**Why creating a fish habitat is important**

We all know that big fish eat little fish. So, if you’re looking to increase fish populations or to draw fish to a specific area, the best thing to do is to enhance the structure and fish habitat in the area. Algae and insects flourish on structure. They’re food for smaller fish, which in turn are food for larger fish. Appropriate structure provides good habitat and is the building block of good fishing.

Placing fish habitat using structure and attractors at different depths yields different results. Good habitat in shallow waters (less than 12 feet) not only provides a place for algae and insects to flourish; it also provides areas of concealment for small fish from larger fish. Largemouth bass and crappie, for example, spawn in shallow water and stay there during most of their first year of development as they require areas of refuge survive and to mature.

Other species like shad and striped bass spend most of their lives in deeper and more open waters. Shad feed on plankton which flourishes in open water and striped bass feed primarily on the shad. These species do benefit as much from additional shoreline habitat since they are less dependent on shallow shoreline environments for food and refuge.

### How to improve the fish population around a dock?

Consider placing structure at various depths (5-20 feet). Deeper water structures attract larger fish but does not necessarily increase overall numbers, these types of structures are usually called fish attractors.

*Types of approved fish habitat include:*
- Bundled woody debris

### How to get permission to install habitat

Obtaining permission is a very easy process! Applications are available on [www.smithmtn.com](http://www.smithmtn.com). Install habitat only after permission has been granted. Failure to get a permit is a violation of Section 62.2.194 of the Code of Virginia.

#### Bundled Woody Debris

To make fish habitat using a bundle of woody debris, use cable (or nylon rope) and cinder blocks for anchors, wrap the cable around the base of the collected debris or trees, weave the cable through the cinder block to the starting point and tie. Using cable requires cable clips to secure the cable ends.

### Approved Artificial Structures

Not the do-it-yourself type? Check out the following websites to purchase pre-man made structures like Mossback Racks™, Aquacribs™, Berkley Fish Habs™, Honey Hole Trees and Bushes™ and Fish ‘N Trees™.

- [http://www.mossbackrack.com/online-store/](http://www.mossbackrack.com/online-store/)

Advantages of using artificial structures in the lake are boating safety, durability of structures, ease of installation and the tendency for lures not to snag. Disadvantages include cost and potential theft.

### Wooden structures

Wooden pyramids, such as those above can be made easily using 2” x 2” (or 1” x 1”) wood. Wooden pyramids should be placed under the stationary portion of docks so they do not become a navigational hazard.
Spider Blocks
Utilizing cinderblock, concrete and black piping, the spider blocks above can be made easily. Consider grouping a minimum of 5 blocks in a single location. Advantages include lack of snagging and cost. Disadvantages include lack of protection for small fish and ease of theft when placed in shallow water depths.

Items to consider before installation:
- Water depths fluctuate at Smith Mountain Lake. Although full pond is the 795-foot contour elevation, Appalachian operates the project utilizing a 2-foot power pool. Further, reservoir elevations fluctuate depending upon flows into the project. Historic water elevations can be found at http://www.aep.com/environmental/recreation/hydro/smithmtn.aspx. Structures should be placed so they do not cause a navigational problem when water levels are low.
- Location – Fish habitat must be placed under your approved dock or within all areas of your extended property lines with the exception of the 15-foot setback from each extended property or dock delineation line.

Benefits
- Improvements to the fish population and the health of the lake’s ecosystem.
- Improved fishing

Additional Information
Sites that have been improved with habitat enhancement may be visible at certain times of the year depending upon factors such as water levels and water clarity. These sites include most public boat ramps and the Smith Mountain Lake State Park (below R-14 at the Discovery Center). Hint: Wear polarized sunglasses.

For additional assistance, contact the Virginia Department of Game and Inland Fisheries at dan.wilson@dgif.virginia.gov.

Special habitat and enhancement projects by neighborhood associations or fishing clubs may be considered. Contact Appalachian (aepsmp@aep.com) for more information.

Email success stories to aepsmp@aep.com

Thanks to the following organizations for helping develop this brochure: