

How to start a monofilament (fishing line) recycling program

There are 2 potential components to a fishing line recycling program:

1. Indoor (cardboard) recycling containers.
2. Outdoor (PVC) collection stations

Bin construction instructions
(below)

Bin Materials and
Specifications (following
instructions)

Indoor Bins (Cardboard)

The cardboard recycling containers are available at no cost from Pure Fishing (the parent company of Berkley) by calling Karen Afinson at 877-777-3850 ext. 8419, or Pat Durrett, NC Clean Marina Program Coordinator at 252-808-2808 for assistance.

These bins are approximately 3 feet in height, 17 inches wide and 17 inches deep. The display holds 2 cardboard boxes; one for fishing line and the other for spools. Both boxes have UPS postage-paid labels. When they are full, they may be sealed and picked up by UPS for shipping back to Pure Fishing in Iowa for recycling. The best locations for these boxes are tackle shops and marinas. Pure Fishing is willing to send out quantities of these to individuals who are starting recycling programs.

Outdoor Bins (PVC)

The outdoor (PVC) stations are made of PVC pipe. If you construct your own bins, please use the included instructions and materials so that your bins will be similar in appearance to existing bins.

Monofilament recycling bin assembly and installation

Assembly:

- Cut PVC pipe into approximately 2' long pieces using a hacksaw, reciprocating saw (metal blade; 12" long blades work well), bandsaw or table saw. Use a deburring tool or sandpaper to remove PVC "burrs" around edges.
- Working in a well-aerated area, apply PVC glue to inside (non-threaded part) of adapter. With adapter sitting squarely on the ground, press the pipe down into the adapter until snug. Note that PVC glue works by dissolving the PVC, then sets rapidly, so you don't have a lot of "play" time with it.
- Apply PVC glue to the inside of one end of the elbow (it does not matter which end). Press the elbow onto the pipe. Try and make sure that any blemishes on the pipe end up on the back side of the bin.
- Apply stickers.
- Drill 2 holes (about 1/4 or 3/8") in the center of the screw plug. Thread plug into adapter.

Installation:

- Decide where you are going to install the bin and sign. Using a long drill bit (8"), drill 2 holes in the supporting wood (post or railings). The holes should be placed such that the upper hole will line up with the lower part of the elbow and the lower hole lines up with the collar of the adapter. Drill a hole through the base of the elbow at the back of the bin.
- Use bolts or all-thread to attach the bin to the post at the top hole. Lok-tite may be used on the threads to try and keep the nuts from coming loose.
- From the back side of the post, drill through the existing hole and through the collar of the adapter. Use a second bolt or piece of all-thread to attach the bin through these holes.
- If using all-thread, use a reciprocating saw or bolt cutters to cut off the excess material.

Alternate method of installation:

In relatively secure areas (paid-access fishing piers, for example), or where you must attach the bin to a concrete railing, you can use long cable-ties (tie-wraps) to wrap around the post and bin in 2 or 3 places. You can purchase tightening tools for the cable ties which will allow you to get a snug fit. The cable ties are available from Home Depot in 34" and 48" lengths. The excess part of the cable tie should be cut off using the tightening tool or snips.

Deterring vandals

You can help prevent removal of 4x4 posts in one of two ways: 1. Use concrete to help set the post in the ground; 2. Nail or screw a piece of 2x4 perpendicular to the 4x4 post, as close to the ground as you can. This will prevent people from being able to rock the post back and forth.

If the container is attached to a pier/railing, you can attach a 2x4 or 4x4 to the pier adjacent to both sides of the container—this helps stop people from rocking the container back and forth and breaking it loose.

Suggested tool list

Tools listed as “optional” will make your life easier, but may be fairly expensive. However, if you or a volunteer happen to already own them, plan to bring them along!

Bin assembly:

- Hacksaw (there are specific PVC hacksaws which can be purchased from plumbing supply companies, but a regular hacksaw should work)
- Tape measure
- Sandpaper (any grit is fine; if purchasing specifically for this project, get 100 grit)

Optional: reciprocating saw with 12” metal cutting blade; OR bandsaw OR table saw with fine-toothed blade (the more teeth the better), de-burring tool (available from plumbing supply company)

Bin installation:

- Post-hole diggers (if installing 4x4 post)
- Cordless drill with long (8”) drill bit (3/8” preferred)
- Wrenches to fit nuts you will be using to install (2 wrenches or ratchets with sockets or combination of the 2)
- Hacksaw or bolt-cutters (if using all-thread)
- Screwdriver (or screwdriver bit for drill) (if attaching signs; use stainless steel screws)
- Cable-tie tightener (available from Home Depot online or at A/C supply companies) (if using cable ties)

Optional: Bucket and small shovel/trowel for mixing concrete, reciprocating saw with metal-cutting blade (if using all-thread)

Suggested items for volunteers who are collecting line from containers:

- Grocery store bags (to collect line)
- Nail clippers or small pair of scissors (to remove hooks, etc.)
- Large pair of pliers or large wrench (in case plug is too tight)
- Short stick with cuphook on the end (used to reach inside container and pull down line without having to put one’s hand inside it)
- Spray bottle with 10% bleach (for occasional rinsing of inside of containers)

CONSTRUCTION OF PVC FISHING LINE RECYCLING CONTAINERS

Materials needed (per station)

2' of 6" PVC pipe



1 6" elbow



1 6" female threaded adapter



1 6" threaded male plug



Glue the elbow to one end of the pipe and the adapter to the other.

Drill two holes in the plug and install hand tight. (this is for drainage in case water gets into the recycling container)