

SOP

Trawling

Purpose:

Describes the procedure used to catch and transport fish and invertebrates from a trawl site to BMSC with as little mortality as possible.

Policy:

This method is recommended for the collection and transport of benthic fish and invertebrates (prawns, shrimp, octopus, stubby squid, few species of crab.) from a trawl site to BMSC.

Responsibility:

Public education assistants, animal care specialist, researchers, university programs students, university programs coordinator, Alta skipper.

Materials:

Trawl net
Buckets
Flowing sea water

Procedures:

Note: trawls capture some invertebrates, but mostly are used to catch bottom fish and shrimp.

The following method is used to minimize the impact on the animals.

1. A small trawl size is used. The length of time trawling should not exceed 5 minutes from the time the trawl is on the bottom to the time that the net is pulled up. Shorter trawl time prevents animals being crushed or suffocating in dredge.
2. Once the trawl net is brought on board, the contents are dumped into a large sea tray with flowing seawater. The animals should be sorted through immediately in order to prevent continued crushing and suffocation.
3. Animals that are not targeted should be immediately returned to the water at the same site they were collected. Releasing animals in a clump increases their chances of survival as opposed to being released individually (a lone animal dropping to the ocean floor is much more likely to be predated upon).

4. If animals (fish) have air bladder expansion they should not be released as they cannot swim down to safety and will be vulnerable to predation. These fish should be brought back to BMSC to recuperate. Recuperation tanks are available on site and animal care staff can return fish if investigator is unable. Even severe damage (i.e. extension of intestines out of anus or out of mouth) can be reabsorbed and corrected within a couple of days recovery.
5. Buckets must have their water refreshed every 10 minutes with flowing seawater until they reach BMSC.
6. Fish that are to be brought back to BMSC must be contained in Alta sea tray with flowing seawater, or in buckets. Lids or screens must be used to prevent fish from jumping out of containment.
7. Once at BMSC, the animals should be immediately transferred to aquariums with substrate, seaweed for cover and flowing seawater. These animals should be provided with at least 24 hours recovery time before the commencement of any experimental procedure.
8. Collection records must be entered into the BMSC website collection record database.
9. Upon termination of research at BMSC the surviving animals must be returned to the site they were collected.