

## How to Make a Sampling Pole

Sampling the water at your lake or pond can be a relaxing and rewarding experience. However, occasionally you can be faced with a very frustrating, or even dangerous situation, if sampling sites are located in especially hard-to-reach areas. Often, tributaries flow in areas that are either obstructed by vegetation, surrounded by unstable and unsafe footing, or simply unpleasant to venture into. If you have ever been faced with one of these arduous sampling tasks, you may benefit from using a sampling pole!

Normally, to sample a tributary, a big white bottle is filled by scooping surface water from a flowing area of a stream. This requires the volunteer to crouch on the stream bank, or to step into the waters of the tributary. Ideally, this task should be relatively simple and safe. Often times, however, this can mean climbing down steep embankments, crawling on dam structures, or balancing on slippery rocks. In these cases, a sampling pole can be used to help reach appropriate sampling areas without putting oneself in a dangerous or unpleasant situation. A sampling pole simply acts as an extension of the sampler's arm, since the sampling bottle is attached to the end of the pole. Tributary water can then be scooped into the bottle from a much greater distance than if using the normal method.

If you often find yourself in precarious tributary sampling situations, DES suggests that you consider using a sampling pole to assist you during your monthly sampling events. This helpful tool can be bought; however, it is easy to construct and can make your sampling job a much more pleasant experience! Just follow these simple instructions, as adapted from the Massachusetts Department of Environmental Protection (MADEP).

### **Materials:**

- Aluminum extension pole that extends 4' to 8' is recommended. Available in most hardware or home centers, usually used for window washing or painting.
- One-handed C Clamp (quick release), which will hold a 3 ½" sample bottle
- 2 bolts
- 2 steel washers
- 2 neoprene washers
- Friction tape
- Waterproof glue
- Drill
- Screwdriver
- Pliers

### **Instructions:**

1. If there is a threaded end on the aluminum pole, remove it (a drill should work).
2. Drill two holes through the end of the pole and the clamp handle, making sure to match them up so they can be connected. Be careful to drill your holes through the clamp handle WITHOUT the release lever.
3. Attach the clamp to the pole using the nuts, bolts and washers. The neoprene washers should be in contact with the plastic clamp handle to prevent cracking as the bolts are tightened.
4. Add a drop of waterproof glue to the end of each nut (if you are not using lock washers).
5. Finish by adding friction tape to the inside of the clamp's jaws to prevent the bottle from slipping.