

Driftwood Fish Habitat

Background

West Point Lake is a reservoir. As such, not enough fish habitat is present to allow young fish to complete the life-cycle for their species. There is little natural protection for young fry.

Ship 378, in cooperation with the West Point Lake Coalition, working with the US Army Corps of Engineers are adding fish attractors and fish habitat as part of Hornaday, Eagle, Quartermaster, Venturing Summit, and Venturing Ranger projects.

Though the projects are similar in construction, we are learning more about the environment were operating in to develop better methods of deployment while becoming more environmentally responsible and serving the needs of fish and fishermen.

As we try other projects on the lake, we're expanding our body of knowledge. These ideas are shared among types of projects resulting not only in leadership growth opportunities through Scout leadership projects, but in the Ship's and West Point Lake Coalition's understanding as well.

Situation Analysis

When looking around the shoreline, West Point Lake is full of trash. Most of it is plastic, though there are other types of man-made floating debris, including tennis balls. There is a lot of driftwood too. A lot of this debris flows into the lake as the Chattahoochee River flows through Atlanta. This condition is constant.

What is not constant is the location of the debris. Due to flood control operations through the dam, the water level rises and falls significantly throughout the year. In addition, flood conditions also modify water levels. This results in debris found on the shoreline or floating.

When the debris is floating, it interferes with the operation of boat motors. It is a lot easier to retrieve when water levels are down along a relatively dry shoreline.

Concepts

Based on recent Scout projects, we have determined the best time to create driftwood fish habitat is when the wood is on the shoreline. It also happens to be the best time to retrieve floating man-made materials too.

Creating driftwood fish habitat then provides at opportunities to remove trash and recycle plastic too.

Frequently, the Corps sponsors clean-up days. Normally, Ship 378 and the West Point Lake Coalition help. What we've figured out by trial & error is that bags of man-made debris must be removed to a common location for disposal. The idea of leaving bags on the shoreline for pickup is not working in practice.

Recycling

By far, plastic is the largest amount of man-made debris. Generally, the plastic is bottles used for drinking and oil. There are other types too, including coolers, toys, etc. These need to be captured for recycling.

Though we have figured out it's best to bag plastic separately as part of the clean up, what we don't know yet is how to get it to and ready for the recyclers.

Debris Removal

There are other kinds of trash too. If there is enough to collect for recycling, it should be considered, such as aluminum cans. Otherwise, it needs to be disposed of.

The best practice at the moment seems to be getting bagged trash to a boat ramp. The bags are then set behind the trash can for pick up. Though this works for a small number of bags, another method is probably more appropriate for larger scale clean ups.

Driftwood Habitat

There is a huge load of driftwood on the shorelines. We haven't figured out much to do with it, but we have determined it's a great source of driftwood to sink as fish habitat.

What we do know is water-logged driftwood will stay on the bottom. We also know methods used to sink must be durable enough to ensure the driftwood stays on the bottom until it becomes water logged. When the driftwood finally rots, the materials used must not be allowed to float to the surface, which could create other problems.

Operations

The intent of this paper is not to define the best way to do anything. First our body of knowledge on is increasing as we explore and exploit opportunities. We have that body of knowledge and it expands with each Scout project we conduct on the lake. However, a purpose of the Scout Leadership Projects is for a Scout to trying to solve problems or

determine better methods. Therefore there is no attempt here to declare any particular way to solve problems or make driftwood fish habitat. Both are a work in progress.

As part of an Eagle project, we tried sinking driftwood with nylon webbing and concrete blocks. We learned we need to figure out better methods of tying driftwood together, getting out to the drop sites, and holding the driftwood to the bottom. For this, the Eagle Project was an overwhelming success!

We need to figure out how to build bundles of driftwood on shore and get them to the boat to prepare for dropping. Though each piece of wood may be picked up by one person, the bundle is too heavy and bulky to handle alone.

The best time to build these bundles is when the water level is down. There are two water conditions to consider: warm and cold. Scouts like getting in the water to manipulate boats and floating driftwood when it's warm. Toward the end of summer is great time to consider doing this because water levels are intentionally dropped, starting at the beginning of September. However, our Ship operations preclude us from seriously consider lake cleanup when the water is warm. This is great opportunity for other Scout units, such as Troops and Venturer Crews though.

For Ship 378, the best time to try to do this is after mid October and before water levels rise again in January. It's clear Scouts will not be intentionally allowed in the water without proper thermal protection, such as wet or dry suits. Dryer methods of moving bundles to drop locations need to be used. The likely candidates are small boats, such as kayaks, canoes, or rowboats.

In addition to building and deploying fish habitat, man-made debris needs to be removed. There are trespassing issues to be concerned about. Legally, the shoreline up to 643 feet is controlled by the Corps of Engineers. Therefore, we can access any part of the water line without having to gain permission from property owners first. Given full-pool is defined at ~632', there is at least 10' of elevation—leaving plenty of shoreline to conduct shore-side operations from. In certain places, gaining landside permission is easier to obtain, such as with Camp Lumpkin—a Boy Scout camp. In those cases, vehicle removal of bags of trash is possible too.

Conclusion

Conservation of West Point Lake is a major value for Ship 378, the West Point Lake Coalition, Boy Scouts of America, and Army Corps of Engineers. Ship 378 intends to be the experts for Scout leadership projects in cooperation with these other organizations, and possibly others, such as the Chattahoochee Riverkeepers. For Ship 378, it provides us the opportunity to use our seamanship skills in a way that serves our community.

We've figured some things out by dropping fish attractors and erecting osprey nests. One of our Scouts knows something about building bird nests. We have determined there is a need for a lot of projects of these types on this lake. We also know every project can be intentionally made different and possibly adapted to explore other projects to be tried. As a result of one Scout's Eagle project, we were able to figure out major issues for creating driftwood fish attractors. By no means have we figured out the best or only way to do it. Therefore, there are a lot of opportunities to conceptually complete the same project but implement them in different ways.

Let full-scale projects for building driftwood fish habitat begin!