Atlantic States Marine Fisheries Commission

Spiny Dogfish and Coastal Shark Management Board

February 21, 2013 11:30 a.m.-12:30 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*) 11:30 a.m.

2. Board Consent 11:30 a.m.

Approval of Agenda

• Approval of Proceedings from October 2012

3. Public comment 11:35 a.m.

- 4. Consider Draft Addendum II to the Interstate Coastal Sharks Fishery Management Plan for Public Comment (*M. Hawk*) *Action* 11:40 a.m.
- 5. Consider Spiny Dogfish and Coastal Sharks Fishery Management Plan Review and State Compliance (*M. Hawk*) *Action* 12:20 p.m.
- 6. Other Business/Adjourn 12:30 p.m.

MEETING OVERVIEW

Spiny Dogfish and Coastal Sharks Management Board Meeting Thursday, February 21, 2013 11:30 a.m. – 12:30 p.m. Alexandria, VA

| Chair: Mark Gibson (RI) Assumed Chairmanship: 10/12 | Vice Chair: Adam Nowalsky (NJ) | Law Enforcement Committee Representative: Tulik/Frampton | | |
|---|--|--|--|--|
| Spiny Dogfish Technical Committee Chair: Vacant | Spiny Dogfish Advisory Panel Chair: Vacant | Dravious Doord Mostings | | |
| Coastal Shark Technical Committee Chair: Greg Skomal (MA) | Coastal Shark Advisory Panel Chair: Lewis Gillingham | Previous Board Meeting: October 25, 2012 | | |
| 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 Proceeding from October 25, 2012
- 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 Draft Addendum II for Public Comment (11:40 a.m. - 12:20 p.m.) Action

Background

- NOAA Fisheries was working to establish a quota for smoothhound sharks in Amendment 3 to the HMS (this has since been delayed)
- In August 2011, the Board directed the PDT to draft an addendum concerning state-shares of smooth dogfish to respond to the NMFS HMS quota
- In August 2012, the Board directed the TC to investigate smooth dogfish fin: carcass ratios and include that in an addendum in response to the Shark Conservation Act of 2010

Presentations

• Overview of Draft Addendum II for public comment by M. Hawk (Briefing CD)

Board actions for consideration at this meeting

• Approve Draft Addendum II for public comment.

5 & 6. Consider Fishery Management Plan Reviews (12:20 p.m. – 12:30 p.m.) Action

Background

- State Compliance Reports for spiny dogfish are due on July 1, 2012 and for coastal sharks are due on August 1, 2012
- The Plan Review Team reviewed each state report and compiled the annual FMP Review

Presentations

• Overview of the FMP Reviews by M.Hawk (Briefing CD)

Board actions for consideration at this meeting

• Approve 2011 FMP Reviews and State Compliance Report

7. Other Business/Adjourn

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

Radisson Plaza-Warwick Hotel Philadelphia, Pennsylvania October 25, 2012

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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INDEX OF MOTIONS

- 1. **Approval of agenda by consent** (Page 1).
- 2. **Approval of proceedings of August 9, 2012 by consent** (Page 1).
- 3. Move that the spiny dogfish quota for 2013 and 2014 be set at 40.842 million pounds; 2014 to 2015 be set at 41.784 million pounds; and for 2015 to 2016 be set at 41.579 million pounds; and the RSA be set at up to 3 percent starting in 2014 and 2015 (Page 10). Motion by Pat Augustine; second by Terry Stockwell. Motion carried (Page 15).
- 4. Move for a 4,000 pound trip limit for the 2013 and 2014; 2014 and 2015; 2015 and 2016 fishing seasons (Page 13). Motion by Pat Augustine; second by Terry Stockwell. Motion carried (Page 15).
- 5. Move to adopt the coastal shark specifications for 2013 as proposed by the National Marine Fisheries Service Highly Migratory Species Office (Page 16). Motion by Pat Augustine; second by David Pierce. Motion carried (Page 17).
- 6. **Motion to adjourn by consent** (Page 20).

ATTENDANCE

Board Members

Terry Stockwell, ME, proxy for P. Keliher (AA) Bernie Pankowski, DE, proxy for Sen. Venables (LA)

Doug Grout, NH (AA) G. Ritchie White, NH (GA) MA, proxy for P. Diodati (AA) Bill Adler, MA (GA) Rep. Sarah Peake, MA (LA)

Bob Ballou, RI (AA)

Rick Bellavance, RI, proxy for Rep. P. Martin (LA)

Bill McElroy, RI (GA) David Simpson, CT (AA) Rep. Craig Miner, CT (LA) Lance Stewart, CT (GA) Pat Augustine, NY (GA) Jim Gilmore, NY (AA) Tom Fote, NJ (GA)

Peter Himchak, NJ, proxy for D. Chanda (AA) Adam Nowalsky, NJ, proxy for Asm. Albano (LA) John Clark, DE, proxy for D. Saveikis (AA)

Roy Miller, DE (GA) Tom O'Connell, MD (AA)

Russell Dize, MD, proxy for Sen. Colburn (LA)

Bill Goldsborough, MD (GA) Jack Travelstead, VA (AA)

Rob O'Reilly, VA, Administrative proxy

Cathy Davenport, VA (GA) Louis Daniel, NC (AA) Bill Cole, NC (GA) John Duren, GA (GA) Robert Boyles, SC (LA)

Patrick Geer, GA, proxy for S. Woodward (AA) Jim Estes, FL, proxy for J. McCawley (AA)

Wilson Laney, USFWS Peter Burns, NMFS

Karyl Brewster-Geisz, NMFS HMS

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

Ex-Officio Members

John Tulik, Law Enforcement Committee Representative

Staff

Bob Beal Toni Kerns Marin Hawk Melissa Paine Danielle Chesky

Guests

David Pierce, MA DMF Nichola Meserve, MA DMF Dan McKiernan, MA DMF Sean McKeon, NCFA Raymond Kane, CHOIR

Tom McCloy, NJ, proxy for D. Chanda (AA)

Mark Alexander, CT DEEP Greg DiDomenico, GSSA Rick Tobins, MA FMC Amanda Keegan, OCEANA Hetti Brown, HSUS

Janice Plante, Commercial Fisheries News

The Spiny Dogfish and Coastal Shark Management Board of the Atlantic States Marine Fisheries Commission convened in the Radisson Plaza-Warwick Hotel, Philadelphia, Pennsylvania, October 25, 2012, and was called to order at 10:30 o'clock a.m. by Executive Director Robert E. Beal.

CALL TO ORDER

EXECUTIVE DIRECTOR ROBERT E. BEAL: We'll call the Spiny Dogfish and Coastal Shark Management Board together.

APPROVAL OF AGENDA

EXECUTIVE DIRECTOR ROBERT E. BEAL: The first order of business is to review the agenda. We're going to switch Items Number 4 and 5. We're going to move Number 5 ahead, which is the update of Amendment 3 to the Federal Spiny Dogfish FMP.

We will do that before we do dogfish specifications. It is probably a more logical flow to things and we can see where the Mid-Atlantic Council is going with their amendment and then we can consider ASMFC specifications for the following year. With that change, are there any other changes or other things that need to be added to the agenda? Seeing none, the agenda stands approved.

I guess before we get too far I should make the comment that Mark Gibson is the chair of this management board. Mark tweaked his knee last night so he is heading home early to have a doctor look at it or at least get some pain killers. He is not here today to chair the meeting and this board does not have a vice-chair at this time.

We will elect one at the end of today's meeting; but as the Charter states, the senior staff from ASMFC can step in and chair a board meeting when the chair is unable to be there, so that is why I am up here.

APPROVAL OF PROCEEDINGS

Moving on through the agenda, the proceedings from August 9th of this year; are there any changes or modifications for those minutes?

Seeing none, is there any objection to approving those minutes? All right, seeing none, those stand approved.

PUBLIC COMMENT

EXECUTIVE DIRECTOR ROBERT E. BEAL: Public comment; is there any public comment before the Shark and Spiny Dogfish Management Board? Seeing no hands in the back of the room, we will keep moving through the agenda.

UPDATE ON DRAFT AMENDMENT 3 TO THE FEDERAL SPINY DOGFISH FMP

EXECUTIVE DIRECTOR ROBERT E. BEAL: We are going to now tackle the update with Draft Amendment 3. Jim Armstrong has come over from the Mid-Atlantic Council. Thank you, Jim, for coming over and I think you spared Paul Rago a trip down from New England on the spiny dogfish assessment stuff, so thank you for that.

MR. JIM ARMSTRONG: I'm sure Paul appreciates that, too. I'm going to go fairly quickly through this presentation. It is the same one I gave to the Mid-Atlantic Council at our meeting in Long Branch. Then there was discussion and the council chose its preferred alternatives and approved the amendment. Since that doesn't have to happen, I can hop through it a little quicker. There are four issues in Amendment 3; research set-aside, updating EFH, dealing with delays in rulemaking and the quota allocation, which is probably the most important issue in there.

There were three alternatives under the RSA issue; do nothing, allow for a 3 percent set-aside or allow for up to a 5 percent set-aside. The 5 percent set-aside was rationalized by the low value of dogfish. During the auction process, the marginal benefit for bidding on dogfish was thought to be perhaps enhanced by a higher quantity there.

What I'll do when I go through this is I have green checkmarks – this amendment has also been approved by the New England Fishery Management Council, so a green checkmark indicates their preferred alternative. Then if something is circled in red, it indicates that there was support for that during public hearings.

You see there that 1B, the 3 percent set-aside, which is the same as all the other Mid-Atlantic FMPs, was supported by both groups. EFH is

something that we just have to update periodically for dogfish. There is not really a no action alternative on this because you have to at least review EFH. The action then was to actually update the EFH definitions based on the latest biological data.

Here we have a figure showing juvenile dogfish EFH and that is fairly extensive on the coast there and the EEZ. Here we have the updated definition so that is also a lot of area. Adult EFH and then updated. It is not a new world we're living in with that. The EFH definitions are lifestage specific.

So for dogfish, because there are juvenile and there are adult dogfish, but those designations – the designation of adult dogfish is sex-specific and size-specific. There was some difference in the updates as well in the math and how the ranking was done for the ten-minute squares, and the temperature, salinity and depth preferences were modified slightly.

There was support in public hearings for the no action alternative. Some folks I guess saw it as a waste of time. There was support by the New England Council for the action alternative to go ahead and update using the latest data, and there were some public comments supporting that as well.

Delayed implementation; if there is a delay at the beginning of the fishing year in implementing the new management measures, the effective date, in other words, of the final rule is after May 1st, then the only thing that is retained between May 1st and that effective date is the trip limit. That is just kind of a little administrative hiccup that we're going to fix by making sure that all management measures are maintained until replaced by the new measures. That received support.

Quota allocation; this is kind of the crown jewel of the amendment. As you are all probably aware, there is a conflict in federal and interstate FMPs with regard to how the coast-wide quota is allocated. The federal quota is still allocated seasonally under two periods; Period 1 getting 57.9 percent of the quota and Period 2 getting 42.1 percent of the quota. That is a proxy for geographic allocation.

While the commission has gone ahead and adopted geographic allocation directly, the

federal plan is now conflicting with that so that state fisheries could be open, the Federal Period 1 quota gets caught and then federal waters close and state waters are still open. For federal permit holders, if they want to continue fishing in state waters, they have to drop their federal permit.

Because they're in possession of a federal permit, you cannot be in possession of dogfish when the federal fishery is closed, so there is that kind of problem there. The idea here is to minimize the conflict between the two plans. The two ways of doing that are to either not allocate the federal quota at all or to match identically the interstate allocation of the quota.

So 4B is to just have a coast-wide quota and 4C is to match the geographic allocation. 4C is bit more complicated because there is just a lot more to it. It would require regional accountability measures. The federal plans now are required to have accountability measures in case the annual catch limit is exceeded.

Because of the timing of the federal data and the federal cycle in specifying things, we typically would have a one-year lag, so payment for an overage this year would not be until two years from now. Because of the periodic review under the interstate plan, the federal plan would also – because there is the potential for adjusting the allocation under the interstate plan under that review and just the speedier process that the commission uses, that was a shortcoming of this alternative under the federal plan, and so the idea was to make it a framework adjustment so that we can do it as quickly as possible to keep pace with the changes in the interstate plan.

Like the interstate plan, there would have been trading of the quota. However, it would not have accommodated the overage provisions that are in the interstate plan. Here you have your percentages that I'm sure you all know very well. The percentages are from Addendum IV. What this table shows me – and if we spend enough time on it, it might be evident to you as well – is that with the geographic allocation of the quota beginning I believe in 2009, but what we have basically is 2000, the first year in this time series, is when the federal plan went into place and then go through 2010 and we see a shift to the I guess optimized split of the coast-wide landings; 58 roughly to 42. It is not perfect but it is getting close.

The potential for continued problems even under either of the action alternatives are when the quotas are different because ideally you would have, under either one, the final state closing and federal waters closing on exactly the same day; but if the quotas are different, then that closure is going to occur at different times.

So, no matter how we fix it, anytime the quotas are different there is still going to be some problems. I think that because of the idea that would happen for every state and region versus just at least once at the end of the year under Alternative 4B was part of the reason for the matching one not getting as much support.

So, what the New England Council and some of the public supported was the elimination of an allocation scheme within the federal plan, to just specify a coast-wide quota. We had hearings where you got written comments. We're hoping for a May 1 implementation date. Basically, the motion that was put in place by both the New England Council and the Mid-Atlantic Council was to support the B alternatives under all the issues; so 3 percent RSA, update EFH, to maintain all management measures after the start of the fishing year until replaced by the new measures, and to eliminate the seasonal allocation or coast-wide quota. That will do it for me for a little bit.

EXECUTIVE DIRECTOR BEAL: Thank you, Jim. Are there questions of Jim on where the Mid-Atlantic Council and the New England Council recommendations are going for Amendment 3? David.

DR. DAVID PIERCE: Not so much a comment but just a conclusion; the conclusion is that both councils have determined that ASMFC management of spiny dogfish by geographic region is the way to go and that the council should follow ASMFC's lead because the way we're handling it, which is a very effective way of handling it, and we deal with the specific objectives that the councils have had for so many years; that is, protecting the interests of the southern states and the northern states by geographic distribution. So, it is a very good outcome and I'm pleased with what was done by both councils.

EXECUTIVE DIRECTOR BEAL: Thank you, David, and I think Jim made an important point in one his last slides, which is if the ASMFC and

the councils and the federal government starts out with different quotas at the beginning of the year, there are still going to be problems no matter how the fishery is allocated. If both groups are on the same page, things will work a lot better. Pete.

MR. PETER HIMCHAK: Yes, just an observation on the alignment of the plans has the benefit of reducing management uncertainty and quota monitoring. New Jersey went over 180,000 pounds for the 2011/2012 season and that was due because of the confusion on who to notify about what closure, and it affected them. I'm very happy to see this amendment and quota overages are not likely to occur by any substantial amount.

EXECUTIVE DIRECTOR BEAL: Thank you, Pete; you're right, there have been examples of problems with the differing allocation schemes that we've have. Are there any other comments on Amendment 3 or questions for Jim? All right, seeing none, we will move on to what was originally Agenda Number 4, and Jim Armstrong is going to give us an update on the stock assessment and reference points.

SET 2012/2014 SPINY DOGFISH SPECIFICATIONS

SPAWNING STOCK BIOMASS AND REFERENCE POINT UPDATE

MR. ARMSTRONG: This is another presentation that was for the council's use. This is a flow chart that shows the federal process. Once we get an assessment update, which is the first step in that – so up here we're dealing with our SSC scientific uncertainty going from an overfishing limit that is a product of this assessment update.

It is a catch level corresponding to the F to Fmsy, and then scientific uncertainty is taken into account such that the confidence that overfishing limit will not be reached is acceptable, and that is acceptable biological catch. We then acknowledged that there is a Canadian fishery, not much of one anymore, but they're going to catch what they're going to catch.

Since the unit stock extends into Canadian waters, we take what we think is going to be caught there out to get a domestic ABC. We set

that equal to our annual catch limit. Then the Monitoring Committee considers sources of management uncertainty and establishes a buffer if necessary to come up with an annual catch target. The catch includes landings and discards, so we take discards out to get our TAL.

Then we split it out into recreational and commercial components from there. Just a history of spiny dogfish catch, in the midnineties there was an unregulated fishery that targeted mature females. The stock was declared overfished in 1997and a federal FMP was implemented in 2000. Landings were greatly reduced through very restrictive trip limits and very low quotas.

The management approach during that period was to have just a bycatch allowance, a very low bycatch allowance. Landings were greatly reduced during that period. In 2010 we got a letter from NMFS noting that the 2008 and 2009 biomass estimates were both above Bmsy and so the stock was officially declared rebuilt then.

The quotas were expanded. Actually the first expansion was in 2009, prior to that letter being received achieving the F rebuilding fishing mortality rate, even the quota was tripled, I believe. Here is the history of biomass estimates since 1982, and there are three types here, an average, a three-year average and a stochastic estimate – I'm sorry, a point estimate, three-year average and a stochastic estimate.

This reflects the catch history. You see this decline here in the mid-nineties during that unregulated fishery, then a low period when even after the fishery was eliminated, and then the current high period. Some of the jumps in biomass here are actually biologically unreasonable, going from this low to a high in such a short period of time given what we believe we know about the life history and growth rates for this species.

But, the general trend of high/low/high is probably pretty dependable. For 2012 we have a biomass estimate — this is actually the distribution of stochastic estimates of spawning stock biomass or mature female biomass. The median value or modal value there relative to this vertical blue line is how high above the Bmsy target we are.

The green vertical line is the biomass threshold, so the stock is definitely not overfished. Here is the latest stochastic estimate of fishing mortality. The Fmsy, which would define overfishing, is 0.2439, so that is off the charts and there is almost a zero percent chance of overfishing occurring right now, or in 2011.

In summary the stock status is that spiny dogfish are not overfishing and overfishing is not occurring. SSB and effort are stable now. Actually SSB has increased. The point estimate of SSB is 215,444 metric tons, which you compare that to the 160 or so thousand metric ton Bmsy target. Fishing mortality F-1, which is the F on mature females or exploitable females is 0.114, much below the 0.2439 Fmsy value.

That is the information that was used to get us into this stage of the process. Actually another step that we have come up with in the federal process is to go to our AP and develop a fishery performance report. It provides the SSC in the absence of an abundance of biological data with other sources of information to consider that might be driving at least landings.

It was observed that the fishery has underperformed early in this year. The word along the waterfront is that was because the water was warm and the fish were offshore. Given their low value, there wasn't a lot of interest in going way offshore to catch dogfish. The economy in Europe, where most of the product ends up, is not well and that may be constraining demand. The market right now is not ready for huge increases in dogfish supply, but it is possible with larger quotas over a multiyear timeframe that other processors may get into the business. Longer term specifications are considered to be desirable for planning.

Of course, in North Carolina, the closure of the Inlet, with the problems there, may have been reducing the landings there outside of either availability or potential effort. There was a recommendation for developing models to look at a male dogfish fishery. That has been something that has been around since the federal fishery management plan first came up.

Male dogfish are typically not a large component of the overall landings. There are plenty of male dogfish out there and probably at least at a two to one and maybe four to one ratio to females. If somebody could come up with a way to market those things, they would have a lot dogfish to land.

There was also interest expressed at the AP in limited entry. The fear is that if trip limits are increased dramatically that new entrants may flood the fishery and some of these may be less skilled or less able to avoid protected resources and things like that. This is from the quota monitoring page that the northeast regional office maintains.

Two figures; the top is 2011 and what you see in the blue line are the actual landings. The green line is what the landings would be if they were constant and started at zero and then achieved the Period 1 quota on October 31. Then the yellow line is the previous year's landings trajectory. You can see here in 2011 that the steepness of the landings, you know, harvest rate basically was greater than that constant rate, and so we got to a period where the fishery had to be closed prior to the end of Period 1.

If we look at the current year, then what we have is that lag that I spoke about from the AP where landings were coming in at a pretty low rate and then finally started to pick up. Had they been at the rate they are currently from the beginning, we'd probably have been right on catching the whole quota, but right now it looks like it is on target to underharvest the Period 1 Quota.

Okay, at the council meeting John Boreman hops in at this point and gives the SSC presentation. I'll just say that our SSC designated this assessment as a Level 3 Assessment and then applied the risk policy accordingly. They came up the following ABC recommendations and the request, because under the federal plan we can specify management measures for up to five years – there is no harm really in finding out how many years we can get out of the SSC, so we asked for five and they gave us three, so we have ABC recommendations at roughly 25,000 metric tons constant from 2013 through 2014.

Then there are various sources of uncertainty and stuff like that. Those ABC recommendations are taken to the Monitoring Committee that meets jointly and overlaps, for the most part, with the commission's technical committee. We discuss what the appropriate quota and other management measures if necessary would be based on that total catch.

So ABC for next year would be a little under 25,000 metric tons, which is roughly 54 million pounds. That is quite a bit more than we have been landing lately. That is total catch, though, of course. It includes discards. The Canadian landings; what we did is we took the average of 2009 through 2011 because the Canadian fishery kind of fell off the table in 2009, so we consider ourselves to be in that regime or era, stanza, whatever the word is.

So we take those Canadian landings out and get our domestic ABC. I think proposed to the Monitoring Committee that we use a management uncertainty buffer based on the overages that occurred since 2010. 2010 is kind of the effort stanza that we have been operating under. It is related to the big transitions and effort that occurred after the transition to sectors in New England.

I proposed that we deduct that actually as a percentage. The average of the overages for 2010 and '11 was 3.99 percent, and I took that out of the ACL to get an ACT, and then I took discards out to get total landings, and then we take recreational landings out and we get our quota. Well, the Monitoring Committee and technical committee thought that those quota overages would better be deducted from the quota; that if we went through this process and didn't take management buffer out and came up with a quota, then take those overages out from that resulting quota because it wasn't catch.

That is a huge component and you are nearly doubling the deduction there. That was considered to be the most appropriate way to do it, so what we did was we kind of went through it that way and then put it back in at the top and worked it out and we came up with a 40.8 million pound quota for 2013.

The sources of management uncertainty that we were looking at; here are the four panels that show landings versus quota; we had an underage in 2010 and then an overage in 2011. A lot of that was that kind of unusual occurrence with the unlicensed transporter that was discovered in Massachusetts, and that has been fixed there since.

In terms of other sources of removals or other types of removals like discards, Canadian and recreational, we have tended to overestimate those. When we look at the total catch, we haven't really in recent years, anyway, have been exceeding that, but nevertheless we couldn't accept that management uncertainty is zero, so we applied that average there.

Here we have just the fishing mortality compared to the threshold to show that whatever we have been doing has not been resulting in overfishing. This thing back in 2004 was kind of a fluke and that was during rebuilding when the quota was really low and it had to do with very large fish getting caught. Only Paul Rago can explain that.

Another issue we talked about was discards, and we observed that discards, which is the blue line here, total dead discards has been very flat since about 2002 or so or even before then, but it is very flat in recent years. We also noted that the discard to landings ratio has actually been declining.

This is dead discards compared to – let's see, the open circles are dead discards compared to landings and the blue squares are total discards compared to landings, but you can see that even as we have been increasing the quotas, discards have remained flat, which means that discard to landings ratio has been going down.

The Monitoring Committee and technical committee chose to take a long-term average based on this period of time here. We went back ten years and took the average of the discards and deducted it by that. We are fairly confident that trend was going to continue. That first table I showed you where we worked from the top, from OFL down to the commercial quota, did that for three years, and then - yes, I'll summarize those values for you after I deal with trip limits. There was a discussion of trip limits in an analysis that was done by folks at the northeast regional office, Toby Curtis, Mark Brady and Mike Pitney. They wanted to see if the current trip limit for federal waters - that is 3,000 pounds - was constraining and provide insights into the trips that might be impacted if the trip limit was changed.

Here is a histogram of the number of trips, 20,350 for two years, 2010 – well, two years and some – two and a half years. What you see is this big spike over here at 3,000 pounds. It turns out that about a third, roughly, in each of those years of the landings are right at the trip limit, so it is likely that regulatory discarding is occurring for those trips.

Those trips would probably continue to fish or retain dogfish if the trip limit was higher. Their conclusions were that the current 3,000 pound trip limit was constraining a significant portion of dogfish trips; and if it were increased, it would impact a large portion of the trips. They did a hypothetical where they said, well, if the landings rate in 2011 was maintained for these 40 million pound quotas and that was under a 3,000 pound federal trip limit, would the total quota have been caught, and it looks like, yes, it probably would have been caught.

The 2010 rate or the 2011 rate come in fairly close to catching the entire quota at status quo trip limits. Then, of course, you consider the trajectory that we're currently on and it may be that the quota wouldn't get caught, so it kind of unclear. The fishery may be able to land a 40 million pound quota with a 3,000 pound trip limit, but trip limits significantly higher than 3,000 pounds would probably result in a closure of the fishery before the end of the year.

Then, again, these tables, the same one I showed you for 2013 times three, in readable form I have the ABCs which are equal to the ACLs, the management uncertainty accounted for to get the ACTs for three years, the TALs, and then the quota. And then because both councils had approved Amendment 3 to allow for RSA, we kind of missed the boat on 2013 for RSA, but the councils went ahead — or the Mid-Atlantic Council went ahead and approved a deduction of the commercial quota for RSA, so that would be 3 percent of the quota.

There was a comment made wouldn't that be 3 percent of the TAL? No, because the recreational catch is not regulated. It is just a deduction based on expected recreational landings. If you did it off the TAL, you would take 3 percent of that larger number, then you take the same recreational deduction, anyway, and you would end up with a smaller commercial quota. I just wanted to clarify that. Then the council also recommended an increase from the current 3,000 pound trip limit to 4,000 pounds in all of the specification years. I have those motions but I'll just leave it up on this slide.

EXECUTIVE DIRECTOR BEAL: Thank you, Jim. Are there questions for Jim on the stock assessment as well as the actions taken by the Mid-Atlantic Council? Doug Grout.

MR. DOUGLAS GROUT: Jim, when Dr. Rago has come here before, he has made us quite aware of several years of poor recruitment that we went through. I remember from last year's assessment that while we were on an upward trajectory that some time in the near future there was going to be a temporary downward trajectory in the abundance of spiny dogfish. Looking at the three recommended quotas through 2015 and 2016, I don't really see anything like that happening. Has there been any change in that expectation that we're going to see a temporary downturn here in the future?

MR. ARMSTRONG: I shouldn't have breezed through that. I said, well, we tried to get five years out of the SSC and we got three, but I didn't say why, and that is exactly why. The downturn or the ratio of biomass over Bmsy is expected to be less than 1. It is supposed to go down below SSBmax, which is our Bmsy proxy in I believe it is 2017, but they didn't want to go ahead and go right up to the brink in 2016.

They backed off of that and gave us three years. The other important thing is that both the Monitoring Committee and the SSC over this multi-year specification period want to look at as much information as they can to monitor the performance about the fishery and the stock. In fact, the level of detail that the SSC wanted to examine would necessitate an assessment update in every year. It is tough on Paul but easy on me kind of, you know, assuming that it keeps saying what it is saying. We both anticipate that downturn in about four years, and we're ready, if it happens sooner.

MR. ROB O'REILLY: I think this is a followup to that. In terms of the risk analysis, I'm not really clear when the SSC met and wanted to hold short to three years. Did they then have some type of probability associated with having the three-year quota stanza? In other words, is there some type of information that SSB would be expected to decline a certain amount even within that three years before 2017 but by 2015 and the fishing mortality rate was expected not to increase by some probability. Is that part of what they do or how does that work?

MR. ARMSTRONG: Well, it wasn't really quantitative in terms of relationship to some – you know, like the proximity of SSB to Bmsy, you know, crossing some threshold, except for the B over Bmsy less than 1. Like I said, they

didn't want to have that be expected the following year so that when they make ABC recommendations, that they're on the last year where that ratio is above 1.

They wanted to be able to come in earlier, so it was just – it was really a judgment call on their part to back off of that. There is – and it is reflected in the ABC values that 2014 is supposed to be the peak and then there is a bit of a decline; but then as that decline continues and goes below 1, the ratio goes below one 2017, but you can see the ABC for 2015 being less than 2014.

MR. O'REILLY: I guess listening to Jim I wasn't sure when you talked about the three-year assessment; is that going to be the approach and what type of – is that the approach? The Monitoring Committee; what information will they review during these three years as a matter of course? I guess maybe you can just tell me if the assessment is scheduled now for three years hence.

MR. ARMSTRONG: I don't think there is. Actually, I don't think spiny dogfish is even on the assessment planning horizon. That was one of the constraining factors for some of the other multi-year management measure limitations like a two or a one or three-year for I think summer flounder, scup and black sea bass. I know bluefish only got two years because we're expecting an assessment in that third year or maybe the second year. What was the other part of your question?

MR. O'REILLY: Jim, I guess the other part was the Monitoring Committee will meet, I assume, all through this period that the quotas are recommended and will have certain criteria they will review. Could you talk about that a little bit?

MR. ARMSTRONG: Yes, just as the SSC is looking for signpost changes in discard to landings ratios or the size composition, distribution, just anything that says something is kind of changing that is an important level or large scale in the fishery, the Monitoring Committee would I guess more be focused on the quota performance or the fishery performance.

Our discussion of taking another look even during a multi-year specification period was

really related to the trip limit. The Monitoring Committee didn't make a trip limit recommendation because it is not really a biological issue. It is considered to be a policy call, whether you want to risk an in-season closure or not or for whatever economic reasons do you want one trip limit or another.

However, the Monitoring Committee did review this trip limit analysis and discussed the potential for an increased trip limit and came to the conclusion that we'd rather see another year at least of the fishery performing at – operating under these high quotas with the trip limit not changing just to see what effect the current trip limit is going to have, because the fishery typically closes at some point during the year. I guess just from an analytical standpoint they wanted to see if indeed it wouldn't close and then we could make more of an informed comment on the constraining effect of the trip limit.

DR. WILSON LANEY: Mr. Chairman, Doug asked the first question that I was going to ask Jim about the low recruitment window there. You made a comment when you were reviewing the assessment that some of the jumps in biomass were unreasonable given the life history of the spiny dogfish. I was just wondering if the technical committee or Monitoring Committee had an alternate explanation for how the biomass could jump that much.

MR. ARMSTRONG: Well, we basically think that there is a lot of uncertainty in these estimates and that the general direction of the changes is probably more – there is greater confidence associated with that than with the absolute magnitude of the value at any point in that time series.

DR. LANEY: Jim, relative to the fact that we are fishing on much higher quotas now; is the Center – I guess is Paul looking at the age structure of those older females? I'm asking that question from the perspective of we got into that low recruitment stanza before because the fishery was targeting very large, mature females; so is there some likelihood that we could wind up getting there faster again because we are raising the quotas and we're sort of possibly – I guess I'm asking the question are we cropping off females that would be moving into those older age classes and helping to rebuild that

spawning stock biomass before they're able to do so?

MR. ARMSTRONG: One slide from Paul's presentation that I didn't include was the recruitment time series; and that 1997 to 2003 period where recruitment was really low, there hadn't been anything like that since then. In fact, the recruitment for the estimates for 2012 – and it is for 2012 because it is from a spring trawl survey – are I think the third highest in the time series.

MR. HIMCHAK: Mr. Chairman, on this species, I like to focus on good news because we seldom get very much. Lund's Fishery, I learned last week they're exploring the possibility – seriously exploring processing spiny dogfish, which would be a big boon to some of the southern region states.

The second item, many people may already be aware of this, but the Marine Stewardship Council Certification was awarded to the Western Atlantic Spiny Dogfish Stock. This may open up the avenue to exports to the European Union. The third item I would like to bring up is that the Mid-Atlantic Council also will receive a presentation from the Northeast Fisheries Science Center at our December meeting on the predatory impacts of spiny dogfish on any and all other species that can be pulled out of the Northeast Fisheries Science Center Food Web Data Base. I just want to give you a couple nuggets of encouragement here. Thank you.

EXECUTIVE DIRECTOR BEAL: Thank you, Pete; I don't think there was a question for Jim in there but good information. Are there other comments or questions? Bob.

MR. ROBERT BALLOU: Jim, you referenced with regard to the trip limit analysis the fact that at 3,000 pounds there was likely to be a fair amount of regulatory discards. Did the analysis then look at what an increased trip limit would do with regard to discards? Was there any sort of quantitative analysis of that issue?

MR. ARMSTRONG: No; or if was, it wasn't done by me. I was just given that presentation. If they had gone that route, I guess you could have actually quantified the discards and then maybe said at least at current effort levels what an upper trip limit might be or what range of trip

limits the catches might have resulted in; you know, a good trip limit to reduce those regulatory discards. That wasn't presented so I assume it wasn't done.

DR. PIERCE: Since you said comments or questions, I have a couple of comments to add some information that would maybe help some of the questions around the table relative to what was just recently asked. Well, actually, Jim made the point that the biomass in his presentation had dropped off rather dramatically back in the 1990's.

That was because there were no restrictions back then and the U.S. government as well as the states encouraged commercial fishermen to go after dogfish and to reduce their abundance dramatically in light of scientific information that indicated that groundfish rebuilding probably wouldn't be successful because of the abundance of the elasmobranches, dogfish being one of the principal predators there.

The fishery was encouraged to expand and to take as many as they wanted, and then, of course, the catch got high, Magnuson kicks in, we need a management plan and we ended up where we are right now. Regarding the bigger females being abundant and maybe being cropped off, that is not going to happen now because of a hard quota being implemented that is very sensitive to the scientific information and guidance that has been given.

Regarding the anomaly, let's say, that was shown in one of the figures about biomass being up high and then drop down; that is the bottom trawl survey information. As we all know, that is one of the main tools for assessing the abundance of spiny dogfish, the amount in the bottom trawl survey.

In order to deal with spikes in survey information, we do the three-year moving average, which the smoothing of the data, which is a wise way to go, so we no longer see those sorts of swings in abundance coming about from one year or another in bottom trawl survey results. Regarding our being below the target and being concerned that we might drop below the target, that is no problem here because even if we drop below the target we're not going to be anywhere near the threshold, according to the projections, and then we rebuild back up above the target in not too many years.

So, all the projection information is very favorable so that is very good news. Actually that reference about dropping below the target is provided on Page 2, the specification recommendations from the ASMFC technical committee, and then finally great recruitment. Finally we have great recruitment, so encouraging; great recruitment that bodes very well for the future. We're rebuilt, so above the target, and I can see no reason for us to be hesitant in any way to adopt what the Mid-Atlantic Council has adopted for quotas.

EXECUTIVE DIRECTOR BEAL: Thank you, David. Well, we have appeared to have transitioned into comments and starting to support positions on next year's specifications. Are there any other specific questions for Jim? Not seeing any, I'll ask Danielle to give a summary of the decisions that the board needs to make regarding specifications for next year.

Before she does that, following the Policy Board's decision yesterday about increased transparency, one of the lists of actions taken by boards is setting specifications; so under the new roll call or transparency provisions, we will intend to record the votes. If the board is close to unanimous, I'll just record the dissenting states. If we need a roll call vote, we'll take that.

TECHNICAL COMMITTEE RECOMMENDAITONS

MS. DANIELLE CHESKY: I will be giving the technical committee update on the recommended specifications for spiny dogfish. It was a joint technical committee/monitoring committee meeting, as Jim referenced. It was in October in Warwick, Rhode Island, and we reviewed the SSC update that you all just received as well as their recommendations for ABC and the quota.

As Jim already mentioned, the status of the stock is not overfished and no overfishing is occurring, which is good news. In terms of the recommendations, the technical committee monitoring concurs with the committee recommendations for setting quota levels for three years, the 2013 to 2015 seasons. SSB is going to remain above the target projected through 2016, as Jim mentioned, and so that gives a year of buffer, and the technical committee was very supportive of that.

There is no recommendation on the trip limit. The technical committee does, however, recommend that the board task the technical committee with reviewing in 2013 how the 3,000 pound trip limit worked in the 2012/2013 season that we're currently in due to the fact there was such a large increase in quota from 2011 to 2012.

In summary, these are the 2013 to 2015 recommended quotas. These are in millions of pounds. As you can see, this is higher than the 35 approximately million pounds that is currently in place for 2012 to 2013. This would take into account the following considerations and reductions as mentioned. Total harvest is based upon that P-star of 40 percent method. The board received an additional paper and recommendations on it last year.

This was used to set the quota for the 2012 and 2013 season, and it does prevent the SSB from dropping below the target and threshold due to that concern with the 1997 to 2003 recruitment deficit. The same method was used for setting the federal and state quotas, which is a very positive advance forward. This allows for better consistency in quotas across the state and federal lines.

In terms of discards, as Jim mentioned, the average of the past ten years was used to account for the discards. The reason that the technical committee went forward with this is the constant level of discards that they've seen over the past years despite the increase in quotas that they have used. Also taken out were the Canadian recreational landings.

The Canadian landings have seen significant declines in recent years, so the average of 2009 to 2011 was used for the reduction. The recreational fishery itself is very small traditionally and account for only about 1 to 2 percent of the total; and so the average landings since 2010 were used.

Additional considerations that were included were management uncertainty. Jim mentioned that this was the level of 4 percent and this is the average from 2009 to 2011 overages. This 4 percent was taken as a percentage of the actual TAL itself. Additionally as perhaps of concern for the board, this may also provide an additional buffer for rollovers.

As you know, within the interstate fishery management plan, a rollover is allowed up to 5 percent if a state or region does not fully harvest its quota. There has been concern brought up about this provision, especially in terms of the accountability measures that are included within the federal plan, so this 4 percent level may help to take care of any concerns with those accountability measures.

In summary, the technical committee does concur and recommends setting the specifications for 2013 to 2015. The total quotas here are listed. There is no recommendation on possession limits. One other thing that has arisen since the technical committee has met has been the inclusion of the RSA within the Amendment 3 to the fishery management plan.

Just as sort of an FYI for the board, there are a couple of different ways that the board could approach this. One is to initiate an addendum that would include an RSA within the quotas that the fishery management board here sets that parallel the council's. One other option would be is if the council doesn't end up setting an RSA for a year, which isn't mandated as of right now – it just has the option for it – this board could then look at what amount of quota is left after the RSA has been taken out and then just use that as a starting quota level for distribution and allocation among the states. Thank you.

EXECUTIVE DIRECTOR BEAL: Are there questions for Danielle on the decisions the board needs to make? Obviously, decisions need to be made on should it be multi-year specifications or single-year specifications; what level do you want to set for those periods; how do you want to handle RSAs; and what do you want to do about trip limits? I think those are the specification decisions that need to be made. Mr. Augustine.

MR. PATRICK AUGUSTINE: Mr. Chairman, I move that the spiny dogfish quota for 2013 – do you have it already up so I can just read it off – 2013/2014 be set at 40,842,000 pounds; the season or quota for 2014/2015 be set at 41,784,000 pounds; and for season 2015/2016 set at 41,579,000 pounds; and that the research set-aside be set at 3 percent. If I can get a second to that; and then treat the daily limit at another motion.

EXECUTIVE DIRECTOR BEAL: Is there a second to that motion; Terry Stockwell. Are

there comments on the motion? One thing I think we want to clarify, Pat, is that the Mid-Atlantic Council did not recommend a research set-aside for the first year, the 2013 to 2014 time period. They only recommended a 3 percent research set-aside for the two out-years within this provision. Is that consistent with the way you would want the motion to be handled?

MR. AUGUSTINE: Mr. Chairman, could we change the motion to include that, that it applies for the latter two years.

EXECUTIVE DIRECTOR BEAL: We will work on that. Are there comments on the motion?

MR. HIMCHAK: I had a question, really. Typically we set one year's specification, correct, at the ASMFC level; and with the Mid-Atlantic Council there is the opportunity to revisit Years 2 and 3 before the council automatically accepts. The motion would lock in values that may change maybe not by much, but in Years 2 and 3, if there was a change, say, in management uncertainty, that 3.99 percent; do we run into trouble now with committing to actual numbers?

EXECUTIVE DIRECTOR BEAL: Pete, the FMP allows the commission to set multi-year specifications, so we definitely have the flexibility at this board. The board also has the ability to go back and revisit those decisions on an annual basis if they need to and make any changes that they might need to. Rob.

MR. O'REILLY: A couple of quick items, I guess, to the multi-year specification; that was part of the council's discussion and the information was, well, there is adaptive management. Even in that process, there are ways to adjust so certainly the commission, I agree, can go forward that way as well.

On the RSA, I just wanted to point out there was also a pretty good discussion on the need for starting that in the second year. There were also some questions that George Darcy answered because it wasn't clear to everyone – and it wasn't to me at the time – but any underages in the RSA I think everyone knows would go back to the total pool, as it was put by George of RSA, but there is also the stipulation that if an investigator, for example, does not complete a project, that it goes without completion, the same

happens. Those types of situations I think are a good reason why starting off fresh, there needs to be some time to allow RSA proposals to develop, and that was a good reason that the council went for the second year.

EXECUTIVE DIRECTOR BEAL: Thank you, Rob. I think the ASMFC has handled RSA in a similar fashion where if the proposals don't total the full 3 percent, then only the amount is taken off the quota for a given year. Just to clear, the second and third years that are included in this motion will be reduced by up to 3 percent for RSA, so the numbers up here are the starting quotas that will be slightly reduced by the 3 percent number.

Danielle just clarified that technically the ASMFC plan does not have research set-asides included, so this really is just a recognition that the Mid-Atlantic Council may allocate a portion of the quota to RSA, and we're reducing our initial quota to reflect that. This does not establish an ASMFC RSA Program or anything of that sort. It is just recognizing some fishery are coming off the top here to fund some research through the Mid-Atlantic Council process.

Are there any other comments on the motion? The motion is that the spiny dogfish quota for 2013 and 2014 be set at 40.842 million pounds; 2014 to 2015 be set at 41.784 million pounds; and for 2015 to 2016 be set at 41.579 million pounds; and the RSA be set at up to 3 percent starting in 2014 and 2015. Motion by Mr. Augustine; second by Mr. Stockwell. Are there any comments on this motion from the audience before we vote? Yes, sir.

MR. JOHN WHITESIDE: My name is John Whiteside. I'm an attorney in New Bedford, Massachusetts, and I represent the Sustainable Fisheries Association. My clients asked me to be here today to address comments to two different issues facing the dogfish fishery. I'll respond to both simultaneously now with anticipation that the trip limit is going to be the next motion coming up. I could reserve that and come back but they're interlocked.

EXECUTIVE DIRECTOR BEAL: Just do both of them now, John.

MR. WHITESIDE: Thank you. The Sustainable Fisheries Association, as you know, are

processors in Massachusetts and very likely in other states within the very near future. At this time we would not support an increase to the annual quota or to the trip limits. The rationale is that, as Jim had brought up in his presentation, this was, as many of you know, not a normal fishing year where the dogfish didn't come in until very late in the season.

What I have been hearing is the same as what Jim was hearing down on the docks is that was due to the warm water and they stayed offshore. We would like to see one normal year at 3,000 pounds and 35 million pounds and maintain the status quo just to see what that would be like. We're at maybe 70 percent now and we're looking at having a season that doesn't have a closure, so that we don't have the discards that we have had in past years when the fishery did close.

The second part of that is if we do go to a 40-million-plus pound annual quota, we will have effectively doubled the quota within two years. Even though, as it was brought up, the Sustainable Fisheries Association received MSE certification for the fishery about seven weeks ago, we have not seen any increase in the price. If anything, it seems like we're really trying very hard to hold price at where it is. We have not built up demand.

That may just be because it has been less then two months and we need time to really be able to market and work with that. However, if the annual quota is bumped to the level that we're talking about here, simple economics would seem to dictate that we're talking about a significant increase in the quota.

Our concern, and it is a real one, is that buyers are going to look at that and say, you know, we're not going to pay what we're paying now; so we would be looking a reduction in boat prices and a reduction on our end. Lastly, what I'm hearing anecdotally from the processors is that they're seeing this season saw a lot more smaller fish, females that were the size of males, so we're not getting the yields that we traditionally have gotten. That is something that impacts again on the price that is being paid.

Our costs are fixed so it is not like if we get smaller fish that we're able to cut down on the cost that it takes to process it. With increased processing costs from all of the different regulatory demands and other things, it is a drop in price for us. That is our main concern here. I thank you for that.

MR. SEAN McKEON: Sean McKeon, North Carolina Fisheries Association. I would respectfully disagree with everything my colleague, John, just said. We think that the problem in this fishery has been for so long there has not been any continuity and consistency that others would develop processing facilities up and down the coast in different places, whether it is North Carolina, Virginia or other places.

Our concern is that there would be a consideration of management based on one person's group of clients who would like to see a stabilization in their prices. We have been in discussions for a long time about having something just like these multi-year specifications where people could start to make business decisions and a long-term plan.

This fishery is causing untold destruction, as many of you have alluded before, in other fisheries and the quotas needed to be reduced. There are opportunities for others who would consider getting into that process and business to do so in the near future should we pass this type thing and remain consistent. We would recommend and we certainly support the motion.

We think it is a good motion. There is built-in monitoring all along the way, as I know Jim talked about, and anytime they can intervene if there is a problem. We think this sends a very strong signal to the industry that we are going to have some consistency and some continuity in this fishery. I appreciate support for the motion. Thank you.

MR. GREG DIDOMENICO: Greg DiDomenico, Garden State Seafood Association. I will be brief and I will just speak to the two issues; one being the motion regarding the quota and the other being the possible increase of the possession limit from 3,000 pounds to 4,000 pounds. We support the motion and we support the increase in the possession limit, and I'll tell you why.

I had the opportunity to sit through the entire SSC discussion that deliberated extensively over the increase in quota and the benefits of the multi-year increases. Like I said, it was an extensive discussion, a very thorough discussion

with a lot of people involved. Of course, the implications of this quota is very encouraging for the commercial fishing industry.

I can tell you that this is scientifically justified, so that is why we support it. As far as the increase in trip limit, it is just a matter of making it a little bit more profitable regardless of what the price reduction or possible increase may be. An additional 1,000 pounds to offset probably some rising fuel costs will be helpful. Essentially when you provide this type of small increase in a fishery that is large, we hope that is going to be a very sustainable, very stable way to go to prosecute this fishery. We support both those motions and thank you very much.

EXECUTIVE DIRECTOR BEAL: Back to the management board; based on the limited number of comments on the motion, I'm going to assume the board was pretty close on this one and not go through the full roll call vote. If we're not close, we can go back to the roll call votes. With that, let's see the hands that are in favor of the motion that is up on the board; those opposed to the motion that is on the board, no opposition; abstentions, 1 abstention, U.S. Fish and Wildlife Service; any null votes, no null votes. I think it worked; I think we have a good record of how folks voted.

With that, let's move into the trip limit discussion. Before you get too far, just keep in mind when the ASMFC does a trip limit, it is only for the northern region, so it is from the states from Connecticut through Maine. The southern states, North Carolina through New York, establish their own trip limit since they have the state-by-state quotas. Pat.

MR. AUGUSTINE: Mr. Chairman, point of information; the New England and Mid-Atlantic, they went with 4,000. I'll make a motion and if someone wants to change it, please do so. I move for a 4,000 pound per day trip limit be set – do we do it one year or all three years, Mr. Chairman?

EXECUTIVE DIRECTOR BEAL: It is up to you; it is your motion.

MR. AUGUSTINE: One year, 2013 and 2014; and do you want me to say on there for the northern region? I don't think it is necessary; I think it is inferred.

EXECUTIVE DIRECTOR BEAL: Before I get a second, Danielle, can you clarify one thing?

MS. CHESKY: Yes, I just wanted to clarify, Pat, that only the Mid-Atlantic Council has voted on these specifications so far, and so the Mid-Atlantic Council did vote for a 4,000 pound trip limit. The New England Council is going to be voting in November.

MR. AUGUSTINE: Thank you for that information; I'll still go with the 4,000 pounds; and if someone in the northern region wants to challenge it or change it, please do so. Otherwise, it is 4,000.

EXECUTIVE DIRECTOR BEAL: Is there a second to the motion: Mr. Stockwell. Are there comments on the motion? Terry.

MR. TERRY STOCKWELL: Mr. Chairman, just a question probably for Jim or Danielle; did the Mid-Atlantic vote for three years for 4,000 or just for one year?

MR. ARMSTRONG: It was for all three years.

MR. STOCKWELL: May I make a motion to amend; that the 4,000 pound trip limit be 2013 through – for similar language that we had in our first motion.

EXECUTIVE DIRECTOR BEAL: Pat, are you comfortable with making that change to your motion, adding the second and third year or do you want to take –

MR. AUGUSTINE: Yes, I'm comfortable with it. The Mid-Atlantic could change anytime they want and the following year they may go to a different number; but if that is what you want, then that is fine.

MR. STOCKWELL: Thank you for feeling friendly.

EXECUTIVE DIRECTOR BEAL: So we will short-circuit the parliamentary process and skip the motion to amend and take that as a friendly amendment unless anyone on the board objects to that process. Seeing none, the motion is to raise the trip limit for the northern region to 4,000 pounds for the three-year period that the board is talking about. Are there any comments on the motion? Bob.

MR. BALLOU: Mr. Chairman, question for Danielle. Can you remind me why the technical committee deferred on this particular issue?

MS. CHESKY: The technical committee's conservation was that it was a policy decision to be made by the board. More of the impact comes in terms of regulatory discards or how long the season is going to be. There was some support, as I said, for the technical committee to review how the 3,000 pound limit was used during the 2012 to 2013 season that we're currently in next year because there was such a large increase in quota.

The technical committee will be reviewing, hopefully with the board's blessing, that trip limit and how it impacted the length of the season for the 2012 to 2013 season. If the board wishes, the northern region has been tracking and projecting when the season will close, and we do have the most recent graph that we can show to the board if you wish.

EXECUTIVE DIRECTOR BEAL: Are there other questions or comments on the motion? Bill.

MR. WILLIAM A. ADLER: I think Dave explained it to me; but if you're doing it for three years, wouldn't it be easier if you said 2013 through 2016, because that is what you've got on this thing here?

MS. CHESKY: The way that the seasons are done, it is the 2013 season starts May 1, 2013, and then runs theoretically to April 1, 2014. We certainly can change the language if the board wishes. The previous implications like the 2015 season would be 2015 through the end of it, which would be in 2016. There just would be concern that if we said 2013 to 2016, it might imply four fishing years instead of three.

EXECUTIVE DIRECTOR BEAL: It is going to make the motion more cumbersome, but put in the years for those three fishing seasons so there is no confusion if we're straddling seasons and doing anything different. We will change the motion accordingly and then vote on that. Are there any other comments on the motion? Dr. Daniel.

DR. LOUIS DANIEL: Just to comment on the previous motion; it says "roll call" and I don't think you did a roll call.

EXECUTIVE DIRECTOR BEAL: Thank you; we will reflect that change. Rob.

MR. O'REILLY: I think there are sort of competing economic information that I listened to, and I'm not sure how to judge that, but I do think there is also an efficiency built into the higher trip limit, fuel costs and things of that nature. I do think the one comment I heard that is worth finding out about is the discards in the closed season so we will have some information with the higher trip limits to be able to look at that. I think that would be some good information for everybody.

EXECUTIVE DIRECTOR BEAL: Is everyone comfortable with tasking the technical committee to look into the discards during closed seasons as well as the effects of the trip limit, the tasking that they essentially asked that you give them? Is there any objection to asking the technical committee to look at that? All right, seeing none, we'll move that forward.

Are there other comments on the motion? I'll read that in while the states caucus; move for a 4,000 pound trip limit for the 2013 and 2014; 2014 and 2015; 2015 and 2016 fishing seasons. Motion by Mr. Augustine; seconded by Mr. Stockwell. Yes, Louis.

DR. DANIEL: Bob, just to make absolutely clear this is for the northern region; this is not for states with a state-by-state quota share?

EXECUTIVE DIRECTOR BEAL: Yes. Ritchie.

MR. G. RITCHIE WHITE: Mr. Chairman, when we get the report back from the technical committee, if we feel that their report raises issues with going to 4,000 pound, would we be able to change that 4,000 pound prior to or during the 2013 and 2014 season?

EXECUTIVE DIRECTOR BEAL: Yes, the board can change any of the specifications it is setting. It would take a two-thirds vote to do that, but the board can do that if there is obviously compelling information to do it. Are there any comments on the motion? Is there a need to caucus any longer?

Seeing none, I think we're in the same spot here where there is probably close to unanimous opinion on this motion, so we will try to not do the full roll call vote and see if we can get away with that. With that, those in favor of the motion please raise your right hand; those opposed like sign; abstentions, 1 abstention, U.S. Fish and Wildlife Service; any null votes. The motion on the trip limit carried unanimously with one abstention.

I think we have a good record of how folks voted again. It worked out and it didn't slow the process down too much. With that, I think that is all there is to do on the spiny dogfish specifications. Danielle is nodding her head so that makes me feel more comfortable. With that, we will move into Agenda Item Number 6, which is setting the 2013 coastal shark specification, and I will ask Danielle to give background on that.

SET 2013 COASTAL SHARK SPECIFICATION

MS. CHESKY: We're going to be reviewing the 2013 specifications for the coastal sharks. The coastal sharks' technical committee met on October 15th via conference call. This is reviewing the highly migratory species proposed rule for these specifications that was issued. Significant changes that were included in the proposed rule for 2013; the first one has to do with the porbeagle fishery. It is proposed to be closed for the 2013 season.

This is due to a combination of reasons. One is that there were quite a bit of overages and so that has reduced the quota for 2013. The overage was about 259 percent for the porbeagle fishery in 2012 before it was closed. There is also concern stemming from that that there is an inability to keep the catch under its limit.

Additionally, there is the five-year quota reduction that was included in Amendment 2. It will expire at the end of December 2012. That will increase the possession limit for the nonsandbar large coastal sharks in the sandbar fishery to 36. It has been set at 33 for the past years. Additional changes that have been included in the proposed rule and that were reviewed by the technical committee include the fact that all seasons will open on or about January 1, 2013, obviously except for porbeagle which is proposed to be closed.

This is a contrast to past seasons, especially the non-sandbar large coastal complex that had

delayed openings. Additionally, the non-blacknose small coastal quota was adjusted to account for the overage. There are no other adjustments to quotas due to the stock status. The rule does state that in-season trip limit adjustments will be used if needed to ensure access to all fishermen.

Finally, here are your quotas. This was included in the supplemental report as well. The comparison here is between the 2012 and 2013 quotas, and these are in metric tons. As you can note, porbeagle is noted to be closed. The technical committee's recommendation is that the board approve these measures for the 2013 coastal shark specifications. That is the end of my report. Thank you, Mr. Chairman.

EXECUTIVE DIRECTOR BEAL: Are there any questions for Danielle on the presentation of the coastal shark specifications for 2013? Louis.

DR. DANIEL: This may be more Karyl, but I am concerned about this January 1 opening when North Carolina again – I will get back to my little issue of that closure off North Carolina. We're closed until August. This is going to greatly advantage Florida and there is going to be high likelihood that those fish are going to be caught before we even have an opportunity to fish for them unless we go back and reopen state waters to large coastal sharks. I can't support approving a January 1 start date for these fisheries. It is going to disadvantage 90 percent of us around the table.

EXECUTIVE DIRECTOR BEAL: Karyl, can you respond to that?

MS. KARYL BREWSTER-GEISZ: Certainly. This is for the board to know; this is the first time I think the board has been able to meet during the comment period for the specifications. If the board has comments, the comment period closes on the 28th. We are proposing to open January 1.

If you remember a couple of years ago a number of shark fishermen from North Carolina, Florida and the Gulf of Mexico got together at our advisory panel meeting and actually suggested to us that we could open January 1 if we had the flexibility to reduce or even close the fishery as needed to make sure that people later on in the season in those more northern climates had the chance to fish as well.

E-dealer or electronic dealer reporting, which is how we monitor the shark fishery, comes online January 1, and we are expecting to be able to monitor the fishery more closely and use those flexible trip limits to reduce trip limits if needed to make sure that North Carolina fishermen and other fishermen later in the season are not disadvantaged by the January 1 opening. That is our intent.

DR. DANIEL: That sounds good but it is not said anywhere. Is that in the document that that is the plan?

MS. BREWSTER-GEISZ: That is in the proposed rule that we are intending to use that.

DR. DANIEL: Okay, so 50 percent – I mean is there a set number? I'm sorry I haven't read it; but if you save 10 percent or you save 50 percent, it is going to make a big difference.

MS. BREWSTER-GEISZ: We did not set a specific number, but I think the intent is to be right around there, the 50 percent, so that would actually be 40 percent because we close when we reach 80 percent of the quota.

DR. DANIEL: Okay, that is better.

EXECUTIVE DIRECTOR BEAL: Are there any other questions or comments on the proposed specifications for 2013? There are really two actions that the board can consider today. One is approving the specifications for the ASMFC plan, and the other is should ASMFC submit comments to the National Marine Fisheries Service Highly Migratory Species Office. Is there a motion on the 2013 coastal shark provisions? Pat.

MR. AUGUSTINE: Mr. Chairman, move that the board approve these measures as presented – do you want to refer to something because it says "these measures" and it doesn't give you any body, so how do you want to cover that – these measures or those measures as noted in the technical committee's recommendation. I think it has to have a little more meat on that when it goes out to the public that it was approved, Mr. Chairman. I'm looking for your advice.

EXECUTIVE DIRECTOR BEAL: I'll give advice. I think if you want to support what was discussed in this presentation, you want a motion that would read to adopt the coastal

shark specifications for 2013 as proposed by the National Marine Fisheries Service Highly Migratory Species Office.

MR. AUGUSTINE: That was good; I'll second that motion. (Laughter)

EXECUTIVE DIRECTOR BEAL: You're making the motion. Is there a second to that motion; Dr. Pierce. All right, are there comments on the motion? Pete.

MR. HIMCHAK: I had a question on the motion. The matrix that gives all the quota amounts, and we have a very specific recommendation on the daily possession limit, the trip limit on large coastal sharks from 33 to 36; so is that 33 or 36 included?

MS. CHESKY: Yes, the increase in the possession limit would be included in that as it was included in the document.

DR. DANIEL: I appreciate Karyl's clarification, but I still feel like that these seasons could be handled better to make sure that everyone has an equal opportunity at the same time. I think the way it has been operating, we lose two weeks by opening July 15th but that really gives just about everybody the opportunity to start fishing when the quota becomes available and not have to worry about overages or problems with e-Dealer or whatever happens. I'm probably a large minority but I'm going to vote in opposition to the motion because of the January 1 start date of the fishery.

EXECUTIVE DIRECTOR BEAL: Are there other comments on the motion as it is up on the screen? Rob O'Reilly.

MR. O'REILLY: Mr. Chairman, the second thing you mentioned, the ASMFC recommendation to NMFS, couldn't that address North Carolina's situation and probably some other states? I can't say right now all the openings, but certainly that does seem to be starting off on the wrong foot; that some states are left out and others aren't.

EXECUTIVE DIRECTOR BEAL: Rob, are you making a suggestion about specific things to include in a letter to the National Marine Fisheries Service?

MR. O'REILLY: Well, I'm wondering whether something like that would be accepted by Louis as a way to – since this is in the process – as a way to sort of go forward at least without just leaving it cold that this motion gets adopted and it doesn't really help some of the states which would be affected with a January opening.

EXECUTIVE DIRECTOR BEAL: Louis, could you craft some wording either to put up on the screen or to work into a letter that would make you more comfortable and be acceptable by the board?

DR. DANIEL: Sure. I thought that was going to be the second motion. You said we had to issues to deal with, but I would hope that everybody would be supportive of a letter. But then it gets kind of back a little; if you're all supportive of the letter, why are we approving the motion? I'm not exactly sure how to handle that.

I don't want to be disruptive, but I do know that there are going to be winners and losers with that January 1 start date even with the flexible plan; and having the season start at a time when everybody can have access at the same time, North Carolina, Florida, Virginia, Maryland, Delaware, whoever is interested in fishing for these things, to me is a much fairer option.

But if Florida is allowed to catch the fish beginning January 1, and they will, and they close it at 40 percent and then they reopen July 15th or August 1st or whenever, I'm assuming Florida is going to be able to continue fishing so they're going to get basically the first 40 percent and then they're going to get a part of the second 40 percent.

That just doesn't seem fair to me. I don't know how all the rest of you — what your shark fisheries look like, but you're certainly going to be disadvantaged by that January 1 opening with the exception, I think, of Florida. I'm sorry they're not here but — yes, they are. I mean that is my biggest concern.

EXECUTIVE DIRECTOR BEAL: Well, let's dispose of this motion with the understanding we're going to come back to that wording in a minute and we'll try to either come to a consensus or put together a motion on what a letter to the National Marine Fisheries Service would include. With that, unless there is any

objection we will vote on the motion that is on the screen. Is there a need to caucus?

(Whereupon, a caucus was held.)

EXECUTIVE DIRECTOR BEAL: I know Louis has noted he is going to vote in opposition to this motion; but if that is the only dissenting vote, we can probably not go through the lengthy roll call process. Let's try that first; but if we get a lot of votes going different ways, we may revert back to the roll call.

Those in favor of the motion please raise your right hand; those opposed like sign, two states in opposition, North Carolina and Virginia; any abstentions, two abstentions, National Marine Fisheries Service and New Hampshire; any null votes. Seeing none, the motion carries with 12 votes in favor, two in opposition and two abstentions. All right, now the second issue of a letter to the National Marine Fisheries Service. David Simpson.

MR. DAVID SIMPSON: Maybe Dr. Daniel can help me a little bit to understand the fishery better. You're closed until August. I don't understand the pattern of the fishery or why you're closed when you think it might disadvantage you.

DR. DANIEL: Well, I don't know how to do this nice but I'm going to try. We basically are the only state that the National Marine Fisheries Service deemed the area off of North Carolina was a nursery ground, and so the feds actually closed the area off of North Carolina from January through July and so we can't shark fish.

Even though we were the first state to implement the closure at NMFS request the closure to the state waters to shark fishing, we also had our federal waters closed as well. We now have a plan in place that closes state waters by the ASMFC plan so I don't have really the flexibility I used to have where I could have just said to heck with you, I'm going to just open state waters.

I can't do that anymore. I'd like to be able to do that but I can't and still be in compliance with the ASMFC plan. We were one of the developers of the shark fishery but now we're essentially cut out of the fishery and not just the seasonal reasons but because of the trip limits.

We do have folks that are interested in participating in the shark fishery.

What has been happening up until this proposal was a July 15th opening of the large coastal shark fishery. What that did was that still didn't give us access for the two weeks while we were still closed. We're working on that right now to try to get that backed up a little bit so that we can fish during the second half of the year.

But we're the only ones in that boat with the closure, but the problem also is that the fish tend to be down south first; and so when you're open January 1, I don't know how much Georgia and South Carolina shark fish, but certainly we know Florida is a major player, North Carolina is a major player, so we have to sit and wait for eight months in order to start fishing for them.

I kind of felt like at least that with the July 15th opening or an August 1st opening they're available to everybody then, and so nobody is disadvantaged. They're available in Virginia, they're available north of Virginia, they're available in North Carolina, South Carolina, Georgia and Florida.

I understand that some fishermen got together and said that would be okay, but I just still don't think that is the fair way to do it. I would certainly support a letter – I mean it is kind of difficult now with a twelve to two vote supporting the January 1 fishery, so that is why I don't know how to do it. I guess we could say that we have adopted the specifications but disagree with them and would like to see them modified to more fairly and accurately depict the seasonality of the fishery for everybody.

But again, it is that whole disadvantage by geography thing that we dealt with in dogfish, that we have dealt with – we're dealing with a lot in the South Atlantic and I just see it perpetuating with this. I'm not trying to be critical of that decision. I understand why they made the decision that they did. I just don't agree with it.

EXECUTIVE DIRECTOR BEAL: Well, Louis, I think there is room to comment even though the motion was passed and the specifications were approved. I think sort of providing additional information on the distribution of the catch throughout the year is I think what you would like to do or at least request that of the

National Marine Fisheries Service as they move through the final implementation of this proposed rule. The motion we passed has a start date of January 1. It doesn't discuss anything beyond that, so there is probably room to provide some feedback to the National Marine Fisheries Service on distribution throughout the year. Ritchie.

MR. WHITE: Does the Service have the ability to close Florida once the 50 percent is caught thereby allowing the states to the north to have half of it as opposed to Florida getting 50-plus?

EXECUTIVE DIRECTOR BEAL: I don't know but I'll ask Karyl.

MS. BREWSTER-GEISZ: Our flexible trip limits are not state-specific; we would be closing everything or reducing the trip limit down to zero for everyone up and down the coast. We wouldn't be closing Florida; we'd be closing everybody until the fish have migrated. That is the issue, the migration of the fish. They start in Florida and they move up; so come July they aren't available in Florida, at least not the sharks the fishermen want to take.

EXECUTIVE DIRECTOR BEAL: Comments are due the 28th of October, Karyl, which is Monday?

MS. BREWSTER-GEISZ: Correct.

EXECUTIVE DIRECTOR BEAL: So there is not a lot of time to – is that a Sunday, Karyl, or Monday?

MS. BREWSTER-GEISZ: I believe Monday is what we intended.

EXECUTIVE DIRECTOR BEAL: Well, Sunday is the 28th, but we will work through that. Either way, we don't have a lot of time to craft a letter and get that circulated. We can write a letter but I don't think we have a lot of time for redrafting and wordsmithing by the full board. What are your thoughts on how to get that letter pulled together in the next three days and have a comfortable statement in there? Is it just asking the National Marine Fisheries Service to essentially implement a closure at 50 percent, which is essentially a 40 percent closure with the 80 percent provision, or is it more detailed than that? Louis.

DR. DANIEL: I think it might be more detailed I think the recommendation by than that. someone to look at the distribution of the catches seasonally would be a good approach. We could ask NMFS to start looking at state-by-state quotas. That would resolve it. It may be too late at this particular juncture; but I do think if we could craft something simple that just expresses our concerns over the fair and equitable distribution of the shark quotas and ask NMFS to consider those concerns that they have heard here today and see if there is way to be more specific, I guess, in how it is going to be handled to make sure that - I mean, I don't want to disadvantage Florida either. They're the big player. There just needs to be some way to do it that is not too subjective. If everybody can agree to that being the content, then I think that is fairly innocuous and it just asks for additional review.

EXECUTIVE DIRECTOR BEAL: Is there anyone that objects to that type of letter being generally worded, that it won't have necessarily specifics for the upcoming 2013 season, but it may be more an in-depth look moving forward in future years. Is everyone comfortable with that letter moving forward? We can draft it at the staff level and circulate it through Louis in the next 48 hours somehow. Yes, Robert.

MR. ROBERT H. BOYLES, JR.: Mr. Chairman, at the risk of complicating things I was just reminded we don't have a Policy Board session this afternoon, and I think it has been our custom that letters that are generated by the commission do go to the Policy Board. I just remind the body of that.

EXECUTIVE DIRECTOR BEAL: Yes, I was going to make that comment. The good news is this is essentially a coast-wide board; and if folks here are comfortable with that, we maybe can skip that. The only state that is not here is Pennsylvania. If there is essentially unanimous consent by this group, we will draft a letter pretty quickly and we will get that turned around.

We'd probably have to circulate it tomorrow some time; and if you get a chance to look at it, you do; and if you don't, well, I think it is going to be fairly generic and not really impact any fishery this year, but it is going to hopefully spark a discussion for future seasons. It looks like we've got a course of action there and everybody seems to be nodding their head. Rob.

MR. O'REILLY: Well, I just wondered the time limit seems to be driving this, but I was sitting here just a little while ago thinking that after a couple of comments that there might be a situation where the information that Louis is suggesting on the distribution, that that would precede getting to this motion, but I assume now that time is driving this motion with the 28th as sort of the deadline, and I think that is unfortunate because I'm not sure I could tell you every situation around the table where this may be beneficial or not beneficial. I'm not sure why that type of conversation wasn't available or is it just a matter of time.

EXECUTIVE DIRECTOR BEAL: I think it is a timing issue for the most part, unfortunately. Are there any other comments in addition to Rob's? Seeing none, we will try to pull together a fairly generic letter pretty quickly and get that to the National Maine Fisheries Service. Pete.

MR. HIMCHAK: A quick question for Karyl; different animal, same theme, though. We have a draft addendum on the back burner addressing smooth dogfish state-by-state quotas should a coast-wide smooth dogfish quota be implemented by the National Marine Fisheries Service. I know it has been delayed for a number of years. What is the expected timeline or is there one for a coast-wide quota on smooth dogfish?

MS. BREWSTER-GEISZ: If you will remember, about a year ago I said that we were delaying the effectiveness of the regulations indefinitely. I believe it was last spring I was fairly optimistic that we would have a proposed rule out some time this year. I will just say that my optimism is not to what it once was and I do not have a timeline at this point.

EXECUTIVE DIRECTOR BEAL: All right, are there any other comments on specifications or anything related to this agenda item? Seeing none, we move on to the election of the vice-chair. Pat Augustine.

ELECTION OF VICE-CHAIR

MR. AUGUSTINE: Mr. Chairman, at this time I would like to nominate Adam Nowalsky as the new vice-chair. I would like to second it myself with my left hand and then close all nominations and cast one vote, but I don't think I can do that.

EXECUTIVE DIRECTOR BEAL: Let's try for a more legitimate second than that. Is there a second to Pat's motion; Bill McElroy, thank you. Any objection to Mr. Nowalsky becoming the vice-chair of the Shark Board? Seeing none, congratulations, Adam. (Applause) I think that brings us to the end of our agenda.

ADJOURNMENT

Is there anything under other business that has come up during the meeting? We will close the Shark Board.

(Whereupon, the meeting was adjourned at 12:22 o'clock p.m., October 25, 2012.)

Atlantic States Marine Fisheries Commission

Coastal Sharks Technical Committee

Review of Fin: Carcass Ratio for Smooth Dogfish

January 24, 2013

Present: Greg Skomal (MA DMF, Chair), Angel Willey (MD DNR), Brent Winner (FL FWC), Eric Schneider (RI DFW), Holly White (NC DMF), Jack Musick (VIMS), Matt Gates (CT DEP), Karyl Brewster-Geisz (NMFS HMS), Russ Babb (NJ DEP) and Marin Hawk (ASMFC).

The Coastal Sharks Technical Committee had a conference call to review New Jersey data regarding smooth dogfish fin: carcass ratios and make a recommendation of which fin: carcass ratio to include in Draft Addendum II. The meeting began with an overview of the issue, followed by a review of the data from New Jersey. The TC discussed the data before moving on to the issue of the status of North Carolina's data. Following these discussions, the TC discussed the repercussions of having different federal and state ratios. The TC's discussions and recommendations are as follows.

Review of New Jersey Data

- The fish encountered were smaller than market size, and so may suggest a higher ratio than market-sized fish
- Data indicates a fin: carcass ratio range of 7-12%
 - o The cut used in the study may be more exact than those used by the fishermen
 - o The fins kept vary by state and impact the ratio
 - If an area does not keep caudal fins, setting the fin: carcass ratio at 12% would allow a 5% gap between what the research reflects (7%) and the maximum fin: carcass ratio
- The purpose of the research is to ensure that the ratio is not large enough to allow finning to occur a few percentage points either way would not violate this purpose

Status of North Carolina's Data

- North Carolina has not encountered sufficient smooth dogfish to complete the study
- North Carolina has market-sized fish, so research from them would be helpful to the study
- North Carolina is not comfortable making a recommendation of a fin: carcass ratio less than 12% before they have completed the study

Shark Conservation Act Ratio

- The Shark Conservation Act of 2010 is implementing a 12% fin: carcass ratio for smooth dogfish
- The savings clause of this Act contains some other caveats that NOAA Fisheries is trying to work through
- If fin: carcass ratio in state waters is more restrictive than federal waters, anyone who has a federal permit has to abide by the more restrictive regulations
- Enforcement might be difficult if states and federal waters have different ratios
- The FMP encourages consistent regulations between federal and state waters

ASMFC Management Recommendations

The TC agrees that maintaining consistency between federal management and state management is necessary to uphold the objectives of the FMP. The fin: carcass ratio presented in the Shark Conservation Act (12%) cannot be changed. Therefore, the TC recommends that a 12% fin: carcass ratio, consistent with the Shark Conservation Act of 2010, is included as the preferred option in Draft Addendum II.

Atlantic States Marine Fisheries Commission

DRAFT ADDENDUM II TO THE INTERSTATE FISHERY MANAGEMENT PLAN FOR ATLANTIC COASTAL SHARKS: SMOOTH DOGFISH STATE SHARES



This draft document was developed for Management Board review and discussion.

This document is not intended to solicit public comment as part of the Commission/State formal public input process. Comments on this draft document may be given at the appropriate time on the agenda during the scheduled meeting. If approved, a public comment period will be established to solicit input on the issues contained in the document.

ASMFC Vision Statement:

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

February 2013

Public Comment Process and Proposed Timeline

In August 2011, The Atlantic States Marine Fisheries Commission's Spiny Dogfish & Coastal Sharks Management Board (Board) approved a motion to initiate the development of an addendum to the Interstate Fishery Management Plan for Atlantic Coastal Sharks to consider establishing smooth dogfish state shares. This draft addendum presents background on the Atlantic States Marine Fisheries Commission's management of smooth dogfish, the addendum process and timeline, and a statement of the problem. This document also provides options for smooth dogfish management for public consideration and comment.

The public is encouraged to submit comments regarding this document during the public comment period. Comments will be accepted until 5:00 pm (EST) on [Month Day], **[Year].** The Board will consider final action on this addendum during the week of [Month Day], [Year] at the ASMFC [Season] Meeting.

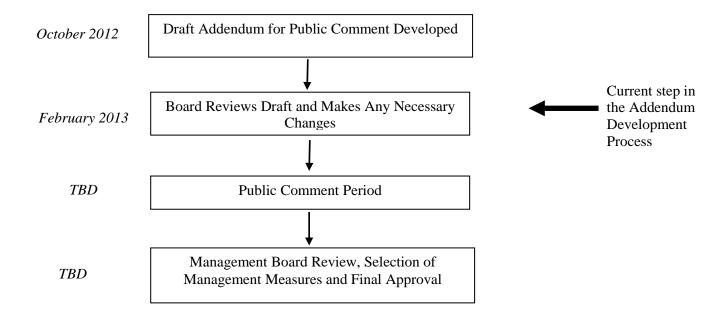
Comments may be submitted by mail, email, or fax. If you have any questions or would like to submit comment, please use the contact information below.

Mail: Marin Hawk

Atlantic States Marine Fisheries Commission 1050 N. Highland St., Suite 200 A-N

Phone: (703) 842-0740 Arlington VA, 22201 Fax: (703) 842-0741

Email: mhawk@asmfc.org



1.0 Introduction

This addendum proposes measures that would amend the Atlantic States Marine Fisheries Commission's (ASMFC) Interstate Fishery Management Plan for Atlantic Coastal Sharks (FMP) to establish state shares for smooth dogfish and allow commercial fishermen to process smooth dogfish at sea with a 12% maximum fin-to-carcass ratio, consistent with the Shark Conservation Act of 2010.

2.0 Management Program

2.1 Statement of the Problem

The purpose of this addendum is to preserve the historical distribution of smooth dogfish landings. The National Marine Fisheries Service (NMFS) Office of Highly Migratory Species Division (HMS) is working to amend the Highly Migratory Species FMP to include measures from the Shark Conservation Act. This will include a smoothhound shark quota. In anticipation of the upcoming federal quota for smooth dogfish, the Spiny Dogfish & Coastal Sharks Management Board (Board) initiated this addendum to consider establishing state shares prior to the federal quota implementation.

2.2 Background

Smooth Dogfish State Shares

Smooth dogfish are included as one of the 40 species managed in the Coastal Sharks FMP. The FMP allows the Board to set possession limits and an annual quota for smooth dogfish for up to five years. Quotas have been implemented for other species as a management strategy following assessment results that indicate a need to reduce harvest. Smooth dogfish have not been assessed and stock status is unknown. In the absence of an assessment that indicates their necessity, the Board has chosen to forego setting a smooth dogfish quota or possession limits in previous years.

Amendment 3 classifies smooth dogfish as part of the 'smoothhound complex' which includes two species: smooth dogfish (Mustelus canis) and Florida smoothhound (Mustelis norrisi). NMFS has indicated that it chose the name smoothhound complex to minimize any confusion with spiny dogfish regulations. It notes that both smooth dogfish and Florida smoothhound are likely the same species and are the only members of the smoothhound family (*Triakidae*) found on the Atlantic coast. All smoothhound complex regulations apply to smooth dogfish.

Coastwide landings peaked in 1994 and 1995, were around 1 million pounds from 1996 – 2007. Landings increased from 2008-2010, but there was a slight decrease in landings in 2011 (Figure 1 and Table 1).

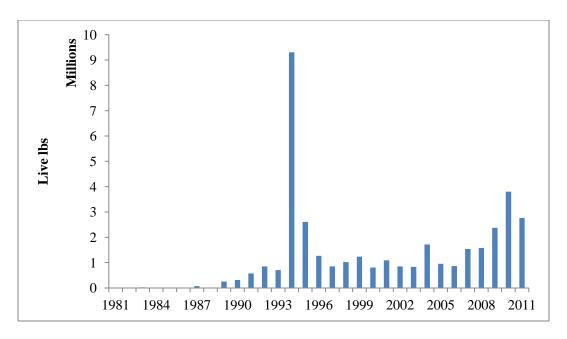


Figure 1. Coastwide smooth dogfish landings 1981 - 2011. Total represents landed weight (not whole or converted weight). Source: ACCSP, 2012.

Table 1 Smooth Dogfish Coastwide Landings 1981 – 2011. Total represents landed weight (not whole or converted weight). Source: ACCSP, 2012

| | LW Landings | | |
|------|-------------|--|--|
| Year | (Pounds) | | |
| 1981 | 600 | | |
| 1982 | 7,500 | | |
| 1983 | 24,800 | | |
| 1984 | 1,300 | | |
| 1985 | 7,800 | | |
| 1986 | 4,900 | | |
| 1987 | 71,400 | | |
| 1988 | 1,600 | | |
| 1989 | 250,100 | | |
| 1990 | 310,775 | | |
| 1991 | 569,567 | | |
| 1992 | 852,582 | | |
| 1993 | 701,733 | | |
| 1994 | 9,210,064 | | |
| 1995 | 2,612,977 | | |
| 1996 | 1,019,460 | | |
| 1997 | 731,935 | | |
| 1998 | 805,211 | | |
| 1999 | 978,741 | | |
| 2000 | 796,764 | | |
| 2001 | 858,636 | | |
| 2002 | 1,107,232 | | |
| 2003 | 1,127,935 | | |
| 2004 | 1,318,779 | | |
| 2005 | 845,729 | | |
| 2006 | 783,013 | | |

| 2007 | 983,034 |
|------|-----------|
| 2008 | 1,267,465 |
| 2009 | 1,811,545 |
| 2010 | 2,554,818 |
| 2011 | 2,971,899 |

Due to data confidentiality issues, landings cannot be presented annually by state. A comparison between confidential and non-confidential state smooth dogfish landings showed that non-confidential sources leave out significant amounts of smooth dogfish in many recent years (>800,000 lbs in 2003 & 2004, >600,000 pounds in 2007 & 2008). As such, presenting non-confidential landings would be uninformative and possibly misleading.

Smooth Dogfish Processing at Sea

The Shark Conservation Act of 2010 requires that coastal sharks are landed with fins and tail attached with an exemption for smooth dogfish. Fishermen holding a valid state commercial permit may process smooth dogfish at sea out to 50 miles from shore, as long as the fin to carcass ratio does not exceed 12%. NMFS HMS has indicated that they plan to implement these regulations for federal waters as part of Amendment 3.

Addendum I allows fishermen to process smooth dogfish at sea as follows:

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. This ratio is consistent with the Shark Finning Prohibition Act of 2000.

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.

2.3 Management Options

ISSUE 1. Smooth Dogfish State Shares

This section proposes to establish smooth dogfish state shares. If the Board selects Option B, C, or D it must specify an annual smooth dogfish quota (as specified in Section 4.3.4 Quota Specification & 4.3.7 Annual Process for Setting Fishery Specifications of the FMP) for state shares to apply. If the Board opts to forego specifying an annual quota, state shares will not apply. Table 2 presents state percent shares based on Options B, C, & D.

Option A. Status Quo

ASMFC will not establish state shares for smooth dogfish.

Option B. Historical Landings 1998 – 2007

This reference period includes the base years used to calculate the initial smoothhound quota in the Amendment 3 final rule.

Option C. Historical Landings 1998 – 2010

This reference period includes the base years used to calculate the initial smoothhound quota in the Amendment 3 final rule (1998 - 2007) plus the most recent years (2008 - 2010).

Option D. 5-Year Moving Average

This reference period is adjusted annually to include the most recent 5 years of available landings. For example, the 2011 quota shares would be calculated based on the average landings 2006 – 2010; the 2012 quota shares would be based on average landings 2007 – 2011; the 2013 quota shares would be based on 2008 – 2012. Table 3 and Figure 2 show quota percentages based on a 5-year moving average 2007 – 2011.

Table 2. State percent shares based on Option B, C, & D. Calculated with confidential dealer reports using whole weight. Source: ACCSP Data Warehouse, 2012.

| terports using whole weight. Source: Acces Data waterouse, 2012. | | | | | |
|--|----------------------|-----------------------|-----------------------|--|--|
| | Histo | 5-Year Moving Average | | | |
| | Option B 1998 - 2007 | Option C. 1998 - 2010 | Option D. 2007 - 2011 | | |
| ME | 0.00% | 0.02% | 0.02% | | |
| MA | 0.53% | 0.33% | 0.06% | | |
| RI | 0.78% | 1.10% | 1.36% | | |
| СТ | 0.19% | 0.20% | 0.17% | | |
| NY | 6.61% | 6.75% | 7.61% | | |
| NJ | 15.15% | 16.32% | 17.58% | | |
| DE | 0.02% | 0.25% | 0.46% | | |
| MD | 4.10% | 5.49% | 8.37% | | |
| VA | 33.77% | 28.11% | 19.06% | | |
| NC | 38.20% | 40.83% | 44.83% | | |
| SC | 0.66% | 0.60% | 0.46% | | |

Table 3. 5-Year moving average quotas 2007 – 2011.

| Quota Year | 2007 | 2008 | 2009 | 2010 | 2011 |
|------------|-----------|-----------|-----------|-----------|-----------|
| Average | 2002-2006 | 2003-2007 | 2004-2008 | 2005-2009 | 2007-2010 |
| ME | 0.00% | 0.00% | 0.04% | 0.04% | 0.02% |
| MA | 0.89% | 0.96% | 0.92% | 0.82% | 0.06% |
| RI | 0.35% | 0.50% | 0.54% | 1.12% | 1.36% |
| СТ | 0.30% | 0.28% | 0.27% | 0.31% | 0.17% |
| NY | 8.55% | 7.91% | 7.36% | 7.36% | 7.61% |
| NJ | 10.52% | 8.11% | 9.09% | 10.87% | 17.58% |
| DE | 0.02% | 0.03% | 0.03% | 0.41% | 0.46% |
| MD | 0.93% | 0.84% | 0.81% | 4.37% | 8.37% |

| VA | 40.99% | 39.94% | 35.21% | 26.18% | 19.06% |
|----|--------|--------|--------|--------|--------|
| NC | 36.67% | 40.64% | 44.89% | 47.52% | 44.83% |
| SC | 0.78% | 0.79% | 0.85% | 1.00% | 0.46% |

Potential 5-Year Moving Average Quotas 2007 - 2011 50% MF 45% MA 40% ٠RI 35% CT NY 30% NJ 25% •• DE 20% MD 15% VA 10% NC. SC 5% 0% 2010 2008 2009 2011

Figure 2. Potential quotas under a 5-year moving average quota system.

ISSUE 2. State Quota Transfer

The following options apply only if the Board implements state shares under Issue 1.

Option A: No Transfer of Quotas

States may not transfer quota under this option.

Option B: Allow Transfer of Ouotas

Two or more states, under mutual agreement, could transfer or combine their smooth dogfish quota. These transfers would not permanently affect the state-specific shares of the coastwide quota, i.e. the state-specific shares would remain fixed. States would have the responsibility for closing the smooth dogfish commercial fishery in their state once the quota has been reached. The Executive Director or designated ASMFC staff will review all transfer requests before the quota transfer is finalized. Such agreements for state-by-state transfer of quota should be forwarded to the Board through Commission staff.

Draft for Board review. Not intended for public comment.

Once quota has been transferred to a state, the state receiving quota becomes responsible for any overages of transferred quota. That is, the amount over the final quota (the state's quota plus any quota transferred to the state) for a state will be deducted from the corresponding state's quota the following fishing season.

ISSUE 3. Quota Rollovers

The following options apply only if the Board implements state shares under Issue 1. This section proposes measures to address rollovers under a state shares quota allocation system. Rollovers would result in an increase in the following year's annual quota.

The Board may select one or more of the following options.

Option A: Status Quo. State Quotas May Not Be Rolled Over

A state may not rollover any of its unused quota from one fishing year to the next.

Option B: Rollover of State Quota

A state may rollover any unused quota from its allocation under *Issue 1 State Shares* from one fishing year to the next. This option does not specify that *transferred* quota may be rolled over nor does it prohibit rollover of *transferred* quota.

Option C: Transferred Quota May Not Be Rolled Over

A state may not rollover any unused transferred quota.

Option D: Rollover of Transferred Quota

A state may rollover any unused transferred quota from one fishing year to the next. That is, if a state receives transferred quota, and does not harvest its final quota amount (the state's quota plus any quota transferred to the state) amount, the remaining amount will be added to the corresponding states quota the following year.

Option E: Maximum 5% Quota Rollover

The maximum total rollover may not exceed 5% of a states allocation for the fishing year in which the under harvest occurred.

ISSUE 4. Possession Limits

The following options apply only if the Board implements state shares under Issue 1.

Option A. Board specified possession limits

The Board will continue to set a maximum possession limit that states may not exceed.

Option B. State Specified Possession Limits

A state may set possession limits as best meets that state's individual needs.

ISSUE 5. Three-year re-evaluation of state shares.

The following options apply only if the Board implements state shares under Issue 1. Reevaluating smooth dogfish state share allows the Board to modify allocations to best meet the states' future needs and respond to any assessment information that may become

Draft for Board review. Not intended for public comment.

available.

The re-evaluation process would allow the Board to modify state shares based on changes in the fishery or the development of a smooth dogfish assessment.

Option A. No Three-Year Reevaluation

Option B. Three-year Reevaluation of State Shares

By default, the measures in this Addendum will expire after three years of implementation, unless the Board votes to extend them for a time certain or make them permanent. Under this option, the Board will review the performance of the fishery under this Addendum and can extend the provisions through Board action. If the Board wants to modify the provisions of this Addendum, a new addendum can be initiated.

ISSUE 6. Smooth Dogfish Commercial Processing At Sea

This section proposes to increase the maximum fin to carcass ratio for commercial smooth dogfish fishermen.

Option A. Status Quo. Commercial fishermen may remove all fins with a maximum fin to carcass ratio of 5% from March through June; and must keep the dorsal fin attached naturally through landing for the rest of the year.

Option B. Measures Consistent with Shark Conservation Act. Commercial fishermen may remove all smooth dogfish fins. If fins are removed, the total wet weight of the shark fins may not exceed 12 % of the total dressed weight of smooth dogfish carcasses landed or found on board a vessel.

3.0 Compliance Schedule

If approved, states must implement Addendum II according to the following schedule to be in compliance with the Coastal Sharks FMP:

XXXXXX: States submit proposals to meet requirements of Addendum II.

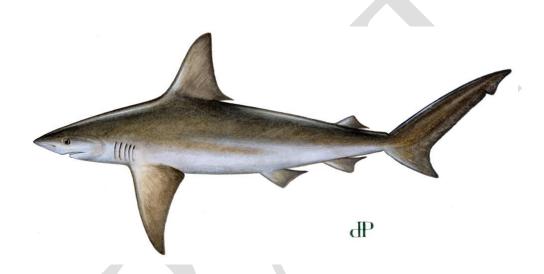
XXXXXX: Management Board reviews and takes action on state proposals.

XXXXXX: States implement regulations.

2012 DRAFT REVIEW OF THE ATLANTIC STATES MARINE FISHERIES COMMISSION FISHERY MANAGEMENT PLAN FOR

COASTAL SHARKS

2011 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

Date of FMP Approval: August 2008

Amendments None

Addenda Addendum I (September 2009)

Management Unit: Entire coastwide distribution of the resource from the

estuaries eastward to the inshore boundary of the EEZ

States With Declared Interest: Maine - Florida

Active Boards/Committees: 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.

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, blacknose, and bonnethead sharks | | | |
| Non-sandbar large coastal | Silky, tiger, blacktip, spinner, bull, lemon, nurse, scalloped hammerhead, great hammerhead and smooth hammerhead | | | |
| Pelagic | Shortfin mako, porbeagle, common thresher, oceanic whitetip and blue sharks | | | |
| Smooth dogfish | Smooth dogfish | | | |

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 obscures*), sandbar (*Carcharhinus plumbeus*), and blacknose (*Carcharhinus acrontus*) 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 incorporating the results of the assessment as part of Amendment 5 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.

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

| | Stock | Status | |
|---------------------------------------|------------|-----------------------|---|
| Species or Complex Name | Overfished | Overfishing occurring | References/Comments |
| Porbeagle | Y | N | Porbeagle Stock Assessment, ICCAT Standing Committee on Research and Statistics Report (2009) |
| Dusky | Y | Y | SEDAR 21 (2011) 'Prohibited' species |
| 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) |
| Smooth dogfish | Unknown | Unknown | No assessment |

Atlantic sharpnose and bonnethead sharks will be assessed in 2013 by SEDAR. 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 sharks complexes opened on January 1, 2011, with the exception of the non-sandbar large coastal 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 2011 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 | 351.9 | July 15, 2011 | November 15, 2011 | |
| Non-sandbar LCS Research Quota | 37.5 | January 1, 2011 | July 26, 2011 | |
| Sandbar Research Quota | 87.9 | January 1, 2011 | | |
| Non-blacknose Small Coastal Sharks | 314.4 | January 1, 2011 | December 31, 2011 | |
| Blacknose Sharks | 19.9 | January 1, 2011 | December 31, 2011 | |
| Blue Sharks | 273 | January 1, 2011 | December 31, 2011 | |
| Porbeagle Sharks | 1.6 | January 1, 2011 | August 29, 2011 | |
| Pelagic Sharks other than Porbeagle or Blue | 488 | January 1, 2011 | December 31, 2011 | |

Landings

Commercial landings of Atlantic large coastal sharks species in 2011 were 1,485,239 lbs dw, a slight decrease from the 2010 total (Table 4). Commercial landings of small coastal shark species in 2011 were 583,684 lbs dw. This is an increase of approximately 225,000 lbs dw from 2010 (Table 5). Total US landings of Atlantic pelagic species of sharks were 1,603 mt ww in 2011. This is approximately a threefold increase in landings from 2010, when landings totaled 565 mt ww Table 6. The 2011 landings of pelagic species comprise 5.1% of total international landings of pelagic species.

Table 4: Commercial landings of authorized Atlantic large coastal sharks by species (thousands of pounds dw), 2003-2011. Source: HMS SAFE Report, 2012.

| | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|-------------------------|--------|--------|-------|--------|--------|-------|-------|-------|-------|
| Blacktip | 1474.4 | 1092.6 | 894.8 | 1255.3 | 1091.5 | 573.7 | 601.1 | 858.3 | 572.2 |
| Bull | 93.8 | 49.6 | 118.4 | 173.4 | 154.9 | 186.9 | 207.5 | 222.8 | 228.5 |
| Dusky | 23.3 | 1.0 | 0.9 | 4.2 | 2.1 | 0.0 | 0.5 | 0.0 | 0.0 |
| Great hammerhead | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Scalloped hammerhead | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Smooth hammerhead | 0.0 | 0.1 | 0.1 | 0.2 | 0.0 | 0.4 | 4.0 | 7.8 | 0.1 |
| Unclassified hammerhead | 150.4 | 116.5 | 182.4 | 141.1 | 65.2 | 55.9 | 159.9 | 95.7 | 104.3 |
| LCS | 51.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

| unclassified | | | | | | | | | |
|--------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Lemon | 80.7 | 67.8 | 74.4 | 65.1 | 72.6 | 53.4 | 82.3 | 46.4 | 82.3 |
| Nurse | 0.1 | 0.3 | 0.2 | 2.3 | 0.0 | 0.1 | 0.1 | 0.1 | 0.0 |
| Sandbar | 1425.6 | 1223.2 | 1247.0 | 1501.3 | 691.9 | 86.6 | 168.0 | 129.3 | 140.3 |
| Silky | 51.6 | 11.8 | 18.2 | 16.2 | 16.5 | 4.8 | 5.5 | 1.2 | 1.6 |
| Spinner | 12.1 | 14.8 | 47.7 | 96.3 | 17.9 | 123.7 | 37.0 | 91.1 | 71.2 |
| Tiger | 18.5 | 31.0 | 39.4 | 50.7 | 34.2 | 29.7 | 23.0 | 49.0 | 58.8 |
| Unclassified | | | | | | | | | |
| assigned to | 908.1 | 603.2 | 519.7 | 499.1 | 182.2 | 247.6 | 224.1 | 18.0 | 225.8 |
| LCS | | | | | | | | | |
| Total | 4290.0 | 3212.0 | 3142.9 | 3804.9 | 2329.1 | 1362.8 | 1513.2 | 1519.6 | 1485.2 |

Table 5: Commercial landings of authorized Atlantic small coastal sharks by species (thousands of lbs dw), 2003-2011. Source: HMS SAFE Report, 2012.

| | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|-----------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Blacknose | 131.5 | 68.1 | 124.0 | 187.9 | 91.4 | 134.3 | 149.9 | 220.3 | 32.3 |
| Bonnethead | 38.6 | 29.4 | 33.3 | 33.4 | 53.6 | 61.0 | 55.3 | 11.7 | 41.3 |
| Finetooth | 163.4 | 121.0 | 109.8 | 80.5 | 138.5 | 80.8 | 150.9 | 92.7 | 211.9 |
| Sharpnose Atlantic | 191.0 | 230.9 | 354.3 | 459.2 | 332.2 | 324.6 | 277.3 | 220.3 | 261.3 |
| Unclassified | | | | | | | | | |
| assigned to | 8.6 | 1.4 | 9.8 | 1.3 | 2.4 | 23.1 | 34.4 | 0.9 | 36.6 |
| SCS | | | | | | | | | |
| Total | 131.5 | 68.1 | 124.0 | 187.9 | 91.4 | 134.3 | 149.9 | 220.3 | 32.3 |

Table 6: Commercial landings of authorized pelagic sharks by species off the Atlantic coast of the United States (mt dw), 2003-2011. Source: HMS SAFE Report, 2012.

| | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|------------------|------|------|------|------|------|------|------|------|-------|
| Blue shark | 0 | 72 | 72 | 68 | 55 | 138 | 107 | 176 | 1,183 |
| Shortfin mako | 142 | 411 | 469 | 469 | 382 | 188 | 354 | 385 | 408 |
| Porbeagle | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 4 | 12 |
| Total | 142 | 484 | 541 | 538 | 437 | 327 | 462 | 565 | 1,603 |

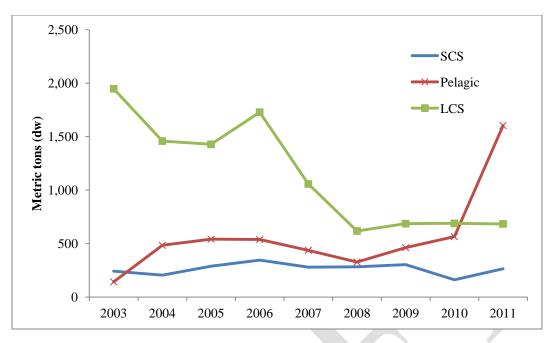


Figure 1: Commercial landings of coastal sharks off the east coast of the United States by species complex, 2003-2011. Source: HMS SAFE Report, 2012.

Recreational landings of shark species in 2011 were similar to other years. Approximately 182,900 fish were harvested during the 2011 fishing season, compared to 178,200 fish in the 2010 season, and 188,500 fish in the 2009 fishing season. The small coastal shark group had the most landings, comprising approximately 60% of the harvest in 2011. Large coastals came next with approximately 33% of the harvest, and pelagic species comprised 3% of the total harvest. Approximately 4% of the total recreational harvest was unclassified and not attributed to any species group.

Table 7: Recreational harvest of all Atlantic shark species by species group in thousands of fish, 2002-2011.

Source: HMS SAFE Report, 2012.

| | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|--------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| LCS | 80.6 | 89 | 67.4 | 85 | 59.1 | 68.8 | 45 | 64.5 | 89.5 | 60.9 |
| Pelagic | 4.7 | 4.3 | 5 | 5.4 | 16.5 | 9 | 2.8 | 7.8 | 6.8 | 5.2 |
| SCS | 152.5 | 134.3 | 127 | 118.9 | 117.2 | 167.6 | 107.9 | 101.1 | 81.3 | 109.3 |
| Unclassified | 5.4 | 18.4 | 28.5 | 47.6 | 7.5 | 23.9 | 6.1 | 15.1 | 0.6 | 7.5 |
| Total | 243.2 | 246 | 227.9 | 256.9 | 200.3 | 269.3 | 161.8 | 188.5 | 178.2 | 182.9 |

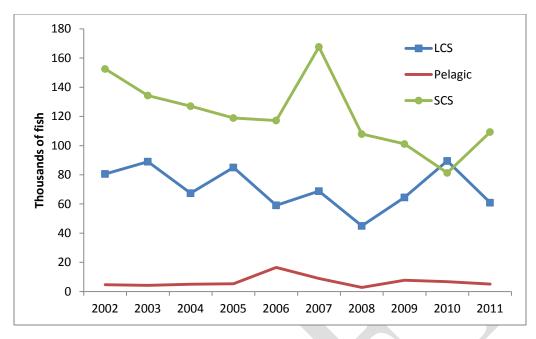


Figure 2: Recreational harvest of all Atlantic coast species by species group, in thousands of fish, 2002-2011. Source: HMS SAFE Report, 2012.

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 Rhode Island Division of Fish & Wildlife, Marine Fisheries Section monthly and seasonal trawl survey. During the 2011 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 below.

Table 8: Summary of fishery independent monitoring for coastal sharks captured in the RI Division of Fish & Wildlife, Marine Fisheries Section monthly and season trawl survey during 2011. Note that the only species captured was smooth dogfish (*Mustelus canis*).

| Year | Month | Tows | Total weight | Total | Number per | Kg per tow |
|-------|-------|-----------|---------------------|--------|------------|------------|
| 1 cui | Month | conducted | (kg) | number | tow | ng per tow |
| | | Month | nly coastal trawl s | urvey | | |
| 2011 | Jan | 13 | 0 | 0 | 0 | 0 |
| | Feb | 13 | 0 | 0 | 0 | 0 |
| | Mar | 13 | 0 | 0 | 0 | 0 |
| | Apr | 13 | 0 | 0 | 0 | 0 |
| | May | 13 | 3.39 | 1 | 0.08 | 0.26 |
| | Jun | 12 | 13.73 | 5 | 0.42 | 1.14 |

| Jul | 13 | 1.50 | 8 | 0.62 | 0.12 | | | |
|--------|-------------------------------|-------|----|------|------|--|--|--|
| Aug | 13 | 3.36 | 5 | 0.38 | 0.26 | | | |
| Sep | 13 | 1.39 | 2 | 0.15 | 0.11 | | | |
| Oct | 13 | 14.98 | 16 | 1.23 | 1.15 | | | |
| Nov | 13 | 0.63 | 1 | 0.08 | 0.05 | | | |
| Dec | 13 | 0 | 0 | 0 | 0 | | | |
| | Seasonal coastal trawl survey | | | | | | | |
| Spring | 43 | 0 | 0 | 0 | 0 | | | |
| Fall | 43 | 33.15 | 12 | 0.77 | 0.28 | | | |

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 2011 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. Delaware also conducts a 16' juvenile trawl survey in the Inland bays. The only species caught in this survey was smooth dogfish.

Maryland

There are no specific at sea sampling programs for Atlantic coastal sharks in Maryland. Limited biological sampling of commercial catch onboard commercial offshore trawlers does occur. On August 17, 2011, September 27, 2011, and October 11, 2011, 12 Smooth Dogfish (*Mustelus canis*) were encountered in four bottom trawls offshore of Ocean City, MD that were targeting horseshoe crabs. The vessel was rigged with a 27.4 m (90 foot) bottom trawl with a 15.24 cm (6 inch) mesh body, with a 15.24 cm (6 inches) cod end. Twelve smooth dogfish were measured and sexed. The minimum size was 398 mm and the maximum size was 730 mm. Average length was 522 mm (\pm 22). There were seven males, four females, and one unknown. It is unknown if these fish were kept or released.

Two Atlantic Angel Sharks (*Squatina dumeril*) were measured and released on July 7, 2011 and August 17, 2011. The vessel was rigged with a 27.4 m (90 foot) bottom trawl with a 15.24 cm (6 inch) mesh body, with a 15.24 cm (6 inches) cod end. The minimum size was 1200 mm and the maximum size was 1300 mm.

North Carolina

The NCDMF does not have an independent program to tag Atlantic Coastal sharks. The NCDMF does have an independent red drum longline project (began 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 12 coastal sharks in 2011. Of the 12 sharks caught, five were sandbar sharks (*Carcharhinus plumbeus*) ranging in size from 622-1038 mm TL (mean=915 mm TL), one bull shark (*Carcharhinus leucas*) 1829 mm TL, four blacktip sharks (Carcharhinus limbatus) ranging in size from 1188-1335 mm TL (mean=1257) and two spinner sharks (Carcharhinus brevipinna) ranging in size from 489-501 mm TL (mean=739 mm TL). Of the five sandbar sharks caught four were released with steel dart tags.

In 2011, the Pamlico Sound independent gill net survey catch included a total of one blacktip (*Carcharhinus limbatus*) with a total length of 663 mm, five bull sharks (*Carcharhinus leucas*) with total lengths ranging from 835-929 mm (mean=894 mm TL), four bonnethead (*Sphyrna tiburo*) with total lengths ranging from 856-1104 mm (mean=949 mm TL), four sandbar sharks (*Carcharhinus plumbeus*) with total lengths ranging from 686-821 mm (mean = 757 mm TL), four Atlantic sharpnose (*Rizoprionodon terraenovae*) with total lengths ranging from 338-982 mm (mean = 761 mm TL) and 398 smooth hound (*Mustelus canis*) with total lengths ranging from 332-1040 mm (mean = 662 mm TL).

In 2011, 1142 sharks were caught in the near shore ocean and 123 were caught in the Cape Fear and New rivers through the Fisheries Independent Assessment Program Ocean Gillnet (FIAPOG). Of the 1142 sharks caught in the nearshore ocean, there were seven blacktip with total lengths ranging in size from 760 – 1270 mm (mean = 1000 mm TL), 33 bonnethead with total lengths ranging in size from 575 – 990 mm (mean = 778 mm TL), eight scalloped hammerhead (*Sphyrna lewini*) with total lengths ranging in size from 449-980 (mean = 704 mm TL), 346 sharpnose with total lengths ranging in size from 257 – 850 mm (mean = 626 mm TL), 38 smooth dogfish with total lengths ranging in size from 452-1070 mm (mean = 788 mm TL), 11 spinner (*Carcharhinus brevipinna*) with total lengths ranging in size from 572-1425 mm (mean = 931 mm TL), six sand tiger (*Carcharias taurus*) with total lengths ranging in size from 940-2743 mm (mean=1972) and one sandbar (*Carcharhinus plumbeus*) with a total length of 1829.

Of the 123 sharks that were caught in the Cape Fear and New rivers, there were four blacktip with total lengths ranging in size from 953 – 1015 mm (mean = 980 mm TL), 24 bonnethead with total lengths ranging in size from 663 – 955 mm (mean = 820 mm TL), four sandbar with total lengths ranging in size from 700 – 800 mm (mean = 761 mm TL), 78 sharpnose with total lengths ranging in size from 246 – 644 mm (mean = 336 mm TL), two smooth dogfish with total lengths ranging in size from 510 – 620 mm TL (Mean = 565 mm TL), one bull shark (*Carcharhinus leucas*) with a total length of 594 mm, one dusky shark (*Carcharhinus obscures*) with a total length of 561 mm and seven finetooth sharks (*Carcharhinus isodon*) with total lengths ranging in size from 961-1122 mm (mean=1017 mm TL).

South Carolina

The marine game fish tagging program encourages anglers to participate in the catch and release of fish, while helping scientists collect valuable information on movement and migration. Reductions in funding have reduced the amount of participating anglers as well as tagging effort. A total of 17 sharks were tagged by recreational anglers in 2011, with five Atlantic sharpnose, two blacktips, six bonnetheads, one finetooth and two lemon sharks tagged.

Catches of LCS on the hand deployed longline, which is a part of the COASTSPAN survey, 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 2011 remained above the long term average, although they were slightly lower than 2010. Catches of SCS were also lower in 2011.

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 lower than their mean CPUE in 2011 with SCS having the lowest CPUE on record since the survey began (Figure 9). Large coastal sharks are caught infrequently in gill nets, averaging less than one LCS per net set.

Georgia

SEAMAP samples Georgia's adult red drum population. 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 2011, CRD staff deployed 284 sets consisting of 17,028 total hooks and 142 hours of total soak time. A total of 770 sharks, representing 12 species were captured during the 2011 season.

COASTSPAN samples areas where sharks are known to nurse. 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 2011, CRD staff fished 120 longline stations consisting of 6,000 hooks and a total of 60 hours of soak time. No spiny dogfish were captured. A total of 407 sharks, representing 7 species were captured during 2011.

The Ecological Monitoring Survey (EMS) uses a 40-foot flat otter trawl with neither a turtle excluder device nor bycatch reduction device to sample 42 stations across six estuaries. At each station, a standard 15 minute tow is made. During this report period, 504 tows/observations were conducted, totaling 127.00 hours of tow time. A total of 288 sharks, representing 5 species were captured during 2011.

The Marine Sportfish Population Health Survey (MSPHS) is a multi-faceted ongoing survey used to collect information on the biology and population dynamics of recreationally important finfish. 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 2011, a total of 216 gillnet and 150 trammel net sets were made, resulting in the capture of 217 individuals representing four 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, and Addendum I, which was implemented in September 2009.

The FMP addresses the management of 40 species, including smooth hound sharks, 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.

VI. Implementation of FMP Compliance Requirements for 2011

Mandatory compliance elements for 2011 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
- 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.
- 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 in Table 3..
- 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:
 - o Rod & reel

- o **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.
- o **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.
- o 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.
- o Pounds nets/fish traps.
- o 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.
- All sharks caught by commercial fishermen must have tails and fins attached naturally to the carcass through landing.

Table 9: Possession limits for shark species in state waters for 2011 fishing season.

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

VII. PRT Recommendations

State Compliance

Connecticut, New York and New Jersey have not submitted reports. 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 plans goals and objectives.

States that have been granted *de minimis* status are Maine, New Hampshire and Massachussetts. 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

Massachussetts, also a state that does not land large quantities of sharks and does not have many of the sharks 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

¹Recent 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.

- 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
- 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. 2012. NOAA Fisheries, December 21, 2012.

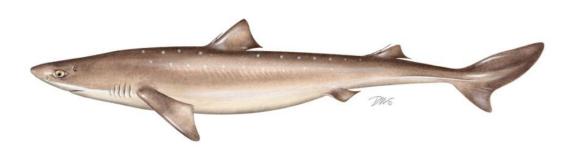
< http://www.nmfs.noaa.gov/sfa/hms/hmsdocument_files/SAFEreports.htm>

2012 DRAFT REVIEW OF THE ATLANTIC STATES MARINE FISHERIES COMMISSION FISHERY MANAGEMENT PLAN FOR

SPINY DOGFISH

(Squalus acanthias)

2011/2012 FISHING YEAR



Spiny Dogfish Plan Review Team

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>: November 2002

Amendments None

Addendum I (November 2005)

Addendum II October 2008) Addendum III (April 2011) Addendum IV (August 2012)

Management Unit: Entire coastwide distribution of the resource from the estuaries

eastward to the inshore boundary of the EEZ

States With Declared Interest: Maine - Florida

Active Boards/Committees: 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 Spiny Dogfish (FMP) established the following goals and objectives.

2.2. *GOALS*

The goal of the Interstate Fishery Management Plan for Spiny Dogfish is:

"To promote stock rebuilding and management of the spiny dogfish fishery in a manner that is biologically, economically, socially, and ecologically sound."

2.3 OBJECTIVES

In support of this goal, the following objectives are recommended for the Interstate FMP:

- 1. Reduce fishing mortality and rebuild the female portion of the spawning stock biomass to prevent recruitment failure and support a more sustainable fishery.
- 2. Coordinate management activities between state, federal and Canadian waters to ensure complementary regulations throughout the species range.
- 3. Minimize the regulatory discards and bycatch of spiny dogfish within state waters.
- 4. Allocate the available resource in biologically sustainable manner that is equitable to all the fishers.
- 5. Obtain biological and fishery related data from state waters to improve the spiny dogfish stock assessment that currently depends upon data from the federal bottom trawl survey.

b) Fisheries Management Plan Summary

In 1998, NMFS declared spiny dogfish overfished and initiated the development of a joint fishery management plan (FMP) between the Mid-Atlantic (MAFMC) and New England Fishery Management Councils (NEFMC) in 1999. NMFS partially approved the federal Fishery Management Plan in September 1999, but implementation did not begin until May 2000, the start of the 2000-2001 fishing year.

In August 2000, ASMFC took emergency action to close state waters to the commercial harvest, landing, and possession of spiny dogfish when the federal waters closed in response to the quota being fully harvested. With the emergency action in place, the Commission had time to develop an interstate FMP, which prevented the undermining of the federal FMP and prevented further overharvest of the coastwide spiny dogfish population. Needing additional time to complete the interstate FMP, the ASMFC extended the emergency action twice through January 2003. During that time, the majority of spiny dogfish landings were from state waters because states had either no possession limits or less conservative possession limits than those of the federal FMP. The Interstate FMP for Spiny Dogfish was approved by ASMFC in November 2002 and was implemented for the 2003-2004 fishing year. In general, the ASMFC and Council FMP's strive to promote stock rebuilding and management of the spiny dogfish fishery in a manner that is biologically, economically, socially, and ecologically sound.

Both the ASMFC and Council FMP's established an annual quota that gets allocated seasonally between two periods (57.9% from May 1 to October 31 and 42.1% from November 1 to April 30). The seasonal periods can have separate possession limits that are specified on an annual basis. Both the Council and ASMFC FMP's also include paybacks for quota overages, allow for a five percent quota rollover once the stock is rebuilt, and allow for up to 1,000 spiny dogfish to be harvested for biomedical supply.

In November 2005, the Spiny Dogfish and Coastal Sharks Management Board approved Addendum I to the Interstate FMP for Spiny Dogfish. Addendum I provides the Board with the authority, but not the requirement, to establish spiny dogfish specifications (quota and possession limits) for up to five years. The Mid-Atlantic and New England Fishery Management Councils took similar action under Framework 1, recommending the adoption of multi-year management measures without the requirement of annual review to NOAA Fisheries for final approval. Framework 1 to the federal Spiny Dogfish FMP, which will allow the specification of commercial quotas and other management measures for up to five years, became effective February 21, 2006.

Addendum II, approved October 2008, established regional quotas in place of the FMP's seasonal allocation. Under Addendum II, the annual quota is divided regionally with 58% allocated to the states of Maine to Connecticut, 26% allocated to the states of New York to Virginia, and the remaining 16% allocated to North Carolina. The Board allocated a specific percentage to North Carolina because spiny dogfish are not available to their fishermen until late into the fishing season when most of the quota has already been harvested. The North Carolina allocation will allow fishermen and processors to plan fishing operations based on a specific amount of dogfish. Regional overage paybacks were also included in Addendum II to maintain the conservation goals of the plan. Any overage of a region and/or state quota is subtracted from that region/state the subsequent fishing year.

The Commission's Spiny Dogfish and Coastal Sharks Management Board (Board) approved Addendum III to the Interstate Fishery Management Plan for Spiny Dogfish (Addendum III) in March 2011. Addendum III did not apply to the 2009/2010 fishing season and was not effective until the 2011/2012 fishing season. The Addendum divided the southern region annual quota of 42% into state-specific shares. It also allowed for quota transfer between states, rollovers of up to five percent, state-specified possession limits, and includes a three-year reevaluation of the measures. The Addendum's provisions apply only to states in the southern region (New York through North Carolina) and do not modify the northern region allocation. The states of Maine to Connecticut continue to share 58% of the annual quota as specified in Addendum II.

Addendum IV to the Interstate Fishery Management Plan for Spiny Dogfish (Addendum IV) was approved in August 2012. This Addendum addressed the differences in the definitions of overfishing between the NEFMC, MAFMC and the ASMFC. The Board adopted the fishing mortality threshold

to be consistent with the federal plan. Overfishing is defined as an F rate that exceeds the $F_{threshold}$. The $F_{threshold}$ is defined as F_{MSY} (or a reasonable proxy thereof) and based upon the best available science. The maximum fishing mortality threshold (F_{MSY}) or a reasonable proxy may be defined as a function of (but not limited to): total stock biomass, SSB, total pup production, and may include males, females, both, or combinations and ratios thereof which provide the best measure of productive capacity for spiny dogfish. This definition is consistent with the federal Spiny Dogfish FMP. Currently $F_{MSY} = 0.2439$. This addendum and F_{MSY} apply to the spiny dogfish fishery on or after August 2012, so they do not apply to the fishery for the year this document is reviewing.

II. Status of the Stock and Assessment Advice

Overfishing definition: $F_{target} = 0.207$; allows for the production of 1.5 female pups per female

that will recruit to the spawning stock biomass (SSB).

 $F_{threshold} = 0.325$; allows for the production of one female pup per

female that will recruit to the SSB.

Overfished Definition: $SSB_{target} = 159,288 \text{ mt}$ (351 million pounds); level of biomass that

would maximize recruitment to the population (100% SSBmax).

 $SSB_{threshold} = 79,644 \text{ mt}$ (175 million pounds); 50% of SSBmax

Spiny dogfish are not overfished and overfishing is not occurring:

Spiny dogfish was declared 'rebuilt' in 2008 when SSB exceeded the target for the first time since the ASMFC began managing spiny dogfish in 2002. Prior to the 'rebuilt' status, quotas were based on the short term target $F_{rebuild} = 0.11$. The FMP allows for quotas based on F_{target} (as opposed to the more conservative $F_{rebuild}$) "once the mature female portion of the spawning stock has reached the target". Target and threshold F and SSB were updated in the 2010 Northeast Fisheries Science Center (NEFSC) Biological Reference Points for Spiny Dogfish (BRP) report. The updated fishing mortality target is 0.207 and the threshold is 0.325. The updated SSB target and threshold are 159,288 and 79,644 metric tons (mt), respectively.

The most recent estimates of SSB are from the NEFSC Update on the Status of Spiny Dogfish in 2012 and Initial Evaluation of Alternative Harvest Strategies report. The 2012 NEFSC report estimates that SSB continued to exceed the target in 2011 (for the fourth year in a row) at 215,744 metric tons.

The NEFSC Update on the Status of Spiny Dogfish in 2012 and Initial Evaluation of Alternative Harvest Strategies report also provides the most recent estimate of F. F was 0.11 in 2011 and has and has been consistently below the fishing mortality target in recent years. As such, spiny dogfish are not overfished and overfishing is not occurring. Unfortunately, record low pup production from 1997 to 2003 has left a recruitment deficit that will cause SSB to drop around 2012. The amplitude of this drop increases as fishing mortality increases and still occurs when fishing mortality is hypothetically zero.

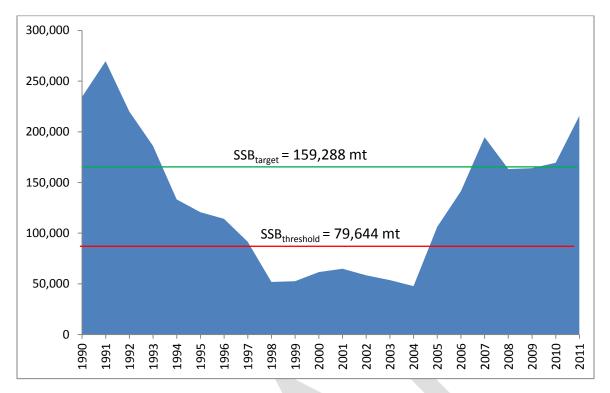


Figure 1: Spiny dogfish spawning stock biomass, 1990 – 2011. Source: NEFSC Update on the Status of Spiny Dogfish in 2012 and Initial Evaluation of Alternative Harvest Strategies.

Table 1: Spawning stock biomass and fishing mortality in the spiny dogfish fishery, 1990-2011. Source: NEFSC Update on the Status of Spiny Dogfish in 2012 and Initial Evaluation of Alternative Harvest Strategies.

| Year | Female SSB (mt) | F rate |
|------|-----------------|--------|
| 1991 | 234,229 | 0.082 |
| 1992 | 269,624 | 0.177 |
| 1993 | 220,002 | 0.327 |
| 1994 | 186,132 | 0.465 |
| 1995 | 133,264 | 0.418 |
| 1996 | 120,664 | 0.355 |
| 1997 | 114,091 | 0.234 |
| 1998 | 91,458 | 0.306 |
| 1999 | 51,821 | 0.289 |
| 2000 | 52,562 | 0.152 |
| 2001 | 61,552 | 0.109 |
| 2002 | 64,844 | 0.165 |
| 2003 | 58,376 | 0.168 |
| 2004 | 53,625 | 0.474 |
| 2005 | 47,719 | 0.128 |
| 2006 | 106,180 | 0.088 |

| 2007 | 141,351 | 0.09 |
|------|---------|-------|
| 2008 | 194,616 | 0.11 |
| 2009 | 163,256 | 0.113 |
| 2010 | 164,066 | 0.093 |
| 2011 | 169,415 | 0.114 |

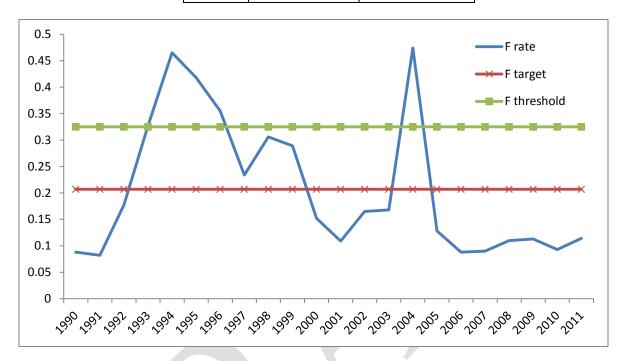


Figure 2: Fishing mortality rates in the spiny dogfish fishery, 1990 – 2011. Source: NEFSC Update on the Status of Spiny Dogfish in 2012 and Initial Evaluation of Alternative Harvest Strategies.

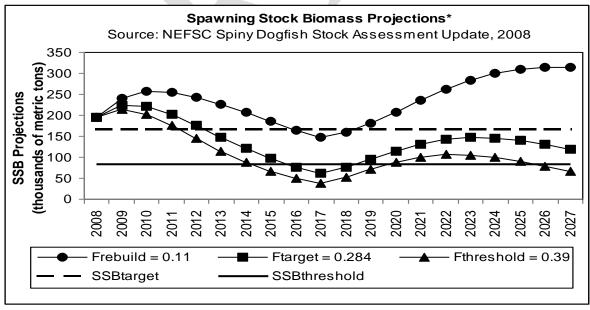


Figure 3: Spawning stock biomass (SSB) projections for the spiny dogfish fishery, 2008-2027. Source: NEFSC Update on the Status of Spiny Dogfish in 2010 and Initial Evaluation of Harvest Strategies.

III. Status of the Fishery

Specifications

The spiny dogfish commercial fishery runs from May 1 – April 30. The coastwide quota was set at 20 million pounds with a maximum of 3,000 pound possession limits for the 2011/2012 fishing season (May 1, 2011 – April 30, 2012), following recommendations from the ASMFC TC and MAFMC Monitoring Committee (Appendix A).

Quotas

Prior to reductions for overages in the 2010/2011 fishing season, the 2011/2012 20 million pound coastwide quota was allocated with 11,600,000 pounds (58%) to states from Maine – Connecticut (Northern Region), 5,592,400 pounds (26%) to New York – Virginia (Southern Region), and 2,807,200 pounds (16%) to North Carolina. Addendum III further divided the Southern region into state-specific quotas as follows: 541,400 pounds (2.707%) to New York, 1,528,800 pounds (7.644%) to New Jersey, 179,200 pounds (0.896%) to Delaware, 1,184,000 pounds (5.920%) to Maryland, 2,159,000 pounds (10.795%) to Virginia and the remaining 2,807,200 pounds (14.036%) to North Carolina. Addendum II specifies that when the quota allocated to a region or state is exceeded in a fishing season, the amount over the allocation will be deducted from the corresponding region or state in the subsequent fishing season. There was a 454,547 pound overage in the Northern Region, 27,912 pound overage in the Southern Region, and 68,648 pound overage in North Carolina during the 2010/2011 fishing season. Table 2 shows the final 2011/2012 quotas after being adjusted for the previous year's overages.

Table 2: Regional quotas for May 1, 2011 - April 30, 2012 fishing season.

| Region/State | 2011/2012 Quotas | 2010/2011 Overages | 2011/2012 Adjusted Quotas |
|----------------|---------------------|-----------------------|---------------------------------|
| Northern | 11,600,000 | 454,547 | 11,145,453 |
| New York | 541,400 | | 538,698 |
| New Jersey | 1,528,800 | | 1,521,170 |
| Delaware | 179,200 | 27,912 ¹ | 178,306 |
| Maryland | 1,184,000 | | 1,178,091 |
| Virginia | 2,159,000 | | 2,148,224 |
| North Carolina | 2,807,200 | 68,648 | 2,738,552 |

Landings

There was a 454,547 and 27,912 pound overage in the Northern and Southern Region, respectively, during the 2010/2011 fishing season (Table 2). Overages from the 2010/2011 fishing season were primarily the result of late reports and an increased rate of landings at the

¹ State-specific quotas had not been established prior to 2011/2012.

end of the season. North Carolina landed 68,648 pounds more than their allocation during the 2010/2011 fishing season.

Commercial landings totaled 20,346,473 pounds during the 2011/2012 fishing season (Table 3). The increase coincides with the increased commercial quota set by the Board for the 2011/2012 fishing season. Massachusetts (9,048,875 pounds), New Hampshire (1,332,781 pounds), North Carolina (2,538,995 pounds), Virginia (2,794,578 pounds), and New Jersey (1,881,019 pounds) had the most significant commercial landings during the 2011/2012 fishing season.

Table 3: Commercial landings of spiny dogfish on the Atlantic coast, 2011/2012 fishing year. Source: ACCSP Data Warehouse.

| State Landed | Pounds |
|--------------|------------|
| DE | 9,901 |
| MD | 489,413 |
| NJ | 1,881,019 |
| NY | 452,114 |
| VA | 2,794,578 |
| CT | 186,967 |
| MA | 9,048,875 |
| ME | 345,267 |
| NH | 1,332,781 |
| RI | 1,266,563 |
| NC | 2,538,995 |
| Total | 20,346,473 |
| | _ |

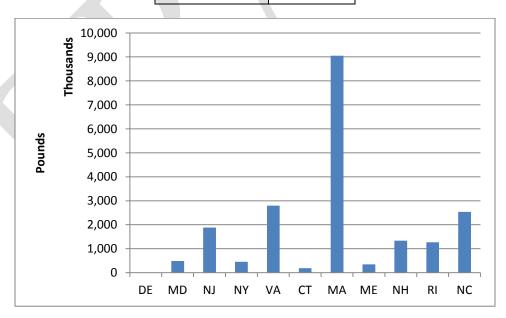


Figure 4: Commercial landings of spiny dogfish on the Atlantic coast, 2011/2012. Source: ACCSP Data Warehouse.

Recreational harvest of spiny dogfish on the Atlantic coast for the 2011/2012 fishing year remained insignificant at 200,711 pounds. This is less than 1% of total landings of spiny dogfish.

Canadian landings declined from 113 mt in 2009 to 6 mt in 2010, but returned to 124 mt in 2011. The Canadian and foreign fleets in 2011 collectively accounted for only 267 mt.

Table 4: Landings of spiny dogfish off the Atlantic coast by Canada and foreign fleets, 1991-2011.

| Year | Canada (mt) | Foreign Fleets (mt) | Total (mt) |
|------|-------------|---------------------------|------------|
| 1991 | 307 | 234 | 541 |
| 1992 | 868 | 67 | 935 |
| 1993 | 1,435 | 27 | 1462 |
| 1994 | 1,820 | 2 | 1822 |
| 1995 | 956 | 14 | 970 |
| 1996 | 431 | 236 | 667 |
| 1997 | 446 | 214 | 660 |
| 1998 | 1,055 | 607 | 1662 |
| 1999 | 2,091 | 554 | 2645 |
| 2000 | 2,741 | 402 | 3143 |
| 2001 | 3,820 | 677 | 4497 |
| 2002 | 3,584 | 474 | 4058 |
| 2003 | 1,302 | 643 | 1945 |
| 2004 | 2,362 | 330 | 2692 |
| 2005 | 2,270 | 330 | 2600 |
| 2006 | 2,439 | 10 | 2449 |
| 2007 | 2,384 | 31 | 2415 |
| 2008 | 1,572 | 131 | 1703 |
| 2009 | 113 | 82 | 195 |
| 2010 | 6 | 127 | 133 |
| 2011 | 124 | 143 | 267 |

Total dead discards were 4,325 metric tons (9,534,895 pounds) in 2011. Total dead discards have been between 4,000 and 6,000 metric tons since 1996 (Table 5) despite significant management changes and large fluctuations in annual landings.

Table 5: Dead discards (metric tons) in the spiny dogfish commercial fishery on the Atlantic coast of the United States, 1981-2011. Source: NEFSC 2012 Update on the Status of Spiny Dogfish and Initial Evaluation of Harvest at F_{msv} Proxy.

| Year | Otter trawl | Sink gill net | Scallop dredge | Line gear | Total dead discards |
|------|----------------|---------------|-------------------|--------------|---------------------------|
|------|----------------|---------------|-------------------|--------------|---------------------------|

| 1981 | 18,180 | 1,608 | na | na | 19,788 |
|------|--------|-------|-----|-----|--------|
| 1982 | 21,455 | 1,336 | na | na | 22,791 |
| 1983 | 21,094 | 1,213 | na | na | 22,307 |
| 1984 | 19,813 | 1,475 | na | na | 21,288 |
| 1985 | 16,677 | 1,362 | na | na | 18,039 |
| 1986 | 15,873 | 1,465 | na | na | 17,338 |
| 1987 | 14,525 | 1,459 | na | na | 15,984 |
| 1988 | 14,476 | 1,540 | na | na | 16,015 |
| 1989 | 14,143 | 1,608 | na | na | 15,751 |
| 1990 | 17,121 | 1,819 | na | na | 18,940 |
| 1991 | 9,661 | 3,309 | 24 | 10 | 13,004 |
| 1992 | 16,309 | 1,786 | 620 | 65 | 18,779 |
| 1993 | 8,642 | 2,944 | 157 | 4 | 11,747 |
| 1994 | 6,954 | 866 | 542 | na | 8,362 |
| 1995 | 8,499 | 2,019 | 284 | na | 10,801 |
| 1996 | 4,701 | 1,167 | 91 | na | 5,959 |
| 1997 | 3,352 | 698 | 149 | na | 4,199 |
| 1998 | 2,634 | 590 | 90 | na | 3,313 |
| 1999 | 3,843 | 602 | 31 | na | 4,475 |
| 2000 | 1,364 | 1,405 | 11 | na | 2,780 |
| 2001 | 2,460 | 2,161 | 23 | na | 4,643 |
| 2002 | 2,770 | 1,499 | 44 | 402 | 4,714 |
| 2003 | 1,927 | 1,624 | 77 | 0 | 3,628 |
| 2004 | 4,150 | 1,209 | 40 | 50 | 5,448 |
| 2005 | 3,758 | 1,001 | 11 | 118 | 4,887 |
| 2006 | 3,886 | 1,011 | 10 | 13 | 4,920 |
| 2007 | 4,058 | 1,540 | 45 | 7 | 5,650 |
| 2008 | 2,802 | 1,459 | 178 | 26 | 4,465 |
| 2009 | 3,505 | 1,462 | 273 | 84 | 5,323 |
| 2010 | 2,782 | 716 | 147 | 51 | 3,695 |
| 2011 | 3,270 | 849 | 170 | 36 | 4,325 |
| | | | | | |

Total commercial landings in 2011 are estimated to be 92% female. Females composed an average of 93.5% of commercial catch since 2000 (NEFSC Update 2012).

IV. Status of Research and Monitoring

Under the Interstate Fishery Management for Spiny Dogfish, the states are not required to conduct any fishery dependent or independent studies. The Interstate FMP requires an annual review of recruitment, spawning stock biomass, and fishing mortality. The annual review relies heavily on the NEFSC's spring trawl survey data to determine the annual status of the stock. States are encouraged to submit any spiny dogfish information collected while surveying for other species. Research and monitoring information from state reports follows. States that are

did not include research/monitoring information in their reports are not listed below. Please see individual reports for more information.

Maine:

The spring portion of the 2011 Maine-New Hampshire Inshore Trawl Survey was conducted in the near shore waters of the Gulf of Maine. A total of 15 spiny dogfish were collected, 5 females and 10 males were caught. Males ranged from 27 to 75 cm and the females 31 to 79 cm. The fall portion of the 2011 Trawl survey saw 1648 dogfish. There were 1139 males at lengths ranging from 26 cm to 85 cm with the majority ranging between 72 and 78 cm. A total of 509 females were sampled at lengths ranging between 24 and 92 cm, numbers were distributed fairly evenly within this range. All dogfish collected in the survey were released alive.

Delaware:

Delaware has two fisheries independent surveys that have the potential for taking spiny dogfish. The first is a 30-foot bottom trawl that was deployed monthly in Delaware Bay at nine fixed stations from March through December in 2011. These surveys have been conducted annually since 1990, and before that from 1966-1971 and 1979-1984 using essentially the same gear type. A total of 92 spiny dogfish was taken in 2011 in 90 tows of this gear, and most of these were taken in December (60) with the others being taken in April (7), May (6) and November (19).

The second fishery independent survey that has the potential for taking spiny dogfish is the 16-foot bottom trawl which is deployed monthly at 39 fixed stations in Delaware River and Delaware Bay and at 12 fixed stations in Delaware's Inland Bays. This survey is conducted from April through October. This gear includes a 0.5-inch mesh liner in the cod end of the trawl and it targets primarily juvenile fishes. There were no spiny dogfish taken with this gear in 2011 from either the Delaware Bay or Delaware's Inland Bays.

Virginia

The intercept component of the Marine Recreational Fishing Statistic Survey (MRFSS) program interviews anglers to collect demographic information and individual catch data. The raw intercept files demonstrate few spiny dogfish have been encountered during surveys of anglers intercepted in Virginia. Beginning in 2010 a new Marine Recreational Information Program (MRIP) was initiated to provide recreational fishing estimates based on angler intercepts. The estimates for MRIP are available from 2004 through 2011. Type A+B1 harvest based on MRIP estimates range from a low in 2007 of 13 fish, to a high in 2011 of 4,937 fish.

North Carolina

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 US Department of Commerce, National Marine Fisheries Service). Predominate fisheries sampled included the ocean gill net fishery, estuarine gill net fishery, winter trawl fishery, long haul seine/swipe net fisheries, beach haul seines and pound net fisheries. The ocean gill net fishery is responsible for the majority of the spiny dogfish landings in North Carolina. Spiny dogfish were sampled from 65 ocean gill net, one winter trawl and one beach seine catch in the 2011/2012 fishing year. The majority of the fishing effort ranged from northeast of Oregon Inlet to Beaufort Inlet. A total of 2461 fish were measured and ranged in length from 681 to 1074 mm total length (TL) with a mean of 876 mm TL.

Spiny dogfish were not sampled during the 2011 or 2012 Cooperative Winter Striped Bass Tagging Cruise due to the use of hook and line gear to capture striped bass instead of the usual trawl gear. The spiny dogfish work conducted during past cruises was in cooperation with the ASMFC, Mid-Atlantic Fishery Management Council, the National Marine Fisheries Service-Northeast Fisheries Science Center, the North Carolina Division of Marine Fisheries and East Carolina University.

The NCDMF initiated a fisheries independent gill net survey in 2001 and expanded its coverage in 2008 to include the Cape Fear River and the near shore Atlantic Ocean from New River Inlet south to the South Carolina state line. The objective of this project is to provide annual, independent, relative-abundance indices for key estuarine species in the Pamlico Sound, near shore Atlantic Ocean, Pamlico, Pungo, Neuse, and Cape Fear rivers. These indices can also be incorporated into stock assessments and used to improve bycatch estimates, evaluate management measures, and evaluate habitat usage. Results from this project will be 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. The survey employs a stratified random sampling design and utilizes multiple mesh gill nets (3.0 inch to 6.5 inch stretched mesh, by ½ inch increments). Catches of spiny dogfish in the Pamlico Sound portion of this survey are minimal. During the 2011/2012 fishing year, a total of 103 spiny dogfish were captured. They ranged from 569 to 992 mm TL with an average of 856 mm TL. Catches of spiny dogfish in the Cape Fear River were minimal with only two fish being captured. In the near shore Atlantic Ocean sampling 703 individuals were captured. They ranged from 610 to 930 mm TL with an average total length of 768 mm. Catch data from the Cape Fear and New River independent gill net project is up to date through July 2012, individuals captured in sampling are represented for the 2011/2012 fishing year. The near shore Atlantic Ocean catches represent preliminary data from May and December, 2011 and February and March, 2012.

South Carolina

Fishery dependent data is collected through the Marine Recreational Fisheries Statistics Survey (MRFSS), the South Carolina State Finfish Survey (SFS), and a SCDNR-managed mandatory trip reporting system for licensed charter boat operators. Commercial landings and effort are monitored though logbooks and trip tickets. There is limited data available on recreational catches of spiny dogfish due to the low number of anglers interviewed have caught or harvested spiny dogfish.

Data collected from the charter boat fishery includes, effort, species targeted, species encountered and species captured. A total of 1,173 spiny dogfish were captured in 2011, with 39 (280 lbs.) of them harvested.

The SCDNR's on-going nearshore bottom longline survey program documents the annual presence of spiny dogfish in South Carolina's nearshore coastal waters, typically beginning in mid-November. Relative abundance and residence time of spiny dogfish along the coast in

general, may be related to winter water temperatures along the east coast, with colder winters resulting in larger spiny dogfish populations and longer residence times in South Carolina waters than in more moderate temperature years. Adult females, many being pregnant, seem to make up a majority of the fish taken by sampling gear in this program, suggesting that South Carolina waters may play a role as valuable over-wintering grounds for this species.

Georgia

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, 504 tows/observations were conducted, totaling 127.00 hours of tow time. Two spiny dogfish were captured in two separate trawls during February. Lengths for these fish were 790 mm TL and 830 mm TL.

V. Status of Management Measures and Issues

Fishery Management Plan

Interstate Specifications for the 2011/2012 fishing season:

Coastwide quota: 20 million pounds Maximum possession limit: 3,000 pounds

The Northern Region (MA – CT) was closed on September 1, 2011. New Jersey closed January 8, 2012. Virginia closed December 7, 2011.

Federal specifications

Coastwide quota: 20 million pounds; Maximum possession limit: 3,000 pounds; Regional allocation; Period 1 (May – October) closed on August 26, 2011; Period 2 (November – April) closed on January 13, 2012.

Canadian Regulations

Spiny dogfish is listed as a "groundfish" in the Canada Department of Fisheries and Oceans (DFO) Atlantic Fishery Regulations and managed under their groundfish plan. In the Canadian Maritimes region (New Brunswick, Nova Scotia, and Prince Edward Island), a total allowable catch (TAC) of 2,500 mt has been established for a directed spiny dogfish using fixed gears (longline, handline and gillnet) and Canadian landings have been significantly below this level for the past few years.

Other groundfish fleets are permitted bycatch only. The inshore and offshore dragger fleets are permitted to retain bycatch in the amount of 25 mt for vessels less than 65 feet and vessels larger in size have an annual cap of 10 mt. With the re-opening of the US east coast fishery and the subsequent reduction in market demand from US buyers, there is very little targeting of spiny dogfish in Canadian waters at this time.

Marine Stewardship Council (MSC) Certification

On August 30, 2012, the United States east coast spiny dogfish fishery was awarded MSC certification as a sustainable and well-managed fishery following an independent, third-party assessment by the certification body. The Marine Stewardship Council focuses on two standards to certify their seafood: sustainable fishing and seafood traceability. The spiny dogfish fishery on the east coast of the United States is the first US Atlantic fishery to be certified.

VI. Implementation of FMP Compliance Requirements

The mandatory components of the Interstate Fishery Management Plan are:

- There are no management measures for the recreational fishery.
- States must close the fishery when the commercial quota is projected to be harvested in their region. (4.1.2 Semi-Annual Quota Allocation of FMP)
- Possession limits cannot exceed the maximum specified by the Board during the annual specification setting process. (4.1.2.1 Annual Process for Setting Fishery Specifications of FMP)
- States may issue exempted fishing permits for the purpose of biomedical supply not to exceed 1,000 spiny dogfish per year. States must report the amount of dogfish harvested under special permits annually. (4.1.6 Biomedical Supply of FMP)
- Up to 1,000 spiny dogfish may be taken for biomedical harvest per year.
- Finning is prohibited. (4.1.7 Prohibition of Finning of FMP)
- State permitted dealers must report weight weekly. (4.1.4 Data Collection and Reporting Requirements of FMP)
- States must report weight weekly to NMFS. (4.1.4.2 Quota Monitoring of FMP)

Biomedical Harvest

In 2011, Mount Desert Island Biological Labs (MDIBL) was the only special license holder that collected dogfish for biomedical supply. A total of 197 spiny dogfish were collected from May 24 – August 25, 2011 from Maine coastal waters. Average centimeters per trip ranged from 76 to 88 cm. All dogfish were used for biomedical research at MDIBL.

Scientific/Educations Permits

Maine Department of Marine Resources (ME DMR) operates a public aquarium at its Boothbay Harbor laboratory facility. The Marine Resources Aquarium did not receive any spiny dogfish during the 2011 season.

Eight scientific or educational collection permits were issued in North Carolina during the 2011-2012 fishing season with sharks as a target species. Of these eight permits three spiny dogfish were captured and only one was released. The average weight of the three was 7 kg (15 lb) and they were captured in trawl gear.

VII. PRT Recommendations

State Compliance

Connecticut and New York have not submitted reports. All other states with a declared interest in the management of spiny dogfish, have submitted reports, and have regulations in place that meet or exceed the requirements of the Interstate Fisheries Management Plan for Spiny Dogfish.

There were some landings and late reports that came in during the two weeks after the Northern Region closed (Table 6). The closure lag and/or landings during these closed periods are thought to be a result of federal waters remaining open while state waters were closed (Table 7). Some states regulations stipulate possession limits and open seasons that mirror federal regulations or require federal permits (whose conditions control fishing in state waters) to meet the requirements of the FMP.

Table 6: Late reports and landings in Northern Region during 2011/2012 fishing season. Source: NOAA Fisheries Weekly Quota and Landings website quota report archives.

| | Aug 27 – Sept 2 | | Sept 3 - | - Sept 10 |
|-----------------|-----------------|----------|----------|-----------|
| Northern Region | | | | |
| (Closed on | Previous | | Previous | |
| August 26, | Weeks | Weekly | Weeks | Weekly |
| 2011) | Updates | Landings | Updates | Landings |
| ME | 0 | 0 | 2,985 | 0 |
| NH | 0 | 0 | 3,000 | 0 |
| MA | 4,400 | 130,050 | 0 | 0 |
| RI | 40 | 32,679 | 0 | 0 |
| CT | 375 | 0 | 0 | 0 |
| Total | 4,815 | 162,729 | 5,985 | 0 |

Table 7: ASMFC and NMFS open and closed dates for the 2011/2012 spiny dogfish fishing season by 2 week period.

| Jurisdicti | Jurisdiction | | MFC | NMFS |
|------------|--------------|---|--------------------|------|
| Region | Region | | Southern States | EEZ |
| | 1 | О | 0 | О |
| May | 15 | О | 0 | О |
| | 1 | О | 0 | О |
| June | 15 | О | 0 | О |
| | 1 | 0 | 0 | О |
| July | 15 | 0 | 0 | О |
| | 1 | 0 | 0 | О |
| Aug | 15 | О | 0 | О |
| | 1 | С | 0 | С |
| Sep | 15 | C | 0 | С |
| | 1 | C | 0 | С |
| Oct | 15 | C | 0 | С |
| | 1 | С | 0 | О |
| Nov | 15 | С | 0 | О |
| | 1 | С | 0 | О |
| Dec | 15 | С | 0 | О |

| | 1 | С | 0 | O |
|-----|----|---|---|---|
| Jan | 15 | С | 0 | С |
| | 1 | С | 0 | С |
| Feb | 15 | С | 0 | С |
| | 1 | С | 0 | С |
| Mar | 15 | С | 0 | С |
| | 1 | С | 0 | С |
| Apr | 15 | С | 0 | С |

De Minimis

The ASMFC Interstate Fisheries Management Program Charter defines de minimis as "a situation in which, under the existing condition of the stock and scope of the fishery, conservation, and enforcement actions taken by an individual state would be expected to contribute insignificantly to a coastwide conservation program required by a Fishery Management Plan or amendment" (ASMFC 2000).

Under the Spiny Dogfish FMP, a state may be granted de minimis status if a state's commercial landings of spiny dogfish are less than 1% of the coastwide commercial total. If a state meets this criterion, the state will be exempt from biological monitoring of the commercial spiny dogfish fishery. All states, including those granted de minimis status, will continue to report any spiny dogfish commercial or recreational landings within their jurisdiction.

When the spiny dogfish Interstate FMP was implemented in 2003, Maine, Delaware, South Carolina, Georgia, and Florida were granted de minimis status. To achieve de minimis status the FMP requires, "a state's commercial landings of spiny dogfish to be less than 1% of the coastwide commercial total." When given de minimis status, a state is exempted from biological monitoring of the commercial spiny dogfish fishery, but must continue to report both commercial and recreational spiny dogfish landings.

Delaware, South Carolina, Georgia, and Florida are requesting de minimis status for the 2012/2013 fishing season and meet the FMP requirements for achieving this status (Table 8). The PRT recommends granting all of these states de minimis status.

Table 8: Percent landing by state during 2011/2012 fishing season. * indicates a state that qualifies for *de minimis*. Source: ACCSP Data Warehouse.

| State | Landings | Coastwide Landings | % of Coastwide Landings |
|-------|-----------|-----------------------|-------------------------------|
| ME | 345,267 | | 1.70% |
| NH | 1,332,781 | 20,346,473 | 6.55% |
| MA | 9,048,875 | | 44.47% |

| RI | 1,266,563 | 6.22% |
|-----|-----------|--------|
| CT* | 186,967 | 0.92% |
| NY | 452,114 | 2.22% |
| NJ | 1,881,019 | 9.25% |
| DE* | 9,901 | 0.05% |
| MD | 489,413 | 2.41% |
| VA | 2,794,578 | 13.74% |
| NC | 2,538,995 | 12.48% |
| SC* | 0 | 0.00% |
| GA* | 0 | 0.00% |
| FL* | 0 | 0.00% |

Table 9: State-by-state compliance with the Interstate Fishery Management Plan for Spiny Dogfish.

| | Report Submitted (Due July 1) | De Minimis Request | Biomedical Permit Harvest | Finning Prohibition | Possession limits |
|------------------|--|-----------------------|---------------------------------|------------------------|-------------------|
| Maine | Yes | No | Yes: 197 Collected | Yes | 3,000 lb |
| New Hampshire | Yes | No | No | Yes | 3,000 lb |
| Massachusetts | Yes | No | No | No | 3,000 lb |
| Rhode Island | Yes | No | No | Yes | 3,000 lb |
| Connecticut | No | No | No | Yes | 3.000 lb |
| New York | No | No | No | Yes | 3,000 lb |
| New Jersey | Yes | No | No | Yes | 3000 lb |
| Delaware | Yes | Yes, recommended | No | Yes | 3,000 lb |
| Maryland | Yes | No | No | Yes | 3,000 lb |
| Virginia | Yes | No | No | Yes | 3,000 lb |

| North | | | | | |
|----------|-----|-------------|---|-----|-------------|
| Carolina | Yes | No | No | Yes | 3,000 lb |
| South | | Yes, | | Yes | 3,000 lb |
| Carolina | Yes | Recommended | No | 103 | 3,000 10 |
| | | | | | 1 fish bag |
| | | Yes, | | | limit / 30" |
| Georgia | Yes | Recommended | No | Yes | min size |
| | | Yes, | Prohibit harvest, possession, purchase, | | |
| Florida | Yes | Recommended | sale, or exchange of spiny dogfish. | | |

Research Priorities

- Determine area, season, and gear specific discard mortality estimates coast wide in the recreational, commercial, and non-directed (bycatch) fisheries. (SR 88)
- Monitor the level of effort and harvest in other fisheries as a result of no directed fishery for spiny dogfish. (SR 88)
- Characterize and quantify bycatch of spiny dogfish in other fisheries. (SR 88)
- Increase observer trips to document the level of incidental capture of spiny dogfish during the spawning stock rebuilding period. (SR 88)
- Conduct a coast wide tagging study to explore stock structure, migration, and mixing rates. (2010 TRAC, SR 88)
- Standardize age determination along the entire East Coast. Conduct an ageing workshop for spiny dogfish, encouraging participation by NEFSC, NCDMF, Canada DFO, other interested agencies, academia, and other international investigators with an interest in dogfish ageing (US and Canada Pacific Coast, ICES). (SR 88)

References

NEFSC. 2012. Update on the status of spiny dogfish and initial evaluation of alternative harvest strategies. Report to MAFMC SSC September 19, 2012. 44 p.

Special Report No. 88 of the Atlantic States Marine Fisheries Commission. 2008. Prioritized research needs in support of interjurisdictional fisheries management.

< http://www.safmc.net/Portals/0/FEP/AppendAFEPVolIVInterResNeeds08.pdf>

TRAC (Transboundary Resource Assessment Committee) Spiny Dogfish Review Proceedings. 2010.

< http://www.mar.dfo-mpo.gc.ca/science/TRAC/trac.html>

APPENDIX A.

Atlantic States Marine Fisheries Commission Spiny Dogfish Technical Committee

September 24, 2010

Specification Recommendations for May 2011 – April 2012 Spiny Dogfish Fishing Season

This report summarizes the recommendations and discussions from a joint meeting of the Atlantic States Marine Fisheries Commission (ASMFC) Spiny Dogfish Technical Committee (TC) and the Mid-Atlantic Fishery Management Council (MAFMC) Spiny Dogfish Monitoring Committee (MC). The meeting was held in Warwick Rhode Island on September 24, 2010. This report only summarizes recommendations of the TC. Please see the MC report for their recommendations and details on the federal process.

TC Attendance:

J. Armstrong (MAFMC), P. Rago (NMFS NEFSC), Angel Willey (MD DNR), C. Gray (NC DMF), R. Babb (NJ DEP), E. Schneider (RI DFW), M. Gates (CT DEP), E. Bryant (NMFS NERO), S. Newlin (DE DFW), and C. Vonderweidt (ASMFC Staff).

MC Attendance (not on TC): Dan McKiernan (MADMF)

Observers:

Louis Julliard (AML International), Steve Barndollar (Seatrade), Kristian Kristensen (Zeus Packing).

TC Recommendations:

The TC recommends a 20 million pound quota with 3,000 pound possession limits for the 2011/2012 fishing season *only*. The TC recommends setting a single year specifications to allow for an additional year of dead discards estimates and the Canadian landings when setting the 2012/2013+ specifications (discussed at length below).

Background and Discussion:

Biomass estimates in 2009 (163,256 mt) and 2010 (164,066 mt) exceed the biomass target (159,288 mt). Fishing mortality (F) is estimated to be F = 0.113 in 2009 which is well below the target (0.207) and threshold (0.325) F rates. Therefore spiny dogfish are not overfished and overfishing is not occurring.

While spiny dogfish have rebuilt, the stock is expected to decrease below the target biomass around 2014 because of record low recruitment from 1997 - 2003. The magnitude of this drop increases with fishing mortality and occurs even when fishing mortality is zero.

The TC agreed that setting the quota based on F75% target is reasonable because it allows for a considerable increase in quota while minimizing the future SSB decline. They agreed that a quota based on Fthreshold (0.325) is inappropriate because the stock does not stabilize at or near Bmsy in the near future under Fthreshold. Setting the quota based on F75% target is generally consistent with the recommendations of the MAFMC Science and Statistical Committee (SSC). The TC is not bound

by SSC recommendations but they agreed that setting consistent quotas between state and federal waters is beneficial. After agreeing that the quota should be set based on F75% target; the TC discussed discards, Canadian catch, and the recreational fishery.

Quota:

The equation used by the TC to calculate the 2011/2012 (and previous years) quota is:

Quota = Total catch (based on Frate) – estimated dead discards – estimated Canadian landings – estimated recreational landings

Total catch based F75% target = 15,341 metric tons.

Discards

For the last few years, dead discards have been estimated as a proportion of the total catch. However, discards have remained around 5,000 metric tons since 1996 independent of increases or decreases in total catch (Table 1). As such, the TC felt that using the most recent year (2009) dead discards for the 2011/2012 estimate is more appropriate than discards based on a percent of total catch. The TC discussed using an average of the last 3 years dead discards, but agreed that an average does not change the value significantly (difference of 68 metric tons), and is inconsistent with methods (using most recent year rather than an average) used to estimate Canadian and recreational landings (see Canadian Landings and Recreational Landings sections of this report).

Table 10: Total dead discards and total catch in the spiny dogfish fishery off the east coast of the United States. 1996-2009.

| Year | Total Dead Discards (mt) | Total Catch (mt) | | |
|------|--------------------------|------------------|--|--|
| 1996 | 6,025 | 33,852 | | |
| 1997 | 4,366 | 23,443 | | |
| 1998 | 3,435 | 25,764 | | |
| 1999 | 4,581 | 22,134 | | |
| 2000 | 2,917 | 15,321 | | |
| 2001 | 5,063 | 11,882 | | |
| 2002 | 5,049 | 11,510 | | |
| 2003 | 4,225 | 7,380 | | |
| 2004 | 6,146 | 9,925 | | |
| 2005 | 5,589 | 9,382 | | |
| 2006 | 5,688 | 10,480 | | |
| 2007 | 6,510 | 12,512 | | |
| 2008 | 5,088 | 11,113 | | |
| 2009 | 5,897 | 11,503 | | |

The TC also agrees that discards are likely to be less than 5,896 metric tons (2009 value) in 2010 because of fishing restrictions under Amendment 16 the Northeast Multispecies Groundfish FMP (Amendment 16). Amendment 16 establishes sectors, allows for higher possession limits, and reduces harvest levels for groundfish species. As a result, the number of otter trawl days-at-sea are likely to decrease because these vessels can land more groundfish per trip under higher trip limits.

The higher possession limits also give fishermen an incentive to bring in only higher value species and avoid species such as dogfish and skates that take up valuable space in their holds.

Canadian Landings

Canadian landings dropped significantly from 1,572 mt in 2008 to 113 mt in 2009 and are likely to remain at this low level in 2010. Preliminary information suggests that as of September 19, 2010 landings were less than 6 metric tons (pers. comm. Zeus Packing). The Canadian fishery generally occurs between May and October, and as such, a significant increase above 6 mt's is unlikely. The drop in Canadian landings is thought to be a result of market issues related to reduced demand in Europe. Industry representatives at the meeting commented that there are too few processing facilities left in Canada to allow for a large increase in landings. If European demand increases, it will likely take several years before Canadian processors are able to process large amounts of dogfish.

The TC agrees that the most recent years Canadian landings (113 mt in 2009) should be used as the value to calculate the 2011/2012 quota.

Recreational Landings

Recreational Landings account for around 1-2% of total landings. The TC agreed that the most recent years recreational landings should be used. This approach is consistent with the method used by the TC in previous years. Recreational landings were estimated to be 34 mt in 2009.

2011/2012Annual Quota

Total catch F75% target 15,341 mt
Estimated dead discards -5,897 mt
Estimated Canadian landings -113 mt
Estimated recreational landings -34 mt = 9,297 mt (20,496,166 pounds)

The TC agreed to round down to 20 million pounds to provide a slight buffer for Canadian landings and dead discards. TC members agreed that a small buffer is appropriate for the 2011/2012 fishing season but may be unnecessary in future years, once the impacts of Amendment 16 are known and the Canadian fishery has stabilized.

The TC's unanimous recommendation for the 2011/2012 annual quota is 20 million pounds.

Possession Limits

The TC recommends that the Board continue with a 3,000 pound possession limit for the 2010/2011 fishing season because a 3,000 limit allowed fishermen to harvest the entire quota in past years without exceeding the target F. The TC agrees that there is little scientific justification for a large or small possession limit and setting the amounts is a policy/management decision.

Other Business

The TC noted that the Marine Stewardship Council (MSC) is scheduled to meet with several members of the TC and Board in late 2010 to potentially certify spiny dogfish. Members noted that MSC certification is likely to increase European demand for dogfish which could benefit US fishermen and processors in the future.