Glacier Bay

National Park Service
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Alaska

Forage Fish of Glacier Bay

These small but mighty fish are sentinels of marine ecosystem health and a major food source for the Park's marine predators.

What are forage fish?

Forage fish are small schooling pelagic fishes. Examples of key taxa found in Glacier Bay include Pacific herring, Pacific capelin, Pacific sand lance, and juvenile walleye pollock. Although krill are invertebrates, they are also often considered 'forage fish'.

Why are they important?

Forage fish fulfill an important mid-trophic role in Glacier Bay's marine food web by transferring nutrients from plankton to predators. Specifically, forage fish are a **major food source** for many large fishes, seabirds, and marine mammals, including humpback whales, Stellar sea lions, and harbor seals.

Forage fish are sensitive to changes in oceanographic conditions, making them a **valuable indicator for assessing the health of pelagic food webs and ecosystem productivity**. Monitoring forage fish populations in Glacier Bay is essential for understanding the drivers behind flucations in marine predator populations, and **assessing the impacts of environmental events,** like prolonged marine heatwaves, on marine resources.

Monitoring Forage Fish in Glacier Bay

This summer, NPS will start a new forage fish monitoring program in Glacier Bay. NPS Biologists will be conducting surveys to monitor changes in forage fish biomass and nutritional quality, and understand how the fish interact with their habitat and predators. You may spot biologists at work during your visit to the Park!

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Photos: (Top) Pacific capelin. (Bottom) From top to bottom: Pacific capelin, Pacific herring, Pacific sand lance, and juvenile walleye pollock. Credit: M. Arimitsu, USGS Alaska Science Center.