Claytor Lake: More than a Wide Spot in the New River

John R. Copeland, Fisheries Biologist, Blacksburg Office
April 1, 2015

Imagine yourself on a waterbody that is more like a wide river than a lake. When you do, you have a picture of Claytor Lake. Claytor Lake, a 4,363 acre reservoir, stretches northeastward from Allisonia across the Pulaski County countryside for about 21 miles to its dam near Radford. From Claytor Lake State Park, visitors view a sparkling lake, bustling with boating activity, with the top of Claytor Lake dam in the distance. Visitors who want to explore can ride 15 miles upstream to Allisonia, where the New River enters the lake (up to an hour’s ride from Claytor Lake State Park). Claytor Lake is shallow in areas upstream from Lighthouse Bridge, the only bridge that crosses the main lake (Pulaski County Route 672), so be cautious if you roam upstream from this bridge. Near the midpoint of Claytor Lake, the only major tributary, Peak Creek, enters the lake. If you are not familiar with Claytor Lake’s key locations, refer to the lake overview map on the last page of this report.

American Electric Power Company (now known as Appalachian Power Company) constructed Claytor Dam in 1939 to produce hydroelectric power from the incessant flow of the New River, installing 4 hydroelectric turbines to produce electricity. Because Claytor Lake is a main stem impoundment with a large watershed upstream, water passes through more quickly than in most large Virginia reservoirs. As a result, Claytor Lake has different temperature and oxygen levels than other nearby reservoirs like Smith Mountain Lake. Claytor Lake’s
temperature and oxygen levels are big factors for fishes like striped bass and hybrid striped bass that swim in its waters.

When Claytor Lake was first constructed, New River fish were trapped in the reservoir. Smallmouth, largemouth, and spotted bass, bluegill, black crappie, channel and flathead catfish, yellow perch, and carp flourished in this new environment called Claytor Lake. Most of these fish prefer shoreline areas of the lake. Due their hydropower operating license agreement with the Federal Energy Regulatory Commission, Appalachian Power Company maintains stable water levels in Claytor Lake between April 1 and November 30 to protect spawning habitat for shallow water spawning fishes like sunfish, crappie, and bass.

During the early years of Virginia Department of Game and Inland Fisheries (VDGIF) management efforts at Claytor Lake, fish were introduced to take advantage of the large open water areas in this lake. VDGIF fisheries biologists introduced alewife as a prey fish. Then, they stocked walleye annually to prey on the alewife. In 1996, walleye stockings were discontinued after a genetic study of walleye in the lake and the upstream New River found that a unique strain of walleye exists in the New River. Prior to this study, walleye stocked in Claytor Lake were from other areas of North America. Biologists managing the fishery feared that these other genetic strains of walleye would contaminate the unique New River walleye strain that produced state record walleye through the early 1990’s. Since 2004, VDGIF biologists have produced New River strain walleye in their fish hatcheries, so Claytor Lake is stocked with these walleye. Starting in the late 1960’s, striped bass were stocked as an additional predatory fish in the open waters of Claytor Lake. Annual stocking of stripers continues today. In 1993, fisheries biologists added striped bass hybrids (a cross between striped bass and white bass) to provide another open water predatory fish for anglers.

Claytor Lake offers something for every angler. Whether you enjoy working shoreline trees for bass and bluegill or trolling deepwater areas for striped bass, hybrid striped bass, and walleye, Claytor Lake is the place for you. Read on to learn about the mysterious waters of Claytor Lake and how to catch the fish that swim in them.

**Black Bass**

Largemouth, smallmouth, and spotted bass are the "bread and butter" fishes of this lake. Almost 50 percent of the anglers at Claytor Lake fish for these species. All three bass species in Claytor Lake are regulated by a 12-inch minimum size limit and anglers may harvest 5 per day (all three species combined). Anglers are encouraged to practice catch-and-release of trophy-size bass.

Claytor Lake’s largemouth bass populations have been stable over the past 10 years. During spring 2014 electrofishing, 71% of the largemouth bass collected over 8 inches long were over 12 inches, and 35% were over 15 inches long, so anglers should catch plenty of largemouth bass between 12 and 20 inches in 2015. Anglers can find largemouth bass in coves throughout the lake, but the best areas to fish are large coves in the lower lake, like Spooky Hollow and Texas Hollow, and the Peak Creek arm of the lake. The Claytor Lake record for largemouth bass was a 14-pound, 6-ounce giant caught in June 1991.
Claytor's steep and rocky shorelines create good habitat for smallmouth bass. In 2014, Claytor Lake produced 5 smallmouth bass trophy award certificates (more than 5 pounds or over 20 inches), as the second-best Virginia reservoir for trophy smallmouth bass. Good areas for smallmouth bass are the shoreline across from the mouth of Dublin Hollow, the shoreline between Spooky Hollow and Texas Hollow, and in Dublin Hollow.

Spotted bass in Claytor Lake do not grow as large as largemouth and smallmouth bass, rarely reaching 2 pounds in size. Spotted bass numbers are high in Claytor Lake, so anglers will catch them when largemouth bass fishing. Most of the spotted bass in 2014 electrofishing collections were 11 to 14 inches long. In recent years, Claytor Lake anglers have managed to catch some larger spotted bass, like the new state record pictured below caught in March 2012.

Mr. Rod Kegley proudly displays the new state record spotted bass he caught in Claytor Lake in March 2012. This spotted bass weighed in at 4 pounds, 7 ounces.

**Striped Bass and Hybrid Striped Bass**

Striped bass and hybrid striped bass are the second biggest fishery at Claytor Lake, with nearly 20% of anglers fishing for these 2 species. VDGIF fisheries biologists maintain these populations in Claytor Lake through annual stocking.

Claytor Lake produced 8 trophy award certificate size (more than 20 pounds or over 37 inches) stripers in 2014, ranking second only to Smith Mountain Lake. Dry years are difficult for stripers in Claytor Lake, since their preferred habitat (suitable temperatures and oxygen levels) disappears in most dry years due to the lack of flow from the New River upstream. Stripers can be caught year-round, although most anglers have their greatest success from late September through May. Water temperatures below 70 degrees produce the best striper fishing. Striper diet studies at Claytor Lake showed that stripers rely mostly on alewife and gizzard shad. Therefore, it is no surprise that Claytor Lake anglers experience the best success using these species as bait. Many stripers are taken with topwater baits (Redfins, Rapalas, etc.) and bucktails in the spring and fall. For best topwater action, fish points and flats adjacent to deep water. Trolling bucktails in 20-60 feet of water can produce good catches.
During the summer and early fall months of average and wet years stripers “hole up” in the middle and lower lake areas close to the lake’s thermocline (50-70 feet deep), where they find suitable temperature and oxygen levels. In dry years, stripers are unable to find suitable habitat anywhere in the lake during the summer months, so they roam the lake in search of suitable habitat. During summer, stripers are typically located from the mouth of Clapboard Hollow downstream to the dam. When the lake begins to cool in October, stripers begin chasing shad and alewife schools around the lake and are more difficult to locate. If you see stripers chasing shad at the surface, you can catch them on top water lures. In winter months, look for stripers in the middle and upper lake areas, from the mouth of Peak Creek up to Lighthouse Bridge. Find the bait schools and you are likely to find the stripers nearby. In March and April, and during times of high inflows, stripers run to the headwaters of the lake at Allisonia.

Claytor Lake is the top destination in the state for hybrid striped bass, producing 8 trophy award certificate size hybrids (more than 8 pounds or 20 inches) in 2014. Since they can tolerate higher water temperatures, hybrids often chase schools of shad at the lake’s surface at night in the summer months. Hybrid striped bass diets are very similar to striper diets, so they can be caught using the same techniques. In summer, hybrids are usually found either between Lighthouse Bridge and Peak Creek or between Felt’s Hollow and Hidden Hollow. In the fall, winter, and spring months, hybrids can be found throughout the lake.

White Bass and White Perch

White bass are occasionally found in Claytor Lake, but their numbers do not compare to historic levels. White perch were introduced to Claytor Lake from an unknown source during the last 12 years. These close cousins of white bass may be caught by anglers seeking white bass.

Striper, Hybrid, White Bass and White Perch Regulations and Identification

Harvest of stripers and hybrids is limited to 4 fish per day (the two species combined), all of which must be longer than 20 inches. White bass are regulated by a creel limit of five per day, with no size limit. White perch of any size may be taken in unlimited numbers. Anglers should study the differences between these fish carefully. Identification information is available at http://www.dgif.virginia.gov/fishing/virginiafishes/group.asp?group=2 or from our Department publication “The Angler’s Guide to Virginia Freshwater Sportfish”.

Walleye

Anglers can tie into schools of walleye at Claytor Lake. Some of these walleye are reaching trophy award certificate sizes (more than 5 pounds or over 25 inches). In 2014, anglers reported 9 trophy award certificate walleye caught from Claytor Lake. The improved walleye population is a result of Department fisheries biologists restoring New River strain walleye to the river upstream from Claytor Lake. Some of these walleye live in Claytor Lake for much of the year, then run up the New River in February, March, and April to spawn. During fall, winter, and summer months, look for schools of these fish in the same areas where stripers hang out. During the spring spawning run, look for walleye where the New River enters the lake near Allisonia. From February 1 to May 31, in Claytor Lake and the New River, no walleye 19 to 28 inches may be kept and anglers are limited to 2 walleye per day. From June 1 to January 31, walleye are regulated by a 20 inch minimum size limit and a 5 per day creel limit. This seasonal
slot limit is designed to protect large female spawning walleye in the New River, while allowing some harvest of the more abundant male walleye.

**Other Popular Species**

Claytor Lake anglers catch yellow perch in the one-pound range. In 2014, anglers reported 12 trophy award certificate size yellow perch (more than 1 pound, 4 ounces or 12 inches) caught from Claytor Lake. The black crappie population is not large compared to other lakes, but they average about 3/4 pound in size. Bluegill are numerous throughout the lake, providing action when other species are not biting. Flathead and channel catfish up to 20 pounds can also be caught from the lake. With catches of 20 to 30 pound carp possible, anglers from as far away as England come to fish for them at Claytor.

**Lake Access**

Claytor Lake State Park, located on the north side of the lake within a few miles of the dam, provides 497 acres of park with camping, cabins, picnic areas, and a swimming beach, as well as a marina. For more information on the park, call 540-643-2500. To reach Claytor Lake State Park, take the Claytor Lake State Park exit (Exit 101) off Interstate 81 and follow the signs to the park.

Boat access to the lake is available for a small fee at ramps at Claytor Lake State Park, Lighthouse Bridge, and Conrad Brothers and Rockhouse Marinas on the Peak Creek arm of the lake. The VDGIF maintains no-fee ramps at Allisonia (in the upper lake area) and near the entrance to the state park (Dublin Ramp).

Harry’s Point boat ramp, a no-fee ramp located in the mid-lake area in Pulaski County’s Harry S. DeHaven Park, has a double ramp and courtesy piers. This park also has a handicapped-accessible fishing pier, where many of the lake’s species can be caught throughout the year. During the fall and winter months, anglers are likely to catch striped bass and hybrid striped bass swimming near the pier. The easiest way to get to Harry DeHaven Park from Interstate 81 is to take the Route 605 exit (Exit 105) and follow the brown trailblazer signs to Harry DeHaven Park. From the Interstate 81 exit ramp, take Route 605 (Little River Dam Road). Follow Route 605 until you reach Route 663 (Owens Road), go right on 663, then look for signs marking the park when you get near the lake.

**Maps and Additional Information**

A commercially produced topographic map, sold by Friends of Claytor Lake, is available from local marinas and other retailers in the lake area or at [http://www.focl.org/merchandise/](http://www.focl.org/merchandise/). Claytor Lake is long and steep-sided, so use a depth finder to look for underwater humps and points. Clues to locations of these key features can be found by looking at the surrounding land at any point on the lake. If you are next to a steep ridge, it is unlikely that you are close to any shallow water habitat. Look for shallow water habitat on the opposite shoreline from steep ridges. The old New River channel typically follows close to the steep areas along the lake’s shoreline.

If you have questions, call VDGIF fisheries biologist John Copeland at the Blacksburg office (540-961-8304, mailbox 2), or email him at [John.Copeland@dgif.virginia.gov](mailto:John.Copeland@dgif.virginia.gov).
Map of Claytor Lake showing key locations mentioned in this report.

- Dublin Hollow
- Claytor Dam
- Claytor Lake State Park
- Harry S. DeHaven Park
- Peak Creek
- Clapboard Hollow
- Lighthouse Bridge
- New River
- Allisonia
- Approximately 2 miles