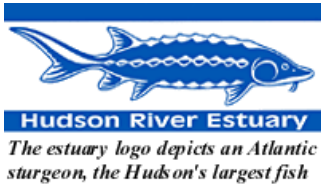


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| Topic/Lesson: | The Atlantic Sturgeon Spelling & Punctuation Challenge |
| Subject: | Spelling, grammar, punctuation |
| Author: | Tracy Bowen |
| Overview: | This is meant as a review of basic grammar, sentence structure, and spelling. It can be completed as a homework assignment. |
| Objectives: | Students will be able to: <ul style="list-style-type: none"> • Differentiate between homonyms (their, there, they're). • Recognize proper sentence structure and punctuation. • Choose noun-verb agreement. • Catch basic spelling errors. |
| Materials: | <ul style="list-style-type: none"> • Atlantic Sturgeon article for each student • Answer key |
| Procedures: | Distribute handout. Have students indicate each spelling, punctuation, or grammar error (using a highlighter, or by circling). |
| Scoring: | There are 50 errors in the text. Assign 2 points for each error found. |
| Massachusetts Frameworks: | Language Standards #2: Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing. <ol style="list-style-type: none"> a. Use punctuation (commas, parentheses, dashes) to set off nonrestrictive/parenthetical elements.* b. Spell correctly. |



The Atlantic Sturgeon: Logo of the Hudson River Estuary: With Errors

The Hudson River Estuary logo depicts an Atlantic sturgeon. The Hudson's largest fish. It highlights the estuary's critical role as habitat for valuable fish and wildlife and the need to be vigilant in protecting this natural heritage. Through a partnership involving the Department of Environmental Conservation (DEC), the New York State Department of Transportation, the New York State Thruway Authority, and the New York State Bridge Authority, the logo appears on signs where major highways cross tributaries of the estuary. It reminds travelers that these streams are intimately connected to the mainstream and that the health of the Hudson depends on the health of its watershed.



Capable of reaching huge size, armored with bony plates and possessing a lineage extending back to the age of dinosaurs, sturgeon are almost as fascinating as those extinct reptiles. The sea-going Atlantic sturgeon may grow to a weight of 800 pounds and a length of fourteen feet. Sturgeon eggs (a prime source of caviar) and meat (tasty when smoked) make these fish commercially valuable. Unfortunately, overfishing is among the factors that have reduced sturgeon populations. Fishing for sturgeon is now prohibited in all Atlantic Coast states.



Atlantic sturgeon

Young Atlantic sturgeon have been especially scarce in the Hudson in recent years. Among spawning adult sturgeon, there is a very low ratio of females to males. It could take nearly 50 years for this fish population to rebound, as

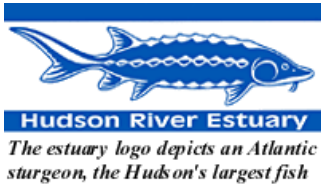
sturgeon mature slowly. This species leaves the estuary between its second and sixth year of life. Female Atlantic sturgeon do not return to the Hudson to spawn until they are 18 years old, and do not reproduce every year after that. Younger spawners may produce eggs with lower hatching rates and less yolk to sustain the larvae. Thus the females may not actually replenish the population until they are closer to 30 years old. In addition, while at sea, many Atlantic sturgeon are killed in nets set for other fish.

The first commitment of the Hudson River Estuary Action Plan calls for monitoring stocks of Atlantic sturgeon and other migratory fish in the river. The Hudson River Estuary Program has

provided funding support for studies by the New York State Cooperative Fish and Wildlife Unit at Cornell University.

Atlantic sturgeon are bottom feeders, using sensitive, whisker-like barbels on the underside of their snouts to find food - chiefly worms, insects, crustaceans, and small fish - that is sucked up in their tube-like mouths. While they spend most of their time in the deep channels of the Hudson, sturgeon occasionally bask at the surface and make startling leaps out of the water.

For more information, visit the sturgeon page in the DEC's collection of web pages about New York State's freshwater fishes and Hudson River Fisheries Unit's pages on Atlantic sturgeon studies in the Hudson River.



The Atlantic Sturgeon: Logo of the Hudson River Estuary: Teacher Answer Key

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