

SOP

Beach Seine

Purpose:

Describes the procedure used to catch and transport fish from a beach seine site to BMSC with the least mortality possible,

Policy:

This method is recommended for the collection and transport of fish caught by beach seine.

Responsibility:

Public education assistants, animal care specialist, researchers, and university programs students

Materials:

Beach seine net
2 ropes
Dip nets
Buckets
Hip waders

Procedures:

Note: Many delicate species are found in beach seine (eelgrass bed) sites. These sites are nursery areas for many species of fish. In the spring, great care must be taken not to impact salmon smolts (This means immediate release with no loss of scales).

1. Person A will stay on the beach with one end of the seine net. The other end of the net remains in the boat and the driver brings the boat from the point A where person A is on the beach, out and around, in a semi circle to a point B, 30 ft up the beach, to person B. (If the tide is low enough, this can also be done without a boat by persons in hip waders)
2. The seine net is then slowly pulled in by persons A and B until the net is up on the shore. While pulling the net in, be sure the weighted side of the net drags along the bottom and the float side of the net stays at the surface.
3. Several buckets of clean water should be filled prior to seining. Often the seine will stir up sediment, and making it difficult to fill buckets with clear water. If there are enough people present, someone should be assigned to ensure the buckets are ready and to immediately begin to recover fish once the net is brought in.

4. Fish should immediately be put into buckets. A small amount of seaweed should be added to the bucket to give the fish a feel of safety (cover). This will help in recuperation. Any by-catch should immediately be released. If the by catch appears to be injured or disoriented give it time to recover (5-10 minutes) in a bucket of cold seawater. Be very careful not to disrupt slime layer or scales of fish through handling.
5. Fish to be transported to BMSC should be put into buckets and transported as soon as possible. From the time of capture, one quarter of the seawater should be refreshed every 20 minutes. This will keep the water oxygenated and cold. Refreshing seawater from the boat on the way back to BMSC is often a good option.
6. Once the fish are at BMSC, they should be transferred to aquariums with flowing seawater, substrate to hide in and seaweed for cover. It is the researchers/instructors/TA's responsibility to ensure that all animals collected are kept in as low stress conditions as possible, including having appropriate food and habitat.
7. Potential seine sites should be checked with BMSC staff to ensure ongoing research is not disrupted.
8. Collection records must be filled out in the BMSC collection record database.