

Spiny surveillance monitoring: Sourcing your plankton net

Ensuring that you have the right net size and mesh diameter is important for increasing the detectability of spiny water fleas and for conducting efficient surveys.

- Size: The mouth (opening) of the net can vary but it should be at least 12 inches (30 cm) in diameter. The length of the net may also vary but one that is about 3 feet (1 meter) in length is ideal.
- Mesh: The mesh walls of virtually all nets purchased from commercial suppliers are
 constructed of Nitex and they come in various gauges measured in microns. Anything
 from 300 to 500 microns will work for collecting spiny water fleas, if present. 500
 microns is the ideal mesh size, because organisms smaller than spiny will pass through
 and you will be less likely to have a clogged net from algae and other smaller particles.
 Sorting your sample will also be much easier.

For our purposes (presence/absence sampling) a "student plankton net" style net is best. This uses a drain hose attachment at the bottom of the net instead of a collection cup (aka the 'cod end' of a net used for quantitative sampling).

Recommended source

<u>Aquatic Research Instruments</u> in Hope, Idaho is currently the only supplier we know of that makes nets according to these specifications. Again, similar style nets will work, but if you want a net that is optimal for this project, this is your best and likely only source.

All nets are made to order by hand and spring is an exceptionally busy time for this tiny company. If you intend to order a net from this source, orders must be placed as soon as possible to ensure you have your net in time for sampling starting in August and September.

Product: Spiny water flea sampling kit (includes ballast weight, collection tube and clamp, mesh

carrying/storage bag, and rope for lowering net)

Cost: \$335, shipping to any MN address: \$35

Contact: Will Young: hydrobio@aol.com

Website: aquaticresearch.com

The spiny surveillance net is not currently listed on the company site, you need to email **Will Young** at the email listed and **ask to order the spiny water flea plankton net**. Mention that you are a part of the MAISRC program.

Other Sources for plankton nets

• Forestry Suppliers: https://www.forestry-suppliers.com/c/plankton-nets/18-156-853