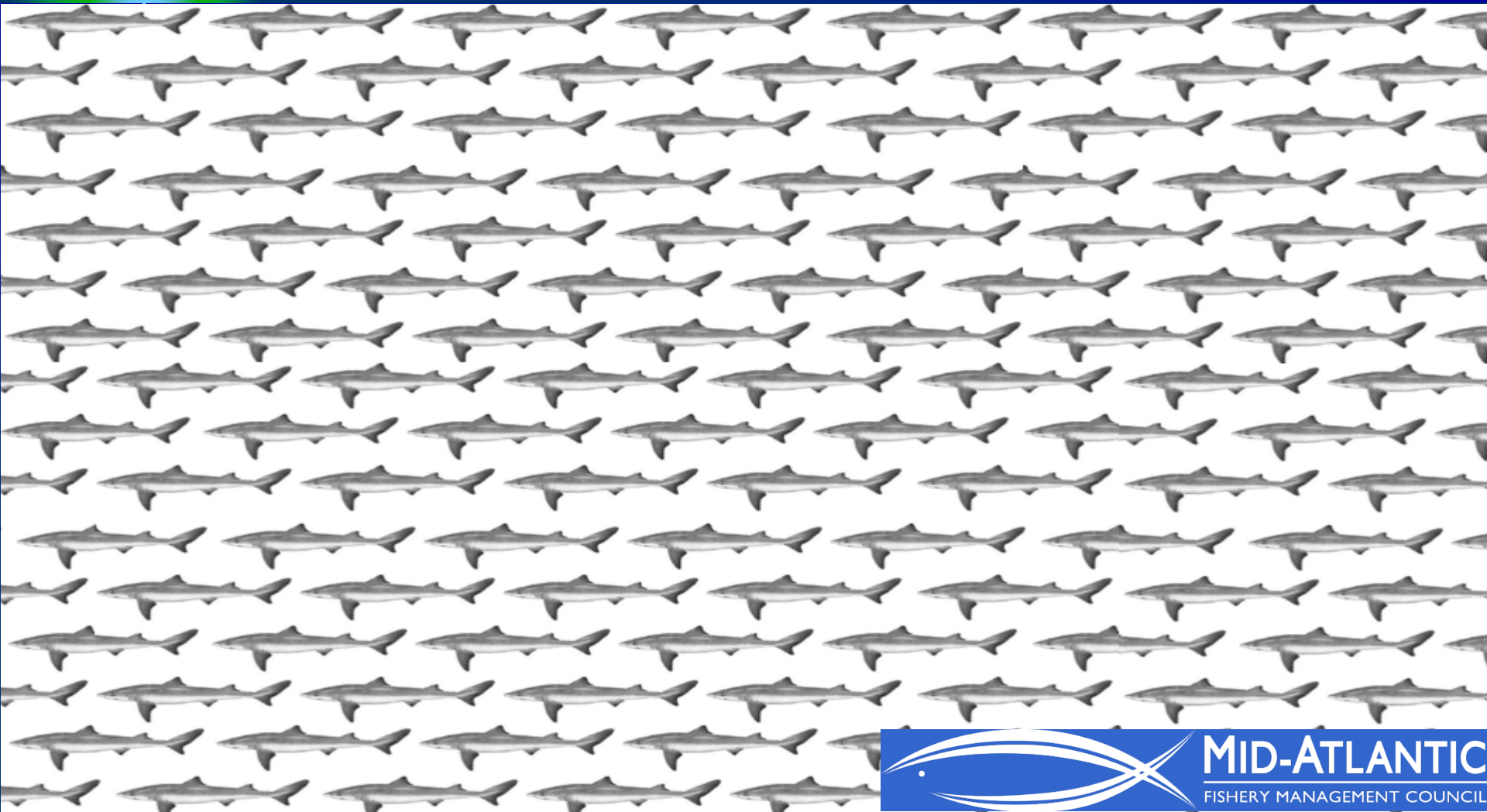


Spiny Dogfish

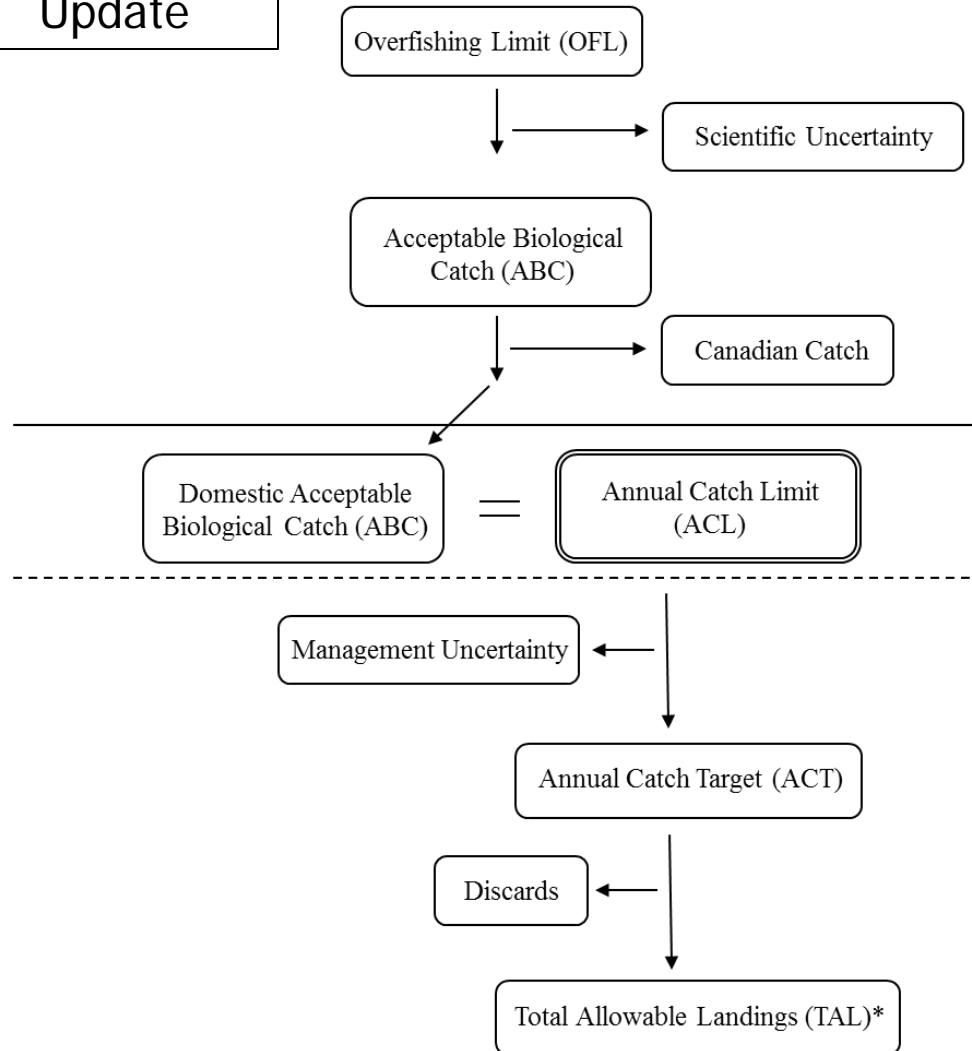
Specifications

2013 - 2015

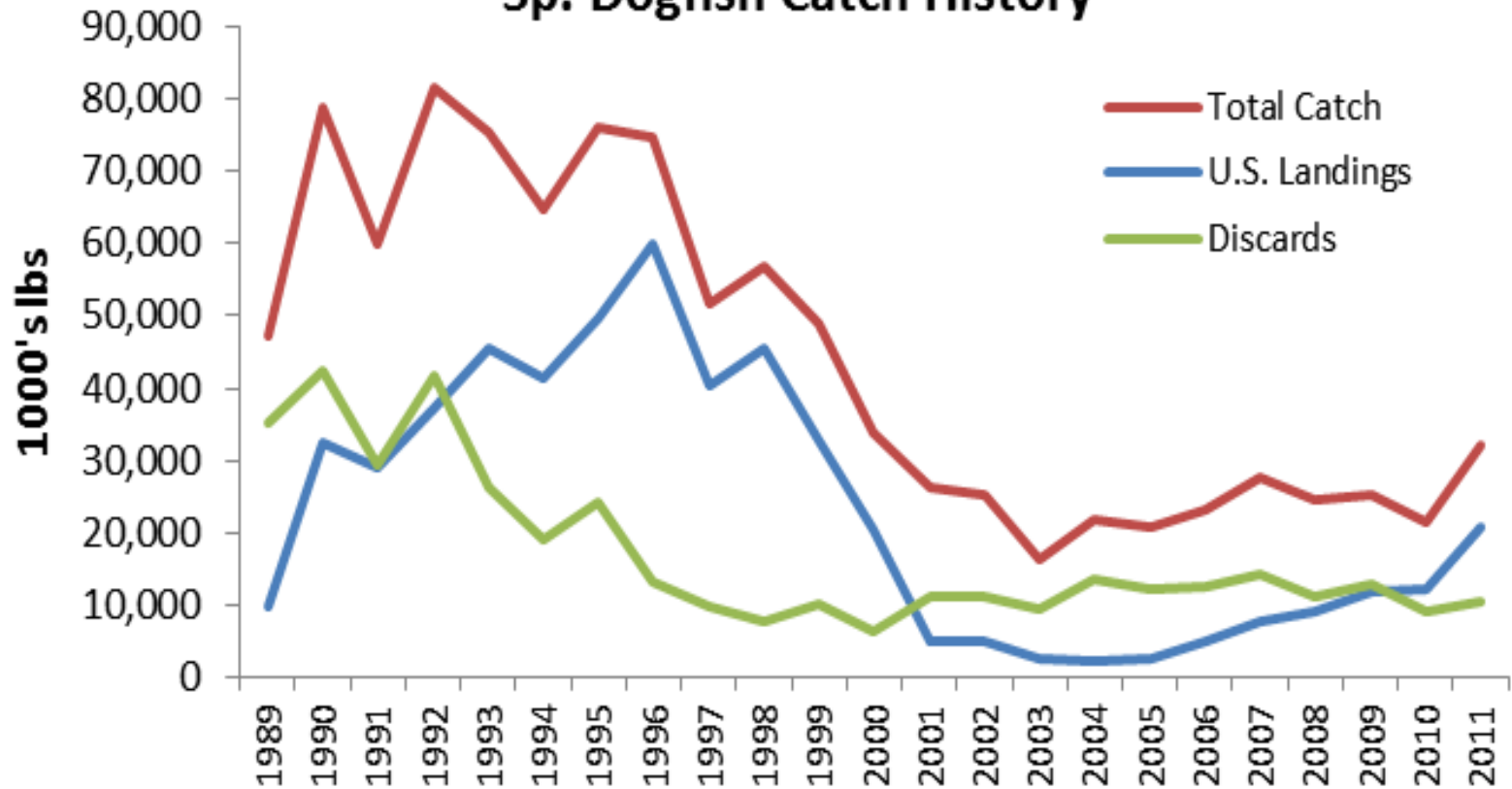


Assessment
Update

Spiny Dogfish Flowchart



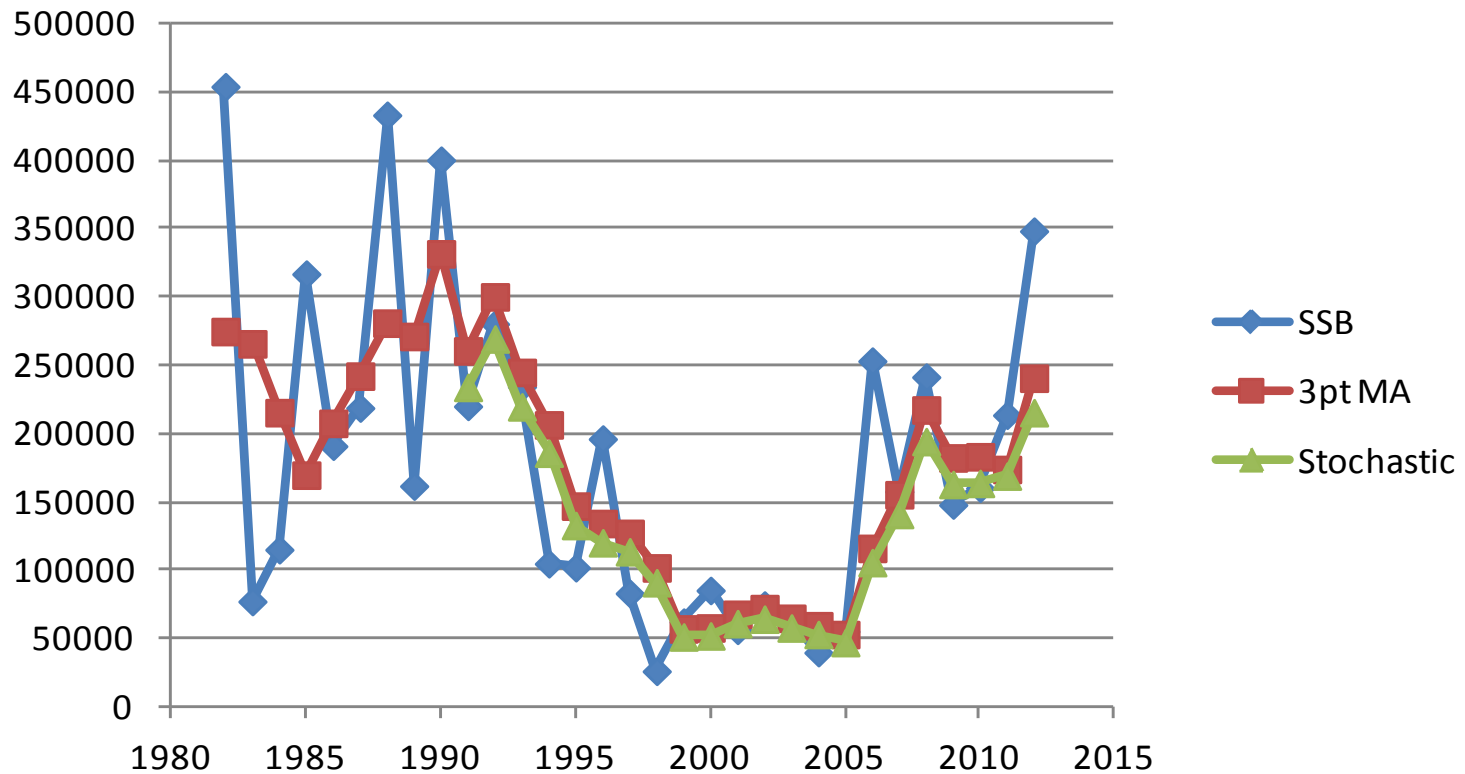
Sp. Dogfish Catch History



- Unregulated fishery targeted mature female dogfish
- Female stock overfished in 1997
- FMP implemented in 2000
- Landings greatly reduced from 2001 – 2008
- Stock rebuilt in 2010
- Quotas expanded in 2009 - 2012

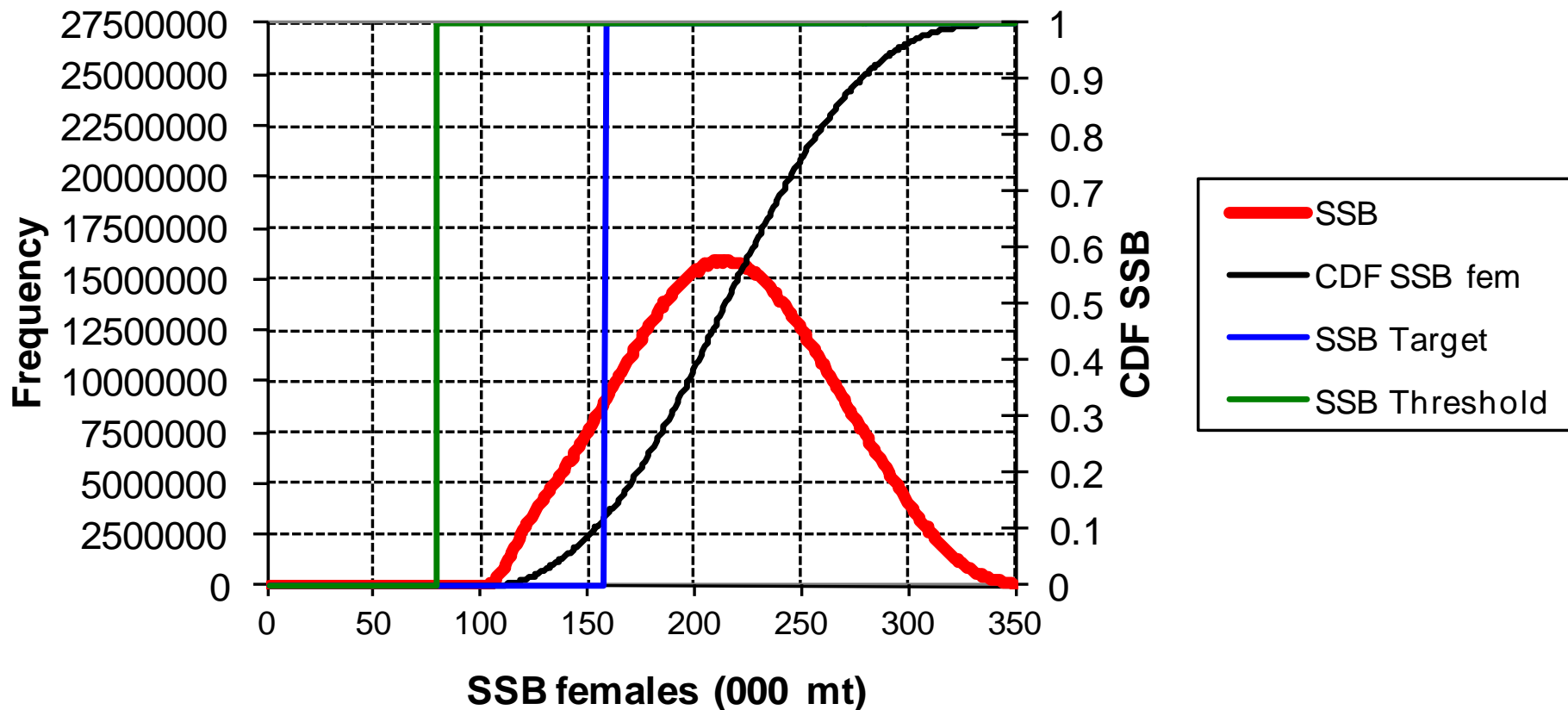
Stock Biomass

Female spawning stock biomass Estimates 1982-2012



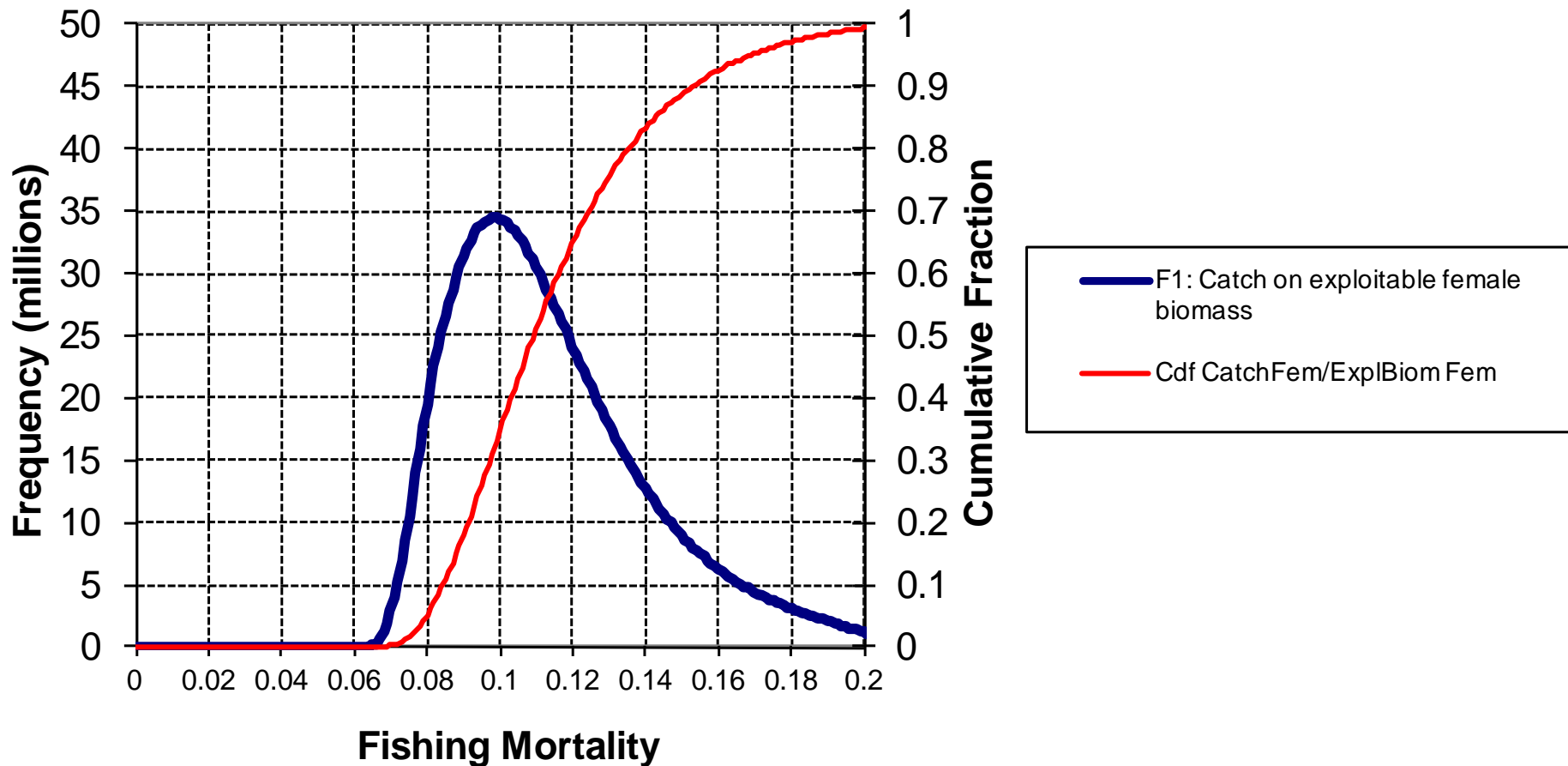
Biomass 2012

Stochastic Estimate of Spawning Stock Biomass with nominal target and threshold biomasses, 2012



Fishing Mortality 2011

F1: Female Catch vs exploitable biomass: 2011



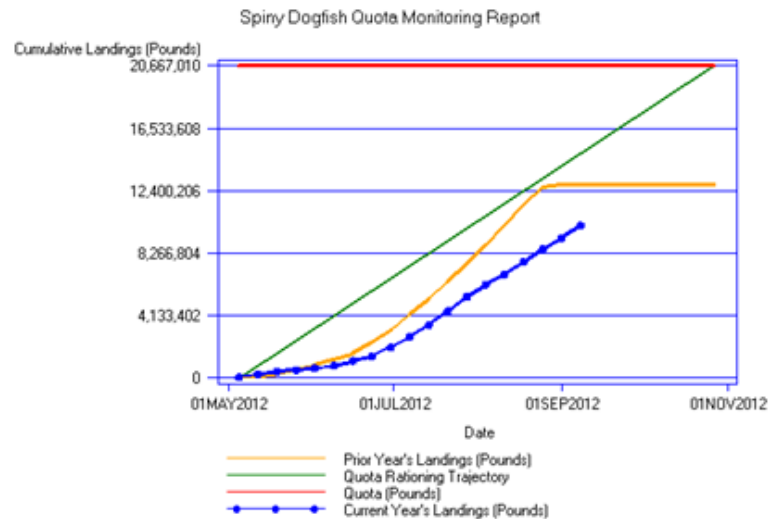
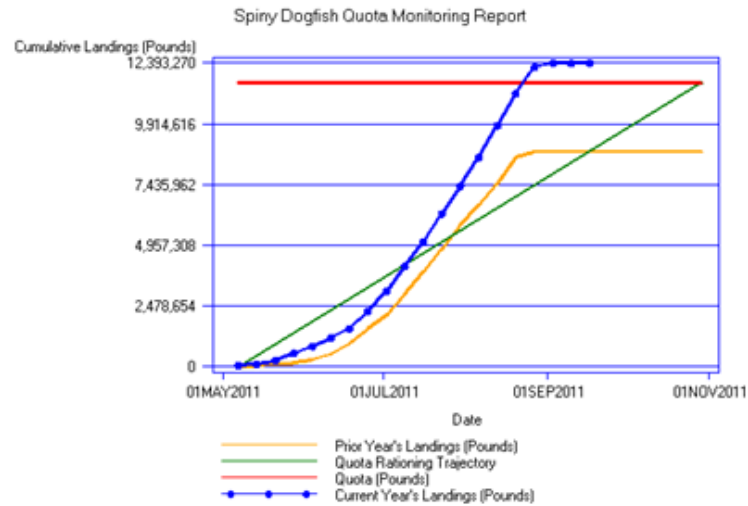
Stock Status

- Not overfished, overfishing not occurring
- SSB and F stable for now
- Biomass₂₀₁₂: 215,444 mt (SSB_{MAX}: 159,088 mt)
- F_{1,2011}: 0.114 (F_{MSY}: 0.2439)

Fishery Performance Report

- Fishery underperformed in early part of the year because fish were offshore
- Poor economy in Europe constraining demand
- Market not ready for huge increases in dogfish supply, but more processors may get involved over time.
- Longer term specifications (multi-year) desirable for planning
- Closure of Oregon Inlet affecting NC commercial effort
- Recommendation for developing models (management and population) for administering and assessing male fishery
- Interested in limited entry

Fishery Performance Report

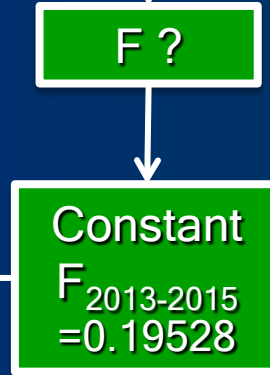


ABC Determination



Year	Fishing Mortality			Average								Probability			
	F on females	F on males	SSB (mt)	Total Catch (mt)	Total Landing (mt)	Female Landings (mt)	Male Landings (mt)	Total Discards (mt)	Female Discards (mt)	Male Discards (mt)	SSB(t)/SSB_target	SSB<SSB_target	F>=Fthresh	F>=Ftarget	
2012	0.197411	0.00559	215,647	24,787	13,616	12,571	1,045	6,594	4,465	2,129	1.354	0.882	1.000	0.160	0.540
2013	0.19528	0.00999	225,378	24,709	15,969	14,145	1,824	8,740	5,024	3,716	1.415	0.890	1.000	0.000	1.000
2014	0.19528	0.00999	213,838	25,154	16,368	14,601	1,767	8,786	5,186	3,600	1.342	0.854	1.000	0.000	1.000
2015	0.19528	0.00999	197,751	25,057	16,350	14,627	1,723	8,707	5,195	3,512	1.241	0.788	1.000	0.000	1.000
2016	0.19528	0.00999	180,096	24,524	16,010	14,330	1,680	8,513	5,090	3,423	1.131	0.680	1.000	0.000	1.000
2017	0.19528	0.00999	166,236	23,824	15,542	13,900	1,642	8,282	4,937	3,345	1.044	0.568	1.000	0.000	1.000
2018	0.19528	0.00999	155,467	23,028	14,999	13,394	1,605	8,029	4,757	3,271	0.976	0.460	0.998	0.000	1.000
2019	0.19528	0.00999	144,082	22,315	14,521	12,954	1,567	7,794	4,601	3,193	0.905	0.330	0.986	0.000	1.000
2020	0.19528	0.00999	132,598	21,845	14,230	12,708	1,522	7,615	4,514				0.00	1.000	
2021	0.19528	0.00999	139,415	21,771	14,239	12,768	1,471	7,532	4,535				0.00	1.000	
2022	0.19528	0.00999	152,098	22,008	14,478	13,060	1,419	7,529	4,639				0.00	1.000	
2023	0.19528	0.00999	167,947	22,512	14,913	13,545	1,368	7,599	4,811				0.00	1.000	
2024	0.19528	0.00999	182,931	23,169	15,458	14,139	1,319	7,711	5,022				0.00	1.000	
2025	0.19528	0.00999	194,278	23,771	15,960	14,687	1,273	7,811	5,217				0.00	1.000	
2026	0.19528	0.00999	201,534	24,264	16,375	15,143	1,232	7,889	5,379				0.00	1.000	
2027	0.19528	0.00999	204,950	24,608	16,674	15,478	1,196	7,934	5,498	2,437	1.287	0.826	1.000	0.000	1.000
2028	0.19528	0.00999	205,157	24,820	16,867	15,701	1,166	7,953	5,577	2,376	1.288	0.826	1.000	0.000	1.000
2029	0.19528	0.00999	202,666	24,875	16,937	15,794	1,143	7,939	5,610	2,329	1.272	0.814	1.000	0.000	1.000
2030	0.19528	0.00999	198,196	24,834	16,928	15,803	1,125	7,906	5,613	2,293	1.244	0.794	1.000	0.000	1.000
2031	0.19528	0.00999	193,735	24,756	16,887	15,776	1,111	7,868	5,604	2,265	1.216	0.770	1.000	0.000	1.000
2032	0.19528	0.00999	190,714	24,705	16,863	15,762	1,101	7,842	5,598	2,243	1.197	0.754	1.000	0.000	1.000
2033	0.19528	0.00999	190,299	24,731	16,893	15,800	1,093	7,839	5,612	2,227	1.195	0.752	1.000	0.000	1.000
2034	0.19528	0.00999	192,273	24,863	16,998	15,912	1,086	7,865	5,652	2,213	1.207	0.764	1.000	0.000	1.000
2035	0.19528	0.00999	196,494	25,103	17,183	16,103	1,080	7,920	5,720	2,200	1.234	0.788	1.000	0.000	1.000
2036	0.19528	0.00999	202,058	25,435	17,435	16,361	1,074	8,000	5,811	2,189	1.269	0.814	1.000	0.000	1.000
2037	0.19528	0.00999	208,287	25,833	17,735	16,666	1,069	8,098	5,920	2,178	1.308	0.840	1.000	0.000	1.000
2038	0.19528	0.00999	214,357	26,255	18,052	16,987	1,065	8,203	6,034	2,169	1.346	0.862	1.000	0.000	1.000
2039	0.19528	0.00999	219,606	26,670	18,362	17,300	1,062	8,308	6,145	2,163	1.379	0.880	1.000	0.000	1.000
2060	0.19528	0.00999	276,268	33,781	23,397	22,164	1,233	10,384	7,873	2,512	1.734	0.976	1.000	0.000	1.000
2061	0.19528	0.00999	279,498	34,173	23,669	22,422	1,246	10,504	7,964	2,540	1.755	0.980	1.000	0.000	1.000
Grand Total	0.195351	0.009843	194,795	24,787	16,664	15,353	1,310	8,123	5,453	2,670	1.223	0.722	0.998	0.005	0.985

"Mean" from Table 15-rev



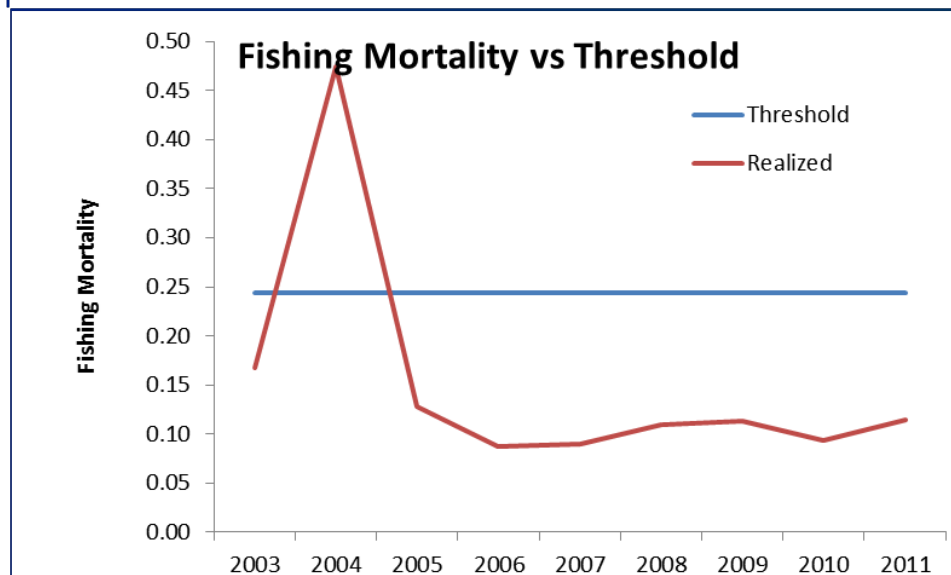
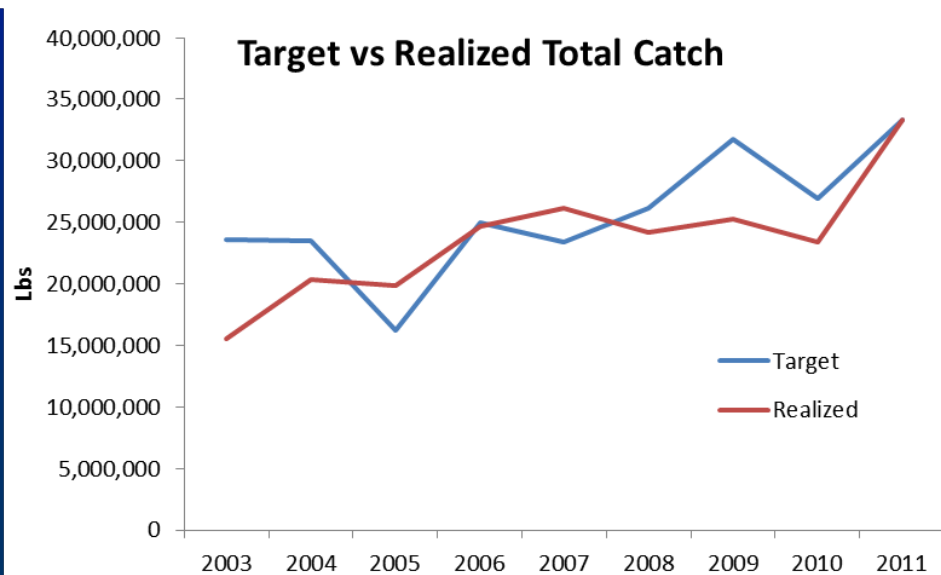
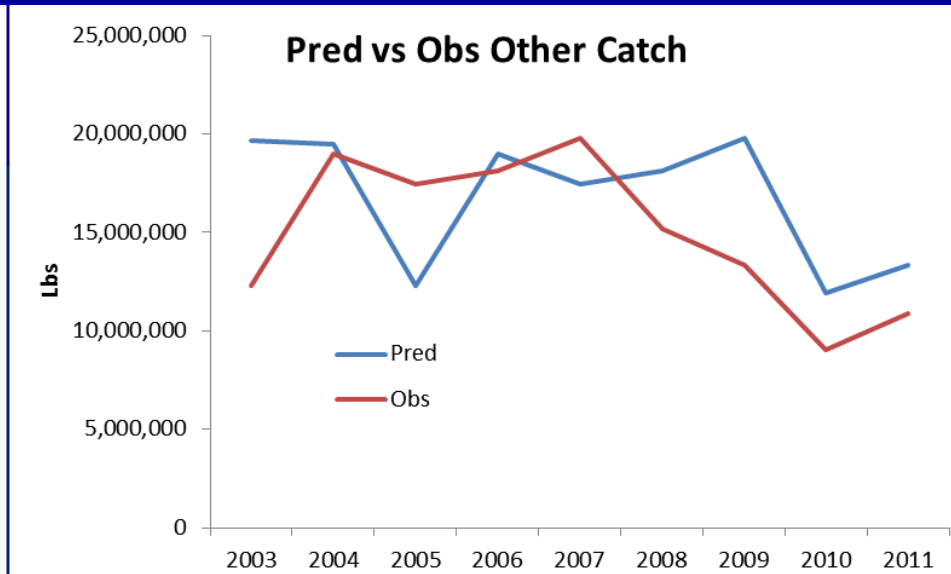
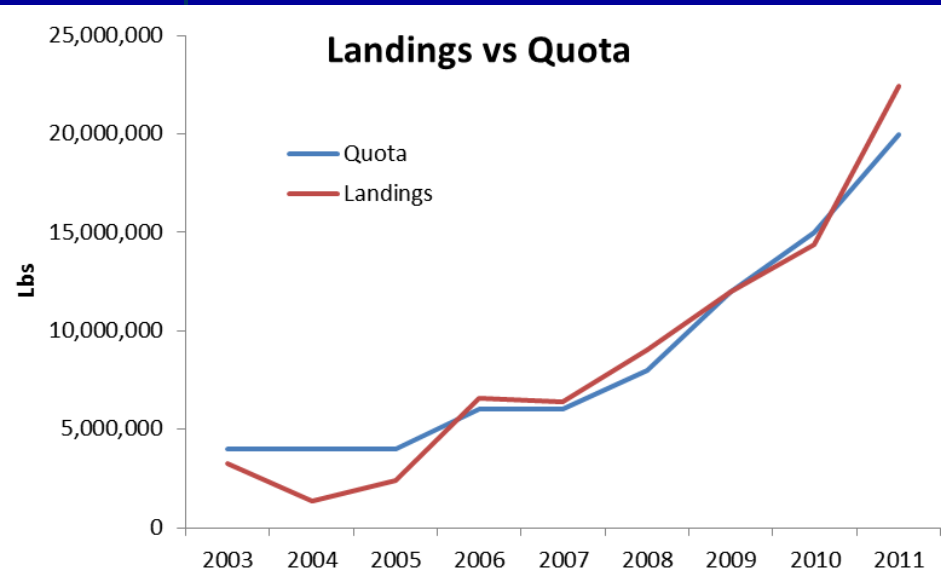
$ABC_{2013-2015}$

ABC₂₀₁₃₋₂₀₁₅

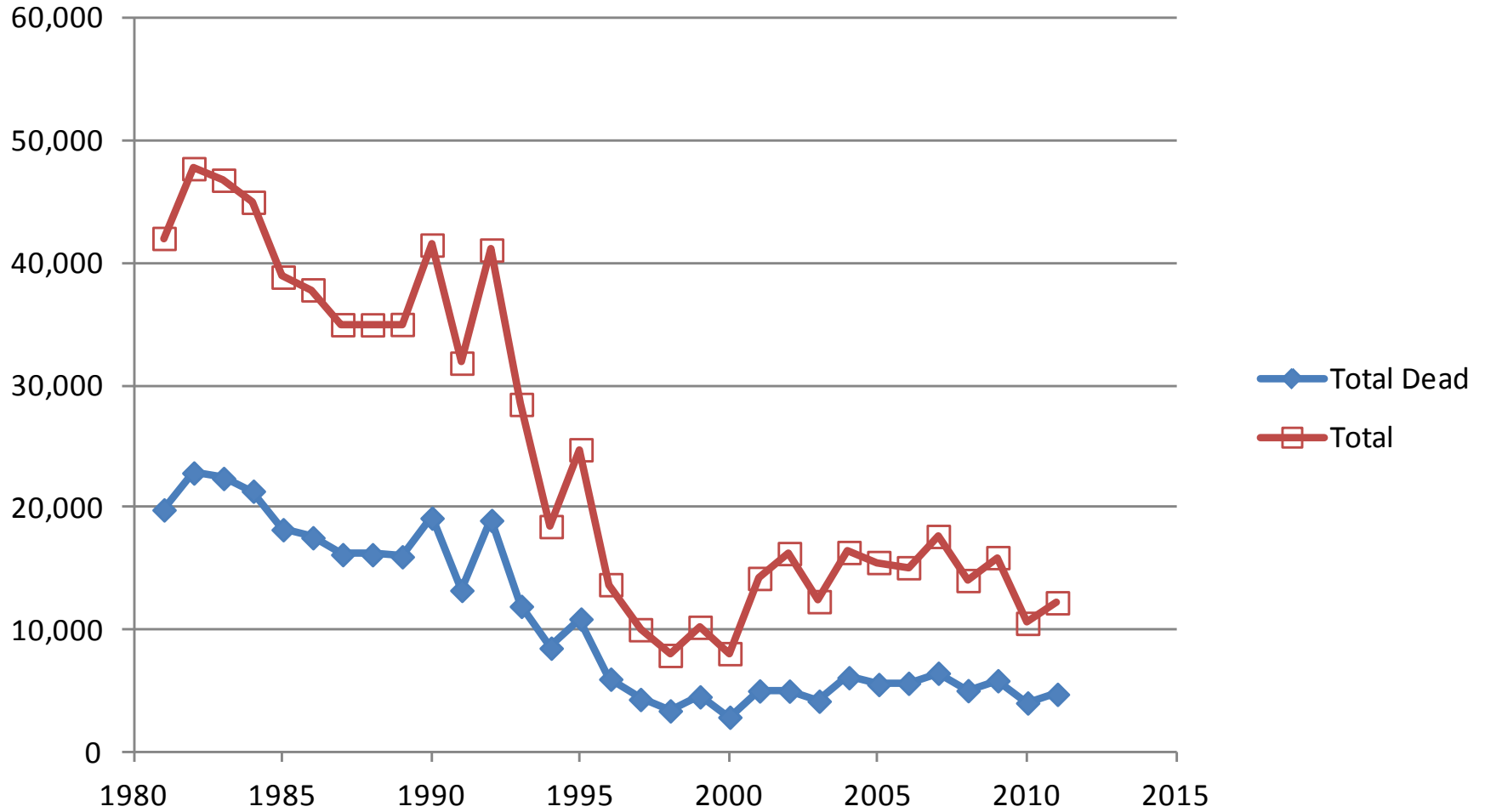
YEAR	ABC	OFL
2013	24,709 mt	30,652 mt
2014	25,154 mt	
2015	25,057 mt	

Mgmt Measures

2013 Measures	Basis	M lb	Mt
OFL	$F_{MSY} (0.2439)$	67.576	30,652
ABC	<i>Constant F (0.19528)</i>	54.474	24,709
Canadian Landings	<i>= ave 2009-2011</i>	0.179	81.0
Domestic ABC	<i>= ABC - Canadian Landings</i>	54.295	24,628
ACL	<i>= Domestic ABC</i>	54.295	24,628
Mgmt Uncertainty Buffer	<i>Ave of quota overages (pct) in 2010-2011 (4.0%)</i>	1.697	770
ACT	<i>= Domestic ACL - management uncertainty</i>	52.598	23,858
U.S. Discards	<i>= ave 2002-2011</i>	11.698	5,306
TAL	<i>ACT - Discards</i>	40.900	18,552
U.S. Rec Landings	<i>= ave 2010-2011</i>	0.058	26.5
Comm Quota	<i>TAL - Rec Landings</i>	40.841896	18,526



Comparison of total and estimated dead discards (mt), 1981-2011



2013 Measures	Basis	M lb	Mt
OFL	$F_{MSY} (0.2439)$	67.576	30,652
ABC	$Constant F (0.19528)$	54.474	24,709
Canadian Landings	$= ave 2009-2011$	0.179	81.0
Domestic ABC	$= ABC - Canadian Landings$	54.295	24,628
ACL	$= Domestic ABC$	54.295	24,628
Mgmt Uncertainty Buffer	$Ave of quota overages (pct) in 2010-2011 (4.0\%)$	1.697	770
ACT	$= Domestic ACL - management uncertainty$	52.598	23,858
U.S. Discards	$= ave 2002-2011$	11.698	5,306
TAL	$ACT - Discards$	40.900	18,552
U.S. Rec Landings	$= ave 2010-2011$	0.058	26.5
Comm Quota	$TAL - Rec Landings$	40.841896	18,526

2014 Measures	Basis	M lb	Mt
OFL			
ABC	$Constant F (0.19528)$	55.455	25,154
Canadian Landings	$= ave 2009-2011$	0.179	81.0
Domestic ABC	$= ABC - Canadian Landings$	55.277	25,073
ACL	$= Domestic ABC$	55.277	25,073
Mgmt Uncertainty Buffer	$Ave of quota overages (pct) in 2010-2011 (4.0\%)$	1.737	788
ACT	$= Domestic ACL - management uncertainty$	53.540	24,285
U.S. Discards	$= ave 2002-2011$	11.698	5,306
TAL	$ACT - Discards$	41.842	18,979
U.S. Rec Landings	$= ave 2010-2011$	0.058	26.5
Comm Quota	$TAL - Rec Landings$	41.783807	18,953

2015 Measures	Basis	M lb	Mt
OFL			
ABC	$Constant F (0.19528)$	55.241	25,057
Canadian Landings	$= ave 2009-2011$	0.179	81.0
Domestic ABC	$= ABC - Canadian Landings$	55.063	24,976
ACL	$= Domestic ABC$	55.063	24,976
Mgmt Uncertainty Buffer	$Ave of quota overages (pct) in 2010-2011 (4.0\%)$	1.728	784
ACT	$= Domestic ACL - management uncertainty$	53.335	24,192
U.S. Discards	$= ave 2002-2011$	11.698	5,306
TAL	$ACT - Discards$	41.637	18,886
U.S. Rec Landings	$= ave 2010-2011$	0.058	26.5
Comm Quota	$TAL - Rec Landings$	41.578491	18,860

Mgmt Measures for 2013- 2015

Table 1-rev



NOAA
FISHERIES

Northeast
Regional
Office

Spiny Dogfish Trip Landings Analysis

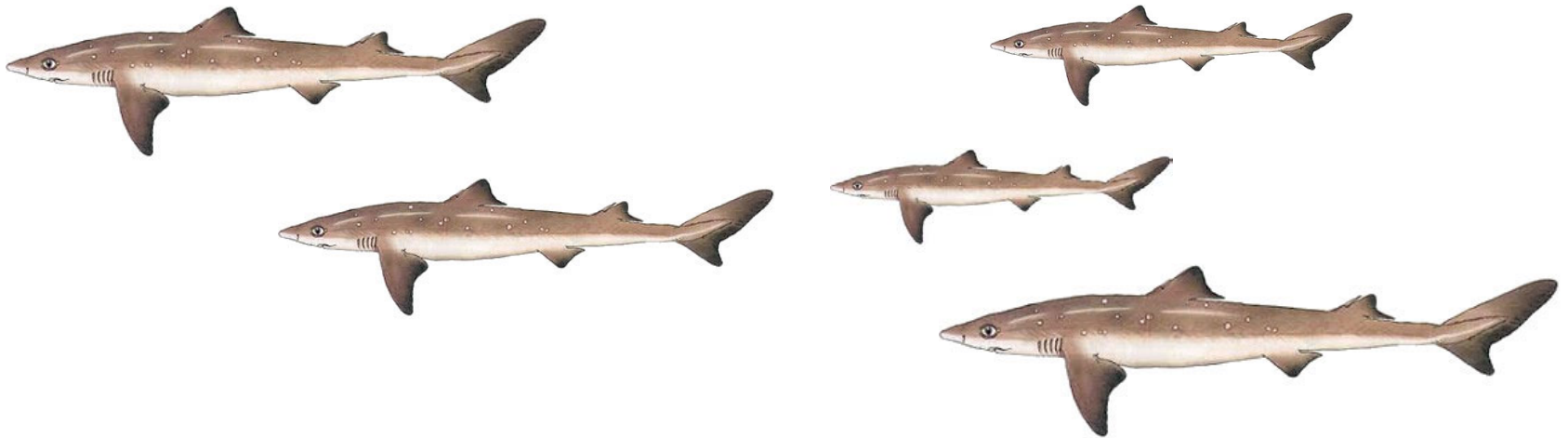
Tobey Curtis, Mark Brady, Michael Pentony



October 3, 2012

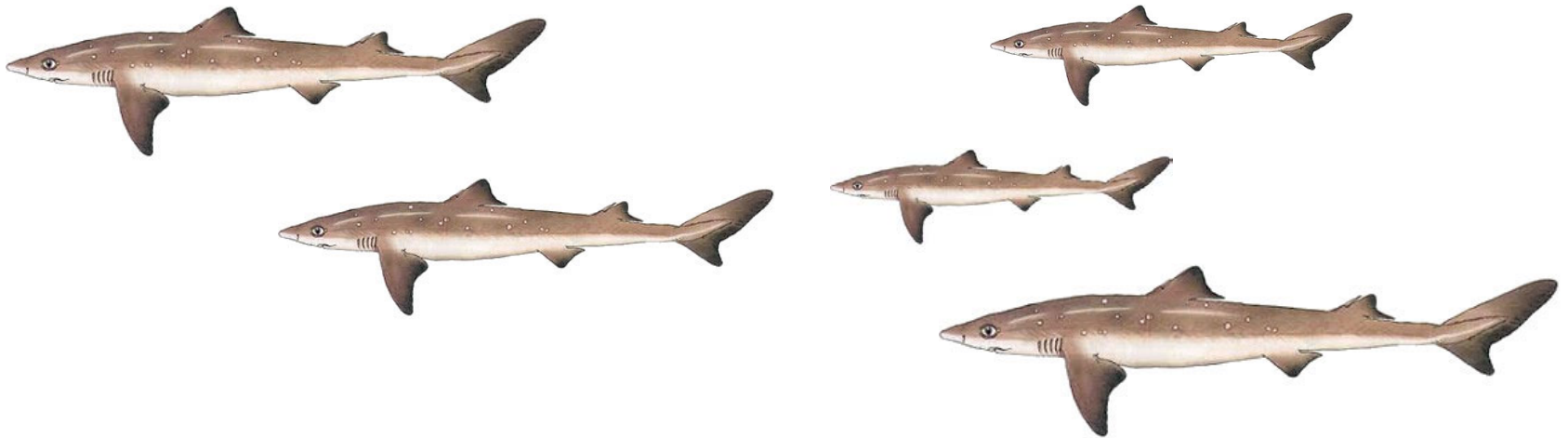
Conclusions

- The 3,000-lb trip limit is constraining for a significant proportion (~1/3) of dogfish trips
- If the trip limit were to be increased, it would impact a large proportion of trips



Conclusions

- The fishery may be able to land a 40+ million lb quota with a 3,000-lb (or slightly higher) trip limit
- Trip limits significantly higher than 3,000 lb would likely result in inseason closures



Mgmt Measures (Summary)

Year	Domestic ABC	ACL	ACT	TAL	Quota	RSA	Trip Limit
	millions of pounds						
2013	54.295	54.295	52.598	40.900	40.842	n/a	4,000 lb
2014	55.277	55.277	53.540	41.842	41.784	1.254	4,000 lb
2015	55.063	55.063	53.335	41.637	41.578	1.247	4,000 lb

Motions

Move to adopt for spiny dogfish in 2013 an ACL of 54.295 million pounds equivalent to Domestic ABC, an ACT of 52.598 million pounds corresponding to a TAL of 40.900 million pounds resulting in a commercial quota of 40.842 million pounds. Himchak/Berg
15/0/1

Motions

Move to adopt for spiny dogfish in 2014 an ACL of 55.277 million pounds equivalent to Domestic ABC, an ACT of 53.540 million pounds corresponding to a TAL of 41.842 million pounds resulting in a commercial quota of 41.784 million pounds.

Himchak/Berg

15/0/1

Motions

Move to adopt for spiny dogfish in 2015 an ACL of 55.063 million pounds equivalent to Domestic ABC, an ACT of 53.335 million pounds corresponding to a TAL of 41.637 million pounds resulting in a commercial quota of 41.579 million pounds.

Himchak/Berg

15/0/1

Motions

Move to adopt a trip limit of 4,000 lbs for spiny dogfish in 2013, 2014, and 2015.

Anderson/King

15/0/1

RSA

Move to allow a research set-aside of up to 3%, 1.254 M lb, of the commercial in 2014.

Move to allow a research set-aside of up to 3%, 1.247 M lb, of the commercial in 2015.

Motions

RSA

Move to allow a research set-aside of up to 3%, 1.254 M lb, of the commercial in 2014.

Pate/O'Reilly

16/0/0

Move to allow a research set-aside of up to 3%, 1.247 M lb, of the commercial in 2015.

Pate/O'Reilly

17/0/0