

Identification: The black warrior waterdog (*Necturus alabamensis*) is a large completely aquatic salamander that is gilled throughout life. It grows to a maximum recorded length of 9.8 inches and is medium sized when compared to other necturids. All members of this genus have bushy external gills, two gill slits, a laterally compressed tail, and four toes on front and hind feet. Adults vary in color with the dorsum being reddish brown to nearly black. It typically has enlarged dark spots that form a dorsolateral row or stripe contiguous with the dark stripe on the side of head. Tail has a dark band of pigment. Tips and underside of the toes and legs are light colored. The body and head are flattened. Sexually mature males can be distinguished by the swollen cloaca and pair of enlarged cloacal papillae that project posteriorly. Post hatching juveniles have wide dark chocolate brown stripes on the dorsum and sides separated by two distinct light-colored stripes beginning at the nostrils and ending at the tail.



Photo by Todd Pierson

Limited life history and ecology studies indicate this species is mostly nocturnal with nesting activity occurring in late spring or early summer. Diet is thought to be similar to other *Necturus* species and comprised of small fish, fish eggs, tadpoles, crayfish, aquatic insects including mayflies and caddisflies, and other aquatic life.

The black warrior waterdog was [listed as an endangered species](#) and provided protection under the Endangered Species Act on February 2, 2018.

Habitat: Only known to occur in the upper Black Warrior River drainage including the Locust Fork, Mulberry Fork, Sipsey Fork, North River and their tributaries in Blount, Tuscaloosa, Walker, and Winston counties. Collections since 1990 have been limited to 13 sites throughout the drainage system. Preferred habitat includes moderate to large streams with moderate flows and alternating pools and rapids. Rocks and other cover are generally present, sedimentation is thought to be a limiting factor, and submerged semi-permanent leaf packs appear to be very important for cover and feeding. Water quality degradation and the creation of impoundments that changed flow patterns are the predominant threats to waterdog populations.

The U.S. Fish and Wildlife Service designated 420 river miles of critical habitat in four units within the Black Warrior river basin: Sipsey Fork (Lawrence and Winston counties); Locust Fork (Blount, Etowah, Jefferson and Marshall counties); Blackwater Creek (Walker and Winston

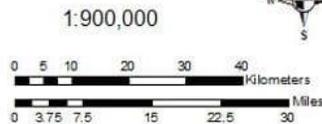
counties); and Yellow Creek (Tuscaloosa County). The designation included 127 miles of habitat already designated for other federally protected fish, mussels and salamanders. The critical habitat designation includes only areas currently occupied by the species and will protect more than 50 percent of the waterdog's historical habitat.

Index Map of Critical Habitat Units for Black Warrior Waterdog

Blount, Etowah, Jefferson, Lawrence, Marshall, Tuscaloosa, Walker, and Winston Counties, Alabama



- Black Warrior Waterdog Critical Habitat Unit Number Labeled
- Interstates Highways
- Waterbodies
- County Boundary



Forestry Considerations: Sedimentation from any activity including, agriculture, mining, and forestry can negatively impact habitat of the black warrior waterdog. Following established guidelines outlined in Alabama's Best Management Practices for Forestry should protect water quality and habitat conditions. Streamside management zones and proper stream crossings are very important for the longevity of this species. The listing of this species and designation of critical habitat should have minimal or no impact on forestry activities unless a landowner or industry is completing an action that involves federal funding or permits.

Distribution by County: Known or believed to occur in Bibb, Blount, Cullman, Etowah, Fayette, Franklin, Jefferson, Lawrence, Marion, Marshall, Morgan, St. Clair, Tuscaloosa, Walker, and Winston counties.



This information has been provided by the Alabama Forestry Commission.
For more information please visit: www.forestry.alabama.gov