SOP# = Oste4
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GOBY CARE

PURPOSE: To describe methods of care for gobies.

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 three goby species found around BMSC.

Species:	Blackeye goby	*Rhinogobiops nicholsi*
	Bay goby	*Lepidogobius lepidus*

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

Rhinogobiops nicholsi: These fish have large black eyes and a black edge on the first dorsal fin. Their bodies are bright orange to pink. The pelvic fins are fused to form a cone. They can reach 15cm in length. Very occasionally caught on a baited line, this goby can show up in shrimp nets.

Lepidogobius lepidus: Have 7 characteristic spines on the first dorsal fin. A moderate sized mouth extends to below the pupil of the eye. The pelvic fins are fused to form a cone. The body is almost transparent, light gray in colour. They can be found in muddy or silty bottom habitat.

Sites: Intertidal and subtidal sites are found on the shores of the Deer Group Islands, Dixon I., Scott's Bay, off the Blowhole, along Grappler Inlet and at the Harbour mouth across from Aguilar Pt.. Gobies are also found on the bottom of the channels around BMSC.

Methods: These fish are occasionally caught in shrimp nets, others can be caught in dip nets when they occur in tidepools.

Transport: Please follow transport and handling of fish SOP.

Holding: Hold the fish in continually flowing seawater. Lids are necessary. Mud or sand will help reduce stress levels.
Feeding: Should be fed with scraps of fish, snails, and tiny shrimp. These fish feed well on any frozen chopped fish.

Tank Cleaning: Once every 3 weeks 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.