

HOW TO: BUILD A FISH CRIB

SIMPLE PROJECTS FOR CONSERVATION

THE IZAAK WALTON LEAGUE OF AMERICA

The late Gene Shove, an Illinois Ike and engineer, noticed that when plumbers in his area took their licensing exams, they had to assemble PVC pipes into certain configurations. But when they were done with the test, piles of discarded PVC structures sat at the dumpster. Shove had an idea: Use the discarded PVC pipes to build “fish cribs”—places where bass, bluegills, and other lake species could hide, feed, and reproduce, making for better fishing and aquatic health. Shove’s fellow Champaign County Chapter

members helped him assemble several fish cribs, and they worked with state biologists to install them in local lakes. Says Shove’s wife, Myrtle, “Gene’s plan was to distribute the idea so that other chapters could do it, too.”

Before starting this project, find out if there are similar plumbers’ exams in your state in order to obtain discarded pipes. If not, any discarded plastic materials that can create a solid structure could be used, so be creative.



ILLUSTRATIONS BY MARIA RABINKY

Note about PVC:

The use of PVC (polyvinyl chloride) has raised concerns due to dioxins that are produced when PVC is manufactured, chemicals that are added to make PVC pliable, and toxins that are emitted when PVC is burned. Other problems are associated with PVC made before 1977. None of these issues applies to using these pre-existing pipes for fish cribs. Placing the PVC pipes in the water, where they can serve a purpose, is one way to reuse them safely and productively.

Materials:

- Recycled PVC plumbing pipes, preferably already combined into boxy structures
- Other recycled materials, including vinyl window frames, house vinyl siding, or plastic drain pipes
- Discarded trees or branches to be used as filler
- Plastic cable ties, sold in bundles at home improvement stores
- Plastic bags
- Sand
- Rope or twine

Recommended tools:

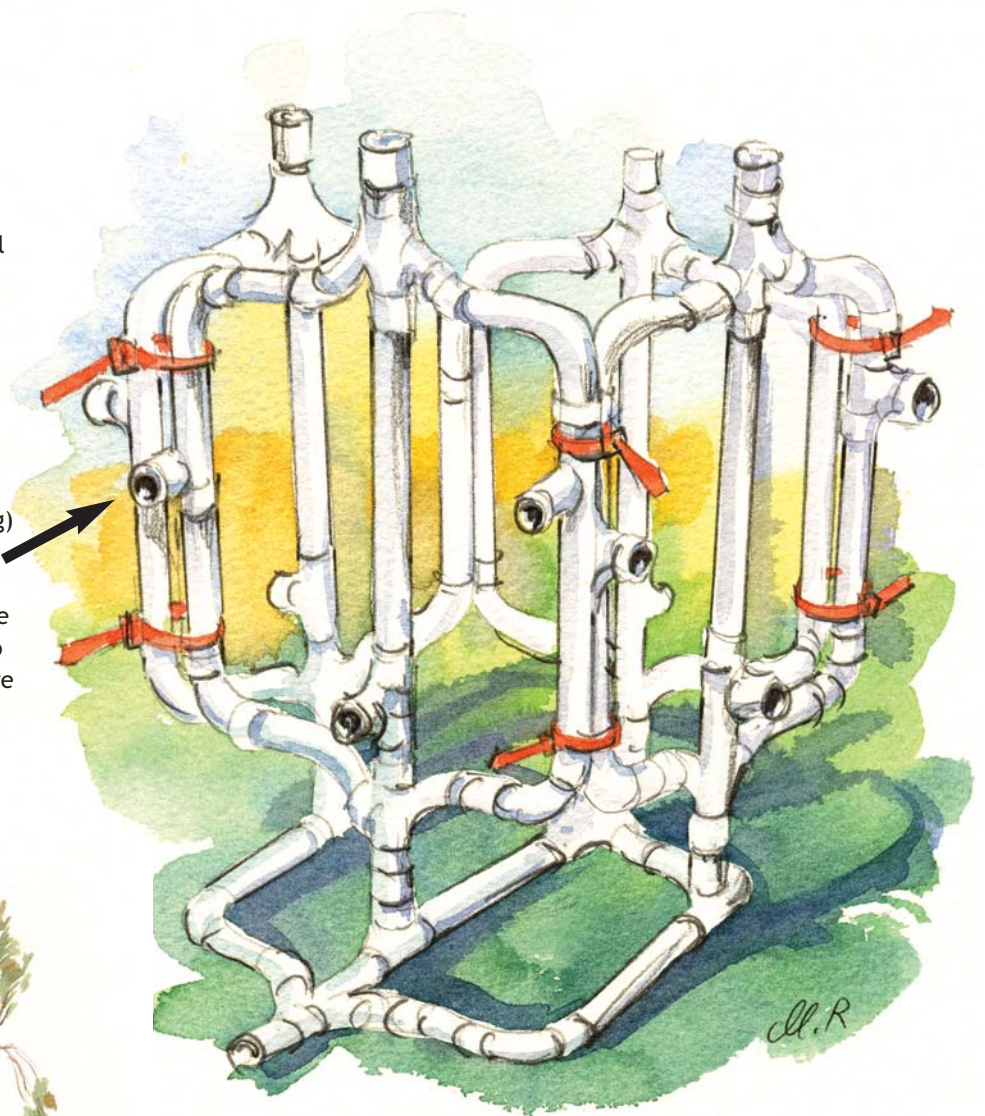
- Pliers
- Side-cutters
- Hammer
- Gloves
- Shovels
- Boats (for installing the cribs)

1. Assembly

Position the squares of PVC pipe so that each is one side of a cube-like structure. A house-shaped structure can work as well. Tie the sides together with twine first to stabilize the structure. Then secure them tightly with plastic cable ties near the corners, until the cube can stand by itself.

2. Making it sink

Use a hammer to knock off the ends of a couple of pipes (easier than cutting) to allow water to enter the pipes and prevent the crib from floating. Also, fill two plastic bags with sand. Tie each one tightly to a bottom edge of the fish crib to help weigh it down once the structure is in the water.



3. Adding filler

Add more structure to the fish crib by stuffing the center with other discarded plastic materials. Secure everything with cable ties so it doesn't separate in the water. Add some natural materials, too, such as dead trees or branches, for additional habitat.

4. Installing the fish cribs

Organize a workday with chapter members serving as boat drivers, loaders, and divers (optional) to assist in delivering the cribs to selected lakes. Be sure to work with local park officers or state biologists to determine which locations need fish habitat the most. These experts will also know what depth of water is ideal for the fish while not being an obstruction to boaters. Also, remember to recruit other volunteers, such as Boy Scouts, 4-H clubs, and local businesses looking to cooperate in conservation work.

5. Monitoring the cribs

Mark the site of each crib (a GPS system would be ideal for this) so that you can monitor it. The most direct way to check whether the crib is working is to have divers see if the structure is intact and if fish are utilizing it. Otherwise, send boats out periodically to try to pull up the cribs and check their condition.