

Blue lines indicate the area meeting the ISRA Criteria; dashed lines indicate the suggested buffer for use in the development of appropriate place-based conservation measures

YAKUTAT BAY SHELF ISRA

North American Pacific Region

SUMMARY

Yakutat Bay Shelf is located in Alaskan waters of the United States of America. It sits in the Gulf of Alaska and is a shallow bank surrounded by deep channels and troughs. It is characterised by sandy, muddy, and gravel substrates. Strong currents and bathymetry around the area transport nutrient-rich waters to the surface that enhance productivity. Within this area there are: **undefined aggregations** (North Pacific Spiny Dogfish *Squalus suckleyi*).

CRITERIA

Sub-criterion C5 - Undefined Aggregations

— —
UNITED STATES OF AMERICA
 — —

— —
0-150 metres
 — —

— —
10,127 km²
 — —





DESCRIPTION OF HABITAT

Yakutat Bay Shelf is located in Alaskan waters of the United States of America. The area sits in southeast Alaska and extends along the glacial coastline from Lituya Bay in the southeast to Icy Bay in the northwest. The area is characterised by sandy, rocky, and gravel substrates (Schoch et al. 2014).

The area is dominated by the Alaska Coastal Current, an eastern boundary current forced by strong winds and influenced by freshwater input from rivers and glaciers that produces mixing in the water column. These processes along with the formation of eddies during the boreal autumn and winter along the continental slope contribute to the high productivity of the area (Stabeno et al. 2004; Weingartner et al. 2009; Mordy et al. 2023).

This Important Shark and Ray Area is benthic and pelagic and is delineated from inshore and surface waters (0 m) to 150 m based on the bathymetry of the area.

ISRA CRITERIA

SUB-CRITERION C5 - UNDEFINED AGGREGATIONS

Yakutat Bay Shelf is an important area for undefined aggregations of one shark species.

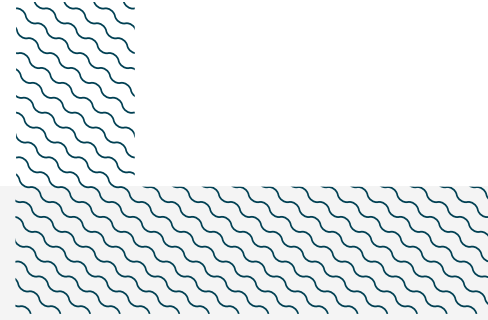
Between 1982-2025, the Alaska Fisheries Science Center (AFSC) - National Oceanic and Atmospheric Administration (NOAA) conducted trawl surveys during the late spring and summer in the Bering Sea, the Aleutian Islands, and the Gulf of Alaska (NOAA-AFSC 2026). Temporal coverage of the surveys varies per region with most conducted annually (e.g., continental shelf surveys in the Bering Sea), or biennially (e.g., Gulf of Alaska) since 1999 (Hoff 2016; Siple et al. 2024; Markowitz et al. 2025; Dowlin et al. 2026). The continental slope survey in the Bering Sea stopped in 2016 (Markowitz et al. 2025). Surveys were conducted at fixed stations or following a stratified random survey design and covering depths from 0-1,000 m divided in multiple depth strata across 300-500 stations per region. In general, otter trawls of ~25 m headrope and ~34 m footrope were used and tows lasted between 15-30 minutes at a speed of ~3 knots. Catch-per-unit-effort (CPUE) was estimated as the number of individuals or number of egg cases per square kilometre (no./km²) and the area swept (km²) as the linear distance towed, multiplied by the mean net width (Hoff 2016; Siple et al. 2024; Markowitz et al. 2025; Dowlin et al. 2026).

In addition, between 1998-2025, the International Pacific Halibut Commission (IPHC) conducted annual longline surveys during summer across nearshore and offshore waters from Southern California to Alaskan waters (Gulf of Alaska, Aleutian Islands, and Bering Sea; IPHC 2026a). Surveys were conducted at ~1,200 stations each year at depths of 15-340 m. Longlines consisted of 4-8 skates (longline units) with 96-104 hooks per skate with soak times between 5-24 hours (IPHC 2026b). Non-halibut species were counted either as subsample counts (20% observations, the majority for sharks) and whole-set counts (100% observations). Nominal CPUE was estimated as the number of individuals caught per 100 hooks per hour.

Between 1998-2024, aggregations of North Pacific Spiny Dogfish were regularly recorded in this area. During this period, North Pacific Spiny Dogfish were recorded in 2,039 sets during trawl surveys across the whole region, 353 (17.3%) of which were recorded inside this area in June-August of all surveyed years and mostly at depths of 20-150 m (NOAA-AFSC 2026). The second highest mean CPUE of North Pacific Spiny Dogfish in the region was reported from this area (mean = 625.2 individuals/km²; 21.1-26,737.3) compared to adjacent areas in the region (mean CPUE outside the area = 205.3 individuals/km²; 17.5-16,563.7). Multiple individuals (>10) were recorded in 93 tows (26.3% of

the tows with the species captured inside this area) with 681 individuals being the maximum number recorded in a single tow (mean 15.8 individuals/haul).

In the IPHC surveys, North Pacific Spiny Dogfish were recorded in 15,525 sets during longline surveys, 1,511 (9.7%) of which were recorded inside this area in June–September (IPHC 2026a). For this species, individuals were counted in subsamples (20% of the observations) in 12,132 sets (78.1% of total). The highest mean CPUE of North Pacific Spiny Dogfish in the region was reported from this area (mean = 0.92 individuals/100 hooks/hour; 0.01–7.34) compared to adjacent areas in the region (mean CPUE outside the area = 0.22 individuals/100 hooks/hour; 0.006–4.900). Multiple individuals (>10) were recorded in 1,096 tows (72.5% of the tows with the species captured inside this area) with 449 individuals being the maximum number recorded in a single set (mean = 52.6 individuals/set). In addition, this area has been highlighted as important after 2013 due to catches of North Pacific Spiny Dogfish according to commercial fisheries data, especially from longliners (Tribuzio et al. 2022). High abundances for North Pacific Spiny Dogfish have been associated with aggregations and are mostly related to seasonal increases in abundance of prey species (Beamish et al. 1992). Additional information is required to understand the nature and function of these aggregations.



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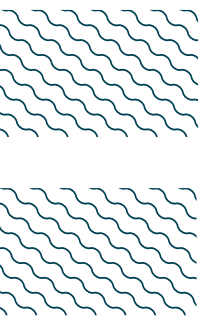
QUALIFYING SPECIES

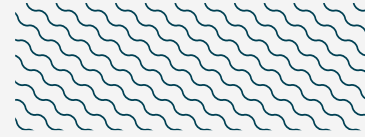
Scientific Name	Common Name	IUCN Red List Category	Global Depth Range (m)	ISRA Criteria/Sub-criteria Met								
				A	B	C1	C2	C3	C4	C5	D1	D2
SHARKS												
<i>Squalus suckleyi</i>	North Pacific Spiny Dogfish	LC	0-1,236							X		

SUPPORTING SPECIES

Scientific Name	Common Name	IUCN Red List Category
RAYS		
<i>Bathyraja interrupta</i>	Bering Skate	LC
<i>Beringraja binoculata</i>	Big Skate	LC
<i>Caliraja rhina</i>	Longnose Skate	LC

IUCN Red List of Threatened Species Categories are available by searching species names at www.iucnredlist.org Abbreviations refer to: CR, Critically Endangered; EN, Endangered; VU, Vulnerable; NT, Near Threatened; LC, Least Concern; DD, Data Deficient.





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