

Algoma University Animal Care Committee	
AU #0025 Fish Collection via Seine Netting	
Issue date: July 2013	Last revised: March/2025

1. Purpose

Seine netting is an active sampling technique that traps fish by encircling them with netting. A seine net is weighted at the bottom by lead weights or a leadline and has floats attached to the top of the net. Many seines also contain a bag in the middle that helps to concentrate fish within the bag while the net is being closed. can allow for the assessment of fish community assemblage, provide a technique for the collection of individuals for streamside experiments, or allow for the establishment of captive populations. Seining can be performed in streams, rivers, and lakes. This protocol is designed to outline the ways to safely operate a seine net to capture fish.

2. Policy

CCAC guidelines and regulations

3. Responsibility

It is the responsibility of the Principal Investigator to ensure that this SOP is followed and that those handling fish are appropriately trained to do so.

4. Training Required

Animal Research Ethics
Handling/training in the relevant technique

5. Materials Required

Seine net (e.g., 30ft x 6 ft, 1/8 inch mesh bag seine is suitable for acquiring adult minnows)
Buckets or coolers for fish holding
Life jackets
Waders
First aid kit
Cell phone
Tapestry thread and needle

6. Procedures

1. Assess the seining location to ensure there are no large objects or debris in the transect to be seined (e.g., fallen tree, large rocks).
2. Two individuals must operate the seine at all times.
3. Unfurl the seine net. Orient the seine so that the poles are upright, the floats are at the top, and the weights (lead line) are at the bottom. Ensure the net is not tangled in any location.

4. One individual will walk into the water until the net is fully extended or to a depth of water that reaches their waist (whichever comes first). The other individual will enter the water near the shoreline. The net should be perpendicular to the shoreline and hauled with the current.
5. Both individuals will walk parallel to the shoreline until the net is fully extended. Continue walking parallel to the shoreline pulling the net along by the poles. The bottom of the poles should be in the substrate and the poles should be held a 45-degree angle away from the direction of movement. Continue hauling the seine until the transect has been completed. If you reach deeper water, adjust your location to ensure the water is never deeper than waist height. The length of the transect will vary depending on the goal of the work.
6. In areas where there is a rocky bottom that can snag the leadline, having a third person follow behind the net and free it from snags can help to prevent the loss of fish.
7. The individual furthest ashore will begin to walk towards the shoreline. Both individuals will bring their poles together, crossing them over one another to form an X shape on the edge of the shore.
8. Pull the seine in by bringing the lead lines together and pulling the full bag to shore as quickly as possible.
9. Keep the bottom of the bag submerged at all times and slowly roll the netting up until you can visualize the organisms that have been sampled.
10. Sort through the fish as efficiently as possible either in the waterway or by transferring the captured fish to a container on shore filled with water from the sampling site. Any fish that are being collected can be placed in an aerated bucket or cooler with water from the sampling site. Bycatch should be counted and released.
11. Inspect the net fully to ensure that all organisms have been released.
12. At the end of the seining event, lay the net on the shoreline to allow it to fully dry in the sun. Inspect the net for any holes and repair them with tapestry thread at your earliest convenience.
13. Furl the net for storage.

6. Safety Considerations

Before travelling to any field sites for the day, the Principal Investigator/Team Leader must be notified that you will spend the day in the field and which sites you plan to visit. You must also notify the Principal Investigator/Team Leader when you have returned from the field.

When working in the field, always use the buddy system.

Inspect the site to be seine netted and make careful note of water conditions, potential danger zones, and type of substrate. Do not seine net in water that is more than waist deep, or areas that have large woody debris in the water (e.g., large tree trunks, submerged large branches etc.).

When working around water, you must wear a flotation vest. When you work in the water, you also need to wear a pair of waders.

Do not wade through water that is deeper than your waist height and faster than 50 cm/sec.

If you slip or fall in shallow water, try to stand up right away. Wade out to the shore as soon as possible and change clothes. If you cannot stand up, do not fight the current, float down river to a shallower area, stand up and wade out to the shore.

If you have been hurt during the fall, have your co-worker assess the extent of damage. Small cuts and bruises can be attended on site with the help of a first aid kit. If the extent of damage is larger, keep the affected person comfortable on the shore, dial 911 from a cell phone and wait for the arrival of emergency personnel.

REVISION HISTORY		
Revision #	Revision Date	Summary of Changes
1	July 2013	Accepted with no comments
2	October 2018	Accepted with no revisions
3	April 2021	Changed numbering
4	July 16,2024	Reformatted to new SOP template
5	October 30, 2024	A basic description of what material and size of net being used. How will you transfer the catch after the bucket? What type of bucket and transfer means? If injuries do occur what do you do refer to SOP regarding euthanasia that pertains to other species or if a different species added that SOP to include. Bycatch issues need to be addressed.
6	March 25, 2025	Revised entire SOP addressing the comments from October