

Ancient mystery of European eel migration unraveled to help combat decline of critically endangered species

October 19 2022



Migration of European eels from the Azores to the Sargasso Sea spawning area. (A) European eel fitted with a pop-up satellite tag; (B) historic data, showing the location of the proposed spawning area in relation to previous pop-up satellite tag positions (crosses) from eels released from three different locations in Europe. Shading shows kriged minimum leptocephalus size data from ICES in a 1° grid; (C) pop-up data from European eels tagged at two Azores locations (circles) in



November of 2018 (gold) or 2019 (yellow). Symbols within the crosses show if the tags detached from the eels prematurely, either due to exceeding the depth failsafe of 1400 m (downward triangle), or for other (unknown) reasons (circle). Predations are not shown. The average bearing of eels released in 2019 is shown as a yellow line, with intervals along the line marking the distance traveled at the average speed shown by eels at liberty for 120 day or less, at liberty for between 120 and 240 day, and at liberty for > 240 day. The yellow star shows the extrapolated position along the average bearing for a migratory period ending at the second peak spawning event after release (i.e., 14th February, 466 day after release). White circles (at 1° grid) show where the smallest larval eels have been recorded in larval surveys conducted over the last century (large circles = larvae

Citation: Ancient mystery of European eel migration unraveled to help combat decline of critically endangered species (2022, October 19) retrieved 26 June 2024 from https://phys.org/news/2022-10-ancient-mystery-european-eel-migration.html

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.