

Navigation Aids on the Tennessee River System

There are many different traffic signs along the Tennessee River waterway to help boaters navigate safely. These vary depending on whether they are located along commercial navigation or secondary channels of the Tennessee River or on tributary (storage) reservoirs.

The main channel of the Tennessee River is 652 miles long. It was designed for commercial navigation and provides safe passage for barges from Knoxville, Tennessee, to the Ohio River at Paducah, Kentucky. The commercial navigation channel also extends into other rivers that flow into the Tennessee River, including the Clinch River (61 miles), the Little Tennessee River (19 miles), and the Hiwassee River (21 miles). Secondary channels, which are used primarily by recreational boaters, generally are located in streams that flow into the commercial navigation channel or in wide areas of the reservoirs along the channel. Boaters on the main channel and secondary channels will see a variety of buoys, navigation lights, daymarks, daybeacons, and fingerboards.

Tributary reservoirs are located on rivers that flow into the commercial navigation channel. Boaters on tributary reservoirs will see hazard buoys, daymarks, and fingerboards.

Navigation lights flash red or green according to which bank they are located on. The old saying "red right returning" is a good way to remember that red lights, as well as buoys, are located on your right as you are returning upstream. By traveling in a straight line from one navigation light to the next, boaters can safely navigate the length of the river.

Buoys are anchored in the water and mark the channel limit and channel junctions, identify boating hazards, or provide other information.

Daymarks and daybeacons serve the same purpose. Daymarks are located directly below navigation lights on the same structure. Daybeacons stand alone. On secondary channels, daybeacons are white because they do not designate left or right bank. They are used to indicate a clear channel line between two points.

Fingerboards are directional signs used in place of buoys to mark secondary channels where the water isn't deep enough for buoys and anchors.









Commercial and Secondary Channel Navigation Aids



Red Nun Buoy: Marks the right channel limit. You should pass to the left of this buoy as you travel upstream.*



Green (or black) Can Buoy: Marks the left channel limit. You should pass to the right of this buoy as you travel upstream.



Junction Buoy (red over green): Two channels are coming together. You should pass to the left of this buoy as you travel upstream.



Junction Buoy (green over red): Two channels are coming together. You should pass to the right of this buoy as you travel upstream.



Boats Keep Out Buoy: Marks a swimming area, area near a dam, or any area where boats are not allowed.



Danger Buoy: Marks an underwater obstruction or any area where boats should not navigate or should use extreme caution.



Information Buoy: Information is printed in black letters in the square.



Control Buoy: Marks a restricted area; for example, a no-wake zone, an area where skiing or fishing is prohibited, or an area where a 5-mile-per-hour speed limit is enforced.



Commercial Channel Passing Daymark/Daybeacon: Marks the right side of the channel as you travel upstream.



Commercial Channel Passing
Daymark/Daybeacon: Marks the left
side of the channel as you travel
upstream.



Commercial Channel Unilateral Daymark/Daybeacon (red): Means the channel crosses a wide stretch of the reservoir from the right bank to the left bank as you travel upstream.



Commercial Channel Unilateral
Daymark/Daybeacon (green): Means
the channel crosses a wide stretch
of the reservoir from the left bank to
the right bank as you travel upstream.



Secondary Channel Red Nun Buoy: Marks the right secondary channel limit. You should pass to the left of this buoy as you travel upstream.



Secondary Channel Green Can Buoy: Marks the left secondary channel limit. You should pass to the right of this buoy as you travel upstream.



Secondary Channel Daybeacon (white): Indicates a clear channel line between two points.



Secondary Channel Fingerboard (red): Marks the right limit of the channel as you travel upstream. Pass to the left.



Secondary Channel Fingerboard (green): Marks the left limit of the channel as you travel upstream. Pass to the right.

^{*} Upstream on the Tennessee River is toward Knoxville, Tennessee.

Tributary Reservoir Navigation Aids



Daymarks are the most common navigation aid on tributary reservoirs. They are signs on the shore that indicate the river mile and serve as a reference point to help boaters determine their location on the river. Daymarks are numbered in ascending order starting at one mile from the dam and going upstream.



Fingerboards mark the entrances to larger creeks. They show the name of the creek and sometimes identify the river mile.



Boat Hazard Buoys are installed where possible to mark underwater hazards such as rocks, sandbars, and submerged islands. However, because some tributary reservoirs fluctuate as much as 70 feet between winter and summer, it's impossible to warn boaters of every possible hazard at every pool level. Boaters in areas marked by hazard buoys should use extreme caution.



For More Information

Navigation charts are available for reservoirs on the Tennessee River and its tributaries. These charts generally show navigation aids, river miles, contour elevations, launching

ramps, marinas, campgrounds, fish attractors, and connecting roadways.

Copies of these charts can be obtained by calling TVA's Map and Photo Records at 423-751-MAPS or 1-800-MAPS-TVA, or by logging on to TVA's Web site at http://maps.tva.com.



For additional copies of this publication or for more information on navigation on the Tennessee River system, call TVA's Navigation Program at 865-632-4678, or write to:

Tennessee Valley Authority Navigation Program 400 West Summit Hill Dr. Knoxville, TN 37902-1499