



United States Department of the Interior

U.S. FISH AND WILDLIFE SERVICE

P.O. Box 33683

Raleigh, North Carolina 27636-3683

Phone: 919-515-5019 FaxForm: 919-515-4454

November 13, 2013



Robert K. Mahood, Executive Director
South Atlantic Fishery Management Council
4055 Faber Place Drive, Suite 201
North Charleston, South Carolina 29405

Dear Bob:

The U.S. Fish and Wildlife Service (Service) is responsible for identifying species in need of protection under the Endangered Species Act of 1973, as amended (ESA). The American eel (*Anguilla rostrata*) has been petitioned for ESA listing, most recently in 2010. The Service is conducting a status review for the species and will be making a finding on the listing petition by September 2015. The finding will either be that listing the American eel is warranted, listing is not warranted, or that listing is warranted but precluded by other higher priority listing actions.

The life history of the American eel begins in the Sargasso Sea, located in the middle of the North Atlantic Ocean, where eggs hatch into a larval stage known as “leptocephali.” These leptocephali are transported by ocean currents from the Sargasso Sea to the Atlantic coasts of North America and northern portions of South America. The American eel undergoes several stages of metamorphosis, from leptocephali to juveniles arriving in coastal waters as unpigmented “glass eels.” When juvenile eels arrive in coastal waters, they can arrive in great density and with considerable yearly variation. Glass eels metamorphose (change) to pigmented “elvers” and then develop into “yellow eels,” occupying marine, estuarine, and freshwater habitats. American eels begin sexual differentiation at a length of about 20 to 25 centimeters and, depending on eel density, become male or female “silver eels.” Upon nearing sexual maturity, these silver eels begin migration toward the Sargasso Sea, completing sexual maturation en route. Spawning occurs in the Sargasso Sea. After spawning, the adults die; a species with this life-history trait is known as a semelparous species.

The extensive range of the American eel includes all accessible river systems and coastal areas having access to the western North Atlantic Ocean and to which oceanic currents would provide transport. As a result of oceanic currents, the majority of American eels occur along the Atlantic seaboard of the United States and Canada. The historical and current distribution of the American eel within its extensive continental range is well documented along the United States and Canadian Atlantic coast, and the Saint Lawrence River/Lake Ontario (see the enclosed range map). The distribution is less well documented and likely rarer, again due to currents, in the Gulf of Mexico, Mississippi watershed, and Caribbean Islands, and least understood in Central and South America.

Detailed biological and threat assessment information for the American eel can be found online at: <http://www.gpo.gov/fdsys/pkg/FR-2011-09-29/pdf/2011-25084.pdf>. Additional information can be found here: <http://www.fws.gov/northeast/newsroom/eels.html>.

We are analyzing the best available information on the American eel in our consideration of whether the species warrants ESA protection. We are seeking new information since our 2007 status review that found listing the American eel under the ESA was not warranted. In addition to any new information about the species' biology, range, population abundance and trends, genetics and taxonomy, and threats (loss or modification of habitat, overutilization, disease or predation, existing regulatory mechanisms, and other natural or manmade factors), we are particularly seeking information about:

- Panmixia (having one, well-mixed breeding population) and population structure, such that a threat could have differentiating effects on portions of the population and not the whole species;
- Statistically significant long-term glass eel recruitment declines;
- Correlations between climate change and glass eel recruitment; and
- Climate predictions over the next 25 to 100 years as they relate to ocean circulation, changes in the Sargasso Sea circulation, sea surface temperature, and larval and glass eel food availability.

We will accept new information throughout the Status Review process, but information received by December 20, 2013, will be of the most help to our review. Information should be submitted to Steve Shepard, Maine Ecological Services Field Office, 17 Godfrey Drive, Suite 2, Orono, Maine 04473-3702. All data and information submitted to us, including names and addresses, will become part of the administrative record.

Thank you for your interest in American eel conservation. We appreciate your willingness to share information and assist us with the Status Review process. If you would like additional information or have any questions about the American eel or the status review process, please contact Steve Shepard, Maine Field Office, at 207-866-3344, ext. 116, or by electronic mail at steven_shepard@fws.gov, or Krishna Gifford at 413-253-8619, or by electronic mail at krishna_gifford@fws.gov.

Sincerely,

/s/ Wilson

R. Wilson Laney, PhD
SE Region American Eel Core Team Member

Enclosure

