

“How To” Bug Preservation

Supplies Needed:

- * Vials (glass) with screw caps
- * Ethyl alcohol
- * Glycerin
- * Eye droppers
- * Small funnel
- * Labels
- * Permanent marker

Ethyl alcohol, glycerin, eyedroppers, labels, and markers can be purchased at your local pharmacy. Funnels and glass vials can be purchased from www.carolina.com.

How To Make Your Preserved Macroinvertebrate Collection:

1. Fill vial 2/3 full with ethyl alcohol.
2. Add bug specimen to vial.
3. Add several drops of glycerin. (2-3 for small vials and 4-5 for medium vials)
4. Seal lid.
5. Label specimen jar.

Note: The glycerin is necessary, as it will help to keep your specimen from becoming brittle.

Uses For Your Specimen Collection:

Eye catching booth display piece

“Interesting” things generally fascinate people. For those who have never taken a close look at aquatic macroinvertebrates or those who know them well, this is a great way to engage them and discuss with them the importance of water quality to all living things.

Identification Practice

Having specimens is a great way to practice your identification. Test yourself or your chapter members who may be doing stream monitoring and are looking to strengthen their identification skills.

Turn Your Specimens into Identification and Trivia Games

Rather than labeling your specimens with their name, label them with letters or numbers and have people who stop at your booth see if they can guess what they are.

You may want to give them clues to help them out; these could be written on paper and located next to the vial.

You may want to have the booth attendees have the answers available to them for verification. Or you may want this to be an activity that does not need any monitoring and you can put the answer on a sheet or board that is turned over, opened up, etc. that the guesser can look at to see if they are correct. You may also want to include some details about the bugs' pollution tolerance, choice feeding patterns and habitats, etc., to help educate the public about macroinvertebrates and their importance.

There are many more options and uses for these fun and exciting bugs so let your imagination guide you and share your ideas with other IWLA members.

Helpful Izaak Walton League of America Resource Publications:

A Volunteer Monitor's Field Guide to Aquatic Macroinvertebrates

This handy reference tool is designed to help volunteer monitors identify aquatic macro invertebrates when conducting water quality surveys. The laminated brochure is convenient and durable for outdoor use. The diagrams of the macroinvertebrate larvae and adults are grouped by biological type and display common features that characterize each. Symbols indicate the relative pollution-sensitivity categories (sensitive, less sensitive, and tolerant) based on the general Save Our Streams classification system. Diagrams are accompanied by descriptions for easy and accurate identification in the field.

McDonald & Woodward Publishing Company
431-B East College Street
Granville, Ohio 43023
(800) 233-8787 (voice)
(740) 321-1141 (fax)
mwpubco@mwpubco.com

A Guide to Aquatic Insects and Crustaceans (previously *Monitor's Guide to Aquatic Macroinvertebrates*)

Now in its second edition—fully updated under a new publisher and with a new title—*A Guide to Aquatic Insects and Crustaceans* continues to assist volunteers with biological water quality monitoring. It is also reaching a wider audience, including those who are interested in aquatic macroinvertebrates for other purposes, such as fly-fishermen trying to match hatches, naturalists exploring local waters, and educators and students.

Whatever your interests, this guide will help you learn more about the insects and crustaceans that live in freshwater streams, lakes, and rivers. Within these pages, you will discover an excellent resource for biological monitoring as well as a helpful tool to assist you in your underwater exploration and discovery.

Stackpole Books
5067 Ritter Road
Mechanicsburg, Pennsylvania 17055
www.stackpolebooks.com
(800) 732-3669