

Atlantic States Marine Fisheries Commission

Spiny Dogfish and Coastal Sharks Management Board

February 6, 2014
12:15 – 1:15 p.m.
Alexandria, Virginia

Draft Agenda

The times listed are approximate; the order in which these items will be taken is subject to change; other items may be added as necessary.

1. Welcome/Call to order (*M. Gibson*) 12:15 p.m.
2. Board Consent 12:15 p.m.
 - Approval of Agenda
 - Approval of Proceedings from October 2013
3. Public comment 12:20 p.m.
4. Consider Coastal Sharks FMP Review and state compliance (*M. Hawk*) 12:25 p.m.
Action
5. Review of state proposals for Addendum III **Action** 12:35 p.m.
 - Plan Review Team Report (*M. Hawk*)
 - Consider approval of state implementation plans
6. Review Coastal Sharks Seasons and Possession Limits White Paper 12:55 p.m.
 - Plan Development Team Report (*M. Hawk*)
7. Other business/Adjourn 1:15 p.m.

The meeting will be held at the Crowne Plaza Hotel Old Town, 901 N. Fairfax St, Alexandria, VA 703-683-6000

Healthy, self-sustaining populations for all Atlantic coast fish species or successful restoration well in progress by the year 2015

MEETING OVERVIEW

Spiny Dogfish and Coastal Sharks Management Board Meeting

Thursday, February 6, 2014

12:15 p.m – 1:15 p.m.

Alexandria, Virginia

Chair: Mark Gibson (RI) Assumed Chairmanship: 10/12	Vice Chair: Adam Nowalsky (NJ)	Law Enforcement Committee Representative: Frampton
Spiny Dogfish Technical Committee Chair: Vacant	Spiny Dogfish Advisory Panel Chair: Vacant	Previous Board Meeting: October 31, 2013
Coastal Shark Technical Committee Chair: Carolyn Belcher (GA)	Coastal Shark Advisory Panel Chair: Lewis Gillingham (VA)	
Voting Members: ME, NH, MA, RI, CT, NY, NJ, DE, MD, VA, NC, SC, GA, FL, NMFS, USFWS (16 votes)		

2. Board Consent

- Approval of Agenda
- Approval of Proceedings from October 31, 2013

3. Public Comment – At the beginning of the meeting public comment will be taken on items not on the Agenda. Individuals that wish to speak at this time must sign in at the beginning of the meeting. For agenda items that have already gone out for public hearing and/or have had a public comment period that has closed, the Board Chair may determine that additional public comment will not provide additional information. In this circumstance the Chair will not allow additional public comment on an issue. For agenda items that the public has not had a chance to provide input, the Board Chair may allow limited opportunity for comment. The Board Chair has the discretion to limit the number of speakers and/or the length of each comment.

4. Consider Coastal Sharks 2013 FMP Review and state compliance (12:20 – 12:35 p.m.) Action

Background

- State Compliance Reports are due on August 1, 2013
- The Plan Review Team reviewed each state report and compiled the annual FMP Review

Presentations

- FMP Review Report by M. Hawk (**Briefing CD**)

Board actions for consideration at this meeting

- Approve 2013 FMP Review and State Compliance Report.

5. Review state proposals for Coastal Sharks Addendum III (12:35-12:55 p.m.) Action

Background

- Addendum III modified the commercial shark species groupings and increased the recreational size limit for hammerhead sharks
- State proposals to implement measures were due January 5, 2014 (**Briefing CD**)
- PRT reviewed state proposals and compiled report on compliance

Presentations

- PRT report on compliance by M. Hawk

Board actions for consideration at this meeting

- Approve state proposals for Coastal Sharks Addendum III

6. Review Coastal Sharks Seasons and Possession Limits White Paper (12:55 p.m. – 1:15 p.m.)

Background

- NOAA Fisheries sets the season for commercial shark species and has the option to adjust the possession limit throughout the season
- The Board directed the PDT to investigate having a set opening date (season) for coastal sharks
- Also directed the PDT to determine the feasibility of adjustable possession limits for states

Presentations

- Plan Development Team Report by M. Hawk (**Briefing CD**)

7. Other Business/Adjourn

**DRAFT PROCEEDINGS OF THE
ATLANTIC STATES MARINE FISHERIES COMMISSION
SPINY DOGFISH AND COASTAL SHARK MANAGEMENT BOARD**

**The King & Prince Beach and Golf Resort
St. Simons Island, Georgia
October 31, 2013**

These minutes are draft and subject to approval by the Spiny Dogfish & Coastal Shark Management Board.
The Board will review the minutes during its next meeting.

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1. **Approval of agenda by consent** (Page 1).
2. **Approval of proceedings of August 2013 by consent** (Page 1).
3. **Move to reconsider the adoption of the spiny dogfish quota for 2014 an ACL/AM of 60.695 million pounds resulting in a commercial quota of 49.037 million pounds, and to adopt for spiny dogfish in 2015 an ACL/AM of 62.270 million pounds resulting in a commercial quota of 50.612 million pounds** (Page 4). Motion made by Pat Augustine; second by Rick Bellavance. Motion carried (Page 5).
4. **Move that the board accept the 2013 Spiny Dogfish FMP Review and state compliance and approve *de minimis* status for Delaware, South Carolina, Florida and Georgia** (Page 7). Motion made by Pat Augustine; second by Malcolm Rhodes. Motion carried (Page 8).
5. **Move to approve the 2014 coastal shark specifications conditional on NOAA Fisheries Final Rule** (Page 9). Motion made by Pat Augustine; second by Peter Himchak. Motion carried (Page 12).
6. **Move to approve Issue 1, Option B: Measures Consistent with HMS Amendment 5a; and approve Issue 2, Option B: Measures Consistent with HMS Amendment 5a. Smooth hammerhead, scalloped hammerhead and great hammerhead sharks will have a 78-inch fork length recreational size limit. All other recreational measures will remain the same** (Page 16). Motion made by Pat Augustine; second by Peter Himchak. Motion carried (Page 16).
7. **Move to approve Addendum III to the Coastal Sharks FMP as selected today** (Page 16). Motion made by Pat Augustine; second by Peter Himchak. Motion carried (Page 16).
8. **Motion to adjourn by consent** (Page 20).

ATTENDANCE

Board Members

Terry Stockwell, ME, proxy for P. Keliher (AA)	Tom Fote, NJ (GA)
Doug Grout, NH (AA)	David Saveikis, DE (AA)
Ritchie White, NH (GA)	John Clark, DE, Administrative proxy
Dennis Abbott, NH, proxy for Sen. Watters (LA)	Roy Miller, DE (GA)
Jocelyn Cary, MA, proxy for Rep. Peake (LA)	Tom O'Connell, MD (AA)
Dan McKiernan, MA, proxy for P. Diodati (AA)	Bill Goldsborough, MD (GA)
Bill Adler, MA (GA)	Russell Dize, MD, proxy for Sen. Colburn (LA)
Robert Ballou, RI (AA)	Rob O'Reilly, VA, proxy for J.Travelstead (AA)
Rick Bellavance, RI,proxy for Sen.Sosnowski (LA)	Robert Boyles, Jr., SC (AA)
David Simpson, CT (AA)	Malcolm Rhodes, SC (GA)
Rep. Craig Miner, CT (LA)	Patrick Geer, GA, proxy for Rep Burns (LA)
James Gilmore, NY (AA)	Spud Woodward, GA (AA)
Pat Augustine, NY (GA)	Jim Estes, FL, proxy for J. McCawley (AA)
Sen. Phil Boyle, NY (LA)	Michael Pentony, NMFS
Peter Himchak, NJ, proxy for D. Chanda (AA)	Wilson Laney, USFWS
Adam Nowalsky, NJ, proxy for Asm. Albano (LA)	

(AA = Administrative Appointee; GA = Governor Appointee; LA = Legislative Appointee)

Ex-Officio Members

Staff

Robert Beal	Marin Hawk
Toni Kerns	Mike Waine

Guests

Stew Michels, DE DFW	Nichola Meserve, MA DMF
Peter Burns, NMFS	Jay Luger, MSC
Raymond Kane, CHOIR	

The Spiny Dogfish and Coastal Shark Management Board of the Atlantic States Marine Fisheries Commission convened in the Lanier Ballroom of The King and Prince Beach & Golf Resort, St. Simons Island, Georgia, October 31, 2013, and was called to order at 8:00 o'clock a.m. by Chairman Adam Nowalsky.

CALL TO ORDER

CHAIRMAN ADAM NOWALSKY: Good morning, everyone. I would like to go ahead and call the Spiny Dogfish and Coastal Shark Management Board Meeting to order. I'm Adam Nowalsky; I'm the vice-chair of the board sitting in for Mark Gibson, who is not with us here this week.

APPROVAL OF AGENDA

CHAIRMAN NOWALSKY: We will entertain a motion to approve the agenda; and I'll ask if anyone has any other items to the agenda under other business? Seeing none; do I have a motion to approve the agenda as it appears? Bill Adler; second by Bob Ballou. Is there any opposition to that? Seeing none; the agenda is approved as written.

APPROVAL OF PROCEEDINGS

CHAIRMAN NOWALSKY: Our second item of business here this morning will be to approve the proceedings from the August 8th board meeting. Do I have a motion for that? Motion made again by Mr. Adler; a second by Mr. Himchak. Is there any opposition to the approval of the proceedings? Seeing none; those proceedings are hereby approved.

PUBLIC COMMENT

CHAIRMAN NOWALSKY: Our next order of business will be to turn to the public for comment on any items that are not on the agenda. We don't have anyone signed up. Do I have any hands from the audience this

morning? Seeing none, we'll continue moving along.

SET 2014/2015 SPINY DOGFISH SPECIFICATIONS

CHAIRMAN NOWALSKY: Our next order of business this morning will be to go back and reconsider the 2014/2015 spiny dogfish specifications after a change made by the Mid-Atlantic Council. For that we're going to turn to Katie Drew for a presentation on that.

DR. KATIE DREW: Paul Rago could not come down, as I'm sure you all understand why, for this meeting, so I will be giving the update on the spawning stock biomass status and reference points. I'm just going to go over sort of the existing management measures, the stock conditions, the ABC update and recommendations and council action.

The existing management, just to remind everybody, 2014 is Year Two of a three-year specification-setting process. The ACL is 55,277,000 pounds with a commercial quota of 41,784,000 pounds and a trip limit of 4,000 pounds. So 2015 is going to Year Three of three with an ACL of 55,063,000 pounds and a commercial quota of 41,578,000 pounds, and it's still the same trip limit of 4,000 pounds. Stock status from a recent update is overfishing is not occurring and the stock is not overfished. F in 2012 was approximately 0.149, which is definitely below the Fmsy of 0.24.

The biomass in 2013 was approximately 200,000 metric tons above the biomass target or Bmsy of 159,999 metric tons. This is just a graph to show you sort of recent trends in spawning stock biomass. You can see that dip that we all know about and then the recovery of the stock in recent years.

This is sort of the estimate with uncertainty around it; so from the stochastic model, you can see that the probability of being below

that threshold and the target are very low. Fishing mortality on the females is relatively low in recent years; maybe a slight uptick at the end, but definitely down from the peak during the decline. The probability of being above your F reference points is low.

This is the recruitment index. As you can see in recent years we've had some fairly strong year classes; however, it is coming after a period of low recruitment which is expected to work its way through the spawning stock population in the future, in the next several years. These are the projections, which you can't read, but the point is we're taking the median of these, which is what is circled.

Basically the technical committee, the monitoring committee and the SSC recommended increased quota in line with the increased ACL and AM. Council action was taken where they moved to adopt a higher commercial quota, a higher ACL for 2014 and 2015, and that motion is pending approval by NOAA Fisheries.

CHAIRMAN NOWALSKY: All right, given that, are there any questions on the presentation?

MR. ROB O'REILLY: Katie, I guess that situation with the poor recruitment, when I looked at the assessment document, it seemed like it's not going to work its way through it all. I think we have been waiting for a downturn and to have quotas downturn as well. The explanation that I saw was that the exploitation rates for those year classes, those poor year classes was low enough and I guess the longevity is long enough that it smoothed over any type of expected transition in the subsequent year classes following the poor string from I guess 1998 to 2003 really has made this a stock that is pretty vibrant still. Is that consistent with what you know?

DR. DREW: Yes; so when I say it is going to work its way through, what I mean is the projections indicate the biomass will dip a

little bit, but it is definitely not – it is going to go maybe below its target, but it is definitely not going to crash the stock or anything to that extent. We may expect a small dip, but it should recover with the strong year classes in recent years.

DR. WILSON LANEY: Rob, I was concerned about that, too, and I talked to Jim Armstrong about it. I guess I would still ask Katie as far as the age structure of the female SSB goes; are we seeing rebuilding in those older, more mature females? Obviously, it takes 20 years to grow a 20-year-old dogfish.

I had talked to Jim about the dip and whether or not by continuing to increase the quota we ran the risk of then having to decrease it in the future. What he had indicated to me was that there is a possible scenario that if the market was to explicitly reject exploitable size male dogfish and discards of males of went up, then overall landings might go down because then it would follow the female-only trajectory. How likely that is, I don't know, but that was the only scenario he could think in which we might have to once again take a look at reducing the quota in order to rebuild that older age female biomass. Would you comment on that?

DR. DREW: The length structure of the females does remain – I don't want to say truncated exactly, but the mean length of females is lower in current years than definitely it has been in the past. I don't think it is necessarily a cause for concern or at least it doesn't seem to be for the assessment. I think your point about targeting and the more pressure you put strictly on the females, obviously the more of a concern we would have for the rebuilding of the stock or the maintenance of the stock in its rebuilt condition.

DR. LANEY: If you look at the recruitment, the recruitment has bounced back very well; so even though we may not be getting as many pups per female as we

used to, I guess there are enough of them out there to have caused that to rebound very nicely; so maybe not a concern.

DR. DREW: I believe mean pup size per female has remained stable if not increased a tiny amount.

MR. PATRICK AUGUSTINE: Did the SSC have any problems with this number? This number was in the range of what they thought the council approved; wasn't it? Do we know that?

DR. DREW: Yes, this is –

MR. AUGUSTINE: The real question is was at the maximum over the range or at the medium? I think it was at the medium, wasn't it, Mr. Chairman?

CHAIRMAN NOWALSKY: I'll turn to staff who is giving me a yes.

MR. AUGUSTINE: Excellent. When you're ready, I'd like to make a motion.

CHAIRMAN NOWALSKY: Okay, we'll entertain a few more questions to the presentation before we get to that. Dan.

MR. DAN McKIERNAN: Katie, isn't one of the reasons for this smoothing out or lack of a dip the sort of expected lack of discards? I believe a lot of the mortality in dogfish was not related to directed fishing but bycatch and discards and trips that were either not targeting dogfish or not allowed to take any significant amounts of dogfish. I think a lot of those trips have gone away because of the situation with groundfish in New England.

DR. DREW: I think that's part of it, yes, and basically any kind of amelioration of the fishing pressure is going to help the stock; and so in that respect I think reducing those discards has helped.

MR. PETER HIMCHAK: Yes, the Mid-Atlantic Council, when we were debating

the higher allowable biological quotas, I guess they used the words we're being a too polite with the species. We went with the higher quotas after discussion of market or if we're even going to even reach the quota. I think what I came down to as far as my concern was that – I mean we're trying to promote new markets and for that matter it did not make sense to constrain an allowable biological catch, which would be the higher quotas that the Mid-Atlantic Council adopted for 2014 and 2015.

CHAIRMAN NOWALSKY: Are there any other questions on the presentation? Bill Adler.

MR. WILLIAM A. ADLER: This is more of just a comment on the dogfish thing. I don't know if there is anything that the Atlantic States can do about trying to help regain the market that was lost. This is one of the reasons that the price was so low and nobody went fishing because there just wasn't the market. The dealers didn't want it.

They go, okay, we have a higher quota, whoopee ding, and they're happy about that. For once a quota goes up, but there is no market. I didn't know if the federal government or this agency can do anything about helping the market. Like in Europe, they don't want them anymore, which is the major place it went. I don't know what can be done to help that. If you raise the quota, that's great; but with the low price and the market not there, they're just not going fishing.

MS. TONI KERNS: Adam, we have been trying to provide some information with congressional staff on spiny dogfish to help them write some letters. For those board members that do not know, I think we think a lot of the market loss is due to the European countries not allowing shipments of dogfish due to high levels of PCBs. They have a higher standard than the U.S. does. We have been trying to work with the congressional staff to get them the

information that they need that we can provide for that.

CHAIRMAN NOWALSKY: All right, so where we are then, seeing no other questions, what is before us is to go ahead and reconsider our previous decision, assuming we get a motion to that effect, which is sounds like, Pat, you're prepared to make. I believe this is the motion that you were ready to make that Mike can put up here for us right now. If you would just double-check that, Pat, you can read it here to make sure that was in fact the correct motion you had.

MR. AUGUSTINE: Yes, Mr. Chairman, I believe that is exactly the wording. **Move to reconsider the adoption of the spiny dogfish quota for 2014 an ACL/AM of 60.695 million pounds resulting in a commercial quota of 49.037 million pounds, and to adopt for spiny dogfish in 2015 an ACL/AM of 62.270 million pounds resulting in a commercial quota of 50.612 million pounds.**

CHAIRMAN NOWALSKY: **And just to clarify that; that was 60.695 million pounds and 49.037 million pounds.**

MR. AUGUSTINE: 60.695 million pounds; correct, thank you.

CHAIRMAN NOWALSKY: Mr. Bellavance seconds that motion. Are there comments on the motion? Just a reminder for the board that we will need a two-thirds vote for this. Pete.

MR. HIMCHAK: Yes; the discussion on the PCB issue was new to spiny dogfish at the Mid-Atlantic Council. As it was explained, the European Union set a standard that says near to zero as possible. It would be somewhat unrealistic in context with any PCB standard that we set for any fish in the United States. Those issues were trying to be resolved. November 1st traditionally kicks in a big harvesting season at least in New Jersey. Again, that is just

background information on the PCB issue; but, yes, we need new markets. Whether it comes in the National Park System, state institutions, the push is on to market these things and get them out of the water.

MR. JOHN CLARK: Just following on what Pete said, I had heard the same thing about the European Union blocking imports. I looked online and is it blanket policy there, because it looks like they've rejected specific shipments from what I can see. They've actually tested for the PCB levels; and all I could find was a couple of shipments rejected from Germany and Italy. I was just curious whether you knew whether it applied to all EU countries or not.

CHAIRMAN NOWALSKY: I'll go back to Pete for a response to that.

MR. HIMCHAK: It was understanding that any PCBs detected are in the belly flaps; and the belly flaps typically go to the German biergartens; whereas, the meat goes to the Great Britain fish and chips market. Italy; I don't know.

MS. MARIN HAWK: Since all the European countries are part of the EU; if they're rejected from one country, they would be rejected from all the countries,

MR. CLARK: I was just curious about the process because what was listed is individual shipments being rejected, which would imply that other ones are being accepted. The shipments that they said were rejected recently were not huge amounts.

MS. HAWK: I'm not sure what their process is.

CHAIRMAN NOWALSKY: Okay, do we have any other comments on the motion before us? Okay, seeing none, does the board need a moment a caucus? All right, seeing that the board is ready for the vote; again we need a two-thirds vote and we do need to record this as a final action. I'll begin by asking if there is any opposition or

abstentions to this action from the board?
Mr. Himchak.

MR. HIMCHAK: Adam, I'm sorry I'm violating protocol here, but you're chair and you said I could take liberties. (Laughter)

CHAIRMAN NOWALSKY: For the record I don't recall saying that.

MR. HIMCHAK: Every year we go through three approval phases of this. We go through the Mid-Atlantic, the ASMFC and the New England Council. The New England Council doesn't vote on this until I'm not sure when, but what is the sentiment from anybody from New England on – or is there any premature discussion on what they want to do with spiny dogfish?

MR. TERRY STOCKWELL: Pete, this isn't even our agenda. We have a one-day meeting scheduled at the end of November, which is crammed full, and a three-day meeting scheduled in December. I will work with the executive director to get this on the agenda.

CHAIRMAN NOWALSKY: Okay, I'm going to shorten up that rope here and moving forward since we were in the middle of taking a vote. **I saw no opposition from the board; I saw abstentions from the Fish and Wildlife Service and the National Marine Fisheries Service, and an abstention from Georgia as well. So seeing that with the motion before us, the motion will pass with those three abstentions; Georgia, Fish and Wildlife Service and the National Marine Fisheries Service.** Okay, we will go ahead and move on then to our next agenda item. Actually, before we go to that, Toni had some comments here for us on issues regarding cumulative trip limits she wanted to bring before the board.

DISCUSSION OF CUMULATIVE USE OF TRIP LIMITS

MS. KERNS: I was at the Mid-Atlantic Council; and while the council was

reconsidering these specifications, they also were discussing trip limits. There was discussion to have cumulative trip limits. There had been discussions of up to 20,000 pounds as well as at 12,000 pounds. Because this board hadn't discussed cumulative trip limits and it was a new idea being brought forward, they decided not to take it on for this year, but asked us to discuss them and then bring back our thoughts on using cumulative trip limits in the dogfish fishery for the future.

We have used cumulative trip limits in other species before, like scup, where the commission sets a weekly trip limit and NOAA Fisheries has set a daily possession limit. I think it was the hope of the Mid-Atlantic Council that both bodies would have cumulative trip limits, though, meaning that it would be a weekly possession limit that could be accumulated over time. I think they wanted to raise this trip limit to help avoid discards in the fishery.

CHAIRMAN NOWALSKY: Toni, are you looking for any specific response from the board here today of what would be needed or is that just a point of information that you're looking for all the commissioners to go home and consider for future action?

MS. KERNS: I was looking for the board's thoughts on using trip limits so I could take it back to the Mid-Atlantic Council; as well as if the New England Council does bring it up, that we would have our thoughts on the use of cumulative trip limits. They were talking about this I believe for the northern region and not the southern states.

CHAIRMAN NOWALSKY: All, we'll take a few minutes. Tom O'Connell had his hand up.

MR. THOMAS O'CONNELL: I'm not opposed to the idea, but I'm curious in regards to law enforcement, the enforceability of monitoring the cumulative trip limits. Are they going to have access to

data to understand where a fisherman is during the week?

MS. KERNS: I did bring this up with law enforcement yesterday in anticipation of that question. Their thoughts have not changed since we did cumulative trips in scup where they find that cumulative trip limits are very difficult to enforce because they don't have timely data to show whether or not a fisherman has already offloaded or not during that week; so they can't tell if they have surpassed that weekly trip limit or not by one boarding.

MR. McKIERNAN: One of the problems with weekly trip limits is it might work more successfully for federally permitted vessels that are filling out VTRs properly; so as they steam out, the VTR is filled out. As they head back into port, the VTR is filled out; the VTR is in the wheelhouse and the officer can check the VTR to see what happened on this trip and in this week.

The problem with the nearshore fishery is if it is done by a state-waters-only fisherman, I don't believe any of the states – I know we don't in Massachusetts – have a comparable system that creates that accountability. Maybe the federal government could accommodate weekly trip limits and maybe the state fishery does without that.

There is an advantage, however, to going with larger trip limits, especially if you consider the predominance of males offshore; that if you want to reduce discards and actually to start to target some of the smaller males, you'd probably have to do that further from shore. I serve on the monitoring committee and there is often conversation about whether or not it would be appropriate to target males in the offshore areas, but the trip limits are never high enough. There might be some advantage there going forward.

CHAIRMAN NOWALSKY: Toni, did you want to respond or you've got that? Okay, Pat.

MR. AUGUSTINE: Mr. Chairman, along with what Mr. McKiernan is saying, there is no question that increasing the trip limits does eliminate discards, and I think that's part of the issue. As far as the law enforcement people are concerned, I think we've recently been paying an awful lot of good attention to them because they've been very much on target.

I think part of our role is making sure that we make their job as simple as possible. We have good enforcement suggestions and recommendations. In this case I think we should look at eliminating that weekly and go to the Mid-Atlantic and go for the higher quotas. I do think it would solve the problem on both parts. Thank you, Mr. Chairman.

MR. DOUGLAS E. GROUT: Instead of cumulative trip limits, why not just an increase in the daily trip limit? Is that just not going to be high enough for offshore vessels; is that the reason behind that? There are obviously enforcement issues with that.

CHAIRMAN NOWALSKY: Toni, perhaps you could take that back if you don't have an answer right now, but you can get some information about that. Mike Pentony.

MR. MICHAEL PENTONY: Just sort of following on from Dan McKiernan's comments; from the NMFS perspective we have always held that we cannot monitor or adequately monitor or enforce weekly or cumulative possession limits.

Remembering, as Toni described, the scup situation several years ago when the commission did adopt weekly possession limits, we held we could not monitor or enforce those; so we adopted a complementary per trip possession limit equal to the weekly limit. Nothing has changed; we still feel that we could not adequately monitor or enforce weekly possession limits.

MR. RICK BELLAVANCE: I guess I just wanted to offer maybe a flip opinion to the federal cumulative trip limits and not having it apply in state waters; we saw pretty loud and clear in the winter flounder case that the state boats felt really disadvantaged by having a state quota that was different than the federal quota.

There was an inequity argument there that I think we should probably think about as well. In Rhode Island we have a dogfish fishery right in state waters up against the federal waters, and I could see some fishermen having hard feelings about seeing one boat be able to take in a cumulative trip and they can't. We might want to think of that a little bit.

CHAIRMAN NOWALSKY: Toni, does that give you some information that you were looking for? One more comment; Bob Ballou

MR. ROBERT BALLOU: Mr. Chairman, I just want to note that Rhode Island has had experience with regard to what we call our aggregate landings' program, which is the same concept, for both scup and summer flounder. Monitoring through SAFIS, enforcement through logbooks and VTRs, we feel the program is working very well and I think this could work just as well. Thank you.

CHAIRMAN NOWALSKY: Are there any other comments? Toni looks like she has got some information. I appreciate the board's comment on that and she can take that information back.

CONSIDER SPINY DOGFISH FMP REVIEW AND STATE COMPLIANCE

CHAIRMAN NOWALSKY: All right, our next order of business will be to consider Spiny Dogfish FMP Review and State Compliance, and we will turn to Marin for that presentation.

MS. HAWK: This is the 2013 Spiny Dogfish FMP Review and State Compliance. It is a very brief presentation. Commercial harvest has increased with the increasing quota over the year since the development of the FMP in 2002. In 2012 the quota was 30 million pounds and coast-wide commercial landings were 27,900,000 pounds. These landings were comprised of 97 percent female.

The recreational landings made up less than 1 percent of the total catch with about 42,000 pounds. The discards were about 10.5 million pounds, which is similar to previous years discards. There are no specific surveys aimed at monitoring spiny dogfish; however, there were seven surveys that encountered spiny dogfish.

There were no trends that were apparent in these surveys so not much information was gleaned from them. The plan review team reviewed all state compliance reports. All states' regulations were consistent with the FMP. I did just want to note that Table 9 in the FMP Review that was distributed with the board materials was incorrect. Massachusetts does have a finning prohibition.

The plan review team received four requests for de minimis; Delaware, South Carolina, Georgia and Florida. All of those states meet the requirements, which is less than 1 percent of total landings. Connecticut and Maine also qualified but they did not request de minimis. The plan review team recommends granting all of these requests. That's all I have. Thank you.

CHAIRMAN NOWALSKY: Are there questions for Marin? Seeing none; do we have a motion to come before the board? Mr. Augustine.

MR. AUGUSTINE: **Mr. Chairman, I move that the board accept the 2013 Spiny Dogfish FMP Review and state compliance and approve de minimis**

status for Delaware, South Carolina, Florida and Georgia.

CHAIRMAN NOWALSKY: Dr. Rhodes seconded the motion. Is there any discussion on the motion? Seeing none; is there any opposition to the motion; abstentions; null votes. **The motion carries without opposition.**

SET 2014 COASTAL SHARK SPECIFICATIONS

CHAIRMAN NOWALSKY: All right, our next order of business will be to set the 2014 coastal shark specifications, and we'll turn to Carolyn Belcher for that.

DR. CAROLYN BELCHER: The technical committee reviewed the draft specifications that HMS has put out. The 2014 coastal specifications that the technical committee looked at during its September 27th meeting; they're still obviously in draft form. The finals won't be out until closer to the first of the year.

The aspects that were kind of discussion points for our group was looking at how blacknose is going to be handled with overharvesting; the idea being is that it will be spread out over the subsequent years to help lessen the impact to the fishermen as opposed to taking one big hit up front. Then there was a discussion relative to the season's start date of January 1st.

I know most of us are aware of the seasonality of these animals; so as we start earlier in the year because of cold water off of the Mid-Atlantic, those states don't get the chance to fish to the degree that those southern states do; and as such, obviously it impacts the equitability of catch up and down the coast.

Karyl Brewster-Geisz, who is on our committee, had noted that they received many comments relative to that date; so we're still kind of in that draft stage. Again, finals won't be out until closer to the first of

the year; so there could be some discussion at that point. As you can see relative to quotas from 2013 to 2014, the only changes that are pretty obvious are the small coastal sharks' group. There is an increase there.

The blacknose has a decrease to deal with the overfishing issues; and porbeagle is actually going to get some proposed quota this year as well. Those are the major changes that we see. Again, this could change depending on whatever other comment NOAA gets or HMS gets on this subject. That is for that point.

CHAIRMAN NOWALSKY: All right, where we are with this, we will first entertain questions on that brief presentation. Rob.

MR. ROB O'REILLY: I know there has been some concern with the January 1 opening, and I don't know how to gauge just how much concern based on Carolyn's comments. I know that I talked to Louis Daniel a few times and to Toni, and the situation is that there can be a problem with little quota left by the time, for example, in Virginia our closure stops, which is after July 15th – May 1 to July 15th.

I wasn't sure – I haven't really followed up with Toni – as to whether all those comments were placed in the response on this issue. The other comment I have is the 80 percent seems a little conservative. I know that it's not being considered but was there any discussion about the 80 percent trigger for the closure?

DR. BELCHER: To my recollection I don't remember that 80 percent discussion. I do know, past and present, the discussions about we've been through many changes with the season and opening and closing, and it always does come down to the same point, the January 1, because of that cold water precluding states – the states do have that concern and will continue to voice that concern about that disconnect in how that affects the quota for the northern states. I can't tell you specifically that 80 percent – it

has been more of that fact again about the equitability of the northern states being able to catch their fair share of the quota.

MR. AUGUSTINE: Having been on the HMS Committee for a bunch of years when I was with the Mid-Atlantic, this issue kept coming up again and again and again. The problem was that those states that had access to the animals early on were literally wiping up the quotas; primarily the Gulf of Mexico and that area.

The concern would be if we go back to January 1, what is to prevent that from happening unless certain species are put on the prohibited list for the Gulf of Mexico. So, quite frankly, from my experience, I would not support – if we were to write a letter, I would not support going back to January 1. I know I've had some discussions with the HMS group. I just think it's a bad idea.

Again, we will go back to that area where – well, first off, we now have limited shark fishermen primarily because you either have to have an experimental permit or you're basically out of it. That has been a hardship on a lot of the shark fishermen that I've known over the years. And now to go back to January 1 just compounds the problem even more. I really don't think we should support this unless you have more clarification, Carolyn.

DR. BELCHER: To that point, I do know that there was a letter that was sent from ASMFC relative to that point on behalf of the board stressing that concern over January 1; and the technical committee does again support that and the fact because it is a seasonality issue, for sure.

MR. O'REILLY: I guess just another question; when would a seasonal quota be able to be talked about; so, for example, having it based on different seasons? Is that something that has been the works?

MS. HAWK: Under adaptive management in the FMP, the board can consider that at any time.

CHAIRMAN NOWALSKY: Seeing no other questions on the presentation; the action that would be before the board here today would be potentially approve the 2014 specifications. We do have the one hurdle, however, with regards to the fact that these specifications may be changed in the not too distant future. What the board may consider is drafting a motion that may be contingent upon those specifications changing moving forward. Pat.

MR. AUGUSTINE: Mr. Chairman, I'll make the motion after someone puts it up there for me, so I don't have to wordsmith my own motion. We're going to have to expand that motion as the chairman had suggested. **I move to approve the 2014 coastal shark specifications conditional on NOAA Fisheries final rule.**

CHAIRMAN NOWALSKY: Now, when we go ahead and say "conditional", would that be enough information to – phrased like that; would that mean that we're not approving it until NOAA Fisheries approves it or would that mean that we would change it when they changed it?

MR. AUGUSTINE: It should be conditional on the fact they will change it and that we approve because we have been abiding by similar or mirror-type rules all these years. Toni might have a better word.

CHAIRMAN NOWALSKY: Perhaps "contingent" – well, let me stop there for a minute. Let's start with this. Let's entertain a second to that and then we'll work on wordsmithing it. Mr. Himchak seconds the motion before us. Okay, seeing that, maybe we can get some guidance from staff here on how to wordsmith this to achieve what we're trying to achieve.

MS. KERNS: I guess my question to the board is are you saying that you want to

automatically approve whatever NOAA Fisheries puts out or is this specific to the start date?

CHAIRMAN NOWALSKY: I believe that what we're looking to do is to approve what we saw before us today; and should those regulations be changed, our regulations would automatically change without them having to come back before the board. Is that correct what the intent of your motion and second was?

MR. AUGUSTINE: That's correct; and I do want to address the letter again if we need to, but we've already sent one letter. If it's important to split it out and send a second letter that would address the concern about the January 1st start date; but you're absolutely right, Mr. Chairman, that addresses the issue.

MS. KERNS: I believe the wording is fine, especially with having on the record what your intention is.

CHAIRMAN NOWALSKY: Is there any other discussion with suggestions for changing it or with having that on the record about what our intentions are sufficient. Is there any other discussion on this matter? Okay, Rob.

MR. O'REILLY: Mr. Chairman, I know we don't have a time certain for the National Marine Fisheries Service Final Rule. Is it necessary to go forward with this today? That would be a question; and if it is, then Virginia would have difficulty supporting that January 1, 2014, opening.

MS. HAWK: In the past NOAA Fisheries has come out with their final rule usually about the second week of January; so that would be up to the board whether you want to proceed with this or not given that information. Maybe Kelly has something to add.

MS. KELLY DENIT: Just to clarify that we're targeting to try to have the final rule

out in the beginning of December to inform the board's decision-making.

CHAIRMAN NOWALSKY: I think where we are is that if we don't take action here today, we wouldn't likely be taking action prior to February at that point; so that's really why this action is before us here today with the contingency/condition about should these numbers be changed, they would just automatically be implemented through the board. Does that meet your needs,

MR. O'REILLY: Without being able to see down the road on how adaptive management would work to provide some security to those states that could be left behind on this January 1 date, I think what has been provided is sufficient, but there is still that question of taking that up later,. I suppose.

CHAIRMAN NOWALSKY: And what would meet your needs for later, at a subsequent board meeting, have staff getting back to you in the next couple of weeks; what would you like to help meet the needs of your state?

MR. O'REILLY: I sense some interest from other states that they would like to see modifications to just having the quota in a derby style, which can happen and has happened. Perhaps looking at seasonal options so that there would be some quota still available later on in the second half of the year for states would be my preference.

CHAIRMAN NOWALSKY: One of the options I could see with us moving forward, after we take action on this, would be direct the plan development team to look into that for us.

MR. O'REILLY: I think that would be very good. Thank you.

CHAIRMAN NOWALSKY: Okay, is there any other discussion on this motion? Pat.

MR. AUGUSTINE: Yes, clarification, Mr. Chairman. I'm assuming when we said

specifications, we were talking about the quota-setting. We weren't talking about the January date. I think Mr. O'Reilly's concern is that by us doing this we automatically accept the January 1 date. That was not my intention.

My intention was to accept the specifications for the quotas that have been presented by Carolyn. The second part of it would be – as she iterated, we have already sent one letter saying we weren't happy with the January date. Even though there will be a final rule coming out in December, I still think we need to have another separate piece of paper, another letter from the commission saying that we do not approve going to the January 1 date.

Whether it gets any traction or not, I do think we have to go on record. It is going to have a negative effect on our fishermen, and Mr. O'Reilly is right on target with that. They may have moved to the point where it's going to be a slam dunk and they're going to incorporate it, but I still think we need to go on record it will have a deleterious effect on our fishermen.

As a separate motion or just a letter from you, Mr. Chairman, directed to the staff to generate a letter to them saying we are not in favor of – that's assuming that the rest of the board feels similar.

CHAIRMAN NOWALSKY: I'll give Marin a chance to respond to that and then we can decide if further action is needed on the part of the board.

MS. HAWK: I just wanted to remind the board that the FMP indicates that you will not actively set quotas or opening and closing dates; so as of right now the FMP dictates that we follow NOAA Fisheries opening and closures whenever they decide. If you wanted to change that, it would require board action.

MS. KERNS: What we are doing is we are – when we say we're following the

specifications, we are accepting the possession, right? The possession limits is what we're approving for the board?

MS. HAWK: Yes, the quotas and the possession limits; well, basically just the possession limits.

MS. KERNS: And to remind the board that we did send a letter when the comment period was open, and Rob had asked if we had – and Virginia also sent a letter in regard to the possession limits as well. We did have conversations with HMS staff expressing our concerns with those start dates and the possession limits to make sure that there would be fish available throughout the season.

MR. AUGUSTINE: To that point, Mr. Chairman, please.

CHAIRMAN NOWALSKY: I'll just add before we reiterate that, then I would just like some clarity then on the starting date. Do we have a date through this motion that would constrain our states to a specific date at this time?

MS. HAWK: Yes; but in the proposed rule the date is January 1st, but NOAA Fisheries has indicated that this date might change due to the public comments that they received on that rule.

CHAIRMAN NOWALSKY: Is the public comment period still open whereby another letter could affect change or is there any – writing another letter at this point; how could that impact the process, if at all, or is it basically out of the hands of any additional input at this point? Kelly, I hate to put you on the spot but any input you could provide would be great.

MS. DENIT: The public comment period has closed and we're in the midst of final rulemaking. Obviously, if the board would like to send another letter, they're welcome to do that. It's too late, probably. But, reiterating or reinforcing, certainly I

recognize and I'm sitting here and I'm hearing what you're saying, and I can take that back to HMS.

CHAIRMAN NOWALSKY: Pat, did you have a further comment?

MR. AUGUSTINE: So based on that, whether we approve those specifications or not, the specifications will be implemented. If we don't accept them and go along with them; we're going to be zigging and zagging. We've been out of sync with NOAA before, but I just don't see us going down that way. I think at this point in time it's a late date, it's too late, the game is almost over and the score is going to be put up in the first part of December. I would still go forward with this motion.

CHAIRMAN NOWALSKY: Okay, so what I would see, then, is just to be clear, this motion with regards to approving the specifications would approve the quota, the possession limits; and the date is to be determined yet at this time. And then after we dispense this motion, we could have discussion about the plan development team looking at seasons or any other ideas this board may have before it. Given that, is there any other discussion on this motion? Rob.

MR. O'REILLY: The discussion has been very helpful and I think that on the to be determined, I can be optimistic for the moment and would be able to support this motion.

CHAIRMAN NOWALSKY: Okay, hearing that; is there any public comment on this motion? Seeing none; I'll give board a moment to caucus.

(Whereupon, a caucus was held.)

CHAIRMAN NOWALSKY: Okay, all those states in favor – okay, we're going to go with the roll call method again. I will go ahead as a final action and ask again if there are any objections to the motion as it is

before us? Seeing none; are there any abstentions; any null votes. **Okay, seeing none, the motion passes unanimously without opposition.** Rob, would you like me to turn to you to continue the discussion about the seasonal measures and possibly tasking the plan development team with action.

MR. O'REILLY: Mr. Chairman, I would; and I think if there can be different seasonal regimes that could be established based on the landings' trends of the states, that would be the place to start. I know in particular for Virginia with the closure from May 1 to July 15, it's obvious that after that time – even though earlier we have the distribution, we have the closure. After that time, July 15th, would be a window for Virginia.

I think from talking to Louis Daniel that there is a similarity there for North Carolina, but Toni has also talked to Louis Daniel and may have that information as well. I think based on recent information you could probably configure a few seasonal options that could be reviewed at a later meeting.

CHAIRMAN NOWALSKY: From what I've heard in conversing with staff based on the way the FMP is right now, to ultimately achieve that we would need to get to an addendum to accomplish that. At this stage we could task the plan development team with coming back to us with a white paper or some other type of informational that you could feed into that process; or, you could go ahead and initiate an addendum to go ahead with that and jumpstart that process.

My guess is that whatever we're looking at, we're probably looking at 2015 at this point. Whether we get a white paper that comes back to us or an addendum isn't going to change initiating either those at February I don't think. Again, what would be the pleasure of the board? There is clearly a need here for at least some states; so what would you like to do? I think the two options before us are get a white paper back from the plan development team that could

spell out some of the options or have them start looking at drafting an addendum to bring back to us with those options. Rob.

MR. O'REILLY: I think the white paper is the right place to start to have everyone aware of the possibilities. I think this has been a relatively quiet issue at the ASMFC in general; and then towards the eleventh hour there has been a little bit of commotion about all this. The January 1 date is sort of a perennial situation; but the other issues I think were fairly quiet from what I recall from past meetings. It would be better I think to raise the awareness of maybe all the states of what the possibilities could be with the seasonality to the quota. Thank you.

MS. KERNS: Rob, would you also like the plan development team to explore seasonal possession limits since that is one of the things that HMS has discussed using to ensure that the quota is stretched out throughout the year from the conversations that I have had with them.

MR. O'REILLY: Thank you, Toni, and that was also one of our interests in Virginia and I think North Carolina, but I can't say for certain; but I think that would be a good approach and it could possibly achieve the same desired result.

MS. KERNS: And I mean adjustable possession limits and not seasonal. I apologize for misspeaking.

MR. O'REILLY: I understood; thank you.

CHAIRMAN NOWALSKY: This discussion here today would be sufficient to get the plan development team started on that without a formal motion. Are there any other specific inputs any members of the board want to give at this point; it certainly isn't a constraining timeframe. It's an iterative, ongoing process; but is there anything specific to go ahead and give the plan development team information right now?

Seeing none; is staff comfortable that we've got enough information to have the plan development team bring something back to us at the February meeting is what we would be looking at? Okay, so this board will have information about that in February.

SHARKS DRAFT ADDENDUM III FOR FINAL APPROVAL

CHAIRMAN NOWALSKY: All right, we'll next move on to our next agenda item, which is Addendum III, which is up for final approval today. I'll turn to Marin for a review of that addendum.

MS. HAWK: This is Draft Addendum III for final approval. I'm just going to quickly go over the options and give you a brief public comment summary. I just wanted to mention that Louis Gillingham couldn't make it, so I will be giving the AP report, but I'll leave time between my presentation and that report for questions.

We are at the final stages of approving this document; so today you will review the options and select management measures and give it final approval. Just to remind you, NOAA Fisheries Amendment 5A addressed the recent stock assessment findings for scalloped hammerhead, blacknose and sandbar sharks.

In that rule they established new species groupings and quotas for hammerhead and blacknose sharks. They also established a new recreational size limit for all hammerhead sharks. These measures were implemented July 3rd and August 2nd, so they are already in place in federal waters.

A key goal of the Coastal Sharks FMP, as I remind you a lot, is to maintain consistency between NOAA Fisheries and the ISFMP. These new species' group quotas and recreational size limit result in inconsistencies, and that's why this addendum was developed. Just some background; when NOAA Fisheries opens or closes federal waters for hammerhead

sharks or blacknose sharks, state waters follow suit.

Removing the species from the species' groups doesn't actually impact the FMP or the regulations as written; and so NOAA Fisheries removed these species from their respective groups and just established separate groups for them. Just some more background; the current recreational size limit for hammerheads is 54 inches; and the stock assessment found that the female scalloped hammerhead shark reaches maturity at 78 inches; and so that new size limit would limit the retention of mature individuals.

Issue 1 is to establish new species' groups and quota. Option A is status quo; the commission will not change the species' groupings in the ISFMP. Option B is to change these species' groupings and quota to be consistent with the Highly Migratory Species Amendment 5A. Here would be the new species' groupings and linkages. As I mentioned, hammerhead sharks would be removed from the large coastal sharks species' groups and placed into their own separate species' group.

Then these two species' groups would be linked so whenever one closes, the other would also close. The same with non-blacknose small coastal sharks and blacknose sharks; they were already in separate quotas and they were already linked, but they will now be in their separate species' groups.

Issue deals with the recreational size limit. Option A is status quo; the commission will not change the recreational size limit for hammerhead sharks. Option B is measures consistent with the Amendment 5A. Smooth hammerhead, scalloped hammerhead and great hammerhead sharks will have a 78 inches fork length recreational size limit. All other recreational measures will remain the same. There were no public comments received on this

addendum. I can any take any questions you may have. Thank you.

CHAIRMAN NOWALSKY: Are there questions for Marin? Pete.

MR. HIMCHAK: Marin, I think is a no-brainer as to what we have to do; but as far as reshuffling the sharks in the different groupings is quite a chore when you have to change the regulations. My only question is – and I think I just touched upon it, but it wasn't in the addendum – taking hammerheads out of the non-sandbar large coastal group – and in our current regulations the large coastal group has that season closure in state waters. The hammerheads are still subject to the state waters closure; are they not?

MS. HAWK: Yes, they are.

MR. HIMCHAK: Okay, and then the same thing for the possession limit. Whereas now it says possession limit, large coastals, so now it would be large coasts and hammerheads combined?

MS. HAWK: Yes, all the appropriate sections in the FMP would be changed to accommodate these new species' groupings.

MR. AUGUSTINE: Marin, you did a great job. There is no question this will put us in line with where we should be so we're consistent. As my old expression used to be, it is kind of a no-brainer; so whenever you're ready for a motion, Mr. Chairman.

CHAIRMAN NOWALSKY: I'll give the board another opportunity for comment or questions. Seeing none, I do have a couple of other reports to go through, Pat. I appreciate your enthusiasm and we will put it to you shortly. As Marin indicated, we didn't have any public comment for her to present. She does have an AP report for us.

MS. HAWK: As I mentioned, this is the AP report. We held a conference call to discuss Draft Addendum III and five AP members

participated. There was a little bit of concern with the new quota linkage. As the AP indicated when the blacknose and non-blacknose species' groups are linked, it resulted in underharvest of the non-blacknose species' group when the blacknose species' group closes.

NOAA Fisheries was part of this call and they indicated that this has actually not happened in the past. I just wanted to point that out to the board. Issue 2, the recreational size limit, the AP didn't have any issues with this, although some recreational fishermen felt that putting a size limit on the recreational fishery and not on the commercial fishery put them at a bit of a disadvantage. That's all I have for the AP report. Thank you.

CHAIRMAN NOWALSKY: Are there questions? Okay, seeing none, we have a technical committee report.

DR. BELCHER: The technical committee met on September 27th of 2013 to discuss both the 2014 specifications and Draft Addendum III. We also had a couple of other lesser important items that we also discussed; one being the scientific exhibit permits that are issued to folks, how states are following up with those once you have issued them.

If you have a shark that is in an aquarium, who is responsible for ensuring what is going on with that specimen? That was again more informational and finding out most states have different ways and mechanisms of dealing with it; or it is issued but it is not really monitored. It was kind of more again discussion and information amongst the group.

The other item was discussion of the adoption of smoothhound as a swap for smooth dogfish within the FMP; because obviously the animals – the vernaculars do have different connotations, but there was discussion that HMS had adopted the use of

smoothhound as a complex in their Amendment 3.

As such, our language was changed, but we did have discussion because Florida does have the presence of both smooth dogfish and smoothhound; but the ratio of which those two species occur was low enough that Florida really didn't feel that the vernacular change was going to hurt them. At that point folks felt that it was okay to issue that smoothhound naming overall to include the two species.

With regards to what happens with the Draft Addendum III, there were seven of us on the phone call. We didn't anticipate any issues as far as the options that are currently laid out. In this particular situation obviously the consistency would be key in the success for this, especially with these groupings.

Hammerheads in general are obviously easy to identify. We recommended going ahead and adopting both Options B under Issue 1 and Issue 2, which are the measures to be consistent with NOAA Fisheries. That is pretty much all of our discussion relative to that and I'll take any questions that the group might have.

CHAIRMAN NOWALSKY: Are there questions on the technical committee report? Mr. O'Reilly.

MR. O'REILLY: Just a question about where things stand on the smooth smoothhound as far as the quota. Also I know we're going forward in December to establish the fin-to-carcass ratio; is there any idea where NMFS end up on that? Since that isn't final yet; is there anything that we will know that will be coming back after we establish the 12 percent to 88 percent; any ideas on that?

DR. BELCHER: I'm not a hundred percent sure and I'm going to look to Marin to help me with that. We do know obviously that was part of where our question came up in the group was that when we looked at that

12 percent rule, it was relative to smooth dogfish; so the question was would that ratio still apply in a smoothhound type category. I think again knowing that the proportion that is actually smooth dog, it wasn't as big a concern for the group as we discussed it. I don't really know where HMS is relative to the smooth dogfish.

MS. HAWK: Sorry, Rob, I was consulting with the chair when you asked your question; so could you please repeat it.

MR. O'REILLY: Yes, I was indicating that we're going forward with the 12 percent and to 88 percent after conferring with you earlier as to what needs to be in place by January 1. I was wondering how firm that ratio is. Has there been any other discussion as to whether that might change; how does that look?

MS. HAWK: I believe it's very firm. It's not looking like it's going to change.

CHAIRMAN NOWALSKY: Are there any additional questions? All right, seeing none, our next step then would be to take action on this. We have two issues in this addendum. We could take separate motions or combine them. We will then need to take final action on the addendum as a whole, and then we could have some discussion about an implementation date. Mr. Augustine.

MR. AUGUSTINE: Mr. Chairman, let's go forward with an overall motion.

CHAIRMAN NOWALSKY: We originally had from you Pat as two separate motions. If you would like to move forward in that manner or if you'd now like to combine it, that would be at your discretion.

MR. AUGUSTINE: I would like to combine it, Mr. Chairman. Quite frankly, it's a slam dunk. The things we are doing are in line with them so let's do it all unless someone really has a stomach ache about it.

CHAIRMAN NOWALSKY: I'll give Mike a minute to combine your motions for you.

MR. AUGUSTINE: That's great! If I may read it, Mr. Chairman, **move to approve Issue 1, Option B: Measures Consistent with HMS Amendment 5a; and approve Issue 2, Option B: Measures Consistent with HMS Amendment 5a. Smooth hammerhead, scalloped hammerhead and great hammerhead sharks will have a 78-inch fork length recreational size limit. All other recreational measures will remain the same.** I think that should be it.

CHAIRMAN NOWALSKY: Okay, we have a motion; do we have a second to that motion? Seconded by Mr. Himchak. Is there discussion on the motion? Is there any objection to the motion? Are there any abstentions to the motion; null votes. Should the record that we don't have any constituents from here? Okay. **All right, the motion passes without objection.** Our next step then would be to go ahead and entertain a motion to approve the addendum with the options chosen here today. Mr. Augustine.

MR. AUGUSTINE: **Mr. Chairman, move to approve Addendum III to the Coastal Sharks FMP as selected today.**

CHAIRMAN NOWALSKY: Seconded by Mr. Himchak. Is there any board discussion on this? Is there any additional comment from the public on this addendum? Seeing none, we will now turn back to the board for a vote. This is a final action. In lieu of a roll call vote, I will ask if there is any objection to the approval of this addendum today. Seeing no objection, are there any abstentions, no abstentions; any null votes, no null votes. **The motion carries.**

The next order of business then would be to discuss the compliance schedule implementation date. In talking with staff here, January 1, 2014, was a date that was suggested. I would turn to the board for any

state-specific compliance issues that we may need to consider here today. Jim.

MR. JAMES J. GILMORE, JR.: We can do this as an emergency rulemaking in New York. However, we have so many of them I'm getting the attorneys really annoyed at me. A typical rulemaking on a normal procedure will take three to six months. It would be helpful actually if we had a little bit of latitude on that to say maybe March 1st or something just so we can finish our process. Again, if it's not the pleasure of the board, we can get an emergency rule done by January 1st. Thank you.

MS. HAWK: Just to clarify to the board, I was under the impression that the states just followed the FMP and deferred to NOAA Fisheries. I wasn't aware that any states actually had to put out rulemaking. If that's not the case, then, of course, we can move the date later in the season. I just wanted to get some feedback on that first. New York would have to have rulemaking for this?

MR. GILMORE: If I do a size change, I essentially have to do the rulemaking.

MR. HIMCHAK: Just a technical point; because of the reshuffling of the species into all these different groups, we have to do rulemaking, but we can do it by notice of an administrative change and have it done by January 1st. It took a lot of rewording because essentially you're reshuffling the deck.

MR. CLARK: Similarly, we start the process immediately but it would take a few months, because we also have to go through the regulatory process.

MR. O'REILLY: March 1 would be good for Virginia. Although we could do an emergency, we'd prefer not to. It sounds like March 1 may be ambitious for some of the states.

CHAIRMAN NOWALSKY: Well, I think hearing the conversation around the board

here at this point, the changes to those state plans I believe would just need to come back to this board for approval. Would the February meeting be reasonable for the board to be able to see those state regulations at this point?

I am seeing nods of heads. I'm not seeing any waving hands indicating extreme opposition to that. With that then, if we do that in February, we could leave here today with a March 1st date, although I heard some comment about that; that may be a little ambitious. Rob.

MR. O'REILLY: No, that was a shrug. I was following up on John's comments about at least three months or something; so I just wanted to make sure that everyone was March 1.

CHAIRMAN NOWALSKY: Okay, we've got March 1 as a proposal before us with the caveat also that those states that do need to make changes will bring them back to the board for the February meeting. Marin.

MS. HAWK: The February board meeting is the first week in February, and the plan review team will need time to review those state plans. What would be a good date to have those state plans turned into staff? Does early January – I know the holidays are coming up – so January 5th. Okay, great, thank you.

CHAIRMAN NOWALSKY: Okay, do we need a specific motion on the implementation date at this point or just the record reflecting March 1, 2014, sufficient? I'm getting nods of heads from staff. We've got an implementation date for this addendum, then, of March 1, 2014. States that are changing their plans will turn them into the plan review team for review on or about January 5, 2014, and those will come before this board at the winter meeting.

That concludes discussion on that item. There was no other business brought before

this board. Seeing none, I will turn to Mr. Adler.

MR. ADLER: Mr. Chairman, I just wanted to bring this thing back up – I know I'm repetitive – on dogfish. When I looked at my notes of some of the comments that came from the fishermen, it said that the National Marine Fisheries Service has not been doing anything. I wanted to ask and see if the representatives from NOAA who are here can indicate that they've done anything on that dogfish problem we talked about earlier. I'm not going back into the whole story. Do they have any comment on anything that they're trying to do to improve the market thing?

CHAIRMAN NOWALSKY: Well, the specific problem you're referring to is the markets. Obviously, the biggest factor that caused the loss of those markets was the reduction in quota previously. Thankfully we're going in the other direction at this point. Mike, I saw you come forward; did you want to respond at all to markets?

MR. PENTONY: Yes; I can try to respond to the question. We have been requested to write a letter of support. There has been some attempts and some conversations between industry and members of Congress and others about having dogfish added to I believe it is a USDA category of food products that can be supported and used in schools and other institutional food service industries. We, the agency, have been requested to write a letter of support for that program. That is still under discussion and consideration. We have issued no final decision on that, but we are looking into it.

MR. ADLER: That would be good and I think it ought to be put out from NOAA that they're trying to do something about it and not just – the fishermen have the feeling that you don't care about us. I see you're trying to do something, but you do have restraints as to what you can do. I mean, you can't go and call up Europe and go, hey, take them. But, at the same time if you could somehow

in the – put out something to the fishing industry showing that you are doing whatever you can to help the situation, that would be I think very helpful.

MR. PENTONY: Keep in mind that there is an issue with the PCB levels that have been found in the fish that have been exported to the EU. We do have to be somewhat sensitive about taking agency positions on food products that may or may not have PCB issues.

CHAIRMAN NOWALSKY: Comment from the audience?

MR. RAYMOND KANE: Good morning, ladies and gentlemen. I have been a life-long commercial fisherman. My name is Raymond Kane. I also work as an outreach coordinator the Cape Cod Commercial Fishermen's Alliance. Dogfish, as you all know, is prevalent off the waters of New England.

I know for Bill's fleet it is a money-value fish and for the fleets on Cape Cod. Our organization took it upon ourselves to do testing. We sent 12 samples out; very expensive; \$700 per sample. Twelve samples passed U.S. Standards; nine of the twelve past the Euro standards. By the way, the standards on dogfish were dropped in Euro from 150 to 75. Meanwhile, salmon has stayed the same.

Our organization is working with the processors and with academia to try to establish a market within this country and to bring back the market. We feel it has been lost in Europe. The bellies themselves, years ago when we were cut back to 4 million pounds, they substituted dogfish bellies with salmon bellies.

The younger generation, as Pete spoke to earlier, in Germany in the biergartens, they enjoy the salmon bellies. But, we are moving forward with this; and I would appreciate this commission going home and not talking about the PCBs but talking about

another fish product, which is edible and perishable. And as I said, every sample passed U.S. Standards and nine of the twelve in Europe. I hate to inform Patsy, but it was Italy that keeps red flagging dog fish.

CHAIRMAN NOWALSKY: Thank you, Raymond. Obviously, the loss of the EU market due to that is something that our fishermen, with the help of ourselves and our government, are going to have to continue to overcome. I hope we can all continue to work together to find solutions to that.

OTHER BUSINESS

CHAIRMAN NOWALSKY: Is there any other business to come before this board? Before entertaining a motion to adjourn, Bob.

EXECUTIVE DIRECTOR ROBERT E. BEAL: Just a couple of housekeeping or scheduling issues; I don't see a need to have the Policy Board or Business Session later this afternoon. During that meeting is when we usually read the resolution thanking the host state for the annual meeting. David Simpson has that wording now; so it might be a good time to read it.

MR. DAVID SIMPSON: Up front I want to thank the other committee members, Bernie Pankowski and Steve Train and especially Tina and Laura for all their help. Here we are:

WHEREAS, the 72nd Annual Meeting of the Atlantic States Marine Fisheries Commission was conducted on the breathtakingly beautiful St. Simons Island, which provided a spectacular backdrop for the commissioners, management and science, law enforcement, habitat, Atlantic Coast Fish Habitat Partnership members and the commission staff to tackle issues of mutual concern; and

WHEREAS, the weather could not have been more perfect and provided the northerners with a few more delightful warm days that we were not expecting to experience again until next spring; and

WHEREAS, the opening reception was a lovely affair held in the St. Simons Casino, where some commissioners were seen wandering about in search of slot machines; and

WHEREAS, Melissa Laser ACFHP Award was presented at the reception to a most deserving Bill Goldsborough honoring his steadfast commitment to habitat for more than two decades; and

WHEREAS, the 22nd Laura Leach Fishing Tournament provided anglers the opportunity to land an array of species from Bernie Pankowski's bull red to Roy Miller's surprisingly impressive bay anchovy; and

WHEREAS, the staff of the Coastal Resources Division pulled out all the stops and only fed us amazing southern food, beginning with an endless oyster roast, moving on to fried shrimp, cheese grits and collards (y'all), and ending with an endless sky of majestic color and a great band to bogie to, and the most beautiful port-a-potties where several women were overheard extolling their virtues; and

WHEREAS, the 23rd Annual David H. Hart recognized Ritchie White for his unwavering commitment to successful management of marine fisheries along the Atlantic Coast; and

WHEREAS, everyone at the meeting had such a great time to such an extent that when one state director was asked about his plans for an upcoming annual meeting in his state, he replied we're having our next meeting in Georgia; and

NOW, THEREFORE, BE IT RESOLVED, that the Atlantic States Marine Fisheries Commission expresses its deep appreciation

to Georgia's commissioners, Spud Woodward, John Burns, Nancy Addison and especially Pat Geer, Nancy Butler, Tami Gane and Doug Haymans, for their exceptional assistance in the planning and conduct of this outstanding 72nd Annual Meeting. We will all leave with Georgia on our Minds. (Applause)

MR. SPUD WOODWARD: I'm glad that the restrooms made the resolution because we struggled but we felt it was particularly important for folks that had never been to this part of the world to realize that we don't all use little wooden shacks with crescent moons on the door as restrooms and so we wanted to make sure that – you know, that is a very important part of any social function.

We were pleased to do that and we were very glad to have y'all here and for the blessing of the wonderful weather. We hope that you will leave with Georgia on your Mind and come back. If you have ever have an interest in coming back, just let us know and we'll do our best to roll out the same carpet for you.

ADJOURNMENT

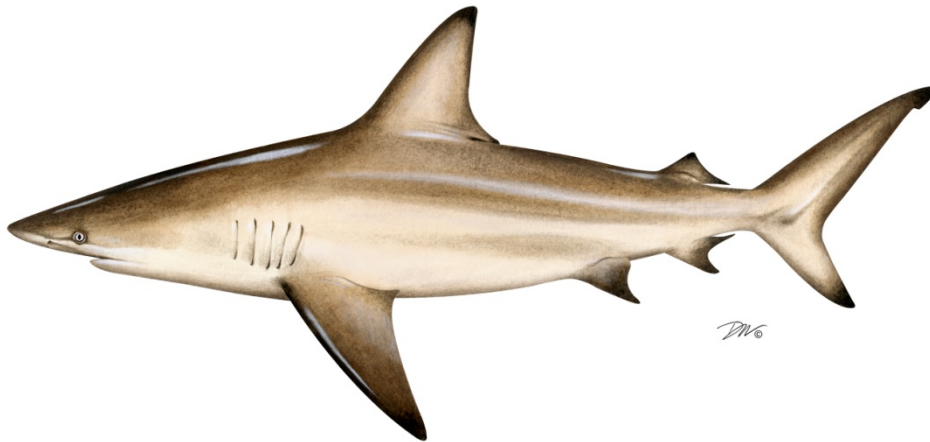
CHAIRMAN NOWALSKY: All right, is there any other business? Seeing none, I'll entertain a motion to adjourn. Pat and seconded by Mr. Adler. This board is adjourned.

(Whereupon, the meeting was adjourned at 9:30 o'clock a.m., October 31, 2013.)

**DRAFT 2013 REVIEW OF THE
ATLANTIC STATES MARINE FISHERIES COMMISSION
FISHERY MANAGEMENT PLAN FOR**

COASTAL SHARKS

2012 FISHING YEAR



Coastal Sharks Plan Review Team

Bryan Frazier, South Carolina Department of Natural Resources
Dr. Gregory Skomal, Massachusetts Department of Marine Fisheries
Tina Moore, North Carolina Department of Environment and Natural Resources
Marin Hawk, Atlantic States Marine Fisheries Commission, Chair

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I. Status of the Fishery Management Plan

<u>Date of FMP Approval:</u>	August 2008
<u>Amendments</u>	None
<u>Addenda</u>	Addendum I (September 2009) Addendum II (May 2013) Addendum III (October 2013)
<u>Management Unit:</u>	Entire coastwide distribution of the resource from the estuaries eastward to the inshore boundary of the EEZ
<u>States With Declared Interest:</u>	Maine - Florida
<u>Active Boards/Committees:</u>	Spiny Dogfish and Coastal Shark Management Board, Advisory Panel, Technical Committee, and Plan Review Team

a) Goals and Objectives

The Interstate Fishery Management Plan for Coastal Sharks (FMP) established the following goals and objectives.

GOALS

The goal of the Interstate Fishery Management Plan for Coastal Sharks is “to promote stock rebuilding and management of the coastal shark fishery in a manner that is biologically, economically, socially, and ecologically sound.”

OBJECTIVES

In support of this goal, the following objectives proposed for the Interstate Shark FMP:

- 1. Reduce fishing mortality to rebuild stock biomass, prevent stock collapse, and support a sustainable fishery.*
- 2. Protect essential habitat areas such as nurseries and pupping grounds to protect sharks during particularly vulnerable stages in their life cycle.*
- 3. Coordinate management activities between state and federal waters to promote complementary regulations throughout the species’ range.*
- 4. Obtain biological and improved fishery related data to increase understanding of state water shark fisheries.*
- 5. Minimize endangered species bycatch in shark fisheries.*

b) Fisheries Management Plan Summary

The Atlantic States Marine Fisheries Commission (Commission) adopted its first fishery management plan (FMP) for coastal sharks in 2008. Coastal sharks are managed under this plan as six different complexes: prohibited, research, small coastal, non-sandbar large coastal, pelagic and smooth dogfish (Table 1). The Board does not actively set quotas for any shark species. The Commission follows NOAA Fisheries openings and closures for small coastal sharks, non-

sandbar large coastal shark and pelagic sharks. Species in the prohibited category may not be possessed or taken. Sandbar sharks may only be taken with a shark fishery research permit. All species must be landed with their fin attached to the carcass by natural means.

Addendum I (2009) modified the FMP to allow limited smooth dogfish processing at sea (removal of fins from the carcass), remove smooth dogfish recreational possession limits, and remove gillnet check requirements for smooth dogfish fishermen. The goal of Addendum I was to remove restrictive management intended for large coastal sharks from the smooth dogfish fishery, to allow fishermen to continue their operations while upholding the conservation measures of the FMP.

Addendum II (2013) modified the FMP to allow year round smooth dogfish processing at sea and allocated state-shares of the smooth dogfish federal quota. The goal of Addendum II was to implement an accurate fin-to-carcass ratio and prevent the quota of smooth dogfish being harvested in one state, while excluding the others.

Addendum III (2013) modified the species groups to ensure consistency with NOAA Fisheries. The addendum also increased the recreational size limit for all hammerhead sharks species to 78” fork length.

Table 1: List of species and species groups within the Interstate FMP.

Species Group	Species within Group
Prohibited	Sand tiger, bigeye sand tiger, whale, basking, white dusky, bignose, Galapagos, night, reef, narrowtooth, Caribbean sharpnoes, smalltail, Atlantic angel, longfin mako, bigeye thresher, sharpnoes sevengill, bluntnose sixgill and bigeye sixgill sharks
Research	Sandbar sharks
Small coastal	Atlantic sharpnose, finetooth, and bonnethead sharks
Blacknose	Blacknose sharks
Aggregated large coastal	Silky, tiger, blacktip, spinner, bull, lemon, and nurse
Hammerhead	scalloped hammerhead, great hammerhead and smooth hammerhead
Pelagic	Shortfin mako, porbeagle, common thresher, oceanic whitetip and blue sharks
Smoothhound	Smooth dogfish and Florida smoothhound sharks

II. Status of the Stock and Assessment Advice

Stock status is assessed by species complex for most coastal shark species and by species group for species with enough data for an individual assessment (Table 2). A 2011 benchmark assessment of dusky (*Carcharhinus obscurus*), sandbar (*Carcharhinus plumbeus*), and blacknose (*Carcharhinus acronotus*) sharks indicates that both sandbar and dusky sharks continue to be overfished with overfishing occurring for dusky sharks. Blacknose sharks, part of the SCS

complex, are overfished with overfishing occurring. The Board approved the assessment for management use in February 2012, and NOAA Fisheries' Highly Migratory Species Division (HMS) is incorporated the results of the assessment as part of Amendment 5a to its FMP.

Porbeagle sharks were assessed by the ICCAT Standing Committee on Research and Statistics in 2009. The assessment found that while the Northwest Atlantic stock is increasing in biomass, the stock is considered to be overfished with overfishing not occurring. The 2007 Southeast Data Assessment Review (SEDAR 13) assessed the SCS complex, finetooth, Atlantic sharpnose, and bonnethead sharks. The SEDAR 13 peer reviewers considered the data to be the 'best available at the time' and determined the status of the SCS complex to be 'adequate.' Finetooth, Atlantic sharpnose and bonnethead were all considered to be not overfished and not experiencing overfishing. Atlantic sharpnose and bonnethead were more recently assessed by SEDAR 34, and are still considered not overfished or undergoing overfishing.

SEDAR 11 (2006) assessed the LCS complex and blacktip sharks. The LCS assessment suggested that it is inappropriate to assess the LCS complex as a whole due to the variation in life history parameters, different intrinsic rates of increase, and different catch and abundance data for all species included in the LCS complex. Based on these results, NMFS changed the status of the LCS complex from overfished to unknown. As part of SEDAR 11, blacktip sharks were assessed for the first time as two separate populations: Gulf of Mexico and Atlantic. The results indicated that the Gulf of Mexico stock is not overfished and overfishing is not occurring, while the current status of blacktip sharks in the Atlantic region is unknown.

There is no assessment for smooth dogfish on the Atlantic coast. The Commission's Coastal Sharks Technical Committee has identified a smooth dogfish assessment as a top research priority.

Table 2: Stock Status of Atlantic Coastal Shark Species and Species Groups

Species or Complex Name	Stock Status		References/Comments
	Overfished	Overfishing occurring	
Porbeagle	Y	N	Porbeagle Stock Assessment, ICCAT Standing Committee on Research and Statistics Report (2009)
Dusky	Y	Y	SEDAR 21 (2011) 'Prohibited' species
Aggregated Large Coastal Sharks	Unknown	Unknown	SEDAR 11 (2006) Difficult to assess as a species complex due to various life history characteristics/lack of available data
Blacktip	Unknown	Unknown	SEDAR 11 (2006)
Sandbar	Y	N	SEDAR 21 (2011)
Non-blacknose Small Coastal Sharks	N	N	SEDAR 13 (2007)
Blacknose	Y	Y	SEDAR 21 (2011)
Atlantic sharpnose	N	N	SEDAR 34 (2013)
Bonnethead	N	N	SEDAR 34 (2013)
Finetooth	N	N	SEDAR 13 (2007)
Smooth dogfish	Unknown	Unknown	No assessment

Smoothhound sharks (also known as smooth dogfish) and finetooth sharks will undergo assessments in 2014. A smoothhound shark assessment is a high priority since no assessment on the species has been conducted to date.

III. Status of the Fishery

Specifications

All non-prohibited coastal shark complexes opened on January 24, 2012, with the exception of the porbeagle sharks, which opened on July 15, 2011 (Table 3). These openings followed NOAA Fisheries openings of the species complexes. NOAA Fisheries closes the shark complexes when 80% of their quota is reached. When the fishery closes in federal waters, the Interstate FMP dictates that the fishery also closes in state waters.

Quotas

NOAA Fisheries sets quotas for coastal sharks through their 2006 Consolidated Highly Migratory Species Fishery Management Plan. As indicated above, the states follow NOAA Fisheries openings and closings, which are based on those quotas. The quotas for each species or species grouping for the 2012 fishing season are in Table 3.

Table 3: Commercial quotas and opening dates for 2011 shark fishing season.

Species Group	2011 Annual Quota (mt)	Season Opening Dates	Closing Date (if any)
Non-sandbar Large Coastal Sharks	182.3	July 15, 2013	
Non-sandbar LCS Research Quota	37.5	January 24, 2012	
Sandbar Research Quota	87.9	January 24, 2012	
Non-blacknose Small Coastal Sharks	332.4	January 24, 2012	
Blacknose Sharks	19.9	January 24, 2012	
Blue Sharks	273.0	January 24, 2012	
Porbeagle Sharks	0.7	January 24, 2012	May 30, 2012
Pelagic Sharks other than Porbeagle or Blue	488.0	January 24, 2012	

Landings

Commercial landings of Atlantic large coastal sharks species in 2012 were 425,612 lbs dw, a slight decrease from the 2011 total (Table 4). Commercial landings of small coastal shark species in 2012 were 419,990 lbs dw. This is an increase of approximately 60,000 lbs dw from 2011 (Table 5). Total US landings of Atlantic pelagic species of sharks were 314,084 lbs dw 2012, similar to recent years (Table 6).

Table 4: Commercial landings of authorized Atlantic large coastal sharks by species (pounds dw), 2008-2012. Source: HMS SAFE Report, 2013.

	2008	2009	2010	2011	2012
Blacktip	258,035	229,267	246,617	176,136	215,403
Bull	43,200	61,396	56,901	49,927	24,504
Dusky	0	0	0	14	172
Great hammerhead	0	0	0	0.0	371
Scalloped hammerhead	0	0	0	0.0	15,800
Smooth hammerhead		4,025	7,802	110	3,967
Unclassified hammerhead	21,631	62,825	43,345	35,618	9,617
Lemon	22,530	30,909	25,316	45,448	21,563
Nurse	10	0	71	0	81
Sandbar	63,035	54,141	84,339	94,295	46,446
Silky	306	1,386	1,049	992	29
Spinner	1,265	20,022	13,544	4,113	10,643
Tiger	14,119	15,172	43,145	36,425	23,245
Unclassified assigned to LCS	187,670	70,894	2,229	50,711	53,705
Total	611,918	550,037	524,376	493,809	425,612

Table 5: Commercial landings of authorized Atlantic small coastal sharks by species (lbs dw), 2003-2011. Source: HMS SAFE Report, 2013.

	2008	2009	2010	2011	2012
Blacknose	117,197	90,023	30,287	28,373	37,873
Bonnethead	61,549	53,912	9,069	28,284	19,907
Finetooth	28,872	63,359	76,438	52,318	15,922
Atlantic sharpnose	261,788	262,508	211,190	214,382	345,625
Unclassified assigned to SCS	23,077	34,429	851	36,639	492
Total	490,574	504,231	327,931	360,007	419,990

Table 6: Commercial landings of authorized pelagic sharks by species off the Atlantic coast of the United States (lb dw), 2008-2012. Source: HMS SAFE Report, 2013.

	2008	2009	2010	2011	2012
Blue shark	3,229	4,793	9,135	13,370	17,200
Shortfin mako	120,255	141,456	220,400	207,630	198,841
Porbeagle	5,259	3,609	4,097	5,933	4,250
Total	234,546	225,421	312,195	314,314	314,084

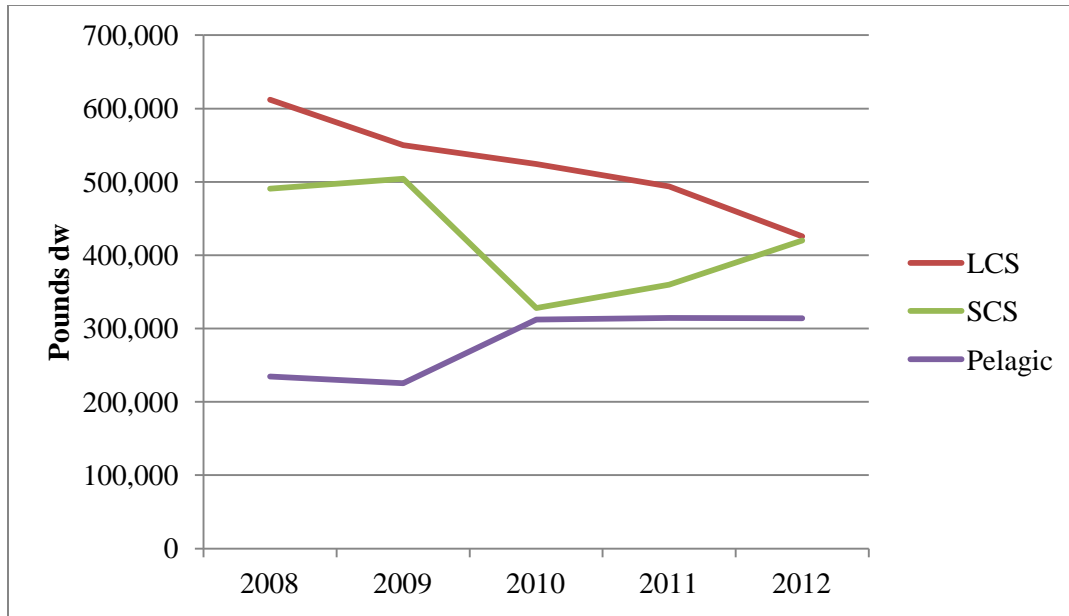


Figure 1: Commercial landings of coastal sharks off the east coast of the United States by species complex, 2008-2012. Source: HMS SAFE Report, 2013.

Approximately 44,007 fish were harvested during the 2012 recreational fishing season, compared to 46,862 fish in the 2011 season, and 64,302 fish in the 2010 fishing season. The small coastal shark group had the most landings, comprising approximately 75% of the harvest in 2012. Large coastal sharks came next with approximately 23% of the harvest, and pelagic species comprised 2% of the total harvest.

Table 7: Recreational harvest of all Atlantic shark species by species group in numbers of fish, 2008-2012. Source: HMS SAFE Report, 2013.

	2008	2009	2010	2011	2012
LCS	23,157	19,077	7,750	8,723	10,299
Pelagic*	1,972	8,693	5,023	716	703
SCS	47,063	42,524	51,529	37,423	33,005
Total	72,192	70,294	64,302	46,862	44,007

*Pelagic sharks include Gulf of Mexico landings.

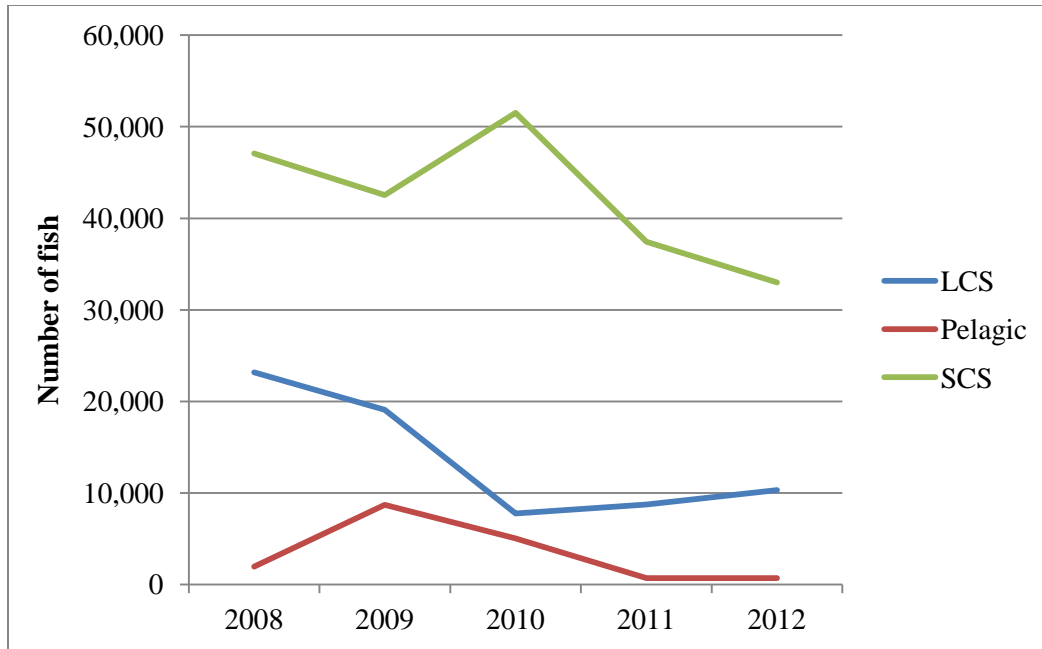


Figure 2: Recreational harvest of all Atlantic coast species by species group, in numbers of fish, 2008-2012. Source: HMS SAFE Report, 2013.

IV. Status of Research and Monitoring

Under the Interstate Fishery Management for Coastal Sharks, the states are not required to conduct any fishery dependent or independent studies. States are encouraged to submit any information collected while surveying for other species. Research and monitoring information from state reports follows. States that did not include research/monitoring information in their reports are not listed below. Please see individual reports for more information.

Rhode Island

Fishery independent monitoring is limited to coastal shark species taken in the RI Division of Fish & Wildlife, Marine Fisheries Section monthly and seasonal trawl survey. During the 2012 calendar year the only coastal shark species captured in the trawl survey was smooth dogfish (*Mustelus canis*). A summary of fishery independent monitoring for coastal sharks is summarized in Table B-1 below.

Table 8. Summary of fishery independent monitoring for coastal sharks captured in the RI Division of Fish & Wildlife, Marine Fisheries Section monthly and seasonal trawl survey during 2012. Note that the only species captured was smooth dogfish (*Mustelus canis*).

Year	Month	Tows conducted	Total weight (kg)	Total number	Number per tow	kg per tow
Monthly Coastal Trawl Survey						
2012	JAN	13	0	0	0.00	0.00
2012	FEB	13	0	0	0.00	0.00
2012	MAR	12	0	0	0.00	0.00
2012	APR	13	0	0	0.00	0.00
2012	MAY	13	12.9	4	0.31	0.99
2012	JUN	9	20.4	14	1.56	2.27
2012	JUL	13	15.53	19	1.46	1.19
2012	AUG	13	6	6	0.46	0.46
2012	SEP	13	0	0	0.00	0.00
2012	OCT	9	55.24	28	3.11	6.14
2012	NOV	13	0	0	0.00	0.00
2012	DEC	13	0	0	0.00	0.00
Seasonal Coastal Trawl Survey						
2012	Spring	44	0	0	0	0
2012	Fall	44	77.76	49	1.11	1.77

Delaware

Delaware conducts a 30' adult trawl survey and a 16' juvenile trawl survey in the Delaware Bay. In the adult trawl survey, the species most commonly caught were sand tigers, sandbar shark and smooth dogfish. Thresher, Atlantic angel, Atlantic sharpnose and dusky sharks have been caught in the past, but rarely. Sand tiger shark catch per nautical mile in 2012 remains high for the time series and sandbar shark catch per nautical miles continues to increase. Smooth dogfish catch per nautical mile continues to increase from a low in 2005. In the juvenile trawl, the species caught were sand tigers, sandbar sharks and smooth .

Delaware also conducts a 16' juvenile trawl survey in the Inland bays. The only species caught in this survey was smooth dogfish.

North Carolina

NCDMF has an independent red drum longline project established in 2007, which allows for capture and tagging of Atlantic coastal sharks. The independent red drum longline project in the Pamlico Sound resulted in a catch of four coastal sharks in 2012. Three species of shark were captured, 2 blacktip (*Carcharhinus limbatus*) with only one total length recorded at 1570 mm, one Atlantic sharpnose (*Rhizoprionodon terraenovae*) with a total length of 551 mm, and one bull (*Carcharhinus leucas*) with a total length of 1676 mm. Only two of the sharks, blacktip and bull, captured were tagged by NCDMF with federal tags.

A fisheries independent gill net survey was initiated in North Carolina in 2001. The objective of this project is to provide annual independent relative indices of abundance for key estuarine species in sounds and rivers that can be incorporated into stock assessments and used to improve

bycatch estimates, evaluate management measures, and evaluate habitat usage. Results from this project are used by the NCDMF and other Atlantic coast fishery management agencies to evaluate the effectiveness of current management measures and to identify additional measures that may be necessary to conserve marine and estuarine stocks. Developing fishery independent indices of abundance for target species allows the NCDMF to assess the status of these stocks without relying solely on commercial and recreational fishery dependent data. Sampling is a stratified random sampling design in Pamlico Sound, utilizing multiple mesh gill nets (3.0-6.5 inch, ½ inch increments). In 2012, a total of 193 individual coastal sharks were captured in the Pamlico Sound independent gill net survey. Coastal sharks from the 2012 Pamlico Sound independent gill net survey catch included: two angel (*Squatina dumeril*), total length of 844 mm and 880 mm, 65 Atlantic sharpnose (*Rhizoprionodon terraenovae*), total length range of 250-970 mm (mean = 355.7 mm TL), 35 blacktip (*Carcharhinus limbatus*) total length range of 365-1010 mm (mean = 501.1 mm TL), 22 bonnethead (*Sphyrna tiburo*) total length range of 352-913 mm (mean = 743.5 mm TL), 28 bull (*Carcharhinus leucas*) total length range of 375-925 mm TL (mean = 734.9 mm TL), one scalloped hammerhead (*Sphyrna lewini*), total length of 860 mm, and 40 smooth hound (*Mustelus canis*) total length range of 472-1210 mm TL (mean = 555.1 mm TL).

The Fisheries Independent Assessment Program Ocean Gillnet (FIAPOG) began in February, 2008, funded by the Coastal Recreational Fishing License receipts. The program utilizes the same sampling framework as the fisheries independent gill net survey. This program is designed to gather data on fishes utilizing the nearshore ocean (<3 miles) from New River Inlet south to the SC/NC state line and the Cape Fear and New Rivers. The goals of the program are to provide CPUE data for coastal fishes, to supplement age, growth, and reproduction studies, to evaluate catch rates and species distribution for use in management plans, and to characterize habitat use. In 2012, 405 sharks were captured in the near shore ocean waters from New River Inlet south to the SC/NC state line and the Cape Fear and New Rivers. Coastal sharks from the 2012 FIAPOG survey catch included: 269 Atlantic sharpnose (*Rhizoprionodon terraenovae*), total length range of 227-851 mm (mean = 483.6 mm TL), 52 blacknose (*Carcharhinus acronotus*) total length range of 722-1140 mm (mean = 935.9 mm TL), 10 blacktip (*Carcharhinus limbatus*) total length range of 828-1275 mm (mean = 952.0 mm TL), 42 bonnethead (*Sphyrna tiburo*) total length range of 602-935 mm (mean = 801.6 mm TL), 13 finetooth (*Carcharhinus isodon*) total length range of 898-1310 mm (mean = 1050.5 mm TL), 13 scalloped hammerhead (*Sphyrna lewini*) total length range of 538-695 mm (mean = 589.8 mm TL), and 6 smooth dogfish (*Mustelus canis*) total length range of 431-482 mm (mean = 456.2 mm TL).

South Carolina

The COASTSPAN survey was created in 1998 as a cooperative survey between the NMFS Apex predators program and the SCDNR. The estuaries and sounds from Bulls Bay to St. Helena Sound are sampled with hand-deployed longlines and gillnets. The hand deployed longline is more effective for targeting large coastal species, primarily sandbar and blacktip sharks, while gillnets are more effective for small coastal sharks, Atlantic sharpnose, finetooth and bonnethead sharks. All stations in this survey are index stations. Species captured are measured, sexed, tagged and released, and physical and water quality parameters are recorded. All collected data are shared with the apex predators program.

Catches of LCS on the hand deployed longline have been relatively steady and have remained above the long term average since 2005, with a slight decline occurring from 2006 to 2009. Catches of LCS in 2012 remained above the long term average, and were slightly higher than 2011. Catches of SCS continued to decline from a 10 year high in 2010 and 2012 CPUE of SCS were lower than the long term average.

The gillnet is a more effective gear for small coastal shark species, and is the only available long term survey data set for bonnethead and finetooth sharks in the Southeast. Trends in the data from the gillnet survey are typically more stable than the hand deployed longline data, with both populations remaining around their long term averages. However, catches of both LCS and SCS were both well above their mean CPUE in 2012 with SCS having the second highest CPUE on record since the survey began. Large coastal sharks also dramatically increased with 2012 being the highest CPUE recorded since the survey began.

The Adult Red Drum and Coastal Sharks Bottom Longline Survey is used to estimate the abundance and distribution of adult red drum and coastal sharks in SC coastal waters. This program utilized a 1,609 meter hydraulic longline to sample index stations from 1994 to 2007. Beginning in 2007 the survey design was changed to a random stratified survey using two 536 meter longlines. The spatial coverage of this survey also changed in 2007 and now covers the majority of the state and the four largest bays and sounds, Port Royal Sound, St. Helena Sound, Charleston Harbor, and Winyah Bay. All other survey protocols remained unchanged. This shift in design and spatial coverage should yield excellent data on the species of shark utilizing South Carolina's coastal waters in the future. The primary species captured by this survey are: Atlantic sharpnose, sandbar, finetooth, blacknose, blacktip, scalloped hammerhead, bonnethead, and spinner sharks. Other species encountered include: tiger, lemon, bull, nurse, great hammerhead and seasonally smooth and spiny dogfish.

The presence of SCS in the longline data set has been variable. Increases in abundance starting in 2005 are associated with the spatial changes the program underwent (Figure 10). Sampling was expanded in 2005, and again in 2007 causing shifts in catches of both SCS and LCS. Regional differences in CPUE are evident with the areas added (Winyah Bay, St. Helena Sound, and Port Royal Sound) having higher diversity and abundance of coastal sharks than the Charleston Harbor. Future research will investigate these differences. The random stratified survey has shown an increase in catches of both SCS and LCS when compared to the index station survey. Large coastal shark catches have decreased every year since the survey protocol was changed. Catches of SCS continued to increase from a low in 2010 and were slightly above the long term average.

Georgia

Georgia's Adult Red Drum Survey (SEAMAP) occurs in inshore and nearshore waters of southeast Georgia and in offshore waters of northeast Florida. Sampling occurs from mid-April through the end of December. Sampling gear consists of a bottom set 926m, 600lb test monofilament mainline configured with 60, 0.5 m gangions made of 200lb test monofilament. Each gangion consists of a longline snap and either a 12/0 or 15/0 circle hook. Thirty hooks of each size are deployed during each set. All hooks are baited with squid. Soak time for each set is 30 minutes. During 2012, CRD staff deployed 214 sets consisting of 12,838 total hooks and

107 hours of total soak time. A total of 740 sharks, representing 9 species were captured during the 2012 season.

The Shark Nursery Survey (COASTSPAN) occurs in the inshore waters of St. Simons and St. Andrew sounds. Sampling occurs from mid-April through the end of September. Sampling gear consists of a 305 m braided rope mainline configured with 50, 1 m gangions made of 200lb test monofilament. Each gangion is configured with a longline snap and a 12/0 circle hook. All hooks are baited with squid. Soak time for each set is 30 minutes. During 2012, CRD staff fished 115 longline stations consisting of 5,747 hooks and a total of 57.5 hours of soak time. A total of 432 sharks, representing 8 species were captured during 2012.

The Ecological Monitoring Survey uses a 40-foot flat otter trawl with neither a turtle excluder device nor bycatch reduction device which is deployed at 42 stations across six estuaries. At each station, a standard 15 minute tow is made. During this report period, 494 tows/observations were conducted, totaling 123.5 hours of tow time. A total of 181 sharks, representing 6 species were captured during 2012.

The MSPHS is a multi-faceted ongoing survey used to collect information on the biology and population dynamics of recreationally important finfish. Currently two Georgia estuaries are sampled on a seasonal basis using entanglement gear. During the June to August period, young-of-the-year red drum in the Altamaha/Hampton River and Wassaw estuaries are collected using gillnets to gather data on relative abundance and location of occurrence. During the September to November period, fish populations in the Altamaha/Hampton River and Wassaw estuaries are monitored using monofilament trammel nets to gather data on relative abundance and size composition. In 2012, a total of 216 gillnet and 158 trammel net sets were made, resulting in the capture of 259 individuals representing five species of coastal sharks.

V. Status of Management Measures and Issues

Fishery Management Plan

Coastal Sharks are managed under the Interstate FMP for Coastal Sharks, which was implemented in August 2008, Addendum I (2009), Addendum II (2013) and Addendum III (2013). The FMP addresses the management of 40 species and establishes a suite of management measures for recreational and commercial shark fisheries in state waters (0 – 3 miles from shore). Prior to this plan, shark management in state waters consisted of disjointed state-specific regulations. The plan allows for consistency across jurisdictions. For the small coastal, pelagic and non-sandbar large coastal complexes, the Commission's Board does not set active quotas, but instead follows NOAA Fisheries closures and openings. Smooth hounds are not actively managed by the National Marine Fisheries Service. Because fishery quotas are set at a harvest level that is estimated to be sustainable based on the stock assessment, the Board is unable to set quotas in the absence of an assessment. When a stock assessment has been done, the Board may set quotas for smooth hounds. Addendum I was added to allow commercial fishermen limited processing of smooth hounds at sea and remove recreational possession limits for smooth hounds, as well as the 2 hour net check requirement for commercial fishermen using large mesh gillnets. Addendum II modified smooth dogfish processing at sea regulation and allocated state-shares of the smooth dogfish federal quota. Addendum III changed the species groupings and

increased the size limit for hammerhead sharks. Addendum III was initiated in response to changes in the federal plan and will be implemented in March of 2014 to ensure consistency between the two management plans.

VI. Implementation of FMP Compliance Requirements for 2013

Mandatory compliance elements for 2013 were provided by the FMP.

Regulatory Requirements

The management program includes regulatory requirements for non *de minimis* states as follows:

- Recreational anglers are prohibited from possessing silky, tiger, blacktip, spinner, bull, lemon, nurse, scalloped hammerhead, great hammerhead, and smooth hammerhead in the state waters of Virginia, Maryland, Delaware and New Jersey from May 15 through July 15—regardless of where the shark was caught. Fishermen who catch any of these species in federal waters may not transport them through the state waters of VA, MD, DE, and NJ during the seasonal closure.
- Recreational prohibition of species that are illegal to land by recreational anglers in federal waters.
- All sharks caught by recreational fishermen must have head, tail, and fins attached to carcass through landing. Smooth dogfish may be processed at sea so long as the total wet weight of the shark fins may not exceed 12 percent of the total dressed weight of smoothhound shark carcasses landed or found on board a vessel.
- Sharks caught in the recreational fishery must have a fork length of at least 4.5 feet with the exception of Atlantic sharpnose, blacknose, finetooth, bonnethead, and smooth dogfish. Hammerhead species must have a fork length of 6.5 feet.
- Recreational anglers may only use handlines and rod & reel.
- Recreational and commercial possession limits as specified in Table 3.
- All commercial fishermen are prohibited from possessing silky, tiger, blacktip, spinner, bull, lemon, nurse, scalloped hammerhead, great hammerhead, and smooth hammerhead in the state waters of Virginia, Maryland, Delaware and New Jersey from May 15 through July 15.
- Quota specifications as specified by NOAA Fisheries.
- Ability to allocate quotas seasonally as specified if deemed necessary.
- Commercial permit requirement.
- Display and research permit requirements.
- Federal Commercial Shark Dealer Permit requirement.
- Prohibition of use of any gear type except:
 - **Rod & reel**
 - **Handlines.** Handlines are defined as a mainline to which no more than two gangions or hooks are attached. A handline is retrieved by hand, not by mechanical means, and must be attached to, or in contact with, a vessel.
 - **Small Mesh Gillnets.** Defined as having a stretch mesh size smaller than 5 inches.
 - **Large Mesh Gillnets.** Defined as having a stretch mesh size equal to or greater than 5 inches.
 - **Trawl nets.**

- **Shortlines.** Shortlines are defined as fishing lines containing 50 or fewer hooks and measuring less than 500 yards in length. A maximum of 2 shortlines are allowed per vessel.
- **Pounds nets/fish traps.**
- **Weirs.**
- Any vessel using a shortline must use corrodible circle hooks¹. All shortline vessels must practice the protocols and possess the recently updated federally required release equipment for pelagic and bottom longlines for the safe handling, release, and disentanglement of sea turtles and other non-target species; all captains and vessel owners must be certified in using handling and release equipment.

Table 8: Possession limits for shark species in state waters for 2012 fishing season.

Recreational	<i>Shore-angler</i>	1 permitted spp/day (excluding smooth dogfish), +1 bonnethead, 1 Atlantic sharpnose, and 1 smooth dogfish /day
	<i>Vessel-fishing</i>	1 permitted spp/boat/day (excluding smooth dogfish), +1 bonnethead, 1 Atlantic sharpnose, and 1 smooth dogfish /boat/day
Commercial	<i>Directed permit</i>	33 fish possession limit for spp in LCS group, No limit for SCS
	<i>Incidental permit</i>	3 non-sandbar LCS/vessel/trip, 16 pelagic or SCS combined/trip

VII. PRT Recommendations

State Compliance

Massachusetts, Connecticut, and Florida have not submitted a report. All other states with a declared interest in the management of sharks have submitted reports and have regulations in place that meet or exceed the requirements of the Interstate Fisheries Management Plan for Coastal Sharks.

De Minimis Status

This FMP does not establish specific *de minimis* guidelines that would exempt a state from regulatory requirements contained in this plan. *De minimis* shall be determined on a case-by case basis. *De minimis* often exempts states from monitoring requirements in other fisheries but this plan does not contain any monitoring requirements.

De minimis guidelines are established in other fisheries when implementation and enforcement of a regulation is deemed unnecessary for attainment of the fishery management plan's

objectives and conservation of the resource. Due to the unique characteristics of the coastal shark fishery, namely the large size of sharks compared to relatively small quotas, the taking of a single shark could contribute to overfishing of a shark species or group. Therefore, exempting a state from any of the regulatory requirements contained in this plan could threaten attainment of this plan's goals and objectives.

States that have been granted *de minimis* status are Maine, New Hampshire and Massachusetts. Maine and New Hampshire are exempt from the Interstate Coastal Shark FMP, due to their low landings and the low presence of sharks in their waters. Both states implement the following rules that uphold the goals and objectives of the FMP:

- Require federal dealer permits for all dealers purchasing Coastal Sharks
- Prohibit the take or landings of prohibited species in the plan
- Close the fishery for porbeagle sharks when the NMFS quota has been harvested
- Prohibit the commercial harvest of porbeagle sharks in State waters
- Require that head, fins and tails remain attached to the carcass of all shark species, except smooth dogfish, through landing

Massachusetts, also a state that does not land large quantities of sharks and does not have many of the shark species in its waters, has been granted an exemption from the possession limit for non-sandbar large coastal sharks and closures of the non-sandbar large coastal shark fisheries. These states will continue to have *de minimis* status until their landings patterns change or they request a discontinuation.

Research Priorities

Species-Specific Priorities

- Investigate the appropriateness of using vertebrae for ageing adult sandbar sharks. If appropriate, implement a systematic sampling program that gathers vertebral samples from entire size range for annual ageing to allow tracking the age distribution of the catch as well as updating of age-length keys.¹
- Re-evaluate finetooth life history in the Atlantic Ocean in order to validate fecundity and reproductive periodicity.
- Develop and conduct tagging studies on dusky and blacknose stock structure with increased international collaboration (e.g., Mexico) to ensure wider distribution and returns of tags. Expand research efforts directed towards tagging of individuals in south Florida and Texas/Mexico border to get better data discerning potential stock mixing.

General Priorities

- Generally update age and growth and reproductive studies for all species currently assessed

¹ Recent bomb radiocarbon research has indicated that past age estimates based on tagging data for sandbar sharks may be correct and that vertebral ageing may not be the most reliable method for mature individuals. See Andrews *et al.* 2011.

- Examine female sharks during the pupping periods to determine the proportion of reproductive females.
- Expand or develop monitoring programs to collect appropriate length and age samples from the catches in the commercial sector by gear type, from catches in the recreational sector, and from catches taken in research surveys to provide reliable length and age compositions for stock assessment
- Evaluate to what extent the different CPUE indices track population abundance (e.g., through power analysis)
- Explore modeling approaches that do not require an assumption that the population is at virgin level at some point in time.

References

Stock Assessment and Fishery Evaluation (SAFE) Report for Atlantic Highly Migratory Species. 2013. NOAA Fisheries, January 8, 2013.
< http://www.nmfs.noaa.gov/sfa/hms/hmsdocument_files/SAFEreports.htm>



PAUL R. LEPAGE
GOVERNOR

STATE OF MAINE
DEPARTMENT OF MARINE RESOURCES
21 STATE HOUSE STATION
AUGUSTA, MAINE
04333-0021

PATRICK C. KELIHER
COMMISSIONER

August 1, 2013

Marin Hawk
Atlantic States Marine Fisheries Commission
1050 N. Highland Street Suite 200A-N
Arlington, VA 22201

Dear Marin,

Attached is Maine's 2012 Compliance Report for Coastal Sharks. Please note that commercial landings in section III d are confidential. These landings should be removed from the report before distributing or posting to the Commission website.

Thank you,

Chris Vonderweidt
Policy Development Specialist

Maine 2012 Coastal Sharks Compliance Report

August 1, 2013

I. Introduction

Very few of the species managed in the Interstate Fisheries Management Plan for Coastal Sharks inhabit Maine's coastal waters and the species that are encountered by Maine commercial and recreational fishermen are caught in Federal waters outside the jurisdiction of the State.

The Spiny Dogfish & Coastal Sharks Management Board (Board) granted Maine *de minimis* status in 2009, based on recommendations of the Coastal Sharks Technical Committee and Plan Review Team. In their July reports, the TC and PRT recommended:

“The TC recommends that the Board grant Maine de minimis status as long as they implement all measures contained in this letter¹. Maine does not harvest many sharks and implementing the measures in their letter is likely to provide sufficient regulation to ensure that the goals and/or objectives of the FMP are met.”

Following Board approval of their *de minimis* proposal, the Department of Marine Resources (DMR) implemented the following regulations in 2009, and these regulations have remained unchanged since.

- Require federal dealer permits for all Maine dealers purchasing Coastal Sharks.
- Prohibit the take or landing of prohibited species in the plan including: sand tiger, bigeye, sand tiger, whale, basking, white, dusky, bignose, Galapagos, night, reef, narrowtooth, Caribbean sharpnose, smalltail, silky, Atlantic angel, longfin mako, bigeye thresher, sharpnose sevengill, bluntnose sixgill, sandbar and bigeye sixgill sharks.
- Close the fishery for porbeagle sharks when the NMFS quota has been harvested.
- Prohibit the commercial harvest of porbeagle sharks from State waters.
- Require that head, fins and tails remain attached to the carcass of all shark species through landing.

There were no significant changes to the coastal sharks regulations in 2012.

II. Request for *de minimis*, where applicable.

Maine requests continued *de minimis* status as coastal shark landings are minimal or non-existent and current regulations are sufficient to ensure the goals and objectives of the FMP are met.

III. Previous calendar year's fishery and management program

¹ Refers to attached July 28, 2009 letter.

- a. **Activity and results of fishery dependent monitoring (provide general results and references to technical documentation).**

None

- b. **Activity and results of fishery independent monitoring (provide general results and references to technical documentation).**

None

- c. **Copy of regulations that were in effect, including a reference to the specific compliance criteria as mandated in the FMP.**

See attached.

- d. **Harvest broken down by commercial (by gear type where applicable) and recreational, and non-harvest losses (when available).**

According to NMFS MRIP recreational data, in 2012, blue shark was the only species managed in the FMP that was caught in the "Maine Geographic Area". In 2012, 2,444 blue sharks were caught (total catch, A + B1 + B2) in Maine.

- e. **Review of progress in implementing habitat recommendations.**

Does not apply to Coastal Sharks FMP.

IV. Planned management programs for the current calendar year

- a. **Summarize regulations that will be in effect.**

Refer to III c.

- b. **Summarize monitoring programs that will be performed.**

None.

- c. **Highlight any changes from the previous year.**

No changes were implemented in 2012.

V. Plan specific requirements

- a. **Recreational seasonal closure as specified in Section 4.2.1.**

Does not apply to Maine state waters.

b. Recreational prohibition of species that are illegal to land by recreational anglers in federal waters.

Take of sand tiger, bigeye, sand tiger, whale, basking, white, dusky, bignose, Galapagos, night, reef, narrowtooth, Caribbean sharpnose, smalltail, silky, Atlantic angel, longfin mako, bigeye thresher, sharpnose sevengill, bluntnose sixgill, sandbar and bigeye sixgill shark prohibited.

c. All sharks caught by recreational fishermen must have head, tail, and fins attached to carcass.

See attached regulations.

d. Sharks caught in the recreational fishery must have a fork length of at least 4.5 feet with the exception of Atlantic sharpnose, blacknose, finetooth, bonnethead, and smooth dogfish.

Not required under Board approved *de minimis* plan.

e. Recreational anglers may only use handlines and rod & reel.

Not required under Board approved *de minimis* plan.

f. Recreational possession limits as specified in Section 4.2.7.1 and 4.2.7.2, as modified by Addendum I (2009) for smooth dogfish.

Not required under Board approved *de minimis* plan.

g. Commercial seasonal closure as specified in Section 4.3.2.

Does not apply to Maine state waters.

h. Quota specifications as specified in Section 4.3.4.

Not required under Board approved *de minimis* plan.

i. Ability to allocate quotas seasonally as specified in Section 4.3.5.

Not required under Board approved *de minimis* plan.

j. Possession limits as specified in Section 4.3.6.

Not required under Board approved *de minimis* plan.

k. Commercial permit requirement.

See attached regulations.

l. Display and research permit requirements.

Not required under Board approved *de minimis* plan.

m. Federal Commercial Shark Dealer Permit requirement.

See attached regulations.

n. Prohibition of use of any gear type not listed in Section 4.3.9, as modified by Addendum I (2009).

Not required under Board approved *de minimis* plan.

o. Shortline and gillnet bycatch reduction measures as specified in section 4.3.10, as modified by Addendum I (2009).

Not required under Board approved *de minimis* plan.

p. All sharks caught by commercial fishermen must have tails and fins attached naturally to the carcass through landing, as modified by Addendum I (2009).

See attached regulations.

Coastal Sharks Compliance Report New Hampshire -2012

I. Introduction

Summary of the year: highlight any significant changes in monitoring, regulations, or harvest.

II. Request for *de minimis*, where applicable.

The State of New Hampshire requests *de minimis* status for the coastal sharks in 2013. NH was first granted *de minimis* status by the Board in 2009 under the following provisions:

- Provide protections for prohibited species
- Require federal dealer permits
- Require that all fins and tails remain attached to the carcass in the commercial fishery
- Close the fishery for porbeagle sharks when the NMFS quota has been harvested.

The state rules shown under Section III c. addressed these provisions and will continue to remain in place for 2013.

No coastal sharks were harvested or landed in New Hampshire during 2009, 2010, 2011, and 2012 which constitutes less than one percent of the coast wide commercial landings during those years. If the *de minimis* threshold was reached, New Hampshire Fish and Game Department has the ability to close the fishery.

III. Previous calendar year's fishery and management program

a. Activity and results of fishery dependent monitoring (provide general results and references to technical documentation).

Three hundred twenty-six individuals were licensed to take, land, and sell commercial species in New Hampshire in 2012. Four of these license holders indicated their intent to take, land, or sell sharks in New Hampshire. No shark harvest or landings were reported.

b. Activity and results of fishery independent monitoring (provide general results and references to technical documentation).

There is no fisheries independent monitoring of coastal sharks in New Hampshire state waters.

c. Copy of regulations that were in effect, including a reference to the specific compliance criteria as mandated in the FMP.

Fis 603.20 Sharks.

(a) No person shall take, land or possess the following species of sharks in state waters:

- (1) Sand tiger (*Carcharias taurus*);

- (2) Bigeye sand tiger (*Odontaspis noronhai*);
- (3) Whale (*Rhincodon typus*);
- (4) Basking (*Cetorhinus maximus*);
- (5) White (*Carcharodon carcharias*);
- (6) Dusky (*Carcharhinus obscurus*);
- (7) Bignose (*Carcharhinus altimus*);
- (8) Galapagos (*Carcharhinus galapagensis*);
- (9) Night (*Carcharhinus signatus*);
- (10) Reef (*Carcharhinus perezii*);
- (11) Narrowtooth (*Carcharhinus brachyurus*);
- (12) Caribbean sharpnose (*Rhizoprionodon porosus*);
- (13) Smalltail (*Carcharhinus porosus*);
- (14) Atlantic angel (*Squatina dumeril*);
- (15) Longfin mako (*Isurus paucus*);
- (16) Bigeye thresher (*Alopias superciliosus*);
- (17) Silky (*Carcharhinus falciformis*);
- (18) Sharpnose sevengill (*Heptranchias perlo*);
- (19) Bluntnose sixgill (*Hexanchus griseus*);
- (20) Sandbar (*Carcharhinus plumbeus*); and
- (21) Bigeye sixgill (*Hexanchus nakamurai*).

(b) Porbeagle shark (*Lamna nasus*) shall only be taken by recreational fishing from state waters.

(c) The head, fins and tail of all shark species shall remain attached to the carcass through landing.

(d) Dealers licensed under RSA 211:49-aa or RSA 211:49-c who purchase any of the following species of coastal sharks shall first obtain a federal dealer permit:

- (1) Smooth Dogfish (*Mustelus canis*);
- (2) Atlantic sharpnose (*Rhizoprionodon terraenovae*);
- (3) Finetooth (*Carcharhinus isodon*);
- (4) Blacknose (*Carcharhinus acronotus*);
- (5) Bonnethead (*Sphyrna tiburo*);
- (6) Tiger (*Galeocerdo cuvier*);
- (7) Blacktip (*Carcharhinus limbatus*);
- (8) Spinner (*Carcharhinus brevipinna*);
- (9) Bull (*Carcharhinus leucas*);
- (10) Lemon (*Negaprion brevirostris*);
- (11) Nurse (*Ginglymostoma cirratum*);
- (12) Scalloped hammerhead (*Sphyrna lewini*);
- (13) Great hammerhead (*Sphyrna mokarran*);
- (14) Smooth hammerhead (*Sphyrna zygaena*);
- (15) Shortfin mako (*Isurus oxyrinchus*);
- (16) Porbeagle (*Lamna nasus*);
- (17) Common thresher (*Alopias vulpine*);
- (18) Oceanic whitetip (*Carcharhinus longimanus*); or
- (19) Blue (*Prionace glauca*).

d. Harvest broken down by commercial (by gear type where applicable) and recreational, and non-harvest losses (when available).

There was no documented recreational or commercial harvest in New Hampshire state waters by any gear type. Marine Recreational Information Program (MRIP) estimates for 2012 indicate 176 shortfin mako and 1,410 blue sharks were caught recreationally and released alive. None were released dead or retained.

e. **Review of progress in implementing habitat recommendations.**

New Hampshire has requested *de minimus* status.

IV. Planned management programs for the current calendar year

a. **Summarize regulations that will be in effect.**

Refer to III c.

b. **Summarize monitoring programs that will be performed.**

New Hampshire will continue to collect data from individuals harvesting in state waters and continue to be involved in the cooperative Maine/New Hampshire trawl survey.

c. **Highlight any changes from the previous year.**

No changes were implemented in 2012.

V. Plan specific requirements

a. **Recreational seasonal closure as specified in Section 4.2.1.**

New Hampshire has prohibited the take, landing, and possession in NH state waters of the specified species indicated for closures in the FMP.

b. **Recreational prohibition of species that are illegal to land by recreational anglers in federal waters.**

New Hampshire has requested *de minimus* status.

c. **All sharks caught by recreational fishermen must have head, tail, and fins attached to carcass.**

New Hampshire requires head, tail, and fins remain attached to all sharks taken, landed, or possessed in New Hampshire.

d. **Sharks caught in the recreational fishery must have a fork length of at least 4.5 feet with the exception of Atlantic sharpnose, blacknose, finetooth, bonnethead, and smooth dogfish.**

New Hampshire has requested *de minimus* status.

e. **Recreational anglers may only use handlines and rod & reel.**

New Hampshire has requested *de minimus* status.

- f. Recreational possession limits as specified in Section 4.2.7.1 and 4.2.7.2, as modified by Addendum I (2009) for smooth dogfish.**

New Hampshire has requested *de minimus* status.

- g. Commercial seasonal closure as specified in Section 4.3.2.**

New Hampshire has requested *de minimus* status.

- h. Quota specifications as specified in Section 4.3.4.**

New Hampshire has requested *de minimus* status.

- i. Ability to allocate quotas seasonally as specified in Section 4.3.5.**

New Hampshire has requested *de minimus* status.

- j. Possession limits as specified in Section 4.3.6.**

New Hampshire has requested *de minimus* status.

- k. Commercial permit requirement.**

A commercial license is required to land sharks in New Hampshire.

- l. Display and research permit requirements.**

New Hampshire has requested *de minimus* status.

- m. Federal Commercial Shark Dealer Permit requirement.**

Federal permits are required by federal dealers purchasing coastal sharks.

- n. Prohibition of use of any gear type not listed in Section 4.3.9, as modified by Addendum I (2009).**

New Hampshire has requested *de minimus* status.

- o. Shortline and gillnet bycatch reduction measures as specified in section 4.3.10, as modified by Addendum I (2009).**

New Hampshire has requested *de minimus* status.

- p. All sharks caught by commercial fishermen must have tails and fins attached naturally to the carcass through landing, as modified by Addendum I (2009).**

New Hampshire requires head, tail, and fins remain attached to all sharks taken, landed, or possessed in New Hampshire.



Rhode Island
Department of Environmental Management

DIVISION OF FISH AND WILDLIFE

3 Fort Wetherill Road
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TEL 401 423-1920
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To: Marin Hawk, ASMFC Coastal Shark FMP Coordinator

From: Eric Schneider, Principal Biologist

Date: November 1, 2013

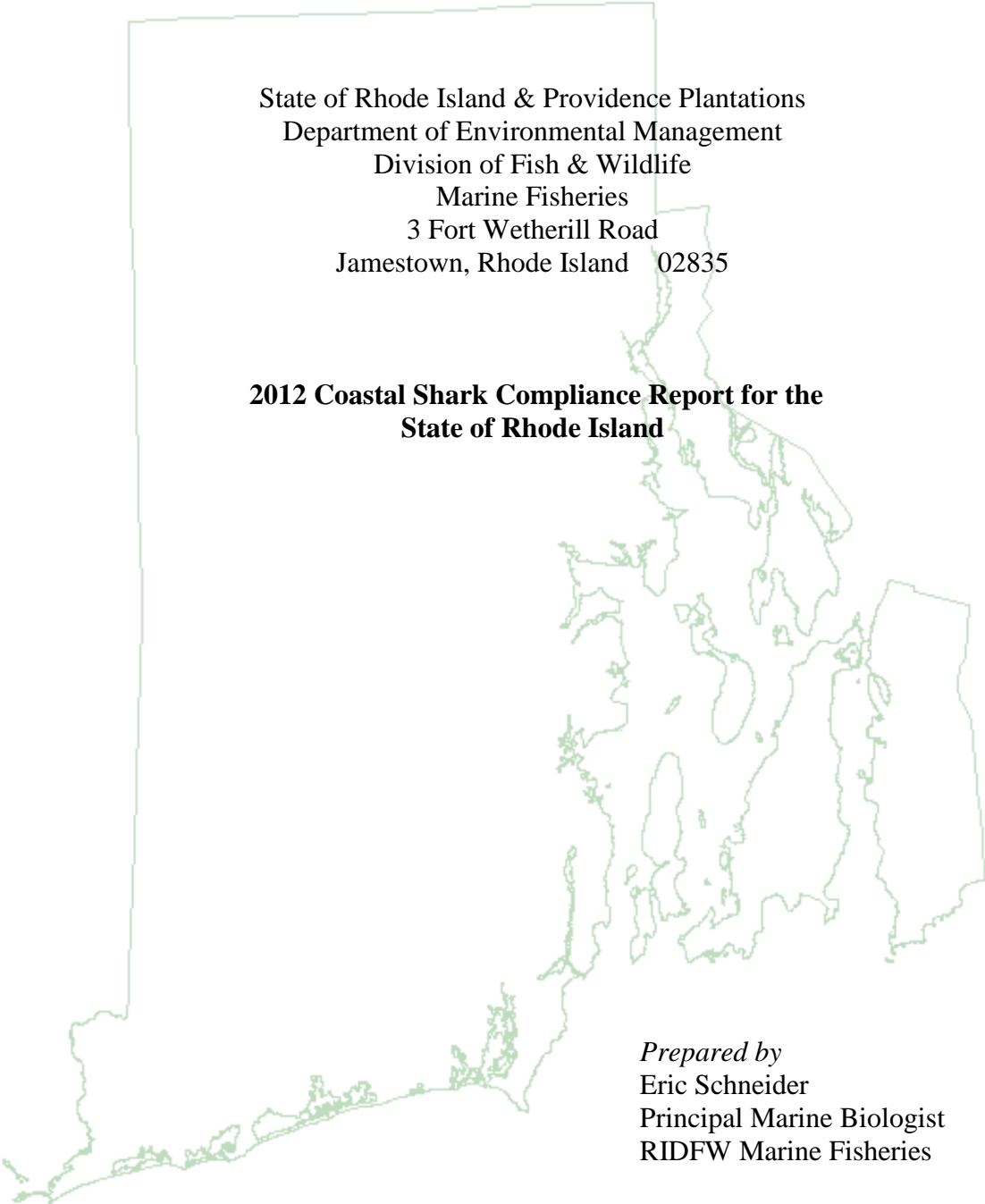
Subject: Rhode Island Coastal Shark Annual Compliance Report for the 2012 Fishing Year

Attached please find Rhode Island's Coastal Shark annual compliance report for the 2012 fishing year.

Please contact me at 401.423-1933 or via email at Eric.Schneider@dem.ri.gov if you have questions or need additional information.

Thank you.

Attachment: RI Coastal Shark Compliance Report for 2012 FY.doc



State of Rhode Island & Providence Plantations
Department of Environmental Management
Division of Fish & Wildlife
Marine Fisheries
3 Fort Wetherill Road
Jamestown, Rhode Island 02835

**2012 Coastal Shark Compliance Report for the
State of Rhode Island**

Prepared by
Eric Schneider
Principal Marine Biologist
RIDFW Marine Fisheries

Date Submitted: November 1, 2013

Rhode Island Coastal Shark Annual Compliance Report for the 2012 Fishing Year



I. Introduction

Summary of the year: Commercial landings data collected by the Standard Atlantic Fisheries Information System (SAFIS) as of 6/24/13 indicate 17,168 lbs of Coastal Sharks were landed in Rhode Island during the 2012 fishing year (Jan 1 – Dec 31, 2012), with an estimated commercial value of \$ 6,639.14. During 2012 there were no significant changes in monitoring, regulations, or harvest.

In accordance with the Section 4.3.4, Quota Specifications, of the Interstate Fisheries Management Plan for Atlantic Coastal Sharks and Rhode Island Marine Fisheries Regulation Part VII, 7.24.1-3 the following opening and closures of Rhode Island commercial coastal shark fisheries were enacted (also included in Table 1):

- Beginning 12:01 AM on February 1, 2012 the Rhode Island commercial fisheries for Small Coastal Sharks (SCS), and Pelagic Sharks Rhode Island opened for the 2012 fishing year.
- Beginning 12:01 AM on May 31, 2012 the Rhode Island commercial fishery for Porbeagle Shark was closed.
- Beginning 12:01 AM on July 15, 2012 the Rhode Island commercial fishery for Non-sandbar Large Coastal Sharks (LCS) opened.
- The Rhode Island commercial fishery for Small Coastal Sharks (SCS), Non-sandbar Large Coastal Sharks (LCS), and Pelagic Sharks remained open for the remained of the fishing year (through 12/31/13).

Table 1. The following table summarizes openings and closures of Rhode Island commercial coastal shark fisheries managed under the Interstate Fisheries Management Plan for Atlantic Coastal Sharks and Rhode Island Marine Fisheries Part VII.

Species Group	Date Opened	Date Closed
Smooth Dogfish	Jan 01, 2011 *	NA
Small Coastal Sharks (SCS)	Feb 01, 2012	did not close
Non-sandbar Large Coastal Sharks (LCS)	Jul 15, 2012	did not close
Pelagic Sharks	Feb 01, 2012	did not close
- porbeagle shark fishery	Feb 01, 2012	May 31, 2012

* per rule, the fishing season is from Jan 1 to Dec 31 of each year. There is no quota and the fishery generally does not close. However, in the event that an annual smooth dogfish quota is set and harvested, or projected to be harvested, the commercial fishery will close.

II. Request for *de minimis*, where applicable.

The state of Rhode Island does not wish to apply for *de minimis* status.

III. Previous calendar year's fishery and management program:

A. Activity and results of fishery dependent monitoring.

Fishery dependent is limited to port sampling and at-sea observers. None of these efforts are directed at any coastal shark species.

B. Activity and results of fishery independent monitoring.

Fishery independent monitoring is limited to coastal shark species taken in the RI Division of Fish & Wildlife, Marine Fisheries Section monthly and seasonal trawl survey. During the 2012 calendar year the only coastal shark species captured in the trawl survey was smooth dogfish (*Mustelus canis*). A summary of fishery independent monitoring for coastal sharks is summarized in Table B-1 below. More information, including a copy of the trawl survey annual report is available upon request.

Table B-1. Summary of fishery independent monitoring for coastal sharks captured in the RI Division of Fish & Wildlife, Marine Fisheries Section monthly and seasonal trawl survey during 2012. Note that the only species captured was smooth dogfish (*Mustelus canis*).

Year	Month	Tows conducted	Total weight (kg)	Total number	Number per tow	kg per tow
Monthly Coastal Trawl Survey						
2012	JAN	13	0	0	0.00	0.00
2012	FEB	13	0	0	0.00	0.00
2012	MAR	12	0	0	0.00	0.00
2012	APR	13	0	0	0.00	0.00
2012	MAY	13	12.9	4	0.31	0.99
2012	JUN	9	20.4	14	1.56	2.27
2012	JUL	13	15.53	19	1.46	1.19
2012	AUG	13	6	6	0.46	0.46
2012	SEP	13	0	0	0.00	0.00
2012	OCT	9	55.24	28	3.11	6.14
2012	NOV	13	0	0	0.00	0.00
2012	DEC	13	0	0	0.00	0.00
Seasonal Coastal Trawl Survey						
2012	Spring	44	0	0	0	0
2012	Fall	44	77.76	49	1.11	1.77

C. Copy of regulations that were in effect during this period are as follows:

Regulations from January 1, 2012 through December 31, 2012 are provided below. Other than fishery opening and closings, no regulatory changes were made during this period.

**Rhode Island Marine Fisheries Statutes and Regulations
Part VII – Minimum Sizes of Fish/Shellfish**

7.24 Coastal Sharks

7.24.1 – Commercial

7.24.1-1 Commercial Species Groupings - Species managed under the

Atlantic States Marine Fisheries Commission (ASMFC) Interstate Fishery Management Plan (IFMP) for Atlantic Coastal Sharks shall be grouped into six commercial “species groups” for management purposes, hereafter referred to as: Prohibited Species, Research Species, Smooth Dogfish, Small Coastal Sharks, Non-Sandbar Large Coastal Sharks, and Pelagic Sharks. These groupings apply to all commercial shark fisheries in state waters.

7.24.1-2 Commercial Fishing Year - The commercial shark fishery shall operate on a January 1 through December 31 fishing year.

7.24.1-3 Commercial Possession Limits – Possession limits, quotas, and seasonal periods for commercial shark fisheries will be established annually either through the National Marine Fisheries Service (NMFS) or the Atlantic States Marine Fisheries Commission (ASMFC). In accordance therewith:

- a. Properly licensed commercial fishermen may possess any of the species of sharks listed in Table 7.1 below in the Smooth Dogfish, Small Coastal Sharks, Non-Sandbar Large Coastal Sharks and Pelagic Sharks species groups.
- b. There are no commercial trip limits or possession limits for Smooth Dogfish, or for the sharks listed in the Small Coastal Sharks and the Pelagic Species groups.
- c. No person shall possess more than 33 sharks, per vessel per calendar day, regardless of species, from the Non-Sandbar Large Coastal Sharks species group.

Table 7.1 Sharks in the Smooth Dogfish, Small Coastal Sharks, Non-Sandbar Large Coastal Sharks, and Pelagic Species Groups.

Common Name	Scientific Name
Smooth dogfish	
Smooth Dogfish	<i>Mustelus canis</i>
Small Coastal Sharks (SCS)	
Atlantic sharpnose	<i>Rhizoprionodon terraenovae</i>
Finetooth	<i>Carcharhinus isodon</i>
Blacknose	<i>Carcharhinus acronotus</i>
Bonnethead	<i>Sphyrna tiburo</i>
Non-Sandbar Large Coastal Sharks (LCS)	
Silky	<i>Carcharhinus falciformis</i>
Tiger	<i>Galeocerdo cuvier</i>
Blacktip	<i>Carcharhinus limbatus</i>
Spinner	<i>Carcharhinus brevipinna</i>
Bull	<i>Carcharhinus leucas</i>

Lemon	<i>Negaprion brevirostris</i>
Nurse	<i>Ginglymostoma cirratum</i>
Scalloped hammerhead	<i>Sphyrna lewini</i>
Great hammerhead	<i>Sphyrna mokarran</i>
Smooth hammerhead	<i>Sphyrna zygaena</i>
Pelagic Sharks	
Shortfin mako	<i>Isurus oxyrinchus</i>
Porbeagle	<i>Lamna nasus</i>
Common thresher	<i>Alopias vulpinus</i>
Oceanic whitetip	<i>Carcharhinus longimanus</i>
Blue	<i>Prionace glauca</i>

7.24.1-4 Transfer of Sharks - No person shall transfer sharks between vessels at sea.

7.24.1-5 Prohibition on the Possession of Sharks in the Prohibited and Research Species Groups – No person shall possess any species of sharks listed in Table 7.2 below in the Prohibited Species and Research Species groups, except in accordance with the provisions of section

7.24.1-8.

Table 7.2 Sharks in the Prohibited and Research Species Groups

Prohibited Species Group	
Common Name	Scientific Name
Sand tiger	<i>Carcharias taurus</i>
Bigeye sandtiger	<i>Odontaspis noronhai</i>
Whale	<i>Rhincodon typus</i>
Basking	<i>Cetorhinus maximus</i>
White	<i>Carcharodon carcharias</i>
Dusky	<i>Carcharhinus obscurus</i>
Bignose	<i>Carcharhinus altimus</i>
Galapagos	<i>Carcharhinus galapagensis</i>
Night	<i>Carcharhinus signatus</i>
Reef	<i>Carcharhinus perezii</i>
Narrowtooth	<i>Carcharhinus brachyurus</i>
Caribbean sharpnose	<i>Rhizoprionodon porosus</i>
Smalltail	<i>Carcharhinus porosus</i>
Atlantic angel	<i>Squatina dumeril</i>
Longfin mako	<i>Isurus paucus</i>
Bigeye thresher	<i>Alopias superciliosus</i>
Sharpnose sevengill	<i>Heptranchias perlo</i>
Bluntnose sixgill	<i>Hexanchus griseus</i>
Bigeye sixgill	<i>Hexanchus nakamurai</i>

Research Species Group	
Sandbar	<i>Carcharhinus plumbeus</i>

7.24.1-6 Quota Specification – It shall be unlawful for any person to possess any species of shark in state waters when the National Marine Fisheries Service (NMFS) prohibits the possession of that species in federal waters.

When notified that the quota set for any species of shark is harvested or projected to be harvested, as determined by the National Marine Fisheries Service or the Atlantic States Marine Fisheries Commission, the Division of Fish and Wildlife shall file notice with the Office of the Secretary of State prohibiting the commercial landings, harvest and possession of that species in state waters for the remainder of the designated period.

7.24.1-7 Commercial License – A person must hold a state commercial license in accordance with RIGL Chapter 20-2.1 in order to commercially land, harvest, possess, and sell sharks in state waters.

7.24.1-8 Display and Research of Sharks – No person shall possess, transport, sell or offer to sell any of the shark species listed in the Prohibited and Research Species Groups without the possession of a valid state collector’s permit obtained from the Division of Fish and Wildlife.

Any person granted a collector’s permit shall:

- a. Report to the Director, within 30 days after coming into possession of a shark. For each and every shark collected for research or display, the report to the Director shall include the following information: species identification, length, weight, date and location where caught by latitude and longitude coordinates, and the gear used; and
- b. For each shark taken for live display, the holder of the permit shall also report to the Director annually, by December 31 of each year, for the life of the shark. The annual report shall include all of the information set forth in the original report to the Director pertaining to the sharks, as well as updated information on the length and weight of the shark.

7.24.1-9 Dealer Permit

- a. No person shall sell any shark species to a person or dealer who does not possess a state commercial dealer license issued pursuant to RIGL 20-2.1, and a federal Commercial Shark Dealer Permit issued by the National Marine Fisheries Service.
- b. No person shall purchase any shark species for sale or resale unless such person, possesses a state commercial dealer license issued pursuant to RIGL 20-2.1, and a federal Commercial Shark Dealer Permit issued by the National

Marine Fisheries Service. [*Federal Commercial Shark Dealer Permits are open access and can be obtained by contacting the National Marine Fisheries Service Southeast Regional Office in St. Petersburg, FL at (727) 824-5326. Applications are available on the web at <http://sero.nmfs.noaa.gov/permits/permits.htm>].*

7.24.1-10 Authorized Commercial Gear – No person shall fish commercially for sharks in state waters by any method other than the following gear types:

- Rod & reel
- Handlines, which are defined as a mainline to which no more than two gangions or hooks are attached. A handline is retrieved by hand, not by mechanical means, and must be attached to, or in contact with, a vessel.
- Small Mesh Gillnets which are defined as having a stretch mesh size smaller than 5 inches
- Large Mesh Gillnets which are defined as having a stretch mesh size equal to or greater than 5 inches.
- Trawl nets.
- Shortlines which are defined as fishing lines containing 50 or fewer hooks and measuring less than 500 yards in length. A maximum of 2 shortlines shall be allowed per vessel.
- Pound nets/fish traps.
- Weirs.

7.24.1-11 Bycatch Reduction Measures – Vessels using shortlines and large-mesh gillnets to catch sharks must abide by the following bycatch regulation measures. Any vessels using shortlines or large-mesh gillnets that do not follow the following bycatch reduction measures are prohibited from possession, landing or selling any sharks.

- a. Any vessel using a shortline shall:
 - (1) use corrodible circle hooks, which are defined as non- offset hooks with the point turned perpendicularly back to the shanks; and
 - (2) practice the protocols, and possess the federally required release equipment, for pelagic and bottom longlines for the safe handling, release, and disentanglement of sea turtles and other non-target species; and
 - (3) have all captains and vessel owners federally certified in using, handling and release equipment. Captains and vessel owners can become certified by attending a Protected Species Safe Handling, Release, and Identification Workshop offered by NOAA. [Information on these workshops can be found at <http://www.nmfs.noaa.gov/sfa/hms/workshops/index.htm> or by calling the Management Division at (727) 824-5399.]

- b. Any vessel using large-mesh gillnets, must use nets that are shorter than 2.5 kilometers.

7.24.1-12 Prohibition of Finning – Finning is defined as the act of taking a shark and removing its fins. Finning of sharks is prohibited in all state waters. All sharks, with the exception of smooth dogfish, possessed by commercial fishermen within state boundaries must have the tails and fins attached naturally to the carcass until landed. Fins may be cut as long as they remain attached to the carcass, by natural means, with at least a small portion of uncut skin. Sharks may be gutted and bled provided the tail is not removed. Sharks taken and possessed by commercial fishermen may have the heads removed, but no commercial fisherman shall fillet a shark at sea or otherwise cut a shark into pieces at sea.

Commercial fishermen may completely remove the fins of smooth dogfish from March through June of each year. If fins are removed, the total wet weight of the shark fins may not exceed 5 percent of the total dressed weight of smooth dogfish carcasses landed or found on board a vessel.

From July through February for the smooth dogfish fishery only, commercial fishermen may completely remove the head, tail, pectoral fins, pelvic (ventral) fins, anal fin, and second dorsal fin, but must keep the dorsal fin attached naturally to the carcass through landing. Fins may be cut as long as they remain attached to the carcass, by natural means, with at least a small portion of uncut skin. If fins are removed, the total wet weight of the shark fins may not exceed 5 percent of the total dressed weight of smooth dogfish carcasses landed or found on board a vessel.

7.24.2 - Recreational

7.24.2-1 Recreationally Permitted Species – Recreational fishermen may possess any of the species of sharks listed in Table 7.3.

Table 7.3 Recreationally Permitted Species List.

Recreationally PERMITTED Species	
Smooth Dogfish *	<i>Mustelus canis</i>
Atlantic sharpnose	<i>Rhizoprionodon terraenovae</i>
Finetooth	<i>Carcharhinus isodon</i>
Blacknose	<i>Carcharhinus acronotus</i>
Bonnethead	<i>Sphyrna tiburo</i>
Tiger	<i>Galeocerdo cuvier</i>
Blacktip	<i>Carcharhinus limbatus</i>
Spinner	<i>Carcharhinus brevipinna</i>
Bull	<i>Carcharhinus leucas</i>
Lemon	<i>Negaprion brevirostris</i>
Nurse	<i>Ginglymostoma cirratum</i>
Scalloped hammerhead	<i>Sphyrna lewini</i>

Great hammerhead	<i>Sphyrna mokarran</i>
Smooth hammerhead	<i>Sphyrna zygaena</i>
Shortfin mako	<i>Isurus oxyrinchus</i>
Porbeagle	<i>Lamna nasus</i>
Common thresher	<i>Alopias vulpinus</i>
Oceanic whitetip	<i>Carcharhinus longimanus</i>
Blue	<i>Prionace glauca</i>

* Smooth dogfish are not regulated in federal waters and are not prohibited as a result.

7.24.2-2 Recreationally Prohibited Species -- No person fishing recreationally shall possess, in state waters any shark species that is not permitted to be taken in federal waters, as listed in Table 7.4.

Table 7.4 Recreationally Prohibited Species List.

Recreationally PROHIBITED Species	
Sandbar	<i>Carcharhinus plumbeus</i>
Silky	<i>Carcharhinus falciformis</i>
Sand tiger	<i>Carcharias taurus</i>
Bigeye sand tiger	<i>Odontaspis noronhai</i>
Whale	<i>Rhincodon typus</i>
Basking	<i>Cetorhinus maximus</i>
White	<i>Carcharodon carcharias</i>
Dusky	<i>Carcharhinus obscurus</i>
Bignose	<i>Carcharhinus altimus</i>
Galapagos	<i>Carcharhinus galapagensis</i>
Night	<i>Carcharhinus signatus</i>
Reef	<i>Carcharhinus perezii</i>
Narrowtooth	<i>Carcharhinus brachyurus</i>
Caribbean sharpnose	<i>Rhizoprionodon porosus</i>
Smalltail	<i>Carcharhinus porosus</i>
Atlantic angel	<i>Squatina dumeril</i>
Longfin mako	<i>Isurus paucus</i>
Bigeye thresher	<i>Alopias superciliosus</i>
Sharpnose sevengill	<i>Heptranchias perlo</i>
Bluntnose sixgill	<i>Hexanchus griseus</i>
Bigeye sixgill	<i>Hexanchus nakamurai</i>

7.24.2-3 Recreational Landings Requirements – No person fishing recreationally shall possess or land sharks that do not have heads, tails, and fins attached naturally to the carcass. Sharks may be gutted and bled by making an incision at the base of the caudal peduncle provided the tail is not removed. No a person fishing recreationally shall fillet a shark at sea or otherwise cut a shark into pieces at sea.

7.24.2-4 Recreational Minimum Size Limits – No person fishing recreationally shall possess a shark with a fork length less than 54 inches, with the exception of Atlantic sharpnose, blacknose, finetooth, bonnethead, and smooth dogfish, which have no minimum size limit. (See Table 7.4).

Table 7.5 Recreational Minimum Size Limits

No Minimum Size Limit	At Least 54 inches (4.5 Feet) Fork Length	
Smooth Dogfish	Tiger	Shortfin mako
Atlantic sharpnose	Blacktip	Porbeagle
Finetooth	Spinner	Common thresher
Blacknose	Bull	Oceanic whitetip
Bonnethead	Lemon	Blue
	Nurse	Scalloped hammerhead
	Great hammerhead	Smooth hammerhead

7.24.2-5 Authorized Recreational Gear – No person fishing recreationally shall take sharks by any method other than rod and reel or handline. Handlines are defined as a mainline to which no more than two gangions or hooks are attached; retrieved by hand, not by mechanical means; and attached to, or in contact with, a vessel.

7.24.2-6 Recreational Shore-Fishing Possession Limits – No recreational fishermen fishing from shore shall possess, in any one calendar day, more than one shark from the recreationally permitted species list (*Section 7.24.2-1, Table 7.3*), except that each such fishermen may individually possess one additional bonnethead (*Sphyrna tiburo*), and one additional Atlantic sharpnose (*Rhizoprionodon terraenovae*) per calendar day. However, recreational shore-fishermen may harvest an unlimited amount of smooth dogfish.

Sharks that are transported by a vessel are considered ‘boat assisted’ and are regulated under the more restrictive vessel-fishing possession limits in section 7.24.2-7 regardless of how or where they were caught.

7.24.2-7 Recreational Vessel-Fishing Possession Limits - No vessel engaged in recreational fishing vessels shall possess, in any one calendar day, or any one trip, whichever is less, more than one shark from the recreationally permitted species list (*Section 7.24.2-1, Table 7.3*), regardless of the number of people on board the vessel, except that each recreational fisherman fishing from a vessel may individually possess one additional bonnethead (*Sphyrna tiburo*), and one additional Atlantic sharpnose (*Rhizoprionodon terraenovae*), per calendar day, or per trip, whichever is less. However, recreational vessel-fishermen may harvest an unlimited amount of smooth dogfish.

RIMF REGULATIONS [Penalty – Part 3.3 (RIGL 20-3-3)]

D. Harvest broken down by commercial (gear type where applicable) and recreational fishing, and non-harvest losses (when available).

Table D-1. Commercial landings (in lbs and value in U.S. dollars) for smooth dogfish and other sharks (i.e. longfin mako, oceanic whitetip, sand tiger, sandbar, and thresher) landed in Rhode Island during the 2012 fishing year (Jan 1 – Dec 31, 2012) collected by the Standard Atlantic Fisheries Information System (SAFIS) as of 6/24/2013. To satisfy confidentiality rules data for coastal sharks other than smooth dogfish must be aggregated across species and gear types.

Shark Group(s)	landings (lbs)	value (\$)
Smooth dogfish	14,698	\$5,121.00
other sharks *	2,470	\$1,518.14
Total	17,168	\$6,639.14

*longfin mako, oceanic whitetip, sand tiger, sandbar, and thresher

- Recreational – unknown.
- Non-harvest losses – unknown.

E. Review of progress in implementing habitat recommendations.

Currently, Rhode Island has no initiatives in this area.

IV. Planned management programs for the current calendar year

A. Summarize regulations that will be in effect.

- Management of Coastal Sharks in RI state waters will be consistent with ASMFC management actions. RI will implement regulatory changes to comply with Addendum II by Jan 2014.

B. Summarize monitoring programs that will be performed.

- The RI Division of Fish & Wildlife, Marine Fisheries Section will continue:
 - to collect trip-level reporting of landings of Coastal Shark and quota-managed species using SAFIS and
 - fishery independent monitoring, limited to coastal shark species taken in the RI Division of Fish & Wildlife, Marine Fisheries Section monthly and seasonal trawl survey.

C. Highlight any changes from the previous year.

- **2012 Changes**
 - No regulatory or management changes occurred during the 2012 fishing year.
- **Proposed changes for 2013**
 - **Note that the following proposed changes were included in the 2011 Compliance Report, but were intended to be undertaken in 2013 rather than 2012.**
 - In light of what appears to be commercial landings of sandbar sharks (*Carcharhinus plumbeus*), which are contained within the Research Species Group, the Division plans to work with the Division of Law Enforcement, commercial dealers, and commercial fisherman during the 2013 fishing year to ensure that all are familiar with current regulations regarding all Prohibited and Research Species.

- In years past we've received little feedback regarding whether or not Prohibited or Research Shark species were collected. In an attempt to improve reporting, the Division revised our "Scientific Collector's Application" to clearly convey that, *"If collecting Prohibited or Research shark species, you MUST submit a report for each individual shark to DFW within 30 days stating species ID, length, weight, date and location (lat/long) of collection, and gear used. Annual reports are due by Dec. 31 of each year for the lifespan of the individuals taken for display indicating updated length and weight measurements (See Rule 7.24.1-8; <http://www.dem.ri.gov/pubs/regs/regs/fishwild/rimf7.pdf>)."*

V. Plan specific requirements

A. Recreational seasonal closure as specified in Section 4.2.1..

- Not Applicable to Rhode Island

B. Recreational prohibition of species that are illegal to land by recreational anglers in federal waters.

- Rhode Island Marine Fisheries Regulation Part VII, 7.24.2-2, states: "Recreationally Prohibited Species -- No person fishing recreationally shall possess, in state waters any shark species that is not permitted to be taken in federal waters, as listed in Table 7.4."

C. All sharks caught by recreational fishermen must have head, tail, and fins attached to carcass.

- Rhode Island Marine Fisheries Regulation Part VII, 7.24.2-3, states: "Recreational Landings Requirements – No person fishing recreationally shall possess or land sharks that do not have heads, tails, and fins attached naturally to the carcass. Sharks may be gutted and bled by making an incision at the base of the caudal peduncle provided the tail is not removed. No a person fishing recreationally shall fillet a shark at sea or otherwise cut a shark into pieces at sea."

(A). Sharks caught in the recreational fishery must have a fork length of at least 4.5 feet with the exception of Atlantic sharpnose, blacknose, finetooth, bonnethead, and smooth dogfish.

- Rhode Island Marine Fisheries Regulation Part VII, 7.24.2-4, states: "Recreational Minimum Size Limits – No person fishing recreationally shall possess a shark with a fork length less than 54 inches, with the exception of Atlantic sharpnose, blacknose, finetooth, bonnethead, and smooth dogfish, which have no minimum size limit. (See Table 7.4)."

D. Recreational anglers may only use handlines and rod & reel.

- Rhode Island Marine Fisheries Regulation Part VII, 7.24.2-5 states: "Authorized Recreational Gear – No person fishing recreationally shall take sharks by any method other than rod and reel or handline. Handlines are defined as a mainline to which no more than two gangions or hooks are attached; retrieved by hand, not by mechanical means; and attached to, or in contact with, a vessel."

E. Recreational possession limits as specified in Section 4.2.7.1 and 4.2.7.2, as modified by Addendum I (2009) for smooth dogfish.

- Rhode Island Marine Fisheries Regulation Part VII, 7.24.2-6 states: “Recreational Shore-Fishing Possession Limits – No recreational fishermen fishing from shore shall possess, in any one calendar day, more than one shark from the recreationally permitted species list (*Section 7.24.2-1, Table 7.3*), except that each such fishermen may individually possess one additional bonnethead (*Sphyrna tiburo*), and one additional Atlantic sharpnose (*Rhizoprionodon terraenovae*) per calendar day. However, recreational shore-fishermen may harvest an unlimited amount of smooth dogfish.”

F. Commercial seasonal closure as specified in Section 4.3.2.

- Not Applicable to Rhode Island

G. Quota specifications as specified in Section 4.3.4.

- Rhode Island Marine Fisheries Regulation Part VII, 7.24.1-6 states: “Quota Specification – It shall be unlawful for any person to possess any species of shark in state waters when the National Marine Fisheries Service (NMFS) prohibits the possession of that species in federal waters. When notified that the quota set for any species of shark is harvested or projected to be harvested, as determined by the National Marine Fisheries Service or the Atlantic States Marine Fisheries Commission, the Division of Fish and Wildlife shall file notice with the Office of the Secretary of State prohibiting the commercial landings, harvest and possession of that species in state waters for the remainder of the designated period.”

H. Ability to allocate quotas seasonally as specified in Section 4.3.5.

- Rhode Island Marine Fisheries Regulation Part VII, 7.24.1-3 states: “Commercial Possession Limits – Possession limits, quotas, and seasonal periods for commercial shark fisheries will be established annually either through the National Marine Fisheries Service (NMFS) or the Atlantic States Marine Fisheries Commission (ASMFC). In accordance therewith:
 - a. Properly licensed commercial fishermen may possess any of the species of sharks listed in Table 7.1 below in the Smooth Dogfish, Small Coastal Sharks, Non-Sandbar Large Coastal Sharks and Pelagic Sharks species groups.
 - b. There are no commercial trip limits or possession limits for Smooth Dogfish, or for the sharks listed in the Small Coastal Sharks and the Pelagic Species groups.
 - c. No person shall possess more than 33 sharks, per vessel per calendar day, regardless of species, from the Non-Sandbar Large Coastal Sharks species group.”

I. Possession limits as specified in Section 4.3.6.

- As noted in previous bullet (H) above in Rhode Island Marine Fisheries Regulation Part VII, 7.24.1-3.

J. Commercial permit requirement.

- Rhode Island Marine Fisheries Regulation Part VII, 7.24.1-7 states: “Commercial License – A person must hold a state commercial license in accordance with RIGL Chapter 20-2.1 in order to commercially land, harvest, possess, and sell sharks in state waters.”

K. Display and research permit requirements.

- Rhode Island Marine Fisheries Regulation Part VII, 7.24.1-8 states: “Display and Research of Sharks – No person shall possess, transport, sell or offer to sell any of the shark species listed in the Prohibited and Research Species Groups without the possession of a valid state collector’s permit obtained from the Division of Fish and Wildlife.

Any person granted a collector’s permit shall:

- a. Report to the Director, within 30 days after coming into possession of a shark. For each and every shark collected for research or display, the report to the Director shall include the following information: species identification, length, weight, date and location where caught by latitude and longitude coordinates, and the gear used; and
- b. For each shark taken for live display, the holder of the permit shall also report to the Director annually, by December 31 of each year, for the life of the shark. The annual report shall include all of the information set forth in the original report to the Director pertaining to the sharks, as well as updated information on the length and weight of the shark.”

L. Federal Commercial Shark Dealer Permit requirement.

- Rhode Island Marine Fisheries Regulation Part VII, 7.24.1-9 states: “Dealer Permit -
 - a. No person shall sell any shark species to a person or dealer who does not possess a state commercial dealer license issued pursuant to RIGL 20-2.1, and a federal Commercial Shark Dealer Permit issued by the National Marine Fisheries Service.
 - b. No person shall purchase any shark species for sale or resale unless such person, possesses a state commercial dealer license issued pursuant to RIGL 20-2.1, and a federal Commercial Shark Dealer Permit issued by the National Marine Fisheries Service. [*Federal Commercial Shark Dealer Permits are open access and can be obtained by contacting the National Marine Fisheries Service Southeast Regional Office in St. Petersburg, FL at (727) 824-5326. Applications are available on the web at <http://sero.nmfs.noaa.gov/permits/permits.htm>].*

M. Prohibition of use of any gear type not listed in Section 4.3.9, as modified by Addendum I (2009).

- Rhode Island Marine Fisheries Regulation Part VII, 7.24.1-10 states: “Authorized Commercial Gear – No person shall fish commercially for sharks in state waters by any method other than the following gear types:
 - Rod & reel
 - Handlines, which are defined as a mainline to which no more than two gangions or hooks are attached. A handline is retrieved by hand, not by mechanical means, and must be attached to, or in contact with, a vessel.

- Small Mesh Gillnets which are defined as having a stretch mesh size smaller than 5 inches
- Large Mesh Gillnets which are defined as having a stretch mesh size equal to or greater than 5 inches.
- Trawl nets.
- Shortlines which are defined as fishing lines containing 50 or fewer hooks and measuring less than 500 yards in length. A maximum of 2 shortlines shall be allowed per vessel.
- Pound nets/fish traps.
- Weirs.”

N. Shortline and gillnet bycatch reduction measures as specified in section 4.3.10, as modified by Addendum I (2009).

- Rhode Island Marine Fisheries Regulation Part VII, 7.24.1-11 states: “Bycatch Reduction Measures – Vessels using shortlines and large-mesh gillnets to catch sharks must abide by the following bycatch regulation measures. Any vessels using shortlines or large-mesh gillnets that do not follow the following bycatch reduction measures are prohibited from possession, landing or selling any sharks.
 - a. Any vessel using a shortline shall:
 - (1) use corrodible circle hooks, which are defined as non- offset hooks with the point turned perpendicularly back to the shanks; and
 - (2) practice the protocols, and possess the federally required release equipment, for pelagic and bottom longlines for the safe handling, release, and disentanglement of sea turtles and other non-target species; and
 - (3) have all captains and vessel owners federally certified in using, handling and release equipment. Captains and vessel owners can become certified by attending a Protected Species Safe Handling, Release, and Identification Workshop offered by NOAA. [Information on these workshops can be found at <http://www.nmfs.noaa.gov/sfa/hms/workshops/index.htm> or by calling the Management Division at (727) 824-5399.]
 - b. Any vessel using large-mesh gillnets, must use nets that are shorter than 2.5 kilometers.

O. All sharks caught by commercial fishermen must have tails and fins attached naturally to the carcass through landing, as modified by Addendum I (2009).

- Rhode Island Marine Fisheries Regulation Part VII, 7.24.1-12 states: “Prohibition of Finning – Finning is defined as the act of taking a shark and removing its fins. Finning of sharks is prohibited in all state waters. All sharks, with the exception of smooth dogfish, possessed by commercial fishermen within state boundaries must have the tails and fins attached naturally to the carcass until landed. Fins may be cut as long as they remain attached to the carcass, by natural means, with at least a small portion of uncut skin. Sharks may be gutted and bled provided the tail is not removed. Sharks taken and possessed by commercial fishermen may have the heads removed, but no commercial fisherman shall fillet a shark at sea or otherwise cut a shark into pieces at sea.

Commercial fishermen may completely remove the fins of smooth dogfish from March through June of each year. If fins are removed, the total wet weight of the shark fins may not exceed 5 percent of the total dressed weight of smooth dogfish carcasses landed or found on board a vessel.

From July through February for the smooth dogfish fishery only, commercial fishermen may completely remove the head, tail, pectoral fins, pelvic (ventral) fins, anal fin, and second dorsal fin, but must keep the dorsal fin attached naturally to the carcass through landing. Fins may be cut as long as they remain attached to the carcass, by natural means, with at least a small portion of uncut skin. If fins are removed, the total wet weight of the shark fins may not exceed 5 percent of the total dressed weight of smooth dogfish carcasses landed or found on board a vessel.”

New York State Department of Environmental Conservation

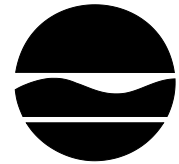
Division of Fish, Wildlife & Marine Resources

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Joe Martens
Commissioner

New York's 2012 Annual Compliance Report to the Atlantic States Marine Fisheries Commission For Coastal Sharks

I. Introduction

Coastal sharks are a minor commercial fishery in New York and a small but important recreational fishery. Our commercial fishermen land significant numbers of smooth and spiny dogfish as targeted species, with shortfin mako and possibly a few thresher sharks making up the bulk of the rest. New York's spiny dogfish fishery is addressed in a separate report. During the past decade smooth dogfish landings have ranged from 80,878 pounds to 267,033 pounds. The average landings for the last ten years are 162,533 pounds. The recreational fishery is focused on fishing in the EEZ for shortfin mako, blue, and common thresher sharks. During the last decade, recreational landings in NY have become so sparse as to void MRFSS as a useful tool for tracking them. Estimates from the Large Pelagic Species Survey are reported here.

II. Request for *de minimus* status

Not applicable

III. Previous year's fishery management and management program

a. Fishery dependent monitoring

New York implemented mandatory state-level Vessel Trip Reporting (VTR) during 2003 for all state-level harvesters of finfish. Data for certain species may not be reported at the trip level because low landings numbers could result in confidentiality violations. New York's commercial harvest of sharks is summarized in Table 1 (most recent data from ACCSP) and its estimated recreational harvest is reported in Table 2 (all data from NMFS).

b. Fishery independent monitoring

None to report

c. Regulations in effect in 2012

New York's regulations are authorized under Section 13-0338 of the Environmental Conservation Law. This law provides for a prohibition on finning in New York's Marine and

Coastal district; provides that no person shall possess shark fins, in the Marine and Coastal district of New York, unless proper proportion of species, number and size of shark carcasses is also possessed; and provides the department with the regulatory authority to fix by regulation measures for the management of sharks, including size limits, catch and possession limits, open and closed seasons, closed areas, restrictions on the manner of taking and landing, requirements for permits and eligibility, record keeping requirements, requirements on the amount and type of fishing effort and gear, and requirements relating to transportation, possession, and sale provided that such regulations are no less restrictive than requirements set forth in the law and provided further that such regulations are consistent with the compliance requirements of applicable fishery management plans adopted by the Atlantic States Marine Fishery Commission and with applicable provisions of fishery management plans adopted pursuant to the Federal Fishery Conservation and Management Act (16 U.S.C. Section 1800 et seq.).

Actual text of NY regulations in place in 2012

6NYCRR Part 40.7 Marine Fish - Coastal sharks- open seasons, size and catch limits.

(a) "Purpose of this section." It is the intent of this section to promote the prudent management of coastal sharks that are landed in the State of New York. The provisions of this section shall define which sharks may be taken for commercial and recreational purposes and which sharks are prohibited from harvest. Size limits, possession limits, manner of taking and landing, gear restrictions open and closed seasons will also be specified in this section. The provisions in this section are designed to promote healthy self-sustaining populations of coastal sharks and provide for the sustainable use of the shark resource for the benefit of the residents of the State of New York.

(b) "Definitions." For the purposes of this section, the following definitions apply:

(1) "Circle hook" means a fishing hook originally designed and manufactured so that the point is turned perpendicularly back to the shank to form a generally circular, or oval, shape.

(2) "Eviscerate" means to remove the alimentary organs of a shark without removing the head.

(3) "Finning" means the removal of a fin or fins, other than the caudal fin, and not retaining the remainder of the shark's carcass (as specified in Environmental Conservation Law (ECL) 13-0338(1)(b)).

(4) "Fork length" means that length measured in a straight line from the tip of the nose snout of the shark to the end of the middle caudal fin to the center of the fork of the tail of the shark.

(5) "Handline" means a main line to which not more than two gangions or hooks are attached. A handline is not retrieved by mechanical means and must be attached to, or in contact, with the vessel.

(6) "Land" or "landed" means the bringing of fish to shore or the transfer of the catch of fish taken from a vessel to any other vessel or in-water storage facility or to the land or to any pier, wharf, dock or other similar structure. When a vessel bearing fish has been tied, moored, or made fast to the land, to another vessel, to an in-water storage facility or to any pier, wharf, dock or similar structure, such fish shall be deemed as landed.

(7) "Large mesh gillnet" means a gillnet having a stretched mesh size equal to or greater than five inches.

(8) "Recreational angler" means any person engaged in fishing for sharks for personal use.

(9) "Shore angler" means any person engaged in any type of fishing that does not take place aboard a vessel.

(10) "Shortline" means a fishing line having 50 or fewer hooks and measuring less than 500 yards in total length.

(11) "Small mesh gillnet" means a gillnet having a stretched mesh size less than five inches.

(12) "Vessel" means every type of watercraft used or capable of being used as a means of transportation on water except non-displacement craft and seaplanes.

(13) "Vessel fishing" means any fishing conducted from a vessel.

(c) "Recreational fishing."

(1) It shall be unlawful for any recreational angler to take, or to possess on the waters of the marine and coastal district, as defined in ECL section 13-0103, or the shores thereof, or anywhere inland from such shores, any shark species other than the following: Atlantic sharpnose ("Rhizoprionodon terraenovae"); blacknose ("Carcharhinus acronotus"); blacktip ("Carcharhinus limbatus"); blue ("Prionace glauca"); bonnethead ("Sphyrna tiburo"); bull ("Carcharhinus leucas"); common thresher ("Alopias vulpinus"); finetooth ("Carcharhinus isodon"); great hammerhead ("Sphyrna mokarran"); scalloped hammerhead ("Sphyrna lewini"); smooth hammerhead ("Sphyrna zygaena"); lemon ("Negaprion brevirostris"); nurse ("Ginglymostoma cirratum"); oceanic whitetip ("Carcharhinus longimanus"); porbeagle ("Lamna nasus"); shortfin mako ("Isurus oxyrinchus"); smooth dogfish ("Mustelus canis"); spiny dogfish ("Squalus acanthias"); spinner ("Carcharhinus brevipinna"); and tiger ("Galeocerdo cuvier").

(2) The minimum size limit for the shark species listed in (c)(1) shall be 54 inches fork length, except that there shall be no minimum size limit for Atlantic sharpnose, finetooth, blacknose, bonnethead, smooth dogfish and spiny dogfish.

(3) It shall be unlawful for a recreational angler to take sharks using any means other than handlines retrieved by hand, not mechanical means, or by rod and reel.

(4) It shall be unlawful for a recreational angler to sell, trade or barter sharks or shark pieces.

(5) All sharks harvested by a recreational angler shall have heads, tails and fins attached naturally to the carcass through landing. Sharks may be eviscerated and bled by making a cut at the base of the tail fin as long as the tail fin is not removed.

(6) Catch limits.

(i) Shore anglers shall take or possess no more than one shark, regardless of species, from the list in (c)(1), except that

("a") one additional Atlantic sharpnose may be taken and possessed; and

("b") one additional bonnethead may be taken and possessed; and

("c") there shall be no limit to the number of spiny dogfish and smooth dogfish that can be taken or possessed.

(ii) Recreational anglers fishing from a vessel shall take or possess no more than one shark, regardless of species, from the list in (c)(1) per vessel, except that

("a") one additional Atlantic sharpnose may be taken and possessed per angler; and

("b") one additional bonnethead may be taken and possessed per angler; and

("c") there shall be no limit to the number of spiny dogfish and smooth dogfish that can be taken or possessed per angler.

(7) When aboard a vessel, a recreational angler is bound by the more restrictive vessel fishing limits described in (6)(ii) above, regardless of where the shark was caught.

(8) A shark that is transported aboard a vessel is considered as though caught by an angler on that vessel and is regulated under the more restrictive vessel fishing limits described in (6)(ii) above, regardless of where the shark was caught.

(d) "Commercial fishing."

(1) The commercial fishery for spiny dogfish is regulated under Part 40.1 of this Subchapter and is not regulated under this part.

(2) It is unlawful for any person to take, possess or land sharks listed in this section for commercial purposes without having in their possession a valid New York State commercial foodfish license.

(3) The commercial fishing year for sharks shall begin on January 1 and end on December 31. All annual specifications begin on January 1 of each fishing year.

(4) Shark groups. For the purposes of this section and consistency with federal rules and the fishery management plan for coastal sharks developed by the Atlantic States Marine Fisheries Commission, coastal sharks shall be classified as follows:

(i) Prohibited species: Atlantic angel ("Squatina dumeril"); basking shark ("Cetorhinus maximus"); bigeye sand tiger shark ("Odontaspis noronhai"); bigeye thresher shark ("Alopias superciliosus"); bignose shark ("Carcharhinus altimus"); Caribbean sharpnose shark ("Rhizoprionodon porosus"); dusky shark ("Carcharhinus obscurus"); Galapagos shark ("Carcharhinus galapagensis"); longfin mako shark ("Isurus paucus"); narrowtooth shark ("Carcharhinus brachyurus"); night shark ("Carcharhinus signatus"); reef shark ("Carcharhinus perezii"); sand tiger shark ("Carcharias taurus"); sharpnose sevengill shark ("Hepttrachias perlo") bigeye sixgill shark ("Hexanchus nakamurai"); bluntnose sixgill shark ("Hexanchus griseus") smalltail shark ("Carcharhinus porosus"); whale shark ("Rhincodon typus"); white shark ("Carcharodon carcharias");

(ii) Research species: sandbar ("Carcharhinus plumbeus");

(iii) *Smooth dogfish: smooth dogfish ("Mustelus canis");*

(iv) *Small coastal species: Atlantic sharpnose shark ("Rhizoprionodon terraenovae"); blacknose shark ("Carcharhinus acronotus"); bonnethead shark ("Sphyrna tiburo"); finetooth shark ("Carcharhinus isodon");*

(v) *Pelagic species: blue shark ("Prionace glauca"); common thresher shark ("Alopias vulpinus"); oceanic whitetip shark ("Carcharhinus longimanus"); porbeagle shark ("Lamna nasus"); shortfin mako shark ("Isurus oxyrinchus"); and*

(vi) *Non-sandbar large coastal species: great hammerhead shark ("Sphyrna mokarran"); scalloped hammerhead shark ("Sphyrna lewini"); smooth hammerhead shark "Sphyrna zygaena"); lemon shark ("Negaprion brevirostris"); nurse shark ("Ginglymostoma cirratum"); silky shark ("Carcharhinus falciformis"); spinner shark ("Carcharhinus brevipinna"); tiger shark ("Galeocerdo cuvier").*

(5) *There is no closed season for the shark commercial fishery.*

(6) *No person shall take, possess or land any shark species listed in (4)(i) and (4)(ii) of this Part without first obtaining and possessing a valid special license in accordance with Part 175.*

(7) *There is no possession limit for sharks listed in (4)(iii), (4)(iv) and (4)(v) of this Part.*

(8) *No person shall take possess or land more than thirty-three sharks, regardless of species, listed in (4)(vi) of this Part, in any 24-hour period.*

(9) *Sharks harvested for commercial purposes shall be taken by the following methods and gears, only: rod and reel; handline, which shall be retrieved by hand, not mechanical means, and shall be attached to or in contact with a vessel; small mesh gillnet; large mesh gillnet; trawl; shortline; pound net; and weir. A maximum of two shortlines per vessel may be used. The use of any other gear to take sharks for commercial purposes is prohibited.*

(10) *Bycatch reduction measures. No person shall take, possess or land sharks using shortlines or large mesh gillnets without practicing the following bycatch reduction measures:*

(i) *All hooks attached to shortline gear must be corrodible circle hooks;*

(ii) *All persons participating in the commercial shark fishery shall practice the protocols and possess the federally required release equipment for pelagic and bottom longlines for the safe handling, release and disentanglement of sea turtles and other non-target species;*

(iii) *All captains and vessel owners must be certified in using handling and release equipment through workshops offered by National Oceanic and Atmospheric Administration's National Marine Fisheries Service;*

(iv) *Large mesh gillnets shall be no longer than 2.5 kilometers (1.55 miles).*

(11) *No person shall possess or land a shark listed in this section without the tails and fins naturally attached to the carcass. Fins may be cut as long as they remain attached to the carcass by natural means with at least a small portion of uncut skin. Finning is prohibited. Sharks may be eviscerated and have the heads removed. Sharks may not be filleted or cut into pieces at sea.*

(12) Quotas, trip limits and directed fishery thresholds may be set by the Atlantic States Marine Fisheries Commission Spiny Dogfish & Coast Sharks Management Board (Sharks Board) for the smooth dogfish, small coastal, non-sandbar large coastal and pelagic species groups for each commercial fishing year. The department will establish trip limits and directed fishery thresholds within the fishing year consistent with those established by the Sharks Board. Such trip limits and thresholds will be enforceable upon 72 hours notice to license holders of the vessel trip limit allowed.

(13) If the department determines that the maximum allowable harvest of sharks covered by (12) has been taken or is projected to be taken before the end of the fishing year, the department may prohibit the take and possession of a shark species for commercial purposes upon 72 hours notice to license holders.

(14) If the department closes a fishery, but determines that the quota will not be harvested by the projected date, then the department may reopen the fishery for a specified time at a specified trip limit up to the maximum allowed upon 72 hours notice to license holders.

(15) No person shall take, possess or land sharks listed in (4) for commercial purposes when the federal commercial fishery for that species is closed.

(16) No harvester shall sell sharks taken in state waters for commercial purposes except to a holder of a federal Commercial Shark Dealer Permit. A Federal Commercial Shark Dealer Permit shall be required to buy and sell sharks taken in state waters.

d. Harvest

No sharks were reported taken for display purposes in 2012.

Commercial shark landings for New York in 2012 were obtained from both NMFS Office of Science and Technology and from ACCSP Data Warehouse:

Common Name	NMFS Landings (lbs)	ACCSP Landings (lbs)
Hammerhead	194	
Smooth hammerhead	188	
Dusky *	42	
Shortfin Mako	6,238	7,247
Angel *	171	
Thresher	1,759	
Sandbar	628	
Bigeye Thresher *	203	
Smooth Dogfish	202,028	230,549
Tiger	16	
Blacktip	406	
Sand Tiger *	11	
Longfin Mako *	246	

* Prohibited Species

Five prohibited species were reported taken in 2012. DEC is currently working with NMFS in order to verify those landings. DEC believes that there may be reporting errors or misidentification responsible for these reports, particularly where two species are very similar in appearance (makos, threshers).

Survey estimates for recreational take of sharks in New York based upon the MRFSS/MRIP data have very large PSEs and do not support meaningful reporting. The landings data obtained is a result of LPS survey efforts and includes tournament landings. For 2012, the following were reported:

Common Name	Harvest (no. fish)	PSE
Blue	201	32.8
Common Thresher	352	24.2
Shortfin Mako	910	18.3

e. Habitat recommendations

None.

IV. Planned management programs for the current fishing year.

a. Summarized regulations for 2013 fishing year

The regulations will remain unchanged in 2013. Those regulations are listed in their entirety above and also online at: <http://www.dec.ny.gov/regs/4015.html#66392>

b. Summarized monitoring programs

No monitoring is planned, as New York currently has no monitoring program and lacks resources to initiate one.

c. Changes from the previous year

None.

V. Plan specific requirements.

New York has no plan specific requirements to report and has not undertaken or approved any new display permits for coastal sharks. New York may issue display permits pursuant to Environmental Conservation Law, Title 5:

§ 11-0515. Licenses to collect, possess or sell for propagation, scientific or exhibition purposes.

1. The department may issue to any person a license revocable at its pleasure to collect or possess fish, wildlife, shellfish, crustacea, or aquatic insects, birds' nests or eggs for propagation, banding, scientific or exhibition purposes. The department in its discretion may require an applicant to pay a license fee of ten dollars, and to file a bond of two hundred dollars to be approved by the department that he or she will not violate any provisions of this article. Each licensee shall file with the department a report containing such information as the department may require. Such license shall be in force for one year only and shall not be transferable.

2. The department may also issue a license revocable at its pleasure to possess and sell protected fish, wildlife, shellfish, crustacea or aquatic insects for propagation, scientific or exhibition purposes. The department in its discretion may require a license fee of ten dollars. Such license shall be in force for one year only and shall not be transferable. Each licensee shall file with the department a report containing such information as the department may require. Fish, wildlife, shellfish, crustacea or aquatic insects lawfully possessed under this section may be sold at any time by the licensee for propagation, scientific or exhibition purposes only.

3. The department may also issue a revocable license to possess distressed wildlife for rehabilitation purposes. The department may adopt regulations concerning the qualifications, appointment and duties of wildlife rehabilitators and the procedures for license issuance and revocation.

4. The department shall have power to make regulations governing the possession of such fish, wildlife, shellfish, crustacea and aquatic insects to protect them from cruelty, disease or undue discomfort and to protect the public from attack or contamination.

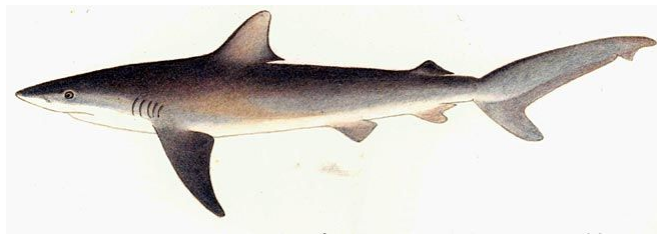
TABLE 1. NY COMMERCIAL SHARK LANDINGS (LBS)								
Year	Blacktip	Blue	Nurse	Porbeagle	Shortfin Mako	Smooth Dogfish	Common Thresher	Tiger
2000	14		132	266	18,656	23,146	894	
2001		11		31	17,054	116,853	661	42
2002	342		54	131	14,771	148,996	1,072	
2003	94		25		6,094	164,876	187	31
2004	120		29		1,252	96,093		
2005						80,878		
2006						114,165		
2007						103,602		
2008						151,250		
2009					5,652	158,211	230	
2010					12,160	258,877	919	
2011					18,593	267,033	2,137	
2012					7,247	230,549		

TABLE 2. NY RECREATIONAL SHARK LANDINGS ESTIMATES (NO. KEPT) FROM LARGE PELAGIC SPECIES SURVEY						
Year	Blue	PSE	Common Thresher	PSE	Shortfin Mako	PSE
2002	544	30.8	331	33.9	902	24.5
2003	356	38.3	368	36.1	1,502	18.1
2004	1,811	19.1	950	24	1,703	18.6
2005	946	27.4	493	25.6	1,063	17.8
2006	643	34.6	580	25.6	1,377	18.1
2007	639	25.9	359	22.5	764	19.8
2008	199	27.4	412	24.9	979	16.7
2009	318	25.7	470	22.1	893	15.4
2010	150	29.4	162	27.1	724	16.2
2011	183	29.8	274	23.6	961	14.5
2012	201	32.8	352	24.2	910	18.3

State of New Jersey

Annual Compliance Report for
Atlantic Coastal Sharks

2012 Fishing Year



NJ Department of Environmental Protection
Division of Fish & Wildlife
Marine Fisheries Administration

**Report Submitted By: Russell Babb
Nacote Creek Research Station**

Submitted to the Atlantic States Marine Fisheries Commission as a Requirement of the Interstate
Fisheries Management Plan for Coastal Sharks

I. SUMMARY OF COASTAL SHARKS FISHERY AND RESOURCE MONITORING

The Atlantic States Marine Fisheries Commission (Commission) adopted its first fishery management plan (FMP) for coastal sharks in 2008. Coastal sharks are managed under this plan as six different complexes: prohibited, research, small coastal, non-sandbar large coastal, pelagic and smooth dogfish. Since the Commission does not actively set quotas for any shark species; in 2012, the State of New Jersey remained in compliance to the FMP (Addendum I) for Coastal Sharks by following NOAA Fisheries openings and closures for small coastal sharks, non-sandbar large coastal and pelagic sharks. New Jersey's regulations were amended in 2010 to incorporate the modifications set forth under the FMP's Addendum I, which allowed limited smooth dogfish processing at sea (removal of fins from the carcass), removal of smooth dogfish recreational possession limits, and removed gillnet check requirements for smooth dogfish fishermen. Our regulations stipulate clearly that species in the prohibited category may not be possessed or taken, that sandbar sharks may only be taken with a shark fishery research permit and that all species must be landed with their fin attached to carcass by natural means.

There were no changes or modifications to New Jersey's marine fisheries regulations during the 2012 fishing year (see Attachment I for copy of the full rule). The New Jersey Marine Fisheries Administration (NJMFA) did not have any significant changes in fishery independent or fishery dependent monitoring for coastal sharks or smooth dogfish during 2012. However, in 2012, NJMFA staff did coordinate a small project in an effort to characterize the finning and processing methods used within New Jersey's smooth dogfish fishery (see Attachment II). In addition, the collected data was, in part, used by the ASMFC Coastal Sharks technical committee to review fin:carcass ratio data in order to make a recommendation regarding what ratio should be included in the development of Coastal Sharks FMP Addendum II.

II. REQUEST FOR DE MINIMUS STATUS, WHERE APPLICABLE

New Jersey has not requested *de minimus* status from the requirements outlined within the Interstate Fishery Management Plan (Addendum I) for Coastal Sharks.

III. NJ COASTAL SHARKS FISHERY AND MANAGEMENT PROGRAM: 2012

A. Fishery Dependent Monitoring

The Marine Fisheries Administration does not conduct any regular fishery dependent monitoring targeting coastal sharks species or smooth dogfish. However, a few commercial shark fishermen did participate in an advisory role in the NJMFA's 2012 study to review fin:carcass ratios for smooth dogfish finning (see Attachment II).

B. Fishery Independent Monitoring

The New Jersey Bureau of Marine Fisheries conducts five nearshore (within 12 nautical miles) trawl surveys each year. These surveys occur in January/February, April, June, August, and October. All species taken during these surveys are weighed and measured. Catch per unit effort (cpue) in number of fish per tow and biomass (kilograms) per tow is calculated each year.

The NJ Ocean Trawl Stock Assessment Survey uses a stratified random sampling design to collect trawl data from state coastal waters. The survey area includes only waters adjacent to the New Jersey coastline. Trawl samples are collected with a three-in-one trawl, which is a two-seam trawl constructed of polyethylene twine with forward netting (wings, belly) of 12 cm (4.7 in.) stretch mesh and rear netting of

8 cm (3.1 in.) stretch mesh. The codend is 7.6 cm stretch mesh (3.0 in.) and is lined with 6.4 mm (0.25 in.) bar mesh liner. The headrope is 25 m (82 ft.) long and the footrope is 30.5 m (100 ft.) long. The trawl bridle is 120 ft. long, the top leg consisting of 0.5 in. wire rope and the bottom leg comprised of 0.75 in. wire rope covered with 2 3/8 in. rubber cookies. A 60 ft. groundwire, also made of 0.75 in. wire rope covered with 2 3/8 in. rubber cookies, extends between the bridle and trawl doors. The trawl doors are wooden with steel shoes, 8 ft. x 4 ft. 2 in., and weigh approximately 1,000 lbs. each.

Trawl samples are collected by towing the net for 20 minutes, timed from the moment the winch brakes are set to stop the deployment of tow wire to the beginning of haulback. Target towing speed is 2.5 – 3.0 knots, or about 2.8 knots. A 20-minute tow generally covers about one nautical mile. Following haulback, the catch is dumped into a 4 x 8 ft. sorting table where fishes and macroinvertebrates are sorted by species into plastic buckets and wire fish baskets. The total weight of each species is measured with hanging metric scales and the length of all individuals comprising each species caught, or a representative sample by weight for large catches is measured to the nearest centimeter (cm).

A total of three coastal shark species (seven individual sharks) within the Prohibited Species Group were collected during the months of June, August and October, consisting of Atlantic angel, dusky and sand tiger sharks. Two individual thresher sharks from the Pelagic Species Group were also collected.

Table 1. Coastal sharks (LCS, SCS and Pelagic spp., excluding smooth dogfish) collected in New Jersey’s fishery independent monitoring (Ocean Trawl Survey).

Species	No.	Weight (kg)	Avg. Length (cm)
Atlantic Angel	5	87.72	110.8
Dusky	1	7.91	108
Sand Tiger	1	56.26	220
Thresher Shark	2	45.25	229.5

As part of the Ocean Trawl survey, a total of 4,720 individual smooth dogfish were collected during the months of April, June, August and October. Collected smooth dogfish had a total weight of 7,998.8 kg and an average length of 69.9 cm.

Table 2. Smooth dogfish collected in New Jersey’s fishery independent monitoring (Ocean Trawl Survey).

Smooth Dogfish By Month / Cruise	Total No.	Total Weight (kg)	Avg. Length (cm)
April	69	213.51	95.8
June	2,687	6,069.77	76.6
August	967	624.17	59.0
October	997	1,091.36	69.6

The New Jersey Division of Fish and Wildlife also conducts a finfish trawl survey within the waters of Delaware Bay monthly at eleven stations extending from the Villas in Cape to the Cohansey River from April 2011 to October 2011. All species taken during these surveys are counted and measured. Total number of individuals, relative abundance (catch per tow = c/t) and length frequency are recorded. The

sampling was conducted from the Bureau of Shellfisheries' 12.9-m (42-foot) research vessel, *RV Zephyrus*. This vessel has a fiberglass hull with a draft of 0.8-m (2.75-foot) and is powered by a John Deere inboard marine diesel engine. A new 4.9-m (16-foot) Marinovich style otter trawl built by Innovated Nets with a 3.8-cm (1.5-inch) stretch body mesh and 3.2-cm (1.25-inch) stretch mesh in the cod end was used for sampling. The cod end was lined with a 1.3-cm (0.5-inch) knotless stretch mesh net. The headrope was buoyed with molded fish net floats. The bottom of the net's mouth was weighted with a 0.3-cm (0.125 inch) galvanized chain looped along the footrope. The door dimensions were 30.5 cm (12 inches) x 61.0 cm (24 inches) and were constructed of 1.9-cm (0.75 inch) marine plywood with 1.3-cm (0.5 inch) by 5.1-cm (2 inch) steel shoes. The doors were attached to 1.6-cm (0.625 inch) twisted three strand nylon tows, by a 0.5-cm (0.188 inch) galvanized chain bridle with 1.0-cm (0.375 inch) swivels.

Single ten-minute tows were conducted against the prevailing tide at each station. All stations were sampled once during each month of the survey (typically during second or third week of the month). The engine tow speed was usually set depending on tidal velocity, to maintain a speed-over-ground of approximately 4.4 km/hr (or 2.4 knots). Speed-over-ground, tow distance and depth were monitored using a Garmin 2010 GPS receiver/depthfinder. Engine speed was constantly monitored and adjusted during the sampling period to maintain trawl speed. The estimated distance towed (nautical miles) was calculated from the average speed over ground (knots) and multiplying it by the duration (in hours) of each tow (Distance = Speed x Time). The trawl net was manually deployed with 60 feet of towline tied to the stern cleats and retrieved with the tows being spooled through blocks at the end of a 4.6-m (15 foot) A-frame made of 7.62-cm (3 inch) inside diameter aluminum, marine grade pipe. On retrieval, the A-frame and net were hauled at the transom using a Gearmatic GH5 hydraulic winch installed on the mast located aft of the wheelhouse bulkhead. The cod end of the net was manually retrieved and the contents emptied onto a sorting table affixed to the stern of the vessel.

A total of only four smooth dogfish were caught during the months of April, June and August with an average length of 64.7 cm and a catch per tow index of 0.05. These fish were not weighed.

C. New Jersey Regulations for Coastal Sharks in 2012

Addendum I (2009) made a number of modifications to the coastal sharks FMP, which required rule amendments to N.J.A.C. 7:25-18. These changes were made following the passage of this addendum. The amendments to New Jersey's recreational and commercial fisheries for Atlantic coastal sharks reflected the management measures mandated under the Atlantic States Marine Fisheries Commission (ASMFC) Interstate Fishery Management Plan for Atlantic Coastal Sharks, which contained an addendum implementation date of January 1, 2010. The smooth dogfish is also included in the ASMFC Interstate Fishery Management Plan for Atlantic Coastal Sharks. Please see Attachment I (Pg. 8) of this document for a partial copy of the rules governing the harvest of sharks in New Jersey (N.J.A.C. 7:25, Subchapter 18. MARINE FISHERIES).

D. New Jersey Coastal Shark Harvest

Commercial Landings

Reported coastal shark (LCS, SCS and Pelagic spp., excluding smooth dogfish) landings were obtained from the Standard Atlantic Fisheries Information System (SAFIS) for fishing year 2012. Reported NJ landings of Atlantic coastal shark species in 2012 were 50,651.20 lbs, a slight increase from the average landings of 50,162 lbs. from the previous three (2009-2011) seasons (Table 3).

Table 3. 2012 Coastal Shark (LCS, SCS and Pelagic spp.) Landings

Fishing Year	Species		NJ Reported Qty. (lbs)	Value
2012	SHARK,SANDBAR		1.70	\$49.30
2012	SHARK,SHORTFIN MAKO		36,667.00	\$68,650.38
2012	SHARK,THRESHER		11,822.20	\$12,882.41
Total			50,652.90	\$82,787.07

New Jersey's reported commercial landings of smooth dogfish in 2012 were 597,651 lbs, a slight increase from the average landings of 587,882 lbs. from the previous three fishing (2009-2011) seasons (Table 4). Not coded harvest (50.0%) and gill nets (41.0%) constituted just over 90% of the total state catch.

Table 4. 2012 Commercial Landings by Gear Type - Smooth Dogfish

Gear Type	Trips/Count	Reported Qty. (lbs)	Average Qty./Trip	% of Total Harvest
Gill Nets	190	245,158	1,290	41.0%
Not Coded	124	298,592	2408	50.0%
Other Trawls	38	4,192	110	1.0%
Otter Trawl, Bottom Fish	1	500	500	0.1%
Otter Trawl, Bottom Scallop	12	2,451	204	0.4%
Otter Trawl, Midwater Trawl	1	530	530	0.1%
Otter Trawls	213	39,971	188	6.7%
Pots and Traps	1	5,770	5,770	1.0%
Pound Nets	7	487	70	0.1%
Totals	587	597,651	11,070	

Recreational Landings

NOAA's Marine Recreational Information Program (MRIP) website was queried for all coastal shark species within the Research, Small Coastal, Non-Sandbar large coastal, Pelagic and smooth dogfish categories. Despite the NJMFA's firsthand knowledge of shark landings (e.g., shortfin mako) throughout the State during 2012, queries for some species demonstrated little to no data in the MRIP harvest database. MRIP estimated that 895,737 smooth dogfish were caught during fishing year 2012 (Table 5.). MRIP estimated that over 5,000 sandbar sharks were caught during fishing year 2012 (Table 6.). MRIP

estimated that 5,628 thresher, 1,404 bull, 2,451 dusky, and 9,100 blue sharks were caught during fishing year 2012 (Table 7.).

The queries that yielded positive harvest results are listed as follows:

Table 5. 2012 Recreational Landings by Fishing Mode - Smooth Dogfish

Year	Common Name	Fishing Mode	Total Catch (A+B1+B2)	PSE	Harvest (A+B1) Total Weight (lb)	PSE
2012	SMOOTH DOGFISH	PRIVATE/RENTAL BOAT	760,346	28.0	7,259	72.3
		PARTY BOAT	14,266	37.5	6,768	62.2
		CHARTER BOAT	75,926	22.1	46,617	66.4
		SHORE	45,199	39.8	0	

Table 6. 2012 Recreational Landings by Fishing Mode – Sandbar Shark

Year	Common Name	Fishing Mode	Total Catch (A+B1+B2)	PSE	Harvest (A+B1) Total Weight (lb)
2012	SANDBAR SHARK	CHARTER BOAT	142	100.0	0
		PRIVATE/RENTAL BOAT	5,202	100.2	0

Table 7. 2012 Recreational Landings by Fishing Mode – Thresher, Bull, Dusky, and Blue Sharks

Year	Common Name	Fishing Mode	Total Catch (A+B1+B2)	PSE	Harvest (A+B1) Total Weight (lb)
2012	THRESHER SHARK	PRIVATE/RENTAL BOAT	5,628	102.5	0
	BULL SHARK	PRIVATE/RENTAL BOAT	1,404	100.2	0
	DUSKY SHARK	PRIVATE/RENTAL BOAT	2,451	72.8	0
	BLUE SHARK	PRIVATE/RENTAL BOAT	9,100	92.6	0

E. Addendum III Habitat Requirements

No mandatory measures related to habitat are implemented through this FMP.

IV. NEW JERSEY COASTAL SHARKS AND SMOOTH DOGFISH FISHERY AND MANAGEMENT PROGRAM: 2013

A. New Jersey Regulations on Coastal Sharks and Smooth Dogfish in 2013

See III C above for New Jersey's 2012 regulations related to the management of the harvest for coastal sharks and smooth dogfish. No amendments or changes are currently planned for the sections related to coastal shark and smooth dogfish management.

B. Coastal Sharks and Smooth Dogfish Monitoring Programs for 2013

There will be no fishery dependent resource monitoring program for coastal sharks or smooth dogfish in 2013. The State's ocean stock assessment program and the Delaware Bay trawl survey will continue in 2013 and any coastal sharks or smooth dogfish taken will be enumerated, weighed and measured.

C. Significant Changes in Management and/or Monitoring of Coastal Sharks and/or Smooth Dogfish in 2013.

No changes from the previous year.

V. PLAN SPECIFIC REQUIREMENTS

Specific requirements outlined in the Coastal Shark FMP are addressed by our regulations. They are as follows:

- a. Recreational seasonal closure as specified in Section 4.2.1.
- b. Recreational prohibition of species that are illegal to land by recreational anglers in federal waters.
- c. All sharks caught by recreational fishermen must have head, tail, and fins attached to carcass. a. Sharks caught in the recreational fishery must have a fork length of at least 4.5 feet with the exception of Atlantic sharpnose, blacknose, finetooth, bonnethead, and smooth dogfish.
- d. Recreational anglers may only use handlines and rod & reel.
- e. Recreational possession limits as specified in Section 4.2.7.1 and 4.2.7.2, as modified by Addendum I (2009) for smooth dogfish.
- f. Commercial seasonal closure as specified in Section 4.3.2.
- g. Quota specifications as specified in Section 4.3.4.
- h. Ability to allocate quotas seasonally as specified in Section 4.3.5.
- i. Possession limits as specified in Section 4.3.6.
- j. Commercial permit requirement.
- k. Display and research permit requirements.
- l. Federal Commercial Shark Dealer Permit requirement.
- m. Prohibition of use of any gear type not listed in Section 4.3.9, as modified by Addendum I (2009).
- n. Shortline and gillnet bycatch reduction measures as specified in section 4.3.10, as modified by Addendum I (2009).
- o. All sharks caught by commercial fishermen must have tails and fins attached naturally to the carcass through landing, as modified by Addendum I (2009).

VI. LAW ENFORCEMENT REPORTING REQUIREMENTS

There is no plan specific law enforcement reporting requirements in the Coastal Sharks FMP.

ATTACHMENT I.

REGULATIONS N.J.A.C. 7:25-18.1 – GOVERNING THE TAKING OF SHARKS AND SMOOTH DOGFISH

*NOTES: THIS IS A REDUCED VERSION OF THIS RULE. IT HAS BEEN SHORTENED TO ONLY DEPICT THOSE SECTIONS RELATIVE TO THE REGULATION OF THE COASTAL SHARK AND SMOOTH DOGFISH FISHERIES. A PLACEHOLDER OF [...] DEPICTS LOCATION OF OMITTED AND UNRELATED SECTIONS. **BOLDFACED** TEXT INDICATES LANGUAGE THAT WAS ADDED OR MODIFIED BY THE NJMFA DURING THE LAST RULE AMENDMENT PROPOSAL FOLLOWING PASSAGE OF ADDENDUM I.*

SUBCHAPTER 18. MARINE FISHERIES

7:25-18.1 Size, season and possession limits

- (a) For the purpose of this subchapter, the following common names shall mean the following scientific name(s) for a species or group of species, except as otherwise specified elsewhere in this subchapter.

Common Name Scientific Name

.....

Shark Large Coastal Group

...

[*Carcharhinus altimus* (Bignose Shark)]

...

[*Carcharhinus perezi* (Caribbean Reef Shark)

Carcharhinus obscurus (Dusky Shark)

Carcharhinus galapagensis (Galapagos Shark)]

...

[*Carcharhinus brachyurus* (Narrowtooth Shark)

Carcharhinus signatus (Night Shark)

Carcharhinus plumbeus (Sandbar Shark)]

...

Small Coastal Group

[*Squatina dumerili* (Atlantic Angle Shark)]

...

[*Rhizoprionodon porosus* (Caribbean Sharpnose Shark)]

...

[*Carcharhinus porosus* (Smalltail Shark)]

Pelagic Group

[*Hexanchus vitulus* (Bigeye Sixgill Shark)

Heptranchias perlo (Sevengill Shark)

Hexanchus griseus (Sixgill Shark)

Isurus paucus (Longfin Mako)]

...

[*Alopias superciliosus* (Bigeye Thresher)]

...

Research Only Group

***Carcharhinus plumbeus* (Sandbar Shark)**

...

(b) A person shall not purchase, sell, offer for sale, or expose for sale, any species listed below less than the minimum length, measured in inches, except as may be provided elsewhere in this subchapter, and subject to the specific provisions of any such section. Any commercially licensed vessel or person shall be presumed to possess the following species for sale purposes and shall comply with the minimum sizes below. Fish length shall be measured from the tip of the snout to the tip of the tail (total length), except as noted below.

Minimum Size
Species (inches)___

.....

Shark [48]

Large Coastal Group No Limit

Small Coastal Group No Limit

Pelagic Group No Limit

Smooth Dogfish No Limit

.....

1. – 3. (No change.)

(c) A person angling with a hand line or with a rod and line or using a bait net or spearfishing shall not have in his or her possession any species listed below less than the minimum length, nor shall such person take in any one day or possess more than the possession limits as provided below, nor shall such person possess any species listed below during the closed season for that species. Exceptions to this section as may be provided elsewhere in this subchapter shall be subject to the specific provisions of any such section. Fish length shall be measured from the tip of the snout to the tip of the tail (total length), except as noted below:

Minimum Size Possession
Species In Inches__ Open Season Limit___

...

Shark [48] [Jan. 1-Dec. 31] [2]1 per vessel, as specified in (c)2 below

Large Coastal Group 54 Jan. 1-May 14, and

July 16-Dec. 31

Small Coastal Group No Limit Jan. 1-Dec. 31

Pelagic Group 54 Jan. 1-Dec. 31

Smooth Dogfish No Limit Jan. 1-Dec. 31 No Limit

...

1. (No change.)

2. **Shark length shall be measured from the tip of the snout to the V shaped indentation between the two separate tail segments (fork length) forming the caudal fin. Sharks may be harvested in the recreational fishery only by angling with a hand line, or rod and reel.** The possession limit for shark, as listed at (a) above, shall be [as enumerated at (c) above] **a maximum harvest of one shark from the Large Coastal, Small Coastal, or Pelagic species group** on a per vessel basis regardless of the number of individuals on board said vessel. **In addition, each recreational angler fishing from a boat may harvest one bonnethead and one Atlantic sharpnose per trip.** If a person is fishing from shore or a land based structure, the possession limit shall be [as enumerated at (c) above] **a maximum harvest of one shark from the Large Coastal, Small Coastal, or Pelagic species group per calendar day** on a per person basis. **In addition, each recreational angler fishing from the shore or a land-based structure may harvest one bonnethead and one Atlantic sharpnose per calendar day.**

3. (No change.)

(d) A person shall not take, possess, land, purchase, sell or offer for sale any of the following species:

Species Scientific Name

Atlantic Angel Shark *Squatina dumerili*

... ..

Bigeye Sixgill Shark *Hexanchus vitulus*

Bigeye Thresher Shark *Alopias superciliosus*

Bignose Shark *Carcharhinus altimus*

Caribbean Reef Shark *Carcharhinus perez*

Caribbean Sharpnose Shark *Rhizoprionodon porosus*

Dusky Shark *Carcharhinus obscurus*

Galapagos Shark *Carcharhinus galapagensis*

Longfin Mako Shark *Isurus paucus*

Narrowtooth Shark *Carcharhinus brachyurus*

Night Shark *Carcharhinus signatus*

... ..

Sharpnose Sevengill Shark *Heptanchias perlo*

.....

Sixgill Shark *Hexanchus griseus*

**Silky Shark (recreational *Carcharhinus falciformis*
fishery only)**

Smalltail Shark *Carcharhinus porosus*

.....

(e) Except as provided in (e)2 and (f) below, a person shall not remove the head, tail or skin, or otherwise mutilate to the extent that its length or species cannot be determined, any species with a minimum size limit specified at (b) or (c) above or any other species of flatfish, or possess such mutilated fish, except after fishing has ceased and such species have been landed to any ramp, pier, wharf or dock or other shore feature where it may be inspected for compliance with the appropriate size limit.

1. A shark **or dogfish** may be eviscerated [and the head and tail removed] prior to landing [, provided that the alternate length as measured from the origin of the first dorsal fin to the precaudal pit (located just forward of the origin of the upper lobe of the caudal or tail fin) is not less than 23 inches in length]. The fins may not be removed from a shark or dogfish, except after fishing has ceased and such shark or dogfish has been landed as specified in (e) above.

2. (No change.)

(f) – (o) (No change.)

(p) The Commissioner, with the approval of the New Jersey Marine Fisheries

Council, may modify the fishing seasons, minimum size limits and possession limits, **and the list of shark species contained within any of the shark groups** specified in this section by notice in order to maintain and/or to come into compliance with any fishery management plan approved by the Atlantic States Marine Fisheries Commission pursuant to 16 U.S.C. §5104(b) or to maintain consistency with any Mid-Atlantic Fishery Management Council plan adopted by the National Marine Fisheries Service. The Department shall publish notice of any such modification in the New Jersey Fish and Wildlife Digest and the New Jersey Register, and shall submit a news release to individuals on the Division outdoor writers' mailing list.

(q) – (r) (No change.)

7:25-18.12 Commercial fishing seasons, quotas, and trip limits

(a) – (c) (No change.)

(d) The following provisions are applicable to the commercial harvest of sharks **and smooth dogfish**:

1. A person shall not possess more **sharks** than [two sharks per vessel nor shall a person sell or attempt to sell more than two sharks] **the number specified in the possession limit at N.J.A.C. 7:25-18.1(c)** without a valid annual vessel permit for sharks issued by the National Marine Fisheries Service **or a New Jersey commercial fishing license issued for the gear allowed in the commercial shark fishery. With a valid annual vessel permit or a New Jersey commercial fishing license, the maximum possession**

limit is 33 sharks from the Large Coastal shark species group, an unlimited number of sharks from the Small Coastal shark species group, and an unlimited number of sharks from the Pelagic shark species group. A person shall not sell or attempt to sell any sharks without a valid annual vessel permit for sharks issued by the National Marine Fisheries Service or a New Jersey commercial fishing license issued for the gear allowed in the commercial shark fishery.

i. Any harvester or vessel landing shark **or smooth dogfish** in New Jersey for the purpose of sale shall sell all shark **or smooth dogfish** only to a dealer with a valid permit for sharks issued by the National Marine Fisheries Service.

2. A dealer shall not purchase or receive a shark without a valid annual dealer permit for sharks issued by the National Marine Fisheries Service. **Each such shark dealer shall report weekly shark and smooth dogfish landings electronically through the Standard Atlantic Fisheries Information System (SAFIS).**

3. (No change.)

4. The commercial fishing season for shark and smooth dogfish shall be from January 1 through December 31, except the harvest of Large Coastal sharks shall be prohibited from May 15 through July 15. A fisherman legally harvesting any of the Large Coastal sharks in Federal waters from three to 200 nautical miles offshore during the May 15 through July 15 time period may transport his or her catch through the State marine waters of New Jersey provided that the fisherman notifies the Department by calling 609-748-2050 prior to entering the State's marine waters and provided:

i. That the vessel does not engage in fishing within the closed area while processing the above species;

ii. The sharks possessed were not caught in the closed area; and

iii. All fishing gear is stowed and not available for immediate use as defined below:

(1) "On-reel" stowage for vessels transiting a closed area shall be as follows:

(A) The net shall be on a reel, its entire surface is covered with canvas or other similar opaque material, and the canvas or other material is securely bound;

(B) The towing wires shall be detached from the doors; and

(C) No containment rope, codend tripping device, or other mechanism to close off the codend shall be attached to the codend; and

(2) Gillnet gear stowage for vessels transiting a closed area shall be as follows:

(A) All nets shall be covered with canvas or other similar material and lashed or otherwise securely fastened to the deck or rail; and

(B) All buoys larger than six inches (15.24 centimeters) in diameter, high flyers, and anchors shall be disconnected.

5. The following gear types may be used for commercial shark harvest in State marine waters: gillnets, trawl nets, and pound nets. Large-mesh gill nets are defined as having a stretch mesh greater than or equal to five inches.

6. All sharks harvested by commercial fishermen shall have tails and fins attached naturally through dockside landing. Commercial fishermen may completely remove the fins of smooth dogfish from March through June each year. If the fins are removed, the total wet weight of the fins shall not exceed five percent of the total dressed weight of smooth dogfish carcasses landed or found on board a vessel. From July through February, for the smooth dogfish fishery only, commercial fishermen may completely remove the head, tail, pectoral fins, pelvic (ventral) fins, anal fin, and second dorsal fin, but shall keep the dorsal fin attached naturally to the carcass through landing. If fins are removed, the total wet weight of the smooth dogfish fins shall not exceed five percent of the total dressed weight of smooth dogfish carcasses landed or found on board a vessel.

7. The smooth dogfish annual quota is unlimited and the smooth dogfish trip limit is unlimited.

(e) – (n) (No change.)

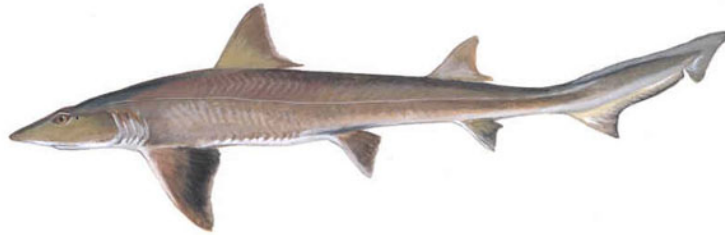
(o) The Commissioner, with the approval of the New Jersey Marine Fisheries Council,

may modify quotas, trip limits and/or seasons, **as well as gear types and gear restrictions**, specified in [the] **this** section[,] by notice in order to maintain and/or to come into compliance with any fishery management plan approved by the Atlantic States Marine Fisheries Commission pursuant to 16 U.S.C. §5104(b) or to maintain consistency with any Mid-Atlantic Fishery Management Council plan adopted by the National Marine Fisheries Service. The Commissioner, with the approval of the New Jersey Marine Fisheries Council, may modify trip limits and/or seasons, **as well as gear types and gear restrictions**, specified in this section by notice in order to provide for the optimal utilization of any quotas specified in this section. The Commissioner will review the catch rate for a particular species in relation to the season quota and, if harvest data indicate that upward adjustments in harvest control measures are warranted to maximize utilization of the available quota within a specific season for a specific fishery, the

Commissioner may adjust the above specified control measures to achieve optimal utilization of the total allowable catch. The Department shall publish notice of any such modification in the New Jersey Register.

(p) – (s) (No change.)

Smooth Dogfish (*Mustelus canis*) Fin: Carcass Ratio Project



May 2013

ASMFC Coastal Sharks Technical Committee – Participating Members/Staff

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Background

The Coastal Sharks Technical Committee (TC) met via conference call in June 2012. The purpose of the call was to review a smooth dogfish processing at sea request from New Jersey commercial fishermen. Section 2.3.1 of Addendum I to the 2008 Interstate Fisheries Management Plan for Atlantic Coastal Sharks (FMP), Smooth Dogfish Processing at Sea, allows commercial fishermen to completely remove all smooth dogfish fins at sea from March – June with a max 5% fin to carcass ratio; the dorsal fin and tail must remain attached naturally to the carcass from July – February.

In July 2009, during the development of Addendum I, North Carolina submitted a memo with trip ticket information from 2004 – 2009 that finds the fin to carcass ratio varied from 9.8 – 10.4%. During the June 2012 TC conference call, the TC chose not to endorse the results of the North Carolina trip ticket study because the weights were not observed by North Carolina Division of Marine Fisheries staff and was calculated from the bulk sum of all fish caught on a trip. Endorsement of this particular study was heavily dependent on the fact that no individual fish weights were present.

North Carolina submitted additional information in September 2009 to that was not included in the June 2012 TC conference call. The additional information included individual weights from sixteen fish sampled by North Carolina Division of Marine Fisheries staff. The purpose of the memo was to revisit the issue of the maximum 5:95 fin to carcass ratio. The findings of this additional study indicated fin to carcass ratios ranged from 8.6 – 11.2% for a dorsal and pectoral fin set. To date the TC has not endorsed the September 2009 study.

The TC agreed, during the June 2012 conference call, that the July 2009 North Carolina memo results indicate that the correct fin to carcass ratio is likely different from the current 5:95 ratio. TC members from Massachusetts, New Jersey, North Carolina, and South Carolina agreed to begin weighing individual smooth dogfish as a comprehensive study to determine a scientifically valid smooth dogfish fin to carcass ratio. Currently, only New Jersey and North Carolina have collected data.

Draft Addendum II to the Interstate Coastal Sharks Fishery Management Plan was developed to address implementation of a coastwide quota and to respond to the above-mentioned New Jersey request. State-shares are proposed as an option in the document to prevent the quota of smooth dogfish being taken in one region while excluding other regions of the coast. The at-sea processing aspect of Draft Addendum II was developed in response to National Marine Fisheries Service (NMFS) pending implementation of the provisions of the Shark Conservation Act of 2010 (SCA). The SCA contains an exception for commercial harvest of smooth dogfish within 50 nautical miles of a state. The SCA is implementing a 12% fin to carcass ratio for smooth dogfish, a ratio less restrictive than the ratio in state waters. In a TC conference call in January 2013, the TC agreed that maintaining consistency between federal management and state management is necessary to uphold the objectives of the FMP. Therefore, the TC recommended that a 12:88 fin to carcass ratio, consistent with the SCA, be included as the preferred option in Draft Addendum II to the FMP.

Objective

The objective of this white paper is to determine a scientifically valid smooth dogfish fin to carcass ratio, in order to assist the Spiny Dogfish and Coastal Sharks Management Board in their final action for Draft Addendum II to the FMP.

Survey Methodology

Due to other work priorities and a lack of activity/landings within the State's dogfish net fisheries, New Jersey's samples were collected on 11 October 2012 from the Ocean Trawl Stock Assessment Survey, which uses a stratified random sampling design to collect trawl data from state coastal waters. The survey area includes only waters adjacent to the New Jersey coastline. Trawl samples are collected with a three-in-one trawl, which is a two-seam trawl constructed of polyethylene twine with forward netting (wings, belly) of 12 cm (4.7 in.) stretch mesh and rear netting of 8 cm (3.1 in.) stretch mesh. The codend is 7.6 cm stretch mesh (3.0 in.) and is lined with 6.4 mm (0.25 in.) bar mesh liner. The headrope is 25 m (82 ft.) long and the footrope is 30.5 m (100 ft.) long. The trawl bridle is 120 ft. long,

the top leg consisting of 0.5 in. wire rope and the bottom leg comprised of 0.75 in. wire rope covered with 2 3/8 in. rubber cookies. A 60 ft. groundwire, also made of 0.75 in. wire rope covered with 2 3/8 in. rubber cookies, extends between the bridle and trawl doors. The trawl doors are wooden with steel shoes, 8 ft. x 4 ft. 2 in., and weigh approximately 1,000 lbs. each.

Trawl samples are collected by towing the net for 20 minutes, timed from the moment the winch brakes are set to stop the deployment of tow wire to the beginning of haulback. Target towing speed is 2.5 – 3.0 knots, or about 2.8 knots. A 20 minute tow generally covers about one nautical mile. Following haulback, the catch is dumped into a 4 x 8 ft. sorting table where fishes and macroinvertebrates are sorted by species into plastic buckets and wire fish baskets. The total weight of each species is measured with hanging metric scales and the length of all individuals comprising each species caught, or a representative sample by weight for large catches is measured to the nearest centimeter (cm).

All smooth dogfish retained in this study were randomly removed throughout the day by Marine Fisheries staff following the recording of total dogfish weight for a given trawl. No preference was given to sex or size. Personnel on the vessel reported that the fish collected and retained were representative of size of fish collected throughout survey.

Study Design, Processing Methodology and Caveats

Three commercial fishermen who regularly land smooth dogfish were consulted prior to sample collection and processing. One commercial fisherman (Kevin Wark - Fisherman 1) visited the Marine Fisheries office at Nacote Creek and processed two smooth dogfish according to his processing methods. This process was photo-documented, step by step by Marine Fisheries staff. In recent years, this harvester stated that he would rarely land smooth dogfish due to the high volume needed and the low price attained at market. The other two fishermen (John Breitling and Eric Snelling – Fishermen 2 & 3) attested to regularly landing smooth dogfish when they were available, and probably more importantly, when other higher-valued species were not readily available. The two latter fishermen process their catch slightly differently than Fishermen 1. Based on later conversations with all three fishermen, it was decided that the processing methods of Fishermen 2 & 3 better represent the processing observed across New Jersey's smooth dogfish fishery.

For fin identification, see Figure 1 below. Three main differences were noted between Fisherman 1 and Fishermen 2 & 3. First, Fisherman 1 used a circular cut on the pectoral fins (P), leaving the fin attachment points on the log and having less meat on the fins (see Figure 2). Fishermen 2 & 3 performed a straight cut similar to the observed process in North Carolina on all fins, with no circular cuts. Fishermen 1 was also very exact in his cutting on all fins and took less “meat” than the other fishermen attested to taking during normal fishing and processing operations. Second, when cutting the belly flap, Fisherman 1 did not take the P1 fins, but would remove them in separate cuts prior to making this cut. Most NJ fishermen remove all fins first, and then perform one single cut when removing the head and belly flap. This cut begins behind the head down through the gills into belly area then running above the P fins (typically already removed) and ending just past the P1 fins, removing them attached to the flap. The fishermen reportedly receive approximately \$3.00 per pound ex-vessel for the D1 and P fin set. The third difference involved the use/retention of the caudal fin. Fisherman 1 stated that he did not retain the caudal, but the other two fishermen reported that they did indeed retain the tail, which was typically placed in a separate basket (separate from the other processed fins) on the harvest vessel. Most fishermen appear to retain the caudal fins separately in New Jersey, which reportedly receive \$0.45 per pound paid ex-vessel to the fishermen.

Figure 1. Fin Identification and Codes

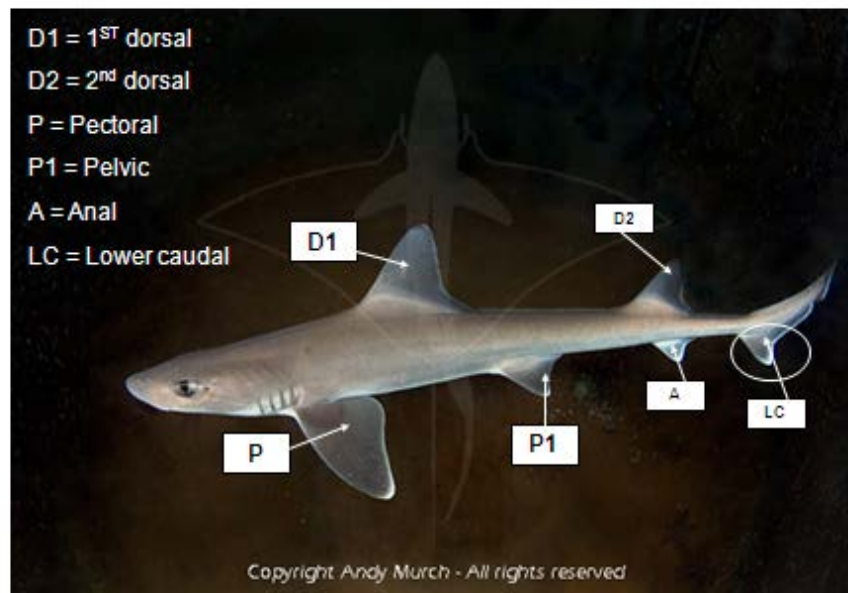


Figure 2. Circular cut, which leaves less meat on the P fins, not the normal cut for NJ fishermen.



Results / Discussion

The dogfish collected from our trawl survey were an average of 707.2 mm in length. The length range was 545 – 1,060 mm. There was a reasonable split within the sexes collected, with 29 males and 23 females. It is noteworthy that these collected fish were a touch on the smaller side, versus what we would see in our commercial fisheries or in our spring trawl survey. It appears that the majority of our

fishermen cut very similar to North Carolina fishermen (straight cuts), but with a few differences: North Carolina fishermen retain the D1 and D2 fins, along with the P fins. We are unsure if the caudal fin is retained in North Carolina. Most NJ fishermen do not retain or use the second dorsal and our fishermen cut and, as noted above, retain the caudal fins in a basket, culled separately.

To summarize, the primary New Jersey fin set is the dorsal (D1) and the two pectoral fins (P) together in one basket and the entire caudal (not the lower lobe) in a separate basket. Because of the varying fin sets both within New Jersey and between the two states, during independent processing, all fins were cut and weighed separately to allow for ease of analysis, depending on what fins are retained and what fin sets are used for a given state. During processing, the following metrics were collected: length (mm), sex, round or whole weight (kg), dressed/carcass weight of processed log (kg), D1 weight (kg), D2 weight (kg), P weight (kg), caudal weight (kg) and all fins weight in kg (see Figure 3 below and Table 1 for collected data).

Initially, one of our main concerns was that the fish needed to be collected within both size and sex bins, which would introduce more variables. Again, the fish collected in the October survey were smaller than those typically retained by commercial fishermen. However, as expected, when comparing NJ and NC numbers, we believe the data neatly confirms proportional growth for fins and body. Initial fin:carcass analysis shows that when comparing NJ and NC data (using the NC fin set), NJ falls in at 8.7% and NC at 9.6% (see Tables 2 & 3). One reason that the NJ numbers may be a bit lower is that it is possible that our processor was a little too careful; not processing at the same speed and pace that a fishermen would be working at, which would presumably leave more meat on the fins. A quick fishery dependent sampling trip on a commercial boat could potentially shed some light on this.

Quick analysis of the data and histograms, NJ data suggests that a mean would be appropriate to characterize a ratio. However, given that the fin:carcass ratio changes with dressed weight, depending on fishery practices and acceptable enforcement tolerances (confidence intervals around the mean), several ratios may be necessary. More problematic from a regulatory, implementation and eventually, an enforcement viewpoint is the fact that NC fishers and NJ fishers harvest different fin sets, at least as reported in NC's 2009 study versus NJ's 2012 study, respectively. While the allowance for harvesters to remove the dorsal fin during the post July 1 period is not viewed as problematic from NJ's perspective, it could have enforcement implications or be difficult to implement across multiple states given the differing fin sets that are retained. A suggestion might be made for a uniform processing and fin set retention across the states in order to implement this otherwise reasonable request from industry.

Figure 3. Processed log and straight cuts of D1, D2, P and caudal fin (Note, NJ fishermen do not retain the D2 for sale).



If you consider all fins retained by NJ fishermen (D1, P **and** the caudal), the percentage is 13%. With just the D1 and the P, without the caudal, is 7.5%. Adding the D2 to the fin set (similar to how NC processes) would add one percent due to the nominal size of the D2 fin. To further complicate the matter, it appears that some (reportedly only a few) NJ fishermen retain the D1 **and** D2, along with the P fins and discard the caudal.

Step by Step Processing

Figure 4. Shows a typical smooth dogfish (*Mustelus canis*) prior to finning procedure.



Figure 5. Straight cut – representative of NJ process



Figure 6. Prior to finning, the total length and weight of the whole dogfish was recorded.



Figure 7. First cut...the first dorsal fin (D1) was removed via a flat cut directly below the cartilaginous section of the fin. A small sliver of meat was left on the first dorsal fin as a result of this type of cut, as shown in photo below.





Figure 8. The pectoral fins were then removed using a straight cut that accounts for the angle of the shark torso. An alternate to this cut (circular cut) is illustrated in Figure 9. This alternate cut cuts around the fleshy lobe at the base of each pectoral fin. The resulting fin has less meat on it. For this study we used the first pectoral fin cut style although it is recognized that some prefer the alternate cut.



Figure 9. A circular cut, which is not typical within NJ commercial industry.



Figure 10. Final Steps in Processing - The caudal fin was removed with a cut on the trunk just anterior of the caudal fin.



A vertical cut was then made, in line with the posterior gill slit, down and then along to the color change of the sharks belly flap.



This horizontal cut continues along the belly flap color line. This cut stemmed from the previous vertical cut and terminated directly after the P1 attachment (taking the P1 fins with the belly flap).



The previous two cuts then allowed for the head, belly flap, and entrails to be removed together as shown below. The result was a clean log with the second dorsal intact with the log.



The individual weight (kg) of each fin (first dorsal, pectorals, caudal) were measured and recorded. The mass of the pectoral fins was measured and recorded as a single combined weight.



The second dorsal was removed from the cleaned log in the same style as the first dorsal. The mass of the cleaned log with the second dorsal was measured and recorded as illustrated below. The D2 was then removed and weighed. This was done in this manner because it is recognized that there may be a possible market for the second dorsal to be sold as a fin and not in association with the cleaned log, similar to what occurs in NC.

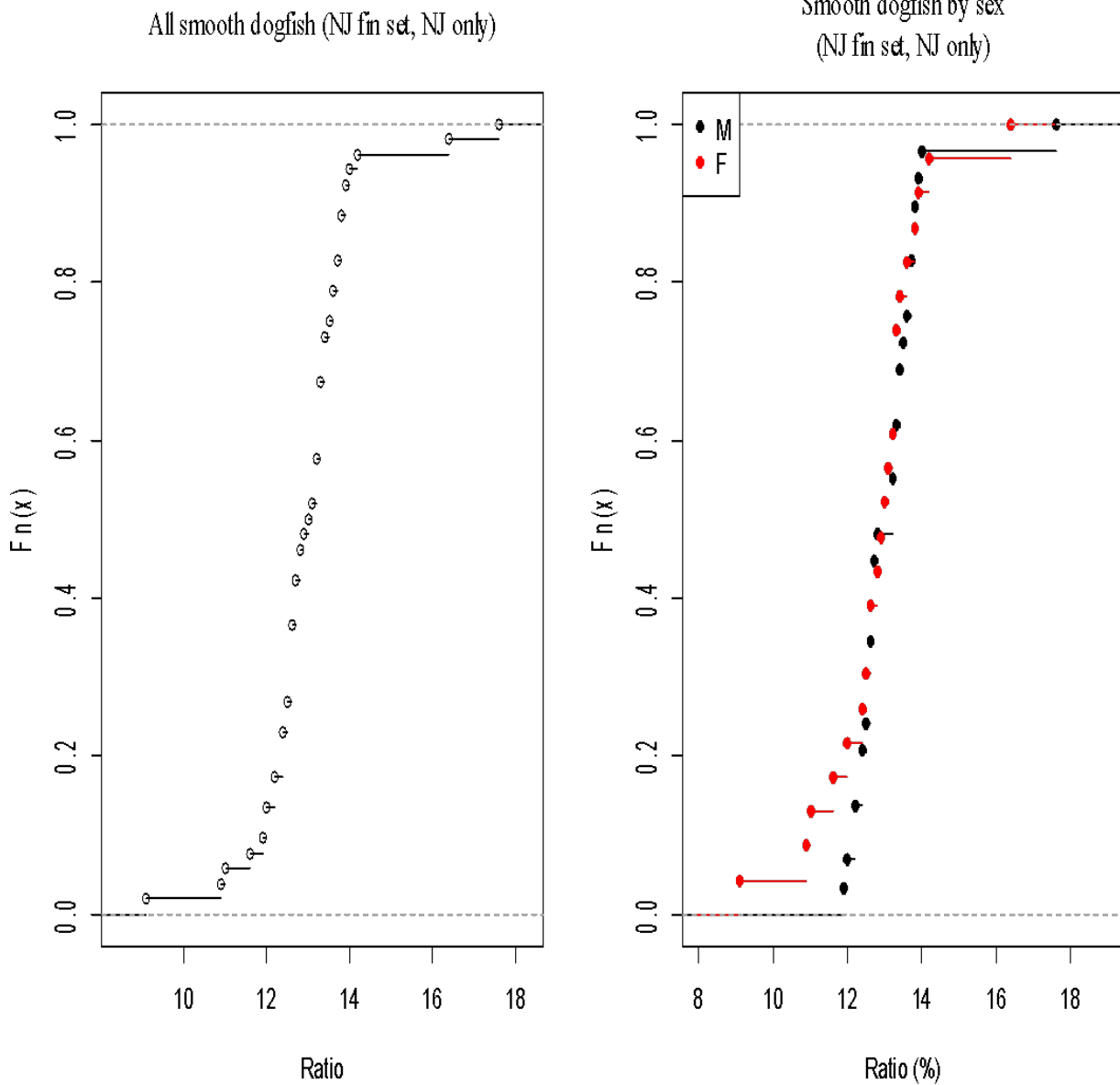


A photograph showing all possible marketable portions of the smooth dogfish.



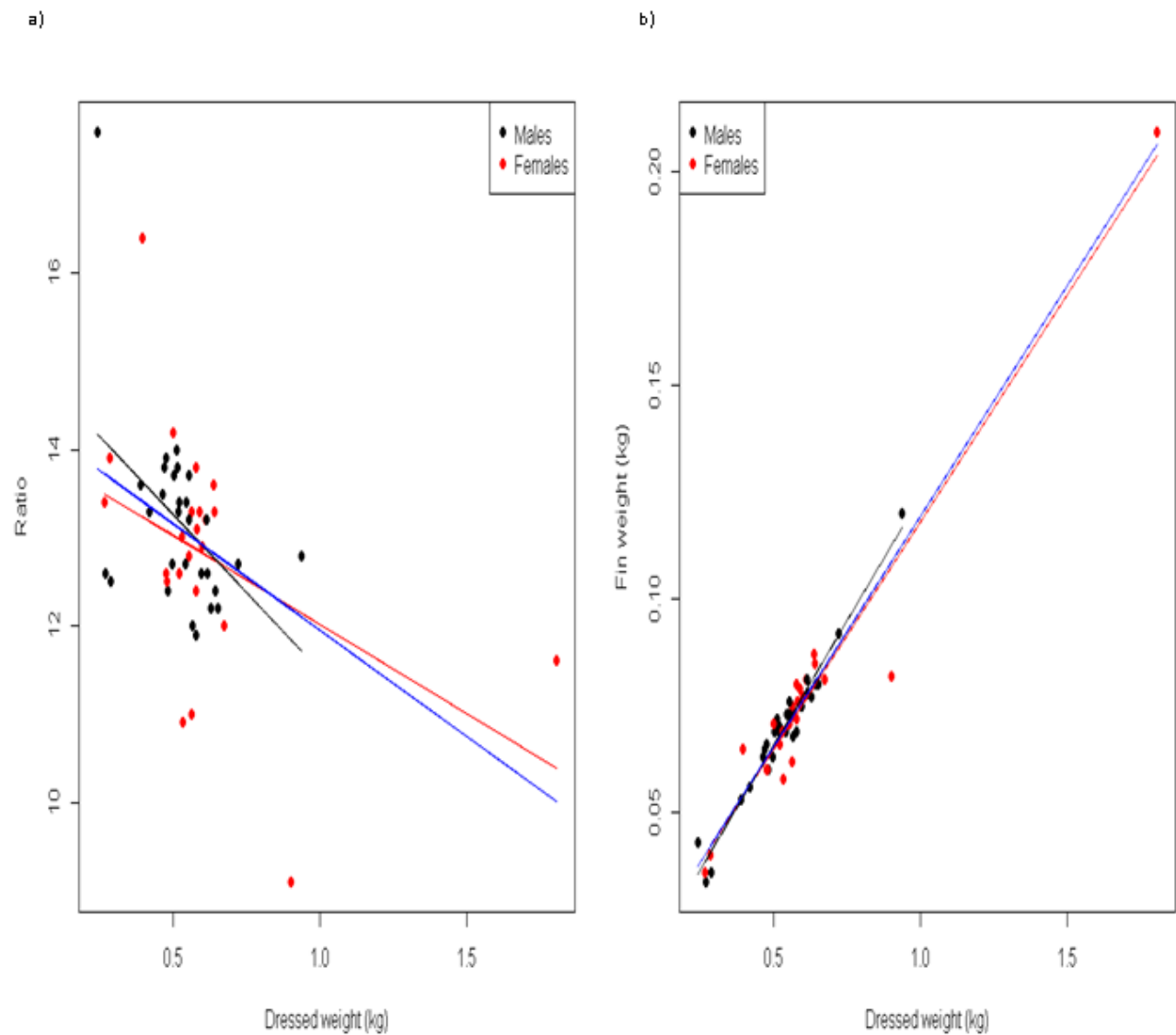
New Jersey Fin Set Data

Figure 12. Empirical cumulative distribution function plots for the NJ fin set for all dogfish and by sex of dogfish [$F_n(x)$ = fraction of observations \leq a given observation]. Small ratios for females diverge (are smaller) from males (i.e., small ratios for females are smaller than small ratios for males). Figure 12 shows that the small female ratios are not associated with aberrant dressed weights, save perhaps two data points.



New Jersey Fin Set

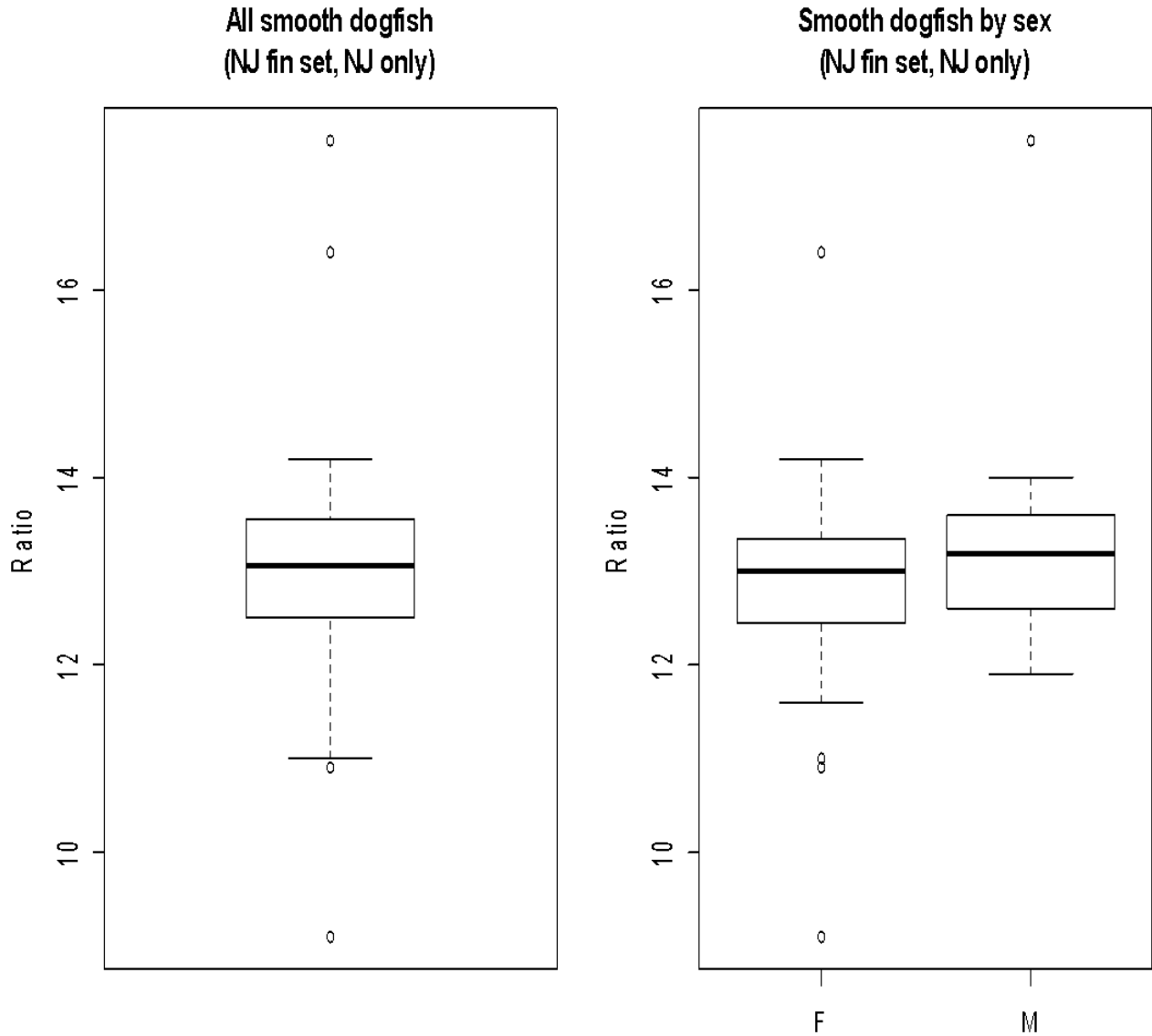
Figure 13. a) Fin:carcass ratio as a function of dressed weight of NJ smooth dogfish (NJ fin set) (blue line is all-fish regression line). Regression lines are added to male fish: ratio = (male dressed weight * -3.536) + 15.032; female fish: ratio = (female dressed weight * -2.022) + 14.04; and all fish (blue line): ratio = (f=dressed weight * -2.416) + 14.370. This figure is provided to convey a sense of the range of variability of the ratio as a function of dressed weight and suggests that future efforts might focus on a broader range of fish sizes (heavier fish in NJ tend to have lower ratios). Future efforts might also focus on the influence of several potential outlying points in ratio estimation. b) The slope of each regression line is an estimate of the respective fin:carcass ratio [male = 0.12 ($r^2 = 0.95$), female = 0.11 ($r^2 = 0.94$), or all fish = 0.11 ($r^2 = 0.94$)]¹. The ratios do not differ by sex (Wilcoxon signed rank $W = 967.5$, $p = 0.5365$).



New Jersey Fin Set

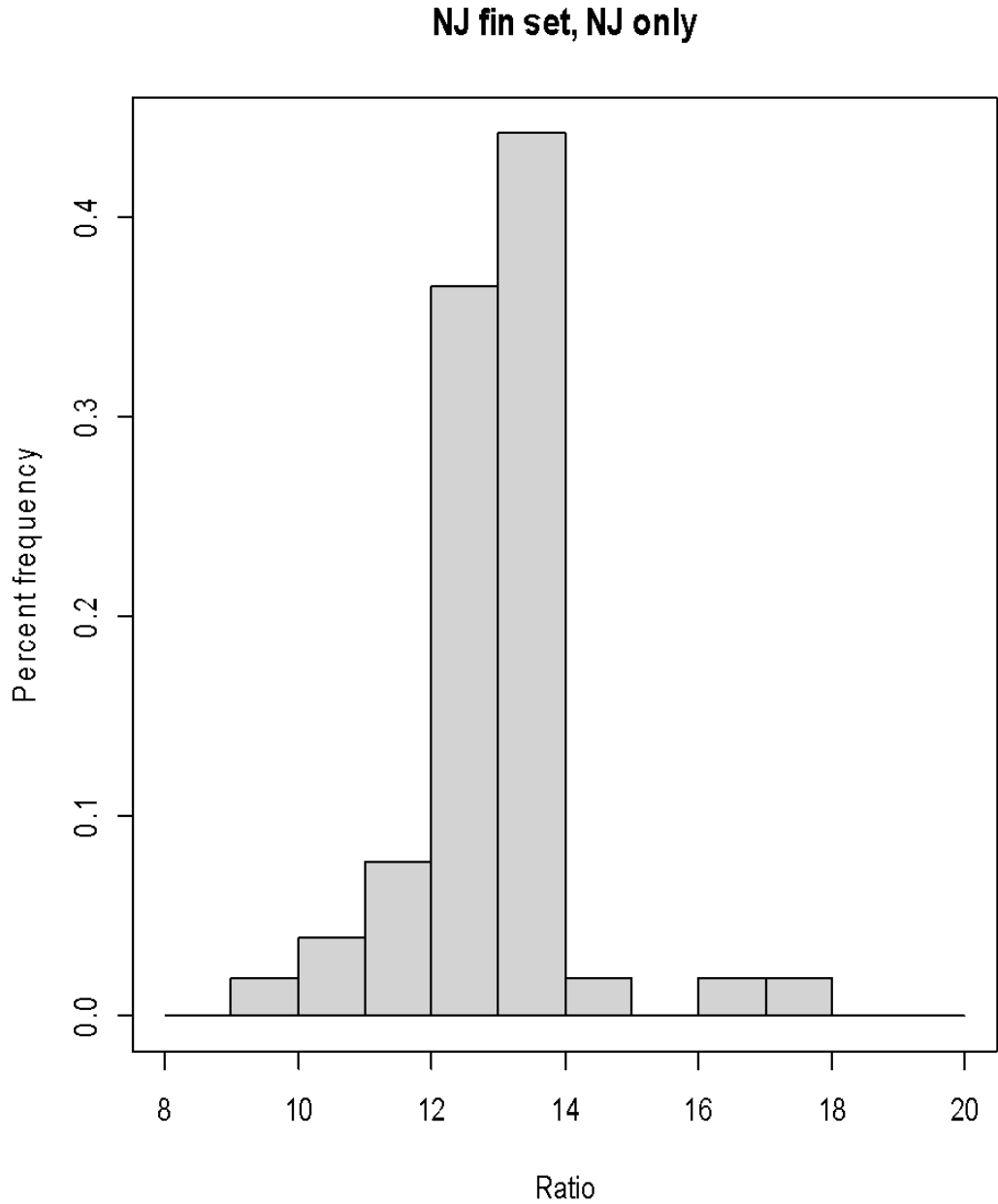
¹ Note that the arithmetic means of male ratios = 0.13, female ratios = 0.13, and all-fish ratios = 0.13.

Figure 14. The boxplots in the figure below suggest that female ratios are somewhat smaller and more variable than ratios from male dogfish, a finding supported in the regression plots above (Figure 13). There is some suggestion too that some data points might be pruned from the data set. We evaluated all data prior to analyses and concluded that there were no QA/QC concerns about the outlying points (e.g., numbers were not transposed, recorded incorrectly, etc.) so all were retained for analyses.



New Jersey Fin Set

Figure 15. The figure below as well as the ECDF plots in Figure 1 2 suggest that the data are reasonably normally distributed, though results from a Shapiro Wilk test indicate otherwise (however, pruning the smallest ratio and two largest ratios did normalize the data). Nevertheless, the mean and median of the values are nearly identical; not surprisingly, the mean and median are nearly identical if outlying points in the boxplot above are removed.



North Carolina Fin Set - Comparison

Figure 16. The empirical cumulative distribution function plot shows that the NJ ratios are less than NC ratio (NC data from 2009). Whether this difference arises from finning techniques or is a result of the larger fish in NC's ratios (see Figure 17 below) is presently unknown. With respect to NJ-only fish, the gender difference in ratios is present, as it was with the NJ fin set, but shows a slightly different pattern (compare with Figure 12).

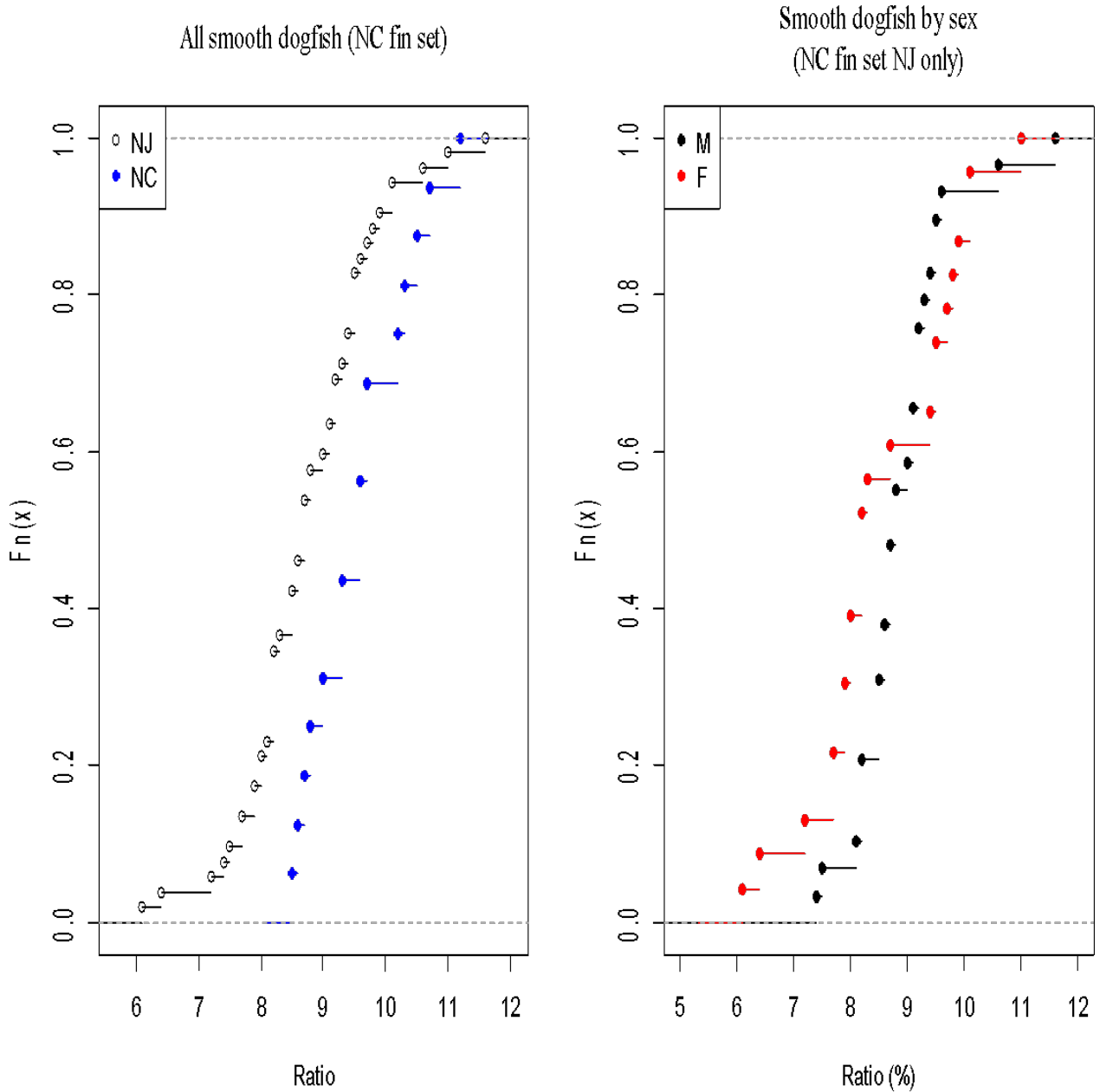
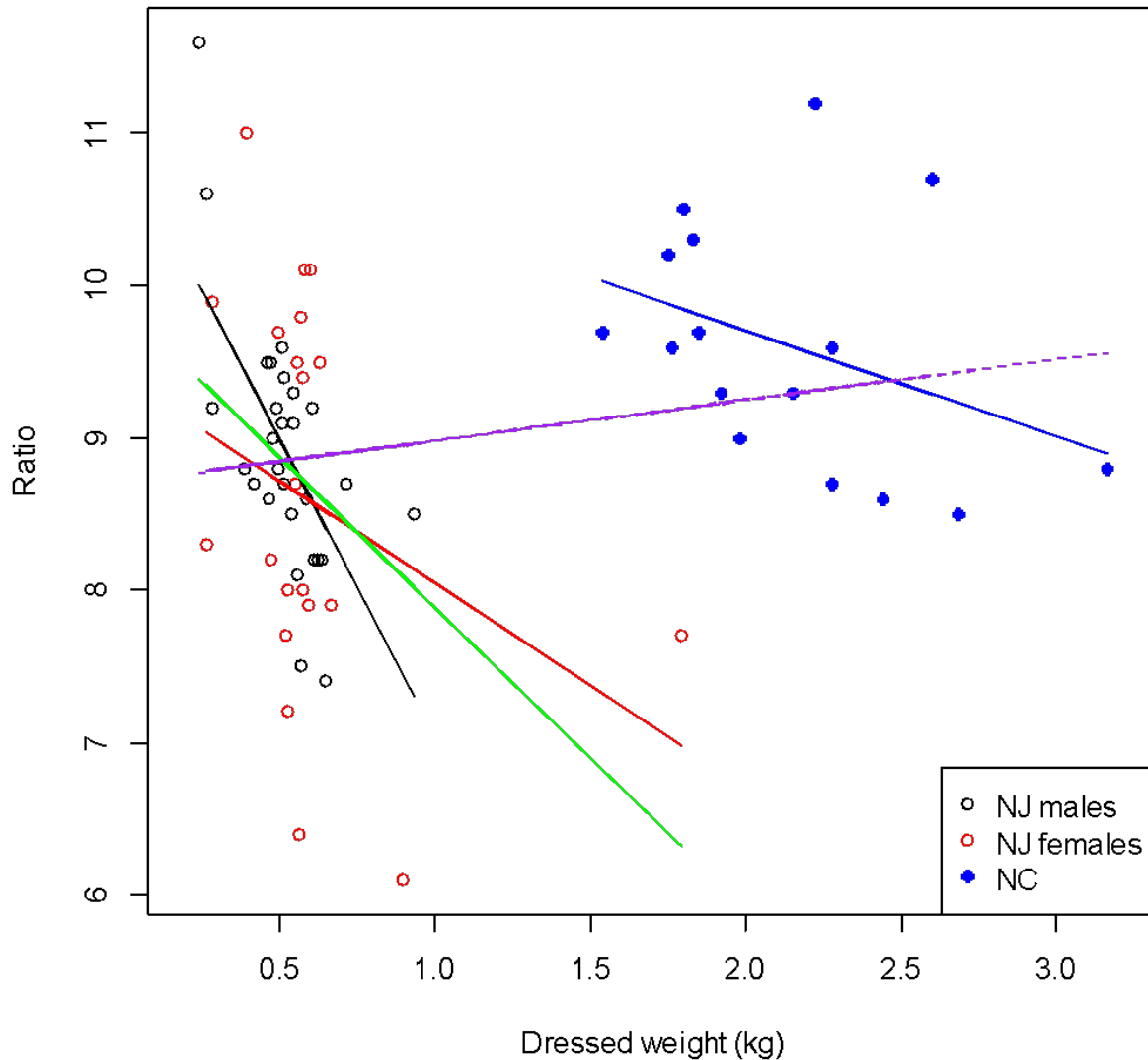


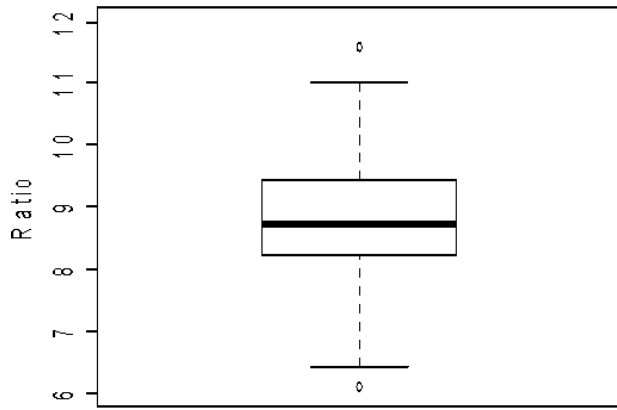
Figure 17. Ratio as a function of dressed weight using the NC fin set (note that green line is an all-NJ-fish regression line & the purple line is the all-all-fish regression line that combines NJ and NC fish) to provide a sense of the range of variability in ratios as a function of dressed weight. Similar to figures above, there is again a suggestion that heavier fish have lower ratios within a state – however when the datasets are combined, there is actually a trend of increasing ratios as a function of dressed weight. NC has an arithmetic mean ratio similar to (9.6 for NC compared to 8.8 for NJ), but statistically different (Wilcoxon’s Signed Rank $W = 626$, $p = 0.0024$) from NJ’s.



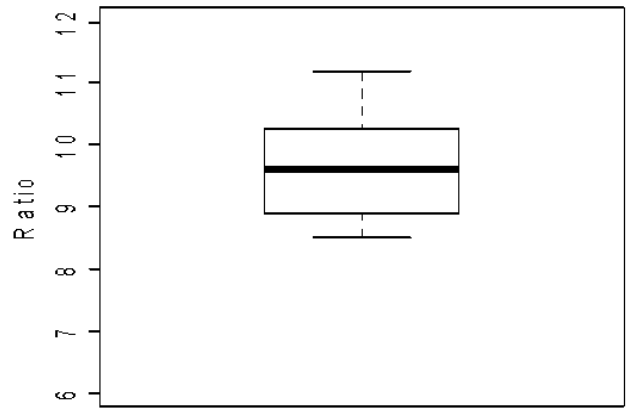
The boxplots in figures above show that ratios in NJ tend to be lower and more variable relative to NC. Female ratios in NJ, using the NC fin set, are again lower and more variable than male ratios.

Figure 18.

**All smooth dogfish
(NC fin set, NJ only)**



**All smooth dogfish
(NC fin set, NC only)**



**Smooth dogfish by sex
(NC fin set, NJ only)**

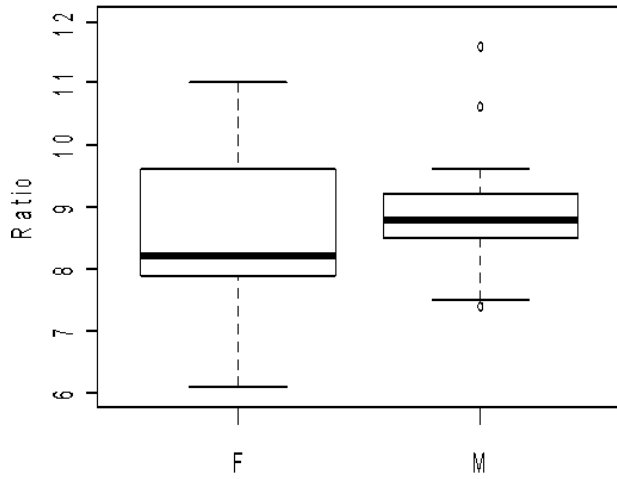


Figure 19. The histogram for NJ suggests that a mean would be appropriate to characterize a ratio, however, given that the fin:carcass ratio changes with dressed weight, depending on fishery practices and acceptable enforcement tolerances (confidence intervals around the mean), several ratios may be necessary. Potentially more problematic from a regulatory and enforcement viewpoint is the fact that NC fishers and NJ fishers (at least in 2009 vs 2012, respectively) harvest different fin sets.

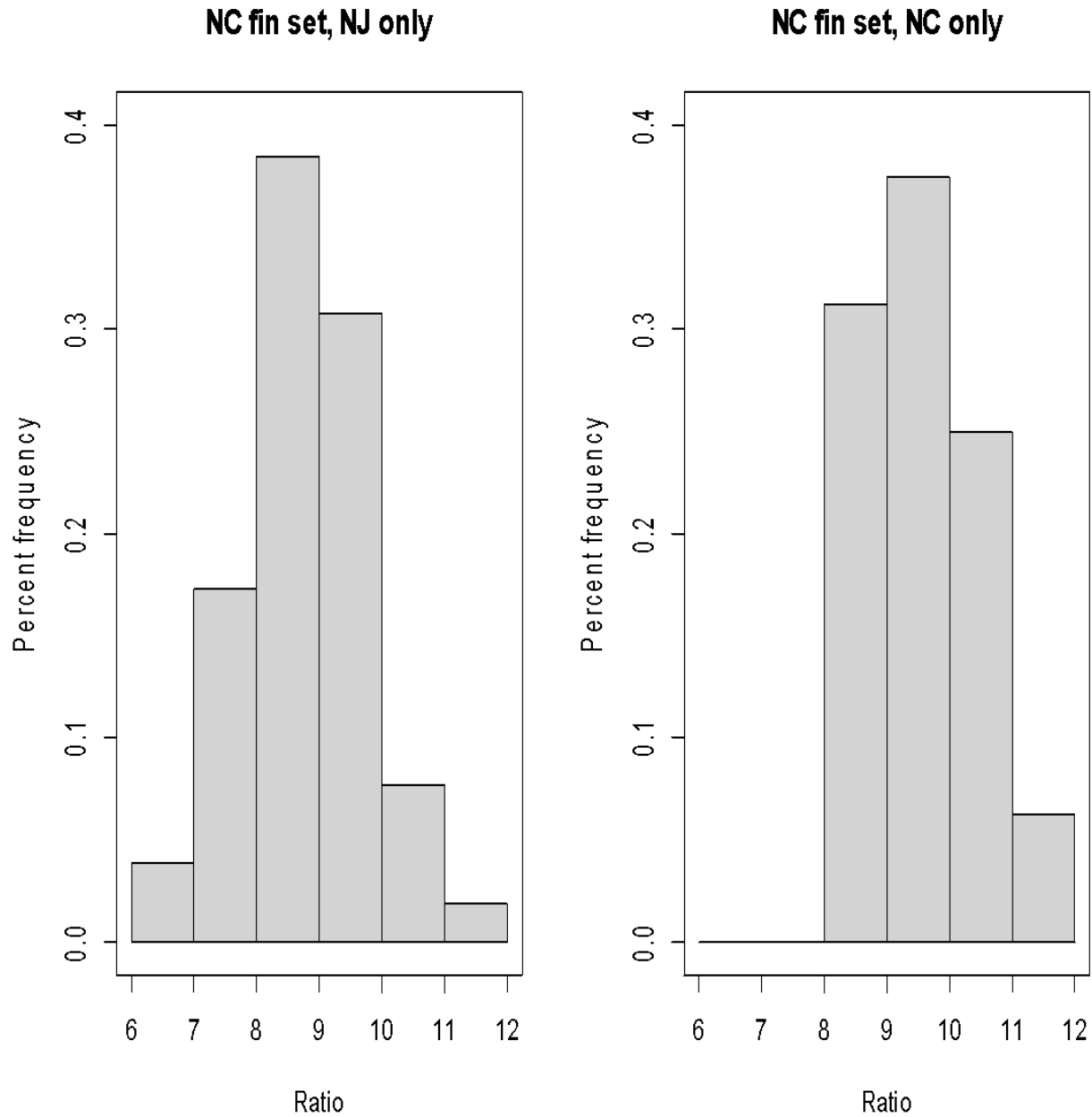


Table 1. New Jersey Data

Ocean Trawl Survey Cruise on 11
Source: October 12
Fin D1 = 1st dorsal ; D2 = 2nd Dorsal; P = Pectoral; P1 = Pelvic; C =
Codes: Caudal

N	LENGTH (mm)	Sex (M / F)	Round / Whole Weight (kg)	Dressed / Carcass Weight (kg)	D1 (kg)	D2 (kg)	P (kg)	CAUDAL (kg)	NJ Fin Set Sum	NJ Fin: Carcass %	NJ Fin Set Sum (w/o Caudal)	NJ Fin: Carcass % (w/o Caudal)
1	688.000	F	1.203	0.563	0.017	0.006	0.030	0.028	0.075	13.3	0.047	8.3
2	690.000	F	1.187	0.554	0.013	0.005	0.030	0.028	0.071	12.8	0.043	7.8
3	738.000	F	1.442	0.639	0.017	0.009	0.034	0.036	0.087	13.6	0.051	8.0
4	684.000	M	1.082	0.498	0.012	0.008	0.025	0.026	0.063	12.7	0.037	7.4
5	546.000	F	0.671	0.287	0.008	0.004	0.016	0.016	0.040	13.9	0.024	8.4
6	705.000	M	1.078	0.516	0.011	0.007	0.031	0.029	0.071	13.8	0.042	8.1
7	551.000	M	0.631	0.289	0.007	0.005	0.014	0.015	0.036	12.5	0.021	7.3
8	874.000	M	2.127	0.939	0.023	0.009	0.047	0.050	0.120	12.8	0.070	7.5
9	743.000	F	1.405	0.641	0.017	0.005	0.030	0.038	0.085	13.3	0.047	7.3
10	715.000	F	1.323	0.613	0.018	0.011	0.032	0.031	0.081	13.2	0.050	8.2
11	716.000	F	1.339	0.579	0.017	0.008	0.031	0.032	0.080	13.8	0.048	8.3
12	548.000	M	0.576	0.270	0.008	0.006	0.014	0.012	0.034	12.6	0.022	8.1
13	704.000	M	1.177	0.554	0.015	0.007	0.028	0.033	0.076	13.7	0.043	7.8
14	710.000	M	1.183	0.554	0.017	0.008	0.026	0.030	0.073	13.2	0.043	7.8
15	554.000	M	0.569	0.244	0.009	0.003	0.016	0.018	0.043	17.6	0.025	10.2
16	545.000	F	0.621	0.268	0.007	0.002	0.013	0.016	0.036	13.4	0.020	7.5
17	705.000	M	1.137	0.544	0.014	0.005	0.027	0.028	0.069	12.7	0.041	7.5
18	735.000	M	1.178	0.522	0.013	0.006	0.026	0.031	0.070	13.4	0.039	7.5
19	677.000	M	1.004	0.466	0.015	0.005	0.024	0.024	0.063	13.5	0.039	8.4
20	732.000	M	1.348	0.646	0.014	0.008	0.030	0.036	0.080	12.4	0.044	6.8
21	729.000	M	1.185	0.546	0.011	0.007	0.028	0.034	0.073	13.4	0.039	7.1
22	711.000	F	1.254	0.580	0.014	0.004	0.028	0.030	0.072	12.4	0.042	7.2
23	743.000	M	1.364	0.629	0.015	0.008	0.028	0.034	0.077	12.2	0.043	6.8
24	710.000	M	1.136	0.519	0.012	0.006	0.030	0.027	0.069	13.3	0.042	8.1
25	735.000	F	1.431	0.676	0.011	0.008	0.034	0.036	0.081	12.0	0.045	6.7
26	723.000	F	1.181	0.533	0.007	0.007	0.024	0.027	0.058	10.9	0.031	5.8
27	733.000	M	1.325	0.597	0.012	0.007	0.032	0.031	0.075	12.6	0.044	7.4
28	745.000	M	1.347	0.617	0.014	0.007	0.029	0.035	0.078	12.6	0.043	7.0
29	691.000	F	1.157	0.530	0.012	0.004	0.026	0.031	0.069	13.0	0.038	7.2
30	735.000	F	1.292	0.592	0.016	0.009	0.034	0.029	0.079	13.3	0.050	8.4
31	784.000	M	1.389	0.655	0.015	0.004	0.029	0.036	0.080	12.2	0.044	6.7
32	671.000	F	1.042	0.478	0.010	0.005	0.024	0.026	0.060	12.6	0.034	7.1
33	734.000	F	1.326	0.599	0.013	0.005	0.029	0.035	0.077	12.9	0.042	7.0
34	696.000	M	1.067	0.483	0.011	0.007	0.025	0.024	0.060	12.4	0.036	7.5
35	730.000	M	1.114	0.513	0.013	0.007	0.026	0.033	0.072	14.0	0.039	7.6

36	714.000	F	1.293	0.581	0.014	0.008	0.032	0.030	0.076	13.1	0.046	7.9
37	713.000	M	1.202	0.566	0.013	0.007	0.025	0.030	0.068	12.0	0.038	6.7
38	682.000	M	1.109	0.503	0.013	0.005	0.026	0.030	0.069	13.7	0.039	7.8
39	1060.000	F	4.368	1.807	0.037	0.017	0.084	0.088	0.209	11.6	0.121	6.7
40	668.000	F	0.978	0.397	0.011	0.005	0.027	0.027	0.065	16.4	0.038	9.6
41	807.000	M	1.584	0.722	0.016	0.009	0.037	0.039	0.092	12.7	0.053	7.3
42	742.000	M	1.302	0.614	0.014	0.008	0.034	0.033	0.081	13.2	0.048	7.8
43	839.000	F	1.906	0.902	0.015	0.006	0.034	0.033	0.082	9.1	0.049	5.4
44	691.000	F	1.267	0.565	0.008	0.003	0.025	0.029	0.062	11.0	0.033	5.8
45	698.000	F	1.167	0.523	0.010	0.005	0.025	0.031	0.066	12.6	0.035	6.7
46	668.000	F	0.981	0.480	0.008	0.005	0.026	0.026	0.060	12.5	0.034	7.1
47	692.000	M	1.058	0.472	0.010	0.005	0.025	0.030	0.065	13.8	0.035	7.4
48	632.000	M	0.822	0.389	0.008	0.004	0.022	0.023	0.053	13.6	0.030	7.7
49	716.000	M	1.188	0.578	0.011	0.006	0.026	0.032	0.069	11.9	0.037	6.4
50	698.000	F	1.129	0.501	0.011	0.007	0.030	0.030	0.071	14.2	0.041	8.2
51	676.000	M	1.036	0.476	0.011	0.004	0.030	0.025	0.066	13.9	0.041	8.6
52	653.000	M	0.939	0.420	0.009	0.005	0.022	0.025	0.056	13.3	0.031	7.4

	LENGTH (mm)	Sex (M / F)	Round / Whole Weight (kg)	Dressed / Carcass Weight (kg)	D1 (kg)	D2 (kg)	P (kg)	CAUDAL (kg)	NJ Fin Set Sum	NJ Fin: Carcass %	NJ Fin Set Sum (w/o Caudal)	NJ Fin: Carcass % (w/o Caudal)
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Avg	707.288		1.235	0.562	0.013	0.006	0.028	0.031	0.072	13.011	0.041	7.506
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StdDev	81.750		0.525	0.220	0.005	0.002	0.010	0.010				
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Var	6683.072		0.276	0.048	0.000	0.000	0.000	0.000				
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Size

Range 545 - 1,060 mm

Males 29

Female 23

Table 2. North Carolina Data from C. Gray - 2009 (unmanipulated)

fins	carcass	%
0.18	1.98	9
0.19	1.83	10.3
0.18	1.85	9.7
0.17	1.76	9.6
0.22	2.28	9.6
0.18	1.92	9.3
0.18	1.75	10.2
0.28	3.16	8.8
0.23	2.68	8.5
0.19	1.8	10.5
0.21	2.44	8.6
0.2	2.15	9.3
0.28	2.6	10.7
0.25	2.22	11.2
0.15	1.54	9.7
0.2	2.28	8.7
0.206	2.140	9.606 avg

Table 3. For comparison purposes, NJ fin:carcass % ratios both by individual fish and averaged, based on uniform North Carolina fin set of D1, D2 and P.

NJ Data with NC Fin Sets		
Dressed Carcass Weight (kg) - D2	/ NC Fin Set Sum	NC Fin Set %
0.557	0.053	9.5
0.549	0.048	8.7
0.630	0.060	9.5
0.490	0.045	9.2
0.283	0.028	9.9
0.509	0.049	9.6
0.284	0.026	9.2
0.930	0.079	8.5
0.636	0.052	8.2
0.602	0.061	10.1
0.571	0.056	9.8
0.264	0.028	10.6
0.547	0.050	9.1
0.546	0.051	9.3
0.241	0.028	11.6
0.266	0.022	8.3
0.539	0.046	8.5
0.516	0.045	8.7
0.461	0.044	9.5
0.638	0.052	8.2
0.539	0.046	8.5
0.576	0.046	8.0
0.621	0.051	8.2
0.513	0.048	9.4
0.668	0.053	7.9
0.526	0.038	7.2
0.590	0.051	8.6
0.610	0.050	8.2
0.526	0.042	8.0
0.583	0.059	10.1
0.651	0.048	7.4
0.473	0.039	8.2
0.594	0.047	7.9
0.476	0.043	9.0
0.506	0.046	9.1
0.573	0.054	9.4
0.559	0.045	8.1

0.498	0.044	8.8
1.790	0.138	7.7
0.392	0.043	11.0
0.713	0.062	8.7
0.606	0.056	9.2
0.896	0.055	6.1
0.562	0.036	6.4
0.518	0.040	7.7
0.475	0.039	8.2
0.467	0.040	8.6
0.385	0.034	8.8
0.572	0.043	7.5
0.494	0.048	9.7
0.472	0.045	9.5
0.415	0.036	8.7

Dressed Carcass Weight (kg) - D2	/	NC Set Sum	Fin Set	NC Set %	Fin Set
0.556		0.048		8.774	



STATE OF DELAWARE
DEPARTMENT OF NATURAL RESOURCES
& ENVIRONMENTAL CONTROL
DIVISION OF FISH & WILDLIFE
89 Kings Highway
Dover, Delaware 19901

State of Delaware

Coastal Sharks Fisheries Annual Report

August 1, 2013

I. Introduction

Delaware did not collect biological samples on coastal sharks in 2012. There was no commercial harvest of sharks in Delaware, excluding smooth dogfish. Commercial smooth dogfish landings decreased by 97% in 2012 to 203 lbs. In 2012, there were 1,782 lbs. of non-smooth dogfish sharks harvested and a total of 6,936 lbs. of smooth dogfish harvested in the recreational fishery. Historically, the predominant species caught in the recreational fishery were sand tigers and sandbar sharks. There were no regulation changes in 2012.

II. Request for *de minimis*, where applicable

Not applicable.

III. Previous calendar year's fishery and management program

a. Activity and results of fishery dependent monitoring

Commercial fishery landings statistics are compiled from mandatory, fisherman-reported, monthly logbook submissions to the State of Delaware. Prior to 2001, sharks were aggregated into one category on fisherman logbooks. After 2001, smooth dogfish and spiny dogfish were given individual categories but all other sharks remained in an aggregate shark group until 2009 when logbooks were adjusted to denote species. Recreational fishery statistics are estimated from the Marine Recreational Information Program of the National Oceanic and Atmospheric Administration. No biological sampling was conducted.

b. Activity and results of fishery independent monitoring

Delaware conducts a 30' adult trawl survey and a 16' juvenile trawl survey in the Delaware Bay. In the adult trawl survey, the species most commonly caught were sand tigers, sandbar shark and smooth dogfish. Thresher, Atlantic angel, Atlantic sharpnose and dusky sharks have been caught in the past, but rarely. Sand tiger shark catch per

nautical mile in 2012 remains high for the time series (Figure 1; Table 1) and sandbar shark catch per nautical miles continues to increase (Figure 2; Table 1). Smooth dogfish catch per nautical mile continues to increase from a low in 2005 (Figure 4; Table 1). In the juvenile trawl, the species caught were sand tigers, sandbar sharks and smooth dogfish (Figures 5-7; Table 2).

Delaware also conducts a 16' juvenile trawl survey in the Inland bays. The only species caught in this survey was smooth dogfish (Figure 8; Table 3).

c. Copy of regulations

3541 Atlantic Sharks

(Penalty Section 7 **Del.C.** §936(b)(2))

1.0 Definitions:

"Fillet" shall mean to remove slices of fish flesh, of irregular size and shape, from the carcass by cuts made parallel to the backbone.

"Land or Landing" shall mean to put or cause to go on shore from a vessel.

"Management Unit" shall mean any of the non-sandbar large coastal species, small coastal species, pelagic species and prohibited species of sharks or parts thereof defined in this regulation. Smooth dogfish (*Mustelus canus*), although they are a species of shark, are not presently part of the management unit as defined above, and are not subject to minimum size or daily harvest restrictions. They are subject to the provisions of Regulation 3541, Sections 3.0 and 4.0.

"Non-Sandbar Large Coastal Species" shall mean any of the following species of sharks or parts thereof:

Great hammerhead, *Sphyrna mokarran*

Scalloped hammerhead, *Sphyrna lewini*

Smooth hammerhead, *Sphyrna zygaena*

Nurse shark, *Ginglymostoma cirratum*

Blacktip shark, *Carcharhinus limbatus*

Bull shark, *Carcharhinus leucas*

Lemon shark, *Neqapriion brevirostris*

Silky shark, *Carcharhinus falciformis*

Spinner shark, *Carcharhinus brevipinna*

Tiger shark, *Galeocerdo cuvieri*

"Pelagic Species" shall mean any of the following species of sharks or parts thereof:

Porbeagle shark, *Lamna nasus*

Shortfin mako, *Isurus oxyrinchus*

Blue shark, *Prionace glauca*

Oceanic whitetip shark, *Carcharhinus longimanus*

Thresher shark, *Alopias vulpinus*

"Prohibited Species" shall mean any of the following species of sharks or parts thereof:

Basking shark, *Cetorhinidae maximus*

White shark, *Carcharodon carcharias*

Bigeye sand tiger, *Odontaspis noronhai*

Sand tiger, *Odontaspis taurus*

Whale shark, *Rhincodon typus*

Bignose shark, *Carcharhinus altimus*

Caribbean reef shark, *Carcharhinus perezii*

Dusky shark, *Carcharhinus obscurus*
Galapagos shark, *Carcharhinus galapagensis*
Narrowtooth shark, *Carcharhinus brachyurus*
Night shark, *Carcharhinus signatus*
Atlantic angel shark, *Squatina dumerili*
Caribbean sharpnose shark, *Rhizoprionodon porosus*
Smalltail shark, *Carcharhinus porosus*
Bigeye sixgill shark, *Hexanchus vitulus*
Sevengill shark, *Heptranchias perlo*
Sixgill shark, *Hexanchus griseus*
Longfin mako, *Isurus paucus*
Bigeye thresher, *Alopias superciliosus*

"**Sandbar shark**" shall mean *Carcharhinus plumbeus*

"**Shore fishing**" shall mean any fishing that does not take place on board a vessel. The terms "shore fishing" and "shore angler" are synonymous.

"**Small Coastal Species**" shall mean any of the following species of sharks or parts thereof:

Bonnethead, *Sphyrna tiburo*
Atlantic sharpnose shark, *Rhizoprionodon terraenovae*
Blacknose shark, *Carcharhinus acronotus*
Finetooth shark, *Carcharhinus isodon*

2.0 It shall be unlawful for any person to land, purchase, trade, barter, or possess or attempt to land, purchase, trade, barter, or possess a prohibited species.

2.1 It shall be unlawful for any hook and line fisherman to remove from the water sandbar shark, or any other species of shark when prohibited from harvest under §3541.

3.0 It shall be unlawful for any person to possess the fins from any shark in the management unit prior to landing said shark unless said fins are naturally attached to the body of said shark.

4.0 It shall be unlawful for any person to fish for any shark while in state waters with any fishing equipment or by any method, except: (1) Hook and Line; (2) Gill Net.

5.0 It shall be unlawful for any person to fillet a shark in the management unit prior to landing said shark. A shark may be eviscerated prior to landing said shark, but the head, tail, and fins must remain naturally attached to the carcass, except that commercial fishermen may eviscerate and remove the head of any shark reduced to possession, but the tail and fins must remain attached to the carcass.

6.0 It shall be unlawful to release any shark in the management unit or any sandbar shark in a manner that will not ensure said sharks maximum probability of survival. All species of shark when prohibited from harvest under §3541 must be immediately released.

7.0 It shall be unlawful for the operator of any vessel without a commercial food fishing license to have on board said vessel more than one non-prohibited shark per trip from among those species in the management unit, regardless of the number of people on board the vessel. In addition each recreational angler fishing from a vessel may harvest and possess one bonnethead, and one Atlantic sharpnose shark per trip.

7.1 It shall be unlawful for any shark caught in state waters to be bought and sold without a federal Commercial Shark Dealer Permit.

8.0 It shall be unlawful for any person who has been issued a valid commercial food fishing license while on board any vessel to possess any non-prohibited shark from among those species in the management unit during the remainder of any period after the effective date a commercial quota for that group of sharks has been reached in said period or is projected

to be reached in said period by the National Marine Fisheries Service, National Oceanic and Atmospheric Administration and the U.S. Department of Commerce. Further, it shall be unlawful for any person who has been issued a valid commercial food fishing license while on board any vessel to possess any non-sandbar large coastal sharks, small coastal sharks, or pelagic sharks in excess of current federal daily harvest limits administered by the National Marine Fisheries Service.

9.0 It shall be unlawful for any person to engage in a directed commercial fishery for a prohibited species.

10.0 It shall be unlawful for the operator of any vessel without a commercial foodfishing license to have on board said vessel any non-prohibited shark from among those species in the management unit that measures less than 54 inches, fork length (tip of snout to indentation between dorsal and ventral tail lobes), with the exception of Atlantic sharpnose, blacknose, finetooth, bonnethead, and smooth dogfish sharks, for which no minimum size limit applies.

11.0 It shall be unlawful for any shore angler without a commercial foodfishing license to take and reduce to possession any non-prohibited shark from among those species in the management unit less than 54 inches, with the exception of Atlantic sharpnose, blacknose, finetooth, bonnethead, and smooth dogfish sharks, for which no size limit applies.

12.0 It shall be unlawful for any shore angler without a commercial foodfishing license to take and reduce to possession more than one non-prohibited shark from among those species in the management unit per day (a day being 24 hours). Recreational shore anglers may also harvest one additional bonnethead, and one additional Atlantic sharpnose shark per day.

13.0 It shall be unlawful for any recreational or commercial fisherman to possess silky, tiger, blacktip, spinner, bull, lemon, nurse, scalloped hammerhead, great hammerhead, and smooth hammerhead sharks from May 15 through July 15, regardless of where the shark was caught. Fishermen who catch any of these species in federal waters may not transport them through Delaware state waters during the aforementioned closed season.

14.0 It shall be unlawful for any recreational or commercial fisherman to land or possess any sandbar sharks, except for a commercial fisherman in possession of a valid sandbar shark research permit issued by the National Marine Fisheries Service. There must be a qualified observer aboard any vessel that lands and possesses sandbar sharks fishing under the auspices of a valid federal research permit.

15.0 It shall be unlawful for any Delaware recreational or commercial fisherman to land or possess any species of shark in state waters that is illegal to catch or land or possess in federal waters. Presently it is unlawful for recreational fishermen to take and possess silky sharks in federal waters at any time of the year.

16.0 The Department may grant anyone permission to take and possess sharks that would otherwise be illegal to take and possess when used for display and/or research purposes. Applicants will need a current State of Delaware scientific collecting permit. Applicants must annually report the number, weight, species, location caught, and gear used for each shark collected for research or display purposes, and the annual disposition of said sharks throughout the life of each shark so taken. The Division reserves the right to place limits on or deny any request to take prohibited species of sharks under the auspices of a scientific collecting permit.

d. Harvest broken down by commercial and recreational

1. Commercial - The only sharks harvested by Delaware commercial sector in 2012 were smooth dogfish. Sharks landings have decreased steadily over the last seven years with the last major harvest of sharks occurring in 2003. Smooth dogfish landings peaked in 2009, with the third largest harvest on record, but have steadily declined in recent years. Commercial smooth dogfish landings decreased by 97% between 2011 and 2012 to 203 lbs (Figures 13 and 14; Table 5). Gill net and hook and line are the only authorized gears in the State's shark fishery.
2. Recreational - In 2012, there were 1,782 lbs. of non-smooth dogfish sharks harvested and a total of 6,936 lbs. of smooth dogfish harvested in the recreational fishery. The predominant species caught (total catch) in the recreational fishery were sand tigers, shortfin makos and sand bar sharks (Figures 9 – 12; Table 4).

IV. Planned management programs for the current calendar year

a. Summarize regulations that will be in effect

Delaware's shark regulations will remain unchanged in 2013 as shown in section III c. It should be noted that new legislation regarding the trade in shark fins became law in 2012 and will be effective January 1, 2014. The addition to 7 **Del. Code** Chapter 9 is as follows:

§ 928A. Trade in shark fins; penalty [Effective Jan. 1, 2014]

(a) For the purpose of this section:

(1) "Shark" shall mean any species of the subclass Elasmobranchii, exclusive of the Spiny dogfish (*Squalus acanthias*) and Smooth dogfish (*Mustelus canis*); and

(2) "Shark fin" shall mean the raw, dried or otherwise processed detached fin, or the raw, dried or otherwise processed detached tail, of a shark.

(b) Except as otherwise provided in this section, no person shall possess, sell, offer for sale, trade or distribute a shark fin.

(c) Any person who holds a license and permit issued by the Department to take or land sharks for commercial purposes may possess or distribute, but not sell within Delaware, a shark fin taken or landed by that person pursuant to, and consistent with, the terms of that license or permit.

(d) Any person holding a license issued by the Department, or those persons exempt from licensing requirements concerning taking or landing sharks for recreational purposes, may possess a shark fin taken or landed by that person for personal use.

(e) The Department may issue scientific permits pursuant to § 911 of this title permitting possession of a shark fin for bona fide scientific research purposes.

(f) Any shark fin seized by the Department through the enforcement of this section shall upon forfeiture be destroyed by the Department, and not sold.

(g) Changes, deletions, or additions relative to new fisheries subject to this section may be devised and enacted by the General Assembly or by the Department regulatory process.

(h) Whoever violates this section shall be guilty of a class B environmental misdemeanor for each offense.

79 Del. Laws, c. 22, § 1.;

b. Summarize monitoring programs that will be performed

Monitoring of the commercial shark landings will continue in 2013. Recreational fishery statistics will be collected by NMFS through the MRIP with Delaware continuing to augment the sampling rate to decrease PSEs. Fisheries independent sampling will continue at the same level for 2013.

c. Highlight any changes from the previous year

There were no changes in 2012 from the previous year.

V. Plan specific requirements

Not applicable.

Table 1. Sand tiger, Atlantic sharpnose, sand bar and smooth dogfish relative abundance (mean number per nautical mile) from 30-foot trawl sampling in the Delaware Bay.

Year	Sand Tiger	Atlantic Sharpnose	Sand Bar	Smooth Dogfish
1966	0.00	0.00	0.27	10.48
1967	0.00	0.00	0.47	9.64
1968	0.00	0.00	0.00	11.99
1969	0.00	0.00	0.08	8.76
1970	0.00	0.00	0.10	13.81
1971	0.00	0.00	0.29	10.79
1979	0.00	0.00	0.09	2.65
1980	0.00	0.00	0.08	4.23
1981	0.00	0.00	0.07	6.41
1982	0.00	0.00	0.13	4.95
1983	0.10	0.00	0.21	4.24
1984	0.00	0.00	0.00	2.11
1990	0.00	0.00	0.00	15.27
1991	0.00	0.00	0.03	9.66
1992	0.01	0.00	0.01	7.14
1993	0.01	0.00	0.06	12.93
1994	0.00	0.00	0.01	11.69
1995	0.01	0.00	0.07	6.05
1996	0.01	0.00	0.08	12.72
1997	0.00	0.00	0.06	12.24
1998	0.00	0.00	0.04	13.12
1999	0.01	0.00	0.03	9.88
2000	0.02	0.00	0.02	26.97
2001	0.01	0.00	0.06	18.53
2002	0.01	0.00	0.03	12.04
2003	0.00	0.00	0.02	34.52
2004	0.00	0.00	0.14	4.73
2005	0.02	0.00	0.05	4.16
2006	0.00	0.00	0.02	27.40
2007	0.00	0.00	0.06	18.63
2008	0.02	0.00	0.04	8.41
2009	0.01	0.00	0.04	8.13
2010	0.01	0.01	0.07	9.48
2011	0.01	0.00	0.09	12.56
2012	0.03	0.01	0.13	12.68

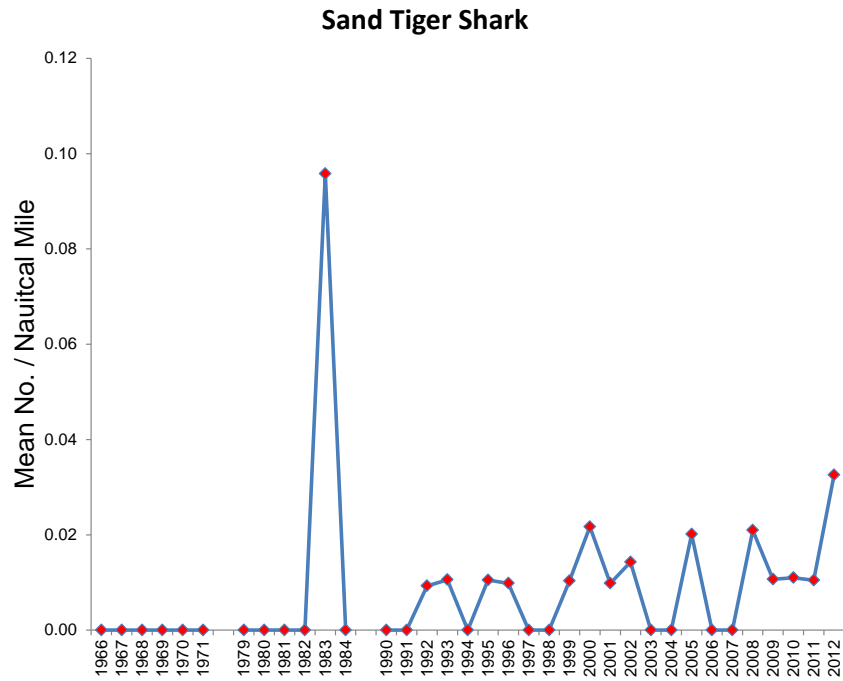


Figure 1. Sand tiger shark relative abundance (mean number per nautical mile) from 30-foot trawl sampling in the Delaware Bay.

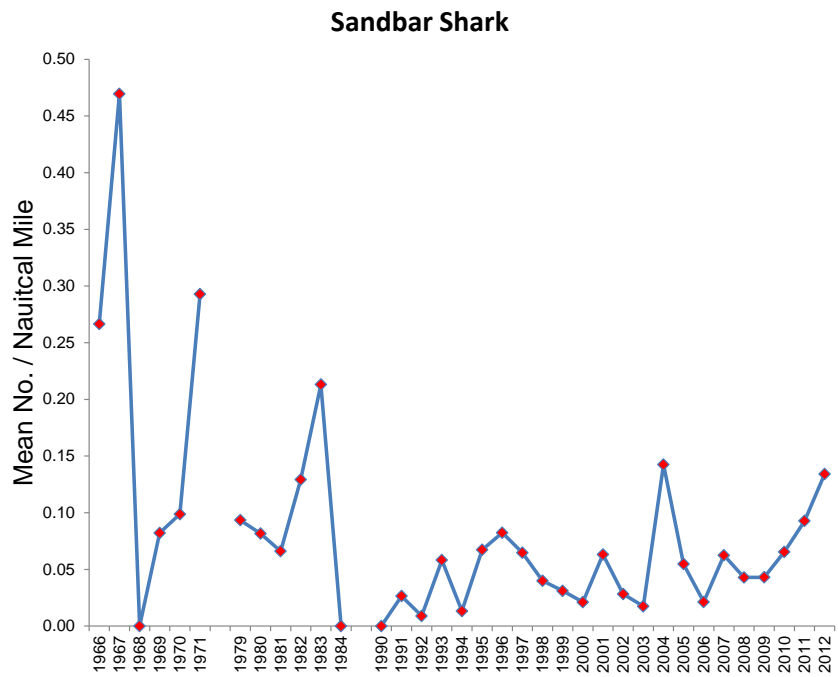


Figure 2. Sandbar shark relative abundance (mean number per nautical mile) from 30-foot trawl sampling in the Delaware Bay.

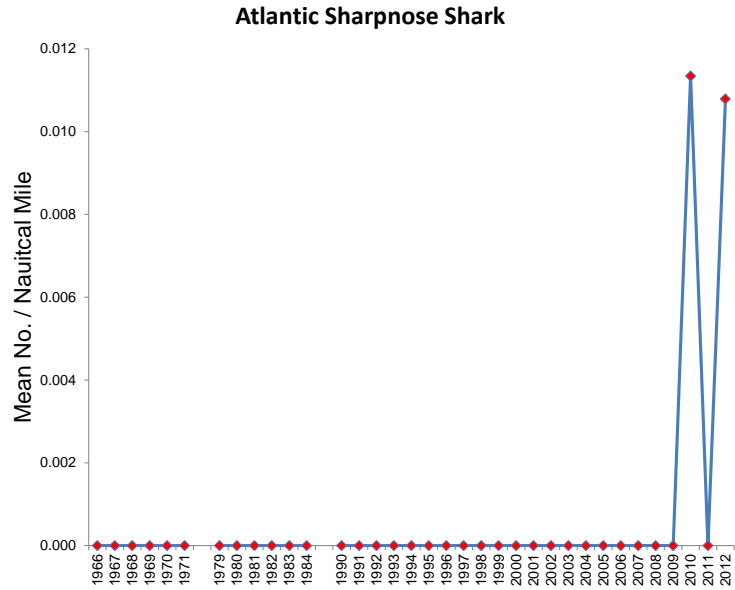


Figure 3. Atlantic sharpnose shark relative abundance (mean number per nautical mile) from 30-foot trawl sampling in the Delaware Bay.

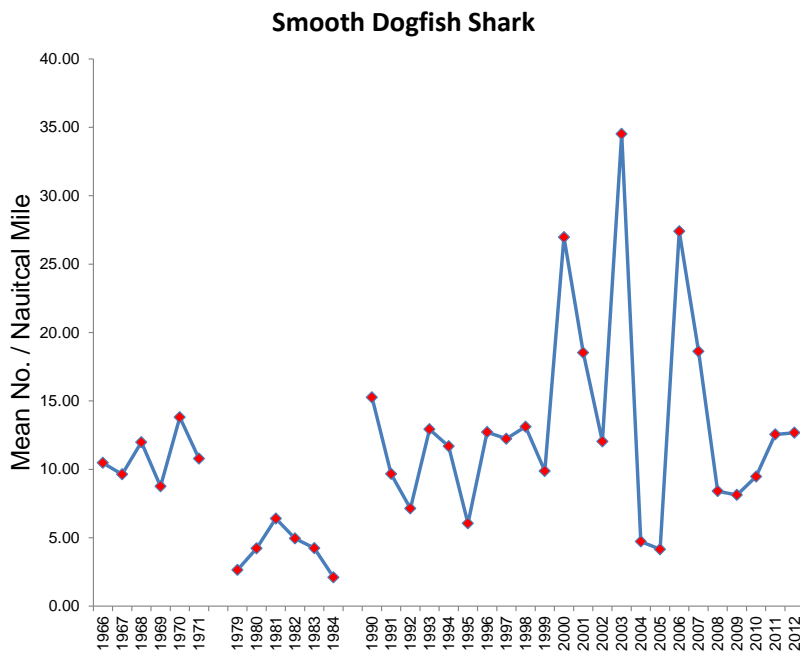


Figure 4. Smooth dogfish relative abundance (mean number per nautical mile) as measured in 30-foot trawl sampling in the Delaware Bay.

Table 2. Sand tiger, sand bar and smooth dogfish relative abundance (geometric mean catch per tow) from 16-foot trawl sampling in the Delaware Estuary.

Year	Sand Tiger	Sand Bar	Smooth Dogfish
1980	0.000	0.004	0.049
1981	0.000	0.017	0.031
1982	0.000	0.007	0.040
1983	0.000	0.003	0.021
1984	0.000	0.000	0.010
1985	0.000	0.000	0.000
1986	0.000	0.000	0.016
1987	0.000	0.000	0.086
1988	0.000	0.003	0.019
1989	0.000	0.000	0.050
1990	0.000	0.000	0.012
1991	0.000	0.003	0.025
1992	0.000	0.000	0.019
1993	0.000	0.006	0.024
1994	0.000	0.003	0.066
1995	0.000	0.006	0.044
1996	0.003	0.000	0.016
1997	0.000	0.000	0.059
1998	0.000	0.000	0.031
1999	0.000	0.012	0.077
2000	0.000	0.000	0.045
2001	0.000	0.000	0.120
2002	0.003	0.000	0.065
2003	0.000	0.003	0.109
2004	0.000	0.000	0.107
2005	0.000	0.000	0.092
2006	0.003	0.003	0.044
2007	0.000	0.000	0.067
2008	0.000	0.003	0.082
2009	0.000	0.000	0.104
2010	0.000	0.000	0.085
2011	0.000	0.000	0.013
2012	0.000	0.000	0.049

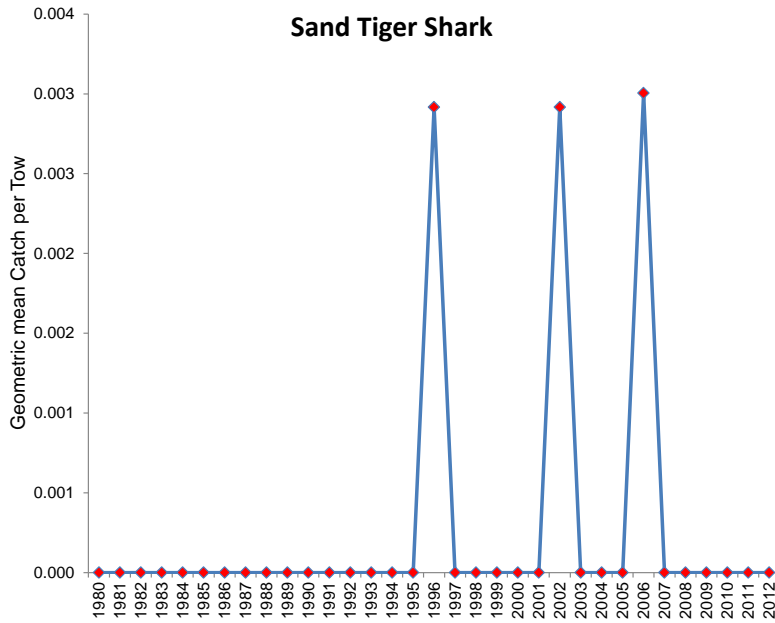


Figure 5. Relative abundance (geometric mean catch per tow) of sand tiger shark as measured by 16-foot trawl sampling in the Delaware estuary.

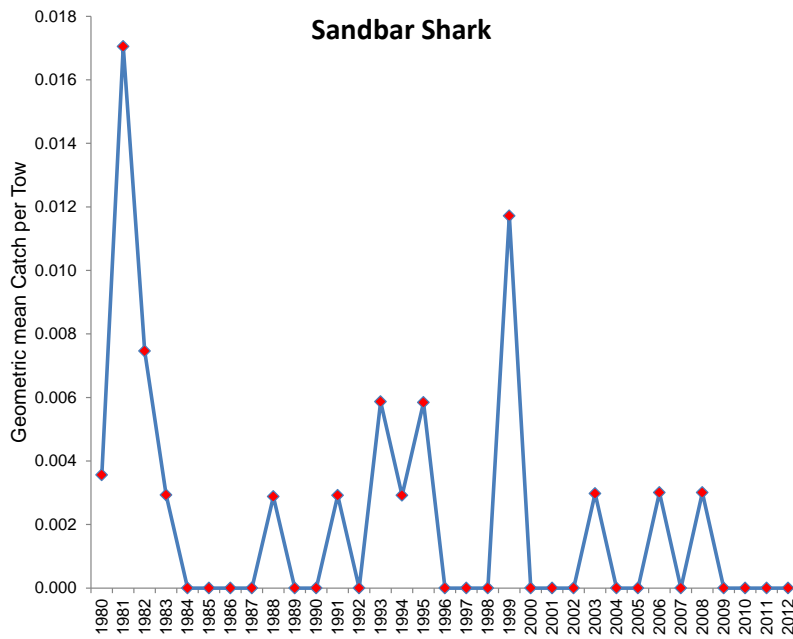


Figure 6. Relative abundance (geometric mean catch per tow) of sandbar shark as measured by 16-foot trawl sampling in the Delaware estuary.

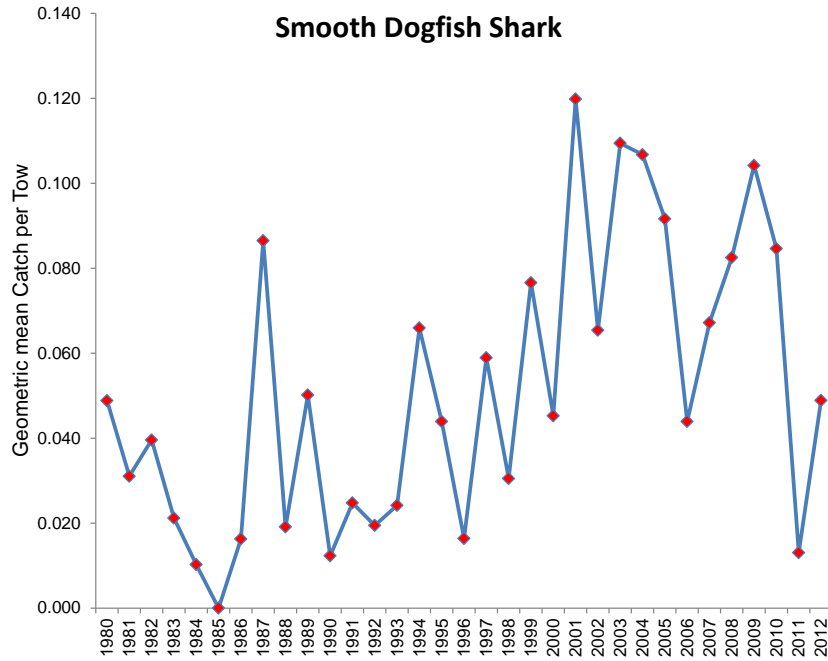


Figure 7. Index of young-of-the-year smooth dogfish relative abundance (geometric mean catch per tow) as measured by 16-foot trawl sampling in the Delaware estuary.

Table 3. Smooth dogfish relative abundance (geometric mean catch per tow) in 16-foot trawl sampling in Delaware's Inland Bays.

Year	Smooth Dogfish
1986	0.000
1987	0.000
1988	0.000
1989	0.000
1990	0.000
1991	0.000
1992	0.000
1993	0.000
1994	0.000
1995	0.000
1996	0.000
1997	0.000
1998	0.008
1999	0.008
2000	0.000
2001	0.018
2002	0.018
2003	0.045
2004	0.067
2005	0.000
2006	0.017
2007	0.000
2008	0.062
2009	0.029
2010	0.047
2011	0.034
2012	0.045

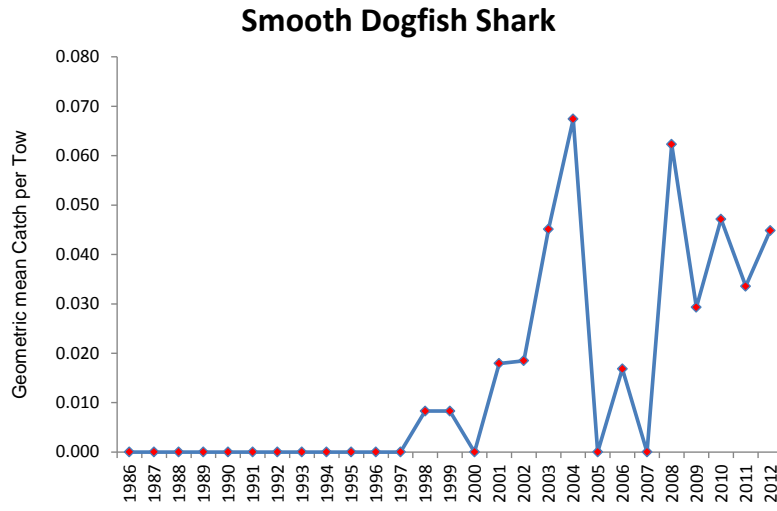


Figure 8. Index of young-of-the-year smooth dogfish relative abundance as measured by 16-foot trawl sampling in Delaware's Inland Bays.

Table 4. Recreational catch and harvest (numbers) of selected species in Delaware from 1981-2012.

Year	Sand Tiger		Sand Bar		Shortfin Mako		Smooth Dogfish	
	Catch	Harvest	Catch	Harvest	Catch	Harvest	Catch	Harvest
1981	0	0	7,266	670	0	0	0	0
1982	0	0	51,555	4,881	0	0	137,740	6,382
1983	5,598	0	171,070	47,099	0	0	30,218	13,975
1984	1,395	0	236,485	8,295	531	299	4,535	1,225
1985	0	0	175,352	22,077	0	0	588	0
1986	0	0	335,112	45,420	0	0	58,098	2,330
1987	8,614	5,016	28,076	1,898	58,013	0	106,571	17,393
1988	916	916	87,955	6,121	0	0	106,039	10,144
1989	1,516	1,516	13,656	3,107	137	137	458,881	42,920
1990	0	0	49,510	19,935	1,526	903	198,124	24,899
1991	0	0	16,917	8,837	568	262	167,992	24,418
1992	0	0	40,748	9,636	150	150	150,866	23,642
1993	381	381	67,477	15,889	588	588	178,172	22,872
1994	620	0	20,998	5,855	112	0	144,578	14,245
1995	270	270	47,314	14,029	1,147	574	111,507	9,760
1996	694	318	40,942	6,136	330	330	217,723	11,091
1997	0	0	101,163	27,952	336	239	385,384	11,677
1998	0	0	39,897	9,977	654	584	179,805	8,605
1999	0	0	28,304	2,432	0	0	157,351	2,847
2000	0	0	920	0	424	424	155,303	3,840
2001	0	0	13,163	1,937	596	257	392,197	9,031
2002	259	0	15,096	0	92	92	171,073	6,686
2003	2,741	0	5,457	0	26	26	179,773	4,120
2004	0	0	476	0	582	160	232,333	5,457
2005	4	0	311	0	11	0	412,678	5,518
2006	0	0	4,305	10	345	36	404,438	5,939
2007	0	0	18,423	0	164	164	230,412	8,082
2008	0	0	2,446	506	369	369	286,550	15,411
2009	0	0	52,350	0	0	0	189,554	6,895
2010	3,925	0	3,377	0	16	0	168,494	2,730
2011	335	0	13,866	0	0	0	73,448	2,707
2012	550	0	9,076	0	17	17	91,623	3,096

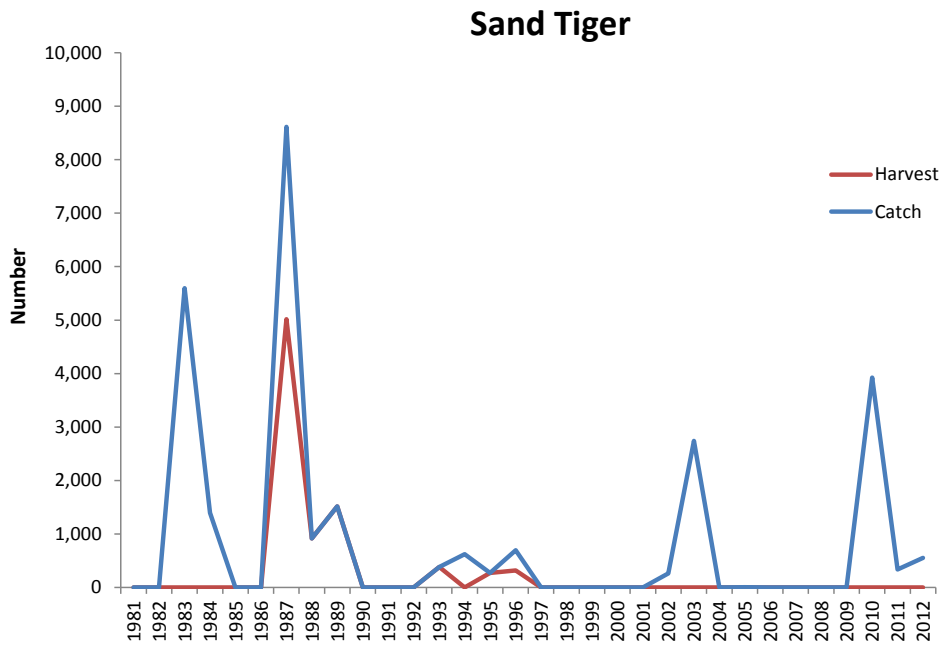


Figure 9. Recreational harvest and catch of sand tiger sharks in Delaware from 1981 to 2012.

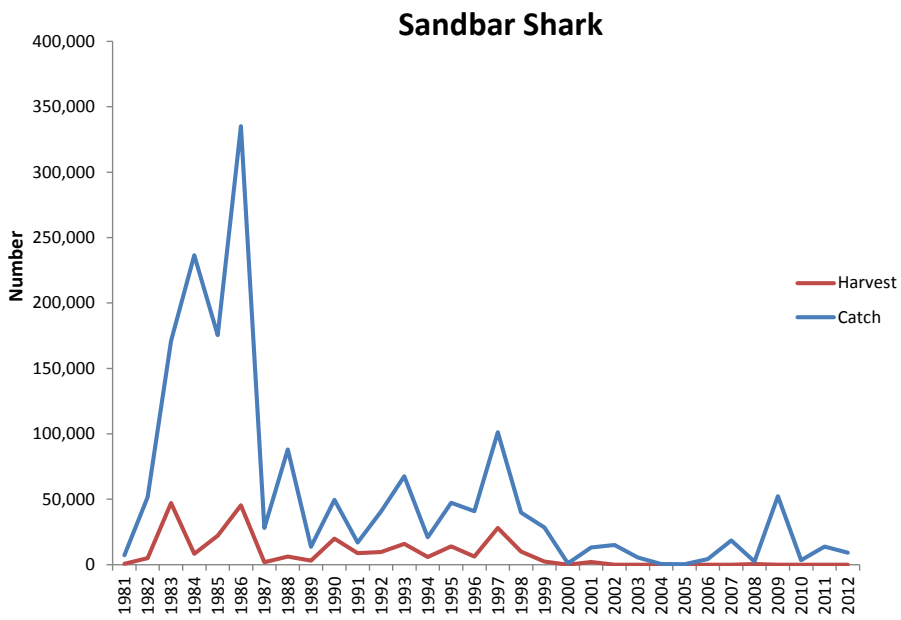


Figure 10. Recreational harvest and catch of sandbar sharks in Delaware from 1981 to 2012.

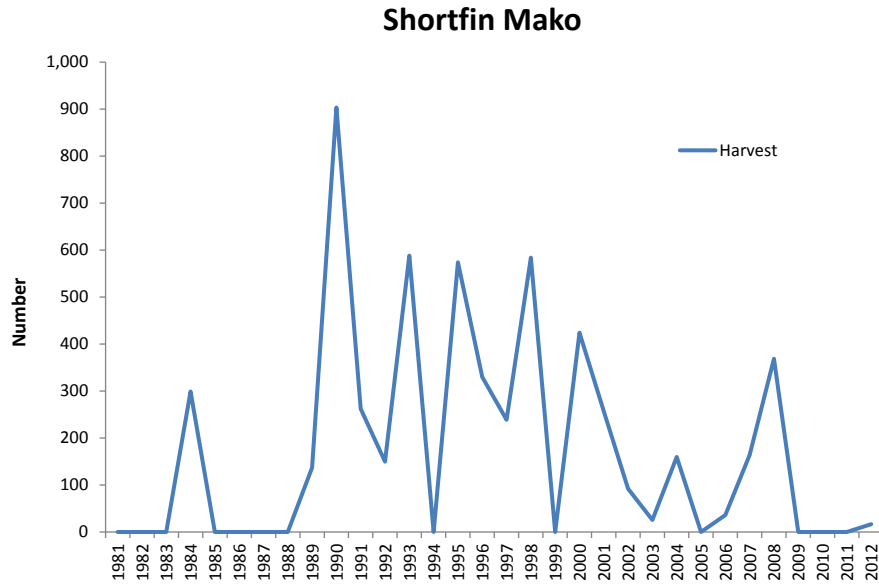


Figure 11. Recreational harvest of shortfin mako in Delaware from 1981 to 2012.

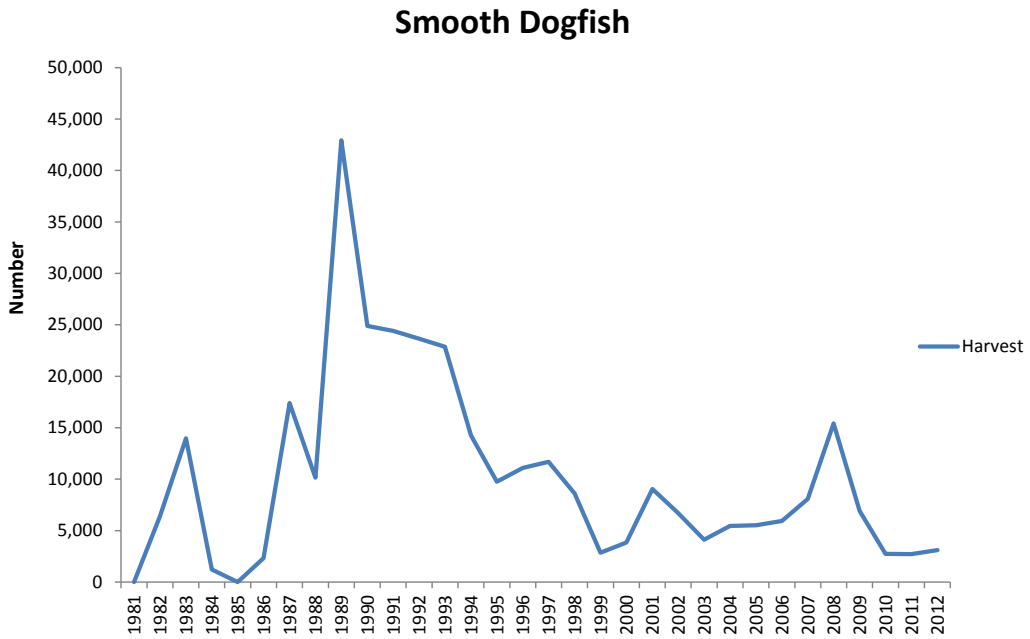


Figure 12. Recreational harvest of smooth dogfish in Delaware from 1981 to 2012.

Table 5. Commercial harvest (pounds) of non-smooth dogfish sharks and smooth dogfish sharks in Delaware from 1985-2012.

Year	Non-Smooth Dogfish Pounds	Smooth Dogfish Pounds
1985	8,674	0
1986	3,732	0
1987	11,220	0
1988	6,917	0
1989	6,243	0
1990	11,917	0
1991	17,391	0
1992	7,610	0
1993	4,922	0
1994	9,254	0
1995	78,618	0
1996	51,054	0
1997	12,902	0
1998	2,055	0
1999	459	0
2000	282	0
2001	480	792
2002	*	*
2003	10,327	271
2004	5,692	475
2005	133	538
2006	1,086	*
2007	122	148
2008	0	314
2009	*	*
2010	*	17,352
2011	0	6,311
2012	0	*

*-confidential data

Non-Smooth Dogfish Sharks

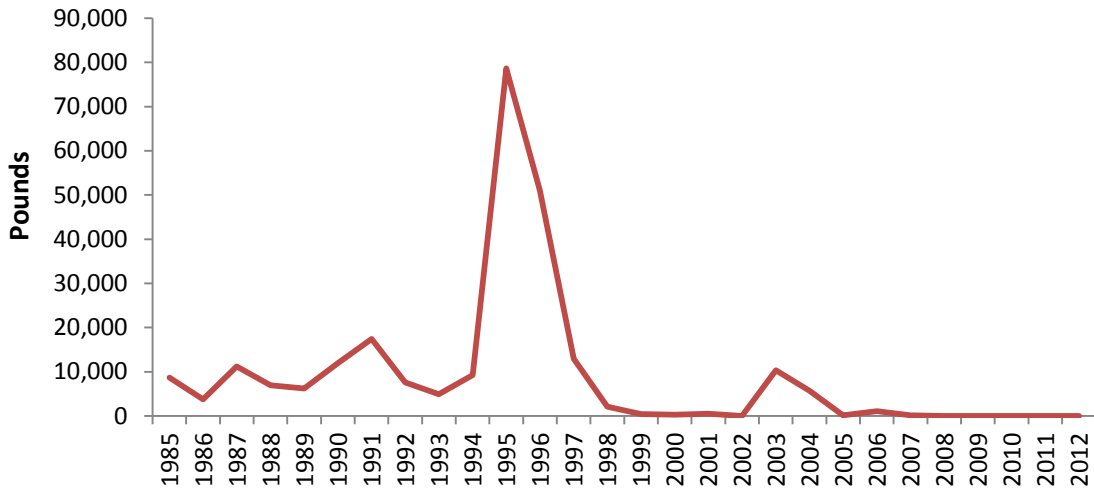


Figure 13. Commercial harvest of all sharks excluding smooth dogfish in Delaware from 1985 to 2012. Years 2002, 2009, and 2010 landings are confidential.

Smooth Dogfish

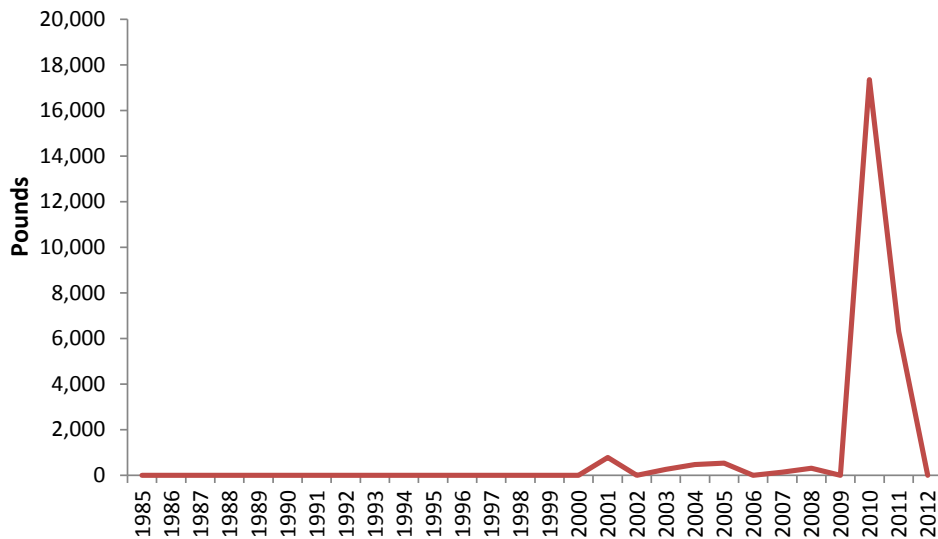


Figure 14. Commercial harvest of smooth dogfish in Delaware from 1985 to 2012. Years 2002, 2006, 2009, and 2012 landings are confidential.

Maryland's 2012 Atlantic Coastal Sharks Compliance Report to the Atlantic States Marine Fisheries Commission

I. Introduction

The Atlantic States Marine Fisheries Commission Interstate Fishery Management Plan (FMP) for Atlantic Coastal Sharks was implemented in August 2008. The five objectives of that FMP include:

- reduce fishing mortality to rebuild stock biomass, prevent stock collapse, and support a sustainable fishery;
- protect essential habitat areas such as nurseries and pupping grounds to protect sharks during particularly vulnerable stages in their life cycle;
- coordinate management activities between state and federal waters to promote complementary regulations throughout the species range;
- obtain biological and improved fishery related data to increase understanding of state water shark fisheries; and
- minimize endangered species bycatch in shark fisheries.

Maryland implemented the management measures outlined in the ASMFC FMP in January 2009.

Addendum I (September 2009) has two commercial and one recreational provision. Commercial changes included limited processing of smooth dogfish at sea and removing the two hour net check requirement associated with large mesh gillnets. Possession limits for smooth dogfish were eliminated for recreational anglers.

II. Request for *De Minimis*

No *de minimis* status requested.

III. Previous Year's Fishery and Management Program

A. Fishery Dependent Monitoring

There was no specific at sea sampling program for Atlantic coastal sharks in Maryland. Limited biological sampling of commercial catch onboard commercial offshore trawlers does occur but zero sharks were encountered.

B. Fishery Independent Monitoring

No fishery independent monitoring for Atlantic coastal sharks was conducted in Maryland state waters.

C. Previous Year's Fishery and Management Program

Code of Maryland Regulations (COMAR) pertaining to sharks are within Chapter 08.02.22.00 in sections 08.02.22.01, 08.02.22.02, 08.02.22.03, and 08.02.22.04.

08.02.22.01 <http://www.dsd.state.md.us/comar/comarhtml/08/08.02.22.01.htm>
.01 Definitions.

A. In this chapter, the following terms have the meanings indicated.

B. Terms Defined.

(1) "Circle hook" means a nonoffset hook with the point turned perpendicularly back to the shank.

- (2) "Eviscerate" means to remove the digestive organs of a shark, excluding the head.
- (3) "Finning" means removing only the fins of a shark.
- (4) "Fork length" means that length measured in a straight line from the tip of the nose of the shark to the center of the fork of the tail of the shark.
- (5) "Handline" means a mainline to which not more than two gangions or hooks are attached.
- (6) "Landing" means:
 - (a) The unloading of any fish at a dock or shore by a commercial fisherman; or
 - (b) The bringing of any fish to a dock, pier, or shore by a recreational fisherman for personal use.
- (7) "Large mesh gillnet" means a gillnet having a stretch mesh size equal to or greater than 5 inches.
- (8) "Recreational angler" means any fisherman who catches sharks for personal use.
- (9) "Shore-angler" means any person engaged in any type of fishing that does not take place on board a vessel.
- (10) "Shortline" means a fishing line containing 50 or fewer hooks and measuring less than 500 yards in length.
- (11) "Small mesh gillnet" mean a gillnet having a stretch mesh size smaller than 5 inches.
- (12) "Vessel" means every type of watercraft used or capable of being used as a means of transportation on water except for nondisplacement craft and seaplanes.
- (13) "Vessel-fishing" means any fishing conducted from a vessel.

08.02.22.02 <http://www.dsd.state.md.us/comar/comarhtml/08/08.02.22.02.htm>

.02 Recreational Shark Fishery.

A. Authorized Shark Species. A recreational angler may harvest only the following species:

- (1) Smooth Dogfish (*Mustelus canis*);
- (2) Atlantic sharpnose (*Rhizoprionodon terraenovae*);
- (3) Finetooth (*Carcharhinus isodon*);
- (4) Blacknose (*Carcharhinus acronotus*);
- (5) Bonnethead (*Sphyrna tiburo*);
- (6) Tiger (*Galeocerdo cuvier*);
- (7) Blacktip (*Carcharhinus limbatus*);
- (8) Spinner (*Carcharhinus brevipinna*);
- (9) Bull (*Carcharhinus leucas*);
- (10) Lemon (*Negaprion brevirostris*);
- (11) Nurse (*Ginglymostoma cirratum*);
- (12) Scalloped hammerhead (*Sphyrna lewini*);
- (13) Great hammerhead (*Sphyrna mokarran*);
- (14) Smooth hammerhead (*Sphyrna zygaena*);
- (15) Shortfin mako (*Isurus oxyrinchus*);
- (16) Porbeagle (*Lamna nasus*);
- (17) Common thresher (*Alopias vulpinus*);
- (18) Oceanic whitetip (*Carcharhinus longimanus*); and
- (19) Blue (*Prionace glauca*).

B. Season Closure. A recreational angler may not harvest, possess, or transport the species listed in §A(6)—(14) of this regulation from May 15 through July 15, inclusive, regardless of where the shark was caught.

C. Size Limits.

(1) There is no minimum fork length for the species listed in §A(1)—(5) of this regulation.

(2) The minimum fork length is 4.5 feet (54 inches) for the species listed in §A(6)—(19) of this regulation.

D. Catch Limits.

(1) Shore-Angler Catch Limits. Each calendar day, a recreational shore-angler may harvest:

(a) Only one shark, regardless of the species, from the list in §A of this regulation;

(b) One additional Smooth Dogfish (*Mustelus canis*);

(c) One additional Atlantic sharpnose (*Rhizoprionodon terraenovae*); and

(d) One additional Bonnethead (*Sphyrna tiburo*).

(2) Vessel-Fishing Catch Limits.

(a) A recreational fishing vessel may not harvest more than one shark, per trip, from the list in §A of this regulation, regardless of the:

(i) Species of shark; and

(ii) Number of people on board the vessel.

(b) In addition to the vessel limit described in §D(2)(a) of this regulation, each recreational angler fishing from a vessel may harvest, per trip:

(i) One Smooth Dogfish (*Mustelus canis*);

(ii) One Atlantic sharpnose (*Rhizoprionodon terraenovae*); and

(iii) One Bonnethead (*Sphyrna tiburo*).

E. Gear. A recreational angler may catch sharks using only:

(1) Handlines retrieved by hand, not by mechanical means; or

(2) Rod and reel.

F. General.

(1) A recreational angler may not sell, barter, or trade sharks or shark pieces.

(2) When aboard a vessel, a recreational angler is bound by the more restrictive vessel-fishing possession limits described in §D(2) of this regulation, regardless of the location where the shark was caught.

(3) A shark that is transported by a vessel is considered "boat assisted" and is regulated under the more restrictive vessel-fishing possession limits described in §D(2) of this regulation, regardless of where it was caught.

(4) All sharks harvested by a recreational angler shall have heads, tails, and fins attached naturally to the carcass through landing.

08.02.22.03 <http://www.dsd.state.md.us/comar/comarhtml/08/08.02.22.03.htm>

.03 Commercial Fishery.

A. Shark Groups.

(1) Prohibited Species. The species of shark in the prohibited group are:

(a) Sand tiger (*Carcharias taurus*);

(b) Bigeye sand tiger (*Odontaspis noronhai*);

(c) Whale (*Rhincodon typus*);

- (d) Basking (*Cetorhinus maximus*);
 - (e) White (*Carcharodon carcharias*);
 - (f) Dusky (*Carcharhinus obscurus*);
 - (g) Bignose (*Carcharhinus altimus*);
 - (h) Galapagos (*Carcharhinus galapagensis*);
 - (i) Night (*Carcharhinus signatus*);
 - (j) Reef (*Carcharhinus perezii*);
 - (k) Narrowtooth (*Carcharhinus brachyurus*);
 - (l) Caribbean sharpnose (*Rhizoprionodon porosus*);
 - (m) Smalltail (*Carcharhinus porosus*);
 - (n) Atlantic angel (*Squatina dumeril*);
 - (o) Longfin mako (*Isurus paucus*);
 - (p) Bigeye thresher (*Alopias superciliosus*);
 - (q) Sharpnose sevengill (*Heptranchias perlo*);
 - (r) Bluntnose sixgill (*Hexanchus griseus*); and
 - (s) Bigeye sixgill (*Hexanchus nakamurai*).
- (2) Research. The species of shark in the research group is Sandbar (*Carcharhinus plumbeus*).
- (3) Smooth Dogfish. The species of shark in the smooth dogfish group is Smooth Dogfish (*Mustelus canis*).
- (4) Small Coastal. The species of shark in the small coastal group are:
- (a) Atlantic sharpnose (*Rhizoprionodon terraenovae*);
 - (b) Finetooth (*Carcharhinus isodon*);
 - (c) Blacknose (*Carcharhinus acronotus*); and
 - (d) Bonnethead (*Sphyrna tiburo*).
- (5) Nonsandbar Large Coastal. The species of shark in the nonsandbar large coastal group are:
- (a) Silky (*Carcharhinus falciformis*);
 - (b) Tiger (*Galeocerdo cuvier*);
 - (c) Blacktip (*Carcharhinus limbatus*);
 - (d) Spinner (*Carcharhinus brevipinna*);
 - (e) Bull (*Carcharhinus leucas*);
 - (f) Lemon (*Negaprion brevirostris*);
 - (g) Nurse (*Ginglymostoma cirratum*);
 - (h) Scalloped hammerhead (*Sphyrna lewini*);
 - (i) Great hammerhead (*Sphyrna mokarran*); and
 - (j) Smooth hammerhead (*Sphyrna zygaena*).
- (6) Pelagic. The species of shark in the pelagic group are:
- (a) Shortfin mako (*Isurus oxyrinchus*);
 - (b) Porbeagle (*Lamna nasus*);
 - (c) Common thresher (*Alopias vulpinus*);
 - (d) Oceanic whitetip (*Carcharhinus longimanus*); and
 - (e) Blue (*Prionace glauca*).

B. Season.

- (1) Closure. During the period of May 15—July 15, inclusive, an individual may not:
- (a) Harvest the species listed in §A(5) of this regulation from State waters; or

(b) Transport the species listed in §A(5) of this regulation in State waters, unless the shark was harvested from federal waters provided:

(i) The vessel does not engage in fishing within the closed area while possessing the species listed in §A(5) of this regulation;

(ii) The sharks possessed were not caught in the closed area; and

(iii) All fishing gear is stowed as described in §D(4) of this regulation and not available for immediate use.

(2) A person may not harvest, possess, or land sharks for commercial purposes in State waters when the National Oceanic and Atmospheric Administration closes the fishery in federal waters for any species listed in §A of this regulation.

C. Catch Limits.

(1) Prohibited and Research Shark Groups. A commercial tidal fish licensee may not harvest, possess, or land any species listed in §A(1) and (2) of this regulation without a scientific collection permit issued in accordance with Natural Resources Article, §4-212, Annotated Code of Maryland.

(2) Smooth Dogfish, Small Coastal, and Pelagic Shark Groups. There is no creel or possession limit for the species listed in §A(3), (4), and (6) of this regulation.

(3) Nonsandbar Large Coastal Shark Group. A commercial tidal fish licensee may not harvest, possess, or land more than 33 sharks, regardless of the species, from the list in §A(5) of this regulation.

(4) Vessels are prohibited from landing more than the specified number in one 24-hour period.

D. Gear.

(1) The following gear types are the only gear authorized for use by a commercial tidal fish licensee to catch sharks in State waters:

(a) Rod and reel;

(b) Handline, which shall be:

(i) Retrieved by hand, not by mechanical means; and

(ii) Attached to, or in contact with, a vessel;

(c) Small mesh gillnet;

(d) Large mesh gillnet, which shall be:

(i) Shorter than 2.5 kilometers; and

(ii) Checked once every 2 hours;

(e) Trawl net;

(f) Shortline;

(g) Pound net; and

(h) Weir.

(2) A maximum of two shortlines are allowed per vessel.

(3) Any vessel using a shortline shall:

(a) Use corrodible circle hooks;

(b) Practice the protocols and possess the federally required release equipment for pelagic and bottom longlines for the safe handling, release, and disentanglement of sea turtles and other nontarget species; and

(c) Have all captains and vessel owners federally certified in using handling and release equipment.

(4) Methods of Stowing Gear.

(a) On Reel.

- (i) The net shall be on a reel, its entire surface covered with canvas or other similar opaque material, and the canvas or other material securely bound.
- (ii) The towing wires shall be detached from the doors.
- (iii) A containment rope, codend tripping device, or other mechanism to close off the codend may not be attached to the codend.

(b) Hook Gear.

- (i) All anchors and buoys shall be secured.
- (ii) All hook gear, including jigging machines, shall be covered.

(c) Sink Gillnet Gear.

- (i) All nets shall be covered with canvas or other similar material and lashed or otherwise securely fastened to the deck or rail.
- (ii) All buoys larger than 6 inches (15.24 centimeters) in diameter, high flyers, and anchors shall be disconnected.

E. General.

- (1) A person shall be authorized in accordance with Natural Resources Article, §4-701, Annotated Code of Maryland, in order to harvest sharks for commercial purposes.
- (2) A federal commercial shark dealer permit is required to buy and sell any shark harvested from State waters.
- (3) All sharks harvested in accordance with this chapter shall have the tails and fins attached naturally to the carcass through landing.
- (4) Sharks harvested in accordance with this chapter may have the heads removed.

08.02.22.04 <http://www.dsd.state.md.us/comar/comarhtml/08/08.02.22.04.htm>

.04 General.

A. Filleting and Finning.

- (1) Sharks harvested in accordance with this chapter may be eviscerated as long as the tail is not removed.
- (2) Sharks may not be filleted or cut into pieces at sea.
- (3) Finning is prohibited.

B. Public Notice.

- (1) The Secretary may modify size limits, catch limits, gear provisions, and shark species lists, or open, close, or modify a season, by publishing notice in a daily newspaper of general circulation at least 48 hours in advance, stating the effective hour and date.
- (2) The Secretary shall make a reasonable effort to disseminate public notice through various other media so that an affected person has reasonable opportunity to be informed.

C. Spiny Dogfish. The provisions of this chapter do not apply to spiny dogfish (*Squalus acanthias*). Spiny dogfish (*Squalus acanthias*) may be harvested in accordance with COMAR 08.02.05.24.

Additionally, Natural Resource Article, §4–206, Annotated Code of Maryland provides MDNR the authority to require weekly dealer reports.

- A. The Department shall audit the books of any person who packs or deals in fish resources within the jurisdiction of the Department including anyone who catches and ships directly to market. The Department audit shall be conducted to determine the

quantity of resources caught and any other data needed for reporting and accounting to State officials.

- B. Every person engaged in the business of packing or dealing in any fish resource within the Department's jurisdiction shall keep accurate books, statements, and accounts showing every detail of the business. Every book, statement, and account shall be open for the Department to inspect at reasonable hours. Every person engaged in the business of packing or dealing in any fish resource within the Department's jurisdiction shall make any report the Department requires on forms the Department prescribes.
- C. Every person the Department licenses to catch the fish resource shall make any report the Department requires on forms the Department provides.
- D. An officer or employee of any department or unit of the Executive Branch of State government may not divulge or use in any manner information contained in any report submitted pursuant to the provisions of this section that would reveal the income of any person submitting the report. This section does not prohibit the publication of statistics classified to prevent the identification of particular reports and items of them or prohibit inspection of reports and records by any official or employee of the Executive Branch having a proper interest in them.

D. Harvest by Gear Type

1. Commercial Landings

There were five federally permitted commercial dealers that reported landings from Ocean City, MD: Agger Fish Corp., Kashiko Exports, Seaborn, Martins, and Southern Connection Ocean City (SCOC). One dealer was listed as Unknown-MD. They electronically reported vessel landings using Standard Atlantic Fisheries Information System (SAFIS) which is operated by the Atlantic Coastal Cooperative Statistics Program (ACCSP) or other federally approved methods. NOAA began requiring federal dealers to report using online tools in 2004. Some MD fishermen and dealers started voluntarily using SAFIS at the same time in 2004.

Preliminary total Maryland commercial harvest from January through December 2012 was 162,731.60 lbs (Table 1). No discard estimates are available for sharks. Highest landings occurred in October which accounts for 48% of the annual 2012 landings. Ninety nine percent of the October landings were Smooth Dogfish. Gill net and an unknown gear (not coded listed for gear in ACCSP landings) were the dominant gears reported with October landings, 89% and 11%, respectively.

Smooth dogfish accounted for 86% of the overall 2012 landings. Gear, gill net, was reported for 75% of the overall landings followed by not coded (14%). Most sharks, 100%, were reported caught an unknown distance from shore.

One prohibited species appears in the 2012 landings for combined total landings of 299 pounds. Preliminary review of those landing reports indicated that they are most likely Smooth Dogfish which were miscoded because of common name confusion.

Table 1. Omitted due to confidentiality rules.			
Common Name	Scientific Name	Gear	Pounds
Atlantic Sharpnose			
Blacktip	<i>Carcharhinus limbatus</i>		
Blacktip	<i>Carcharhinus limbatus</i>		
Blacktip	<i>Carcharhinus limbatus</i>		
Blue Shark	<i>Prionace glauca</i>		
Dogfish, Smooth	<i>Mustelus canis</i>		
Dogfish, Smooth	<i>Mustelus canis</i>		
Dogfish, Smooth	<i>Mustelus canis</i>		
Hammerhead, Great	<i>Sphyrna mokarran</i>		
Sandbar*	<i>Carcharhinus plumbeus</i>		
Shortfin Mako	<i>Isurus oxyrinchus</i>		
Shortfin Mako	<i>Isurus oxyrinchus</i>		
Spinner	<i>Carcharhinus brevipinna</i>		
Spinner	<i>Carcharhinus brevipinna</i>		
Thresher	<i>Alopias vulpinus</i>		
Thresher	<i>Alopias vulpinus</i>		
Thresher	<i>Alopias vulpinus</i>		
Thresher	<i>Alopias vulpinus</i>		
Thresher	<i>Alopias vulpinus</i>		
*			

2. Recreational Landings

Maryland recreational landings from the National Marine Fisheries Service (NMFS) Marine Recreational Fisheries Statistics Survey website (www.st.nmfs.noaa.gov/st1/recreational/queries/index.html) reported a final total catch estimate of 322 (PSE \pm 79.5) fish of Atlantic Sharpnose (*R. terraenovae*) sharks from January 2011 through December 2011 for Maryland. All of those sharks were released alive in Federal waters by private or rental boats. Weights were not available. Data were not available for other sharks applicable to this plan from that website.

There are two known tournaments that target sharks (Mako Mania and the Ocean City Shark Tournament) and two more with shark categories (Ocean City Marlin Club's 34th Annual Small Boat Tournament and the White Marlin Open).

E. Progress in Implementing Habitat Recommendations

Not applicable.

IV. Planned Management Programs for the Current Year (2013)

Summary of Regulations that will be in Effect

The same regulations listed in section, Previous Year's Fishery and Management Program, will be in effect for 2013. Additionally, a Public Notice was issued on July 26, 2013 that increased the minimum size limit for hammerheads, Finetooth, and Blacknose sharks.

The Secretary of Maryland Department of Natural Resources (DNR), pursuant to COMAR 08.02.22.04B and in conjunction with the National Marine Fisheries Service, announces new size limits for certain sharks. Effective at 12:01 am August 1, 2013, the minimum fork length for finetooth and blacknose sharks is 54 inches and the minimum fork length for scalloped hammerhead, great hammerhead, and smooth hammerhead sharks is 78 inches.

A. Summary of Monitoring Programs that will be in Effect

Sharks will be counted and measured for total length when present in the catch during limited biological sampling at sea.

B. Highlights of Changes from the Previous Year

There were no changes from the previous year.

V. Plan Specific Requirements

a. The Number of Sharks Taken for Display and Research (*Section 4.3.8.2*) in the Previous Fishing Year

The State of Maryland issued two Scientific Collection Permits (SCP) in 2012. Sixteen sharks were collected under one permit and zero were collected under the second (Table 2).

i. The Weight, Species, Location Caught, and the Gear Type Used for Each Shark Collected for Research and Display Purposes

Sixteen sand tiger sharks were captured in July and August 2012 and distributed to six aquariums in five countries (Table 2). One shark was released and one died during transport.

Table 2. Omitted due to confidentiality rules.

Species	Weight (lbs)	Gear	Latitude	Longitude	Fate	2012 Status
Sand Tiger		Longline 100 hooks				
Sand Tiger		Longline 100 hooks				
Sand Tiger		Longline 100 hooks				
Sand Tiger		Longline 100 hooks				
Sand Tiger		Longline 100 hooks				
Sand Tiger		Longline 100 hooks				
Sand Tiger		Longline 100 hooks				
Sand Tiger		Longline 100 hooks				
Sand Tiger		Longline 100 hooks				
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Sand Tiger		Longline 100 hooks				
Sand Tiger		Longline 100 hooks				
Sand Tiger		Longline 100 hooks				
Sand Tiger		Longline 100 hooks				
Sand Tiger		Longline 100 hooks				
Sand Tiger		Longline 100 hooks				
Sand Tiger		Longline 100 hooks				
Sand Tiger		Longline 100 hooks				
Sand Tiger		Longline 100 hooks				
Sand Tiger		Longline 100 hooks				

b. The Number of EFP Issued for the Previous Fishing Year

National Marine Fisheries Service issued one EFP that was used in conjunction with a MD SCP in 2011.

c. The Status of any Shark Taken for Display Purposes Each Year Through the Life of the Shark

Section 4.3.8.2 became effective in January 2010. There were no sharks to report for 2010. All sharks captured in 2011 were reported to be alive in 2012 (Table 3).

Table 3. Omitted due to confidentiality rules.

DNR Shark ID	Capture Date	Species	2012 Status
SCP201188_001	8/9/2011	Sandbar	
SCP201188_002	8/9/2011	Sandbar	
SCP201188_003	8/10/2011	Sandbar	
SCP201188_004	8/10/2011	Sandbar	
SCP201188_006	8/8/2011	Sand Tiger	
SCP201188_007	8/19/2011	Sand Tiger	
SCP201188_008	8/14/2011	Sand Tiger	
SCP201188_009	8/14/2011	Sand Tiger	
SCP201188_010	8/15/2011	Sand Tiger	
SCP201188_011	8/16/2011	Sand Tiger	
SCP201188_012	8/16/2011	Sand Tiger	
SCP201188_013	8/16/2011	Sand Tiger	
SCP201188_014	8/16/2011	Sand Tiger	
SCP201188_015	8/16/2011	Sand Tiger	
SCP201188_016	8/17/2011	Sand Tiger	

VI. Law Enforcement Requirements

None



COMMONWEALTH of VIRGINIA

Marine Resources Commission
2600 Washington Avenue
Third Floor
Newport News, Virginia 23607

Douglas W. Domenech
Secretary of Natural Resources

Jack G. Travelstead
Commissioner

July 30, 2013

MEMORANDUM

TO: Marin Hawk, Spiny Dogfish and Coastal Shark Fishery Management Plan
Coordinator *Atlantic States Marine Fisheries Commission*

FROM: Lewis S. Gillingham, Director Virginia Saltwater Fishing Tournament, Fisheries
Management Division *Virginia Marine Resources Commission*

SUBJECT: Virginia's 2012 Compliance Report for Coastal Sharks

The attached document describes Virginia's Coastal Shark landings and management program for the 2012 fishing year and planned management program for 2013.

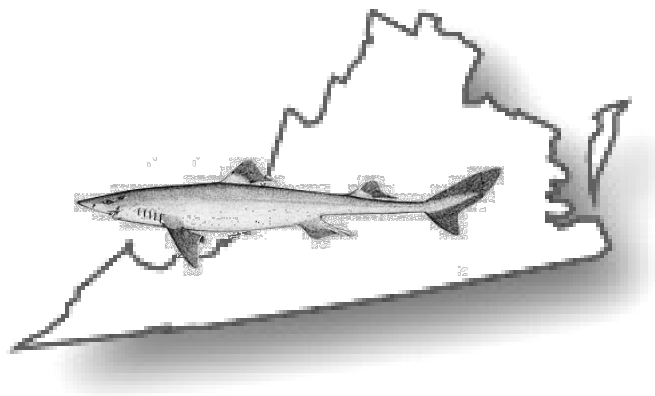
Please contact me at 1-757-247-8013 if you need additional information regarding this report.

LSG

attachment

Annual Compliance Report
to the
Atlantic States Marine Fisheries Commission

**Coastal Shark Fisheries and Management
in
Virginia
Review of 2012 Fishing Season and Planned
Management Program for 2013**



Prepared by:
Lewis S. Gillingham
Virginia Marine Resources Commission

AUGUST 2013

COASTAL SHARKS COMPLIANCE REPORT

I. Introduction

Commercial fishermen landed 247,792 pounds of sharks in Virginia worth \$197,631 in dockside value from the Coastal Shark Management group in 2012. Smooth dogfish (55.6% of the total pounds and 54.3% of the value), blacktip shark (32.2% of the pounds and 35.0% of the value), thresher shark (3.6% of the pounds and 2.1% of the value) Atlantic sharpnose shark (2.6% of the pounds and 2.3% of the value) and shortfin mako shark (1.6% of the pounds and 3.1% of the value) comprised over 95% of pounds and value.

Virginia's recreational harvest (Type A+B1) of sharks was limited to two species (sandbar shark and smooth dogfish) in the Coastal Shark Management group in 2012. Note that the Marine Recreational Information Program (MRIP) estimates for Virginia's recreational shark fishery have been associated with very high levels of proportional standard error (PSE). This is attributed to the limited numbers of shark available for sampling from anglers. Additionally misidentification remains a significant source of error and one that is not reflected by elevated PSE's.

II. Request for *de minimis*, where applicable

The Commonwealth of Virginia is not requesting *de minimis* status.

III. Previous calendar year's fishery and management program

A. Activity and results of fishery-dependent monitoring (provide general results and references to technical documentation).

1. Commercial

There are currently no fishery-dependent sampling programs in Virginia that target coastal sharks for collection from the commercial fishery.

2. Recreational

The intercept component of the MRIP program interviews anglers to collect demographic information and individual catch data. The raw intercept files demonstrate few shark species from the Coastal Management group are encountered during surveys of anglers intercepted in Virginia.

B. Activity and results of fishery-independent monitoring (provide general results and references to technical documentation).

The Virginia Institute of Marine Science Shark Research Program began in 1973 and is one of the longest running longline surveys in the world. The program has provided data on habitat utilization, age, growth, reproduction, trophic interactions, basic demographics, and relative abundance for dominant shark species. Cruise times have been variable over the years, but generally sampling has occurred monthly from May through October. The survey utilizes a fixed station design with nine core

sampling locations, although additional auxiliary locations have been sampled frequently over the years.

Beginning in 2012 a separate longline survey designed specifically to target YOY sandbar sharks in the lower Chesapeake Bay and Eastern Shore was initiated. The new survey follows a stratified random sampling design, rather than fixed sites as in the original survey, and falls under the broader COASTSPAN umbrella (<http://na.nefc.noaa.gov/sharks/coastspan.html>).

The NMFS is the current funding source for these longline surveys. Reports are submitted semiannually on June 30 and December 31, as specified by NMFS. For more information contact: Robert J. Latour, Professor of Marine Science, Virginia Institute of Marine Science, College of William & Mary, P.O. Box 1346, Gloucester Point, VA 23062.

- C. Copy of regulations that were in effect, including a reference to the specific compliance criteria as mandated in the FMP.

Copies of Chapter 4 VAC 20-490-10 et seq., “Pertaining to Sharks”, and Chapter 4 VAC 20-610-10 et seq., “Pertaining to Commercial Fishing and Mandatory Harvest Reporting” that were in effect for the 2012 fishing year are provided in Appendix A and B.

- 1. Commercial

All vessels landing seafood in Virginia for commercial purposes must possess a Seafood Landing License, unless the vessel owner possesses a current Virginia Commercial Fisherman Registration License. All registered commercial fishermen and holders of seafood landing licenses are required to report daily harvest from Virginia tidal waters and landings to Virginia from federal waters to the VMRC on a monthly basis, with reports due on the fifth day of the following month. All licensed seafood buyers are required to use a certified scale for determining the weight of fish, shellfish, or marine organisms that are regulated by a harvest weight limit or quota, possession weight limit, or landing weight limit. Location and reference to specific compliance criteria contained in 4 VAC 20-490-10 et seq., “Pertaining to Sharks” and 4 VAC 20-610-10 et seq., “Pertaining to Commercial Fishing and Mandatory Harvest Reporting” can be found in Table I.

- 2. Recreational

The Commonwealth of Virginia requires all individuals 16 years or older to possess a saltwater fishing license to take or catch marine species for recreational purposes in tidal waters. Anglers 16 years or older that are legally exempt from possessing a saltwater fishing license are required to register with the Virginia Fishermen Identification Program. Location and reference to specific compliance criteria contained in Chapter 4 VAC 20-490-10 et seq., “Pertaining to Sharks” can be found in Table I.

D. Harvest broken down by commercial (by gear type where applicable) and recreational, and non-harvest losses (when available).

1. Commercial

Commercial landings data characterizing harvest from state waters were obtained through the VMRC mandatory reporting database and information on landings from federal waters is provided by the NMFS. Virginia's commercial landings and value of Atlantic Coastal Sharks for 2012 is located in Table II.

2. Recreational

In 2012, the MRIP estimated that 6,929 pounds of smooth dogfish and 993 pounds of sandbar sharks were landed (Type A+B1) in Virginia by recreational anglers (Table III). PSE's for both estimates exceeded 100.

IV. Planned management programs for the current calendar year

A. Summarize regulations that will be in effect (copy of current regulations if different from III c).

1. Commercial

Regulations governing license and reporting requirements for the landing of seafood in Virginia, by commercial vessels, will continue to be in effect in 2012.

2. Recreational

Virginia anglers will continue to be required to possess a license to take or catch finfish for recreational purposes in 2013. Virginia anglers that are exempt from possessing a license and are 16 years of age or older are required to register with the Virginia Fisherman Identification Program.

B. Summarize monitoring programs that will be performed.

Commercial harvest and landings of Atlantic coastal sharks in Virginia will continue to be monitored through the VMRC mandatory reporting system. The MRIP program will continue to serve as the primary source of recreational fisheries statistics for Virginia. The MRIP intercept interview and headboat survey records will be processed to summarize any shark catch and harvest from the Coastal Shark Management group observed and sampled from Virginia's marine recreational fisheries in 2013.

C. Highlight any changes from the previous year.

No changes regulatory changes have occurred since July 2011 that involve the Coastal Shark Management group.

V. Plan Specific Requirements

A. Indicate the number of Research or Display fishing permits issued in the previous fishing year, the actual amount (in numbers of fish and pounds) collected under each exempted fishing permit, as well as any other pertinent information (i.e., species, sex,

when and how the Atlantic Coastal Shark were collected). The report should also indicate the number of exempted fishing permits issued for the current fishing year.

One Research or Display exempted fishing permit was issued to the Virginia Living Museum, located in Newport News, Virginia to allow the take one of sandbar or one Atlantic sharpnose or one bonnethead for display. Their report indicated no shark species were kept or killed in 2012.

VI. References

- ASMFC (Atlantic States Marine Fisheries Commission). 2008. Interstate Fishery Management Plan for Atlantic Coastal Sharks. ASMFC, Fishery Management Report No. 40, Washington, D.C. 128 pp.
- _____. 2009. Addendum I to the Interstate Fishery Management Plan for Atlantic Coastal Sharks. ASMFC, Washington, D.C. 13 pp.

Table I. Location and reference to specific compliance criteria contained in Chapter 4 VAC 20-490-10 et seq., “Pertaining to Sharks” and Chapter 4 VAC 20-610-10 et seq., “Pertaining to Commercial Fishing and Mandatory Harvest Reporting”.

ASMFC ACS Plan	VMRC Chapter 4 VAC 20-490-10 et seq.	Explanation *
Recreational	Applicable sections of regulation	
<i>4.2.1 Recreational Seasonal Closure</i>	20-490-40E	Establishes a May 15 through July 15 seasonal closure for 9 species
<i>4.2.2 Recreationally Permitted Species</i>	20-490-20;20-490-40-A,B,C and D	Defines Recreationally Permitted Species and exempts certain species from the size limit
<i>4.2.3 Landings Requirements</i>	20-490-40F	Requires all sharks landed must have head and fins attached
<i>4.2.4 Recreational Minimum Size Limits</i>	20-490-40D	Establishes 54-inch minimum size
<i>4.2.5 Authorized Recreational Gear</i>	20-490-30D	Defines permitted gear as handline or rod and reel only
<i>4.2.7.1 Recreational Shore-Angler Possession limit</i>	20-490-40B	Establishes a shore angler possession limit
<i>4.2.7.2 Recreational Vessel-Fishing Possession Limit</i>	20-490-40A	Establishes a vessel possession Limit
Commercial	Applicable sections of regulation	
<i>4.3.1 Commercial Fishing Year</i>	20-490-41D	State waters close once NOAA closes federal waters
<i>4.3.2 Commercial Seasonal Closure</i>	20-490-41F	Establishes May 15 through July 15 seasonal closure for 10 species
<i>4.3.3.1 Prohibited and Research Species Groups</i>	20-490-20; 20-490-41G and I	Defines Prohibited and Research species groups
<i>4.3.3.2 Commercial Species Groupings</i>	20-490-20	Defines Commercially Permitted Non-Sandbar, Pelagic and Small Coastal shark groups
<i>4.3.4 Quota Specification</i>	20-490-41D	State waters close once NOAA closes federal waters

4.3.5 Seasons	N/A	Should the ASMFC split the annual quota for any species group the VMRC has the regulatory ability to adapt within 60 days
ASMFC ACS Plan	VMRC Chapter 4 VAC 20-490-10 et seq.	Explanation *
4.3.6 Possession Limits	20-490-41A and D	Establishes a 33 non-sandbar LCS possession limit; State waters close when federal waters close
4.3.8.1 Commercial Permit	4VAC 20-610-10 et eq; 20-490-20; 20-490-30E	Harvester registration and gear license required; defines commercial shark fishermen; only shark caught by permitted commercial gear
4.3.8.2 Display and Research Permit	20-490-41I	Establishes research and display permits; describes special reporting requirements
4.3.8.3 Dealer Permit	20-490-41H	All shark must be sold to a federally permitted dealer
4.3.9 Authorized Commercial Gear	20-490-20; 20-490-30A, B and C	Defines permitted gear and shark shortline; Establishes amount of authorized gear
4.3.10 Bycatch Reduction Measures	20-490-20; 20-490-30B; Code of Virginia	Defines large and small mesh gill nets; establishes by-catch reduction measures for sea turtles; maximum length of any gear 1200 feet
4.3.11 Finning and Identification	20-490-41C and H, 20-490-50, 20-610-60E	Allows processing at-sea of smooth dogfish except dorsal fin shall remain attached through landing during the period of July 1 to the end of February; Must sell to a federal dealer; finning illegal; Harvester required to report by species
4.4.3 De Minimis	N/A	

* Specific regulatory language can be found in attached Chapters 4VAC 20-490-ET SEQ. "Pertaining to Sharks," and 4VAC 20-610-10 ET SEQ. "Pertaining to Commercial Fishing and Mandatory Harvest Reporting"

Table II. Virginia 2012 commercial harvest of shark by species in pounds and value of shark.

Common Name	Pounds	Value*
Smooth Dogfish	137,740	\$107,340
Thresher Bigeye	73	\$29
Thresher	8,919	\$4,105
Shortfin Mako	3,995	\$6,046
Black Tip	79,691	\$69,176
Blue	76	\$33
Spinner	937	\$270
Bull	564	\$174
Atlantic Sharpnose	6,531	\$4,577
Hammerhead	177	\$53
Smooth Hammerhead	5,523	\$2,267
**Shark Combined	3,566	\$3,561
TOTAL	247,792	\$197,631

*not actual price received by harvester per pound, but value is calculated using a dockside survey sent to dealers in Virginia, and therefore the listed value is an average of the prices received from that survey.

**Shark Combined category includes Unclassified shark, and Finetooth shark landings. These landings were combined due to confidentiality requirements.

TABLE III. Estimated 2012 total recreational harvest for Virginia in numbers (Type A + B1) of shark from the Coastal Shark Management group.

Common Name*	Pounds of Shark	Proportional Standard Error (PSE)
Smooth Dogfish	6,929	100.5
Sandbar	993	101.3

*misidentification remains a significant source of error and one that is not reflected by elevated PSE's.

APPENDIX A. Copy of the Virginia Marine Resources Commission’s regulation for the fishing of sharks (including spiny dogfish) that was in effect for the 2012 fishing year.

**VIRGINIA MARINE RESOURCES COMMISSION
"PERTAINING TO SHARKS"
CHAPTER 4 VAC 20-490-10 ET SEQ.
PREAMBLE**

This chapter establishes gear restrictions, a possession limit, and limitations on the taking and landing of sharks, and prohibits the transfer of any spiny dogfish limited entry permit. This chapter is promulgated pursuant to the authority contained in § 28.2-201 of the Code of Virginia.

This chapter amends and re-adopts, as amended, previous chapter 4VAC20-490-10 et seq. which was promulgated April 27, 2010 and made effective on May 1, 2010. The effective date of this chapter, as amended, is July 1, 2011.

4VAC20-490-10. PURPOSE.

The purpose of this chapter is to ensure the conservation of shark resources by preventing overfishing by commercial and recreational fisheries and to control the practice of finning.

4VAC20-490-20. DEFINITIONS.

The following words and terms when used in this chapter shall have the following meanings unless the context clearly indicates otherwise.

“Agent” means any person who possesses the Commercial Fisherman Registration License, fishing gear license, or fishing permit of a registered commercial fisherman in order to fish that commercial fisherman’s gear or sell that commercial fisherman’s harvest.

"*Carcass length*" means that length measured in a straight line from the anterior edge of the first dorsal fin to the posterior end of the shark carcass.

“*COLREGS line*” means the COLREGS Demarcation lines, as specified in Coastal Pilot, 35th and 36th editions by Lighthouse Press.

“*Commercial shark fisherman*” means any commercial fisherman permitted to land or possess sharks (excluding spiny dogfish) that has landed and sold one pound of shark or more (excludes spiny dogfish) in that calendar year (January 1 through December 31).

“Commercially permitted nonsandbar large coastal shark” means any of the following species:

Blacktip, *Carcharhinus limbatus*
Bull, *Carcharhinus leucas*
Great hammerhead, *Sphyrna mokarran*
Lemon, *Negaprion brevirostris*
Nurse, *Ginglymostoma cirratum*
Scalloped hammerhead, *Sphyrna lewini*
Silky, *Carcharhinus falciformis*
Smooth hammerhead, *Sphyrna zygaena*
Spinner, *Carcharhinus brevipinna*
Tiger, *Galeocerdo cuvier*

“Commercially permitted pelagic shark” means any of the following species:

Blue, *Prionace glauca*
Oceanic whitetip, *Carcharhinus longimanus*
Porbeagle, *Lamna nasus*
Shortfin mako, *Isurus oxyrinchus*
Thresher, *Alopias vulpinus*

“Commercially permitted small coastal shark” means any of the following species:

Atlantic sharpnose, *Rhizoprionodon terraenovae*
Blacknose, *Carcharhinus acronotus*
Bonnethead, *Sphyrna tiburo*
Finetooth, *Carcharhinus isodon*

“Commercially prohibited shark” means any of the following species:

Atlantic angel, *Squatina dumeril*
Basking, *Cetorhinus maximus*
Bigeye sand tiger, *Odontaspis noronhai*
Bigeye sixgill, *Hexanchus nakamurai*
Bigeye thresher, *Alopias superciliosus*
Bignose, *Carcharhinus altimus*
Caribbean reef, *Carcharhinus perezii*
Caribbean sharpnose, *Rhizoprionodon porosus*
Dusky, *Carcharhinus obscurus*
Galapagos, *Carcharhinus galapagensis*
Longfin mako, *Isurus paucus*
Narrowtooth, *Carcharhinus brachyurus*
Night, *Carcharhinus signatus*
Sand tiger, *Carcharias taurus*
Sevengill, *Heptranchias perlo*

Sixgill, *Hexanchus griseus*
Smalltail, *Carcharhinus porosus*
Whale, *Rhincodon typus*
White, *Carcharodon carcharias*

“*Control rule*” means a time-certain date, past, present or future, used to establish participation in a limited entry fishery and may or may not include specific past harvest amounts.

“*Dressed weight*” means the result from processing a fish by removal of head, viscera, and fins, but does not include removal of the backbone, halving, quartering, or otherwise further reducing the carcass.

“*Finning*” means removing the fins and returning the remainder of the shark to the sea.

“*Fork length*” means the straight-line measurement of a fish from the tip of the snout to the fork of the tail. The measurement is not made along the curve of the body.

“*Movable gill net*” means any gill net other than a staked gill net.

“*Large mesh gill net*” means any gill net having a stretched mesh equal to or greater than 5 inches.

“*Longline*” means any fishing gear that is set horizontally, either anchored, floating or attached to a vessel, and that consists of a mainline or groundline, greater than 1,000 feet in length, with multiple leaders (gangions) and hooks, whether retrieved by hand or mechanical means.

“*Permitted commercial gear*” means rod and reel, handlines, shark shortlines, small mesh gill nets, large mesh gill nets, pound nets, and weirs.

“*Recreational shore angler*” means a person not fishing from a vessel nor transported to or from a fishing location by a vessel.

“*Recreational vessel angler*” means a person fishing from a vessel or transported to or from a fishing location by a vessel.

“*Recreationally permitted shark*” means any of the following species:

Atlantic sharpnose, *Rhizoprionodon terraenovae*
Blacknose, *Carcharhinus acronotus*
Blacktip, *Carcharhinus limbatus*
Blue, *Prionace glauca*
Bonnethead, *Sphyrna tiburo*

Bull, *Carcharhinus leucas*
Finetooth, *Carcharhinus isodon*
Great hammerhead, *Sphyrna mokarran*
Lemon, *Negaprion brevirostris*
Nurse, *Ginglymostoma cirratum*
Oceanic whitetip, *Carcharhinus longimanus*
Porbeagle, *Lamna nasus*
Scalloped hammerhead, *Sphyrna lewini*
Shortfin mako, *Isurus oxyrinchus*
Smooth Dogfish, *Mustelus canis*
Smooth hammerhead, *Sphyrna zygaena*
Spinner, *Carcharhinus brevipinna*
Thresher, *Alopias vulpinus*
Tiger, *Galeocerdo cuvier*

“Recreationally prohibited shark” means any of the following species:

Atlantic angel, *Squatina dumeril*
Basking, *Cetorhinus maximus*
Bigeye sand tiger, *Odontaspis noronhai*
Bigeye sixgill, *Hexanchus nakamurai*
Bigeye thresher, *Alopias superciliosus*
Bignose, *Carcharhinus altimus*
Caribbean reef, *Carcharhinus perezii*
Caribbean sharpnose, *Rhizoprionodon porosus*
Dusky, *Carcharhinus obscurus*
Galapagos, *Carcharhinus galapagensis*
Longfin mako, *Isurus paucus*
Narrowtooth, *Carcharhinus brachyurus*
Night, *Carcharhinus signatus*
Sand tiger, *Carcharias taurus*
Sandbar, *Carcharhinus plumbeus*
Sevengill, *Heptranchias perlo*
Silky, *Carcharhinus falciformis*
Sixgill, *Hexanchus griseus*
Smalltail, *Carcharhinus porosus*
Whale, *Rhincodon typus*
White, *Carcharodon carcharias*

“Research only shark” means any of the following species:

Sandbar, *Carcharhinus plumbeus*

“Shark shortline” means a fish trotline that is set horizontally, either anchored, floating or attached to a vessel, and that consists of a mainline or groundline, 1,000 feet in length or less, with multiple leaders (gangions) and no more than 50 corrodible circle hooks, whether retrieved by hand or mechanical means.

“*Small mesh gill net*” means any gill net having a stretched mesh less than 5 inches.

“*Smooth Dogfish*” means any shark of the species *Mustelus canis*.

"*Spiny dogfish*" means any shark of the species *Squalus acanthias*.

4VAC20-490-30. GEAR RESTRICTIONS.

- A. It shall be unlawful for any person to place, set, or fish any longline in Virginia's tidal waters.
- B. It shall be unlawful for any person to place, set, or fish any shark shortline in Virginia's tidal waters with more than 50 hooks. All hooks must be corrodible circle hooks. In addition, any person aboard a vessel fishing shortlines must practice the protocols and possess the federally required release equipment, for pelagic and bottom longlines, for the safe handling, release and disentanglement of sea turtles and other non-target species; all captain and vessel owners must be certified in using handling and release equipment.
- C. It shall be unlawful for a person to possess more than two shark shortlines on board a vessel.
- D. It shall be unlawful for any person fishing recreationally to take any shark using any gear other than handline or rod and reel.
- E. It shall be unlawful for any person fishing for commercial purposes to possess any shark caught by means other than permitted commercial gear.
- F. Any commercial shark fisherman fishing for sharks shall check all of his large mesh gill nets at least once every two hours.

4VAC20-490-35. [Repealed]

4VAC20-490-40. RECREATIONAL CATCH LIMITATIONS.

- A. Recreational fishing vessels are allowed a maximum possession limit of one recreationally permitted shark, excluding smooth dogfish, per trip, regardless of the number of people on board the vessel. In addition, each recreational vessel angler may possess one bonnethead and one Atlantic sharpnose per trip. The possession aboard a vessel of more than one recreationally permitted shark, excluding smooth dogfish, or the possession of more than one Atlantic sharpnose shark or one bonnethead shark, per person, shall constitute a violation of this regulation. When fishing from any boat or vessel where the entire catch is held in a common hold or

container, the possession limits for Atlantic sharpnose shark or bonnethead shark shall be for the boat or vessel and shall be equal to the number of persons on board legally eligible to fish, plus one additional recreationally permitted shark. The captain or operator of the boat or vessel shall be responsible for any boat or vessel possession limits.

- B. A recreational shore angler is allowed a maximum possession limit of one recreationally permitted shark, excluding smooth dogfish, per calendar day. In addition a recreational shore angler may harvest one additional bonnethead and one additional Atlantic sharpnose per calendar day. The possession of more than one recreationally permitted shark, excluding smooth dogfish, or the possession of more than one bonnethead and one Atlantic sharpnose, by any person, shall constitute a violation of this regulation.
- C. It shall be unlawful for any person to possess any recreationally prohibited shark.
- D. It shall be unlawful for any person to possess any recreationally permitted shark landed under the recreational catch limitations described in this section that is less than 54 inches fork length except Atlantic sharpnose, bonnethead, finetooth, blacknose, and smooth dogfish.
- E. It shall be unlawful for any person to take, harvest, land, or possess any blacktip, bull, great hammerhead, lemon, nurse, scalloped hammerhead, smooth hammerhead, spinner or tiger shark from May 15 through July 15 of any calendar year.
- F. All sharks must have heads, tails and fins attached naturally to the carcass. Anglers may gut and bleed the carcass as long as the head and tail are not removed. Filleting any shark is prohibited, until that shark is offloaded at the dock or on shore.

4VAC20-490-41. COMMERCIAL CATCH LIMITATIONS.

- A. It shall be unlawful for any person to possess on board a vessel or to land in Virginia more than 33 commercially permitted nonsandbar large coastal sharks in one twenty-four hour period. The person who owns or operates the vessel is responsible for compliance with the provisions of this subsection.
- B. It shall be unlawful for any person to fillet a shark, until that shark is offloaded at the dock or on shore, except smooth dogfish as provided in subsection C of this section. A licensed commercial fisherman may eviscerate and remove the head of any shark, but the tail and all fins of any shark, except smooth dogfish as provided in subsection C of this section, shall remain naturally attached to the carcass through landing. The fins of any shark, except smooth dogfish, may be partially cut but some portion of the fin shall remain attached, until the shark is landed.

- C. From July 1 through the end of February, commercial fishermen may process smooth dogfish at sea, except the first dorsal fin shall remain attached naturally to the carcass until landed. From March 1 through June 30, commercial fishermen may completely process smooth dogfish at sea prior to landing.
- D. It shall be unlawful to possess, on board a vessel, or to land in Virginia any species of shark, after NOAA Fisheries has closed the fishery for that species in Federal waters.
- E. There are no commercial trip limits or possession limits for smooth dogfish or sharks on the lists of commercially permitted pelagic species or commercially permitted small coastal species.
- F. Except as described in this section, it shall be unlawful for any person to take, harvest, land, or possess in Virginia any blacktip, bull, great hammerhead, lemon, nurse, scalloped hammerhead, silky, smooth hammerhead, spinner or tiger shark from May 15 through July 15. These sharks may be transported by vessel, in Virginia waters, during the closed season provided the sharks were caught in a legal manner consistent with federal regulations outside Virginia waters and:
- 1) The vessel does not engage in fishing, in Virginia waters, while possessing the above species; and
 - 2) All fishing gear aboard the vessel is stowed and not available for immediate use.
- G. It shall be unlawful for any person to retain, possess or purchase any commercially prohibited shark or any research only shark, except as provided in subsection I of this section.
- H. All sharks harvested from state waters or federal waters, for commercial purposes, shall only be sold to a federally permitted shark dealer.
- I. The Commissioner may grant exemptions from the seasonal closure, quota, possession limit, size limit, gear restrictions and prohibited species restrictions. Exemptions shall be granted only for display or research purposes. Any person granted an exemption for the harvest of any shark for research or display shall report the species, weight, location caught and gear used for each shark collected within 30 days. Any person granted a permit to possess any shark for research or display shall provide the Commissioner, on an annual basis, information on the location and status of the shark throughout the life of the shark.

4VAC20-490-42. SPINY DOGFISH COMMERCIAL QUOTA AND CATCH LIMITATIONS.

- A. For the 12-month period of May 1, 2011, through April 30, 2012, the spiny dogfish commercial landings quota shall be limited to 2,148,224 pounds.
- B. It shall be unlawful for any person to take, possess aboard any vessel or land in Virginia any spiny dogfish harvested from federal waters, for commercial purposes after it has been announced that the federal quota for spiny dogfish has been taken.
- C. It shall be unlawful for any person to take, possess aboard any vessel or land in Virginia more than 3,000 pounds of spiny dogfish per day for commercial purposes.
- D. It shall be unlawful for any person to harvest or to land in Virginia any spiny dogfish for commercial purposes after the quota specified in subsection A of this section has been landed and announced as such.
- E. Any spiny dogfish harvested from state waters or federal waters, for commercial purposes, shall only be sold to a federally permitted dealer.
- F. It shall be unlawful for any buyer of seafood to receive any spiny dogfish after any commercial harvest or landing quota described in this section has been attained and announced as such.

4VAC20-490-43. LIMITED ACCESS CONTROL RULE.

At such time the status of shark stocks or their fisheries warrant the establishment of a limited access program for participation in the commercial fishery for sharks, a control rule may be enacted that limits participation in the commercial fisheries for sharks to those individuals who participated in that fishery on and before December 31, 2004. The control rule may also include eligibility requirements based on past harvest amounts.

4VAC20-490-44. SPINY DOGFISH LIMITED ENTRY FISHERY PERMIT AND PERMIT TRANSFERS.

- A. It shall be unlawful for any person to take, catch, possess, or land any spiny dogfish without first having obtained a Spiny Dogfish Limited Entry Fishery Permit from the Marine Resources Commission. Such permit shall be completed in full by the permittee who shall keep a copy of that permit in his possession while fishing for or selling spiny dogfish. Permits shall only be issued to Virginia registered commercial fishermen meeting either of the following criteria:
 - 1. Shall have documented on Virginia mandatory harvest reporting forms harvest from a legally licensed, movable gill net for an average of at least 60 days from 2006 through 2008, and a minimum harvest of 1 pound of spiny dogfish at any time from 2006 through 2008.

2. Shall have documented on Virginia mandatory reporting forms harvests that total greater than 10,000 pounds of spiny dogfish in any one year from 2006 through 2008.
 3. Any smooth dogfish or unidentified dogfish documented on Virginia mandatory reporting forms as harvested during the months of November through February, 2006 through 2008, shall be classified as spiny dogfish when determining eligibility for a Spiny Dogfish Limited Entry Fishery Permit as described in subdivisions 1 and 2 of this subsection.
- B. It is unlawful to transfer any Spiny Dogfish Limited Entry Fishery permit after November 23, 2009.
- C. The use of agents in the spiny dogfish fishery is prohibited.
- D. The Commissioner or his designee may grant exceptions to the prohibition against transfers of the Spiny Dogfish Limited Entry Fishery Permit as described in subsection B of this section to any individual who meets any of the following criteria:
1. Demonstrates a significant hardship on the basis of health and provides the Commissioner documentation, by an attending Physician, of the medical condition.
 2. Demonstrates a significant hardship on the basis of a call to active military duty and provides the Commissioner an explanation, in writing, and copy of the military orders for active duty.
 3. Documents the retirement or death of the immediate family member permitted for the spiny dogfish limited entry fishery and possessing a legal Commercial Fisherman Registration License.

4VAC20-490-45. [Repealed]

4VAC20-490-46. SPINY DOGFISH MONITORING REQUIREMENTS.

- A. Any Virginia seafood buyer purchasing spiny dogfish shall provide written reports to the Marine Resources Commission of weekly landings for each registered commercial fisherman to include that commercial fisherman's registration license number and exact weight of the spiny dogfish landed, in pounds, until it is projected and announced that 80% of Virginia spiny dogfish quota has been landed.
- B. When it has been projected and announced by the Marine Resources Commission that 80% of the Virginia spiny dogfish quota has been landed, each Virginia seafood buyer shall call the Marine Resources Commission's interactive voice recording

system on a daily basis to report the daily landings for each registered commercial fisherman to include the commercial fisherman's registration license number and exact weight of spiny dogfish landed, in pounds, until it is projected and announced that the Virginia spiny dogfish quota has been landed and the fishery closed.

4VAC20-490-47. CONTROL DATE

The Marine Resources Commission hereby establishes April 30, 2011, as the control date for management of all spiny dogfish licenses and fisheries in Virginia. The harvest of any spiny dogfish or the participation by any individual in any Virginia spiny dogfish fishery after the control date will not be considered in the calculation of spiny dogfish rights should further entry limitations be established. Any individual entering the spiny dogfish fishery after the control date may forfeit any right to future participation in the spiny dogfish fishery should further entry limitation be established.

4VAC20-490-50. FINNING.

It shall be unlawful for any person to engage in finning.

4VAC20-490-60. [Repealed]

4VAC20-490-70. PENALTY.

As set forth in §28.2-903 of the Code of Virginia, any person violating any provision of this chapter shall be guilty of a Class 3 misdemeanor, and a second or subsequent violation of any provision of this chapter committed by the same person within 12 months of a prior violation is a Class 1 misdemeanor.

* * * * *

APPENDIX B. Copy of the Virginia Marine Resources Commission's regulation "Pertaining to Commercial Fishing and Mandatory Harvest Reporting" that was in effect for the 2012 fishing year.

**VIRGINIA MARINE RESOURCES COMMISSION
"PERTAINING TO COMMERCIAL FISHING AND MANDATORY
HARVEST REPORTING"
CHAPTER 4VAC20-610-10 ET SEQ.**

PREAMBLE

This chapter describes the procedures and manner for application for registration as a commercial fisherman, the manner and form of mandatory harvest reports by commercial fishermen and others, and exceptions to the registration process and delay requirements as specified in § 28.2-241 of the Code of Virginia. A commercial hook-and-line license is also established.

This chapter is promulgated pursuant to authority contained in §§ 28.2-201, 28.2-204, 28.2-242, and 28.2-243 of the Code of Virginia. This chapter amends and readopts, as amended, previous Chapter 4VAC20-610-10 et seq. which was promulgated October 27, 2009 and made effective on November 1, 2009. The effective date of this chapter, as amended, is January 1, 2010.

4VAC20-610-10. Purpose.

The purpose of this chapter is to establish the procedures for the registration of commercial fishermen and the manner and form of mandatory harvest reports from fishermen and others. Further, the purpose is to license commercial fishermen using hook-and-line, rod-and-reel, or hand line.

4VAC20-610-20. Definitions.

The following words and terms when used in this chapter shall have the following meanings unless the context clearly indicates otherwise:

"Agent" means any person who possesses the commercial fisherman registration license, fishing gear license, or fishing permit of a registered commercial fisherman in order to fish that commercial fisherman's gear or sell that commercial fisherman's harvest.

"Clam aquaculture product owner" means any person or firm that owns clams on leased, subleased or fee simple ground or on any growing area within or adjacent to Virginia tidal waters that are raised by any form of aquaculture. This does not include any riparian shellfish gardeners whose activities are authorized by 4VAC20-336.

"Commission" means the Marine Resources Commission.

"Commissioner" means the Commissioner of the Marine Resources Commission.

"Continuing business enterprise" means any business that is required to have a Virginia Seafood Buyer's License or is required to have a business license by county, city or local ordinance.

"Oyster aquaculture product owner" means any person or firm that owns oysters on leased, subleased or fee simple ground or on any growing area within or adjacent to Virginia tidal waters that are raised by any form of aquaculture. This does not include any riparian shellfish gardeners whose activities are authorized by 4VAC20-336.

"Sale" means sale, trade, or barter.

"Sell" means sell, trade, or barter.

"Selling" means selling, trading or bartering.

"Sold" means sold, traded, or bartered.

4VAC20-610-25. Oyster and clam aquaculture permit requirements.

A. For the purposes of collecting oyster fisheries statistics from the Virginia aquaculture industry as authorized by §28.2-204 of the Code of Virginia, and in accordance with §28.2-613 of the Code of Virginia, which describes conditions that determine the duration of a lease, any oyster aquaculture product owner shall obtain an oyster aquaculture product owner's permit and shall report harvest of any oysters from leased, subleased or fee simple ground or on any growing area within or adjacent to Virginia tidal waters in accordance with 4VAC20-610-60.

B. For the purposes of collecting clam fisheries statistics from the Virginia aquaculture industry as authorized by §28.2-204 of the Code of Virginia, and in accordance with §28.2-613 of the Code of Virginia, which describes conditions that determine the duration of a lease, any clam aquaculture product owner shall obtain a clam aquaculture product owner's permit and shall report harvest of any clams from leased, subleased or fee simple ground or on any growing area within or adjacent to Virginia tidal waters in accordance with 4VAC20-610-60.

C. Any person who is not a permitted oyster aquaculture product owner who harvests oysters from leased, subleased or fee simple ground or on any growing area within or adjacent to Virginia tidal waters shall obtain an oyster aquaculture harvester's permit for the purposes of providing fisheries effort statistics to the commission as authorized by §28.2-204 of the Code of Virginia.

D. Any person who is not a permitted clam aquaculture product owner who harvests clams from leased, subleased or fee simple ground or on any growing area within or adjacent to Virginia tidal waters shall obtain a clam aquaculture harvester's permit for the purposes of providing fisheries effort statistics to the commission as authorized by §28.2-204 of the Code of Virginia.

E. It shall be unlawful for any person permitted as an oyster aquaculture harvester to fail to possess that permit on his person while harvesting unless that permit is in the possession of a legally permitted oyster aquaculture product owner, and the permitted harvester is harvesting oysters of that oyster aquaculture product owner.

F. It shall be unlawful for any person permitted as a clam aquaculture harvester to fail to possess that permit on his person while harvesting unless that permit is in the possession of a legally permitted clam aquaculture product owner, and the permitted harvester is harvesting clams of that clam aquaculture product owner.

G. Minor persons younger than 18 years of age shall be exempt from the requirements to obtain an oyster aquaculture harvester's permit provided that minor person is harvesting oysters under the supervision of a legally permitted oyster aquaculture product owner.

H. Minor persons younger than 18 years of age shall be exempt from the requirements to obtain a clam aquaculture harvester's permit provided that minor person is harvesting clams under the supervision of a legally permitted clam aquaculture product owner.

4VAC20-610-30. Commercial Fisherman Registration License; exceptions and requirements of authorized agents.

A. In accordance with §28.2-241 C of the Code of Virginia, only persons who hold a valid Commercial Fisherman Registration License may sell, trade, or barter their harvest, or give their harvest to another, in order that it may be sold, traded, or bartered. Only these licensees may sell their harvests from Virginia tidal waters, regardless of the method or manner in which caught. Exceptions to the requirement to register as a commercial fisherman for selling harvest are authorized for the following persons or firms only:

1. Persons taking menhaden under the authority of licenses issued pursuant to §28.2-402 of the Code of Virginia.
2. Persons independently harvesting and selling, trading, or bartering no more than three gallons of minnows per day who are not part of, hired by, or engaged in a continuing business enterprise.
 - a. Only minnow pots, a cast net or a minnow seine less than 25 feet in length may be used by persons independently harvesting minnows.
 - b. All other marine species taken during the process of harvesting minnows shall be returned to the water immediately.

B. Requirements of authorized agents.

1. No person whose Commercial Fisherman Registration License, fishing gear license, or fishing permit is currently revoked or rescinded, by the Marine Resources Commission, pursuant to §28.2-232 of the Code of Virginia is authorized to possess the Commercial Fisherman Registration License, fishing gear license, or fishing permit of any other registered commercial fisherman, in order to serve as an agent for fishing the commercial fisherman's gear or selling the harvest.
2. No registered commercial fisherman shall use more than one person as an agent at any time.
3. Any person serving as an agent shall possess the Commercial Fisherman Registration License and gear license of the commercial fisherman while fishing.
4. When transporting or selling a registered commercial fisherman's harvest, the agent shall possess either the Commercial Fisherman Registration License of that commercial fisherman or a bill of lading indicating that fisherman's name, address, Commercial Fisherman Registration License number, date and amount of product to be sold.
5. Any person licensed to harvest blue crabs commercially shall not be eligible to also serve as an agent.
6. Any person serving as an agent to harvest blue crabs for another licensed fisherman shall be limited to the use of only one registered commercial fisherman's crab license; however, an agent may fish multiple crab traps licensed and owned by the same person.
7. There shall be no more than one person, per vessel, serving as an agent for a commercial crab licensee.
8. Prior to using an agent in any crab fishery, the licensee shall register that person, with the Commission, and shall receive approval for use of that agent, prior to the commencement of any harvesting activity.
9. Failure to abide by any of the provisions of this section, shall constitute a violation of this regulation.

C. In accordance with §28.2-241 H of the Code of Virginia, only persons with a valid Commercial Fisherman Registration License may purchase gear licenses. Beginning with licenses for the 1993 calendar year and for all years thereafter, gear licenses will be sold only upon presentation of evidence of a valid Commercial Fisherman Registration License.

Exceptions to the prerequisite requirement are authorized for the following gears only and under the conditions described below:

1. Menhaden purse seine licenses issued pursuant to §28.2-402 of the Code of Virginia may be purchased without holding a Commercial Fisherman Registration License.

2. Commercial gear licenses used for recreational purposes and issued pursuant to §28.2-226.2 of the Code of Virginia may be purchased without holding a Commercial Fisherman Registration License.

D. Exceptions to the two-year delay may be granted by the commissioner if he finds any of the following:

1. The applicant for an exception (i) has demonstrated, to the satisfaction of the commissioner, that the applicant has fished a significant quantity of commercial gear in Virginia waters during at least two of the previous five years; and (ii) can demonstrate, to the satisfaction of the commissioner, that a significant hardship caused by unforeseen circumstances beyond the applicant's control has prevented the applicant from making timely application for registration. The commissioner may require the applicant to provide such documentation as he deems necessary to verify the existence of hardship.

2. The applicant is purchasing another commercial fisherman's gear, and the seller of the gear holds a Commercial Fisherman Registration License and the seller surrenders that license to the commission at the time the gear is sold.

3. An immediate member of the applicant's family, who holds a current registration, has died or is retiring from the commercial fishery and the applicant intends to continue in the fishery.

4. Any applicant denied an exception may appeal the decision to the commission. The applicant shall provide a request to appeal to the commission 30 days in advance of the meeting at which the commission will hear the request. The commission will hear requests at their March, June, September, and December meetings.

5. Under no circumstances will an exception be granted solely on the basis of economic hardship.

4VAC20-610-40. Registration procedures.

A. An applicant may renew his Commercial Fisherman Registration License by registering during the months of December through February as commercial fishermen as follows:

1. The applicant shall complete an application for a Commercial Fisherman Registration License.

2. The applicant shall mail the completed application to the Virginia Marine Resources Commission, 2600 Washington Avenue, 3rd Floor, Newport News, VA 23607.

3. The Commercial Fisherman Registration License will be returned to the applicant by mail upon validation of his application.

B. Persons desiring to enter the commercial fishery and those fishermen failing to register as provided in subdivision A may apply only during December, January or February of each year. All such applications shall be for a delayed registration and shall be made as provided below.

1. The applicant shall complete an application for a Commercial Fisherman Registration License by providing his complete name, mailing address (and 911 address if different than mailing address), social security number, birth date, weight, height, eye color, hair color, telephone number of residence, and signature.

2. The applicant shall mail the completed application to the Virginia Marine Resources Commission, 2600 Washington Avenue, Newport News, VA 23607.

3. The Commercial Fisherman Registration License will be returned to the applicant by mail two years after the date of receipt of the application by the commission. Notification of any change in the address of the applicant shall be the responsibility of the applicant.

C. No part of the Commercial Fisherman Registration License fee shall be refundable.

D. The Commercial Fisherman Registration License may be renewed annually during the months of December, January or February, only when any and all mandatory reporting harvest reports are up to date and there are no outstanding compliance issues. Any person failing to renew his license shall be subject to the delay provision of subsection B of this section.

4VAC20-610-50. Commercial hook-and-line license.

A. On or after January 1, 1993, it shall be unlawful for any person to take or harvest fish in the tidal waters of Virginia with hook-and-line, rod-and-reel, or hand line and to sell such harvest without first having purchased a Commercial Hook-and-Line License from the commission or its agent.

B. A Commercial Fisherman Registration License, as described in §28.2-241 H of the Code of Virginia, is required prior to the purchase of this license.

4VAC20-610-60. Mandatory harvest reporting.

A. It shall be unlawful for any valid commercial fisherman registration licensee, seafood landing licensee, oyster aquaculture product owner permittee, or clam aquaculture product owner permittee to fail to fully report harvests and related information as set forth in this chapter.

B. It shall be unlawful for any recreational fisherman, charter boat captain, head boat captain, commercial fishing pier operator, or owner of a private boat licensed pursuant to §28.2-

302.7 through 28.2-302.9 of the Code of Virginia, to fail to report recreational harvests, upon request, to those authorized by the commission.

C. All registered commercial fishermen and any valid seafood landing licensee, oyster aquaculture product owner permittee, and clam aquaculture product owner permittee shall complete a daily form accurately quantifying and legibly describing that day's harvest from Virginia tidal and federal waters. The forms used to record daily harvest shall be those provided by the commission or another form approved by the commission. Registered commercial fishermen and seafood landing licensees may use more than one form when selling to more than one buyer.

D. Registered commercial fishermen, seafood landing licensees, valid oyster aquaculture product owner permittees and valid clam aquaculture product owner permittees shall submit a monthly harvest report to the commission no later than the fifth day of the following month. This report shall be accompanied by the daily harvest records described in subsection E of this section. Completed forms shall be mailed or delivered to the commission or other designated locations.

E. The monthly harvest report requirements shall be as follows:

1. Registered commercial fishermen shall be responsible for providing monthly harvest report and daily harvest records that include the name and signature of the registered commercial fisherman and his commercial fisherman's registration license number; the name and license registration number of any agent, if used; the license registration number of no more than five helpers who were not serving as agents; any buyer or private sale information; the date of any harvest; the city or county of landing that harvest; the water body fished, gear type, and amount of gear used for that harvest; the number of hours any gear was fished and the number of hours the registered commercial fisherman fished; the number of crew on board, including captain; species harvested; market category; live weight or processed weight of species harvested; and vessel identification (Coast Guard documentation number, Virginia license number, or hull/VIN number). Any information on the price paid for the harvest may be provided voluntarily.

2. The monthly harvest report and daily harvest records from oyster aquaculture product owner permittees and clam aquaculture product owner permittees shall include the name, signature, permit number, lease number, date of harvest, city or county of landing, gear (growing technique) used, weight or amount of species harvested, number of crew, and buyer or private sale information.

3. The monthly harvest report and daily harvest records from seafood landing licensees shall include the name and signature of the seafood landing licensee and his seafood landing license number; buyer or private sale information; date of harvest; city or county of landing; water body fished; gear type and amount used; number of hours gear fished; number of hours the seafood landing licensee fished; number of crew on board, including captain; nonfederally permitted species harvested; market

category; live weight or processed weight of species harvested; and vessel identification (Coast Guard documentation number, Virginia license number, or hull/VIN number).

F. Registered commercial fishermen, oyster aquaculture product owner permittees and clam aquaculture product owner permittees not fishing during a month, or seafood landing licensees not landing in Virginia during a month, shall so notify the commission no later than the fifth of the following month by postage paid postal card provided by the commission or by calling the commission's toll free telephone line.

G. Any person licensed as a commercial seafood buyer pursuant to §28.2-228 of the Code of Virginia shall maintain for a period of one year a copy of each fisherman's daily harvest record form for each purchase made. Such records shall be made available upon request to those authorized by the commission.

H. Registered commercial fishermen, seafood landing licensees, oyster aquaculture product owner permittees and clam aquaculture product owner permittees shall maintain their daily harvest records for one year and shall make them available upon request to those authorized by the commission.

I. Registered commercial fishermen, seafood landing licensees and licensed seafood buyers shall allow those authorized by the commission to sample harvest and seafood products to obtain biological information for scientific and management purposes only. Such sampling shall be conducted in a manner that does not hinder normal business operations.

J. The reporting of oyster harvest and transactions by licensed seafood buyers, oyster aquaculture product owner permittees, clam aquaculture product owner permittees, and any registered commercial fisherman who self-markets his oyster harvest shall be made in accordance with 4VAC20-200 and Article 3 (§28.2-538 et seq.) of Chapter 5 of Title 28.2 of the Code of Virginia.

K. The reporting of the harvest of federally permitted species from beyond Virginia's tidal waters that are sold to a federally permitted dealer shall be exempt from the procedures described in this section.

L. The owner of any purse seine vessel or bait seine vessel (snapper rig) licensed under the provisions of §28.2-402 of the Code of Virginia shall submit the Captain's Daily Fishing Reports to the National Marine Fisheries Service, in accordance with provisions of Amendment 1 to the Interstate Fishery Management Plan of the Atlantic States Marine Fisheries Commission for Atlantic Menhaden, which became effective July 2001.

4VAC20-610-65. Noncompliance.

A. Any initial violation of 4VAC20-610-60 by any registered commercial fisherman, oyster aquaculture product owner permittee, clam aquaculture product owner permittee, or seafood

landing licensee shall be subject to penalties as described in subdivisions 1 through 4 of this subsection.

1. Any failure to report harvest or no harvest activity or no landing in Virginia within one to three months after that report was due shall result in a minimum of one year of probation.
2. Any failure to report harvest or no harvest activity or no landing in Virginia within four to six months after that report was due shall result in a minimum of two years of probation.
3. Any failure to report harvest or no harvest activity or no landing in Virginia within seven to twelve months after that report was due shall result in a minimum of six months of suspension of all commercial licenses and permits.
4. Any failure to report harvest or no harvest activity or no landing in Virginia more than twelve months after that report was due shall result in a minimum of one year of suspension of all commercial licenses and permits.

B. Any second or subsequent violation of 4VAC20-610-60 by any registered commercial fisherman, oyster aquaculture product owner permittee, clam aquaculture product owner permittee, or seafood landing licensee may be subject to having his commercial licenses and permits suspended by the Commission.

4VAC20-610-70. Penalty.

A. As set forth in §28.2-903 of the Code of Virginia, any person violating any provision of this chapter shall be guilty of a Class 3 misdemeanor, and a second or subsequent violation of any provision of this chapter committed by the same person within 12 months of a prior violation is a Class 1 misdemeanor.

B. In addition to the penalties described by law, any person violating any provision of this chapter may be subject to license suspension or revocation.

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Interstate Fishery Management Plan for Atlantic Coastal Sharks

North Carolina Annual Coastal Shark Compliance Report 2012

August 2013



NC Department of Environment and natural Resources

Division of Marine Fisheries

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I. Introduction

The North Carolina Division of Marine Fisheries (NCDMF) regularly monitors and collects biological data on major landings and predominant gear utilized along the North Carolina coast. A commercial fisheries dependent sampling program, which collects biological data from predominant fisheries in North Carolina, has been ongoing since 1982. These data are used by the NCDMF to monitor the commercial harvest of coastal sharks landed in North Carolina. NCDMF also has an ongoing independent monitoring program, which consists of independent gill net surveys and red drum longline surveys. Biological data such as length, weight, and sex are collected from all sharks caught as a result of these programs. Data from these programs can be used in evaluating coastal shark stock assessments.

The NCDMF opened state waters to shark harvest for recreational anglers and set guidelines and seasons for the commercial fisheries that opened and closed by future proclamations under proclamation FF-85-2011. The proclamation established a commercial possession limit of 33 Large Coastal Sharks (LCS) with no size limits, and no possession or size limits on Small Coastal Sharks (SCS), pelagic sharks or smooth dogfish. Recreational fishermen were allowed one large coastal or pelagic shark (greater than 54 inches fork length) per vessel per day, or if no vessel is used, one shark per person per day. Recreational fishermen were also allowed one Atlantic sharpnose (no minimum size) and one bonnethead (no minimum size) per person per day along with their bag limit for other sharks. The proclamation also advised fishermen that state waters would be closed to the commercial harvest of coastal sharks if the quota is reached, as set forth by the National Marine Fisheries Service (NMFS). Proclamation FF-85-2011 also stated that North Carolina fishermen could sell coastal sharks only to a licensed finfish dealer who possessed a valid federal shark dealer permit. Dealers were also required to submit North Carolina Trip Tickets for all commercial landings, including coastal sharks.

The NCDMF closed the commercial fishing season for porbeagle sharks in all state waters on May 30, 2012 by Proclamation FF-34-2012. The remainder of the pelagic shark species group remained open allowing the harvest of shortfin mako, common thresher, oceanic whitetip, and blue sharks.

Commercial landings of coastal sharks in 2012 have shown an increase from 2011 with landings totaling 703,027 pounds in 2012 compared to 584,238 pounds in 2011. Landings of smooth dogfish decreased to 980,275 pounds in 2012 compared to 1,241,252 pounds in 2011.

The recreational harvest estimates for 2012 are available for certain species on the Marine Recreational Information Program (MRIP) National Query. Type of catch estimates are from fish brought back to the dock in a form that can be identified by trained interviewers (Catch Type A) are fish that are used for bait, released dead or filleted and identification is by individual anglers (Catch Type B1). Final total harvest (Catch Type A+B1) estimates of individuals from North Carolina are as follows: unidentified sharks 486; Atlantic sharpnose shark 1,449; blacktip shark 177; smooth dogfish 176; shortfin mako 172; and bull shark 61. The other type of catch estimate provided on the MRIP National Query is fish that are released alive with identification by individual anglers (Catch Type B2). Final estimates of released (Catch Type B2)

individuals are as follows: unidentified sharks 549,740; Atlantic sharpnose shark 2,337; blacktip shark 195; smooth dogfish 3,951; shortfin mako 13; bull shark 29; hammerhead shark genus 3,342; spinner shark 184; and tiger shark 147.

II. Request for *de minimus*

North Carolina does not request *de minimis* status at this time.

III. Previous calendar year's fishery and management program.

A. Regulations in effect in 2011

Many different state laws (General Statutes - G.S.) provide the necessary authority for fishery management in North Carolina. The North Carolina Marine Fisheries Commission (MFC) was created to "manage, restore, develop, cultivate, conserve, protect, and regulate the marine and estuarine resources of the State of North Carolina including commercial and sport fishing resources"(G. S. 143B-289.52). The MFC can regulate harvest times, areas, gear usage, seasons, size limits, and quantities of fish harvested and possessed (G.S. 143B-289.52). North Carolina Fisheries Rule 15A NCAC 03M .0512 allows the MFC to delegate authority to implement its regulations for fisheries "to comply with management requirements incorporated in Atlantic State Marine Fisheries Commission Management Plans" to the Director of NCDMF by issuing public notices called "proclamations" that can be implemented within 48 hours after issuance. Thus, North Carolina has a very powerful and flexible legal basis for coastal fisheries management.

15A NCAC 03M .0512 COMPLIANCE WITH FISHERY MANAGEMENT PLANS

(a) In order to comply with management requirements incorporated in Federal Fishery Management Council Management Plans, Atlantic States Marine Fisheries Commission Management Plans, or implementation of state management measures, the Fisheries Director may, by proclamation, take any or all of the following actions for species listed in the Interjurisdictional Fisheries Management Plan:

- (1) Specify size
- (2) Specify seasons
- (3) Specify areas
- (4) Specify quantity
- (5) Specify means and methods, and
- (6) Require submission of statistical and biological data.

(b) Proclamations issued under this Rule shall be subject to approval, cancellation, or modification by the Marine Fisheries Commission at its next regularly scheduled meeting or an emergency meeting held pursuant to G.S. 113-221.1.

*History Note: Authority G.S. 113-134; 113-182; 113-221; 113-221.1; 143B-289.4;
Eff. March 1, 1996;
Amended Eff. October 1, 2008.*

Under the proclamation authority cited above, the NCDMF Director issued a proclamation in 2002 that prohibited shark finning. The proclamation addressed the specific compliance criteria as mandated in the FMP. The proclamation had no expiration date and remains in effect.

Proclamation FF-85-2011 Commercial and recreational shark harvest-all state waters (effective January 1, 2012) requires all sharks to have the head, tail and fins intact with the carcass at the point of landing. Commercial fishermen may completely remove the fins of smooth dogfish from March through June of each year. From July through February, for the smooth dogfish fishery only, commercial fishermen may completely remove the head, tail, pectoral fins, pelvic (ventral) fins, anal fin and second dorsal fin, but must keep the dorsal fin attached naturally to the carcass through landing. Fins may be cut as long as they remain attached to the carcass by natural means with at least a small portion of uncut skin. If fins are removed, the total wet weight of the shark fins may not exceed five (5) percent of the total dressed weight of smooth dogfish carcasses landed or found onboard a vessel.

B. Activity and results of fishery dependent monitoring

Commercial Small Coastal Sharks (SCS), Large Coastal Sharks (LSC), pelagic sharks and smooth dogfish landings are monitored through the North Carolina trip ticket program. Under this program, licensed fishermen can only sell their commercial catch to licensed North Carolina Division of Marine Fisheries (NCDMF) fish dealers. The dealer is required to complete a trip ticket every time licensed fishermen land fish. Trip tickets capture data on gears used to harvest fish, area fished, species harvested, and total weights of each individual species. The NCDMF also follows a strict confidentiality policy regarding individual dealer and fisherman landings information. Thus, NCDMF does not release any data summaries that involve less than three dealers and/or fishermen. Trip tickets are submitted to NCDMF by the 10th of the month following the month in which the landings occurred. Preliminary landings are available approximately 30-45 days after they are submitted from the dealers. Final landings information for an entire calendar year is not available until April of the following year after a thorough screening and verification.

Fishery dependent sampling of North Carolina commercial fisheries has been ongoing since 1982 (conducted under Title III of the Interjurisdictional Fisheries Act, and funded in part by the U.S. Department of Commerce, National Marine Fisheries Service). Predominant fisheries sampled include the ocean sink net fishery, estuarine gill net fishery, winter trawl fishery, long haul seine/swipe net fishery, beach haul seine fishery, and pound net fishery. Large mesh gill nets (ocean) were the primary commercial gear used to land coastal sharks in NC during 2012, accounting for 39% of the harvest (Table 1). Small mesh gill nets (ocean) and surface longlines were the second and third most predominant gears, as they accounted for 30% and 27% of total state landings of coastal sharks in 2012 (Table 1). Altogether these three gears combined contributed to 96% of total state landings.

The NCDMF does not have estimates of non-harvest losses of coastal sharks. An increase in discards could be significant should a closure occur as a result of the coastal shark quota being met.

Recreational fishing activity is monitored through the Marine Recreational Information Program (MRIP). The total number of coastal sharks harvested in North Carolina by recreational fishermen from 2003 to 2012 was 3,289 Large Coastal Sharks (LCS), 34,220 Small Coastal Sharks (SCS), and 2,719 Pelagic Sharks (Table 2).

Table 1. Summary of North Carolina 2012 commercial harvest (lbs) of coastal sharks, by gear and percent contribution. Data provided by NC Trip Ticket Program.

Gear	Whole (lb)	Carcass (lb)	Fins (lb)	Total Landings (lb)	Total Landings %
Large mesh gill net (>= 5 in.)					
Estuarine		4,944		4,944	1
Ocean		266,411	9,878	276,289	39
Small mesh gill net (< 5 in.)					
Estuarine		4,292	39	4,331	1
Ocean		201,368	9,323	210,691	30
Longline, Surface					
Ocean		188,914	1,874	190,788	27
Longline, Bottom					
Ocean		7,814	51	7,865	1
Trolling					
Ocean		1,662		1,662	<1
Rod-n-Reel					
Ocean		413		413	<1
Other	2,580	2,027	242	4,849	1
Grand Total	2,580	677,845	21,407	701,832	100

Table 2. Number of Coastal sharks harvested and released alive in North Carolina by recreational gear from 2003 to 2012. Data collected from the Marine Recreational Information Program.

Year	Harvest (number)			Harvest (lbs)			Released Alive		
	LCS	SCS	Pelagic	LCS	SCS	Pelagic	LCS	SCS	Pelagic
2003	405	3,297	52	1,012	21,247	*	552	*	*
2004	*	2,689	345	*	29,643	50,334	*	13,446	22,831
2005	664	1,095	1,509	38,052	6,923	108,234	17,260	3,140	49,095
2006	118	4,605	254	6,789	27,594	26,204	3,080	12,517	11,886
2007	1,105	6,299	80	17,344	26,300	7,439	7,867	11,930	3,374
2008	61	3,268	30	4,827	18,165	2,693	2,189	8,240	1,221
2009	*	3,402	102	*	29,894	9,009	*	13,560	4,087
2010	388	5,989	87	685	33,439	14,547	311	15,168	6,599
2011	305	2,127	88	471	15,414	5,356	214	6,992	2,429
2012	243	1,449	172	22,630	9,836	11,695	10,265	4,461	5,305
Total	3,289	34,220	2,719	91,810	218,455	235,511	41,738	89,454	106,827

* No data was reported by the MRIP

C. Activity and results of fishery independent monitoring

The NCDMF does not have an independent program to tag Atlantic coastal sharks. The NCDMF does have an independent red drum longline project established in 2007, which allows for capture and tagging of Atlantic coastal sharks. The independent red drum longline project in the Pamlico Sound resulted in a catch of four coastal sharks in 2012. Three species of shark were captured, 2 blacktip (*Carcharhinus limbatus*) with only one total length recorded at 1570 mm, one Atlantic sharpnose (*Rhizoprionodon terraenovae*) with a total length of 551 mm, and one bull (*Carcharhinus leucas*) with a total length of 1676 mm. Only two of the sharks, blacktip and bull, captured were tagged by NCDMF with federal tags.

A fisheries independent gill net survey was initiated in North Carolina in 2001. The objective of this project is to provide annual independent relative indices of abundance for key estuarine species in sounds and rivers that can be incorporated into stock assessments and used to improve bycatch estimates, evaluate management measures, and evaluate habitat usage. Results from this project are used by the NCDMF and other Atlantic coast fishery management agencies to evaluate the effectiveness of current management measures and to identify additional measures that may be necessary to conserve marine and estuarine stocks. Developing fishery independent indices of abundance for target species allows the NCDMF to assess the status of these stocks without relying solely on commercial and recreational fishery dependent data. Sampling is a stratified random sampling design in Pamlico Sound, utilizing multiple mesh gill nets (3.0-6.5 inch, ½ inch increments). In 2012, a total of 193 individual coastal sharks were captured in the Pamlico Sound independent gill net survey. Coastal sharks from the 2012 Pamlico Sound independent gill net survey catch included: two angel (*Squatina dumeril*), total length of 844 mm and 880 mm, 65 Atlantic sharpnose (*Rhizoprionodon terraenovae*), total length range of 250-970 mm (mean = 355.7 mm TL), 35 blacktip (*Carcharhinus limbatus*) total length range of 365-1010 mm (mean = 501.1 mm TL), 22 bonnethead (*Sphyrna tiburo*) total length range of 352-913 mm (mean = 743.5 mm TL), 28 bull (*Carcharhinus leucas*) total length range of 375-925 mm TL (mean = 734.9 mm TL), one scalloped hammerhead (*Sphyrna lewini*), total length of 860 mm, and 40 smooth hound (*Mustelus canis*) total length range of 472-1210 mm TL (mean = 555.1 mm TL).

The Fisheries Independent Assessment Program Ocean Gillnet (FIAPOG) began in February, 2008, funded by the Coastal Recreational Fishing License receipts. The program utilizes the same sampling framework as the fisheries independent gill net survey. This program is designed to gather data on fishes utilizing the nearshore ocean (<3 miles) from New River Inlet south to the SC/NC state line and the Cape Fear and New Rivers. The goals of the program are to provide CPUE data for coastal fishes, to supplement age, growth, and reproduction studies, to evaluate catch rates and species distribution for use in management plans, and to characterize habitat use. In 2012, 405 sharks were captured in the near shore ocean waters from New River Inlet south to the SC/NC state line and the Cape Fear and New Rivers. Coastal sharks from the 2012 FIAPOG survey catch included: 269 Atlantic sharpnose (*Rhizoprionodon terraenovae*), total length range of 227-851 mm (mean = 483.6 mm TL), 52 blacknose (*Carcharhinus acronotus*) total length range of 722-1140 mm (mean = 935.9 mm TL), 10 blacktip (*Carcharhinus limbatus*) total length range of 828-1275 mm (mean = 952.0 mm TL), 42 bonnethead (*Sphyrna tiburo*) total length range of 602-935 mm (mean = 801.6 mm TL), 13 finetooth (*Carcharhinus isodon*) total length range of 898-1310 mm (mean = 1050.5

mm TL), 13 scalloped hammerhead (*Sphyrna lewini*) total length range of 538-695 mm (mean = 589.8 mm TL), and 6 smooth dogfish (*Mustelus canis*) total length range of 431-482 mm (mean = 456.2 mm TL).

IV. Planned management program for the current fishing year

The management program for 2013 will follow the regulatory authority as in 2012.

Proclamation FF-61-2012 was issued on December 6, 2012, to comply with the management measures presented in the ASMFC FMP for Coastal Sharks and consistent with the NMFS Highly Migratory Species (HMS) FMP which increased the possession limit to 36 Large Coastal Sharks (LCS) per trip. On December 21, 2013 NMFS announced the final rule regarding the 2013 Atlantic shark commercial fishing season that established quotas and opening dates. Effective May 23, 2013, the ASMFC increased the fin-to-carcass ratio from 5% to 12% for smooth dogfish and allowed year round processing at sea. Large Coastal Shark (LCS) season opened January 1, 2013 unlike 2012 when the fishery opened on July 15. The change in the season opening date, fin-to-carcass ratio and processing at sea for smooth dogfish is reflected in FF-33-2013 (REVISED).

V. Plan specific requirements

A. Scientific and Educational Collection Permits

In 2012, 74 Scientific and Education Collection permits were issued by NCDMF. Only 6 of the 74 issued permits reported sharks in their catch. The number and weight by species of the various coastal shark species collected in these permits are provided in Table 3.

Table 3. Coastal sharks collected in North Carolina under Scientific and Education Collection Permits for 2012.

Common Name	Scientific Name	Number Collected	Weight (Kg)	Number of Fish with Weights Reported	Number Released Alive	Gear
Atlantic Angel Shark	<i>Squatina dumeril</i>	15	154	15	15	Bottom Trawl
Atlantic Sharpnose Shark	<i>Rhizoprionodon terraenovae</i>	728	414	613	* 722	Longline, trawl, gillnet
Blacknose Shark	<i>Carcharhinus acronotus</i>	15	76	6	15	Longline, trawl, gillnet
Blacktip Shark	<i>Carcharhinus limbatus</i>	9	0	1	9	Longline, trawl, gillnet
Bonnethead Shark	<i>Sphyrna tiburo</i>	33	138	33	33	75' trawl
Dusky Shark	<i>Carcharhinus obscurus</i>	20	14	18	20	75' trawl, longline
Hammerhead Shark	<i>Sphyrna spp.</i>	7	5	4	7	75' trawl, longline
Sand Tiger Shark	<i>Odontaspis taurus</i>	10	361	10	10	75' trawl, longline
Sandbar Shark	<i>Carcharhinus plumbeus</i>	26	67	26	26	longline
Smooth Dogfish Shark	<i>Mustelus canis</i>	4	0	2	2	Dredge, longline
Spinner Shark	<i>Carcharhinus brevipinna</i>	2	56	1	2	Longline, trawl
Thresher Shark	<i>Alopias vulpinus</i>	4	66	4	4	Longline, trawl
Unidentified Sharks		202	0	0	202	Gill net
Total		1075	1351	733	1067	

* 6 Atlantic Sharpnose Sharks were captured dead in the longline and released

South Carolina
Coastal Shark Fishery and Management Program
Compliance Report for the Year 2012



DNR

30 July 2013

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I. INTRODUCTION

The Atlantic Highly Migratory Species (HMS) Management Division of the National Marine Fisheries Service (NMFS) is responsible for the management of Atlantic shark populations. Due to the variety of life history patterns that exist among Atlantic shark species, NMFS classifies them into groups with similar life history parameters. The current classifications, as defined in Amendment 3 to the consolidated HMS fisheries management plan¹, include large coastal sharks (LCS), small coastal sharks (SCS), pelagic sharks and prohibited species. Within the LCS unit, sandbar sharks are managed independently of other species, and within the SCS unit blacknose sharks are managed independently. This report focuses on the LCS (sandbar, silky, tiger, blacktip, bull, spinner, lemon, nurse, smooth hammerhead, scalloped hammerhead, and great hammerhead sharks) and SCS (Atlantic sharpnose, blacknose, finetooth, and bonnethead sharks) groups in South Carolina state waters. In addition, data on smooth dogfish are presented. This species currently has no federal management plan; however, HMS management of this species will begin in 2014. The most recent stock assessment (SEDAR 21²) lists the sandbar and blacknose sharks as overfished, with overfishing occurring.

All species of coastal sharks encountered in SC waters are monitored through fishery dependent and independent methods. South Carolina's estuaries and adjacent coastal waters provide essential pupping and nursery habitat for sharks as well as essential foraging habitat for juvenile and adult sharks. Sharks are seasonal residents in South Carolina coastal waters, with the greatest abundances occurring from April to November. Smooth dogfish are an exception, with pregnant females migrating to South Carolina waters in November and migrating out in April. South Carolina's estuarine and coastal waters have been documented as important primary and secondary nursery grounds for several species of coastal sharks including: Atlantic sharpnose, blacktip, finetooth, sandbar, and scalloped hammerhead sharks (Castro 1993³; Ulrich *et al.* 2007⁴). Additional species that may utilize South Carolina's waters as nursery grounds include blacknose, bonnethead, bull, and lemon sharks.

Data indicate that recreational catches of coastal sharks have increased. This trend is likely to continue as coastal populations of humans continue to increase, leading to more fishing effort. Commercial catch data showed increases in landings for large coastal, small coastal, and smooth dogfish sharks. Landings of sandbar sharks remained minimal.

II. REQUEST FOR *de minimis* – Not Applicable

III. 2012 COASTAL SHARK FISHERY AND MANAGEMENT PROGRAM

A. Fishery Dependent Monitoring:

¹ http://www.nmfs.noaa.gov/sfa/hms/FMP/AM3_FEIS/Total_A3_FEIS.pdf

² [SEDAR 21: HMS Sandbar, Dusky, and Blacknose Sharks](#)

³ Castro, J.I. 1993. The shark nursery of Bulls Bay, South Carolina, with a review of the shark nurseries of the southeastern coast of the United States. *Env. Biol. Fish.* 38:37-48.

⁴ Ulrich G.F., Jones C.M., Driggers W.B. III, Drymon J.M., Oakley D., Riley C. 2007. Habitat utilization, relative abundance, and seasonality of sharks in the estuarine and nearshore waters of South Carolina. *Am. Fish. Soc. Symp.* 50:125-139.

Sharks in South Carolina are captured and harvested by both commercial and recreational anglers. Recreational landings are monitored through intercept surveys, phone surveys and charter boat trip tickets. Commercial landings and effort are monitored through logbooks and trips tickets. All commercial shark landings must be sold to federally licensed commercial shark dealers.

Recreational Monitoring:

As the coastal population has increased in South Carolina, angler pressure on all species of estuarine and coastal fish has increased. Anglers, as well as charter captains, have increasingly targeted coastal sharks for sport. The majority of these encounters are catch and release, although a segment is retained for consumption and trophies. Fishery dependent data are collected by the Marine Recreational Information Program (MRIP) of NMFS, the South Carolina State Finfish Survey (SFS), and a SCDNR-managed mandatory trip reporting system for licensed charter boat operators. Additional data on shark movement and seasonal migration are also available through South Carolina’s marine game fish tagging program.

MRIP Data – Species-specific shark data were not available from MRIP. Instead, their landings data included combined catches for either “Dogfish Sharks” or “Other Sharks”, the latter of which includes LCS, SCS, and pelagic sharks. The MRIP data indicates that total harvest of other sharks in 2012 decreased by 38,419 pounds compared with 2011. Note, however, that MRIP emphasize that their weight data are minimum values, and less reliable than their catch in numbers data.

The 2011 harvest was estimated at 78,902 lbs. and the 2010 harvest was estimated at 117,321 lbs (Figure 1). The total weight of other sharks caught is only available for harvested individuals in the MRIP data set. Therefore, the total catch and released alive

Figure 1. Estimated annual recreational landings of the MRIP category “Other Sharks” by all modes in South Carolina state waters in lbs (\pm s.e.). Data from MRFSS data set: <http://www.st.nmfs.noaa.gov/st1/recreational/queries/catch/snapshot.html>

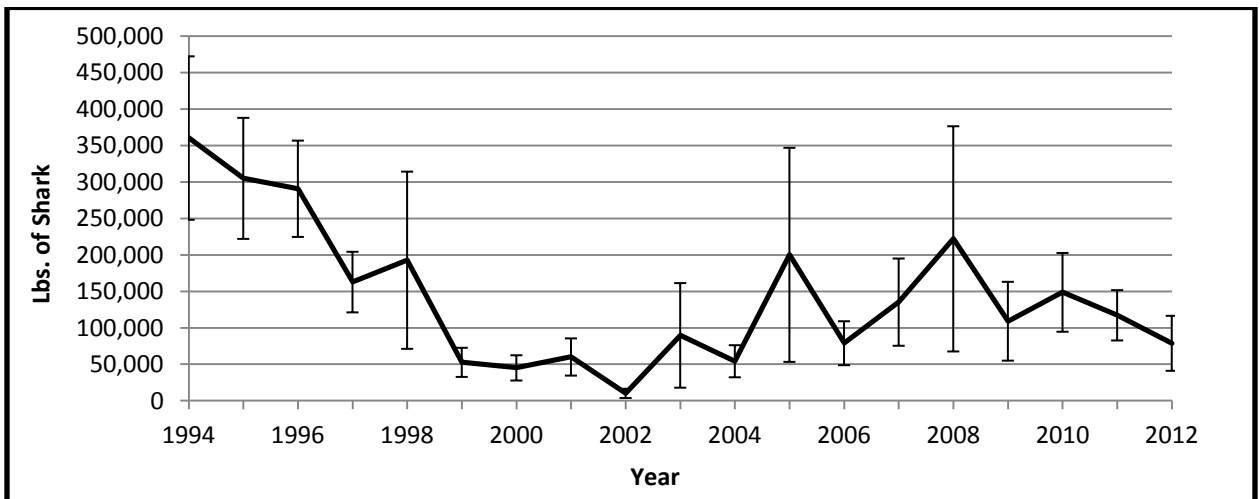
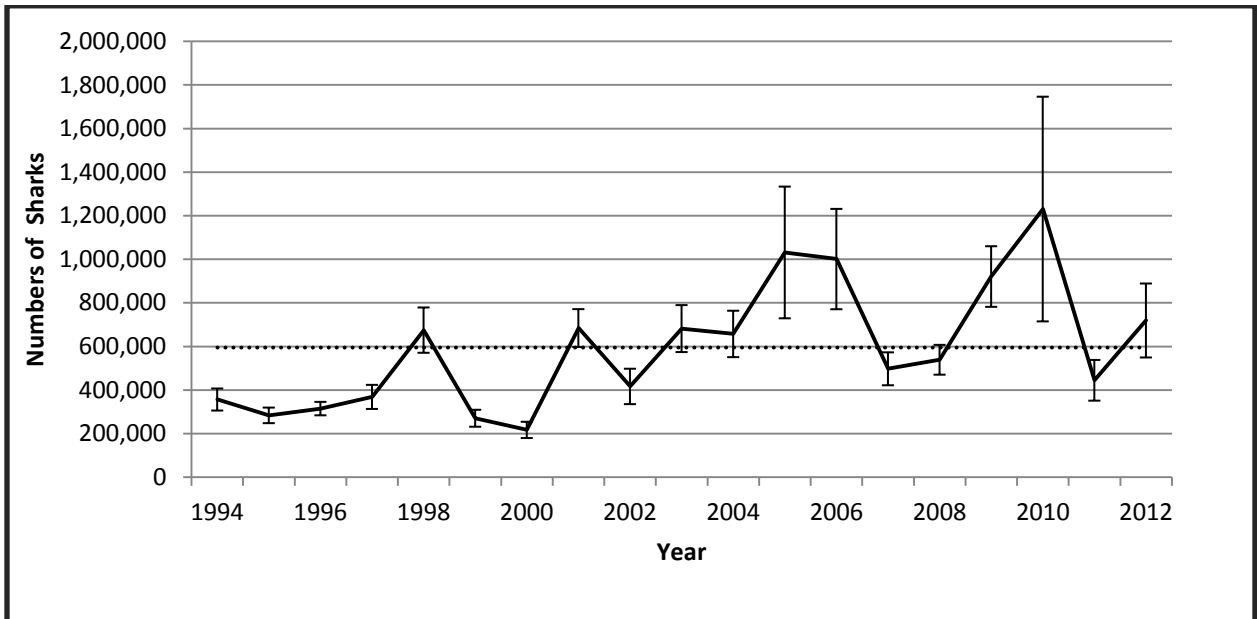


Figure 2. Estimated total recreational catch of the MRIP category “Other Sharks” by all fishing modes from South Carolina state waters. Total catch (harvested and released, \pm s.e) and long term mean (dotted line) are shown. Data from MRIP: <http://www.st.nmfs.noaa.gov/st1/recreational/queries/catch/snapshot.html>



(B2) components are reported in number captured. The total catch in 2011 was estimated to be 719,152 sharks, which is above the long term average of 595,285 sharks (Figure 2). An estimated total of 709,107 sharks were captured and released alive. As regulations have changed and anglers have become increasingly conservation minded, catch and release of coastal sharks has become more prevalent. Released fish composed 78% to 95% of the total catch in the 1990s versus 93% to 99% of the total catch since 2000 (Figure 3). The highest percentage of released fish on record (99.2%) occurred in 2008. Catch and release of coastal sharks remained high in 2012 at an estimated 98.6%.

Figure 3. Estimated percentage of captured “Other Sharks” that were released alive (B2) in South Carolina state waters. Data from MRIP: <http://www.st.nmfs.noaa.gov/st1/recreational/queries/catch/snapshot.html>

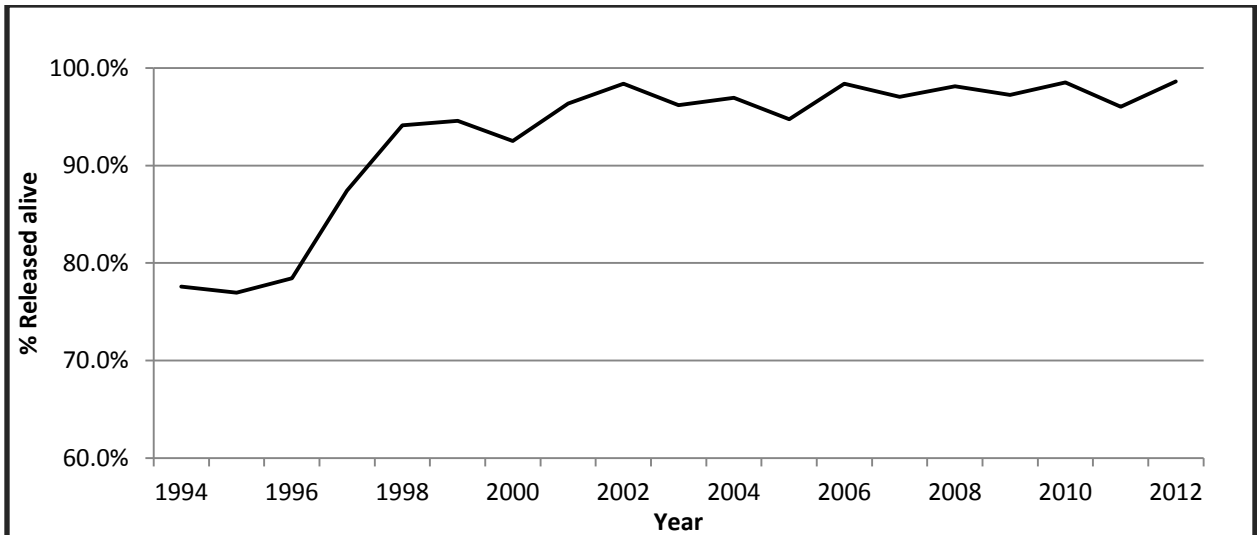
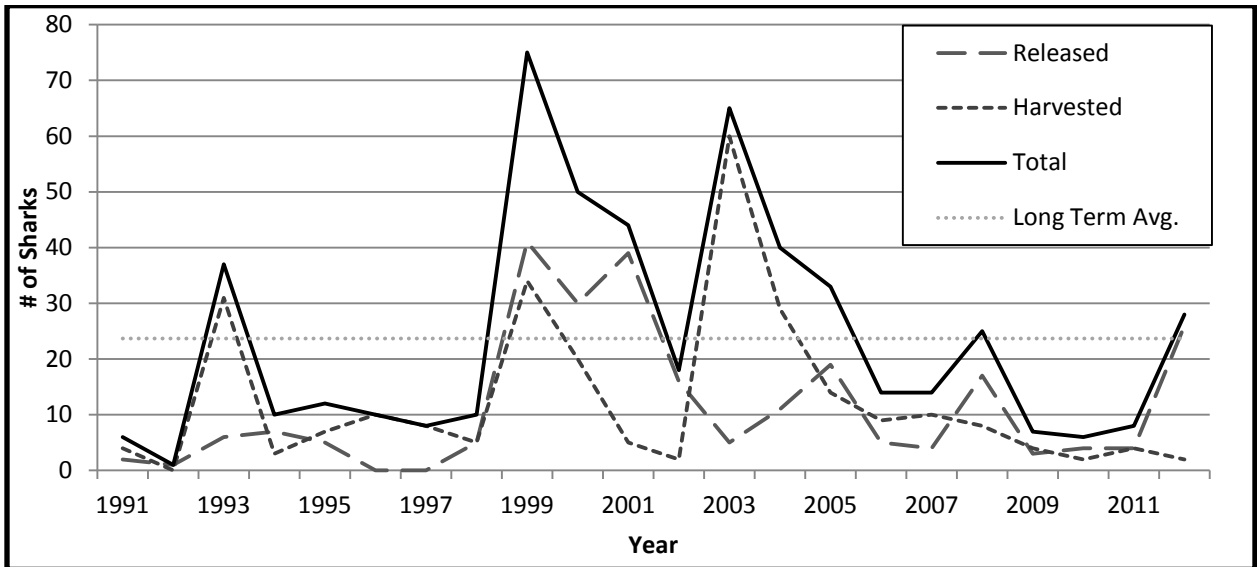


Figure 4. Catches of large coastal sharks in South Carolina state waters from surveyed anglers as documented by the South Carolina State Finfish Survey. The total number of sharks captured, total released, total harvested and long term mean of total captured (dotted line) is reported.



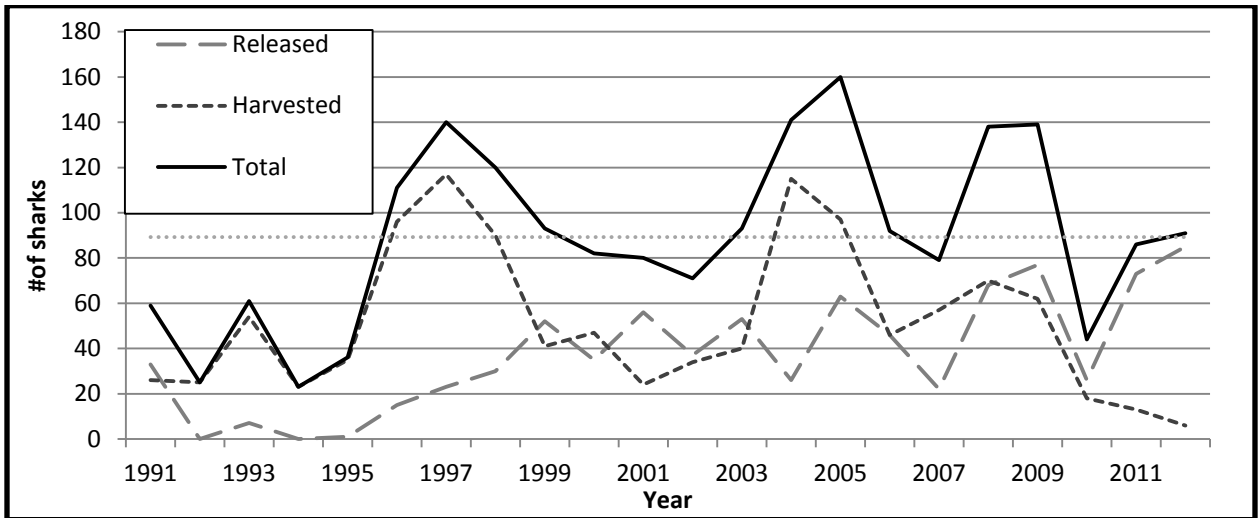
South Carolina State Finfish Survey (SFS) – The SFS is an intercept based fishery dependent survey designed to collect catch/effort data and length measurements of selected species taken by private boat anglers in either South Carolina waters or adjacent federal waters. Other fishing modes (shore based angling) are not sampled by this survey. Numbers reported are direct catches from a single day of fishing as reported by anglers intercepted at boat landings by SCDNR personnel. Some species-specific data are available through the SFS survey, but the majority of anglers interviewed were unable to identify their sharks to the species level. For ease of presentation, data have been summarized by the NMFS species groupings. For all sharks caught (including unidentified species), 99.1% were released alive.

The SFS data indicate that the intercepted catch of LCS sharks was higher in 2012 than 2011, and above the long term average (Figure 4). SCS shark intercepted catch in 2012 was well above 2011 and above the long term average (Figure 5) however, the number of LCS and SCS sharks retained was less in 2012 than 2011.

Charter Boat Trip Reporting – A mandatory component for participants of the charter boat fishery in South Carolina is a trip reporting system, which is administered by SCDNR. Data collected includes effort, species targeted, species encountered and species captured. Recent efforts have led to an increase in species-specific data. Historically, large portions of the data were listed as unclassified shark. The species-specific data that are reported have been grouped into small or large coastal shark groupings.

The 2012 reported large coastal shark landings (5,179 lbs.) were lower than 2011 and remained below the long-term average (Figure 6). The 2012 small coastal shark charter landings (20,330 lbs.) were greater than the 2011 landings and were the highest since the log book program was initiated (Figure 6). While some of the increase in landings can be explained by more species specific reporting, there is also an increase

Figure 5. Catches of small coastal sharks in South Carolina state waters as documented by the South Carolina state finfish survey. The total number of sharks captured, total released, total harvested and the long-term average of total captured is reported.



in the targeting of coastal sharks by charter captains. These numbers are expected to increase in the future as more charter boat captains target Atlantic sharpnose and bonnethead sharks due to the ease of capture and abundance of these species, as well as tightening of restrictions on other coastal species of fish.

Capture of LCS sharks increased slightly from 5,529 sharks in 2011 to 6,182 sharks in 2012, catches of SCS continued to increase in 2012 (Figure 7). A total of 24,264 small coastal sharks were reported captured by charter captains in 2012. Since the

Figure 6. Landings of sharks from South Carolina state waters as reported in the charter boat trip logs. The total landings in lbs, large coastal landings, small coastal landings and unclassified landings are reported.

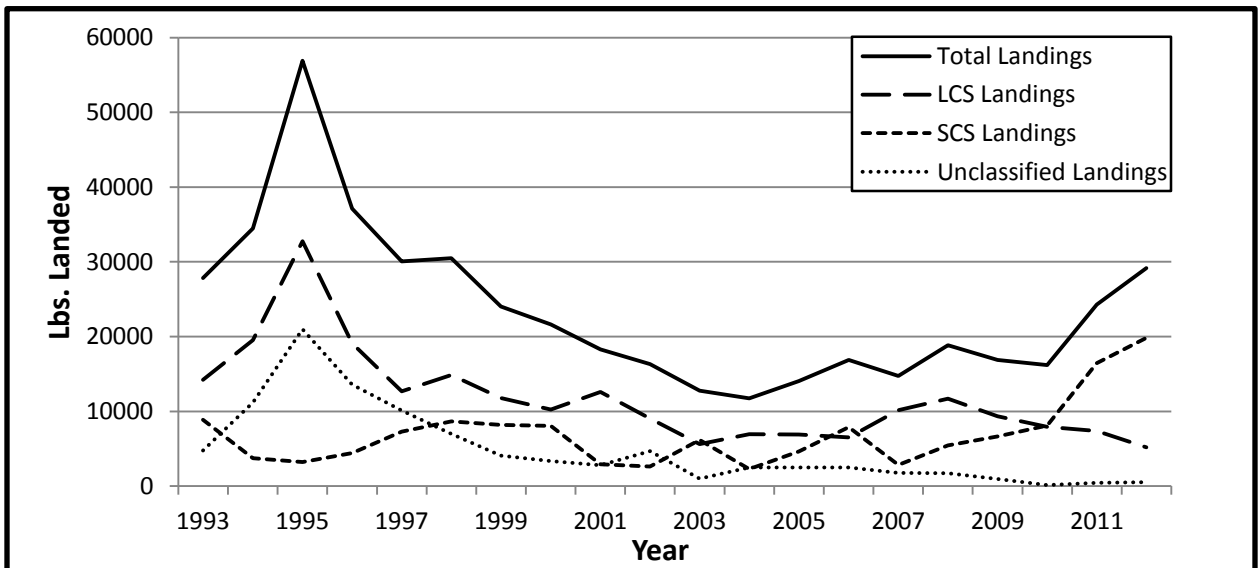
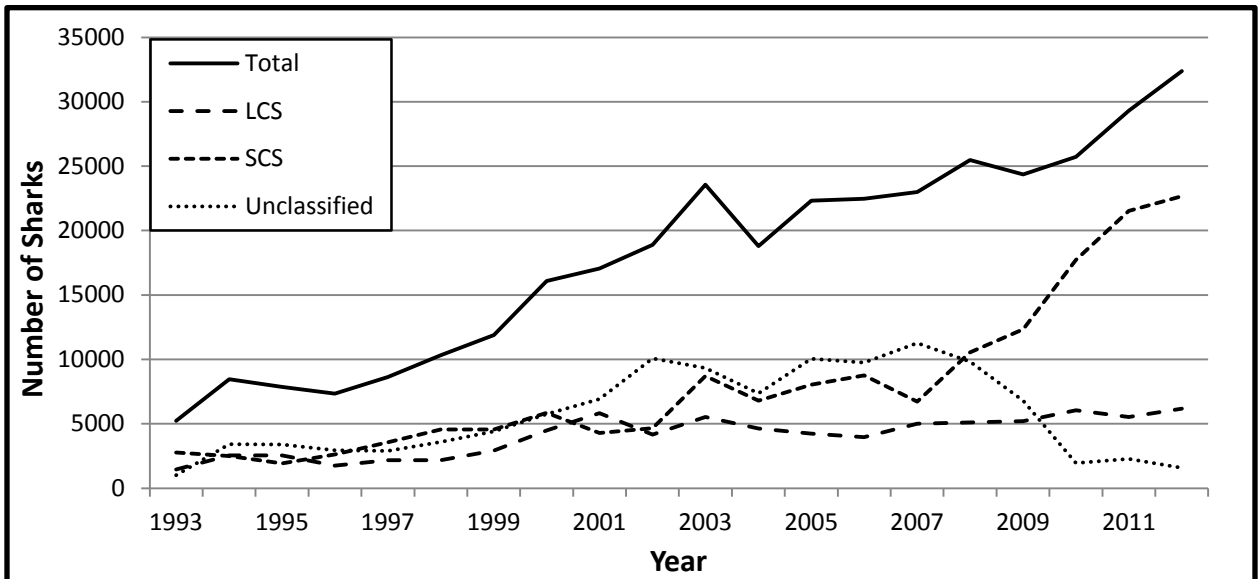


Figure 7. Capture of sharks from South Carolina state waters as reported in the charter boat trip logs. The total number of sharks, total small coastal, total large coastal and total unclassified sharks captured is reported.



charter logbook program began, total reported catches of coastal sharks have increased over 600%. Despite the reported increases in both catches and landings, release of sharks captured by charter boat captains remains high (92.1% in 2011).

Commercial Monitoring:

South Carolina has a relatively small commercial fleet fishing for coastal sharks. Most directed permit holders are smaller vessels conducting day trips, although several larger vessels operate in state and federal waters. Most incidental permit holders are commercial shrimping vessels that sell portions of their bycatch. Gears used by both direct and incidental permit holders include: longlines (bottom and pelagic), otter trawl, gillnets and bandit/rod and reel. Longlines account for the majority of reported landings. All catch is required to be sold to a licensed federal dealer, and landings and effort are monitored through the use of logbooks, federal observers and trip tickets.

B. Fishery Independent Monitoring:

Coastal sharks have been continuously monitored in South Carolina since 1994. The abundance and distribution of sharks is monitored in estuarine coastal waters utilizing a variety of gear types. The Cooperative Atlantic States Shark Pupping and Nursery Habitat Survey (COASTSPAN) monitors the presence and abundance of young of year and juvenile sharks in the estuaries and bays of South Carolina. The presence and abundance of juvenile and adult coastal sharks in the bays, sounds and coastal waters are documented during the adult red drum longlining survey; sharks are a common bycatch in the adult red drum survey. The data gathered from these programs are shared with the NMFS apex predators program and are utilized in stock assessments and management decisions in South Carolina.

COASTSPAN:

The COASTSPAN survey was created in 1998 as a cooperative survey between the NMFS Apex predators program and the SCDNR. The estuaries and sounds from Bulls Bay to St. Helena Sound are sampled with hand-deployed longlines and gillnets. The hand deployed longline is more effective for targeting large coastal species, primarily sandbar and blacktip sharks, while gillnets are more effective for small coastal sharks, Atlantic sharpnose, finetooth and bonnethead sharks. All stations in this survey are index stations. Species captured are measured, sexed, tagged and released, and physical and water quality parameters are recorded. All collected data are shared with the apex predators program.

Catches of LCS on the hand deployed longline have been relatively steady and have remained above the long term average since 2005, with a slight decline occurring from 2006 to 2009. Catches of LCS in 2012 remained above the long term average, and were slightly higher than 2011, (Figure 8). Catches of SCS continued to decline from a 10 year high in 2010 and 2012 CPUE of SCS were lower than the long term average.

The gillnet is a more effective gear for small coastal shark species, and is the only available long term survey data set for bonnethead and finetooth sharks in the Southeast. Trends in the data from the gillnet survey are typically more stable than the hand deployed longline data, with both populations remaining around their long term averages. However, catches of both LCS and SCS were both well above their mean CPUE in 2012 with SCS having the second highest CPUE on record since the survey began (Figure 9). Large coastal sharks also dramatically increased with 2012 being the highest CPUE recorded since the survey began.

Figure 8. Catch per unit effort (\pm s.e.) of coastal sharks on the hand deployed longline and long term mean of CPUE (dotted line) from the COASTSPAN survey (1998-2012).

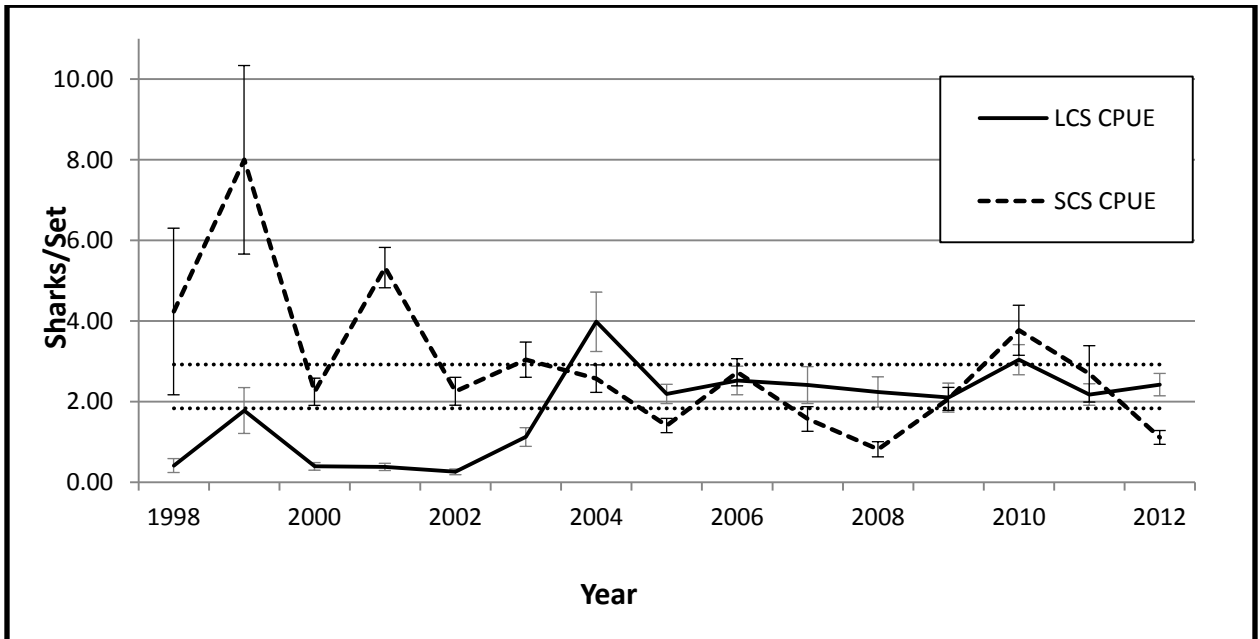
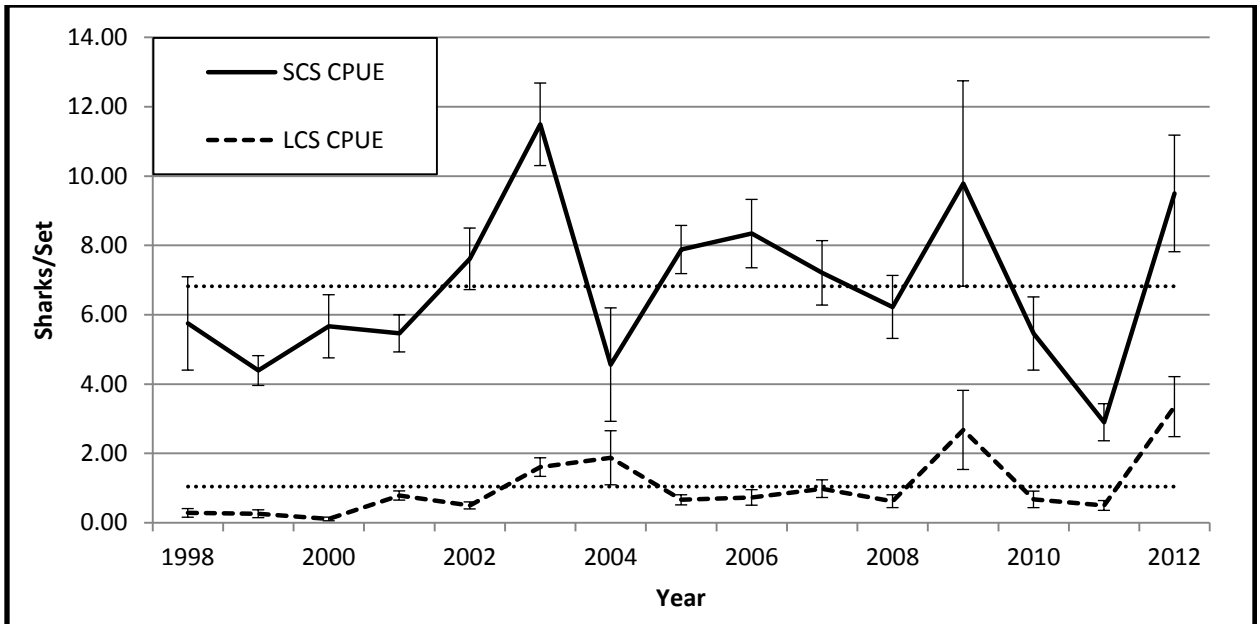


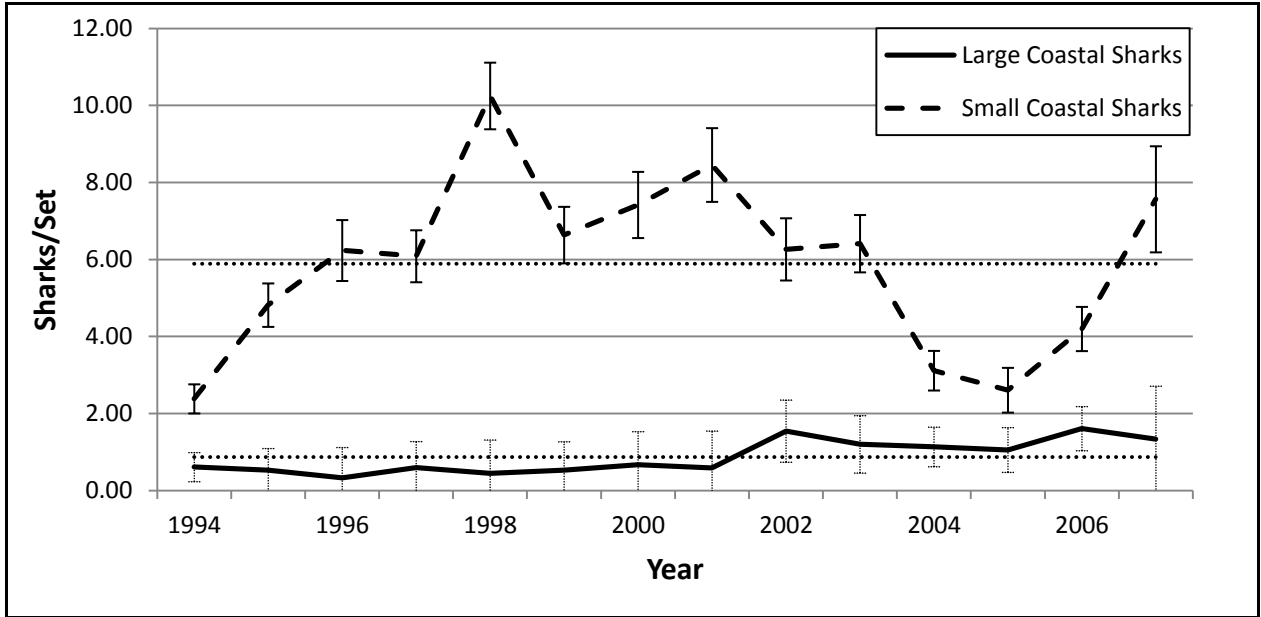
Figure 9. Catch per unit effort (\pm s.e.) of coastal sharks from in gillnets and long term mean of CPUE (dotted line) from the COASTSPAN survey (1998-2012).



Adult Red Drum and Coastal Sharks Bottom Longline Survey – This SCDNR nearshore bottom longline survey is used to estimate the abundance and distribution of adult red drum and coastal sharks in SC coastal waters. This program utilized a 1,609 meter hydraulic longline to sample index stations from 1994 to 2007. Beginning in 2007 the survey design was changed to a random stratified survey using two 536 meter longlines. The spatial coverage of this survey also changed in 2007 and now covers the majority of the state and the four largest bays and sounds, Port Royal Sound, St. Helena Sound, Charleston Harbor, and Winyah Bay. All other survey protocols remained unchanged. This shift in design and spatial coverage should yield excellent data on the species of shark utilizing South Carolina’s coastal waters in the future. The primary species captured by this survey are: Atlantic sharpnose, sandbar, finetooth, blacknose, blacktip, scalloped hammerhead, bonnethead, and spinner sharks. Other species encountered include: tiger, lemon, bull, nurse, great hammerhead and seasonally smooth and spiny dogfish.

The presence of SCS in the longline data set has been variable. Increases in abundance starting in 2005 are associated with the spatial changes the program underwent (Figure 10). Sampling was expanded in 2005, and again in 2007 causing shifts in catches of both SCS and LCS. Regional differences in CPUE are evident with the areas added (Winyah Bay, St. Helena Sound, and Port Royal Sound) having higher diversity and abundance of coastal sharks than the Charleston Harbor. Future research will investigate these differences. The random stratified survey has shown an increase in catches of both SCS and LCS when compared to the index station survey. Large coastal shark catches have decreased every year since the survey protocol was changed. Catches of SCS continued to increase from a low in 2010 and were slightly above the long term average (Figure 11).

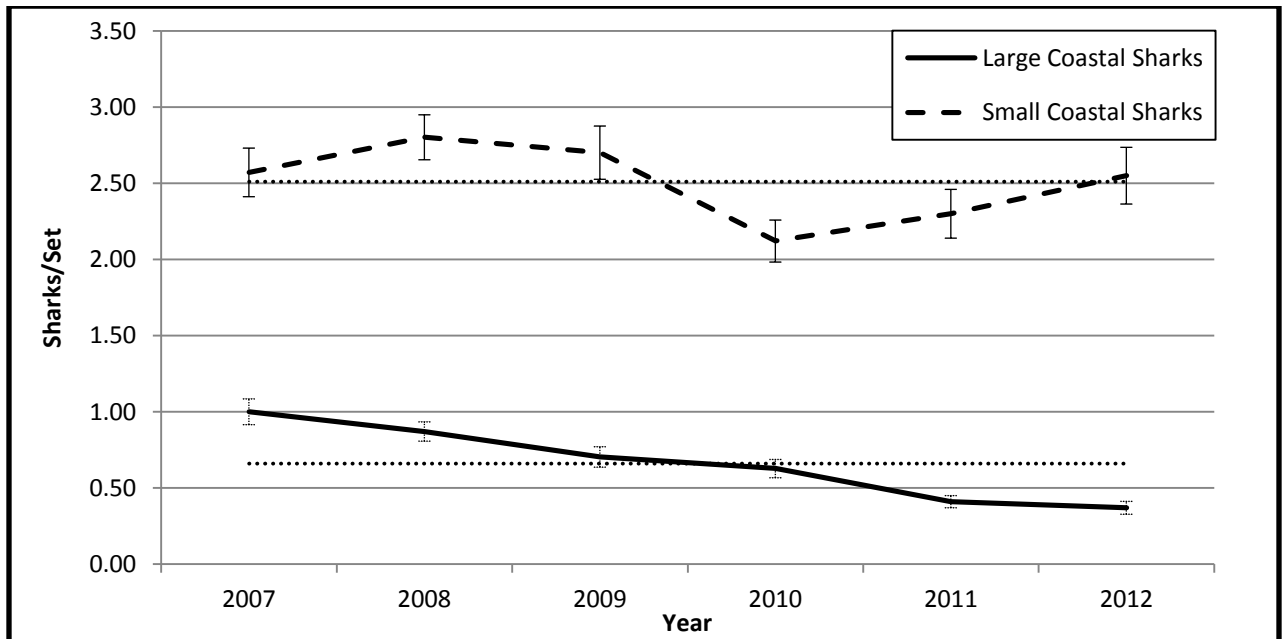
Figure 10. Catch per unit effort (± s.e.) of coastal sharks on the hydraulic longline and long term mean of CPUE (dotted line) from the Adult Red Drum survey (1994 to 2007).



Recent stock assessments treated the surveys as two distinct time periods 1994 to 2006 and 2007 to present.

In addition to the SCS and LCS, pregnant adult smooth dogfish females are encountered seasonally from November to April. This suggests that South Carolina waters may play a role as over-wintering grounds for this species.

Figure 11. Catch per unit effort (\pm s.e.) of coastal sharks on the hydraulic longline and long term mean of CPUE (dotted line) from the Adult Red Drum survey (2007-2012).



C. Coastal Shark Regulations in Effect:

South Carolina is in compliance with all measures of the FMP. Coastal shark commercial and recreational regulations are covered by the following provisions. “The limits, closures, and requirements pertaining to shark fishing in general provided by federal regulations are considered the law of the state of South Carolina except where specific state legislation is enacted.” The following sections from Title 50 of South Carolina Code apply:

SECTION 50-5-2725. Shark catch limits; boat or vessel permit to take sharks for commercial purposes; equipment requirements and prohibitions.

(A) Except as provided in this chapter, the size, catch, bag, and possession limits, fishing period closures, and requirements pertaining to the taking, release, landing, sale, purchase, trade, or barter of sharks or shark parts prescribed by those federal regulations implemented under the Fishery Conservation and Management Act (PL 94-265) and pertaining to the Fishery Management Plan for Atlantic tuna, swordfish, and sharks are declared to be the law of this State and apply in state waters; provided, however, no federal recreational angling permit or federal charter boat/head boat permit is required for the taking or possession of sharks in the waters of this State. In state waters size, catch, bag, and possession limits pertain to individual fishermen when no vessel is utilized.

(B) An annual permit must be obtained from the Department for a boat or vessel before it takes sharks for commercial purposes in state waters. Permits granted under this section do not include income requirements but may include requirements for fishing times, periods, areas, gear, and equipment, catch limitations and reporting, and other conditions the Department may determine to be necessary for management or regulatory purposes. In addition to Department conditions, the use of gill nets to harvest sharks is prohibited in state waters at all times, and when taken by gill net, all sharks must be released immediately.

SECTION 50-5-2730. Federal fishing regulations declared to be law of State.

Unless otherwise provided by law, any regulations promulgated by the federal government under the Fishery Conservation and Management Act (PL 94-265) or the Atlantic Tuna Conservation Act (PL 94-70) which establishes seasons, fishing periods, gear restrictions, sales restrictions, or bag, catch, size, or possession limits on fish are declared to be the law of this State and apply statewide including in state waters.

SECTION 50-5-340 Permits; use for commercial purposes and disposition of proceeds; violations and penalties.

(A) The Department may grant permits for taking, holding, and propagating fish or other marine resources excluding any marine mammals for:

- (1) Exploratory
- (2) Experimental

- (3) Scientific
- (4) Educational or
- (5) Commercial display purposes.

These permits may authorize activities which would otherwise be unlawful. These permits expire at the pleasure of the Department, but permits granted for exploratory or experimental commercial purposes are limited to no more than two years and may not be renewed. Permits granted pursuant to this section may include conditions as to the areas, times, seasons, types of fishing equipment, species to be taken, catch reporting requirements, disposition of the catch, and other conditions the department determines necessary. No permittee may take fish or marine resources in violation of permit conditions.

(B) The Department may permit marine resources collected pursuant to exploratory, experimental, or commercial display permits to be used for commercial purposes. Marine resources collected pursuant to scientific or educational permits may not be used for personal consumption, but the resource or the proceeds of its sale may be used by the department for marketing and promotional purposes. Any product in excess of department needs may be disposed of according to law. The Department may condition permits to allow sale of marine resources for public display.

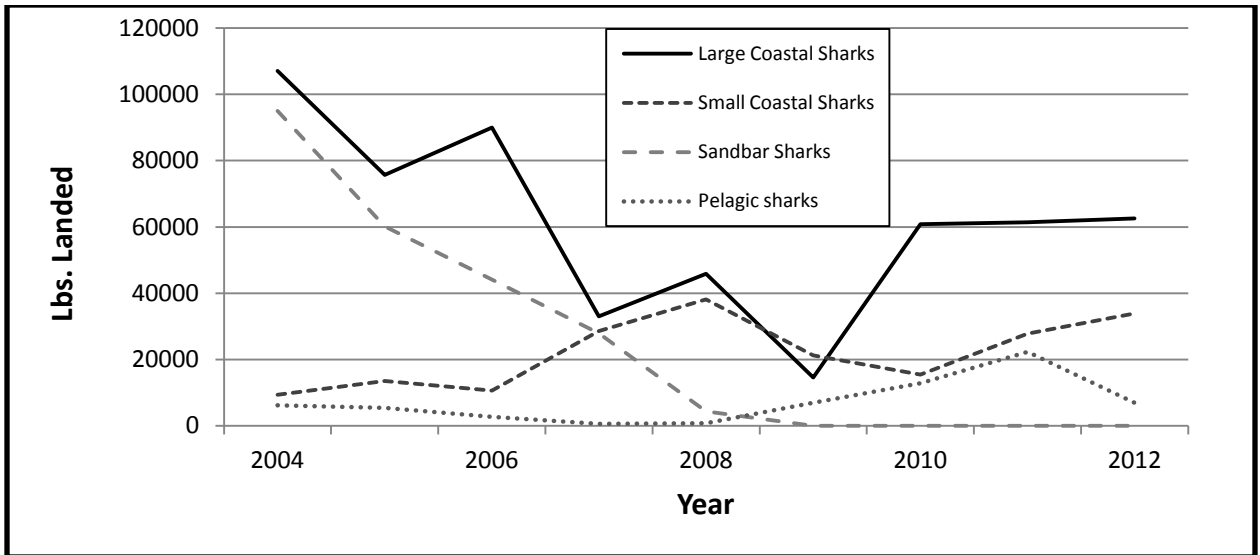
D. Coastal Sharks Harvest:

Commercial harvest data are only reported from 2004 to 2012 due to inconsistencies in the ACCSP data set. Where sufficient data are available, species groupings are to the level established by HMS Amendment 2: LCS, SCS, and sandbar. Smooth dogfish will not be federally managed until 2014, but are included where sufficient data are available. In 2008 species-specific reporting was required as part of HMS amendment 2. This will allow for better data gathering and species-specific management in the future. No commercial landings of sandbar sharks were reported in 2012. Only vessels participating in the HMS sandbar research fishery are allowed to land sandbar sharks; in 2012 there were no South Carolina commercial fisherman participating in the research fishery.

The SCS quota is consistently under harvested in the South Atlantic region and vessels have traditionally shifted to targeting SCS stocks when the LCS quota is filled. Catches of SCS and LCS sharks had been decreasing since 2004, most likely due to reduced quota availability; however in 2012 catches of SCS, LCS and smooth dogfish sharks increased (Figure 12).

Longline vessels account for the majority of LCS and SCS landings. Since 2004 there had been a large decline in landings of both LCS and sandbars in the longline fishery; however landings of LCS increased in 2010 and increased slightly in 2012

Figure 12. 2004-2012 commercial landings of coastal sharks for all available gear types in pounds per year.



(Figure 13). There were larger reported landings of smooth dogfish in 2011 (2,777 lbs.) compared to 2011 (572 lbs.).

The majority of sharks landed in otter trawl and gillnet fisheries have traditionally been SCS primarily due to their size and susceptibility to the gear. From 2004 to 2006 there are no SCS landings, only LCS landings. This is probably due to misreporting of SCS landings or landings being reported as unclassified sharks. Species-specific reporting requirements should help to correct reporting errors like this in the future. Landings of SCS have been declining since 2007. Landings of LCS have remained low since 2008. Anecdotal evidence suggests SCS are still being captured and killed in trawls, but not sold to federal dealers, instead being given to crew. SCDNR is attempting to capture these data, requiring permit holders to report sharks landed, but not sold.

Figure 13. 2004-2012 commercial longline landings of coastal sharks in pounds per year.

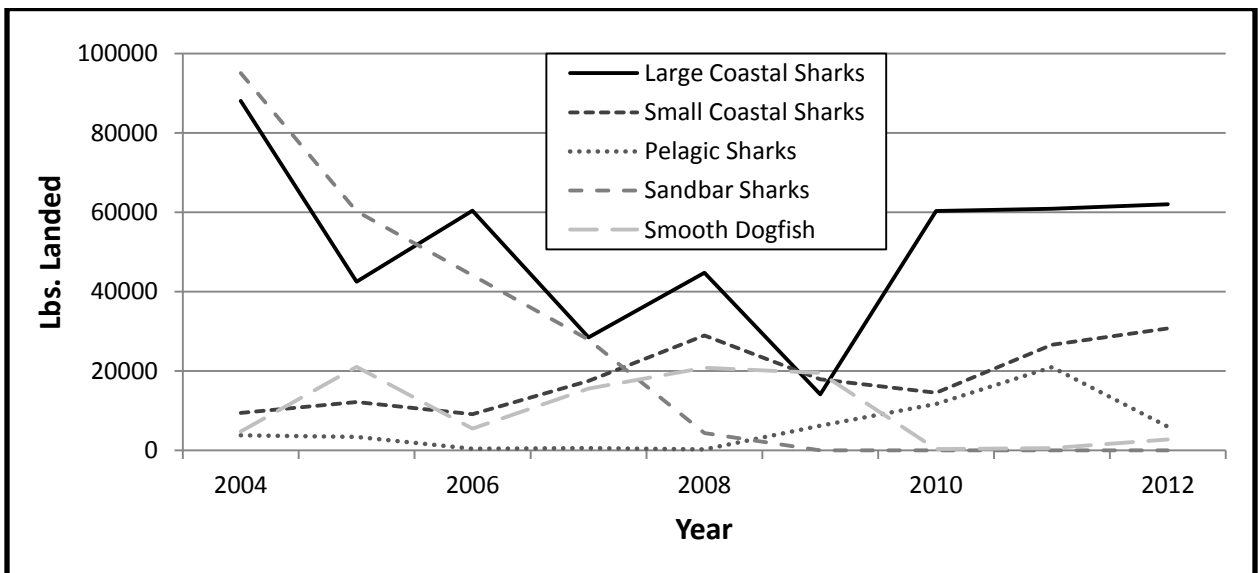
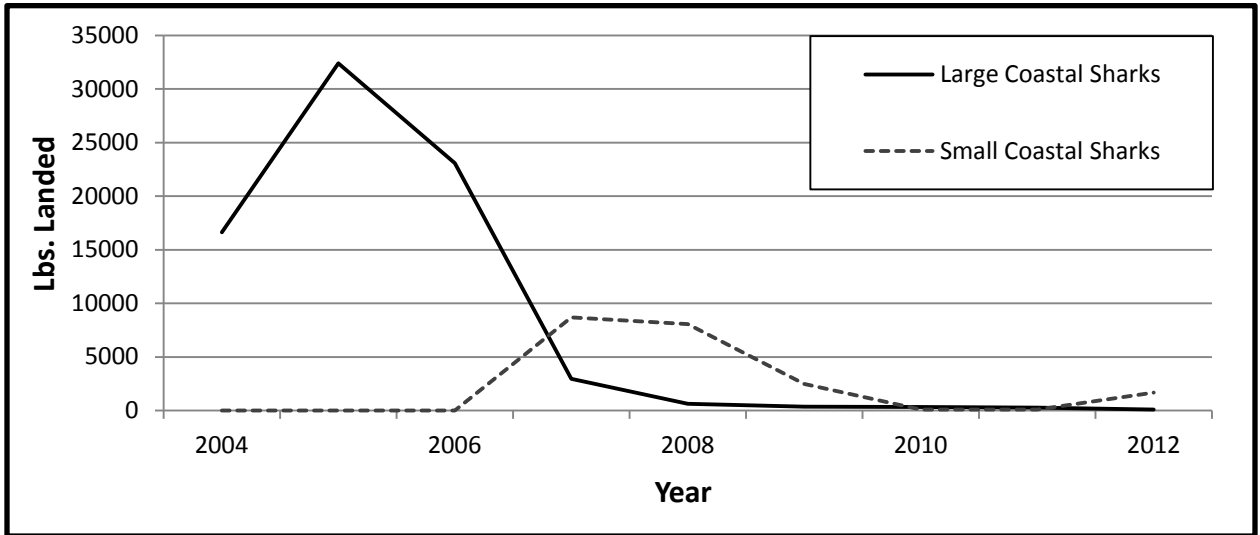


Figure 14. 2004-2012 indirect landings of coastal sharks in the shrimp otter trawl and gillnet industries, landings are in pounds per year.

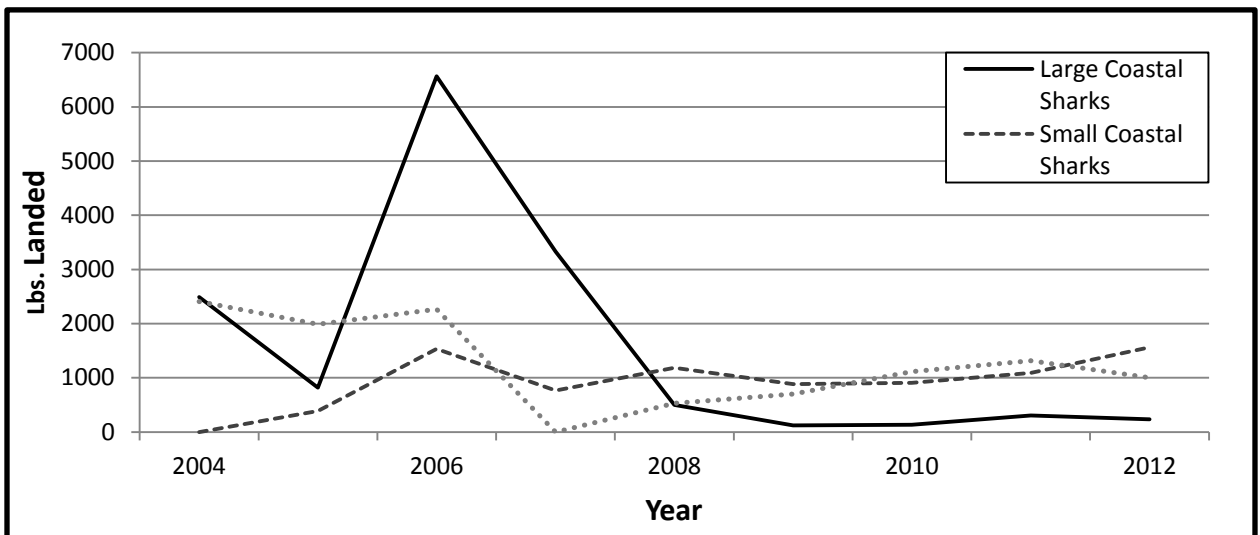


Landings of LCS and pelagic sharks have remained steady in the bandit reel and rod and reel commercial fishery since 2008 (Figure 15) with a slight increase in SCS landings in 2012.

E. Habitat Recommendations

The importance of South Carolina’s estuarine and coastal waters as primary and secondary habitat for coastal sharks has been well documented. The long-term protection of these areas is paramount to the future success of coastal sharks. Continued research is necessary to give a further understanding of the dynamics affecting the distribution and abundance of these sharks in South Carolina nearshore waters and estuaries.

Figure 15. 2004-2012 indirect landings of coastal sharks in the bandit reel and handline (rod and reel) fisheries, landings are in pounds per year.



IV. PLANNED COASTAL SHARK MANAGEMENT PROGRAMS FOR 2013

A. Regulations in Effect for 2013:

No changes in regulations are expected in 2013.

B. Monitoring programs that will be performed:

No new programs dedicated to the monitoring of coastal sharks are planned. Data related to the presence and movement of sharks in South Carolina's coastal waters will continue to be collected as this species is encountered within the context of existing fishery dependent or fishery independent programs conducted by the SCDNR.

C. Changes from the Previous Year:

No changes are expected for 2013.

V. PLAN SPECIFIC REQUIREMENTS

A. Collection and Display Report – SCDNR requires applicants to hold a federal collection permit in addition to a state permit to collect any specimens for display. Three collection permits were issued in 2012. All data associated with these permits are submitted directly to the Highly Migratory Species division of the National Oceanic and Atmospheric Administration.

B. Research Report – As part of ongoing research projects on reproduction of small coastal sharks (NMFS Grant # NA10NMF4540112 & NA12NMF4540080), the following sharks were sacrificed.

Species	Location	Gear	Sex	FL	TL	Comments
Bonnethead	Port Royal Sound	Longline	M	736	907	Reproduction
Blacknose	Port Royal Sound	Longline	F	1035	1272	Reproduction
Bonnethead	St, Helena Sound	Longline	F	899	1104	Reproduction
Bonnethead	St, Helena Sound	Longline	M	695	873	Reproduction
Bonnethead	St, Helena Sound	Longline	M	735	911	Reproduction
Finetooth	St, Helena Sound	Longline	M	1144	1423	Reproduction
Finetooth	St, Helena Sound	Longline	M	1060	1335	Reproduction
Finetooth	St, Helena Sound	Longline	M	1140	1424	Reproduction
Bonnethead	Winyah Bay	Longline	F	924	1150	Reproduction
Finetooth	Winyah Bay	Longline	M	1100	1382	Reproduction
Blacknose	Winyah Bay	Longline	F	999	1235	Reproduction
Blacknose	Winyah Bay	Longline	F	1075	1318	Reproduction
Blacknose	Winyah Bay	Longline	F	1072	1311	Reproduction

Blacknose	Winyah Bay	Longline	F	985	1226	Reproduction
Blacknose	Winyah Bay	Longline	F	1000	1242	Reproduction
Finetooth	Winyah Bay	Longline	F	1011	1275	Reproduction
Finetooth	Winyah Bay	Longline	M	1012	1289	Reproduction
Bonnethead	Winyah Bay	Longline	F	912	1135	Reproduction
Bonnethead	Winyah Bay	Longline	F	832	1033	Reproduction
Finetooth	Winyah Bay	Longline	F	1082	1373	Reproduction
Finetooth	Bulls Bay	Gillnet	F	1120	1390	Reproduction
Finetooth	Bulls Bay	Gillnet	M	1155	1412	Reproduction
Finetooth	Bulls Bay	Gillnet	M	1100	1382	Reproduction
Bonnethead	Bulls Bay	Gillnet	F	895	1116	Reproduction
Bonnethead	Bulls Bay	Gillnet	F	886	1106	Reproduction
Bonnethead	Bulls Bay	Gillnet	M	705	887	Reproduction
Bonnethead	Bulls Bay	Gillnet	F	875	1084	Reproduction
Bonnethead	Bulls Bay	Gillnet	F	1035	1255	Reproduction
Bonnethead	Bulls Bay	Gillnet	M	775		Reproduction
Bonnethead	Bulls Bay	Gillnet	M	752	905	Reproduction
Bonnethead	Bulls Bay	Gillnet	M	720	899	Reproduction
Bonnethead	Bulls Bay	Gillnet	F		906	Reproduction
Bonnethead	North Edisto	Gillnet	F	900	1115	Reproduction
Finetooth	Bulls Bay	Gillnet	M	1120	1145	Reproduction
Bonnethead	St, Helena Sound	Gillnet	F	900	1115	Reproduction



MARK WILLIAMS
COMMISSIONER

A.G. 'SPUD' WOODWARD
DIRECTOR

August 1, 2013

Marin Hawk
Coastal Sharks FMP Coordinator
Atlantic States Marine Fisheries Commission
1050 N. Highland St., Suite 200 A-N
Arlington VA, 22201

Marin:

Please find attached the Georgia 2012 Coastal Sharks Compliance Report. Let me know if you require additional information.

Sincerely,

Carolyn N. Belcher, PhD
Research and Surveys Program Manager

cc: Pat Geer
Spud Woodward

Georgia Coastal Sharks Compliance Report for the Year 2012

I. Introduction

A variety of shark species occur in Georgia waters throughout the year, however, the highest abundances occur from mid-April through October. Georgia does not allow for the use of gillnets or longline in state waters and as such there is no directed commercial harvest of shark species. However, Georgia does have one active Federal shark dealer and 3 active fishing vessels that land shark species captured outside of the three mile limit. Recreationally, shark species are frequently encountered during the summer months; however, relatively speaking, the number of directed trips for coastal shark species is low compared to those directed for popular finfish such as red drum, southern kingfish and spotted seatrout.

II. Previous calendar year's fishery and management program

a. Recreational Landings

See Table 1.

b. Commercial Landings

Commercial landings for sharks are confidential given there are only one federally permitted dealer and 3 active vessels in Georgia.

c. Activity and results of fishery-dependent monitoring

Although a directed fishery for sharks does not exist in Georgia waters, there are a few fishery-dependent sampling programs used by the Coastal Resources Division that could encounter bycatch of shark species. The 2012 data for each program are provided below.

TIP Sampling - Coastal Resources Division (CRD) personnel continue to participate in the collection of biometric and catch/effort data from offshore commercial finfish fishing trips using NMFS Trip Interview Program (TIP) collection protocol. During 2012 TIP sampling was conducted, resulting in 6 snapper-grouper trips; however, no shark species were observed.

Bycatch Characterization - CRD conducts fishery-dependent bycatch characterization studies aboard large trawl whelk vessels. These studies are supported through CRD's federally funded Atlantic Coastal Fisheries Cooperative Management Act (P.L. 103 - 206) project. Participation in the whelk fishery continues to diminish. No trips were observed during this reporting period.

Marine Sportfish Carcass Recovery Project - The Marine Sportfish Carcass Recovery Project, a partnership with recreational anglers along the Georgia coast, is used to collect biological data from finfish such as red drum, spotted seatrout, southern flounder, sheepshead, and southern kingfish. Chest freezers were located at public access points along the Georgia coast. Each freezer is clearly marked

and contains a supply of plastic bags, pencils, and data card. Anglers place their filleted fish carcasses in plastic bags along with completed data in the freezer. CRD personnel collect the carcasses and process them to determine species, length, and gender. Sagittal otoliths are removed and processed to determine the age of the fish. In 2012, a total of 4,411 fish carcasses were donated through this program. No coastal shark species were included.

d. Activity and results of fishery-independent monitoring

Georgia has a number of fishery independent surveys that sample in areas where coastal shark species are encountered and one survey specifically designed to sample subadult sharks in Georgia's inshore waters.

Adult Red Drum Survey (SEAMAP)

Sampling occurs in inshore and nearshore waters of southeast Georgia and in offshore waters of northeast Florida. Sampling occurs from mid-April through the end of December. Sampling gear consists of a bottom set 926m, 600lb test monofilament mainline configured with 60, 0.5 m gangions made of 200lb test monofilament. Each gangion consists of a longline snap and either a 12/0 or 15/0 circle hook. Thirty hooks of each size are deployed during each set. All hooks are baited with squid. Soak time for each set is 30 minutes. During 2012, CRD staff deployed 214 sets consisting of 12,838 total hooks and 107 hours of total soak time. A total of 740 sharks, representing 9 species were captured during the 2012 season (Table 2).

Shark Nursery Survey (COASTSPAN)

Sampling occurs in the inshore waters of St. Simons and St. Andrew sounds. Sampling occurs from mid-April through the end of September. Sampling gear consists of a 305 m braided rope mainline configured with 50, 1 m gangions made of 200lb test monofilament. Each gangion is configured with a longline snap and a 12/0 circle hook. All hooks are baited with squid. Soak time for each set is 30 minutes. During 2012, CRD staff fished 115 longline stations consisting of 5,747 hooks and a total of 57.5 hours of soak time. A total of 432 sharks, representing 8 species were captured during 2012 (Table 2).

Ecological Monitoring Survey (EMS)

Each month, a 40-foot flat otter trawl with neither a turtle excluder device nor bycatch reduction device is deployed at 42 stations across six estuaries. At each station, a standard 15 minute tow is made. During this report period, 494 tows/observations were conducted, totaling 123.5 hours of tow time. A total of 181 sharks, representing 6 species were captured during 2012 (Table 2).

Juvenile Trawl Survey (JTS)

Monitoring of estuarine finfish and crustaceans in the lower salinity, upriver sectors of selected estuaries is done monthly as part of the Juvenile Trawl Survey conducted onboard the research vessel *Navigator*. A 20-foot semi-balloon otter trawl is towed for 5 minutes at 18 stations allocated across three Georgia estuaries. In 2012, 209 tows (observations) were conducted, totaling 17.41 hours of tow time. No sharks were observed during the 2012 season.

Marine Sportfish Population Health Survey (MSPHS)

The MSPHS is a multi-faceted ongoing survey used to collect information on the biology and population dynamics of recreationally important finfish. Currently two Georgia estuaries are sampled on a seasonal basis using entanglement gear.

During the June to August period, young-of-the-year red drum in the Altamaha/Hampton River and Wassaw estuaries are collected using gillnets to gather data on relative abundance and location of occurrence. During the September to November period, fish populations in the Altamaha/Hampton River and Wassaw estuaries are monitored using monofilament trammel nets to gather data on relative abundance and size composition. In 2012, a total of 216 gillnet and 158 trammel net sets were made, resulting in the capture of 259 individuals representing five species of coastal sharks (Table 2).

e. Copy of regulations that were in effect, including a reference to the specific compliance criteria as mandated in the FMP

See Attachment 1.

f. Review of progress in implementing habitat recommendations

N/A

III. Planned management programs for the current calendar year

a. Summarize regulations that will be in effect

All current regulations regarding coastal sharks remain in effect through 2012. Rule 391-2-4.04 restricts fishermen to the use of handline or rod and reel for shark species. Coastal sharks are managed in two groups: (1) "Sharks" defined as all species of sharks other than those comprising the "small shark composite" and the following: sandtiger, sandbar, silky, bigeye sandtiger, whale, basking, white, dusky, bignose, galapagos, night, reef, narrowtooth, Caribbean sharpnose, smalltail, Atlantic angel, longfin mako, bigeye thresher, sharpnose sevengill,

bluntnose sixgill, and bigeye sixgill; and (2) “Small Shark Composite” which includes Atlantic sharpnose shark, bonnethead and spiny dogfish.

Atlantic sharpnose sharks and bonnetheads are restricted to a 30” FL minimum size and a creel limit of 1 per person per day. Species identified by the “Sharks” grouping are limited to 1 per person per boat whichever is less and a 54” FL minimum size. The fishing season is open year round. No person operating as a dealer may buy or sell “Sharks” and “Small Shark Composite” species caught in state waters without first obtaining a federal Commercial Shark Dealer Permit and when state or federal quotas for species within those groups have been reached. Any commercial catch from state waters would be restricted to the daily creel and size limits. All coastal sharks must be landed whole, and transfer at sea is prohibited.

b. Summarize monitoring programs that will be performed

Pursuant to Georgia law (O.C.G.A. Section 27-4-118 and Board of Natural Resources Rule 391-2-4-.09) all commercial harvesters landing seafood in Georgia are required to record their harvest and submit these records to the Department of Natural Resources. Historically, Georgia's commercial seafood landings have been collected as part of the NMFS Cooperative Statistics Program. As Georgia’s participation in ACCSP continues, catch/effort and economic information have been added to the harvest data collected for every commercial fishing trip terminating in Georgia. These data are collected monthly and afford Georgia’s marine fishery managers the opportunity to conduct real time monitoring of the status and trends in our commercial fisheries.

Monitoring of the commercial fishery for both bycatch characterization and landings will continue. O.C.G.A 27-4-110 requires that anyone wishing to engage in commercial fishing in the salt waters of Georgia must obtain a commercial fishing license. Further O.C.G.A. 27-4-118 requires that each commercial fisherman maintain a record and report their landings to and in a manner specified by the Department of Natural Resources. Those reporting requirements are detailed in Board Rule 391-2-4-.09. Additionally, any Georgia seafood dealer must be licensed by the Department of Agriculture (O.C.G.A. 26-2-312) and maintain records and report to the Department of Natural Resources per O.C.G.A 27-4-136 and Board Rule 391-2-4-.09.

The Ecological Monitoring Survey, Juvenile Trawl Survey, Adult Red Drum Survey, Shark Nursery Survey, Marine Sportfish Carcass Recovery Project, and Marine Sportfish Population Health Survey will continue in 2012.

c. Highlight any changes from the previous year

N/A

Table 1. Marine Recreational Information Program (MRIP) catch summary for coastal shark species captured in waters off Georgia during 2012.

	Harvest Numbers (A+B1)	PSE (A+B1)	Observed Harvest (A)	PSE (A)
SHARK, ATLANTIC SHARPNOSE	3,437	59	0	0
SHARKS, REQUIEM	968	107	0	0
SHARK, BONNETHEAD	451	74	3,437	59
SHARK, BLACKNOSE	0	0	0	0
SHARK, BLACKTIP	0	0	451	74
SHARK, BULL	0	0	0	0
SHARK, FINETOOTH	0	0	0	0
SHARK, HAMMERHEAD, GREAT	0	0	0	0
SHARK, NURSE	0	0	0	0
SHARK, SANDBAR	0	0	0	0
SHARK, SPINNER	0	0	0	0
SHARK, TIGER	0	0	0	0
SHARKS, HAMMERHEAD	0	0	0	0

	Numbers Released Alive (B2)	PSE (B2)	Total Catch Numbers (A+B1+B2)	PSE (A+B1+B2)
SHARKS, REQUIEM	319,132	20	320,100	20
SHARK, BONNETHEAD	99,117	21	99,569	21
SHARK, ATLANTIC SHARPNOSE	44,339	84	47,777	78
SHARKS, HAMMERHEAD	3,033	54	3,033	54
SHARK, BLACKTIP	3,016	44	3,016	44
SHARK, BLACKNOSE	918	34	918	34
SHARK, BULL	626	101	626	101
SHARK, SANDBAR	365	74	365	74
SHARK, NURSE	137	61	137	61
SHARK, SPINNER	110	68	110	68
SHARK, HAMMERHEAD, GREAT	41	98	41	98
SHARK, TIGER	11	93	11	93
SHARK, FINETOOTH	5	97	5	97
SHARKS, REQUIEM	319,132	20	320,100	20
SHARK, BONNETHEAD	99,117	21	99,569	21

Table 1. Cont'd.

	Weight* (Lb) of Harvest (A+B1)	PSE Weight (A+B1)
SHARK, ATLANTIC SHARPNOSE	39,440	60
SHARK, BONNETHEAD	3,287	68
SHARK, BLACKNOSE	0	0
SHARK, BLACKTIP	0	0
SHARK, BULL	0	0
SHARK, FINETOOTH	0	0
SHARK, HAMMERHEAD, GREAT	0	0
SHARK, NURSE	0	0
SHARK, SANDBAR	0	0
SHARK, SPINNER	0	0
SHARK, TIGER	0	0
SHARKS, HAMMERHEAD	0	0
SHARKS, REQUIEM	0	0

* Use Caution With Weight Estimates!

Weight estimates are only calculated for harvest (A+B1), not for harvest type A only or type B1 only or type B2 catch (released alive fish).

Released alive catch (B2) weight cannot be estimated because these fish generally are different sizes from harvested fish due to regulatory limits or angler preference, hence it would be inappropriate to apply the average harvested (A+B1) size to the released fish number.

Total catch includes released alive fish (type B2) so total catch weight cannot be computed for the total catch estimates.

Weight estimates are minimums and may not reflect the actual total weight landed or harvested.

Table 2. Numbers of coastal sharks captured in Georgia fishery independent surveys in 2012 by species and by survey.

	SEAMAP	COASTSPAN	EMS	MSPHS
Atlantic sharpnose shark	476	266	107	75
Bonnethead	105	104	67	169
Blacknose shark	95	0	1	1
Sandbar shark	20	46	1	0
Blacktip shark	19	9	4	5
Smooth dogfish	12	1	0	0
Tiger shark	8	0	0	0
Scalloped hammerhead	4	2	1	0
Finetooth shark	1	1	0	9
Spinner shark	0	3	0	0
All Species Combined	740	432	181	259

Attachment 1. Georgia's current coastal shark regulations . Last updated April 14, 2010.
Pertinent code is highlighted in yellow.

Saltwater Fishing Regulations

Chapter 391-2-4

**RULES
OF
GEORGIA DEPARTMENT OF NATURAL RESOURCES
COASTAL RESOURCES DIVISION**

**CHAPTER 391-2-4
SALTWATER FISHING REGULATIONS**

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391-2-4-.04 Saltwater Finfishing

391-2-4-.04 Saltwater Finfishing.

(1) **Purpose.** The purpose of these Rules is to implement the authority of the Board of Natural Resources to promulgate rules and regulations based on sound principles of wildlife research and management, establishing the seasons, creel limits, and minimum sizes for certain finfish.

(2) **Definitions.**

(a) "Daily creel limit" means the lawful amount of a species of finfish that a person may take in one day or possess at any one time, except at one's place of abode or at a commercial storage facility provided the Board has not prohibited sale of that species.

(b) "Minimum size" means the species' specific size in length, specified as fork length, lower jaw fork length or total length, below which size it is unlawful to possess that finfish species.

(c) "Open Season" means that specified period of time during which one may take from any of the waters of this state certain finfish species.

Chapter 391-2-4

Saltwater Fishing Regulations

(d) "Sharks" means all species of sharks other than those comprising the small shark composite as defined in subparagraph 2(e) and the following: Sand tiger, Sandbar, Silky, Bigeye sand tiger, Whale, Basking, White, Dusky, Bignose, Galapagos, Night, Reef, Narrowtooth, Caribbean sharpnose, Smalltail, Atlantic angel, Longfin mako, Bigeye thresher, Sharpnose sevengill, Bluntnose sixgill, and Bigeye sixgill.

(e) "Small Shark Composite" means a group of sharks inclusive of Atlantic sharpnose, Bonnethead, and Spiny dogfish.

(f) “Handline” means a mainline to which no more than two hooks are attached and which is retrieved by hand without the aid of mechanical devices.

(3) **Seasons.** The following species may be taken in accordance with the seasons set forth below, except as otherwise specifically provided herein:

	SPECIES	SEASON
(a)	Spanish mackerel	Mar. 16—Nov. 30
(b)	King mackerel	All Year
(c)	Cobia	Mar. 16—Nov. 30
(d)	Red Snapper	All Year
(e)	Gag grouper	All Year
(f)	Amberjack	Mar. 16—Dec. 31
(g)	Black sea bass	All Year
(h)	Bluefish	Mar. 16—Nov. 30
(i)	Sheepshead	All Year
(j)	Reserved	
(k)	Reserved	
(l)	Reserved	
(m)	Tarpon	Mar. 16—Nov. 30

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(n)	Atlantic sturgeon	No Open Season has been established by the Board of Natural Resources.
(o)	Reserved	
(p)	Red Drum	All Year
(q)	Dolphin	All Year
(r)	Small Shark Composite	All Year
(s)	Sharks	All Year
(t)	Red Porgy	All Year

(4) **Daily Creel Limits and Possession Limits.** The following species may be taken in accordance with the daily creel limits and possessed in accordance with the limits set forth below, except as otherwise specifically provided herein:

	SPECIES	DAILY CREEL LIMIT	POSSESSION LIMIT
(a)	Spanish mackerel	15	15
(b)	King mackerel	3	3
(c)	Cobia	2	2
(d)	Red snapper	2	2
(e)	Gag grouper	2	2
(f)	Amberjack	1	1
(g)	Black sea bass	15	15

(h)	Bluefish	15	15
(i)	Sheepshead	15	15
(j)	Reserved		
(k)	Reserved		
(l)	Reserved		
(m)	Tarpon	1	1

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(n)	Atlantic sturgeon	This species may not be taken or possessed as no Open Season has been established by the Board of Natural Resources.	
(o)	Reserved		
(p)	Red Drum	5	5
(q)	Dolphin	10 per person not to exceed 60 per boat, except headboats with a valid certificate of inspection would be allowed a bag limit of 10 dolphin per paying passenger	10 per person not to exceed 60 per boat, except headboats with a valid certificate of inspection would be allowed a bag limit of 10 dolphin per paying passenger
(r)	Small Shark Composite	1	1
(s)	Sharks	1 per person or boat	1 per person or boat
(t)	Red Porgy	3	3

(5) **Minimum Size Limits.** It shall be unlawful to have in possession the following species less than the minimum size limits set forth below, except as otherwise specifically provided herein:

SPECIES	MINIMUM SIZE LIMIT
(a) Spanish mackerel	twelve inches (12") fork length

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1. A catch of Spanish mackerel under the minimum size limit is allowed equal to five percent by weight of the total catch of Spanish mackerel on board a trawler.

- (b) King mackerel twenty-four inches (24") fork length
- (c) Cobia thirty-three inches (33") fork length
- (d) Red snapper twenty inches (20") total length
- (e) Gag grouper twenty-four inches (24") total length
- (f) Amberjack twenty-eight inches (28") fork length
- (g) Black sea bass eleven inches (11") total length
through June 30, 2007
twelve inches (12") total length beginning July 1, 2007
- (h) Bluefish twelve inches (12") fork length
- (i) Sheepshead ten inches (10") total length
- (j) Reserved
- (k) Reserved
- (l) Reserved
- (m) Tarpon sixty-eight inches (68") fork length
- (n) Atlantic sturgeon This species may not be possessed
as no Open Season has been established by the Board of Natural
Resources.
- (o) Reserved
- (p) Red drum fourteen inches (14") total length
- (q) Dolphin twenty inches (20") fork length
- (r) Small Shark thirty inches (30") fork length
- Composite
- (s) Sharks fifty-four inches (54") fork length
- (t) Red porgy fourteen inches (14") total length

(6) Restrictions on Sale. It shall be unlawful for any person in this state to sell, purchase, or barter any of the following species or part thereof, except as otherwise specifically provided herein:

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(a) No person operating as a dealer may buy or sell Sharks and Small Shark Composite species caught in state waters without first obtaining a federal Commercial Shark Dealer Permit and when state or federal quotas for species within those groups have been reached.

(b) Tarpon.

(c) From April 1 through April 30, no person may sell amberjack harvested from Georgia waters or from the South Atlantic Exclusive Economic Zone. The prohibition on sale during April does not apply to amberjack that were harvested, landed ashore, and sold prior to April 1 and were held in cold storage by a dealer or processor. This prohibition also does not apply to a dealer's purchase or sale of amberjack harvested from another management area other than Georgia or the South Atlantic Exclusive Zone, provided such fish is accompanied by documentation of harvest outside of Georgia waters or the South Atlantic.

(d) From March 1 through April 30, no person may sell gag grouper harvested from Georgia waters or from the South Atlantic Exclusive Economic Zone. The prohibition on sale from March 1 through April 30 does not apply to gag grouper that were harvested, landed ashore, and sold prior to March 1 and were held in cold storage by a dealer or processor. This prohibition also does not apply to a dealer's purchase or sale of gag grouper harvested from another management area other than Georgia or the South Atlantic Exclusive Economic Zone, provided such fish is accompanied by documentation of harvest outside of Georgia waters or the South Atlantic.

(e) From January 1 through April 30, no person may sell red porgy harvested from Georgia waters or from the South Atlantic Exclusive Economic Zone. The prohibition on sale from January 1 through April 30 does not apply to red porgy that were harvested, landed ashore, and sold prior to January 1 and were held in cold storage by a dealer or processor. This prohibition also does not apply to a dealer's purchase or sale of red porgy harvested from another management area other than Georgia or the South Atlantic Exclusive Economic Zone, provided such fish is accompanied by documentation of harvest outside of Georgia waters or the South Atlantic.

(7) Possession and Landing Specifications.

(a) All fish subject to minimum size and creel limits specified in Rules 391-2-4-.04(4) and 391-2-4-.04(5) may be possessed in state waters or landed only with head and fins intact.

(b) It shall be unlawful to transfer at sea in State waters from a fishing vessel to any other vessel or person any fish caught which are subject to the minimum creel limits and minimum size limits specified in Rules 391-2-4-.04(4) and 391-2-4-.04(5).

(c) Except as otherwise provided by law, it shall be unlawful to fish for sharks or small shark composite species for recreational purposes with any gear other than rod and reel or handline as defined in subparagraph (2)(f) above.

Authority O.C.G.A. Secs. 12-2-24, 27-1-4, 27-4-130.1. **History.** Original Rule entitled "Saltwater Finfishing" adopted. F. Aug. 24, 1989; eff. Sept. 13, 1989. **Amended:** F. July 30, 1991; eff. Aug. 19, 1991. **Amended:** F. Feb. 26, 1992; eff. Mar. 17, 1992. **Amended:** F. July 22, 1992; eff. Aug. 11, 1992. **Amended:** F. July 26, 1993; eff. Aug. 15, 1993. **Amended:** F. Nov. 3, 1995; eff. Nov. 23, 1995. **Amended:** ER. 391-2-4-0.34-.04 adopted. F. and eff. Jan. 29, 1997, the date of adoption, to be in effect for 120 days or until the effective date of a permanent Rule covering the same subject matter is adopted, as specified by the Agency. **Amended:** F. Apr. 23, 1997; eff. May 13, 1997. **Amended:** F. Oct. 23, 1998; eff. Nov. 12, 1998. **Amended:** F. Oct. 28, 1999; eff. Nov. 17, 1999. **Amended:** F. Aug. 28, 2001; eff. Sept. 17, 2001. **Amended:** F. Dec. 8, 2006; eff. Dec. 28, 2006. **Amended:** Feb. 11, 2009; eff. Mar. 3, 2009. **Amended:**

Coastal Sharks Plan Development Team

Season and Adjustable Possession Limit White Paper

December 9, 2013

At the October 2013 Coastal Sharks Board Meeting, the Management Board (Board) directed the Plan Development Team (PDT) to develop a white paper on season and possession limit options. Currently, the Board follows NOAA Fisheries openings and closures for coastal sharks groups and sets annual possession limits consistently with NOAA Fisheries. Under *Section 4.5.2* of the Interstate Fishery Management Plan (FMP) for Coastal Sharks, however, these measures are subject to change.

Seasons

As indicated above, the Board does not actively set seasons for coastal sharks, but rather follows NOAA Fisheries openings and closures. This effectively results in the Board following NOAA Fisheries coastal shark seasons. The reason for this was to ensure consistent management of coastal sharks throughout state and federal waters. However, there has been discussion at Board meetings of the opening dates for the coastal shark fisheries in recent years. Due to the reoccurring pattern, the Board would like to investigate seasonal options for state waters that would eliminate the need for any future discussions. Key issues of concern for coastal sharks opening dates are:

- Florida fishermen have expressed concern with the January 1 opening date because they are targeting other species at that time of year. Postponing the opening date would allow them greater access to the shark fishery during the time of year when they are targeting sharks.
- NOAA Fisheries has a time/area closure for bottom longline shark fishermen in federal waters off North Carolina from January 1 – July 31 every year to protect and aid in rebuilding dusky and sandbar sharks.
- Recreational and commercial fishermen are prohibited from possessing any species in the Aggregated Large Coastal Shark or Hammerhead species groups in Virginia, Maryland, Delaware and New Jersey state waters from May 15 through July 15 to protect nurseries and pupping grounds of sharks during particularly vulnerable stages in their life cycle. This closure may put these states at a disadvantage, depending on when the coastal shark fisheries open and close and when the sharks migrate into their waters.

If the Board were to add commercial shark fishery seasons to the FMP, any shark fishermen may have to abide by the more conservative measures (either federal or state) depending on how the states implement the seasons.

Adjustable Possession Limits

NOAA Fisheries has regulations that provide the flexibility for adjustable possession limits (0-36 fish per trip) to allow for equitable fishing opportunities among fishermen from the different states given the migratory pattern of sharks during the year. To date, NOAA Fisheries has not used these adjustable possession limits.

Currently, the Board may set possession limit annually, but there is nothing in the plan that allows them to modify the possession limit if NOAA Fisheries changes the trip limit in-season. An addendum may change this, if the PDT would like to pursue the issue. In 2011, per the request of NOAA Fisheries, the Board discussed several times the possibility of an addendum to add flexibility to the state possession limits in order to match any in-season changes NOAA Fisheries may make. At that time, the Board determined that most states could be responsive to any in-season adjustments NOAA Fisheries made without an addendum. **Although, it is unclear how quickly states could response to in-season adjustments.**

PDT Discussions

The PDT held a conference call to begin developing the white paper and to plan what information is necessary for the Board. After some discussion, the PDT agreed upon the following:

- Different seasons for states and federal waters would be difficult to manage, monitor and enforce. In order to solve this issue, the PDT recommends writing a letter to NOAA Fisheries to request that NOAA Fisheries always opens specific shark fisheries after a certain date. For example, the Board would write a letter asking NOAA Fisheries to always open the shark fisheries after Month, Day to ensure equitable fishing opportunities to fishermen from all states.
 - If the Board did set a different season than NOAA Fisheries, that season would not necessarily change the federal season and some states currently have regulations that would allow federal permit holders to land sharks during a state closure. For example, Florida allows federal permit holders to land species that are on the state's prohibited species list. These nuances could make enforcement more difficult.
 - Every year, NOAA Fisheries must consider a range of factors when establishing the opening dates for all shark species/management groups including: the amount of quota available; the estimated length of the season based on past fishing rates; variations in seasonal distribution, abundance or migration patterns of the shark species and/or management groups; whether the catch rates in one part of a region could preclude fishermen in other parts of the region from having a reasonable opportunity to harvest a portion of the quota; and the effects of fishing opportunities in other fisheries. Any request to NOAA Fisheries to establish a date should discuss how that date would affect the factors NOAA Fisheries must consider.
 - The Board could write such a letter on an annual basis in anticipation of NOAA Fisheries' specification process (usually proposed rule late summer/early fall and final rule mid-fall) after seeing how the shark season went that year or could write one letter that would last for several years.
- Since NOAA Fisheries has the option for adjustable possession limits, states should also. Adding this language into the FMP would not be difficult, but adjusting the regulations in the states may pose problems.

Due to recent changes in shark management, the PDT decided to use data since 2008 to investigate the "always open after" date. This was primarily because sandbar sharks were added

to the prohibited species list, except for the research fishery. This change had a large impact on landings, so landings since 2008 most accurately reflect the trends in the current fishery.

Large Coastal Sharks (does not include the Shark Research Fishery quotas)

Year	Opening Date	Adjusted Quota (mt)	Closure Date	Quota Harvested (mt)	% of Quota Harvested	Length of Season (days)
2008	24-Jul	187.8	31-Dec	164.4	88	160
2009	23-Jan	187.8	1-Jul	203.3	108.3	159
2010	15-Jul	169.7	5-Dec	174.3	103	143
2011	15-Jul	190.4	15-Nov	156.5	82	123
2012	15-Jul	183.2	31-Dec	146.8	80	169
2013	1-Jan	168.9 (LCS) 27.1 (HH)	30-Sept	154.6 (LCS) 13.4 (HH)	91 (LCS) 49 (HH)	272

Table 1: Quotas, openings and closure dates for the Atlantic large coastal shark fishery.

Average season length for 2008-2012 is 151 days, with three years (2008, 2011 and 2012) reaching 80% of the quota. NOAA fisheries closes a fishery when 80% of the quota is projected to be reached.

In order to prevent an early closure, this would require an opening date of August 2 at the latest. If you include 2013, the average season length is 171 days, requiring an opening date of July 13 at the latest. Because 2013 data is not available for all states, the analyses below only consider data through 2012 and an opening date of August 2.

Impact on State Landings of Large Coastal Sharks:

The follow tables explore the effect of different start dates on the states. The tables are based on pounds lost each year (using landings from 2008-2012). For example, if the season opened on June 1, states would lose landings from January 1 – May 31. The table does not incorporate any end date for the shark fishing season.

State	Pounds lost per year based on data from 2008-2012 (% of state landings)		
	Season opens on June 1	Season opens on July 1	Season opens on Aug 1 (after NC closed area re-opens)
ME	0	0	0
NH	0	0	0
MA	0	0	0
CT	0	0	0
RI	0	0	0
NY	24.90 (< 1%)	138.3 (5%)	175.2 (7%)
NJ	20.6 (1%)	118.6 (7%)	921.2 (52%)
MD	0	36.42 (7%)	227.7 (42%)
VA	2,542 (5%)	8,447 (16%)	16,460 (32%)
NC	5,148 (5%)	18,154 (19%)	33,481 (34%)
SC	755 (2%)	1,313 (3%)	10,674 (25%)
GA	0	9.2 (<1%)	1,468 (8%)
FL	94,352 (27%)	113,974 (32%)	161,911 (46%)

An opening date of June 1 would result in FL missing out on a quarter of the state's landings, and an opening date of July 1 would result in FL missing almost a quarter of the state's landings. An opening date of August 1 would greatly impact NJ and FL landings of large coastal sharks. NJ lands almost 50% of their total harvest in July, and Florida lands almost a third of its landings before August 1. MD, VA and NC would all lose almost a third of their landings.

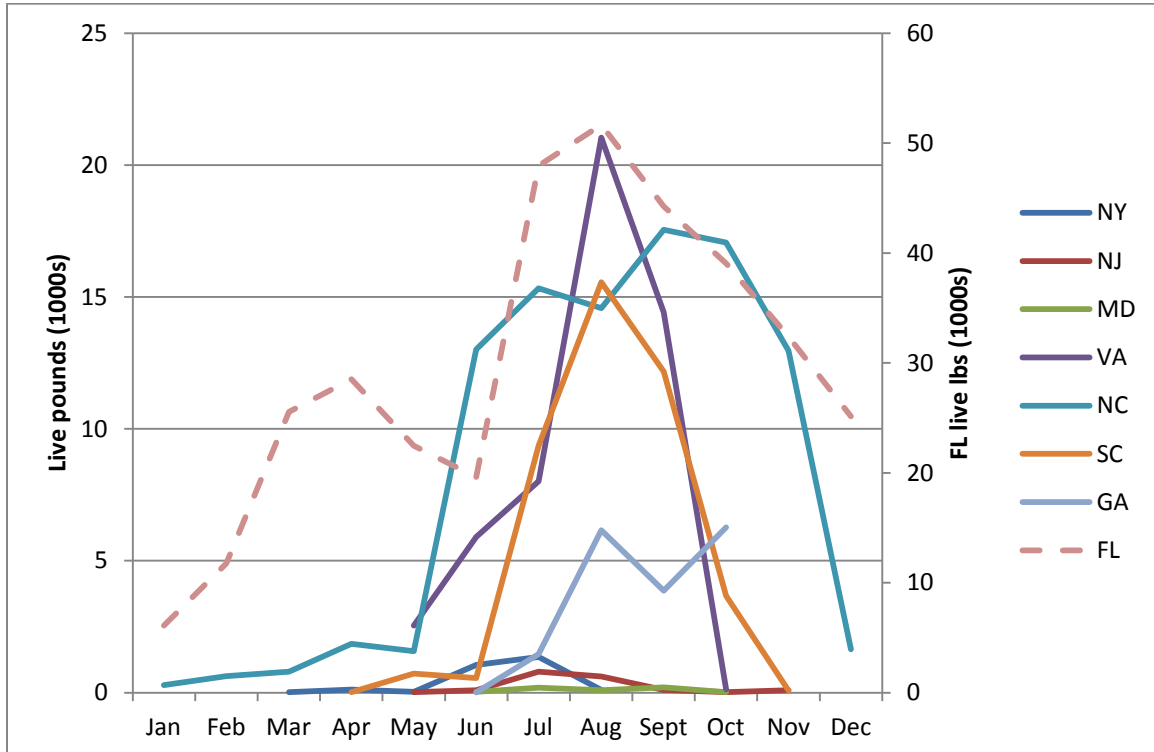


Figure 1: Average annual large coastal shark (including hammerhead) landings on the Atlantic coast by state, 2008-2012. Florida is on the secondary axis.

Small Coastal Sharks

Year	Opening Date	Adjusted Quota (mt)	Closure Date	Quota Harvested (mt)	% of Quota Harvested	Length of Season (days)
2008	1-Jan	454.4	31-Dec	282.2	62	365
2009	23-Jan	454	31-Dec	285	62.8	342
2010	1-Jun	221.6 (NBN) 19.9 (BN)	2-Nov	150.6 (NBN) 14.9 (BN)	68 (NBN) 75 (BN)	154
2011	1-Jan	314.4 (NBN) 19.9 (BN)	31-Dec	229.7 (NBN) 15.0 (BN)	73 (NBN) 75 (BN)	365
2012	24-Jan	332.4 (NBN) 19.9 (BN)	31-Dec	289.4 (NBN) 23.4 (BN)	87 (NBN) 118 (BN)	341
2013	1-Jan	193.5 (NBN) 18.0 (BN)	30-Sept	102.5 (NBN) 15.1 (BN)	53 (NBN) 84 (BN)	272

Table 2: Quotas, openings and closure dates for the small coastal shark (and blacknose, after 2010) fishery. 2013 was the first year SCS were split between the Gulf and the Atlantic regions. NBN = non blacknose SCS; BN = blacknose shark.

Non-blacknose small coastal sharks and blacknose sharks do not present as much of a concern as large coastal sharks, because the landings do not often reach the quota. In 2010, when the fishery closed before December 31, it was late enough in the season that a majority of states had the opportunity to fish. Since the most recent years' (2011 and 2012) season did not harvest the quota, a January 1 date may not pose a problem for SCS and blacknose.

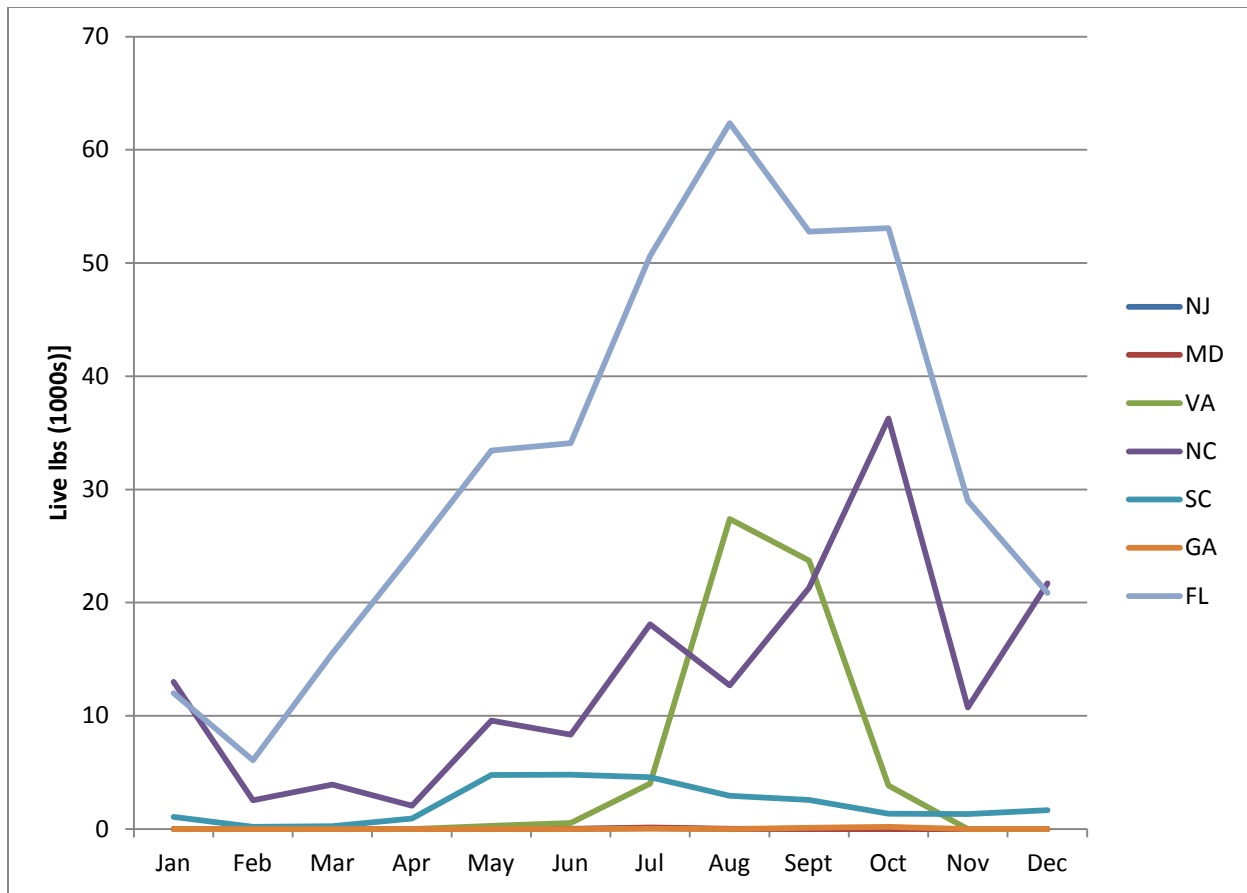


Figure 2: Average annual small coastal shark (including blacknose) landings on the Atlantic coast by state by month, 2008-2012.

Pelagic species

Year	Opening Date	Adjusted Quota (mt)	Closure Date	Quota Harvested (mt)	% of Quota Harvested	Length of Season (days)
2008	1-Jan	488	31-Dec	108.2	22	365
<i>Blue</i>	1-Jan	273	31-Dec	1.5	0.5	
<i>Porbeagle</i>	1-Jan	1.7	18-Nov.	2.2	127	299
2009	23-Jan	488	31-Dec	94.9	19.4	342
<i>Blue</i>	23-Jan	273	31-Dec	2.2	<1	
<i>Porbeagle</i>	23-Jan	1.4	31-Dec	1.6	112	342
2010	5-Jan	488	31-Dec	130	27	360
<i>Blue</i>	5-Jan	273	31-Dec	4.1	2	
<i>Porbeagle</i>	5-Jan	1.5	4-Sep	1.7	114	242
2011	1-Jan	488	31-Dec	118.4	24	365
<i>Blue</i>	1-Jan	273	31-Dec	7.2	2	
<i>Porbeagle</i>	1-Jan	1.6	29-Aug	2.6	163	240
2012	24-Jan	488	31-Dec	135.7	28	341
<i>Blue</i>	24-Jan	273	31-Dec	8.9	3	
<i>Porbeagle</i>	24-Jan	0.7	31-May	1.9	265	127
2013	1-Jan	488	TBD	97.8	20	TBD
<i>Blue</i>	1-an	273	TBD	4.4	2	TBD
<i>Porbeagle</i>	CLOSED	--	CLOSED	<1 mt	<1	0

Table 3: Quotas, openings and closure dates for the pelagic fishery, 2008-2012.

Due to the low landings rate of the species in the pelagic group, this species group does not present a concern in terms of seasonal consideration. A January start date has been used in the past and has not caused any problems.

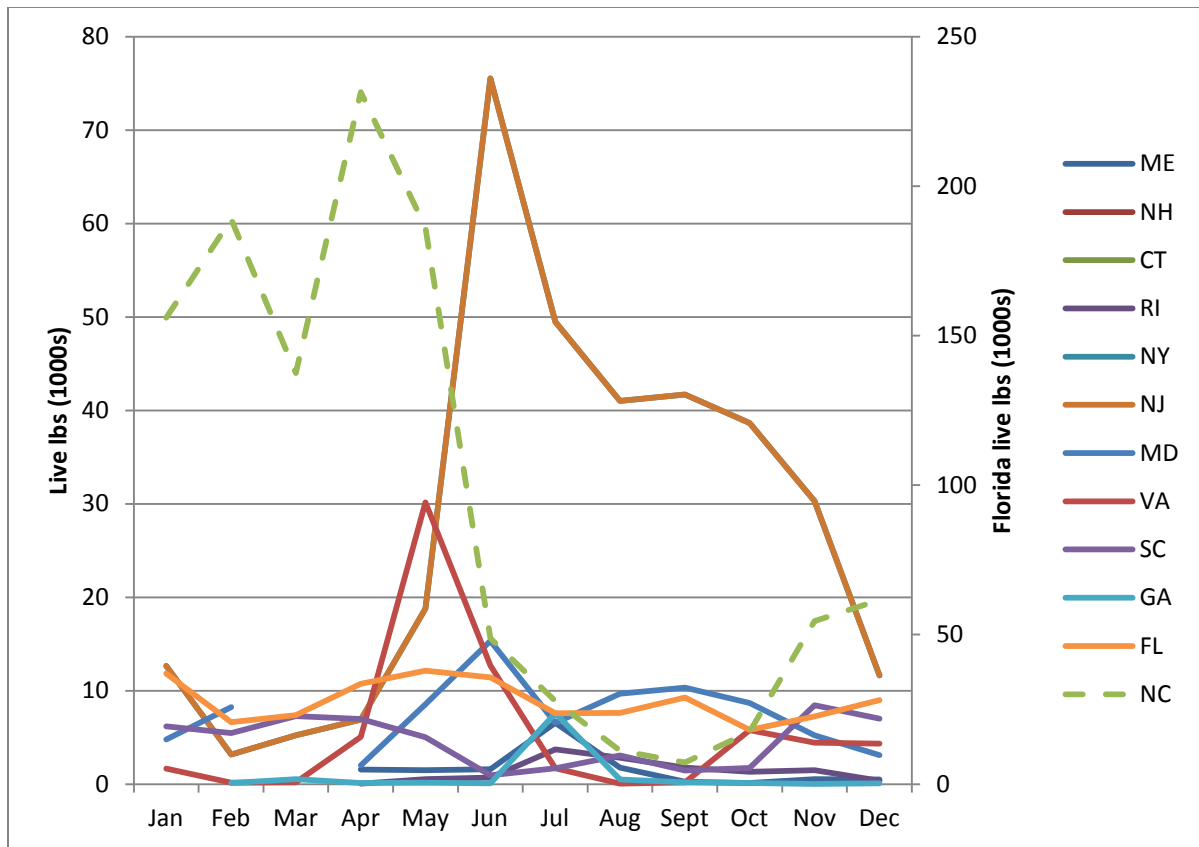


Figure 3: Average annual pelagic landings on the Atlantic coast by state by month, 2008-2012. North Carolina is on the secondary axis.