American Eel Fact Sheet

Scientific Name: ***Anguilla rostrata***
Common Name: American Eel
IUCN Status: Endangered

Parties at CITES CoP20 Should Support Proposal 35

WCS believes that recent status reviews of eels clearly demonstrate that *Anguilla rostrata* meets the criteria for inclusion in CITES Appendix II, pursuant to Annex 2a of Resolution Conf. 9.24 (Rev. CoP17). A CITES Appendix II listing would enhance monitoring of international trade, provide critical data to fishery managers, and help prevent further overexploitation and illegal trade of this species.

Distribution and Habitat

- U.S. Range: Maine to Florida and throughout the Gulf of Mexico.
- Habitat: Demersal; found on river or sea bottoms. They migrate between saltwater, brackish, and freshwater systems.

Biology and Ecology

- Size: Females can reach up to 4 feet in length and 9 pounds.
- Life Span: 3–30 years, can exceed 40. Growth varies by region and habitat type.
- Diet: Nocturnal feeders consuming aquatic insects, crustaceans, larvae, and other fish.
- Behavior: Hide under rocks, roots, and debris during the day; emerge at night to feed.

Reproductive Cycle

American eels spawn in the Sargasso Sea. After hatching, larvae (leptocephali) drift for up to a year before transforming into transparent glass eels. Upon entering rivers, they become pigmented elvers, then mature into yellow eels. Once sexually mature—after up to 30 years—they transform into silver eels and migrate back to the Sargasso Sea to spawn once and die.

Threats and Conservation Status

- Status and Trends: Listed as Endangered on the IUCN Red List. U.S. stock assessments indicate populations at historic lows and continuing to decline.
- Major Threats: Overfishing, habitat fragmentation (dams), pollution, disease, illegal trade, and climate change.

Declines in Japanese and European eels have increased demand for American eels. Glass eels command prices exceeding $2,300 per pound, fueling illegal, unreported, and unregulated (IUU) fishing and trade. An Appendix II CITES listing would establish international controls to ensure trade is legal, sustainable, and traceable.

WCS Research

Since 2012, WCS has studied American eels in New York's Bronx River to understand the effects of dams on population abundance and structure. Over 1,650 eels have been captured, 531 tagged with PIT tags. Studies show eel abundance decreases past successive dams, size increases, but density by biomass remains consistent. A strong correlation exists between eel density and environmental DNA (eDNA) concentrations. Research supports habitat restoration measures such as dam removal and fish passage improvements.

This long-term work has also provided opportunities for students, interns, and volunteers to learn about freshwater connectivity and aquatic biodiversity through hands-on conservation.

Global Context

Anguillid eels (genus *Anguillid*) are declining worldwide due to multiple pressures—habitat fragmentation, overharvesting, pollution, disease, and climate change. Several species are listed as Threatened or Near Threatened. Coordinated international management and trade monitoring through CITES are critical for their recovery.

WCS advocates for international cooperation to conserve anguillid eels and supports science-based management to ensure these ecologically and culturally important species persist for future generations.