# POACHER CARE SOP# - OSTE11

**PURPOSE:** To describe methods of care for poachers.

**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 four poacher species that are found around BMS.

### **Species**

English Name	Scientific Name
Sturgeon poacher	Agonus acipenserinus
Gray starsnout	Bathyagonus alascanus
Spinycheek starsnout	Bathyagonus infraspinatus
Blacktip poacher	Xeneretmus latifrons

## Identification

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

Species	Description
Agonus acipenserinus	<ul> <li>Have bushy whiskers on their snouts and around their under-slung mouth.</li> <li>They are yellowish-brown in color and about 30cm at the longest.</li> </ul>
Asterotheca melanurus	<ul> <li>Anal fin on this fish begins under the space between the dorsal fins.</li> <li>Are slender, stiff-bodied and gray in colour.</li> <li>Are 13cm at their longest.</li> </ul>
Bathyagonous infraspinata	<ul> <li>Have 8 spines below each eye.</li> <li>Anal fin begins below the first dorsal fin.</li> <li>Grayish color</li> <li>Can be up to 12cm long</li> </ul>
Xeneretmus latifrons	<ul> <li>Characteristic black margin on the first dorsal fin.</li> <li>Body is pale gray.</li> <li>Can reach lengths of 19cm.</li> </ul>

# Sites

• Found on shallow rocky and intertidal shores to sandy or muddy substrates at considerable depths.

## **Collection Methods**

Poachers can be caught by fish trawl.

Mortality is high due to hemorrhaging.

• If the trawl is towed at a shallower depth (10 to 20 meters), for a shorter period of time (10 minute maximum), and the net is pulled in slowly, the survival is drastically increased.

## **Transport**

Please follow transport and handling of fish SOP.

#### Holding

- Held in continually flowing seawater.
- Lids are necessary.
- Sandy or muddy substrate should be provided.

#### Feeding

- Feed on bottom-dwelling shrimp and other small crustaceans and worms.
- Very difficult to get poachers feeding on anything but live food
  - o Keeping poachers fed requires much time and patience.

## **Tank Cleaning**

Frequency: Once a month.

#### Procedure:

- 1. The poachers should be removed from the tank and placed into a holding bucket.
- 2. The tanks should be drained and the sides and bottom should be scrubbed and rinsed with warm freshwater.
- 3. The tanks should then be rinsed with cold seawater and allowed to refill, and the fish replaced.

# Other information:

#### 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 the 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). For example, MS-222 has a 5 -day withdrawal time for salmon above 10C.

#### **DAILY ACTIVITIES:**

- Ensure water is flowing into the tank at a reasonable rate.
   Ensure the standpipe is in place and not blocked.
   Check for and remove any dead animals.

- 4. Check for and remove any uneaten prey organisms.
- 5. Check for and remove any foreign organisms.

SOP # - OSTE11 K. Bartlett March 2008