

The Bass Federation
Project Advisory Team
Nursery Habitat Project

The following project to help restore precious nursery habitat has been developed and tested in the state of Tennessee by Project Development Team member and Tennessee Bass Federation Conservation Director Carl Guffey. Many of you already know that our national reservoirs, due primarily to age and natural decay, have started to show definite signs of deteriorating habitat. Stumps and tree tops that once provided great cover and food sources to every variety of aquatic species are nearly gone in many areas.

The potential for success versus the cost of implementation of this Nursery Habitat Project is excellent. Therefore The Bass Federation, Inc. would like to offer this project to all our member clubs for consideration.

Project Theory:

The project utilizes recycled Christmas trees (collected post holiday season) and strategically places them in a configuration which maximizes the available surface area of each tree, thus recreating some of the original structure that originally occupied most impoundments in the early years of their existence. The completed project will replenish important habitats that provide nursery areas for newly hatched fry and will also provide substrate for microscopic organisms, an important food source for young fishes.

Choosing a Site:

Site selection for your project should be along the shoreline or in the back of a cove or pocket in areas where newly hatched fry and young-of-the-year fishes are typically found. Project construction/placement should take place during fall/early winter when water levels are typically at their lowest point (winter pool) as lower water levels provide easier access to the project area and better working conditions for tree placement. Anticipate lake usage when choosing your project site. Avoid high-traffic areas (skiing, swimming, etc.) that might cause safety issues once the trees are planted and under water. Tree placement should generally be in shallower water (3 to 7 ft.), but trees should be mostly submerged when water levels return to summer pool.

Gaining permission for your project:

Although the water in most of our reservoirs and lakes is considered public, the land surrounding these water bodies is private. The majority of the reservoirs constructed across the country are “owned” by a controlling government agency such as the U.S. Army Corps of Engineers, Tennessee Valley Authority, state game and fish agencies or local water management districts.

These agencies often have regulations in place restricting placement of “unnatural” structures in the body of water. **Make sure you contact the controlling authority for permission prior to starting your project to create your nursery areas.** You will need to provide information such as the group name, project location, number of participants, and a brief description of the materials you intend to place in the reservoir. More often than not, the agency will be happy to work with your group to improve fish habitat and may even provide additional manpower, materials and equipment.

Get in touch with your state Conservation Director or Federation President if you are unsure which controlling authority to contact for the body of water you are considering.

Publicity:

Create a press release for your project, including “what, where, when, why, and who” topics, along with a contact name and phone number. Distribute the press release to all local media sources 2-4 weeks prior to the event. Invite the local press to attend.

Next, try and get as many volunteers involved as possible. We suggest your club/organization take this opportunity to engage as many youth groups in your area as possible. This is an excellent project to get kids off the couch and involved in the outdoors. Groups such as Girl/Boy Scouts, Junior Bass Clubs, 4-H Clubs, and School Outdoor Adventure groups, etc. are great sources of manpower for this project.

Collection of Materials:

Collection of trees can be as simple as taking out an ad in the local paper and offering a drop off point for people to bring their trees, or working with municipalities who would normally collect these trees during roadside pickup services. Local businesses might also donate trees, especially if you are willing to come pick them up.

Another potential idea is to make a fund raiser out of the project with a youth club. Offer to pay them a \$1.00 for each tree that they bring you, setting a predetermined number for them to reach. (A worst case scenario is you paid a couple of hundred bucks and now have a group of volunteers to put to work once you have collected the trees.)

Tree Preparation:

We suggest having a minimum of 50 trees available before you begin your project, with a maximum of 200 trees for your first attempt. (We don’t want to “burn out” your volunteers with an over abundance of work.)

Once you have your trees you prep each tree by trimming only the bottom 2 to 2-1/2 ft of the tree trunk. **One of the most important items in preparation is to leave approximately 3” to 4” of each cut branch protruding outward from the trunk.**

These “barbs” hold the tree into the ground; so it is important that you leave them in place. If the tree already has 2’ of bare trunk, cut the trunk off where the branches begin and begin trimming from that point, remembering to leave the “barbs”. We suggest having only adults use power tools to cut the trunks while younger volunteers use hand tools to cut the branches back.



Tree Planting:

Hole exactions should be as close to the low pool water line as physically possible. Holes should be 2' to 2 1/2' deep and 6" to 8" in diameter. Our best recommended method of digging the holes is to use a portable power auger and then clean the holes out with a hand post hole digger. Spacing the holes on a grid approximately 5ft. by 5ft. will allow the complete surface area of each tree to be utilized. Depending on the topography



and geology of the work location, groups of 20 to 50 trees can be assembled in a good days work.

Once the holes are dug, place the trees in the holes and then pack the remainder of the hole with the loose soil and rocks that you removed from the holes.

Any dirt/ rock material that is left over should be transported to an area above the "Normal Full Pool" line and secured with vegetation or with the planting of new seed. When you are finished be sure to try and leave the original slope of the land as it was when you arrived.

Documentation and Follow Up:

Take as many pictures of the group as possible during the project construction. When you are finished, distribute pictures to the volunteering groups along with a thank you note informing them of the next project work date/s! The idea is to build interest for the next event by informing as many people as possible. Once the water level has returned to normal pool and the trees are submerged, offer to take volunteers back out to the site in a boat to observe the progress of the project. Point out any algae growth and/or newly hatched fry migrating in the trees. By viewing this, the volunteers will gain a better understanding of the project's ecological value.

Don't forget to share your photos and results with the authority that gave you permission for the project originally. **Most importantly, whenever you write or speak about the**

Nursery Habitat Project, make certain to include every person/group/donator, etc. who assisted in the project's completion!

Summary:

This project is a great way to help make a difference in your local lake or reservoir. Taking on this project will go a long way in helping to restore habitat vital to every lake's eco system and will pay great dividends in the future. It is relatively easy, inexpensive, and a great way to engage volunteers from outside sources. The Bass Federation, Inc. highly recommends trying this project.

Contact us at conservation@bassfederation.com for questions or call TBF National Office at 580.765.9031