

Macroinvertebrate Monitoring Gear

Updated August 2026

For each monitoring team, you will want the following gear.

Overall note: 500 μ m mesh are acceptable but tend to hold water and fine sediments, so be warned in agricultural or mucky stream. These nets are also easier to find however.

Optimally, find a net ranging from 800-1000 μ m mesh for volunteer monitoring. Multiple net options are included below because they often go out of stock.

Item	2026 Price	Source	Notes
D-Frame Collection Net Option 1	\$240	https://www.coleparmer.com/p/wildco-d-frame-aquatic-dip-nets/54689?Ntt=D-frame+Multifilment+500+Um+(epa)+Net	Standard D net, wood.
D-Frame Collection Net Option 2	\$160	https://store.sciencefirst.com/d-frame-w-shroud-800x900-with-52-handle-and-frame	Standard D net, wood
D-Frame Collection Net Option 3	\$114 for base, \$20 for net	https://ecologysupplies.com/products/aquatic-net-base-d/	Standard D net, wood
Tri-Frame Collection Net Option 4	\$160	https://store.sciencefirst.com/tri-net-800x900mm-w-52-hndl-net-with-52-handle	Triangular net
Waders	\$50–125	Amazon or sporting goods stores	Get several sizes. Chest waders can last many years with proper care.
A container to hold most of the team's equipment	\$10-25	Hardware stores or general merchandise stores	5 gallon buckets are standard, but a variety of bins can serve this purpose.
Sorting Trays option 1 (small white tray)	\$20–40	Amazon or appliance stores	White trays 2–4 inches deep. Four trays per 4-5 person team.
Sorting Tray option 2 (Refrigerator Tray)	\$20-\$60	Stores that sell refrigerators. https://www.homedepot.com/b/Appliances/Pan/N-5yc1vZbv1wZ1z1bx9p	Very large trays useful for 2-3 people at a time
Featherweight Forceps	\$6.50 each	Scientific supply companies, for example: https://www.forestry-suppliers.com/p/53809/53021/forceps	At least three per field group.

Eye Droppers	\$3.99 for 20	Amazon, Rienar White 3 ML Plastic Eye Dropper https://www.amazon.com/Rienar-Disposable-Transfer-Graduated-Pipettes/dp/B00P7QZDK4	Plastic droppers can be trimmed to enlarge openings.
Specimen Jars	\$0.40 each	The Cary Company https://www.thecarycompany.com/2-oz-38mm-38-400-natural-pp-jar	2 oz plastic jars with airtight seals.
Lids for Jars	\$0.40 each	MJS Packaging https://www.mjspackaging.com/product/phenolic-bakelite-closures/	These lids fit Cary jars well. Be sure to get Polyseal/Polycone to prevent evaporation. (Don't order the lids from Cary Company; the fit is loose).
Soft-bristle brush	\$4-6	General merchandise stores	Useful for scrubbing rocks and branches.
Ice Cube Trays	\$5-10	General merchandise stores	Optional for field sorting.
Reusable water bottles	\$2-10	Donations or stores	Helpful for rinsing samples and debris.
Tarps/plastic sheeting	\$20	Hardware stores	Optional seating area for volunteers.
Garbage bags	\$10-20	General merchandise stores	Optional trash collection.

Decontamination Kit Contents

The following equipment represents the minimum decontamination supplies.

Item	Typical Price
Three to five-gallon bucket	\$5-10
Lint roller	\$2-4
Spray bottle for diluted bleach or Formula 409 (8 oz or larger)	\$1-5
Spray bottle for tap water (16 oz or larger)	\$1-5
Soft-bristled scrub brush	\$4-6
Hoof pick	\$5-10

Other Gear to Have Handy

Optional equipment and supplies useful for monitoring activities.

- Ethanol (70%) preservative
- Reel-style measuring tapes
- Yardsticks
- 5-6% household bleach (replace yearly)

Macroinvertebrate Bibliography

- Voshell, J.R. Jr. 2002. A Guide to Common Freshwater Invertebrates of North America.
- Bouchard, R.W. Jr. 2004. Guide to Aquatic Invertebrates of the Upper Midwest.
- Hilsenhoff, W.L. 1995. Aquatic Insects of Wisconsin.
- Merritt, R.W. and Cummins, K.W. An Introduction to the Aquatic Insects of North America, 5th ed.