

PERCH CARE

PURPOSE: To describe methods of care for perches.

POLICY: To provide optimum care for all animals.

RESPONSIBILITY: Collector and user of the animals. If these are not the same person, the user takes over responsibility of the animals as soon as the animals have arrived on station.

PROCEDURE: At present there are 4 perch species found around BMSC.

Species:	Kelp perch	<i>Brachyistius frenatus</i>
	Shiner perch	<i>Cymatogaster aggregata</i>
	Striped perch	<i>Embiotoca lateralis</i>
	Pile Perch	<i>Rhacochilus vacca</i>

Identification: Refer to Lamb and Edgell's book, "Coastal fishes of the Pacific Northwest" for in depth descriptions of individual specimens.

Brachyistius frenatus: Kelp perch are coppery brown in color with large scales. They have a slight indent in the anterior profile at the head/body junction. They are found in dense kelp beds and are up to 22cm length.

Cymatogaster aggregata: These fish have three yellowish bars on each side, large scales. They swarm in sandy, shallow-bottomed bays and are up to 20 cm in length.

Embiotoca lateralis: Have about 15 distinguishing horizontal blue stripes on each side. The dorsal fin is spiny on the anterior end and lower in height than the soft rayed part on the posterior end. These are commonly found along shallow, rocky shores or around wharves or pilings. They can be up to 37cm length.

Rhacochilus vacca: The snout of these fish are not as pointed as in other perch and the top of the head is slightly more rounded. They have two thick black stripes on a silver body, one stripe at the dorsal fin and one closer to the tail. Can be up to 45cm length.

Sites: Shallow intertidal sites along sandy or muddy shores. The shiner perch often comes up in shrimp trawl nets.

Methods: Perches can be collected either by hook and line, longline, trapping, seine nets. Trawling can also be used but few fish seem to survive this method.

Transport: Please follow transport and handling of fish SOP.

Holding: Need to be held in continually flowing seawater. Lids are necessary to prevent escape but also to provide cover for this highly distressed fish. Due to their nature, perch need plenty of habitat to help them feel comfortable and safe in their surroundings. This habitat includes sediment, and plenty of seaweeds such as kelp and eelgrass. BAs they are schooling fish, they do not do well on their own or in numbers less than five.

Feeding:

Brachyistius frenatus: Feed on minute worms, shrimps, clams, crabs and other small crustaceans.

Cymatogaster aggregata: Feed on marine worms, mussels, snails, shrimps, clams.

Embiotoca lateralis: Feeds on worms, mussels, shore crabs, snails and clams.

All 4 species will readily eat frozen chopped fish or mussels, fish flakes, and large zooplankton. Due to high metabolic needs, the fish should be fed at least every 2 days.

Tank Cleaning: Once a month the fish should be removed from the tank and placed into a holding bucket. The tanks should be drained and the sides and bottom should be scrubbed and rinsed with warm freshwater. The tanks should then be rinsed with cold seawater and allowed to refill, and the fish replaced.

Anesthetic: Anesthetizing these animals is size, species, and density dependent; approximately 0.2mg/L of MS-222. Always wear gloves when using MS-222. Clove oil is most effective as an anesthetic at concentrations of 40-60 mg/L, and should be dissolved in ethanol (e.g., 1:9) before mixing into the water. Clove oil has a slightly faster induction time and a longer recovery time than similar concentrations of TMS. Clove oil has a wide margin of safety between effective and lethal doses, and fish do not show signs of distress when being anaesthetized.

Euthanasia: Euthanasia is size, species, and density dependent; inhalant anesthetic overdose of 0.4 - 2.0 g/L of MS-222.

Animal Return: Animals should be returned to the site of their collection. Be sure to have well oxygenated water in bucket that they are being returned in. If any anesthetic chemical has been used on the fish during it's holding at BMSC, the animal must not be released before the drug withdrawal time. Withdrawal time should be on the label of an anesthetic in degree-days (degree-days are the accumulated thermal units for a given day. One day at 10C is 10 degree-days).

Note: MS-222 has a 5 -day withdrawal time for salmon above 10C.

DAILY ACTIVITIES:

1. Ensure water is flowing into the tank at a reasonable rate.
2. Ensure the standpipe is in place and not blocked.
3. Check for and remove and dead animals.
4. Check for and remove any uneaten prey organisms.
5. Check for and remove and foreign organisms