

6.4 Alaska Scallops

Summaries and assessments of habitat information for scallops off the coast of Alaska are provided in an Essential Fish Habitat Assessment Report (NPFMC 1997). The Team reviewed Habitat descriptions and life history information was reviewed and the levels of information available for each life stage was determined. The information contained in these summaries along with that contained in data atlases (NOAA 1990) and summaries of survey data (Allen and Smith 1988; Wolotira et al. 1993; Fritz et al. In press) were used to determine the level of knowledge available to identify EFH for each scallop life stage. In evaluating the level of knowledge available, a level 0 was defined as a subset of level 1 as defined by NMFS in the guidelines for determining the level of information on the distribution of a life stage. For scallops, it was determined that information of level 0, 1, and 2 was available. Rationale for using alternative 2 to define EFH (using general distributions of a species life stage even when level 2 and above information was available) appears elsewhere in this EA.

The recommended EFH definition for each scallop life stage is written in the following section and described in Tables 6.7-6.8. The habitats described in the text are located within the general distributions shown on maps for

species' life stages with level 1 or 2 information. For those stages with level 1 information, only general distributions within which EFH is located are drawn on maps. For adult scallops (level 2 information), known concentrations are also drawn on the maps within the general distribution, however EFH is defined as the adult's general distribution. No maps are provided for those life stages with level 0 information.

Table 6.7 Levels of essential fish habitat information currently available for Alaska scallops, by life history stage. Juveniles were subdivided into early and late juvenile stages based on survey and fishery selectivity curves.

Species	Eggs	Larvae	Early Juveniles	Late Juveniles	Adults
Weathervane scallops	0a	0a	0a	1	2
Pink scallops	0a	0c	0a	0a	0a
Spiny scallops	0a	0c	0a	0a	0a
Rock scallops	0a	0c	0a	0a	0a

Note: for the larval stages of Pink, Spiny, and Rock scallops information is insufficient to infer general distributions.

0a: Some information on a species' life stage upon which to infer general distribution.

0c: No information on the actual species' life stage and no information on a similar species or adjacent life stages, or where complexity of a species stock structure prohibited inference of general distribution.

References

- Allen, M. J., and G. B. Smith. 1988. Atlas and zoogeography of common fishes in the Bering Sea and northeastern Pacific. U.S. Dep. Commer., NOAA Tech. Rept. NMFS 66, 151 p.
- Fritz, L. W., A. Greig, and R. Reuter. Catch-per-unit-effort, length, and depth distributions of major groundfish and bycatch species in the Bering Sea, Aleutian Islands and Gulf of Alaska regions based on research trawl survey data. U.S. Dep. Commer., NOAA Tech. Memo. NMFS-AFSC. In press.
- NOAA. 1990. West coast of North America. Coastal and ocean zones, Strategic assessment: Data atlas. U.S. Dep. Commer., NOAA, NOS.
- NPFMC. 1997. Essential fish habitat assessment report for the scallop fisheries off the coast of Alaska. North Pacific Fishery Management Council, 605 W. 4th Ave., Suite 306, Anchorage, AK 99501.
- Wolotira, R. J., Jr., T. M. Sample, S. F. Noel, and C. R. Iten. 1993. Geographic and bathymetric distributions for many commercially important fishes and shellfishes off the west coast of North America, based on research survey and commercial catch data, 1912-1984. U.S. Dep. Commer., NOAA Tech. Memo. NMFS-AFSC-6, 184 p.

(See table of contents for table)

Table 6.8. Summary of Weathervane scallop habitat and biological associations and reproductive traits.

EFH definition for Alaskan weathervane scallops

Eggs (several days) - Level 0_a

Demersal waters of the inner and middle continental shelf of the Gulf of Alaska and to a lesser extent in the Bering Sea and Aleutian Islands. Eggs are released in the late spring and early summer.

Larvae (2-3 weeks) - Level 0_a

Pelagic waters along the inner, middle, and outer continental shelf of the Gulf of Alaska west of Dixon entrance, extending into the Bering Sea and Aleutian Islands.

Juveniles (to 3 years of age) - Level 1

Areas of clay, mud, sand, and gravel along the mid-continental shelf of the BSAI and GOA.

Adults (3+ years of age) - Level 2

Areas of clay, mud, sand, and gravel along the mid continental shelf of the GOA and BSAI. Areas of concentration are those between the depths of 40-130 m. Scallop beds are generally elongated in the direction of current flow.

EFH definition for Alaskan pink scallops

Eggs (several days) - Level 0_a

Demersal waters of the inner and middle continental shelf of the Gulf of Alaska and to a lesser extent in the Bering Sea and Aleutian Islands. Eggs are released in the winter and early spring.

Larvae (2-3 weeks?) - Level 0_c - No EFH definition determined

Pelagic waters with unknown distribution.

Juveniles (to 2 years of age) - Level 0_a

Soft bottom areas along the inner and mid-continental shelf of the BSAI and GOA.

Adults (2+ years of age) - Level 0_a

Soft bottom areas less than 200 m along the inner, middle, and outer continental shelf of the GOA and BSAI.

EFH definition for Alaskan spiny scallops

Eggs (several days) - Level 0_a

Demersal waters of the inner continental shelf of the Gulf of Alaska and to a lesser extent in the Bering Sea and Aleutian Islands. Eggs are released in the late summer.

Larvae (2-3 weeks?) - Level 0_c - No EFH definition determined

Pelagic waters with unknown distribution.

Juveniles (to 2 years of age) - Level 0_a

Hard bottom areas characterized by strong currents along the inner and middle continental shelf of the GOA.

Adults (2+ years of age) - Level 0_a

Hard bottom areas shallower than 150 m, characterized by strong currents along the inner and middle continental shelf of the GOA.

EFH definition for Alaskan rock scallops

Eggs (several days) - Level 0_a

Demersal waters of the inner continental shelf of the Gulf of Alaska. Eggs are released in the spring and also the autumn months.

Larvae (2-3 weeks?) - Level 0_c - No EFH definition determined

Pelagic waters with unknown distribution.

Juveniles (to 3 years of age) - Level 0_a

Rocky bottoms in shallow waters (0-80m) characterized by strong currents.

Adults (3+ years of age) - Level 0_a

Rocky bottoms in shallow waters (0-80m) characterized by strong currents.

See table of contents for the following maps:

[Weathervane scallops \(Adults and late juveniles\)](#)

[Weathervane scallops \(Adults and late juveniles\)](#)