

**VIRGINIA RECREATIONAL FISHING DEVELOPMENT FUND
SUMMARY PROJECT APPLICATION***

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NAME AND ADDRESS OF APPLICANT: Virginia Marine Resources Commission 2600 Washington Ave, Newport News VA 23607	PROJECT LEADER (name, phone, e-mail): Joe Grist (757) 247-2237 joe.grist@mrc.virginia.gov Joe Cimino (757) 247-8068 joe.cimino@mrc.virginia.gov
PRIORITY AREA OF CONCERN: Research	PROJECT LOCATION: Various Locations in Virginia
DESCRIPTIVE TITLE OF PROJECT: Virginia Marine Sportfish Collection Project (Year-4)	
PROJECT SUMMARY: To collect biological samples, for the purpose of obtaining harvest data per length, age, and sex, for recreationally important species: cobia, red drum, black drum, sheepshead, Spanish mackerel, king mackerel, tautog, tilefish, snowy grouper, and bluefish (Greater than 16 pounds or 32 inches).	
EXPECTED BENEFITS: By increasing the number of samples collected we will be able to increase our ability to describe species-specific life-history traits and provide better information for population analysis.	
COSTS: Total Costs: <input type="text" value="\$ 10,000.00"/> Detailed budget must be included with proposal.	

Updated 6/1/05

*This form alone does not constitute a complete application, see application instructions or contact Sonya Davis at 757-247-8155 or sonya.davis@mrc.virginia.gov :

A request for renewal of funding of the Virginia Marine Sportfish Collection Project (Year 4).

Need:

The Virginia Marine Resources Commission's Biological Sampling Program (also known as the Stock Assessment Program) has been collecting length, weight, sex, and age information from thirteen species since 1998. Fish are processed either by VMRC staff or the Age and Growth lab at Old Dominion University, Center for Quantitative Fisheries Ecology.

The majority of samples collected come from the commercial fishing industry, with very few samples from the recreational fishing community. However, not all of the thirteen species are readily available for sampling from commercial harvesters. Recreational fisherman can provide important biological data to fill any sampling deficiencies. Species of importance to the recreational community include cobia, red drum, black drum, sheepshead, Spanish mackerel, king mackerel, tilefish, grouper and tautog; however, VMRC sampling goals for the majority of these species often fall short due to the lesser role they play in the commercial fishing industry.

Objective:

To increase the number of length, sex, and age samples collected for the following species. This list is dynamic and can change as sampling needs are identified, or sampling goals met, during the year.

Current Listing (as of April 15, 2010)

- Cobia
- Sheepshead
- Spanish Mackerel
- King Mackerel
- Bluefish (greater than 16 pounds or 36 inches)
- Red Drum
- Black Drum
- Tautog
- Blueline Tilefish
- Golden Tilefish
- Warsaw Grouper
- Snowy Grouper
- Wreckfish

Estimated Benefits:

Marine fish populations are exploited by commercial and recreational fishermen and are subject to significant pressure through habitat degradation. Fisheries scientists conduct

stock assessments to determine the health of a fishery and establish recommendations for future harvest levels. At the foundation of these stock assessments are accurate data on catch and effort and descriptive data on population demographics. Accurate and precise age, sex, and length composition data, in concert with age-specific vital rates such as fecundity and selectivity, allow fisheries scientists to choose from a suite of assessment models to predict appropriate harvests.

The information collected also is beneficial to fisheries managers. For example, in 2009, biological data collected through the Marine Sportfish Collection Project was a key component in promoting Virginia's need for separate management opportunities for the tilefish and grouper fisheries offshore.

Approach:

In cooperation with local fishing facilities, chest freezers are provided to select locations. Each freezer is marked with an identifying sign and a list of target species. A supply of durable plastic bags, information cards and pens will be provided in each freezer. Cooperating fisherman are able to put a filleted frame of the fish, with head and tail intact in a plastic bag, along with the completed information card, and place the bag in the freezer. Bags are collected by VMRC staff and processed for biological information.



Additional samples are obtained directly from select regional fishing tournaments which VMRC staff provides technical support. Participating tournament anglers will receive promotional shirts or hats, as described below, for their donations. In 2010, staff will be providing technical support and collecting biological samples from two separate black drum tournaments on the Eastern Shore and from cobia tournaments in Hampton and Capeville.



An incentive program for anglers is included in the project. Once a month, fishermen participating in the program will earn a promotional shirt, hat, boat whistle, or tape measure (angler's choice). Participating anglers will be able to receive information about all of the project's donated fish, to include information on length, sex and age of samples, from VMRC and Virginia Saltwater Recreational Fishing Development Fund (VSRFDF) websites.

As of the 1st of January, 2010, a total of 707 angler donations had been received, since July 2007, producing 1,070 samples (336 fish donated in 2007; 734 for 2008; 404 for 2009). Data tables were generated by VMRC's Biological Sampling Program that detail the species, number, and minimum and maximum size of the donations to date, at each of the project donation sites in 2009 (see Appendix I). In addition, as data becomes available, it will be posted on the VMRC website at: http://mrc.virginia.gov/rec_assessment/index.shtm

Location History:

The project initially began on July 5, 2007, with collection freezers set-up in cooperation with three bait and tackle shops: Wallace's Bait and Tackle (Hampton), Long Bay Pointe Marina (Virginia Beach) and Chris' Bait and Tackle (Capeville). These three locations were ideal for the initial start-up of this project, as they were locations that had high angler traffic; and an onsite cleaning station and weight station. During 2008 Bell Isle Marina (Hampton), Wachapreague Marina, and Morningstar Marina (Gwynn's Island) were added as project donation sites. In addition, Chris' Bait and Tackle added a second donation freezer to their site during May 2008 to meet public participation demands. In 2008, Morningstar Marina ceased to be a project donation site, but staff is working to locate another Middle Peninsula or Northern Neck donation site for the project. The project initially proposed five locations within the first year, a goal that was met by May 2008, the end of the funding for the first year. However, due to the budget constraints during the past year, and the delay in determining future funding availabilities from the Virginia Recreational Fishing Development Fund, the project was downsized to ensure sustainability through the summer of 2009. The downsizing included reducing the number of freezer collection locations to three (Wallace's Bait and Tackle, Long Bay Pointe Marina and Chris' Bait and Tackle) temporarily. Cost cutting measures allowed

for a fourth site to be added in May 2009, Buckroe Fishing Pier. A fifth freezer location was added during the 2nd half of 2009 at the Virginia Beach Fishing Center.

Length of Time:

Collection from recreational fishery, with promotional incentives, will continue each year. The annual budget will be adjusted each year to represent projected funding needs. Currently, we are able to provide replacement freezers for year 4 through a biological equipment grant.

Estimated Cost (Year 4):

Item	Total Cost
Replacement Freezers (None for year 4)	\$0.00
Project supplies (bags, information sheets, pencils, cleaning materials)	\$1,500.00
Promotional items (hats, shirts, signs)	\$4,000.00
Promotional item mailings (envelopes and postage)	\$2,000.00
Sample processing and transport equipment (replacement saws and blades, cold boxes, hand carts).	\$2,500.00
TOTAL	\$10,000.00

APPENDIX:

PAGES 6-11: Species collections by project site data: 2007 through 2009

PAGES 12-17: Species length at age data, 2007 through 2008, for black drum, cobia, red drum, spadefish, speckled trout and tautog (2009 data will be provided to the RFAB at the May 2010 meeting).

PAGES 18-22: Species length at age data: 2007 through 2008, for blueline tilefish, snowy grouper, and wreckfish.

**VMRC MARINE SPORTFISH COLLECTION PROJECT AGE DATA: 2007 THROUGH 2009
SAMPLE INFORMATION BY SPECIES AND SITE**

12:40 Tuesday, April 6, 2010

Donated Species=Black Drum Sportfish Project Collection Site=Chris Bait and Tackle

Donated Species	Sportfish Project Collection Site	Year	Number of Samples Provided	Smallest Size Provided (Inch)	Largest Size Provided (Inch)	Youngest Fish Provided (Years Old)	Oldest Fish Provided (Years Old)
Black Drum	Chris Bait and Tackle	2008	158	29	50	5	56

Donated Species=Black Drum Sportfish Project Collection Site=Eastern Shore Black Drum Tournament

Donated Species	Sportfish Project Collection Site	Year	Number of Samples Provided	Smallest Size Provided (Inch)	Largest Size Provided (Inch)	Youngest Fish Provided (Years Old)	Oldest Fish Provided (Years Old)
Black Drum	Eastern Shore Black Drum Tournament	2007	38	30	52	6	64
Black Drum	Eastern Shore Black Drum Tournament	2008	64	32	53	6	56

Donated Species=Black Drum Sportfish Project Collection Site=Long Bay Pointe Marina

Donated Species	Sportfish Project Collection Site	Year	Number of Samples Provided	Smallest Size Provided (Inch)	Largest Size Provided (Inch)	Youngest Fish Provided (Years Old)	Oldest Fish Provided (Years Old)
Black Drum	Long Bay Pointe Marina	2007	2	22	45	2	47
Black Drum	Long Bay Pointe Marina	2008	4	22	38	3	14

VMRC MARINE SPORTFISH COLLECTION PROJECT AGE DATA: 2007 THROUGH 2009
SAMPLE INFORMATION BY SPECIES AND SITE

12:40 Tuesday, April 6, 2010

Donated Species=Bluefish Sportfish Project Collection Site=Long Bay Pointe Marina

Donated Species	Sportfish Project Collection Site	Year	Number of Samples Provided	Smallest Size Provided (Inch)	Largest Size Provided (Inch)	Youngest Fish Provided (Years Old)	Oldest Fish Provided (Years Old)
Bluefish	Long Bay Pointe Marina	2008	10	34	37	7	11

Donated Species=Cobia Sportfish Project Collection Site=Chris Bait and Tackle

Donated Species	Sportfish Project Collection Site	Year	Number of Samples Provided	Smallest Size Provided (Inch)	Largest Size Provided (Inch)	Youngest Fish Provided (Years Old)	Oldest Fish Provided (Years Old)
Cobia	Chris Bait and Tackle	2007	10	37	57	3	12
Cobia	Chris Bait and Tackle	2008	11	37	62	3	10

Donated Species=Cobia Sportfish Project Collection Site=Hampton Creek Cobia Tournament

Donated Species	Sportfish Project Collection Site	Year	Number of Samples Provided	Smallest Size Provided (Inch)	Largest Size Provided (Inch)	Youngest Fish Provided (Years Old)	Oldest Fish Provided (Years Old)
Cobia	Hampton Creek Cobia Tournament	2007	31	38	60	3	14
Cobia	Hampton Creek Cobia Tournament	2008	6	39	49	3	6

VMRC MARINE SPORTFISH COLLECTION PROJECT AGE DATA: 2007 THROUGH 2009
SAMPLE INFORMATION BY SPECIES AND SITE

12:40 Tuesday, April 6, 2010

Donated Species=Cobia Sportfish Project Collection Site=Long Bay Pointe Marina

Donated Species	Sportfish Project Collection Site	Year	Number of Samples Provided	Smallest Size Provided (Inch)	Largest Size Provided (Inch)	Youngest Fish Provided (Years Old)	Oldest Fish Provided (Years Old)
Cobia	Long Bay Pointe Marina	2008	1	<i>43</i>	<i>43</i>	<i>3</i>	<i>3</i>

Donated Species=Cobia Sportfish Project Collection Site=Wallaces Bait and Tackle

Donated Species	Sportfish Project Collection Site	Year	Number of Samples Provided	Smallest Size Provided (Inch)	Largest Size Provided (Inch)	Youngest Fish Provided (Years Old)	Oldest Fish Provided (Years Old)
Cobia	Wallaces Bait and Tackle	2007	12	<i>40</i>	<i>60</i>	<i>3</i>	<i>10</i>
Cobia	Wallaces Bait and Tackle	2008	26	<i>37</i>	<i>61</i>	<i>3</i>	<i>10</i>

Donated Species=Red Drum Sportfish Project Collection Site=Chris Bait and Tackle

Donated Species	Sportfish Project Collection Site	Year	Number of Samples Provided	Smallest Size Provided (Inch)	Largest Size Provided (Inch)	Youngest Fish Provided (Years Old)	Oldest Fish Provided (Years Old)
Red Drum	Chris Bait and Tackle	2008	19	<i>18</i>	<i>26</i>	<i>1</i>	<i>3</i>

VMRC MARINE SPORTFISH COLLECTION PROJECT AGE DATA: 2007 THROUGH 2009
SAMPLE INFORMATION BY SPECIES AND SITE

12:40 Tuesday, April 6, 2010

Donated Species=Red Drum Sportfish Project Collection Site=Long Bay Pointe Marina

Donated Species	Sportfish Project Collection Site	Year	Number of Samples Provided	Smallest Size Provided (Inch)	Largest Size Provided (Inch)	Youngest Fish Provided (Years Old)	Oldest Fish Provided (Years Old)
Red Drum	Long Bay Pointe Marina	2007	16	18	22	2	2
Red Drum	Long Bay Pointe Marina	2008	1	22	22	2	2

Donated Species=Spadefish Sportfish Project Collection Site=Chris Bait and Tackle

Donated Species	Sportfish Project Collection Site	Year	Number of Samples Provided	Smallest Size Provided (Inch)	Largest Size Provided (Inch)	Youngest Fish Provided (Years Old)	Oldest Fish Provided (Years Old)
Spadefish	Chris Bait and Tackle	2007	95	7	21	2	16
Spadefish	Chris Bait and Tackle	2008	75	7	22	2	13

Donated Species=Spadefish Sportfish Project Collection Site=Long Bay Pointe Marina

Donated Species	Sportfish Project Collection Site	Year	Number of Samples Provided	Smallest Size Provided (Inch)	Largest Size Provided (Inch)	Youngest Fish Provided (Years Old)	Oldest Fish Provided (Years Old)
Spadefish	Long Bay Pointe Marina	2007	9	12	18	2	5
Spadefish	Long Bay Pointe Marina	2008	84	8	23	2	10

Donated Species=Spadefish Sportfish Project Collection Site=Morningstar Marina Gwynns Island

Donated Species	Sportfish Project Collection Site	Year	Number of Samples Provided	Smallest Size Provided (Inch)	Largest Size Provided (Inch)	Youngest Fish Provided (Years Old)	Oldest Fish Provided (Years Old)
Spadefish	Morningstar Marina Gwynns Island	2008	2	16	18	4	4

Donated Species=Spadefish Sportfish Project Collection Site=Wallaces Bait and Tackle

Donated Species	Sportfish Project Collection Site	Year	Number of Samples Provided	Smallest Size Provided (Inch)	Largest Size Provided (Inch)	Youngest Fish Provided (Years Old)	Oldest Fish Provided (Years Old)
Spadefish	Wallaces Bait and Tackle	2008	20	8	16	2	4

Donated Species=Spanish Mackerel Sportfish Project Collection Site=Wallaces Bait and Tackle

Donated Species	Sportfish Project Collection Site	Year	Number of Samples Provided	Smallest Size Provided (Inch)	Largest Size Provided (Inch)	Youngest Fish Provided (Years Old)	Oldest Fish Provided (Years Old)
Spanish Mackerel	Wallaces Bait and Tackle	2008	2	14	17	1	1

Donated Species=Tautog Sportfish Project Collection Site=Bell Isle Marina

Donated Species	Sportfish Project Collection Site	Year	Number of Samples Provided	Smallest Size Provided (Inch)	Largest Size Provided (Inch)	Youngest Fish Provided (Years Old)	Oldest Fish Provided (Years Old)
Tautog	Bell Isle Marina	2008	21	15	19	4	8

VMRC MARINE SPORTFISH COLLECTION PROJECT AGE DATA: 2007 THROUGH 2009
SAMPLE INFORMATION BY SPECIES AND SITE

12:40 Tuesday, April 6, 2010

Donated Species=Tautog Sportfish Project Collection Site=Chris Bait and Tackle

Donated Species	Sportfish Project Collection Site	Year	Number of Samples Provided	Smallest Size Provided (Inch)	Largest Size Provided (Inch)	Youngest Fish Provided (Years Old)	Oldest Fish Provided (Years Old)
Tautog	Chris Bait and Tackle	2008	67	<i>14</i>	<i>20</i>	2	7

Donated Species=Tautog Sportfish Project Collection Site=Wallaces Bait and Tackle

Donated Species	Sportfish Project Collection Site	Year	Number of Samples Provided	Smallest Size Provided (Inch)	Largest Size Provided (Inch)	Youngest Fish Provided (Years Old)	Oldest Fish Provided (Years Old)
Tautog	Wallaces Bait and Tackle	2008	11	<i>15</i>	<i>19</i>	4	5

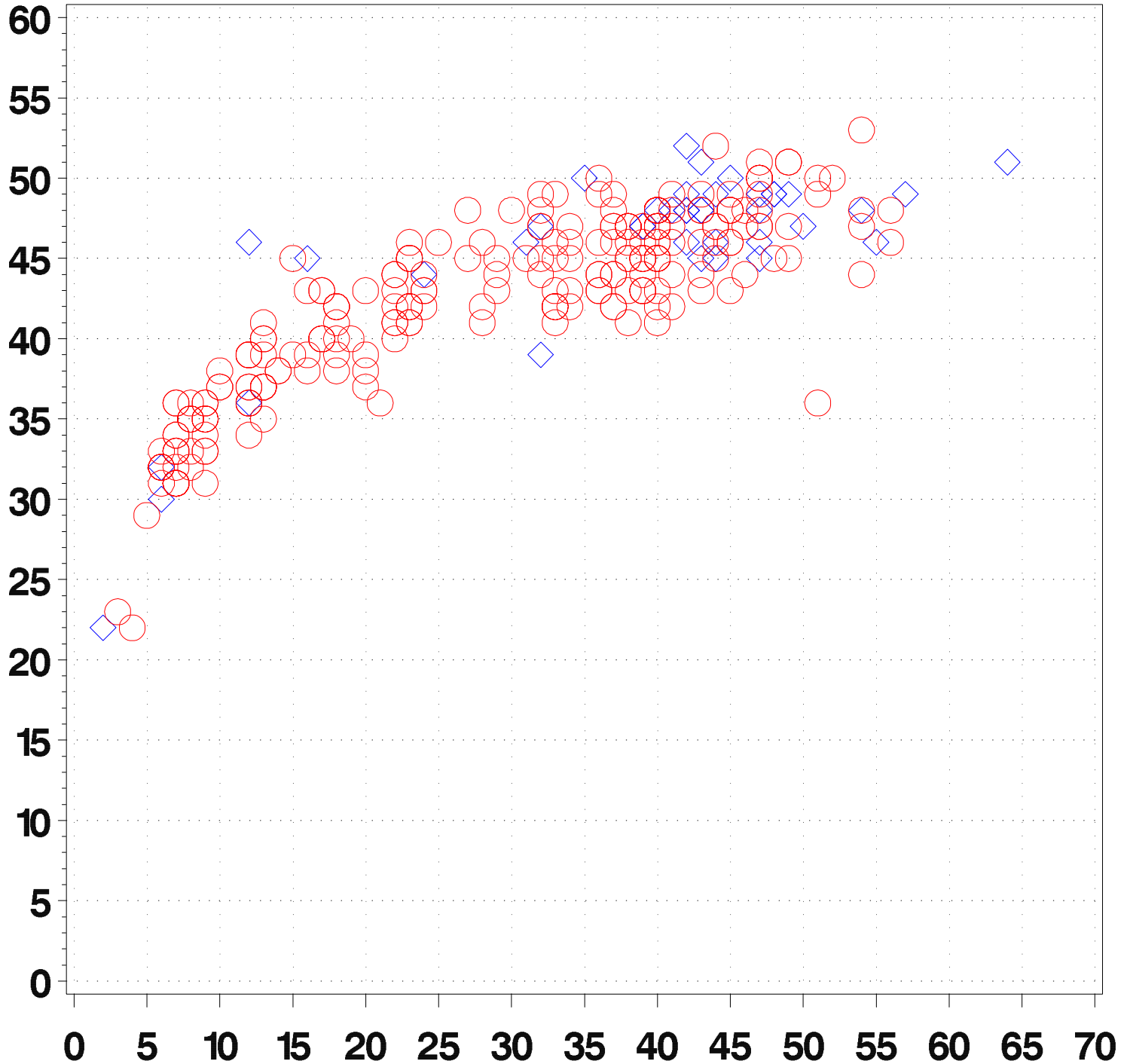
Marine Sportfish Collection Project

Black Drum Size at Age

2007 through 2009*

NOTE: 2009 AGE DATA NOT AVAILABLE AS OF PROPOSAL
SUBMISSION, BUT WILL BE MADE AVAILABLE TO RFAB AT MAY
2010 MEETING

SIZE



YEAR 2007 2008

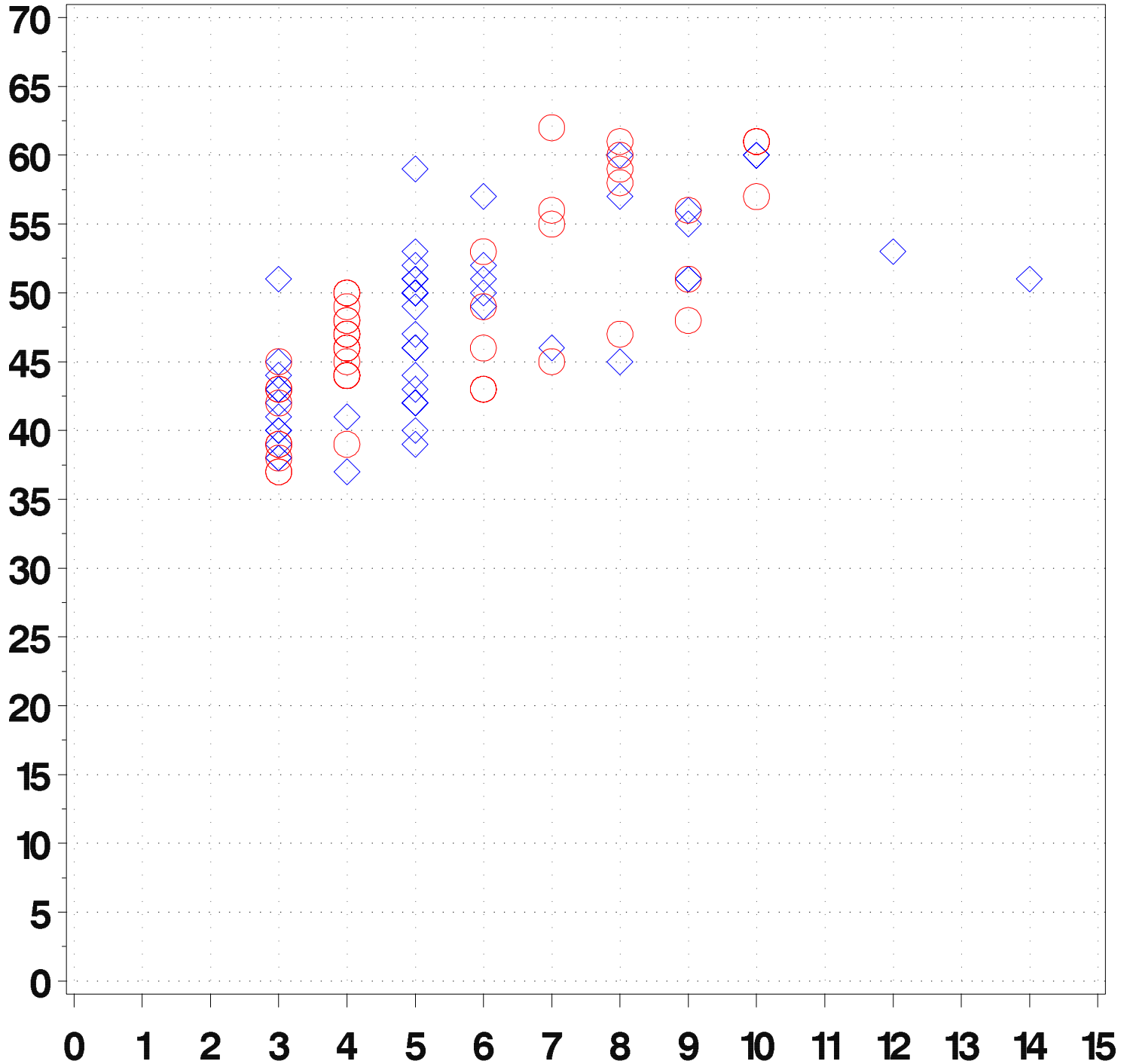
Marine Sportfish Collection Project

Cobia Size at Age

2007 through 2009

NOTE: 2009 AGE DATA NOT AVAILABLE AS OF PROPOSAL SUBMISSION, BUT WILL BE MADE AVAILABLE TO RFAB AT MAY 2010 MEETING

SIZE



YEAR 2007 2008

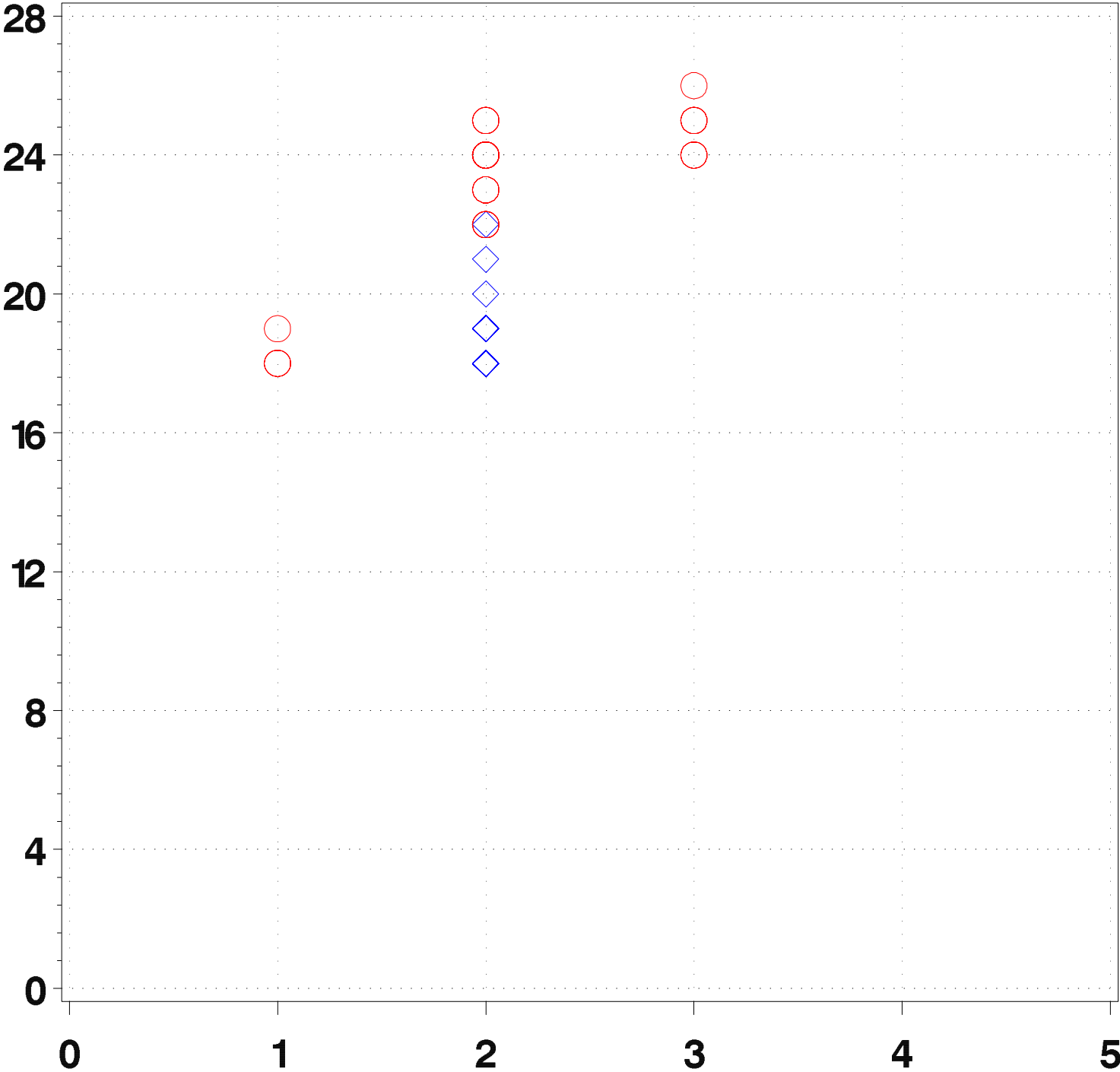
Marine Sportfish Collection Project

Red Drum Size at Age

2007 through 2009

NOTE: 2009 AGE DATA NOT AVAILABLE AS OF PROPOSAL SUBMISSION, BUT WILL BE MADE AVAILABLE TO RFAB AT MAY 2010 MEETING

SIZE



YEAR ◇ ◇ ◇ **2007** ○ ○ ○ **2008**

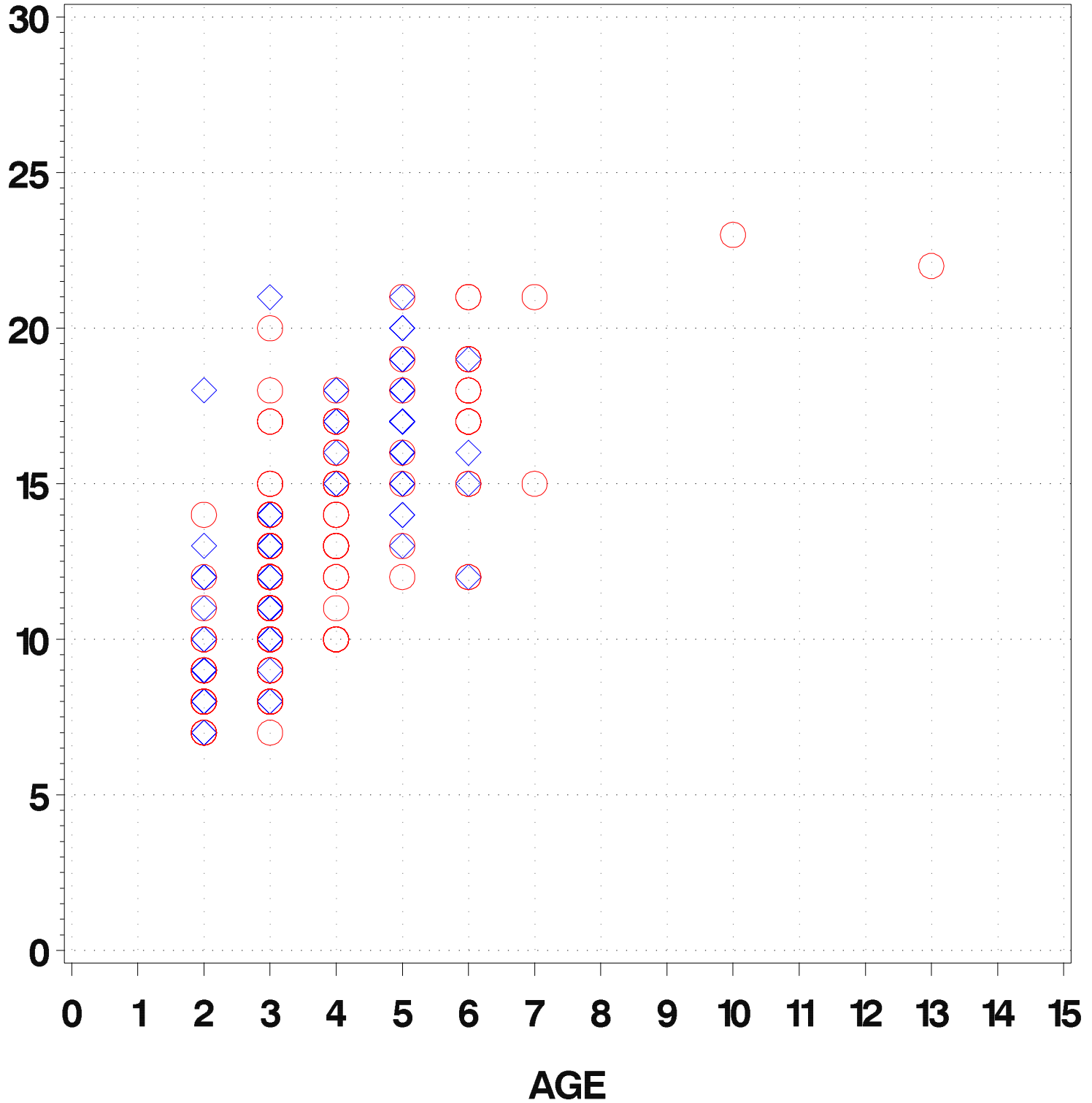
Marine Sportfish Collection Project

Spadefish Size at Age

2007 through 2009

NOTE: 2009 AGE DATA NOT AVAILABLE AS OF PROPOSAL SUBMISSION, BUT WILL BE MADE AVAILABLE TO RFAB AT MAY 2010 MEETING

SIZE



YEAR    2007    2008

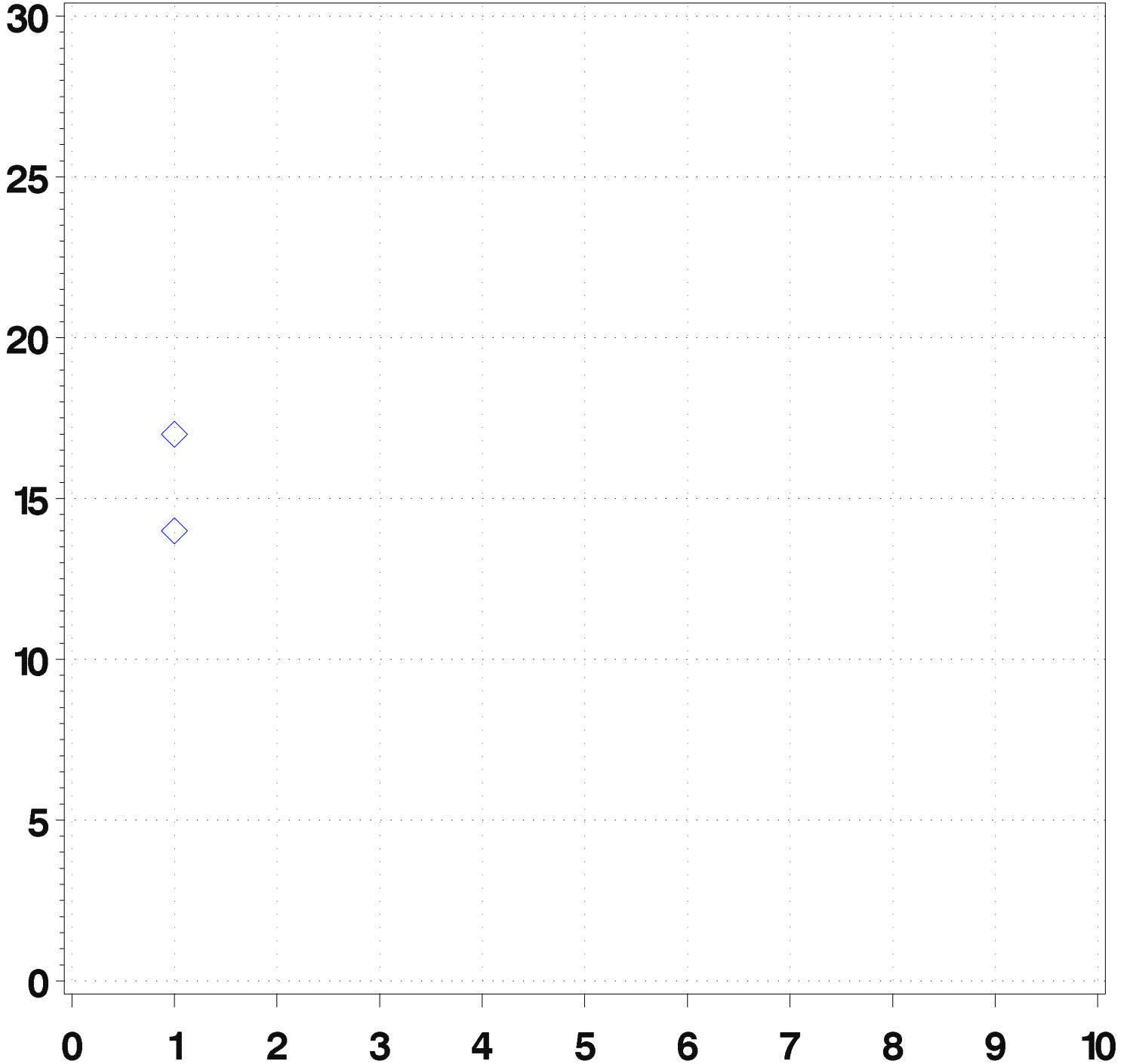
Marine Sportfish Collection Project

Spanish Mackerel Size at Age

2007 through 2009

NOTE: 2009 AGE DATA NOT AVAILABLE AS OF PROPOSAL
SUBMISSION, BUT WILL BE MADE AVAILABLE TO RFAB AT MAY
2010 MEETING

SIZE



YEAR ◇ ◇ ◇ **2008**

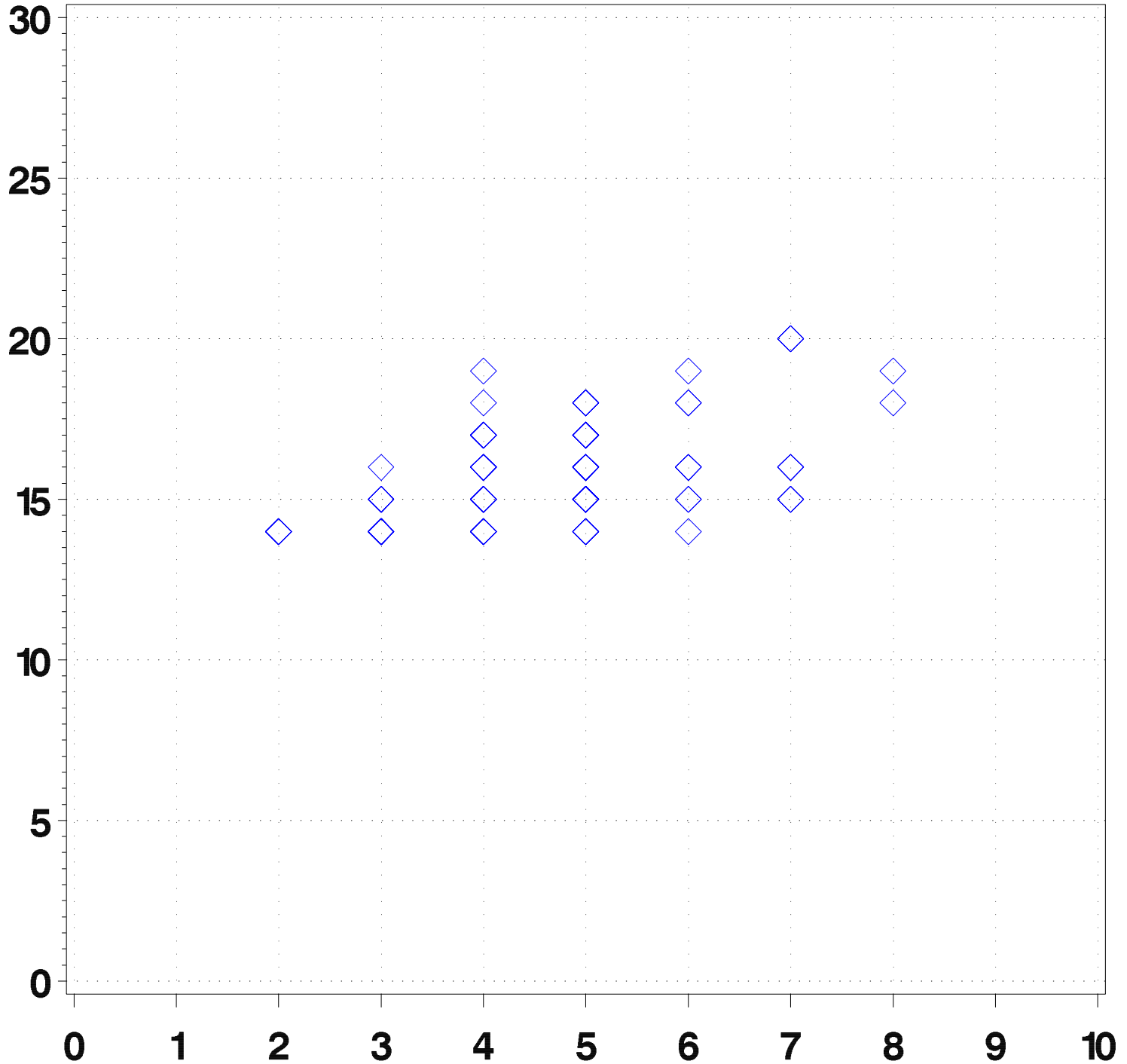
Marine Sportfish Collection Project

Tautog Size at Age

2007 through 2009

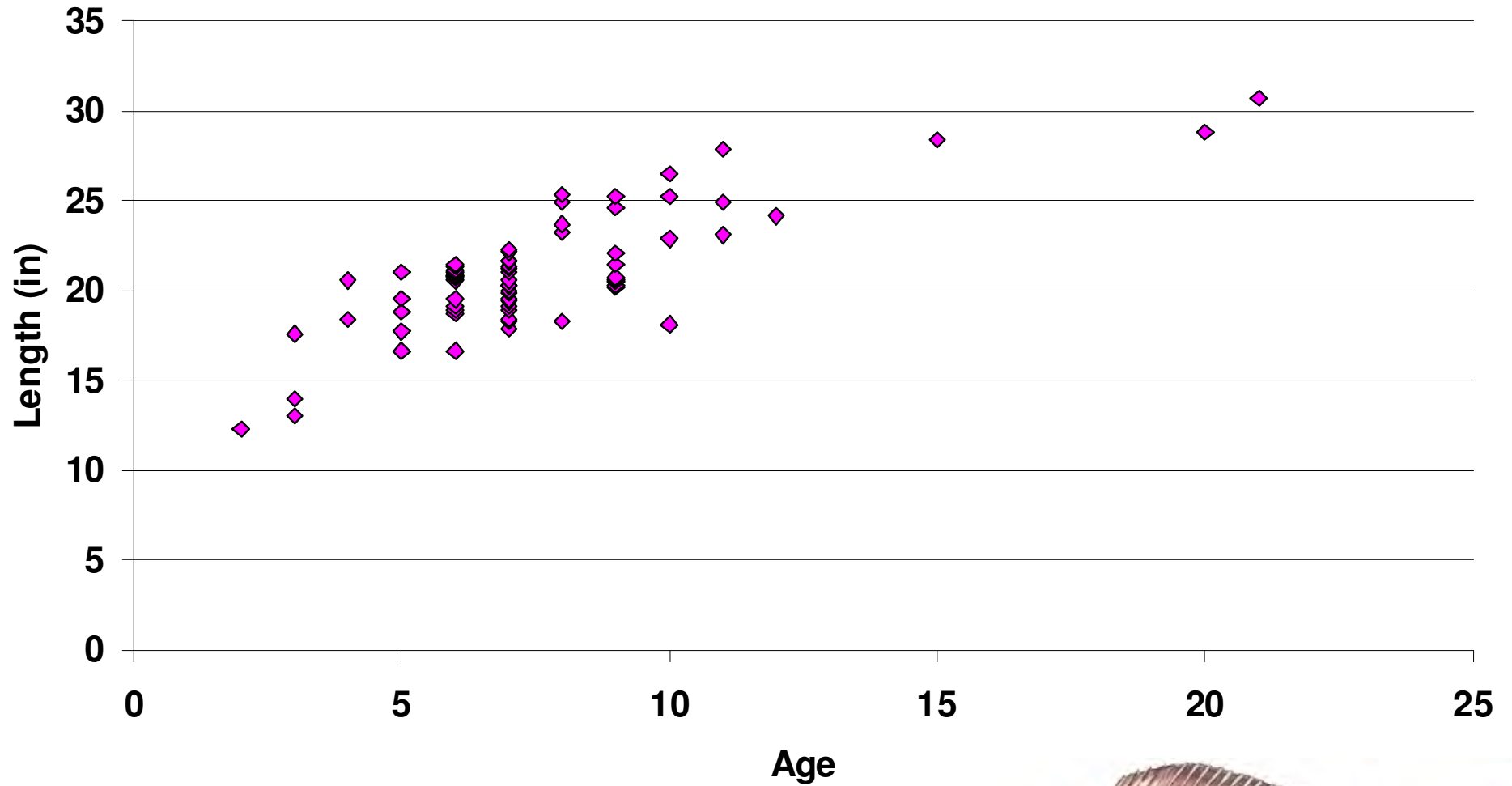
NOTE: 2009 AGE DATA NOT AVAILABLE AS OF PROPOSAL SUBMISSION, BUT WILL BE MADE AVAILABLE TO RFAB AT MAY 2010 MEETING

SIZE



YEAR ◇ ◇ ◇ 2008

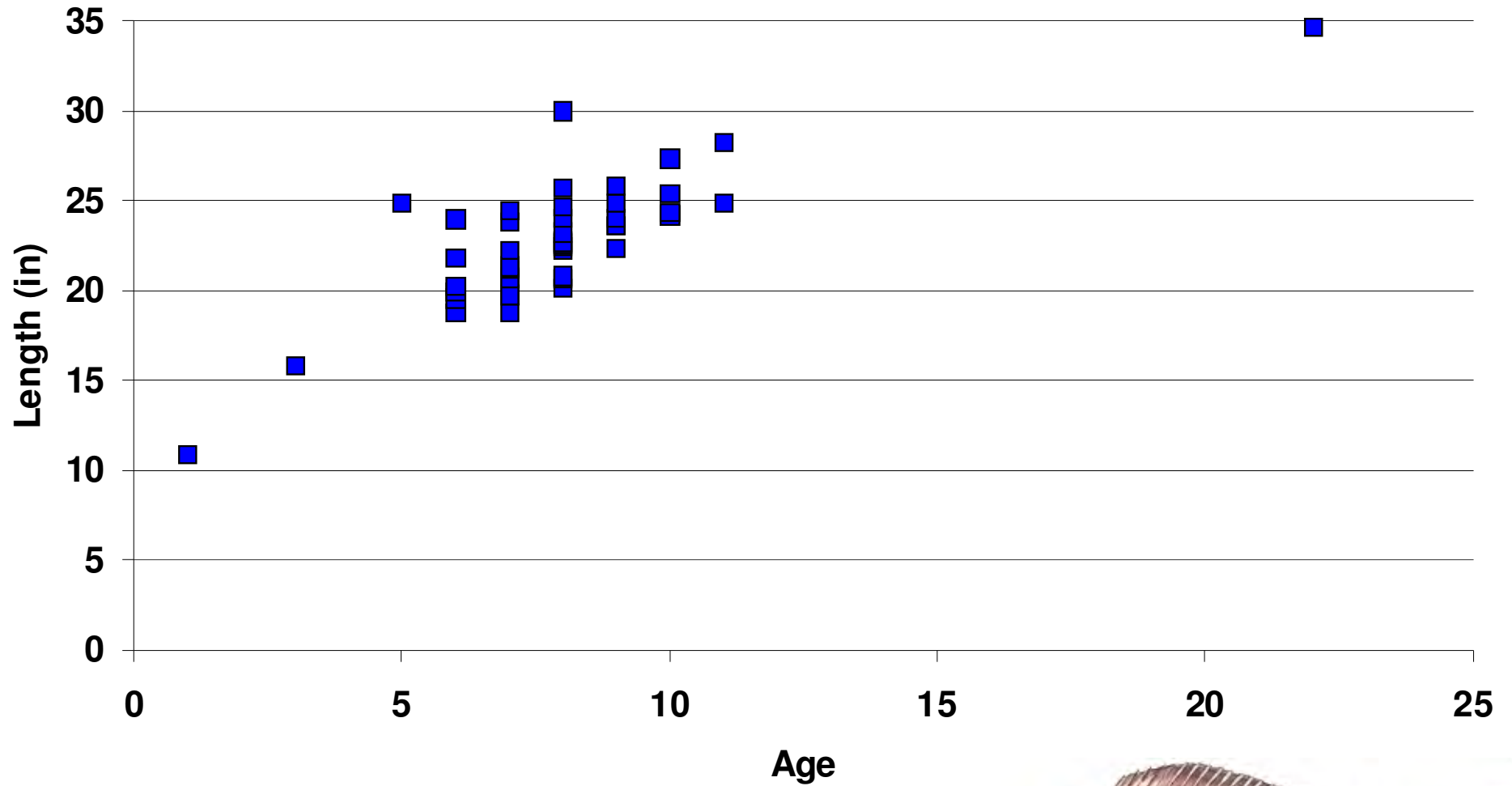
Marine Sportfish Collection Project: Blueline Tilefish Females Only (2007 and 2008)



◆ Female



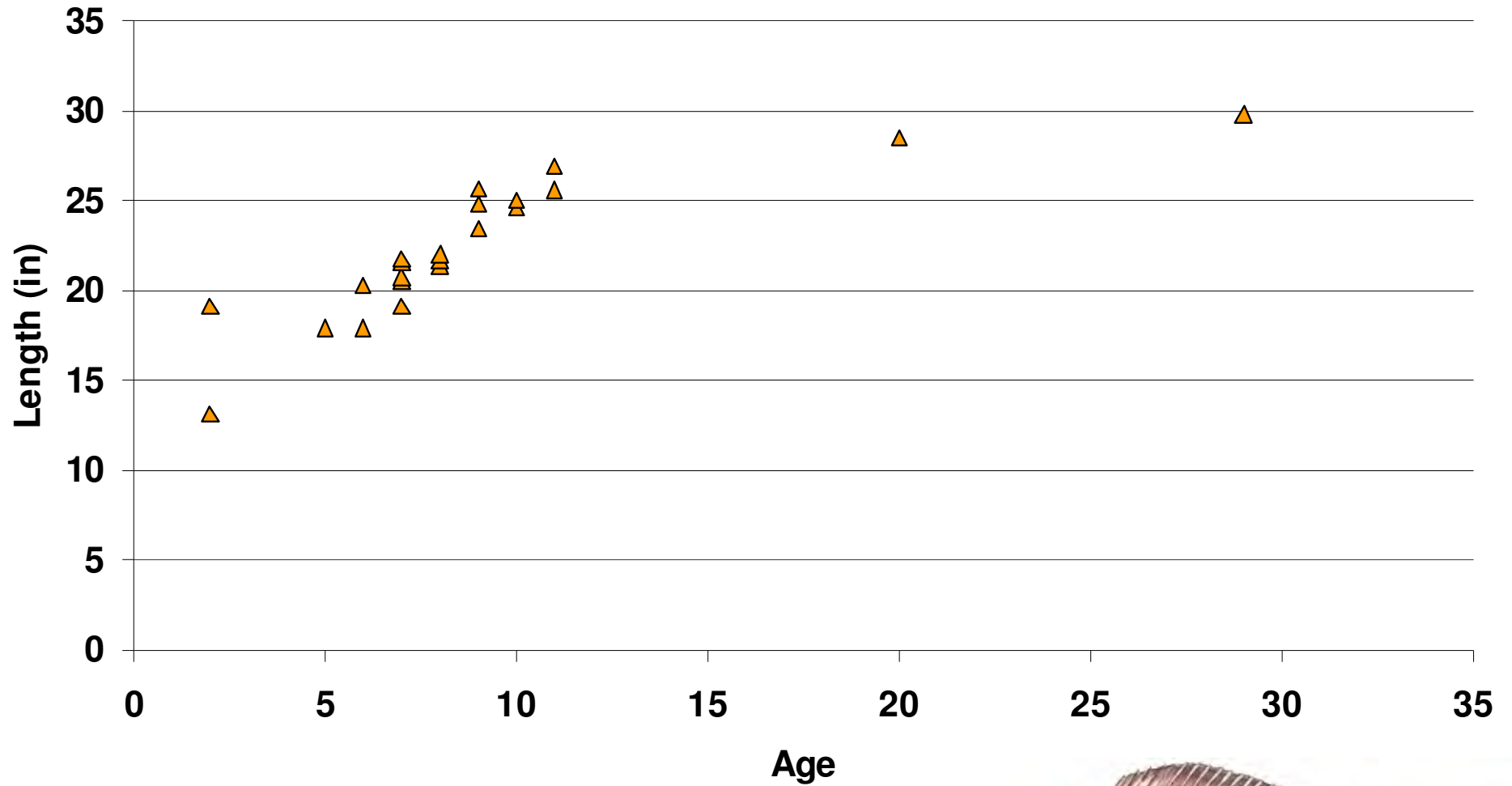
Marine Sportfish Collection Project: Blueline Tilefish Males Only (2007 and 2008)



■ Male



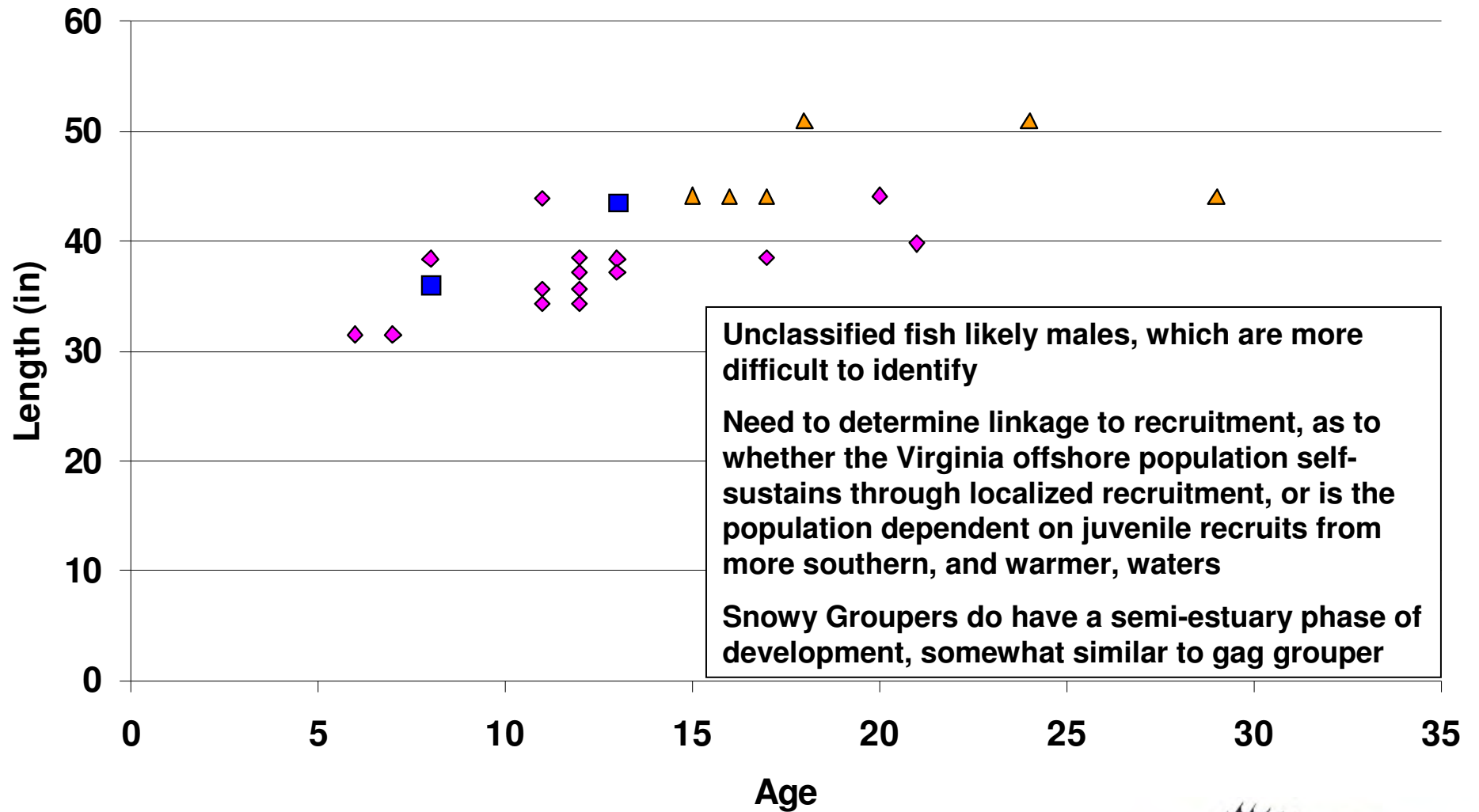
Marine Sportfish Collection Project: Blueline Tilefish Unclassifieds Only (2007 and 2008)



▲ Unclassified



Marine Sportfish Collection Project: Snowy Grouper (2007 and 2008)



Unclassified fish likely males, which are more difficult to identify

Need to determine linkage to recruitment, as to whether the Virginia offshore population self-sustains through localized recruitment, or is the population dependent on juvenile recruits from more southern, and warmer, waters

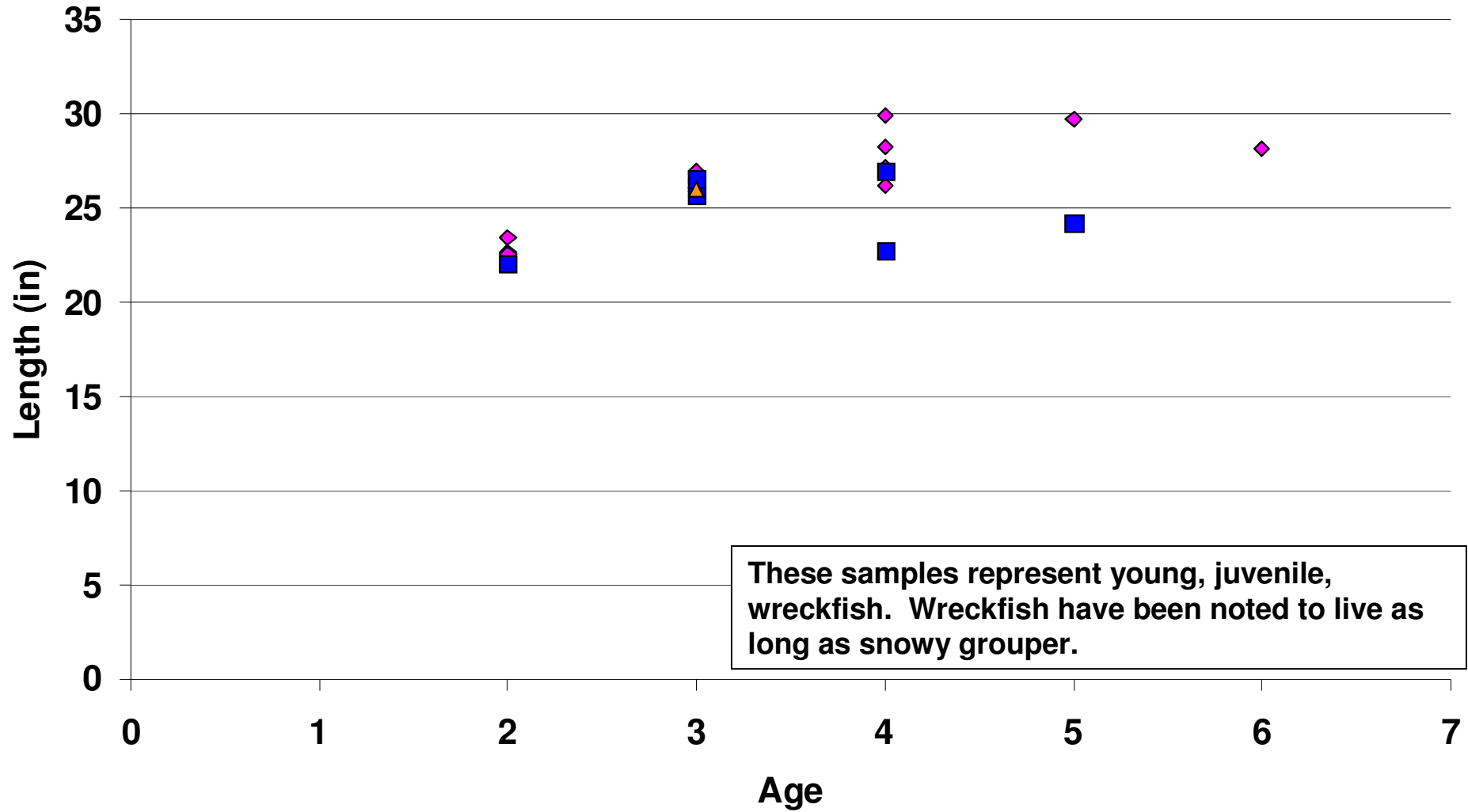
Snowy Groupers do have a semi-estuary phase of development, somewhat similar to gag grouper



◆ Female ■ Male ▲ Unclassified



Marine Sportfish Collection Project: Wreckfish (2007 and 2008)



◆ Female ■ Male ▲ Unclassified

