

Summary of Scallop RSA Projects – 2010-2015

2015	Total of 16 projects funded - 10 with 2015 RSA Awards and 6 from 2014 RSA Announcement (6 survey and 10 other topics)					
Year	Primary Project Category	Title	Principal Investigator	Organization	Funding	Used by Council
2015b	Bycatch	Optimizing the Georges Bank Scallop Fishery by Maximizing Meat Yield and Minimizing Bycatch	Carl Huntsberger, Farrell Davis, Shea Miller, Chris Parkins	Coonamessett Farm Foundation	\$1,999,832	
2015b	Ecosystem/Habitat	Habitat Characterization and Sea Scallop Resource Enhancement Study in a Proposed Habitat Research Area –Year Three	Daniel Ward, Liese Siemann, Christopher Parkins	Coonamessett Farm Foundation	\$979,680	
2015b	Bycatch	Determination of the Impacts of Dredge Speed on Bycatch Reduction and Scallop Selectivity Weights of NW Atlantic Sea Scallops via Paired Field Surveys and Laboratory Experiments	Farrell Davis, Christopher Parkins, Daniel Ward	Coonamessett Farm Foundation	\$950,112	
2015b	Turtle	Understanding Impacts of the Sea Scallop Fishery on Loggerhead Sea Turtles through Satellite Tagging	Shea Miller	Coonamessett Farm Foundation	\$797,040	
2015b	Bycatch	Determining the Impacts of Dredge Bag Modifications on Flatfish Bycatch in the LAGC Scallop Fishery	Christopher Parkins and Farrell Davis	Coonamessett Farm Foundation	\$308,200	
2015b	Survey	Optical Survey of the Resource in the Elephant Trunk Scallop Access Area	Paul Rosonina, Karen Bolles Hopkins, Norman Vine, Jui-Han Chang, Richard Taylor	Arnie's Fisheries, Inc	\$629,328	
2015b	Survey	Optical Survey of Recent Scallop Settlement Areas Along the Southern New England Shelf Including the Southern Portion of the Nantucket Lightship Scallop Access Area	Paul Rosonina, Karen Bolles Hopkins, Norman Vine, Jui-Han Chang, Richard Taylor	Arnie's Fisheries, Inc	\$808,560	
2015b	Survey	Broadscale Video Survey of Georges Bank Scallop Open Areas	Kevin D. E. Stokesbury	SMAST	\$1,994,248	
2015b	Bycatch	Scallop Fishery Bycatch Avoidance System 2015	Catherine E. O'Keefe	SMAST	\$732,252	
2015b	Survey	Development and Implementation of a High Precision Resource Wide Dredge Survey of the Mid-Atlantic Scallop Resource Area	David B. Rudders	VIMS	\$966,472	
2015a	Discard/Inc. Mortality	Discard Mortality of Sea Scallops Following Capture and Handling in the Sea Scallops Dredge Fishery	David Rudders, James Sulikowski, James Mandelman	VIMS, UNE, NE Aquarium	\$693,200	Ongoing Today
2015a	Discard/Inc. Mortality	Incidental Mortality Estimates of Sea Scallops from AUV based BACI Surveys	Art Trembanis, Douglas Miller, David Rudders	University of Delaware, VIMS	\$508,545	Ongoing-Results expected in 2016
2015a	Discard/Inc. Mortality	Estimating Incidental Mortality in the Sea Scallop Fishery	Ron Smolowitz	Coonamessett Farm Foundation	\$429,755	Ongoing Today
2015a	Ecosystem/Habitat	Investigating the Effects of Ocean Acidification and Warming on the Shell Properties and Meat Weights of NW Atlantic Sea Scallops Via Paired Field Surveys and Laboratory Experiments	Justin Ries, Jonathan Grabowski, Brad Harris, Kevin Stokesbury	Northeastern University, Alaska Pacific U., SMAST	\$801,465	Ongoing-Results expected in 2016
2015a	Survey	Assessment of Sea Scallop Distribution in Federal and Adjacent State Waters of the Gulf of Maine	Kevin Kelly	Maine DMR	\$372,344	Survey in Summer 2016
2015a	Survey	Broadscale Video Survey of the Open Areas of George's Bank	Kevin Stokesbury	SMAST	\$1,368,126	Survey in Summer 2015

2014 Total of 15 projects funded (6 survey and 9 other topics)						
Year	Primary Project Category	Title	Principal Investigator	Organization	Funding	Used by Council
2014	Discard/Inc. Mortality	Incidental Mortality Estimates of Sea Scallops from AUV based BACI Surveys	Art Trembanis, Douglas Miller, and David Rudders	University of Delaware	\$1,147,794	Ongoing-Results expected in 2016
2014	Discard/Inc. Mortality	Estimating Incidental Mortality in the Sea Scallop Fishery	Ron Smolowitz	Coonamessett Farm Foundation	\$306,565	Ongoing Today
2014	Discard/Inc. Mortality	Determining Incidental Discard Mortality of Atlantic Sea Scallops, <i>Placopecten magellanicus</i>	Eleanor Bochenek and Jason Morson	National Fisheries Institute	\$366,588	Ongoing-Results Next year
2014	Discard/Inc. Mortality	Discard Mortality of Sea Scallops Following Capture and Handling in the Sea Scallops Dredge Fishery	David Rudders	VIMS	\$963,981	Ongoing Today
2014	Ecosystem/Habitat	Tracking the Occurrence of grey meat in Atlantic Sea Scallops	Kevin Stokesbury	SMAST	\$572,123	Ongoing Today
2014	Ecosystem/Habitat	Habitat Characterization and Sea Scallop Resource Enhancement Study in Proposed Habitat Research Area-Year 2	Katherine Thompson, Daniel Ward, and Ron Smolowitz, Kevin Stokesbury	Coonamessett Farm Foundation and SMAST	\$770,852	Ongoing-Results in 2016
2014	Ecosystem/Habitat	Investigating the Effects of Ocean Acidification and Warming on the Shell Properties and Meat Weights of NW Atlantic Sea Scallops Via Paired Field Surveys and Laboratory Experiments	Justin Ries and Jonathan Grabowski	Northeastern University	\$919,277	Ongoing-Results Next year
2014	Bycatch	Scallop Bycatch Avoidance System	Steven Cadrin	SMAST	\$678,955	Ongoing Today
2014	Survey	Assessment of Sea Scallop Distribution in Federal and Adjacent State Waters of the Gulf of Maine	Kevin Kelly	Maine DMR	\$558,515	Survey in Summer 2016
2014	Survey	An Assessment of Sea Scallop Abundance and Distribution in the Long Island/Southern New England Area	David Rudders	VIMS	\$456,346	Used in FW26
2014	Survey	Broadscale Video Survey of the Open Areas of George's Bank	Kevin Stokesbury	SMAST	\$1,368,126	Used in FW26
2014	Survey	Optical Survey of Recent Scallop Settlement Areas Along the Southern New England Continental Shelf	Richard Taylor	Arnie's Fisheries	\$894,360	Used in FW26
2014	Survey	High-Resolution Video Survey and Biological Sampling of the Northern Area of Closed Area I	Kevin Stokesbury	SMAST	\$438,898	Used in FW26
2014	Survey	Optical Survey of Scallop Resource in the Elephant Trunk Scallop Access Area	Richard Taylor	Arnie's Fisheries	\$895,320	Used in FW26
2014	Turtle	Understanding Impacts of the Sea Scallop Fishery on Loggerhead Sea Turtles	Daniel Ward and Brianna Valenti	Coonamessett Farm	\$919,360	Used in FW26 for AE - more today

2013 Total of 14 projects funded (6 survey and 8 other topics)						
Year	Primary Project Category	Title	Principal Investigator	Organization	Funding	Used by Council
2013	Bycatch	Preventing Bycatch of Yellowtail Flounder in the Scallop Fishery	Thomas Grothues, Eleanor Bochenek, & Kenneth Roma	National Fisheries Institute	\$338,931	Ongoing Today
2013	Bycatch	Testing of Scallop Dredge Bag Design Changes For Flatfish Bycatch Reduction	Ronald Smolowitz	Coonamessett Farm	\$995,712	Used in FW25
2013	Survey	A Synoptic Survey of the Sea Scallop Resource in the Mid-Atlantic	David Rudders	VIMS	\$1,592,471	Used in FW25
2013	Ecosystem/Habitat	Identifying Source Sink Dynamics in Sea Scallop Populations of the Northwest Atlantic	Jonathan Grabowski, Bradley Harris, & Steve Vollmer	Northeastern University	\$1,107,448	Presented in 2014- more in 2016
2013	Ecosystem/Habitat	Habitat Characterization and Sea Scallop Resource Enhancement Study in a Proposed Habitat Research Area	Ronald Smolowitz	Coonamessett Farm	\$806,436	Presented in 2014 - more in 2016
2013	Bycatch	Scallop Fishery Bycatch Avoidance System	Steven Cadrin	SMAST	\$637,417	Presented in 2014
2013	Turtle	Understanding Impacts of the Sea Scallop Fishery on Loggerhead Sea Turtles through Satellite Tagging	Ronald Smolowitz	Coonamessett Farm	\$404,592	Presented in 2014
2013	Bycatch	Seasonal Bycatch Survey of the Georges Bank Scallop Fishery	Ronald Smolowitz	Coonamessett Farm	\$2,522,307	Used in FW25
2013	Other	Survey of Persistent Scallop Aggregations and an Examination of Their Influence on Recruitment Using the FVCOM Oceanographic Model	Kevin Stokesbury, Changsheng Chen, Pingguo He, & Bradley Harris	SMAST	\$993,844	Presented in 2014- more in 2016
2013	Survey	Combined High-Resolution Video Survey and Biological Sampling Using a Modified Sled Dredge of the Sea Scallop Resource in Nantucket Lightship Access Area	Kevin Stokesbury	SMAST	\$628,653	Used in FW25
2013	Survey	Optical Survey of Scallop Resource Areas: Closed Area I, Closed Area II HAPC, & Contiguous Areas	Richard Taylor	Arnie's Fisheries	\$995,894	Used in FW25 and OHA2
2013	Survey	High-Resolution Video Survey of the Sea Scallop Resource in Georges Bank Closed Area II (South) and Delmarva	Kevin Stokesbury	SMAST	\$866,849	Used in FW25
2013	Survey	An Assessment of Sea Scallop Abundance and Distribution in the Northeast Georges Bank Area	David Rudders	VIMS	\$347,122	Used in FW25 and OHA2
2013	Survey	An Assessment of Sea Scallop Abundance and Distribution in the Access Area of the Nantucket Lightship Closed Area	David Rudders	VIMS	\$314,628	Used in FW25

2012 Total of 13 projects funded (4 survey and 9 other topics)						
Year	Primary Project Category	Title	Principal Investigator	Organization	Funding	Used by Council
2012	Bycatch	Bycatch Characterization in the Southern New England Sea Scallop Fishery	Kathleen Castro	Fisheries Specialists	\$584,375	Presented in 2014
2012	Other	Evaluating the Condition and Discard Mortality of Skates Following Capture and Handling in the Sea Scallop Dredge Fishery	Dave Rudders	VIMS	\$1,092,642	Presented in 2014
2012	Bycatch	Design and Test of a Hydrodynamic Scallop Dredge to Reduce Bycatch, Minimize Bottom Impact and Improve Fuel Efficiency	Pingguo He	SMAST	\$836,854	Presented in 2014
2012	Bycatch	Testing of Scallop Dredge Bag Design Changes For Flatfish Bycatch Reduction	Ron Smolowitz	Coonamesett Farm	\$888,132	Used in FW25
2012	Bycatch	Real-Time Electronic Bycatch Reporting Pilot Project	Ron Smolowitz	Coonamesett Farm	\$711,720	Presented in 2014 - more today
2012	Bycatch	Expansion of the Yellowtail Bycatch System	Steven Cadrin	SMAST	\$426,729	Presented in 2014
2012	Turtle	Understanding Impacts of the Sea Scallop Fishery on Loggerhead Sea Turtles Through Satellite Tagging	Ron Smolowitz	Coonamesett Farm	\$798,240	Used in FW25 for AE
2012	Survey	High-resolution Video Survey of the Sea Scallop Resource in the Nantucket Lightship and Closed Area I Access Areas	Kevin Stokesbury	SMAST	\$926,964	Used in FW24
2012	Other	What Causes Gray Meat in the Atlantic Sea Scallop <i>Placopecten Magellanicus</i> in Georges Bank Closed Areas?	Kevin Stokesbury	SMAST	\$379,843	Presented in 2014
2012	Survey	Optical Survey of Closed Area II Scallop Access Area and the Northern Edge Habitat Area of Particular Concern and Contiguous Areas	Richard Taylor	Arnie's Fisheries	\$1,297,656	Used in FW24 and OHA2
2012	Bycatch	Seasonal Bycatch Survey of the George's Bank Scallop Fishery	Ron Smolowitz	Coonamesett Farm	\$2,538,554	Used in FW25
2012	Survey	An Assessment of Sea Scallop Abundance and Distribution in the Hudson Canyon Closed Area and Adjacent Inshore Areas	Dave Rudders	VIMS	\$678,016	Used in FW24
2012	Survey	An Inventory of the Sea Scallop Resource in the Georges Bank Closed Area II and Surrounds	Dave Rudders	VIMS	\$364,498	Used in FW24 and OHA2

2011 Total of 14 projects funded (9 survey and 5 other topics)						
Year	Primary Project Category	Title	Principal Investigator	Organization	Funding	Used by Council
2011	Bycatch	Testing of a low profile scallop dredge for bycatch reduction	Ronald Smolowitz	Coonamessett Farm	\$836,800	Presented in 2014
2011	Ecosystem/Habitat	Effects of Mobile Fishing Gear on Geological and Biological Structure: a Georges Bank Closed Versus Open Area Comparison	Bradley Harris and Kevin Stokesbury	SMAST	\$650,953	Presented in 2014
2011	Bycatch	Optimizing the George's Bank Scallop Fishery by Maximizing Meat Yield and Minimizing Bycatch	Ronald Smolowitz	Coonamessett Farm	\$1,847,700	Used in FW24, 25
2011	Turtle	Understanding Impacts of the Sea Scallop Fishery on Loggerheads through Satellite Tagging	Ronald Smolowitz	Coonamessett Farm	\$734,000	Used in FW23
2011	Survey	Assessment of Sea Scallop Distribution and Abundance in Federal and Adjacent State Waters of the Gulf of Maine	Kevin Kelly	Maine DMR	\$589,314	Used in FW24
2011	Other	Developing Tools to Evaluate Spawning and Fertilization Dynamics of the Giant Sea Scallop Phase II: Field Trials in Experimental Populations	Richard Wahle and Peter Jumars	University of Maine Systems	\$712,455	Presented in 2014 - more in 2016
2011	Survey	Scallop Biomass, Bycatch and Substrate Distribution in the Hudson Canyon and Closed Area I Scallop Access Areas--DROP Hudson Canyon	Richard Taylor	Arnie's Fisheries	\$998,000	Used in FW24
2011	Survey	Extension of the SMAST Video Survey in the Western Portion of the Mid-Atlantic	Kevin Stokesbury	SMAST	\$409,820	Used in FW24
2011	Survey	A Descriptive Sea Scallop Survey of the Federal Inshore Areas of the New York Bight Using a Camera Mounted Autonomous Underwater Vehicle	Arthur C. Trembanis	Phoel Associates, Inc.	\$799,600	Presented in 2012
2011	Survey	High-Resolution Video Survey of the Sea Scallop Resource in the HC and Delmarva Area-----DROP Delmarva	Kevin Stokesbury	SMAST	\$424,011	Used in FW24
2011	Survey	An Assessment of Sea Scallop Abundance and Distribution in Selected Closed Areas: New York Bight and the Southern New England Area	Dave Rudders	VIMS	\$690,010	Used in FW24
2011	Survey	An Assessment of Sea Scallop Abundance and Distribution in Selected Closed Areas: DelMarVa Closed Area	Dave Rudders	VIMS	\$353,353	Used in FW24
2011	Survey	An Assessment of Sea Scallop Abundance and Distribution in Selected Closed Areas: Georges Bank Closed Area II	Dave Rudders	VIMS	\$353,353	Used in FW24
2011	Survey	An Assessment of Sea Scallop Abundance and Distribution in Selected Closed Areas: Nantucket Lightship Closed Area	Dave Rudders	VIMS	\$353,353	Used in FW24

2010 Total of 8 projects funded (3 survey and 5 other topics)						
Year	Primary Project Category	Title	Principal Investigator	Organization	Funding	Used by Council
2010	Bycatch	Real-Time Electronic Bycatch Reporting Pilot Project	Ron Smolowitz	Coonamessett Farm	\$484,250	Presented in 2014
2010	Turtle	Loggerhead Sea Turtle Ecology on the Sea Scallop Grounds	Ron Smolowitz	Coonamessett Farm	\$863,962	Used in FW23
2010	Turtle	Testing of Modifications to the Cfarm Turtle Excluder Dredge for Bycatch Reduction	Ron Smolowitz	Coonamessett Farm	\$918,184	Used in FW23, 24
2010	Survey	Tracking a Large Sea Scallop Recruitment Event with High-Resolution Video Survey in the Gulf of Maine	Kevin D. E. Stokesbury, Ph.D. and Bradley P.	SMAST	\$775,206	Used in FW23
2010	Survey	Scallop, Yellowtail Flounder, and Substrate Distribution in the Closed Area II Scallop Access Area and the Western Side of the Great South Channel	Richard Taylor	Arnie's Fisheries	\$1,706,300	Used in FW22
2010	Survey	High-Resolution Video Survey of the Sea Scallop Resource, Recruitment Patterns, and Habitat of the Hudson Canyon and Delmarva Closed Area	Kevin D. E. Stokesbury and Bradley P. Harris	SMAST	\$1,065,305	Used in FW22
2010	Survey	An Assessment of Sea Scallop Abundance and Distribution in Selected Closed Areas: Hudson Canyon Closed Area	David B. Rudders and William D. DuPaul	VIMS	\$348,855	Used in FW22
2010	Survey	An Assessment of Sea Scallop Abundance and Distribution in Selected Closed Areas: Georges Bank Closed Area 1	David B. Rudders and William D. DuPaul	VIMS	\$428,840	Used in FW22

## Summary of RSA Awards – 2010-2015

### Number of RSA Projects Awarded by Research Priority

Research Priority	2010	2011	2012	2013	2014	2015	Grand Total
Bycatch	1	2	6	4	1	4	18
Discard/ Inc. Mortality					4	3	7
Ecosystem/ Habitat		1		2	3	2	8
Other		1	2	1			4
Survey	5	9	4	6	6	6	36
Turtle	2	1	1	1	1	1	7
Grand Total	8	14	13	14	15	16	80

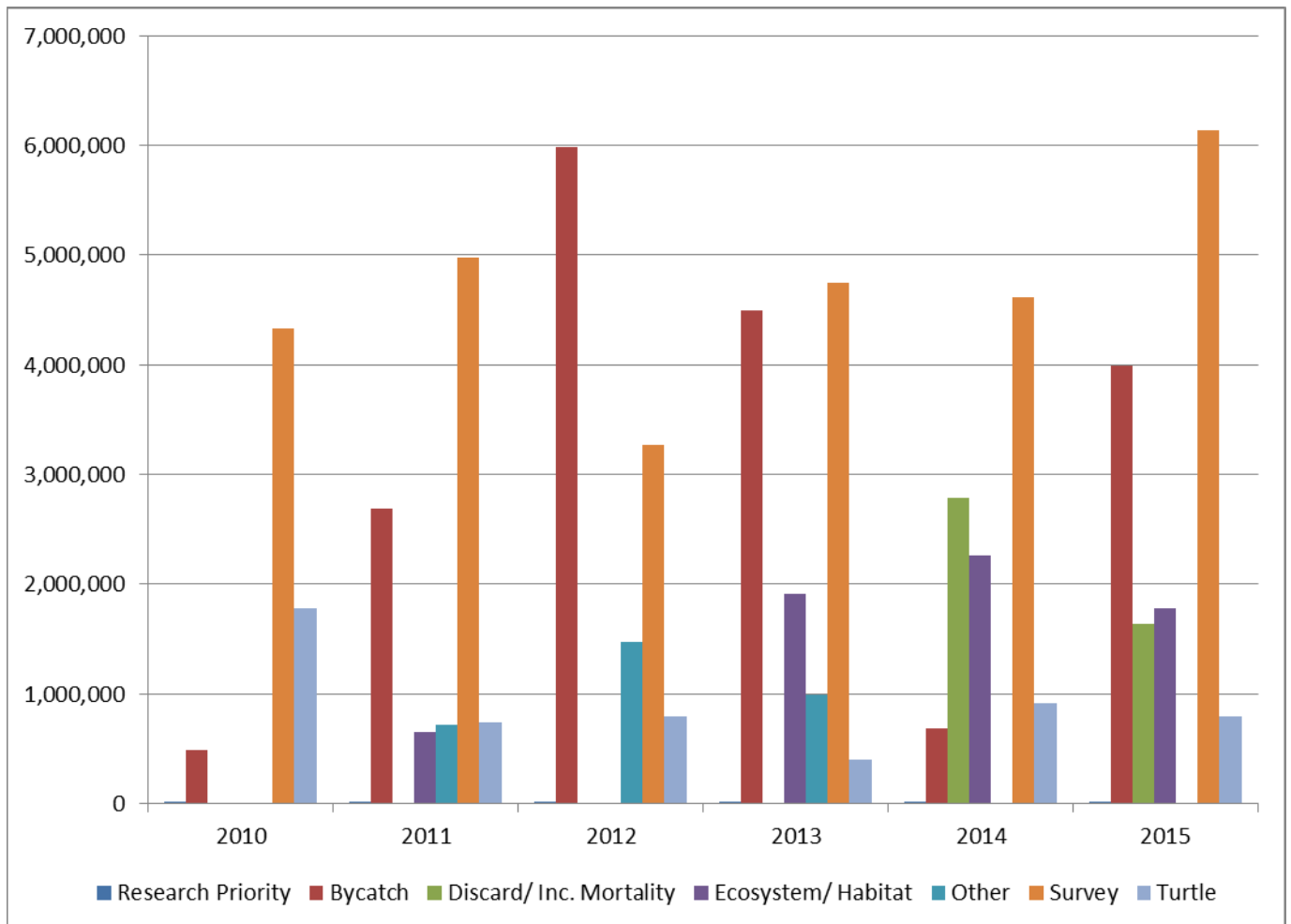
### RSA Allocated by Research Priority (in Dollars)

Research Priority	2010	2011	2012	2013	2014	2015	Grand Total
Bycatch	484,250	2,684,500	5,986,364	4,494,367	678,955	3,990,396	18,318,832
Discard/ Inc. Mortality					2,784,928	1,631,500	4,416,428
Ecosystem/ Habitat		650,953		1,913,884	2,262,252	1,781,145	6,608,234
Other		712,455	1,472,485	993,844			3,178,784
Survey	4,324,506	4,970,814	3,267,134	4,745,617	4,611,565	6,139,078	28,058,714
Turtle	1,782,146	734,000	798,240	404,592	919,360	797,040	5,435,378
Grand Total	6,590,902	9,752,722	11,524,223	12,552,304	11,257,060	14,339,159	66,016,370

### Percentage of RSA Allocated by Research Priority (based on dollars)

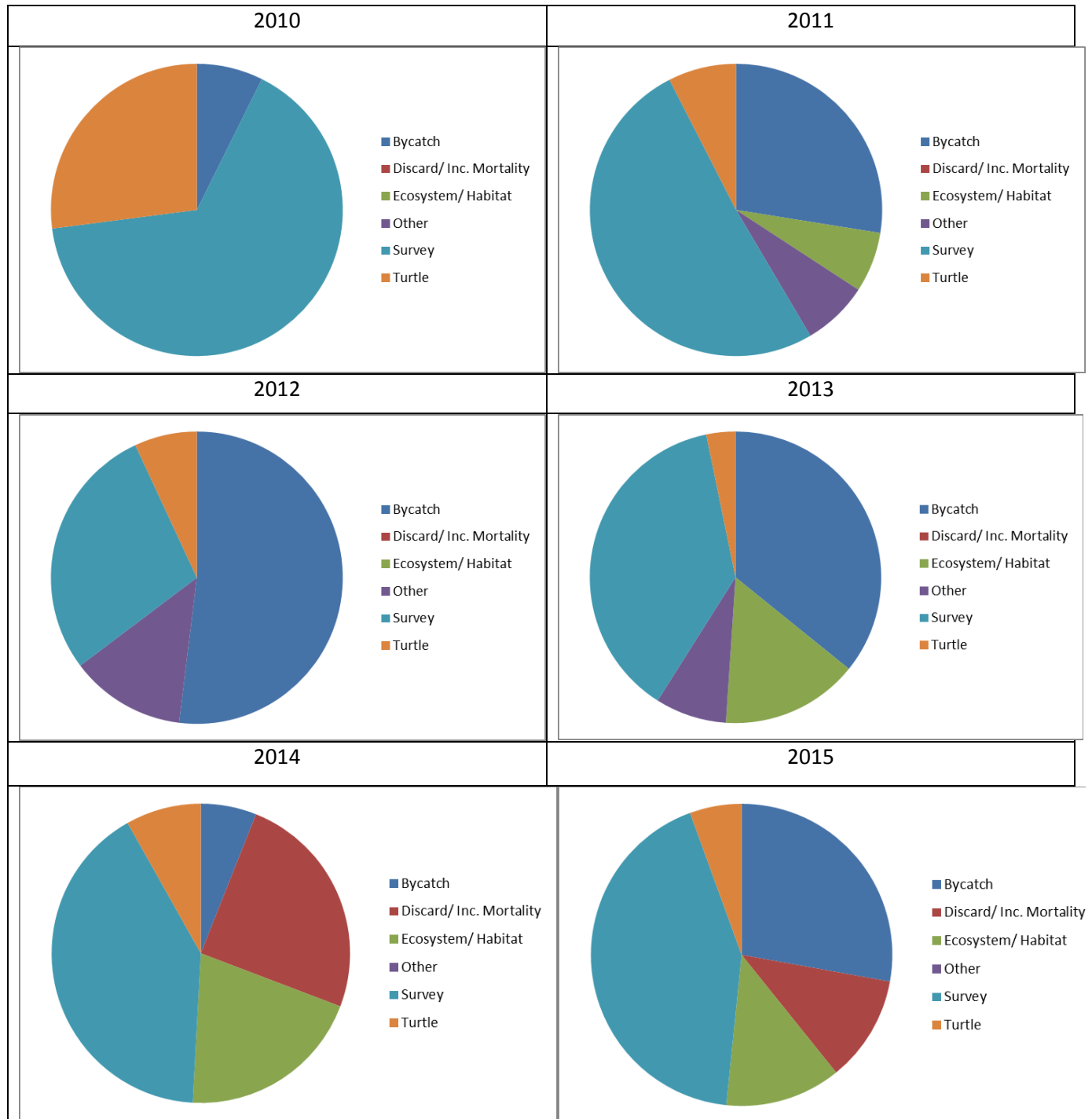
Research Priority	2010	2011	2012	2013	2014	2015	Grand Total
Bycatch	7.3%	27.5%	51.9%	35.8%	6.0%	27.8%	27.7%
Discard/ Inc. Mortality	0.0%	0.0%	0.0%	0.0%	24.7%	11.4%	6.7%
Ecosystem/ Habitat	0.0%	6.7%	0.0%	15.2%	20.1%	12.4%	10.0%
Other	0.0%	7.3%	12.8%	7.9%	0.0%	0.0%	4.8%
Survey	65.6%	51.0%	28.4%	37.8%	41.0%	42.8%	42.5%
Turtle	27.0%	7.5%	6.9%	3.2%	8.2%	5.6%	8.2%
Grand Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

RSA Allocation by Research Topic (in Dollars)





Percentage of RSA Allocated by Research Priority (2010-2015)



Number of RSA Projects by Primary Organization (note some projects have multiple research organizations – this summary is based on primary organization provided only)

Research Organization	2010	2011	2012	2013	2014	2015	Grand Total
Arnies	1	1	1	1	2	2	8
CFF	3	3	4	4	3	6	23
DMR		1			1	1	3
Fisheries Specialist			1				1
NFI				1	1		2
NU				1	1	1	3
Phoel		1					1
SMAST	2	3	4	4	4	3	20
U Maine		1					1
UD					1	1	2
VIMS	2	4	3	3	2	2	16
Grand Total	8	14	13	14	15	16	80

RSA Allocation by Primary Organization (in Dollars)

Primary Organization	2010	2011	2012	2013	2014	2015	Grand Total
Arnies	1,706,300	998,000	1,297,656	995,894	1,789,680	1,437,888	8,225,418
CFF	2,266,396	3,418,500	4,936,646	4,729,047	1,996,777	5,464,619	22,811,985
DMR		589,314			558,515	372,344	1,520,173
Fisheries Specialist			584,375				584,375
NFI				338,931	366,588		705,519
NU				1,107,448	919,277	801,465	2,828,190
Phoel		799,600					799,600
SMAST	1,840,511	1,484,784	2,570,390	3,126,763	3,058,102	4,094,626	16,175,176
U Maine		712,455					712,455
UD					1,147,794	508,545	1,656,339
VIMS	777,695	1,750,069	2,135,156	2,254,221	1,420,327	1,659,672	9,997,140
Grand Total	6,590,902	9,752,722	11,524,223	12,552,304	11,257,060	14,339,159	66,016,370

Percentage of RSA Allocated by Primary Research Organization (based on dollars)

Primary Organization	2010	2011	2012	2013	2014	2015	Grand Total
Amies	25.9%	10.2%	11.3%	7.9%	15.9%	10.0%	12.5%
CFF	34.4%	35.1%	42.8%	37.7%	17.7%	38.1%	34.6%
DMR	0.0%	6.0%	0.0%	0.0%	5.0%	2.6%	2.3%
Fisheries Specialist	0.0%	0.0%	5.1%	0.0%	0.0%	0.0%	0.9%
NFI	0.0%	0.0%	0.0%	2.7%	3.3%	0.0%	1.1%
NU	0.0%	0.0%	0.0%	8.8%	8.2%	5.6%	4.3%
Phoel	0.0%	8.2%	0.0%	0.0%	0.0%	0.0%	1.2%
SMAST	27.9%	15.2%	22.3%	24.9%	27.2%	28.6%	24.5%
U Maine	0.0%	7.3%	0.0%	0.0%	0.0%	0.0%	1.1%
UD	0.0%	0.0%	0.0%	0.0%	10.2%	3.5%	2.5%
VIMS	11.8%	17.9%	18.5%	18.0%	12.6%	11.6%	15.1%
Grand Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%