

A haven for Mother Nature

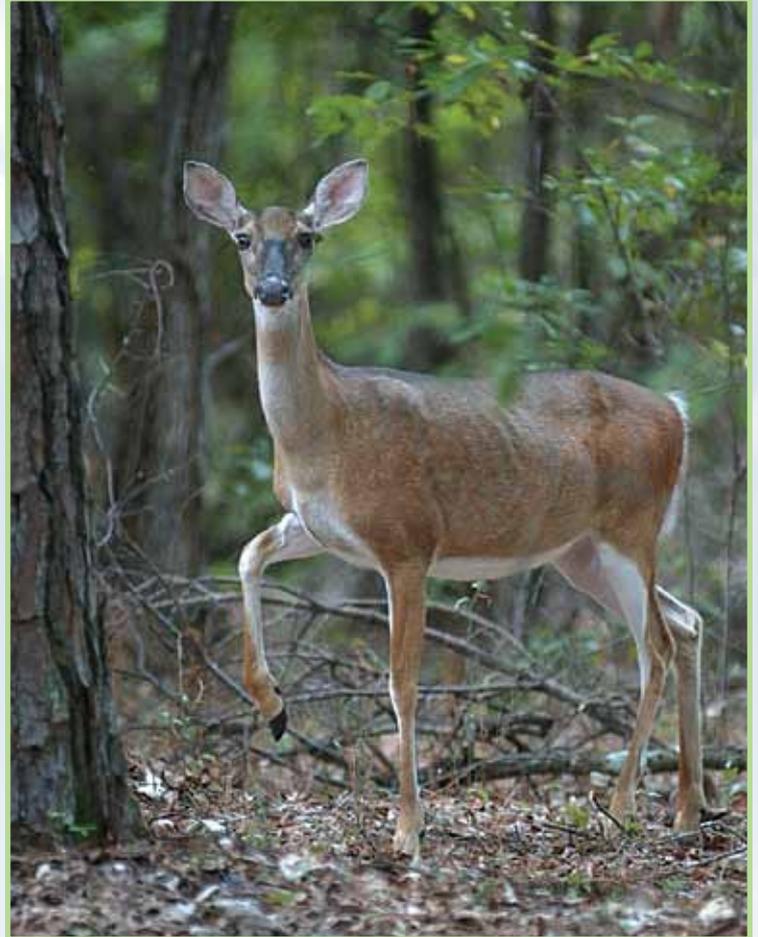
Corps team protects natural resources

With a combined 120 miles of scenic waters, the Savannah District's three dam and lake projects on the upper reaches of the Savannah River – Lakes Hartwell, Russell and Thurmond – are some of Mother Nature's most precious jewels.

An array of wildlife inhabits the lakes and surrounding lands, from deer, fox and black bear to hawks, eagles and owls. Forests with diverse plant life stand tall and lush, while the waters are home to a range of fish, from bluegill to striped bass. With more than 153,000 acres of water and 2,700 miles of shoreline, the three lakes are a haven for natural resources – and the Corps of Engineers is dedicated to protecting those resources.



“As a park ranger, I feel honored with the responsibility to protect the natural resources our nation has entrusted into our [the Corps] care,” said Sandy Campbell, chief ranger of shoreline management at Lake Hartwell. “I feel directly connected to our natural surroundings. It’s not only my work environment, but it’s my



The lands surrounding Lake Thurmond are home to a range of wildlife, including the white tailed deer pictured here. *USACE photo by Jonas Jordan.*

backyard. I routinely tell people that I am blessed to have the best job in the world.”

While each lake has its own unique characteristics, Hartwell, Russell and Thurmond are managed as a multipurpose integrated system, giving consideration to all congressionally authorized purposes and operating requirements—hydropower production, flood risk reduction, recreation, fish and wildlife protection, water quality, water supply and downstream navigation.

Since several of these authorized purposes involve overlapping or sometimes conflicting interests,

Sandy Campbell, chief ranger of shoreline management at Lake Hartwell, is one of many Corps of Engineers team members who work daily to ensure environmental stewardship. *USACE photo by Billy Birdwell.*

maintaining a healthy balance among private, public and natural use requires a dedicated group of Corps staff, who live by a true affinity for eco-friendly management.

All three lakes embrace environmental stewardship, abiding by numerous public laws which safeguard the environment. The lakes are staffed with trained personnel, who lead programs that ensure environmental compliance. Before any ground is disturbed at Lakes Hartwell, Russell or Thurmond, Corps' team members, in partnership with state organizations, conduct endangered species surveys, wetlands delineation and cultural resources surveys. When concerns are identified, the Corps takes steps to reduce or eliminate possible impacts to the environment.

"In addition to providing essential life-giving resources, such as clean water and air, our environment provides a deeper, emotional benefit to many individuals who enjoy being outdoors," said Susan Boyd, environmental compliance coordinator at the Thurmond Project. "Our job as environmental stewards is to ensure those natural resources are conserved for future generations to come."

All three lakes operate resource management programs to protect natural resources, including fish, wildlife, forestry and aquatic plants.

"The lakes provide extensive habitat for native plants and animals indigenous to the Savannah River Basin," said Ken Boyd, wildlife conservation biologist at the Thurmond Project. "As environmental stewards, the



A visitor enjoys water skiing at the Richard B. Russell Dam and Lake Project, nestled between Elberton, Ga., and Abbeville, S.C. The last of the three reservoirs constructed on the Savannah River, Lake Russell was completed in 1985. Not long before that time, the Corps implemented a policy to ensure the quality of the lake's natural resources for future generations. The new policy prohibited private shoreline uses on lakes built after Dec. 13, 1974. Thus, unlike lakes Hartwell and Thurmond, Lake Russell maintains pure, aesthetic qualities in its 540 miles of undeveloped shoreline and 26,650 acres of pristine waters. *USACE photo by Jonas Jordan.*



The oldest and most southern of Savannah District's reservoirs is the J. Strom Thurmond Dam and Lake Project – the largest Corps lake east of the Mississippi River, comprising nearly 71,000 acres of water and 1,200 miles of shoreline north of Augusta, Ga. A thriving recreation lake with unique opportunities – including horseback trail riding – much of Thurmond's shoreline is pristine and undeveloped, with only 18 percent zoned for limited development. *USACE photo by Jonas Jordan.*



Natural Resources Program Manager Zachary Harkness stands in front of the Hartwell Dam. Lake Hartwell, the most northern of the three reservoirs, bordering Hartwell, Ga., and Anderson, S.C., is one of the top five most-visited Corps lakes in the nation, drawing millions of visitors every year. With 962 miles of shorelines and 56,000 acres of water, the lake operates an extensive shoreline permitting program, having the most private boat docks of any Corps lake in the nation. However, the project takes extensive measures to balance private uses with environmental conservation with programs like fish, wildlife and forestry management.

"As a Natural Resources Specialist working in a lake setting, I deal with managing the natural environment on a daily basis," Harkness said. "Our daily job duties focus on two main priorities – resource protection and visitor safety and satisfaction. The lake and the land surrounding it belong to every member of the public – and it's our job to manage it responsibly." *USACE photo by Billy Birdwell.*

Corps strives to sustain and enhance the health, vigor and diversity of the habitat and the species that live here."

Lakes Hartwell, Russell and Thurmond provide some of the finest recreational fishing in the United States, evidenced by the recent Bassmaster Classic fishing tournament at Hartwell in 2008. There are an estimated

1.5 million hours of fishing effort annually at the three lakes combined, and anglers spend over \$10 million annually to pursue their favorite fish at these lakes.

The native aquatic plant nursery at Richard B. Russell provides an opportunity to improve fishery habitat and sustain these important fisheries. In most man-made lakes in the Southeast, shoreline habitat is very limited. The establishment of shoreline fish nursery areas results in sustainable fishery populations for both present and future generations.

"Better habitat equals better fishing, and that's what keeps our visitors happy," said Jamie Sykes, Savannah District fisheries biologist. "The water quality improvement techniques that we pioneered at Richard B. Russell in the 1980s have now been successfully applied at other dams as well. The cool water and oxygen-rich conditions below our dams provide excellent fish habitat and fishing for hybrid bass, striped bass and rainbow trout. I believe the Savannah District is clearly the leader in the Corps when it comes to improving dissolved oxygen conditions at our dams."

In addition to providing fishery habitats, the lakes are an environmentally-friendly source of clean energy. Combined, the hydroelectric dams at lakes Hartwell, Russell and Thurmond generate 1.4 million megawatt hours of clean energy each year – enough electricity to meet the annual energy needs of more than 140,000 households.

Recreation is also a key part of Savannah District's lakes. Visitors to Hartwell, Thurmond and Russell can enjoy a wide variety of recreational activities, including water sports, hunting, hiking, picnicking, camping, and fishing – all in very different settings. For instance, Hartwell, being close to a major population area, has high public use (more than 10 million visitors annually) and a decidedly suburban flavor, while Russell offers a more rural, pristine setting. Thurmond, with its large lake and land base, offers a combination of the two environments and unique features such as Dorn Sport Fishing and Boating facility, the largest boat-launching facility in the southeast.

"The lake is a resource we created when we constructed the dam, and the Corps has a duty to promote that resource by providing quality outdoor recreation facilities," said Kenneth Bedenbaugh, supervisory natural resources program manager at the Hartwell Project. "Being out in nature and enjoying activities at Hartwell, Russell and Thurmond enhances that appreciation for nature – and appreciation is a key part of being good environmental stewards." 

By Tracy Robillard