Beach seine sampling in the Gulf of Alaska occurs in July and August and is divided into two surveys conducted at fixed site locations. An expanded beach seine survey has occurred from 2018-2024 at 13 bays on Kodiak Island, the Alaska Peninsula, and the Shumagin Islands (*n* = 3 - 7 fixed stations per bay, 65 stations), and was initiated to compliment the longer beach seine time series (2006 – 2024) in Cook and Anton Larsen Bay (8 fixed stations per bay, 16 stations).

At all sites, a 36 m long, negatively buoyant beach seine was deployed parallel to shore using a boat, and retrieved by two people standing a fixed distance apart on shore (details in Laurel et al. 2007). Wings on the seine (13 mm mesh) were 1 m deep at the ends and 2.25 m in the middle with a 5 mm delta mesh cod end bag. The seine wings were attached to 25 m ropes for deployment and retrieval from shore, making the effective sampling area ~ 900 m2 of bottom habitat.

In the field, all Pacific cod were counted and a subsample from each catch was measured for total length (± 1 mm). Length groups from these field measured cod (*n* > 11,000 lengths from all bays and years combined) were used to differentiate age-0 (20-145 mm) from age-1 cod (>160 mm). Each year in the extended survey, a subsample of age-0 cod (≈25/bay, *n* = 13 bays) was frozen for condition analyses in the laboratory. Within 6 months of freezing, age-0 cod were thawed, weighed, dissected, and stomachs and livers were removed and weighed.