

## **Narrow-Ridged Finless Porpoises and the Marine Environment**

The Seto Inland Sea sustains a diverse marine ecosystem, among which the narrow-ridged finless porpoise is a top predator and key indicator of the sea's health. Environmental degradation in the twentieth century reduced porpoise numbers, but there are ongoing conservation efforts, including the restoration of feeding grounds, to foster their recovery.

The narrow-ridged finless porpoise is Japan's smallest cetacean, measuring 1.5 to 2 meters in length. It relies on a robust food chain sustained by sandy bottom habitats and seaweed beds in the Seto Inland Sea. The extensive eelgrass and sargassum beds that thrive in the sea's shallow waters serve as hiding places and spawning grounds for sand lances, squid, and other fish species. These habitats also provide food and shelter for juvenile fish upon which larger predators such as black sea bream, conger eels, and puffer fish feed.

Historically, narrow-ridged finless porpoises were common in the region. In 1930, the waters around Awa Island, west of Okunoshima, were

designated a National Natural Monument to protect porpoise migration routes. Until the 1960s, local fishermen reportedly fished alongside these cetaceans: as the porpoises chased shoals of small fish, they attracted seabream and larger fish that the fishermen would target. However, industrial development in the postwar era led to significant habitat loss due to pollution, dredging, and land reclamation. These activities caused the porpoise population to decline.

Conservation initiatives, including legislation to curb pollution and

protect marine environments, habitat restoration projects, and the regeneration of sandy bottom habitats and seaweed beds, are helping to reverse this trend. Recent increases in porpoise sightings suggest that these measures are having a positive impact on their recovery.