

One man's journey with the Corps brings harmony to his environment

Some might imagine a dull, muddy wasteland when asked what a dredged material disposal site looks like. However, nestled between Savannah, Ga. and Hardeeville, S.C., lies a district-managed dredge disposal site teeming with wildlife. Just over nine square miles, the grid of dikes and hollows plays host to thousands of birds.

Species like red-tailed hawks and bald eagles perch on branches, scouring the ground below for prey. Flocks of small, white terns flicker across the open sky spying small fish. Meanwhile the lanky frames of great egrets wade in shallow puddles of water and busy woodpeckers clamor on tree trunks. Many other species of migrating birds use this site as a welcome stopping point to rest and stock up on food needed for the next leg of their journey.

It's here, for the past 20 years, Biologist Steve Calver has observed, studied and helped ensure the safety of this aquatic habitat.

Calver began his career as a high school science teacher and reveled in the chance to share his enthusiasm for nature with students every day. However, with many personnel changes in the school system, other subjects took over his daily lesson plan with increasing regularity and it became more difficult for him to keep teaching only biology classes.

After careful consideration, Calver decided he would have to leave teaching in order to stay focused on his passion for natural science.



With the help of a powerful scope, Calver can identify and record bird sightings from a long distance, without disturbing them. USACE
Photo by Tracy Robillard.

Calver's initial foray into a government position was with the Savannah District Regulatory Division in 1987. Although the job title was biologist, he spent countless hours pouring over permit applications. These requests come from small, private landowners to big-time developers, all with intentions of making some alteration to the landscape.

"When dealing with applicants, you're in a position to make sure they're doing work according to environmental and state laws. When a permit's completed, you can say I had a hand in that," said Calver.

Supporting the ecosystem

Responsibilities changed as Calver moved to the Planning Division in 1992. "When you're in Planning (Division), the fruits of your labor are much less tangible because the particular efforts sometimes take years to complete," he said.

Just like today, one of the big issues in the Planning Division in the early 1990s was maintaining Savannah's harbor. Tidal flow and vessel traffic constantly change the dynamic of the harbor floor. The district must maintain a consistent depth from the water's surface to the river bed for ocean-going vessels. Powerful dredges vacuum sand, plant material and debris then pump it into pre-determined disposal sites along the river.

"In the early 90s, the dredging section's job was to fill up and dry out each disposal site as quickly as possible," Calver said. "But, I felt if we could just hold water, fantastic things could happen with the habitat."

Calver knew it would take his full commitment to work with the Operations Division, which oversees the dredging work, and help coordinate long-term solutions that not only minimize the cost of doing business, but also protect the habitat.

According to Calver, the Corps' dredging mission and its commitment to the environment reached a balance in 1996 with implementation of the LTMS or Long Term Management Strategy, which allows each dredge site to stay flooded for a longer period of time. This arrangement creates more continuity for plant and animal species and increases the strength of the ecosystem.

In concert with other federal and state agencies, the LTMS helped the District establish a rotation plan in which the Corps holds dredged sediment in disposal sites for two or three years before drying them out.

"Before [the LTMS], they'd pump in an area, have material put on dikes and there was no order to it.



A black and white warbler perches from a tree at the dredge disposal area. *Photo by Steve Calver.*

They'd just keep drying it out so no wildlife could stay. Now, with regular rotations we can plan when and where we're going to hold water," said Calver.

Additionally, the Migratory Bird Treaty Act of 1918 prohibits destroying eggs, nests and young, Calver said. "We especially monitor these areas during nesting to make sure our operations don't impact the hatchlings."

Because of the environmental benefits of the LTMS and other regulations, today Calver treks just north of the Talmadge bridge and harkens back to his first love, biology, at the 300-acre disposal area designated 14A.

He monitors the comings and goings of such creatures as black-necked stilts, least terns, gull-billed terns, willets, black skimmers and several other species of what he deems 'non-bird critters' as well, like alligators.

Employees also spot an occasional bobcat at 14A. "You can't see one everyday," said Calver. "There aren't many places where one would have an expectancy of seeing a bobcat when you go to work."

Most would view the bobcats as a menace, but they're really just part of nature, he said. They have a place in existence and help the population thrive by eliminating the sick and injured.

"Another thing I'm proud of is that we have the eastern diamondback rattlesnake," Calver said. "I've

walked up on five- or six-footers and stood four feet from them and they won't do anything. They're actually very docile."

Aside from alligators and bobcats and snakes ("oh my"), birds remain the center of attention.

"It's all about the habitat. If the habitat's there, then the birds will be there," said Calver.

He also notes how the resident's roster has morphed with time.

"Just a few years ago, I noticed the first white pelicans," said Calver. He spotted one with a leg band, sent the numbers to the Patuxent Bird Banding Laboratory, a centralized tracking organization associated with the United States Geological Survey Wildlife Research Center, and learned that particular bird had been banded in South Dakota. "This fall, I counted 200 white pelicans in one day, feeding on mullet."

Because these sites provide valuable habitat to shorebirds and migratory waterfowl, Calver has observed large numbers of several species — some that set the record for the highest number of a particular species seen at one time in all of South Carolina.

Still, Calver laments, "There's nothing fun about counting thousands of shore birds — except the satisfaction that you did it." He said it can be stressful because you have so many moving species in one concentrated area and many look alike. "Just when you think you've got it, they fly away and you have to start over."

The next generation

With retirement thoughts coming his way again — he passed up the chance at 62 — Calver said, "I've got 15 years worth of good bird-use data, so now is the time to start compiling it to answer questions."

He has started sharing his expertise with some "new blood." Calver said these biologists can summon the desire from within, but their competence comes from hours and hours of practice and patience. He makes sure his apprentices get plenty of time to hone their skills and feels they'll be ready replacements when he finally decides to pass the torch.

Until then, it seems with Calver perched behind his ever-vigilant binoculars, the greater and lesser yellowlegs remain and flourish.

"As a society, we need to protect our upland habitats as much as the wetland ones," said Calver. "They provide different functions. We need to protect them both."

Since he started keeping records in 1989, Calver has recorded 301 different bird species in the Savannah Harbor dredge disposal area. 🇺🇸

By Sandra Hudson