

On the Trail of the Hudson's Migratory Fish

Many Hudson River fish are **anadromous**. This means that they are born in fresh water, travel to the ocean to grow up, and then return to the Hudson to **spawn** (lay their eggs).

Scientists attach numbered tags to fish to study **migration** and growth. When a tagged fish is caught, the lucky **angler** uses an address or phone number on the tag to report where and when the fish was caught and how big it was.

You will use real scientific **data** from tagged fish to find out how far fish travel and how much they grow. Show your work as you answer the questions below.



The tag on this striped bass is a thin plastic strip. It is inserted through the skin, much like the way people get
← *body piercings.*

The tagged fish is then released back into the water.



1. Striped bass #388381 was 16 inches long when tagged near the Statue of Liberty in November 1996. When caught near Seaside Park, New Jersey, in November 2001 it was 26 inches long.

(a) How many years had gone by since this bass was tagged? _____ years

(b) How much had it grown from 1996 to 2001? _____ inches

2. Striped bass #289667 was tagged on September 16, 1992, at Danskammer Point on the Hudson, 67 miles north of the Battery in Manhattan. This fish was **recaptured** near the Statue of Liberty, 2 miles south of the Battery, on September 27, 1992.

(a) How many miles had it traveled since September 16? _____ miles

(b) How many days did it take the bass to travel from Danskammer Point to the Statue of Liberty? _____ days

3. Striped bass #32057 was tagged on May 31, 1989 on the Hudson near Kingston, 90 miles north of New York City. It was caught on September 30, 1989 off Nova Scotia, Canada, 850 miles northeast of New York City.

(a) How many miles had the bass swum since being tagged? _____ miles

(b) How many months had gone by? _____ months

4. American shad #12640 was tagged on April 9, 2001, near Cape May, New Jersey, 161 miles south of New York City. It was caught on May 6, 2001, in the Hudson near Selkirk, at **Hudson River Mile 136**.

(a) How many miles had it traveled since April 9? _____ miles

(b) How many days had gone by? _____ days

5. In June 2004 at Kingston, an Atlantic sturgeon received tag #16709 plus a **sonic tag**. Sonic tags send a signal heard by underwater microphones. Scientists followed the signal as the fish swam south that summer. They last heard its signal in Haverstraw Bay, Hudson River Mile 40, in October.

In January 2005 this sturgeon was recaptured near Matapeake, Maryland, 180 miles up the Chesapeake Bay. The entrance to the Chesapeake is 310 miles south of New York City.

People pierce their ears to hang earrings. The same idea is used to attach tags on an Atlantic sturgeon.



(a) How many miles did this sturgeon travel from Haverstraw Bay to New York City?

_____ miles

(b) How many miles did this fish travel from New York City to the entrance of the Chesapeake Bay?

_____ miles

(c) How many miles did the sturgeon travel from the entrance of Chesapeake Bay to Matapeake?

_____ miles

(d) In total, how many miles did this fish swim from Haverstraw Bay to Matapeake?

_____ miles