

Important

In order to deploy an eel mop, you must first have a scientific collection permit from the NYS Department of Environmental Conservation. Contact Chris Bowser: chris.bowser@dec.ny.gov for details.

How to Make an Eel Mop

Instructions adapted from those of Mark C. Sullivan
and Kenneth W. Able of Rutgers Marine Field Station

What is an eel mop?

An eel mop is a structure designed to hold juvenile (glass) eels. The eel mop mimics suitable habitat for glass eels leading eels to swim inside for a safe haven from the open waters. Eel mops are used to monitor the presence or absence of eels in a body of water.

How to use a eel mop:

- Fill a large empty tub of water from the body of water you are sampling in.
- Place the eel mop in the tub of water
- Give the mop 30 good shakes into the tub (this should flush out any eels that are inside)
- Slowly pour the water from the tub over an aquarium net. (This is easier done with two people, one to pour the water and one to hold the net.)
- Count the eels in the aquarium net. Make note of any variations in size or color.

How to make an eel mop

Materials:

- Brown polypropylene rope (25 ft length, 5/8 in. diameter)
- Plant Saucer (12 in.)
- Cable ties (15 count, medium sized)
- Eyebolt (5/16")
- Washer (5/16")
- Extra rope (cut to desired length)
- Pie Plates
- Cement

Cut the Polypropylene Rope into 15 equal lengths (cut every 20 in. of rope)





Unfurl the rope completely so that each fiber is separated

It is pretty time consuming to unfurl all of that rope, ask your friends to help or hand some rope out to your coworkers during a meeting

Rubber band it

After each bundle of rope is unfurled fold the bunch of rope in half and rubber band it so that there is a loop at the top.



Mark the Plant Saucer

Mark the Plant saucer with 15 pairs of evenly spaced holes



Drill Holes

Drill holes into the Saucer, make the holes as small as possible but large enough to pass the cable tie through



Drill yet another hole

Drill a hole in the center of the planter. Make sure the hole is big enough to pass the 5/16" eyebolt through



Attach fibers to saucer

- Place cable tie through a hole in the saucer
- Thread the cable tie through one of your unfurled bundles of rope (pass it through the eyehole created by the rubber band).
- Place the cable tie through the other hole and zip shut.



Repeat...

Keep attaching the fibers until you have all 15 sections attached to the saucer.



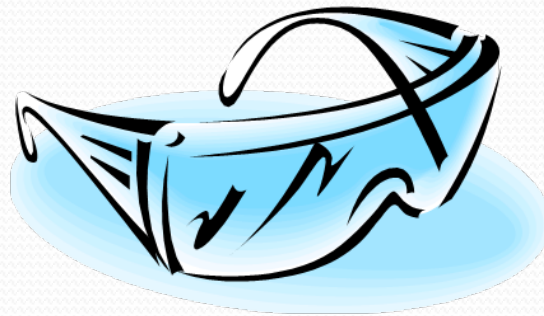
Remove rubber bands

You may remove the rubber bands once they are all firmly zip tied to the saucer



Now its time to mix cement

Make sure you have proper safety equipment. Consider mixing cement outdoors to avoid breathing in toxic fumes. Make sure to wear gloves and a face mask.



- Mix up enough cement to fill your pie tin.
- Carefully pour wet cement into your pie tin. After 2 minutes place your pencil (wrapped in plastic to avoid sticking) directly in the center of the pie tin, make sure it stays upright. You may need to break the pencil in half so that it stays in place easier.



Check on your pencil

Every 5 minutes for the first hour your cement is drying give the pencil a wiggle to make sure the cement doesn't dry around the pencil



Attach cement weight to saucer

- After the cement is dry you may pop it out of the pie tin. Remove the pencil as well.
- Attach the cement weight to the planter using the stainless steel eyebolt. Use the washer as well.
- The eyebolt should be on the same side as the poly rope, the washer and bolt should be on the side with the cement.



Attach Rope

Attach rope to the eyebolt on the eel mop. Make sure you make it long enough to tie it off to a tree or railing. Size of rope will vary depending on where you plan to deploy your mop.





Hooray!

Congratulations, your eel mop is ready to be deployed!

But remember,

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