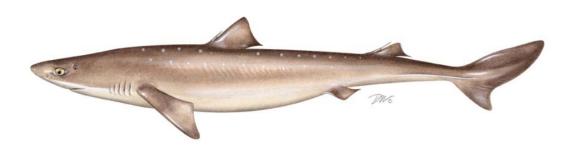
2014 DRAFT REVIEW OF THE ATLANTIC STATES MARINE FISHERIES COMMISSION FISHERY MANAGEMENT PLAN FOR

SPINY DOGFISH

(Squalus acanthias)

Updated 10/21/14. Updates are highlighted throughout document

2013/2014 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

Table of Contents

- I. Status of the Fishery Management Plan
- II. Status of the Stock and Assessment Advice
- III. Status of the Fishery
- IV. Status of Research and Monitoring
- V. Status of Management Measures and Issues
- VI. Implementation of FMP Compliance Requirements for 2009
- VII. Recommendations of the Plan Review Team
- VIII. References

I. Status of the Fishery Management Plan

<u>Date of FMP Approval</u>: November 2002

Amendments None

Addenda 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 – North Carolina

Active Boards/Committees: Spiny Dogfish 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) Fishery 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, Spawning 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 $F_{MSY} = 0.2439$.

Draft Addendum V is currently out for public comment. It considers a fins-naturally-attached policy for spiny dogfish to ensure consistency with the Shark Conservation Act of 2010, which prohibits the removal of all sharks (except smooth dogfish) at-sea. The Spiny Dogfish Board will consider Draft Addendum V for final approval at the October 2014 meeting in Mystic, Connecticut.

II. Status of the Stock and Assessment Advice

Please note: fishing mortality rates and projections regarding the stock size could not be determined for the 2013/2014 fishing season due to a lack of data. The Northeast Fishery Science Center bottom trawl survey was not able to sample strata in the mid-Atlantic region due to mechanical problems.

Overfishing definition: $F_{target} = 0.244$; 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 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".

The most recent estimates of SSB are from the NEFSC Update on the Status of Spiny Dogfish in 2013 and Projected Harvests at the Fmsy Proxy and Pstar of 40% report. The 2013 NEFSC report estimates that SSB continued to exceed the target in 2013 (for the fifth year in a row) at 211,372 metric tons. The 2014 NEFSC spring bottom trawl survey did not collect adequate data to update the SSB estimates for the most recent year.

The NEFSC report also provides the most recent estimate of F. F was 0.15 in 2012 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 soon. The amplitude of this drop increases as fishing mortality increases and still occurs when fishing mortality is hypothetically zero.

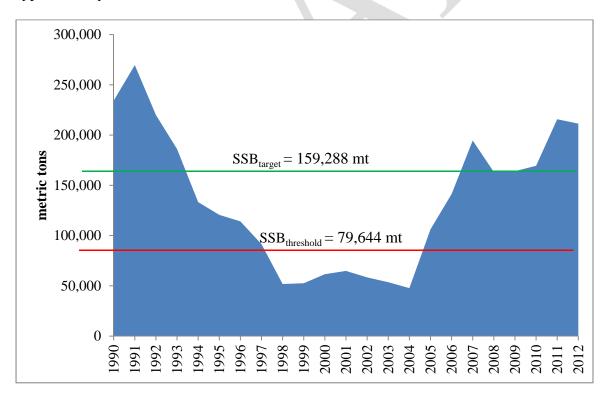


Figure 1: Spiny dogfish spawning stock biomass, 1990 – 2012. Source: NEFSC Update on the Status of Spiny Dogfish in 2013 and Projected Harvests at the Fmsy Proxy and Pstar of 40%.

Table 1: Spawning stock biomass and fishing mortality in the spiny dogfish fishery, 1990 – 2013. Source: NEFSC Update on the Status of Spiny Dogfish in 2013 and Projected Harvests at the Fmsy Proxy and Pstar of 40%.

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
2012	215,444	0.149
2013	211,372	

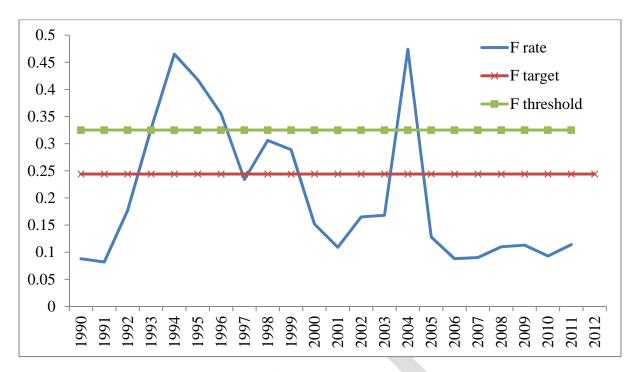


Figure 2: Fishing mortality rates in the spiny dogfish fishery, 1990 – 2012. Source: NEFSC Update on the Status of Spiny Dogfish in 2013 and Projected Harvests at the Fmsy Proxy and Pstar of 40%.

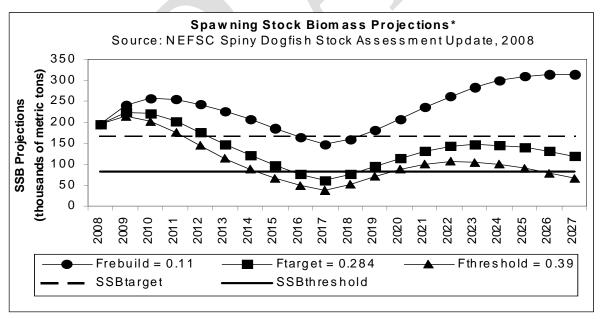


Figure 3: Spawning stock biomass (SSB) projections for the spiny dogfish fishery, 2008-2027. Source: NEFSC Update on the Status of Spiny Dogfish in 2010 and Initial Evaluation of Harvest Strategies.

III. Status of the Fishery

Specifications

The spiny dogfish commercial fishery runs from May 1 - April 30. The coastwide quota was set at 30 million pounds with a maximum of 4,000 pound possession limits for the 2013/2014 fishing season (May 1, 2013 - April 30, 2014).

Quotas

Prior to adjustments for overages and rollovers in the 2012/2013 fishing season, the 2013/2014 40.8 million pound coastwide quota was allocated with 23,688,360 pounds (58%) to states from Maine – Connecticut (Northern Region), 1,105,593 pounds (2.707%) to New York, 3,121,962 pounds (7.644%) to New Jersey, 365,944 pounds (0.896%) to Delaware, 2,417,846 pounds (5.920%) to Maryland, 4,408,894 pounds (10.795%) to Virginia and the remaining 5,732,583 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. The overages for the 2012/2013 season (Northern region, New Jersey, and Virginia) are outlined in Table 2.

Table 2: Regional quotas for May 1, 2013 - April 30, 2014 fishing season.

Region/State	2013/2014 Quotas	2012/2013 Overages (-) and Rollovers (+)	2013/2014 Adjusted Quotas
Northern	23,688,360	+1,035,126	23,912,773
New York	1,105,593	+48,312	1,153,905
New Jersey	3,121,962	+136,422	3,258,384
Delaware	365,944	+15,991	381,935
Maryland	2,417,846	+105,654	4,601,552
Virginia	4,408,894	+192,658	1,153,905
North Carolina	5,732,583	+250,500	3,258,384

Commercial landings totaled 11,853,700 pounds during the 2013/2014 fishing season (

Table 3). The underharvest reflects the market conditions for this year. Massachusetts (6,113,317 pounds), North Carolina (4,516,474 pounds), and Virginia (1,250,148 pounds) had the most significant commercial landings during the 2013/2014 fishing season.



Table 3: Commercial landings of spiny dogfish on the Atlantic coast, 2013/2014 fishing year. Source: State compliance reports and ACCSP Data Warehouse.

State Landed	Pounds	
ME	106,559	
NH	488,126	
MA	6,113,317	
RI	789,334	
CT	<mark>21,990</mark>	
NY	<mark>79,166</mark>	
NJ	1,780,199	
DE	*	
MD	932,210	
VA	1,250,148	
NC	4,516,474	
Total	16,077,523	

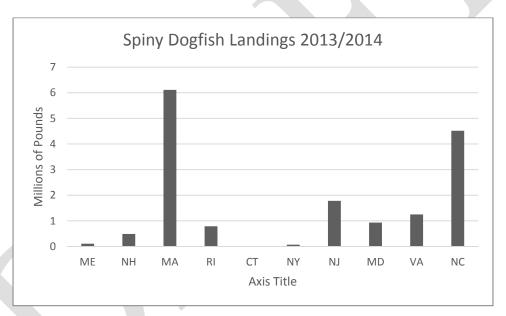


Figure 4: Commercial landings of spiny dogfish on the Atlantic coast, 2013/2014. Source: State compliance reports and ACCSP Data Warehouse.

Recreational landings of spiny dogfish on the Atlantic coast for the 2013/2014 fishing year remained insignificant at 81,570 pounds. This is less than 1% of total landings of spiny dogfish.

Canadian landings have averaged about 77 mt per year since 2009. Estimates of Canadian landings for 2013 are not yet available.

Table 4: Landings of spiny dogfish off the Atlantic coast by Canada and foreign fleets, 1991-2013.

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
2012	65	137	202
2013	NA	61	NA

Total dead discards were 5,010 metric tons (11,045,046 pounds) in 2013. 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, 1981-2013. Source: NEFSC 2014 Status Report for Spiny Dogfish in 2013.

		I			
* 7	Otter	G: 1 :11	Scallop	Line	Total
Year	trawl	Sink gill net	dredge	gear	dead
1001	10 100	1 600			discards
1981	18,180	1,608	na	na	19,847
1982	21,455	1,336	na	na	22,861
1983	21,094	1,213	na	na	22,415
1984	19,813	1,475	na	na	21,373
1985	16,677	1,362	na	na	18,232
1986	15,873	1,465	na	na	17,575
1987	14,525	1,459	na	na	16,195
1988	14,476	1,540	na	na	16,190
1989	14,143	1,608	na	na	16,020
1990	17,121	1,819	na	na	19,174
1991	9,661	3,309	24	10	13,274
1992	16,309	1,786	620	65	18,983
1993	8,642	2,944	157	4	11,969
1994	6,954	866	542	na	8,556
1995	8,499	2,019	284	na	10,932
1996	4,701	1,167	91	na	6,025
1997	3,352	698	149	na	4,366
1998	2,634	590	90	na	3,435
1999	3,843	602	31	na	4,581
2000	1,364	1,405	11	na	2,917
2001	2,460	2,161	23	na	5,063
2002	2,770	1,499	44	402	5,049
2003	1,927	1,624	77	0	4,225
2004	4,150	1,209	40	50	6,146
2005	3,758	1,001	11	118	5,589
2006	3,886	1,011	10	13	5,688
2007	4,058	1,540	45	7	6,510
2008	2,802	1,459	178	26	5,088
2009	3,505	1,462	273	84	5,897
2010	2,782	716	147	51	4,081
2011	3,270	849	170	36	4,787
2012	3,344	888	324	17	4,848
2013	3,448	932	95	4	5,010
	1	1	1		i .

Total commercial landings in 2013 are estimated to be greater than 95% female. Females composed an average of 92% of commercial catch since 2003 (NEFSC Update 2013).

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 2013 Maine-New Hampshire Inshore Trawl Survey was conducted in the near shore waters of the Gulf of Maine. A total of 158 spiny dogfish were collected, 76 females and 82 males were caught. Males ranged from 28 to 79 cm and the females 26 to 83 cm. This was the highest number of dogfish for a spring survey since it began in 2001.

The fall portion of the 2013 Trawl survey saw 40 dogfish. There were 23 males at lengths ranging from 34 cm to 82 cm. A total of 17 females were sampled at lengths ranging between 26 and 73 cm, numbers were distributed fairly evenly within the ranges for both sexes. This was the lowest number for a fall survey since it began in 2000.

Connecticut

Spiny dogfish abundance has been monitored in the Long Island Sound Trawl Survey since 1984. Spring (April, May and June) and fall (September and October) surveys are conducted each year. Spiny dogfish are most consistently taken in the spring portion of the survey with between 0 and 123 fish caught per survey. Dogfish were more commonly taken in the early years of the survey (between 14 and 123 fish per survey from 1985 through 1991). Fewer than 10 fish per year were taken in 9 of the last 20 years. No spiny dogfish were taken during the spring survey in 1995, 1996 and 2000. The 2013 spring survey catch was 21 fish.

Delaware

Delaware has two fisheries independent surveys that have the potential for taking spiny dogfish. A 30-foot bottom trawl that is deployed monthly in Delaware Bay at nine fixed stations from March through December. This survey has been conducted annually since 1990, and before that from 1966-1971 and 1979-1984 using essentially the same gear type. A total of 55 spiny dogfish was taken in 2013 in 90 tows, with the majority taken in November (24) with the others being taken in April (15), May (3) and December (13). Spiny dogfish catches per tow and catch per nautical mile since 1966 are included in Table 1. Sex-based indices were generated at the request of the ASMFC and show variance without any definable trend (Tables 2 and 3). Note that sex-specific data are not available prior to 1990. 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 2013 from either the Delaware Bay or Delaware's Inland Bays in the 16 foot trawl.

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, 470 tows/observations were conducted, totaling 118.24 hours of tow time. A total of 50 spiny dogfish were captured during 23 tows. Catches occurred during January –May. Lengths ranged from a minimum of 509 mm TL to a maximum of 634 mm TL.

North Carolina

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 (0-3 miles) 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 near shore Atlantic Ocean, Pamlico Sound, 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). A total of 33 spiny dogfish, 2 male and 31 female, were caught in the Pamlico Sound portion of the independent gill net study from May 2013 to mid-March 2014.

In the near shore Atlantic Ocean sampling, 873 individual spiny dogfish were captured from May 2013 to mid-March 2014, 290 in December, 25 in February and 558 in March. A total of 25 males, 843 females and 5 unknown spiny dogfish were sampled. It should be noted that the 2014 independent gill net data is preliminary from January through mid-march.

South Carolina

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.

V. Implementation of FMP Compliance Requirements

The mandatory components of the Interstate Fishery Management Plan are:

- 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)

Scientific/Educations Permits

Seventy-two scientific or educational collection permits were issued in North Carolina in 2013. Scientific or educational collection reports, due December 1st, cover the period of November 15th of the previous year to November 14th of the current reporting year. It should be noted, not all 2013 issued permits have submitted catch reports and 2014 reports are not due until December 1, 2014. Of these seventy-two permits only nine reported shark catches. Three permits, using trawl gear, reported catching a total of 80 spiny dogfish, 41 were released alive and 39 were kept for age and diet studies.

VII. PRT Recommendations

State Compliance

All 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.

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. In 2014, Georgia, South Carolina and Florida were removed from the Spiny Dogfish Board.

Delaware is requesting *de minimis* status for the 2014/2015 fishing season and meet the FMP requirements for achieving this status (**Error! Reference source not found.**). The PRT recommends granting *de minimis* status.

Table 8: 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 limit
Maine	Yes	No	No	Yes	4,000 lb
New Hampshire	Yes	No	No	Yes	4,000 lb
Massachusetts	Yes	No	No	Yes	4,000 lb
Rhode Island	Yes	No	No	Yes	4,000 lb
Connecticut	Yes	No	No	Yes	4.000 lb
New York	Yes	No	No	Yes	4,000 lb
New Jersey	Yes	No	No	Yes	4,000 lb
Delaware	Yes	Yes, recommended	No	Yes	4,000 lb
Maryland	Yes	No	No	Yes	4,000 lb
Virginia	Yes	No	No	Yes	4,000 lb 8,000 lb or 10,000 lb (varied
North					during
Carolina	Yes	No	No	Yes	season)
South Carolina*	Yes	NA	NA	NA	NA
Georgia*	Yes	NA	NA	NA	NA
Florida*	Yes	NA		NA	

^{*}South Carolina, Georgia and Florida were removed from the Spiny Dogfish Board in 2014.

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. 2013. Update on the Status of Spiny Dogfish in 2013 and Projected Harvests at the Fmsy Proxy and Pstar of 40%. Report to MAFMC SSC September 17, 2013. 51 p.

NEFSC. 2014. Update of Landings and Discards of Spiny Dogfish in 2014. Report to MAFMC SSC September 17, 2014. 19 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>

State of Connecticut Compliance Report for Spiny Dogfish July 1, 2014

I. Introduction

The Atlantic States Marine Fisheries Commission (ASMFC) requires states to submit an annual report by July 1 of each year to show compliance with the Fishery Management Plan for spiny dogfish. This document fulfills that compliance requirement. This report includes commercial and recreational fishery statistics, monitoring activities and management measures for 2013.

a. Summary of the year highlighting any significant changes in monitoring, regulations or harvest.

There were no significant changes in spiny dogfish monitoring efforts during 2013.

In accordance with the ASMFC plan, commercial trip limits were put in place during 2003 and modified by interim rule making in November 2006 and made final by regulation in March 2007 and modified by interim rulemaking as needed since then. During 2013, the commercial fishery trip limit in Connecticut was 3,000 pounds.

Commercial fishing regulations pertaining to spiny dogfish are specified in section 26-159a-19 of the Regulations of Connecticut State Agencies (Appendix I). Connecticut has no recreational spiny dogfish regulations.

II. Request for de minimus, where applicable.

N/A

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

a. Activity and results of fishery dependent monitoring.

All commercial fishermen submitted either Commercial Fisheries Catch Logs or NMFS Fishing Vessel Trip Reports (VTR) on a monthly basis. Connecticut Department of Energy and Environmental Protection (CT DEEP) Marine Fisheries Division (MFD) staff entered fishermen reports into the Connecticut Marine Fisheries Information System (MFIS) and starting in 2009, into the Standard Atlantic Fisheries Information System (SAFIS) and VTR data is downloaded as needed. Seafood dealers with a federal permit submitted their reports electronically to the National Marine Fisheries Service (NMFS) via SAFIS. Dealers with only state permits submitted reports to the CT DEEP and MFD staff entered the reports into SAFIS. Harvest was monitored by combining fishermen and dealer reports.

Recreational catch and harvest is monitored through the Marine Recreational Fisheries Statistics Survey (MRFSS). CT DEEP staff conducts the fisherman interview (intercept) portion of MRFSS, while the NMFS contractor conducts the telephone survey.

b. Activity and results of fishery independent monitoring.

Spiny dogfish abundance has been monitored in the Long Island Sound Trawl Survey since 1984. Spring (April, May and June) and fall (September and October) surveys are conducted each year.

Spiny dogfish are most consistently taken in the spring portion of the survey with between 0 and 123 fish caught per survey. Dogfish were more commonly taken in the early years of the survey (between 14 and 123 fish per survey from 1985 through 1991). Fewer than 10 fish per year were taken in 9 of the last 20 years. No spiny dogfish were taken during the spring survey in 1995, 1996 and 2000. The 2013 spring survey catch was 21 fish.

c. Copy of regulations that were in effect.

See Appendix 1.

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

Preliminary 2013 landings calculated from the combined fisherman and dealer reports in SAFIS indicate that 21,990 pounds of spiny dogfish were landed commercially in Connecticut compared to the 2002 – 2012 average of 66,424 pounds (Table 1). The decrease in landings in 2013 was due to market conditions and lower availability in nearby coastal waters. In 2013, all spiny dogfish were taken by otter trawl. The fishery remained open throughout 2013.

Table 1. Commercial and recreational harvest and total recreational catch.

Year	Commercial	Recreational Harvest (A+B1)	Recreational Catch (A+B1+B2)
	(pounds)	(numbers of fish)	(numbers of fish)
2002	5,698	175	393
2003	605	2,728	13,682
2004	50,373	25	3,459
2005	83,970	0	55,042
2006	81,451	2,448	42,352
2007	22,763	1,364	10,454
2008	9,095	2,385	11,236
2009	91,860	260	6,587
2010	102,279	0	1,431
2011	185,357	12	25
2012	97,212	0	0
2013	21,990	0	0

There are no estimates available for non-harvest losses in either fishery.

e. Review of progress in implementing habitat recommendations.

IV. Planned management programs for the current calendar year.

a. Summarize regulations that will be in effect (provide copy if different from IIIc).

The ASMFC Fishery Management Plan for Spiny Dogfish allocates the commercial quota between three regions. The northern region (Maine through Connecticut) is allocated 58% of the quota, the southern region (New York through Virginia) is allocated the 26% and North Carolina is allocated the remaining 16%. The trip limit is not to exceed 3,000 pounds for the 2012 fishing year (5/1/2012 – 4/30/2013) and 4,000 pounds for the 2013 fishing year (5/1/2013 – 4/30/2014) until the quota allocated for the region been harvested, at which time the trip limit is reduced to zero pounds. Connecticut implemented, by interim rule making, a 3,000 pound trip limit for January 1, 2013 then increased it to 4,000 pounds on April 1, 2013 (see Table 2 and Appendix 2). There are no recreational harvest limits.

Table 2. Interim rules in	oplemented by	Commissioner	Declarations for 2013
rable 2. Illustration rules in	iipicincincu oy	Commissioner	Deciarations for 2013.

Declaration	Effective Date	Description
12-21	1/1/2013	3,000 pounds on 1/1/2013
13-02	4/29/2013	4,000 LB limit May 1 - Oct
		31, Nov 1 - Apr 30
13-06	8/29/2013	4,000 LB limit May 1 - Oct
		31, Nov 1 - Apr 30

b. Summarize monitoring programs that will be performed.

Commercial fishery spiny dogfish landings will continue to be monitored through the Connecticut MFIS and SAFIS. All fishermen submit either Commercial Fisheries Catch Logs or NMFS Fishing Vessel Trip Reports on a monthly basis. Seafood dealers submit monthly reports of purchases from fishermen on a variety of forms. Federally permitted dealers operating in Connecticut must report electronically to NMFS. Electronically reported data is available to the CT DEEP.

c. Highlight any changes from the previous year.

There were no changes in monitoring from the previous year.

V. Plan specific requirements None

Appendix 1. Connecticut fishing regulations for spiny dogfish

26-159a-19. Spiny Dogfish (Squalus acanthius)

- (a) No holder of a commercial fishing or landing license or registration permitted to take spiny dogfish from the waters of this state or to land spiny dogfish in this state, regardless of where such fish are taken, shall take, possess or land spiny dogfish in this state in excess of the following possession limits that are based on the coastwide spiny dogfish quota as specified in the Spiny Dogfish Fishery Management Plan of the Atlantic States Marine Fisheries Commission, herein referred to as the "Plan":
 - (1) between May 1 and October 31, 600 pounds;
 - (2) between November 1 and April 30, 600 pounds.
- (b) The possession limits specified in subsection (a) of this section shall apply to the aggregate of all persons on board the vessel per trip or per day which ever is the longer period of time. No person shall transfer spiny dogfish between vessels at sea.
- (c) When 100 percent of the quota specified in the plan is landed the possession limit shall be zero pounds.
- (d) The possession of spiny dogfish fins in the absence of the fish from which removed is prohibited.

Appendix 2. Connecticut fishing regulations for spiny dogfish for 2013, implemented by interim rule making. See Attached Commissioner Declarations 12-21, 13-02 & 13-06.

Declaration 12-21 – Effective 12/1/2013 through 4/30/2013

26-159a-19. Spiny dogfish (Squalus acanthius)

- (a) No holder of a commercial fishing or landing license or registration permitted to take spiny dogfish from the waters of this state or to land spiny dogfish in this state, regardless of where such fish are taken, shall take, possess or land spiny dogfish in this state in excess of the following possession limits that are based on the [coastwide] northern region spiny dogfish quota as specified in the Spiny Dogfish Fishery Management Plan of the Atlantic States Marine Fisheries Commission, herein referred to as the "Plan":
 - (2) between November 1 and April 30, [600] 3,000 pounds.

Declaration 13-02 - Effective 4/29/2013 through 8/28/2013

26-159a-19. Spiny dogfish (Squalus acanthius)

- (a) No [holder of a commercial fishing or landing license or registration permitted to take]

 person engaged in commercial fishing shall possess or land spiny dogfish [from the waters of this state or to land spiny dogfish in this state, regardless of where such fish are taken, shall take, possess or land spiny dogfish in this state] in excess of the following possession limits that are based on the [coastwide] northern region spiny dogfish quota as specified in the Spiny Dogfish Fishery Management Plan of the Atlantic States Marine Fisheries Commission, herein referred to as the "Plan":
 - (1) between May 1 and October 31, [600] 4,000 pounds;
 - (2) between November 1 and April 30, [600] 4,000 pounds.

Declaration 13-06 - Effective 8/29/2013 through 12/31/2013

26-159a-19. Spiny dogfish (Squalus acanthius)

- (a) No [holder of a commercial fishing or landing license or registration permitted to take]

 person engaged in commercial fishing shall possess or land spiny dogfish [from the waters of this state or to land spiny dogfish in this state, regardless of where such fish are taken, shall take, possess or land spiny dogfish in this state] in excess of the following possession limits that are based on the [coastwide] northern region spiny dogfish quota as specified in the Spiny Dogfish Fishery Management Plan of the Atlantic States Marine Fisheries Commission, herein referred to as the "Plan":
 - (1) between May 1 and October 31, [600] 4,000 pounds;
 - (2) between November 1 and April 30, [600] 4,000 pounds.

New York State Department of Environmental Conservation

Division of Fish, Wildlife & Marine Resources

Bureau of Marine Resources

205 North Belle Mead Road, Suite 1, East Setauket, New York 11733

Phone: (631) 444-0430 • **Fax:** (631) 444-0434

Website: www.dec.ny.gov



New York's 2013 Annual Compliance Report to the Atlantic States Marine Fisheries Commission For Spiny Dogfish

I. Introduction

Spiny dogfish are a small though significant New York commercial fishery. They are considered a nuisance for recreational fishers. During the past 10 years, spiny dogfish commercial landings have ranged from 14,660 pounds to 461,019 pounds. The average landings for the period are 155,560 pounds. This period includes many years when the spiny dogfish allowable harvest was severely curtailed. With recent increases in allowable harvest, NY landings have significantly increased. Landings from 2009 through 2012 averaged 330,999 pounds but landings in 2013 dropped to 79,166 pounds.

II. Request for de minimus status

Not applicable

III. Previous year's fishery management and management program

a. Fishery dependent monitoring

New York implemented mandatory state-level Vessel Trip Reporting (VTR) during 2003 for all state-level harvesters of finfish. New York's commercial harvest of spiny dogfish is reported in Table 1.

b. Fishery independent monitoring

None to report.

c. Regulations in effect in 2013

New York's regulations are authorized under Section 13-0338 of the Environmental Conservation Law. This law provides for a prohibition on finning in New York's Marine and Coastal district; provides that no person shall possess shark fins, in the Marine and Coastal district of New York, unless proper proportion of species, number and size of shark carcasses is also possessed; and provides the department with the regulatory authority to fix by regulation measures for the management of sharks, including size limits, catch and possession limits, open and closed seasons, closed areas, restrictions on the manner of taking and landing, requirements for permits and eligibility therefor, record keeping requirements, requirements on the amount and type of fishing effort and gear, and requirements relating to transportation, possession, and sale

provided that such regulations are no less restrictive than requirements set forth in this chapter and provided further that such regulations are consistent with the compliance requirements of applicable fishery management plans adopted by the Atlantic States Marine Fishery Commission and with applicable provisions of fishery management plans adopted pursuant to the Federal Fishery Conservation and Management Act (16 U.S.C. Section 1800 et seq.). Pursuant to the adoption of the ASMFC Fishery Management Plan for Coastal Sharks, New York implemented regulations for 2009 to place it in full compliance with the Plan. Spiny dogfish are covered in part by these new regulations.

Older regulations (Part 40.1(v)) covering the spiny dogfish fishery were crafted to comply with the original fishery management plan for spiny dogfish and are, in part, obsolete. These regulations capture the intent of managing the fishery by period, which is still in place in federal waters but was replaced by regional management in 2008 (Addendum II), and for the fishing year beginning May 1, 2011 by state-specific quotas in the Southern Region (Addendum III). While obsolete, these regulations do not prevent the management of a state-based quota and therefore do not result in non-compliance with the FMP.

Actual text of NY regulations in place in 2013

6NYCRR, Part 40.1 (v) - Spiny Dogfish commercial fishing - special regulations.

- (v) Spiny dogfish commercial fishing special regulations.
- (1) It is unlawful for any person to take spiny dogfish for commercial purposes without having in possession a valid New York State commercial food fish license.
- (2) Harvest limits for spiny dogfish are based upon the Fishery Management Plan (FMP) for spiny dogfish as adopted and approved by the Regional Fishery Management Council pursuant to the Fishery Conservation and Management Act, 16 U.S.C. Section 1801, et seq Quota, trip limits and directed fishery thresholds for the periods of May 1 through October 31, and November 1 to April 30 will be established by the National Marine Fisheries Service (NMFS). The department will establish trip limits and directed fishery thresholds within the periods consistent with those established by NMFS. Such trip limits and thresholds will be enforceable upon 72 hours written notice to license holders of the trip limit allowed per vessel for that time period. During periods of trip limits all spiny dogfish not being held alive must be held together in a separate container or containers readily available for inspection and may not be mixed with other species while on board any vessel.
- (3) If the department determines that the maximum allowable harvest of spiny dogfish has been taken or will be taken by a date prior to the end of the applicable fishing period (either May 1 through October 31 or November 1 through April 30), then harvesting for commercial purposes and possession of spiny dogfish shall be prohibited as directed by the department upon 72 hours written notice to all commercial food fish license holders.
- (4) If the department closes the period, but unanticipated events result in the quota not being landed by the projected date and at least one month remains in the time period, then the department may reopen the period for a specified time and a specified trip limit up to the

maximum allowed for that period upon 72 hours written notice to license holders. If less than a month remains in the time period, the remaining quota available form that period will be added to the next period in the same year.

- (5) Fourteen days following the beginning of any period when commercial harvesting is prohibited it shall be unlawful to possess dogfish, or offer spiny dogfish for sale, trade, or barter except as permitted in subdivision 40.1 (e) of this Part.
- 6 NYCRR Part 40.1 (e) Shipping, Labeling, Packing Requirements for Quota Managed Species
- (e) Shipping, Labeling and Packing Requirements for Quota Managed Species.
- (1)It shall be unlawful for a New York Commercial Food Fish license holder to possess, ship, or transport, or cause to be shipped or transported, any container holding summer flounder, scup, black sea bass, bluefish, or spiny dogfish which has not been properly labeled at the point of landing in New York State. Such labels shall be at least two inches wide by four inches long of substantial water proof material and display the following information:
 - (i) the license holder's name;
- (ii) the license holder's New York commercial Foodfish License number or New York commercial Foodfish Landing License number; and
 - (iii) the date landed.
- (2) No person, including dealers, shippers, wholesalers and retailers, shall receive, store, possess, sell, offer for sale, transport, ship, or reship, or cause to be received, stored, possessed, sold, offered for sale, transported, shipped or reshipped, any New York landed summer flounder, scup, black sea bass, bluefish, or spiny dogfish, in containers that have not been properly labeled, pursuant to paragraph (1) of this subdivision.
- (3) No person, including dealers, shippers, wholesalers and retailers, shall receive, store, possess, sell, offer for sale, transport, ship, or reship, or cause to be received, stored, possessed, sold, offered for sale, transported, shipped or reshipped, any summer flounder, scup, black sea bass, bluefish, or spiny dogfish lawfully taken in another state unless there is a complete bill of lading that accompanies such product and each container is marked with a label at least two inches wide and four inches long of substantial, water resistant material. Such label must indicate clearly:
 - (i) the state of origin;
 - (ii) the harvester's name, and permit number;
 - (iii)the date landed; and
 - (iv) the shipper's name.

All bills of lading shall be available for inspection by the department for a period of one (1) year from the date that such product was handled.

- (4) Any summer flounder, scup, black sea bass, bluefish or spiny dogfish lawfully taken and landed in other states and shipped into New York for trade, barter or sale shall:
 - (i) meet New York's minimum total length requirements for such species; and
- (ii) be from a state which authorizes reciprocal privileges for such species taken in New York.
- (5) Nothing in this section shall prohibit the lawful transportation through the State of summer flounder, scup, black sea bass, bluefish, or spiny dogfish lawfully taken from waters outside the state and destined for a state other than New York, provided that such fish remain in

their original unopened container or containers, and such container or containers are accompanied by written documentation, bill of lading, or manifest of their origin.

- (6) Fourteen days following the beginning of any period when commercial harvesting is prohibited, no person, including dealers, shippers, wholesalers and retailers, shall hold or store summer flounder, scup, black sea bass, bluefish or spiny dogfish for sale or resale for the duration of the period, except that fish lawfully landed during an open period for the species pursuant to this section, or summer flounder or scup taken between May 1 and October 31 by the holder of a summer flounder fixed gear permit (pound net/trap net only), may be held or stored for sale or resale, provided that:
- (i) the fish are in containers labeled pursuant to paragraphs 1 and 3 of this subdivision; and
- (ii) the facility in which the fish are stored maintains complete and accurate records indicating the origin of such fish, the dealer's and shipper's name, the location landed, and the date landed; and
- (iii) the quantity of fish held for sale or resale is registered with the department upon storage during an open period for the species pursuant to this section; and
- (iv) such storage facility maintains all records of purchases and disbursements of such product for a period of one year following such purchases and disbursements.
- (7) Packing and repacking. No person shall pack or repack any summer flounder, scup, black sea bass, bluefish or spiny dogfish, or portions thereof, in containers which have not been properly labeled as provided in this subdivision. Any such summer flounder, scup, black sea bass, bluefish, or spiny dogfish subdivided or repacked shall be clearly labeled with the packer's and/or repacker's name, permit number, and all information contained on the original label as specified in paragraphs 1 and 3 of this subdivision.

6NYCRR 40.7 Coastal Sharks - open seasons, size and catch limits.

- (a) "Purpose of this section." It is the intent of this section to promote the prudent management of coastal sharks that are landed in the State of New York. The provisions of this section shall define which sharks may be taken for commercial and recreational purposes and which sharks are prohibited from harvest. Size limits, possession limits, manner of taking and landing, gear restrictions open and closed seasons will also be specified in this section. The provisions in this section are designed to promote healthy self-sustaining populations of coastal sharks and provide for the sustainable use of the shark resource for the benefit of the residents of the State of New York.
- (b) "Definitions." For the purposes of this section, the following definitions apply:
- (1) "Circle hook" means a fishing hook originally designed and manufactured so that the point is turned perpendicularly back to the shank to form a generally circular, or oval, shape.
- (2) "Eviscerate" means to remove the alimentary organs of a shark without removing the head.
- (3) "Finning" means the removal of a fin or fins, other than the caudal fin, and not retaining the remainder of the shark's carcass (as specified in Environmental Conservational Law (ECL) 13-0338(1)(b)).
- (4) "Fork length" means that length measured in a straight line from the tip of the nose snout of the shark to the end of the middle caudal fin to the center of the fork of the tail of the shark.

- (5) "Handline" means a main line to which not more than two gangions or hooks are attached. A handline is not retrieved by mechanical means and must be attached to, or in contact, with the vessel.
- (6) "Land" or "landed" means the bringing of fish to shore or the transfer of the catch of fish taken from a vessel to any other vessel or in-water storage facility or to the land or to any pier, wharf, dock or other similar structure. When a vessel bearing fish has been tied, moored, or made fast to the land, to another vessel, to an in-water storage facility or to any pier, wharf, dock or similar structure, such fish shall be deemed as landed.
- (7) "Large mesh gillnet" means a gillnet having a stretched mesh size equal to or greater than five inches.
- (8) "Recreational angler" means any person engaged in fishing for sharks for personal use.
- (9) "Shore angler" means any person engaged in any type of fishing that does not take place aboard a vessel.
- (10) "Shortline" means a fishing line having 50 or fewer hooks and measuring less than 500 yards in total length.
- (11) "Small mesh gillnet" means a gillnet having a stretched mesh size less than five inches.
- (12) "Vessel" means every type of watercraft used or capable of being used as a means of transportation on water except non-displacement craft and seaplanes.
- (13) "Vessel fishing" means any fishing conducted from a vessel.
- (c) "Recreational fishing."
- (1) It shall be unlawful for any recreational angler to take, or to possess on the waters of the marine and coastal district, as defined in ECL section 13-0103, or the shores thereof, or anywhere inland from such shores, any shark species other than the following: Atlantic sharpnose ("Rhizoprionodon terraenovae"); blacknose ("Carcharhinus acronotus"); blacktip ("Carcharhinus limbatus"); blue ("Prionace glauca"); bonnethead ("Sphyrna tiburo"); bull ("Carcharhinus leucas"); common thresher ("Alopias vulpinus"); finetooth ("Carcharhinus isodon"); great hammerhead ("Sphyrna mokarran"); scalloped hammerhead ("Sphyrna lewini"); smooth hammerhead ("Sphyrna zygaena"); lemon ("Negaprion brevirostris"); nurse ("Ginglymostoma cirratum"); oceanic whitetip ("Carcharhinus longimanus"); porbeagle ("Lamna nasus"); shortfin mako ("Isurus oxyrinchus"); smooth dogfish ("Mustelus canis"); spiny dogfish ("Squalus acanthias"); spinner ("Carcharhinus brevipinna"); and tiger ("Galeocerdo cuvier").
- (2) The minimum size limit for the shark species listed in (c)(1) shall be 54 inches fork length, except that there shall be no minimum size limit for Atlantic sharpnose, finetooth, blacknose, bonnethead, smooth dogfish and spiny dogfish.
- (3) It shall be unlawful for a recreational angler to take sharks using any means other than handlines retrieved by hand, not mechanical means, or by rod and reel.
- (4) It shall be unlawful for a recreational angler to sell, trade or barter sharks or shark pieces.

- (5) All sharks harvested by a recreational angler shall have heads, tails and fins attached naturally to the carcass through landing. Sharks may be eviscerated and bled by making a cut at the base of the tail fin as long as the tail fin is not removed.
- (6) Catch limits.
- (i) Shore anglers shall take or possess no more than one shark, regardless of species, from the list in (c)(1), except that
- ("a") one additional Atlantic sharpnose may be taken and possessed; and
- ("b") one additional bonnethead may be taken and possessed; and
- ("c") there shall be no limit to the number of spiny dogfish and smooth dogfish that can be taken or possessed.
- (ii) Recreational anglers fishing from a vessel shall take or possess no more than one shark, regardless of species, from the list in (c)(1) per vessel, except that
- ("a") one additional Atlantic sharpnose may be taken and possessed per angler; and
- ("b") one additional bonnethead may be taken and possessed per angler; and
- ("c") there shall be no limit to the number of spiny dogfish and smooth dogfish that can be taken or possessed per angler.
- (7) When aboard a vessel, a recreational angler is bound by the more restrictive vessel fishing limits described in (6)(ii) above, regardless of where the shark was caught.
- (8) A shark that is transported aboard a vessel is considered as though caught by an angler on that vessel and is regulated under the more restrictive vessel fishing limits described in (6)(ii) above, regardless of where the shark was caught.
- (d) "Commercial fishing."
- (1) The commercial fishery for spiny dogfish is regulated under Part 40.1 of this Subchapter and is not regulated under this part.
- (2) It is unlawful for any person to take, possess or land sharks listed in this section for commercial purposes without having in their possession a valid New York State commercial foodfish license.
- (3) The commercial fishing year for sharks shall begin on January 1 and end on December 31. All annual specifications begin on January 1 of each fishing year.
- (4) Shark groups. For the purposes of this section and consistency with federal rules and the fishery management plan for coastal sharks developed by the Atlantic States Marine Fisheries Commission, coastal sharks shall be classified as follows:
- (i) Prohibited species: Atlantic angel ("Squatina dumeril"); basking shark ("Cetorhinus maximus"); bigeye sand tiger shark ("Odontaspis noronhai"); bigeye thresher shark ("Alopias superciliosus"); bignose shark ("Carcharhinus altimus"); Carribean sharpnose shark

- ("Rhizoprionodon porosus"); dusky shark ("Carcharhinus obscurus"); Galapagos shark ("Carcharhinus galapagensis"); longfin mako shark ("Isurus paucus"); narrowtooth shark ("Carcharhinus brachyurus"); night shark ("Carcharhinus signatus"); reef shark ("Carcharhinus perezii"); sand tiger shark ("Carcharias taurus"); sharpnose sevengill shark ("Heptrachias perlo")
- bigeye sixgill shark ("Hexanchus nakamurai"); bluntnose sixgill shark ("Hexanchus griseus") smalltail shark ("Carcharhinus porosus"); whale shark ("Rhincodon typus"); white shark ("Carcharodon carcharias");
- (ii) Research species: sandbar ("Carcharhinus plumbeus");
- (iii) Smooth dogfish: smooth dogfish ("Mustelus canis");
- (iv) Small coastal species: Atlantic sharpnose shark ("Rhizoprionodon terraenovae"); blacknose shark ("Carcharhinus acronotus"); bonnethead shark ("Sphyrna tiburo"); finetooth shark ("Carcharhinus isodon");
- (v) Pelagic species: blue shark ("Prionace glauca"); common thresher shark ("Alopias vulpinus"); oceanic whitetip shark ("Carcharhinus longimanus"); porbeagle shark ("Lamna nasus"); shortfin mako shark ("Isurus oxyrinchus"); and
- (vi) Non-sandbar large coastal species: great hammerhead shark ("Sphyrna mokarran"); scalloped hammerhead shark ("Sphyrna lewini"); smooth hammerhead shark "Sphyrna zygaena"); lemon shark ("Negaprion brevirostris"); nurse shark ("Ginglymostoma cirratum"); silky shark ("Carcharhinus falciformis"); spinner shark ("Carcharhinus brevipinna"); tiger shark ("Galeocerdo cuvier").
- (5) There is no closed season for the shark commercial fishery.
- (6) No person shall take, possess or land any shark species listed in (4)(i) and (4)(ii) of this Part without first obtaining and possessing a valid special license in accordance with Part 175.
- (7) There is no possession limit for sharks listed in (4)(iii), (4)(iv) and (4)(v) of this Part.
- (8) No person shall take possess or land more than thirty-three sharks, regardless of species, listed in (4)(vi) of this Part, in any 24-hour period.
- (9) Sharks harvested for commercial purposes shall be taken by the following methods and gears, only: rod and reel; handline, which shall be retrieved by hand, not mechanical means, and shall be attached to or in contact with a vessel; small mesh gillnet; large mesh gillnet; trawl; shortline; pound net; and weir. A maximum of two shortlines per vessel may be used. The use of any other gear to take sharks for commercial purposes is prohibited.
- (10) Bycatch reduction measures. No person shall take, possess or land sharks using shortlines or large mesh gillnets without practicing the following bycatch reduction measures:
- (i) All hooks attached to shortline gear must be corrodible circle hooks;
- (ii) All persons participating in the commercial shark fishery shall practice the protocols and possess the federally required release equipment for pelagic and bottom longlines for the safe handling, release and disentanglement of sea turtles and other non-target species;

- (iii) All captains and vessel owners must be certified in using handling and release equipment through workshops offered by National Oceanic and Atmospheric Administration's National Marine Fisheries Service;
- (iv) Large mesh gillnets shall be no longer than 2.5 kilometers (1.55 miles).
- (11) No person shall possess or land a shark listed in this section without the tails and fins naturally attached to the carcass. Fins may be cut as long as they remain attached to the carcass by natural means with at least a small portion of uncut skin. Finning is prohibited. Sharks may be eviscerated and have the heads removed. Sharks may not be filleted or cut into pieces at sea.
- (12) Quotas, trip limits and directed fishery thresholds may be set by the Atlantic States Marine Fisheries Commission Spiny Dogfish & Coast Sharks Management Board (Sharks Board) for the smooth dogfish, small coastal, non-sandbar large coastal and pelagic species groups for each commercial fishing year. The department will establish trip limits and directed fishery thresholds within the fishing year consistent with those established by the Sharks Board. Such trip limits and thresholds will be enforceable upon 72 hours notice to license holders of the vessel trip limit allowed.
- (13) If the department determines that the maximum allowable harvest of sharks covered by (12) has been taken or is projected to be taken before the end of the fishing year, the department may prohibit the take and possession of a shark species for commercial purposes upon 72 hours notice to license holders.
- (14) If the department closes a fishery, but determines that the quota will not be harvested by the projected date, then the department may reopen the fishery for a specified time at a specified trip limit up to the maximum allowed upon 72 hours notice to license holders.
- (15) No person shall take, possess or land sharks listed in (4) for commercial purposes when the federal commercial fishery for that species is closed.
- (16) No harvester shall sell sharks taken in state waters for commercial purposes except to a holder of a federal Commercial Shark Dealer Permit. A Federal Commercial Shark Dealer Permit shall be required to buy and sell sharks taken in state waters.

d. Harvest

The federal fishing year for spiny dogfish runs from May 1 through April 30. In 2012, the federal and state quotas were synchronized so that the specifications for the 2012/13 fishing year were the same for both federal and state. New York's allocated commercial quota of spiny dogfish is 2.707% of the coast-wide quota. For 2012/13, the coastwide quota was 35.694 million pounds. In 2013/14, this was increased to 40.842 million pounds, making New York's allocation rise to 1,105,593 pounds. According to data available from the NMFS and ACCSP's Data Warehouse, New York's commercial harvest of spiny dogfish is as follows:

Table 1. New York's Spiny Dogfish Landings 2003 through 2013

Year	New York Landings	Total Coastal Landings	Percent of Total Landings

2003	38,356	2,342,429	1.64
2004	44,416	2,216,491	2.00
2005	47,320	2,293,671	2.00
2006	14,660	6,462,371	0.23
2007	24,669	7,462,813	0.33
2008	21,372	8,187,659	0.26
2009	192,875	11,401,681	1.69
2010	365,733	12,694,714	2.88
2011	461,019	21,550,886	2.14
2012	304,370	23,416,769	1.30
2013	79,166	12,817,739	0.62

The decrease in commercial spiny dogfish landings in 2013 is largely due to the loss of the sole NY processing facility after Superstorm Sandy.

New York's <u>recreational</u> catch and harvest of spiny dogfish are reported here:

Table 2. New York's Spiny Dogfish Recreational Catch and Harvest

Year	Total catch (A + B1 + B2)	PSE	Harvest (A + B1)	PSE
2003	34,475	32.3	940	81.9
2004	55,591	50.6	0	1
2005	41,369	65.4	0	-
2006	34,865	45.3	149	91.3
2007	29,118	47.6	0	I
2008	14,067	38.6	596	100.7
2009	26,910	67.1	0	I
2010	2,501	60.1	0	I
2011	5,460	51.7	0	-
2012	37,501	88.9	0	-
2013	105,877	36	3,202	98.8

e. Habitat recommendations

None

IV. Planned management programs for the current fishing year.

a. Summarized regulations for 2013 fishing year

The regulations listed above will remain in effect for 2014. New York State law prohibits finning as of July 2014, but exceptions are made for the possession and sale of fins from smooth and spiny dogfish.

b. Summarized monitoring programs

No changes are planned.

c. Changes from the previous year

None

V. Plan specific requirements.

New York has no plan specific requirements to report and has not undertaken or approved any exempted fishing permits for spiny dogfish.



MARK WILLIAMS COMMISSIONER A.G. 'SPUD' WOODWARD DIRECTOR

October 17, 2014

Marin Hawk Spiny Dogfish FMP Coordinator Atlantic States Marine Fisheries Commission 1050 N. Highland St., Suite 200 A-N Arlington VA, 22201

Marin:

Please find attached the Georgia 2013 Spiny Dogfish Compliance Report. Let me know if you require additional information.

Sincerely,

Carolyn N. Belcher, PhD

Research and Surveys Program Manager

Carolyn M. Belover, PhD

cc: Pat Geer

Spud Woodward

Georgia Spiny Dogfish Compliance Report for the Year 2013

I. Introduction

Because spiny dogfish occur infrequently in Georgia waters or in the EEZ off Georgia, recreational and commercial fishers do not target the species. Per Georgia law, spiny dogfish, Atlantic sharpnose and bonnethead are defined as the small shark composite and are managed under O.C.G.A. 27-4-130.1. This code was modified January 28^{th} 2009 reducing the daily / possession limit from 2 per person ≥ 30 " total length to 1 per person ≥ 30 " fork length. All finfish must be landed whole and transfer at sea is prohibited. There has never been a documented commercial harvest of spiny dogfish in Georgia waters, including during 2013.

II. Request for de minimus

For 2014, Georgia respectfully requests a continuation of its *de minimus* status in this fishery. Georgia's commercial fishermen landed no spiny dogfish in 2013.

III. Previous calendar year's fishery and management program

a. Activity and results of the fishery dependent monitoring

Although a directed fishery for spiny dogfish does not exist in Georgia waters, there are a few fishery dependent sampling programs used by the Coastal Resources Division that could encounter bycatch of spiny dogfish. The 2013 data for each program are provided below.

Bycatch Characterization – CRD conducts fishery dependent bycatch characterization studies aboard large trawl whelk vessels. These studies are supported through CRD's federally funded Atlantic Coastal Fisheries Cooperative Management Act (P.L. 103 - 206) project. Participation in the whelk fishery continues to diminish. During 2013, no trips were observed in the whelk fishery. Because of budget constraints and lack of effort in this fishery, bycatch characterization will not be continued after July 2014.

Marine Sportfish Carcass Recovery Project - The Marine Sportfish Carcass Recovery Project, a partnership with recreational anglers along the Georgia coast, is used to collect biological data from finfish such as red drum, spotted seatrout, southern flounder, sheepshead, and southern kingfish. Chest freezers were located at 12 public access points along the Georgia coast. Each freezer is clearly marked and contains a supply of plastic bags, pencils, and data card. Anglers place their filleted fish carcasses in plastic bags along with completed data in the freezer. CRD personnel collect the carcasses and process them to determine species, length, and gender. Sagittal otoliths are removed and processed to determine the age of the fish. In 2013, a total of 4,390 fish carcasses were donated through this program. No spiny dogfish were included.

b. Activity and results of fishery independent monitoring

As a *de minimus* state, Georgia does not conduct an independent monitoring program targeting spiny dogfish. However, there are fishery-independent surveys conducted in areas where spiny dogfish potentially could be encountered.

Adult Red Drum Survey

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 926 m, 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 2013, CRD staff deployed 217 sets consisting of 13,014 total hooks and 108.5 hours of total soak time. Zero spiny dogfish were reported from this effort.

Shark Nursery Survey

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 2013, CRD staff fished 120 longline stations consisting of 6,000 hooks and a total of 60 hours of soak time. Zero spiny dogfish were captured.

Ecological Monitoring Survey

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, 470 tows/observations were conducted, totaling 118.24 hours of tow time. A total of 50 spiny dogfish were captured during 23 tows. Catches occurred during January –May. Lengths ranged from a minimum of 509 mm TL to a maximum of 634 mm TL.

Juvenile Trawl Survey

Although personnel have historically used the EMTS as the primary trawl survey, a second trawl survey has been implemented to target species occurring further upriver in lower salinity waters. Each month, a 20-foot semi-balloon otter trawl with neither a turtle excluder device nor bycatch reduction device is deployed at 18 stations across three estuaries. At each station, a standard 5 minute tow is made. In 2013, 189 tows (observations) were conducted, totaling 15.75 hours of tow time. Given the upriver locations of the sampling stations, it is highly unlikely that spiny dogfish will be encountered.

Marine Sportfish Population Health Survey

The MSPHS is a multi-faceted ongoing survey used to collect information on the biology and population dynamics of recreationally important finfish. Currently two Georgia estuaries are sampled on a seasonal basis using entanglement gear.

During the June to August period, young-of-the-year red drum in the Altamaha/Hampton River and Wassaw estuaries are collected using gillnets to gather data on relative abundance and location of occurrence. In 2013, a total of 216 gillnet and 150 trammel net sets were made, producing zero spiny dogfish.

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

All sections of the Official Code of Georgia and Rules and Regulations of the Georgia Department of Natural Resources referenced herein have been previously submitted. The only changes to the previously submitted Rules and Regulations impacting spiny dogfish were the reduction of the daily / possession limit from 2 per person \geq 30" TL to 1 per person \geq 30" FL. This change to O.C.G.A. 27-4-130.1 went into effect January 28th 2009.

d. Harvest broken down by commercial and recreational, and non-harvest losses

<u>Commercial Landings</u> – There were no reported commercial landings of spiny dogfish during 2013.

<u>Recreational Landings</u> - Expanded data from the NMFS marine recreational surveys estimate no spiny dogfish were kept in Georgia during 2013; however, an estimated 691 spiny dogfish were released (PSE = 103.6).

e. Review of progress in implementing habitat recommendations

N/A

IV. Planned management programs for the current calendar year

a. Summarize regulations that will be in effect

All current regulations regarding spiny dogfish remain in effect through 2014. Rule 391-2-4.04 restricts fishermen lacking a federal commercial permit to a one fish daily bag/possession limit. All harvest and possession must adhere to a 30-inch FL minimum size. The fishing season is open year round but fishermen with a federal permit are limited to the bag limits when the federal season is closed or when the federal quota has been met. All spiny dogfish must be landed whole, and transfer at sea is prohibited.

b. Summarize monitoring programs that will be performed

Pursuant to Georgia law (O.C.G.A. Section 27-4-118 and Board of Natural Resources Rule 391-2-4-.09) all commercial harvesters landing seafood in Georgia are required to record their harvest and submit these records to the Department of Natural Resources. Historically, Georgia's commercial seafood landings have been collected as part of the NMFS Cooperative Statistics Program. As Georgia's participation in ACCSP continues, catch/effort and economic information have been added to the harvest data collected for every commercial fishing trip terminating in Georgia. These data are collected monthly and afford Georgia's marine fishery managers the opportunity to conduct real time monitoring of the status and trends in our commercial fisheries.

Monitoring of the commercial fishery for both bycatch characterization and landings will continue. O.C.G.A 27-4-110 requires that anyone wishing to engage in commercial fishing in the salt waters of Georgia must obtain a commercial fishing license. Further O.C.G.A. 27-4-118 requires that each commercial fisherman maintain a record and report their landings to and in a manner specified by the Department of Natural Resources. Those reporting requirements are detailed in Board Rule 391-2-4-.09. Additionally, any Georgia seafood dealer must be licensed by the Department of Agriculture (O.C.G.A. 26-2-312) and maintain records and report to the Department of Natural Resources per O.C.G.A 27-4-136 and Board Rule 391-2-4-.09.

The Ecological Monitoring Survey, Juvenile Trawl Survey, Adult Red Drum Survey, Shark Nursery Survey, Marine Sportfish Carcass Recovery Project, and Marine Sportfish Population Health Survey will continue in 2014. Any spiny dogfish captured will be measured for length.

c. Highlight any changes from the previous year

Spiny Dogfish Alternative Management Proposal for Rhode Island Spiny Dogfish Management Board October 2014

Introduction

Rhode Island (RI) proposes an alternative management regime for consideration by the Spiny Dogfish Management Board under Section 4.3 "Alternative State Management Regimes" of the Interstate Fishery Management Plan (FMP) for Spiny Dogfish (ASMFC 2002). Section 4.3, in its entirety, is attached to this submission as Appendix A. In short, Section 4.3 (Alternative State Management Regimes) of the FMP states that:

"A state can request permission to implement an alternative to any mandatory compliance measure only if that state can show to the Board's satisfaction that its alternative proposal will have the same conservation value as the measure contained in this amendment or any addenda prepared under Adaptive Management (Section 4.5). States submitting alternative proposals must demonstrate that the proposed action will not contribute to overfishing of the resource".

Section 4.3.1 (General Procedures) of the FMP outlines the procedures for review and decision by the Management Board. Briefly it states that:

"A state may submit a proposal for a change to its regulatory program or any mandatory compliance measure under this amendment to the Commission, ... The Spiny Dogfish and Coastal Shark Management Board will decide whether to approve the state proposal for an alternative management program if it determines that it is consistent with the "target fishing mortality rate applicable", and the goals and objectives of this amendment."

In accordance with these Sections, we offer this proposal as a demonstration that the actions of the proposed alternative management regime "... will not contribute to overfishing of the resource" and "...(are) consistent with the "target fishing mortality rate applicable", and the goals and objectives of this amendment".

Current Management Regime and Stock Status

The spiny dogfish fishery is managed complementarily by the Mid-Atlantic Fishery Management Council (MAFMC) and New England Fishery Management Council (NEFMC) in federal waters (with MAFMFC taking the lead for federal management), and cooperatively by the states through the Atlantic States Marine Fisheries Commission (ASMFC) in state waters. The management unit for spiny dogfish FMP is the defined range of the resource within the US waters of the Northwest Atlantic Ocean.

In accordance with Addenda II and III (ASMFC 2008 and ASMFC 2011, respectively) 58% of the annual quota is allocated to states from Maine –Connecticut (Northern Region) and 42% divided into state shares for states New York – North Carolina. The current management regime for the Northern Region consists of a 5,000 pound daily possession limit, which complements the federal possession limit applicable to all federal permit holders. The current management regime for New York – North Carolina requires each state to manage their allocated quota, including

monitoring of landings and closing their fisheries when their quota is harvested, as well as establish state-water possession limits. Possession limits in these states generally range from 5,000 to 10,000 pounds (lbs) per vessel per day.

According to the most recent stock assessment update conducted by the Northeast Fisheries Science Center (NEFSC), spiny dogfish are not overfished and not experiencing overfishing (NEFSC 2013, 2104). The 2014 Spiny Dogfish Update provided by the NEFSC to the MAFMC Scientific and Statistical Committee (on 9/17/14) concluded that the stock was above Bmsy in 2013, total catch was about 50% of ABC, and the likelihood of a large decline in true abundance and change in status is low and very low, respectively (NEFSC 2014).

Rationale for Proposed Alternative State Management Regime

Despite the positive stock status, total US landings decreased by 31% from 2012 (10,660 mt) to 2013 (7,312 mt) resulting in only 40% of the coast-wide quota being harvested in 2013 (NEFSC 2014). Similarly, the Northern Region only harvested ~32% of the available regional quota, representing a significant underutilization of the resource (based on SAFIS landings queried 10/7/2014). There are several factors contributing to the under-harvest, most importantly a lagging market and correspondingly poor market price, as well as a lack of coast-wide processing centers. As noted in the MAMFC Spiny Dogfish 2013 Fishery Performance, "market conditions were described as explaining 100% of landings levels, i.e., the availability and abundance of the resource (nearshore or offshore) is not at all constraining right now. The low value (*price*) of dogfish limits the extent to which fishermen are willing to retain dogfish as part of their offshore catch in preference of more valuable species" (MAFMC 2013).

RI fishermen have voiced similar concerns, stating that low market prices in combination with low trip limits make participation in the fishery uneconomic. These concerns affect both the directed and non-directed fisheries. The RI Division of Fish and Wildlife also summarized these concerns in a memorandum of April 28, 2014, which is attached to the submission as Appendix B. A weekly aggregate program for dogfish will improve the economics of the fishery and convert some portion of the current regulatory discards to landings, which are both objectives of the FMP. Administration of the program will take place in a manner similar to the current RI scup and summer flounder weekly aggregate programs, both of which were approved by the Commission under alternative management.

Summary of Proposed Alternative State Management Regime

To improve the economics of the RI spiny dogfish fishery and achieve more effective utilization of the resource, RI proposes to change its state management program from a daily possession limit of 5,000 lbs per vessel per day to a weekly aggregate possession limit of up to 28,000 lbs per vessel per week (equating to 80% of the potential 7-day landing total). We believe the proposed change will improve the economics of the fishery, more fully utilize the quota for the northern region, and do so more effectively, by converting some discards into landings. Most importantly, RI is proposing several program conditions to ensure the proposed action does not contribute to overfishing or adversely impact the ability of other states in the region to harvest the available resource (e.g. a cap in landings under the weekly aggregate possession limit). These conditions are described in more detail below (see "Proposed Alternative Management Regime.")

In addition, to demonstrate that the proposed management program will not contribute to overfishing we assessed what RI landings would look like if *all* spiny dogfish encountered in (and slightly outside) RI state waters were landed. In other words, we asked the question: if the proposed weekly aggregate possession limit (up to 28,000 lbs per vessel per week) converted all discards to landings would RI "...contribute to overfishing of the resource"? In short, our analysis demonstrates the proposed alternative management regime will not contribute to overfishing or put the Northern Region in jeopardy of exceeding the commercial quota set for this species.

Methods

To evaluate whether the proposed program would "...contribute to overfishing of the resource" we assessed the potential total RI landings if all spiny dogfish encountered in (and slightly outside) RI state waters were retained and landed (zero discard scenario). For this assessment we calculated the ratio of discards to landings using federal observer data from NOAA Statistical Reporting Area (Stat Area) 539, which encompasses RI state-waters, and then extrapolated potential RI landings by applying these discard rates to the 2013 Fishing Year (FY) landings data and summing the total of extrapolated discards plus landings. Further details regarding this analysis is as follows.

Estimates of Discards

Using data collected by the Northeast Fisheries Observer Program (NEFOP) and At-Sea Monitoring (ASM) we calculated gear-specific discard ratios (spiny dogfish discarded divided by kept) for all trips in NOAA Stat Area 539 that intercepted spiny dogfish during the 2010-3103 FY. Since Stat Area 539 completely encompasses RI state-waters we believe this data provides a relatively good representation of the RI spiny dogfish fishery. In an attempt to maximize the extrapolated landings estimates we applied the discard ratio calculated for the bottom-otter trawl fishery (largest discard ratio) to all gear types (e.g. sea scallop dredge, midwater otter trawl, midwater paired trawl), except gillnet.

Extrapolated Landings under the "zero discard scenario"

We used commercial landings data from the Standard Atlantic Fisheries Information System (SAFIS) electronic reporting for dealers (queried 10-7-2014) to assess RI landings of spiny dogfish by gear type for the 2013 FY, which is the most recent complete FY and thus, offers the most accurate representation of the fishery. We used this landing data combined with the discard ratios (discussed above) to extrapolate RI landings under the assumption that all spiny dogfish encountered while fishing in state-waters were kept and landed (zero discard scenario). Specifically, we multiplied the 2013 RI commercial landings (L) of spiny dogfish by the applicable discard ratio (D) and added these estimated discards to known landings.

 $[((L \times D) + L) = \text{extrapolated landings under a zero discard scenario}]$

We note that "gear code" was missing from much of the landing data; thus, we applied the discard ratio calculated for the bottom-otter trawl to all non-gillnet landings. We also included landings from the Research Set Aside Program (RSA), which will not be offered for the 2015 FY. Both of these measures were, again, an attempt to maximize the extrapolated landings estimates.

Results

In general, data collected by NEFOP and ASM on trips from Stat Area 539 during the 2010-2013 FY suggest that 75% of dogfish encountered are discarded. Across all gear-type groups the bottom-otter trawl fishery encountered and discarded the greatest proportion of spiny dogfish (92% and 79%, respectively) and for every 1.0 lbs kept, 3.8 lbs were discarded (Table 1). In contrast, the gillnet fishery had the lowest discard rate (7%) and discarded 0.07 lbs for every 1.0 lbs kept (Table 1).

Table 1. Spiny dogfish discarded and kept by gear type in Stat Area 539 during observed trips NEFOP and ASM during the 2010-2013 fishing years.

	Number of	Total (lbs)			Discard Ratios	
Gear Type	Trips	Encountered	Discards	Kept	Discard to Kept	Used in Analysis
bottom-otter trawl	564	267,910	212,029	55,881	3.794	3.80
gillnet	17	9,169	597	8,572	0.070	0.07
all other gear types 1	60	13,238	4,234	9,004	0.470	3.80 ²

¹ sea scallop dredge, midwater otter trawl, midwater paired trawl, etc.

² used bottom-otter trawl ratio in alalysis. See "Estimates of Discards" section for details.

We used these discard ratios to extrapolate landings under a zero discard scenario (Table 2). Based on the 2013 landings data we expect landings would not exceed 2,589,930 lbs assuming fishing effort and practices from the 2013 FY continue into the future and all dogfish encountered were landed (zero discards). In our opinion it is unlikely that the fishery will change dramatically in the short term; as the industry will focus on converting discards to landings, for this low price species, rather than targeting additional effort on the dogfish stock. However, we note that it is unlikely that all dogfish encountered in and around RI state waters would be landed, so our conclusion overestimates total mortality under the new regulations.

Table 2. Preliminary RI commercial spiny dogfish landings for the 2013 fishing year and extrapolated landings under a zero discard scenario (all dogfish encountered were landed).

	Actual	Discard	Estimated	extrapolated
Gear Type	Landings (lbs) ¹	Ratio	Discards	landings (lbs)
bottom-otter trawl & otter trawl ²	7,299	3.8	27,734	35,033
gillnet	321,413	0.07	22,499	343,912
all other gear types 3	460,622	3.8	1,750,364	2,210,986
Total	789,334	-	1,800,597	2,589,930

¹ Preliminary year-end totals (data not finalized)

Overall, this analysis shows that even under an extreme scenario of all discards being landed the proposed alterative management program would not contribute to overfishing. Especially considering that RI will end the proposed weekly aggregate possession limit and revert to the current ASMFC possession limit (i.e. 5,000 lbs per vessel per day) when either 3,000,000 lbs are landed in RI or 80% of the regional quota is harvested (see Proposed Alternative Management Regime for details). It's important to note that 3,000,000 lbs represents about 9.5% of the 2014 Northern Region commercial quota and is generally consistent with the percentage of regional quota harvested by RI during the 2010-2013 fishing years $(7.8\% \pm 3.3\%$ [mean ± 1 standard deviation] based on SAFIS landings queried 10/7/2014).

Proposed Alternative Management Regime

To improve the economics of the RI spiny dogfish fishery and achieve more effective utilization of the resource, RI proposes to change its state management program from a daily possession limit of 5,000 lbs per vessel per day to a weekly aggregate possession limit of up to 28,000 lbs per vessel per week (equating to 80% of the potential 7-day landing total). Most importantly, RI is proposing several program conditions to ensure the proposed action does not contribute to

² combined landings from trips coded as bottom-otter trawl & otter trawl

³ combined across all other gears, including those not coded

overfishing or adversely impact the ability of other states in the region states to harvest the available resource.

A complete list of the program conditions are provided below. Briefly, all participants must: 1) possess a valid RI Department of Environmental Management (RI DEM) commercial fishing license and/or landing permit pursuant to "RI DEM Commercial and Recreational Saltwater Fishing Licensing Regulations"; 2) land their catch at a RI DEM licensed state dealer who reports landings electronically using SAFIS; and 3) and report fishing effort via RI DEM's state logbook reporting system or federal VTR. At the start of the fishing year, RI DEM will enact and enforce a weekly aggregate possession limit of 28,000 lbs per vessel per week for eligible participants until either 3,000,000 lbs are landed in RI or 80% of the regional quota is harvested, at which point RI will revert to the current ASMFC possession limit, i.e., 5,000 lbs per vessel per day. This allowance for higher trip limits, coupled with termination of the program at a point well short of the total regional quota, will enable RI fishermen to increase their harvests and minimize their discards without unduly impacting other states in the region. Indeed, the program would restrain RI fishermen at harvest levels that are below those allowed under the current program (i.e. 35,000 lbs per vessel per week). At present we do not intend to enact fishing seasons, but request the authority to enact seasons in the future, as needed.

If approved by ASMFC, RI will implement this alternative management program soon as possible and no later than May 2016. RI DEM anticipates working with industry to craft a similar proposal for consideration by NOAA for a federal consistency that would afford federally permitted vessels an opportunity to participate, providing they meet the program requirements.

A complete list of the program conditions are as follows:

Participation Requirements:

- All participants must:
 - o possess a valid RI commercial fishing license and/or landing license authorizing them to harvest and/or land spiny dogfish in RI,
 - o land at a RI DEM licensed state dealer who reports landings electronically using SAFIS, and
 - o report fishing effort via state logbook reporting system or federal VTR

Quota Monitoring:

 RI will monitor landings using SAFIS to ensure compliance with weekly limits, and to track total state landings

Implementation date:

The program will be implemented as soon as possible and no later than May 2016
 If approved by ASMFC, RI will apply to NOAA for a federal consistency

Weekly Possession Limit:

• 28,000 lbs per vessel per week at the start of the fishing season

Program Cap:

- The weekly aggregate program will end when either 3,000,000 lbs are landed in RI, or 80% of the regional quota is harvested, whichever comes first
- When the program ends, the RI possession limit reverts to the current ASMFC possession limit, which is currently 5,000 lbs per vessel per day

Season:

• RI DEM may exercise its authority to enact seasons, as needed

Literature Cited

- Atlantic States Marine Fisheries Commission (ASMFC). 2002. Interstate Fishery Management Plan for Spiny Dogfish. Fishery Management Report No. 40 of the ASMFC. Prepared by Plan Development Team Members: M. Gamble, Halgren B., Kelly B., Moore T., and W. Outten.
- Atlantic States Marine Fisheries Commission (ASMFC). 2008. Addendum II to the Interstate Fishery Management Plan for Spiny Dogfish.
- Atlantic States Marine Fisheries Commission (ASMFC). 2011. Addendum III to the Interstate Fishery Management Plan for Spiny Dogfish.
- Mid-Atlantic Fishery Management Council (MAMFC). 2013. Spiny Dogfish 2013 Fishery Performance Report.

 http://static.squarespace.com/static/511cdc7fe4b00307a2628ac6/t/53175ea5e4b0bf4d73536037/1394040485075/2013%20Spiny%20Dogfish%2FPR.pdf
- New England Fishery Science Center (NEFSC) . 2013. Update on the Status of Spiny Dogfish in 2013 and Projected Harvests at the Fmsy Proxy and Pstar of 40%. Report to MAFMC SSC September 17, 2013. 51 p. Rago PJ and KA Sosebee.
- New England Fishery Science Center (NEFSC). 2014. Spiny Dogfish Update 2014. Presentation to MAFMC SSC September 17, 2014 by Rago PJ and KA Sosebee.

APPENDIX A

Section 4.3 "Alternative State Management Regimes" from the Interstate Fishery Management Plan for Spiny Dogfish

4.3 ALTERNATIVE STATE MANAGEMENT REGIMES

Once approved by the Spiny Dogfish and Coastal Shark Management Board, states are required to obtain prior approval from the Board of any changes to their management program for which a compliance requirement is in effect. Other non-compliance measures must be reported to the Board but may be

implemented without prior Board approval. A state can request permission to implement an alternative to any mandatory compliance measure only if that state can show to the Board's satisfaction that its alternative proposal will have the same conservation value as the measure contained in this amendment or any addenda prepared under Adaptive Management (Section 4.5). States submitting alternative proposals must demonstrate that the proposed action will not contribute to overfishing of the resource. All changes in state plans must be submitted in writing to the Board and to the Commission either as part of the annual FMP Review process or the Annual Compliance Reports.

4.3.1 General Procedures

A state may submit a proposal for a change to its regulatory program or any mandatory compliance measure under this amendment to the Commission, including a proposal for de minimis status. Such changes shall be submitted to the Chair of the Plan Review Team, who shall distribute the proposal to the Management Board, the Plan Review Team, the Technical Committee, the Stock Assessment Subcommittee and the Advisory Panel.

The Plan Review Team is responsible for gathering the comments of the Technical Committee, the Stock Assessment Subcommittee and the Advisory Panel, and presenting these comments as soon as possible to the Management Board for decision.

The Spiny Dogfish and Coastal Shark Management Board will decide whether to approve the state proposal for an alternative management program if it determines that it is consistent with the "target fishing mortality rate applicable", and the goals and objectives of this amendment.

4.3.2 Management Program Equivalency

The Spiny Dogfish Technical Committee, under the direction of the Plan Review Team, will review any alternative state proposals under this section and provide to the Spiny Dogfish and Coastal Shark Management Board its evaluation of the adequacy of such proposals. "

4.3.3De minimis Fishery Guidelines

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). A state maybe 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. States may petition the Spiny Dogfish and Coastal Shark Management Board at any time for de minimis status. Once de minimis status is granted, designated states must submit annual reports to the Management Board documenting the continuance of de minimis status. States must include de minimis requests and compliance with de minimis requirements as part of their annual compliance reports.

APPENDIX B

RI Division of Fish and Wildlife memorandum submitted to the Spiny Dogfish Management board on April 28, 2014 summarizing "Problems Affecting RI Spiny Dogfish Fishery; Proposals for Alternative Management"

(remainder of page intentionally left black)

Rhode Island

3 Fort Wetherill Road



Department of Environmental Management

DIVISION OF FISH AND WILDLIFE

401 423-1920

FAX 401 423-1925

TDD 401 222-4462

Discussion Memo

To: Spiny Dogfish Board

From: RI Commissioners

Subject: Problems Affecting RI Spiny Dogfish Fishery; Proposals for Alternative Management

Date: April 28, 2014

At the February 2014 Spiny Dogfish Board meeting, a request was made to address the current 4,000 lb possession limit for dogfish as an agenda item at the May 2014 Board meeting. In advance of the meeting, this memo is provided as a basis for discussion. It sets forth RI's perspectives on the problems affecting our fishery, and issue, and presents options for addressing the problems via alternative management strategies.

For a host of reasons, described below, we find the current possession limit problematic. We note that recent discussions on the issue at Mid-Atlantic and New England Fishery Management Council meetings have been divergent. We urge the Board to take up the issue, with a view to achieving improved management of the fishery.

Background

Pursuant to the Commission's Spiny Dogfish FMP, the fishery is managed via two different approaches, one for the New England region and another for the Mid-Atlantic region. The NE states (Maine through Connecticut) are lumped into a northern region, which is allocated 58% of the dogfish quota, and managed based on a 4,000 lb possession limit, which is complemented by an identical federal regulation. The Mid-Atlantic States (New York through North Carolina) are lumped into a southern region, which is allocated 42% of the quota, and managed via individual sub-allocations to each state. The management program for the southern region enables the Mid-Atlantic States to enact their own trip limits in state waters; in contrast, the management program

for the northern region binds all the states to a 4,000 lb. trip in state waters. All federal permit holders in both regions are bound by the 4,000 lb limit.

The NEFMC recently voted to eliminate the daily possession limit for dogfish, while the MAFMC recently voted to retain the current 4,000 lb. limit. It is our understanding that NOAA Fisheries plans to respond by developing a proposed rule with a range of alternatives -- including the two options set forth by the Councils, as well as other intermediate options. We further understand that NOAA Fisheries will allow the public comment period to remain open through the ASMFC's meeting, to enable the Board and Commission to review the alternatives and offer a recommendation.

The NEFMC's recommendation to eliminate the federal trip limit is intended to allow markets to develop, and enable industry to increase landings, in keeping with the large and underutilized dogfish quota. It also is intended to provide states the opportunity to adjust their trip limits based on the needs of their fisheries.

Problems with the Dogfish FMP; Need for Change

- O The current management program for dogfish runs contrary to the needs and interests of the Rhode Island commercial fishery. The program unduly constrains RI-based fishermen, truckers, and dealers, who find it increasingly difficult to operate in an economically efficient manner under the 4,000 lb. limit. This constraint is ironic given the proximity of RI to the main dogfish processing facilities in New Bedford, MA.
- O Total commercial landings of dogfish for the current fishing year, which ends April 30, 2014, are projected to be about 16 million lbs, which is about 40% of the total coastwide quota (40.8 million lbs). This significant underutilization of the resource clearly indicates that the current management program is failing to achieve full and optimum utilization of the resource. On this point alone, there is ample justification for pursuing an increase to the 4,000 lb. limit.
- The coastwide quota for the 2014/2015 fishing year, which begins May 1, 2014, will increase by 8.6 million lbs, to 49.4 million lbs Absent any changes to the management program, the increased quota is likely to result in an even larger underage. For the northern region, if landing levels remain the same, the projected underage next year will be in the range of 20 million lbs.
- The most recent estimation of dead discards in the fishery is 11.6 million lbs annually, which equates to 72% of this year's commercial landings. A large portion of discards results from catch rates that exceed the daily possession limit. The need to reduce regulatory discards by converting them into landings lends further, and compelling, justification to a proposed increase to the possession limit.
- \circ The price paid to fishermen has declined from 20-22¢/pound in prior years to 10-12¢/pound in recent years.

- o The low price of dogfish, combined with the low daily possession limit, make it uneconomical for small-boat fishermen to harvest the resource, particularly in the small ports that lack dealers. For example, the average small boat (35 feet) in RI has two crew members, and generally travels 7-12 miles to the dogfish grounds. At 12¢/pound, a 4,000 lb. limit results in gross revenue of \$480/day. Assuming fixed operational costs of about \$250/day, that leaves just \$230/day for the captain and crew. Such inadequate earnings pose a disincentive for fishermen to target dogfish, particularly small boats operating out of small ports. Moreover, the current dynamics of the fishery and market pose a disincentive to land incidental catches, so those catches are typically discarded.
- For RI dealers, the economics of the fishery are equally problematic. RI dealers need to make a minimum of 7-10¢/pound to cover the costs of transporting fish from Sakonnet Pt. or Newport to New Bedford, MA. Dealers cannot justify offloading one or two vessels because, at such low volumes, they cannot cover their fixed costs (e.g., fuel, ice, drivers, insurance, vehicle maintenance). The only way a RI-based dealer can justify transporting dogfish is if they engage in volumes, in the range of 20,000 to 40,000 lbs, which would require offloading five to ten boats at the 4,000 lb. limit. Since small harbors in RI, such as Sakonnet Pt. and Newport, lack the capacity to achieve such volumes, the 4,000 lb. limit essentially prevents these ports from participating in the fishery. The management program therefore fails to provide equitable access to the resource, and thus fails to achieve one of the goals set forth by the FMP.
- O Dogfish are generally viewed as nuisance species, and known to be a voracious predator, which further emphasizes the importance of facilitating increased harvest opportunities. For example, fishermen who target cod and monkfish with gill nets frequently have to discard significant portions of their target catch, due to dogfish predation. This occurs on both long and short sets of gill net gear, and also occurs on day sets of less than four hours. Dogfish often eat the bellies out of cod in a few hours, and then devour the balance of the catch on longer sets.
- o The following examples, drawn from different components of the RI commercial fishery, illustrate the adverse effects of dogfish vis-à-vis the current management program:
 - Groundfish sector fishermen with cod allocations essentially cannot fish for cod due to high dogfish bycatch levels. Most of these fishermen fish about 25 miles offshore, where dogfish and cod comingle during the winter. A typical fisherman targeting cod with groundfish mesh may catch 6,000-12,000 lbs of dogfish. In order to target and land, say, 300 lbs of cod, a fishermen would have to handle up to 12,000 lbs of dogfish during the day, 8,000 lbs of which would have to be discarded. This makes no sense from either a fishery management or business perspective. A far better approach would be to enable the discards to be converted to landings, in keeping with the discard-reduction goals and objectives set forth by the Commission, Councils, and NOAA Fisheries.
 - Trawlers from Pt. Judith targeting flat fish also encounter large numbers of dogfish on a regular basis, resulting in significant regulatory discards, due solely to the low trip limits.

Not only would these vessels benefit by being able to land the bycatch, they could also target dogfish a few days a week and thereby reduce fishing pressure on other inshore stocks.

Alternative Management Approaches

The provisions of the current Dogfish FMP are fairly limited and ostensibly offer only two options to address the problems described above. Both options have pros and cons associated with them.

1. **Raise the trip limit.** The first strategy would be to raise the daily possession limit, across-the-board, to a level that accommodates current catches – i.e., landings plus regulatory discards. For RI, that level would be in the range of 8,000-10,000 lbs. However, that level may not meet industry's overall needs and interests; and it may have varying impacts depending on gear, season, and the size and location of ports.

So, an across-the-board increase of that amount may not be a preferred solution. Moreover, it is recognized that a doubling of the current daily trip limit could cause a spike in effort, which could disrupt the market and place downward pressure on prices. Accordingly, as set forth below, RI would support a more moderate increase in the daily trip limit, to either 5,000 or 6,000 lbs.

2. Utilize conservation equivalency. Sections 4.3, 4.3.1, and 4.3.2 of FMP set forth provisions governing proposal and adoption of Alternative State Management Regimes. The criteria are generally similar to other conservation-equivalency provisions in other FMPs, in that any proposal offered by a state must have the same conservation value as the mandatory measure contained in the FMP. The state must demonstrate that its alternative proposal will not contribute to overfishing of the resource. The proposal must be submitted in writing, as part of the annual FMP review process or annual compliance reporting. Upon receipt and review of the proposal and the advice of the PRT, the Board may approve it, based on a determination that the proposal is consistent with the "target fishing mortality rate applicable," and the goals and objectives of the FMP. The situation pertaining to dogfish is unique in that the resource is being collectively under-harvested. Also unique is the applicability of a state-based conservation-equivalency proposal pertaining to a regional management program, with a regional quota. The question arises: given the nature of the Dogfish FMP as it pertains to the northern region, what constitutes the same conservation value as the mandatory measure?

The existing criteria in the FMP relating to conservation equivalency are limited, and primarily focused on overfishing standards. The dogfish population is rebuilt, not overfished, and not subject to overfishing. Moreover, the resource is being significantly under-harvested, and that is occurring in the face of upcoming quota increases. Further, the goals and objectives of the FMP specify the need to minimize regulatory discards, and the need to allocate the resource fairly to all fishers. Taken together, these factors suggest that a proposal from RI to increase the RI possession limit could be in order; however, more guidance is needed from the Board on the matter.

Rhode Island's Proposed Approach

RI is interested in managing its commercial dogfish fishery via a weekly aggregate program, similar to the aggregate programs already in place (per Commission approval) for scup and summer flounder. Such a program would afford the State the flexibility to address the constraints on, and other problems affecting, the State's commercial fishery, as described above. Importantly, the program would improve the economics of the fishery and reduce regulatory discards. The program would likely involve some or all of the following provisions: a weekly aggregate limit, the exact amount of which has yet to be vetted and determined, but would likely be in the range of 20,000 lbs (equating to about 70% of weekly totals allowed under the current daily limit); a cap on total allowable landings under the program; a requirement for a state-issued LOA to participate in the program; a specified season, or time period, for the program, including termination criteria based on regional landing levels; and reporting requirements.

RI's proposed approach – offered to the Board in advance of any in-state vetting -- would enable the State to position itself in a manner consistent with the needs and interests of its commercial fishery. Such positioning would be similar to other states in the southern region, such as North Carolina, which has enacted a 10,000 lb. possession limit to provide its state-waters fishermen with the advantages associated with a sufficiently large possession limit.

Pending the outcome of the Board's review of this memo, and subsequent in-state discussions with local industry interests, RI plans to pursue this approach via the submission of an alternative state management proposal pursuant to Sections 4.3, 4.3.1, and 4.3.2 of the FMP.

Summary: Request to the Board

RI seeks the Board's guidance on and response to the issues raised in this paper, with particular reference to the following three potential action items:

- 1. Consider increasing the trip limit in the northern region to either 5,000 or 6,000 pounds. Although an even higher limit could be justified and recommended, it is recognized that significantly higher limits could trigger market, price, and bycatch concerns. Moreover, it may be preferable to move forward via incremental increases, allowing the market to respond and adjust, and helping to keep in check any major shifts in effort. Thus, RI is proposing a moderate increase, aimed at moving the fishery in the right direction. The Board has already voted to retain the 4,000 lb. possession limit for the 2014/2015 season. Thus, in order to make this proposed change at the May 2014 meeting, the Board would have to vote to reconsider the issue, with at least two thirds of the Board voting in favor, followed by a simple majority vote to increase the trip limit.
- 2. Consider the need for a Federal trip limit. If the Board moves to adopt a new trip limit, consider an additional motion to send a recommendation to NOAA Fisheries

requesting repeal of the existing (4,000 lb.) federal trip limit. This recommendation would align the position of the Commission with that of the New England Council. The federal regulation is duplicative and unnecessary and reduces the flexibility of States and the Commission to adopt new strategies.

- 3. Consider the appropriateness, applicability, and guidelines for a conservation equivalency proposal. RI wishes to move forward with a state-based conservation equivalency proposal, involving the aggregate program described above, and is prepared to do so at the first available opportunity. In advance, the State seeks the Board's guidance on the potential use of conservation equivalency as a basis for the State's proposal, per the relevant provisions of the FMP. The State also seeks guidance from the Board on a set of guidelines that would govern the submittal and review of such a proposal. For purposes of discussion, the State suggests that, at a minimum, any proposal should include, and be evaluated pursuant to, the following information:
 - > The State-specific problems addressed by the proposal.
 - ➤ How the proposal comports with the goals and objectives of the FMP and relates to the existing management program; specifically, how the proposal will achieve the same conservation value as the measures set forth in the FMP
 - ➤ How the program will be administered and enforced by the State.
 - ➤ Identify if a special permit will be required, and how the landings will be tracked, recorded, and monitored.
 - ➤ Identify how landings under the program will be capped and not result in overfishing.
 - ➤ Identify the timing of the program.
 - ➤ Identify terms and conditions on when the program will terminate (e.g., if/when regional landings reaches 75 % of the regional allocation).
 - > Reporting protocols.