FISH FEATURES

Stripers—Just How Old is That Fish?

By Tom Baum, Principal Fisheries Biologist

The following tables and graph were developed utilizing length, weight and age data collected from the Bonus Striped Bass Program and from striped bass research projects conducted by Division of Fish & Wildlife personnel. These projects include tagging striped bass in Delaware Bay during March and April, and a fall creel survey of party boats along the coast. The Division of Fish & Wildlife is a participating agency in the US Fish & Wildlife Service's (USFWS) Striped Bass Cooperative Tagging Program. The USFWS provides various agencies along the Atlantic coast with tags that contain their phone number: 800-448-8322. The pink tags are located in the abdominal area of the fish. An anchor part of the tag is inserted into a small incision and the pink streamer part is readily visible. Both parts have the 800 number, and a unique tag number. Anglers are asked to report the date the fish was caught, location, whether or not the fish was kept or released and it's total length.

During the fall of 2000, Division personnel sampled striped bass from 8 party boat trips. A total of 172 anglers caught 283 striped bass, 148 of those were kept. These keepers were comprised of 64 "slot fish" (greater than or equal to 24" and less than 28") and 84 fish that were greater than or equal to 28" (22 of which were bonus fish).

In addition to measuring and weighing the fish, scales are taken to determine the age for a specific fish. Impressions of the scale samples are made on acetate slides utilizing a heated, hydraulic press. These slides are magnified with a microfiche reader. Rings on the scales (much like growth rings seen on a cross-section of a tree trunk) enable scientists to assign each fish an age.

Figure 1 shows the predicted weight for a given length of a striped bass by the pink line composed of squares. The blue diamond shapes represent actual data points or the range of weights for a given length. For example, the graph shows that the predicted weight for a 35" striped bass was 18 pounds, and samples ranged from 11 to 23 pounds.

- 1. What is the predicted weight of a striped bass measuring 30 inches? 40 inches?
- 2. What are minimum and maximum weights of striped bass measuring 30 or 40 inches?

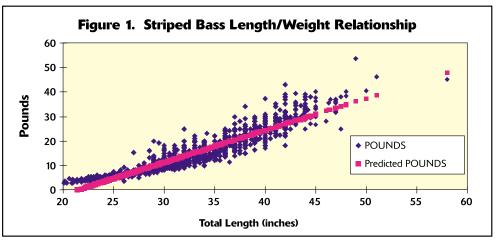
Table 1 shows the range of ages that correspond to a given length interval. For example, a striped bass measuring 24 to 27 inches may be from 3 to 8 years old. Forty-five percent of the fish sampled in this length group were 5 years old.

3. A fish measuring 30 inches most likely would be how old?

Table 2 shows the range of ages that correspond to a weight interval. For example, a striped bass weighing 7 to 10 pounds may be from 5 to 9 years old. Forty percent of the fish sampled in this weight group were 7 years old.

4. A fish weighing 15 pounds would most likely be how old?

ANSWERS: 1. 12 lbs.; 24 lbs. 2. 18 lbs. max./8 lbs. min.; 37 max., 18 minimum 3. 7 years old 4. 8 years old



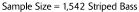


Table 1. Striped Bass Percent Age at Length

LENGTH	AGE												
(inches)	3	4	5	6	7	8	9	10	11	12	13	14	15
17–23	10%	40%	43%	7%									
24–27	1%	14%	45%	30%	8%	1%							
28–31			9%	31%	36%	19%	3%	1%					
32–35			2%	13%	33%	33%	14%	4%	1%				
36–39					8%	23%	31%	24%	10%	3%			
40-43						5%	21%	32%	21%	15%	5%		
44–48							8%	15%	31%	23%	15%	4%	4%

Sample size = 2,170 fish

Table 2. Striped Bass Percent Age at Weight

WEIGHT	AGE												
(pounds)	3	4	5	6	7	8	9	10	11	12	13	14	15
3–6	12%	30%	46%	9 %	2%								
7–10			11%	30%	40%	16%	3%						
11–14			3%	19%	40%	24%	11%	2%					
15–18				2%	20%	44%	19%	11%	2%	2%			
19–22					13%	24%	33%	21%	8%	3%			
23–26		12% 28% 3							19%	12%			
27–30		4% 31% 35 %							12%	12%	8%		
31–34	18%								29%	29%	24%		
35–44	8%								33%	8%	17%	8%	25%

Sample size = 881 fish