

# Proposal for Fish Habitat

## **ISSUE:**

With the current lack of aquatic vegetation in the lake, our Sport Fishery continues to be challenged as the fry of each species have little chance for survival after being hatched. Without the presence of cover for fry to hide from predators, the spawn populations will continue to decline. Habitat/cover small enough for fry to hide in, that other fish cannot access, is a necessity for their survival and our efforts to promote a healthy fishery. The Board previously approved this type of habitat/cover placement (milk crate structures/artificial vegetation weighted with concrete) which was focused in shallow water areas and under docks. The Lake Committee (LC) continues these shallow water placements as requested to further protect the newly hatched fry from various lake fish species. The LC is now requesting Board approval for placement of larger types of Fish Habitat/Cover at Lake Holiday in the 20+/- foot depth ranges. These placements will provide additional habitat/cover for bait fish and sport fish while also providing “Bank Fisherman” with greater opportunity for increased catch rates and success by drawing fish to the proposed habitat placement locations.

## **BACKGROUND:**

Essential fish habitat includes all types of aquatic habitat where fish spawn, breed, feed, or grow to maturity (<https://www.fisheries.noaa.gov/>). Lake Holiday currently has a good amount of fallen trees, docks, rip rap (chunk rock on dam) in the shallower depths along the banks. These areas are beneficial to mature fish, bait fish, and crayfish alike and offer protection primarily during spring and fall seasons. Fish also frequent shaded docks and the shallower areas at night, during low light times of the day, early morning, and late evening in the summer. As water temperatures become hot in the shallows during the summer a percentage of the fish will move out to deeper water. Fish are known to move up and down in the water column. Fish also frequent deeper water during the winter months. Dropping additional “deep water habitat” in strategic areas around the lake will provide more “housing” and “buffets” for a variety of species. Several Lake Holiday resident fishermen assisted in preparing 200 Christmas trees recently sunk by the Virginia Department of Wildlife Resources (VDWR) into the 117 acre lake at the Trilogy At Lake Frederick Community. Sinking brush piles (man-made and natural) and Christmas trees is a common practice for fishery habitat management groups across the country and State of Virginia (Lake Frederick, Lake of the Woods, Lake Anna & Smith Mountain Lake).

## **RECOMMENDATION:**

The Lake Committee initially recommends the construction and placement of this type of habitat in areas off the fishing/observation pier behind the clubhouse. The depth of the

lake in this area is between 20-30 foot. The two types of habitat proposed to be placed in the lake are 4 foot artificial brush/log structures and sunken Christmas trees. The brush/log is created by drilling a series of holes in a 4' cardboard tube. Grapevines are cut to length and inserted into the holes. Concrete is poured down the tube which is capped on the other end. When the concrete sets we have a simulated tree branch that will lay parallel on the lake bottom with less than 2 foot of height. We are proposing creating and sinking 5 of these brush/log structures. The Christmas trees will be anchored with 2-3 cinder blocks depending on the size of the tree. A hole is drilled through the tree trunk and large heavy duty zip ties are used to connect the tree to the blocks. We are proposing sinking a total of 8 trees. To ensure no contact with boat motors or swimmers, the tops of the sunken brush/log structures will have 18-20 foot and the Christmas trees will have 12-22 foot of water between them and the surface. All labor, supplies and materials will be donated by Lake Holiday resident/member fisherman and other LC Members. All future habitat/cover locations will be documented with GPS Coordinates, video and/or pictures and shared in a future Newsletter Article to document the project. We would also like to follow up with an underwater camera or scuba diver to check for future habitat success (presence of bait fish and sport fish) and consistency of our placements.

By creating additional Virginia Department of Wildlife Resources (VDWR) approved habitat/cover, Lake Holiday will not only benefit the fishery, but also provide a greater opportunity for community members (young and old) to enjoy their favorite pastime, waiting for the thrill of a tug on the end of their line and the accompanying smile when they land a fish.

**Please see the attached “Habitat Structure Photos and Location Map” for the Phase 1 proposed locations.**





**Geralyn Gallagher Vadell** ▸ **Lake Holiday Families (Cross Junction, VA)** ...

January 25 at 11:07 AM · Facebook for Android ·



This looks like a great idea! Is this something we should be doing for our lake?



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