

Terrestrial Carbon Sequestration

Restoring native wildlife habitat and capturing carbon



home than any other part of the continental United States. The Southeast is home to nearly half of the nation's wetlands, more than half of its coastal marshes, and more freshwater aquatic species than any other region. The region is covered "wall-to-wall" with joint ventures. Our challenges are stark. Our opportunities are significant. So we are moving forward aggressively to examine climate change, its impacts, and steps this agency can take in the Southeast through the prism of strategic, integrated landscape-level conservation to adaptively prepare its managers for the future. Are we identifying and connecting the right wildlife corridors? Are we targeting the most beneficial blocks of wildlife habitat?

One of the tools the Southeast Region has developed over the past decade to begin addressing some of the impacts of climate change is an innovative terrestrial carbon sequestration program. The first of its kind among natural resource agencies – was born out of conversations between the Service's biologists and representatives of Entergy Corporation in 1997.

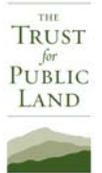
Today, the program has grown into a multi-pronged effort involving individual citizens, energy companies, and conservation organizations. It is a key part of the Service's effort to restore the Lower Mississippi Valley, which saw its forested wetland habitat shrink from 24 million acres to less than five million acres over the better part of the 20th century. The program's success in the Lower Mississippi Valley has led the Service to expand it, providing restoration opportunities to refuges across the country.

The Service works with more than two dozen energy companies, Environmental Synergy, Inc., The Trust for Public Land, and The Conservation Fund, and so far has added 40,000 acres of restored habitat to its national wildlife refuges and restored a total of 80,000 acres to native habitats benefiting fish, wildlife, and migratory bird populations. Together these partners have planted more than 22 million trees that will capture more than 33 million tons of carbon over the next 90-plus years.

Early in the program, the companies simply restored lands the Service already owned. Today, energy companies purchase high value lands, restore them based on priority needs, donate the restored lands

Climate change is and will continue to impact the natural resources the U.S. Fish and Wildlife Service and its partners are charged with conserving. Whether it's change to native terrestrial habitats or sea level rise and impacts to vital coastal wetlands and marshes, we are only beginning to understand what is happening across the Southeast Region, what is likely to occur in the years ahead, and how our agency will act.

Indeed, more than half of the Southeast Region's national wildlife refuges are located along the coast. Nine of 10 southeastern states are ranked among the top 20 states that have lost the most open space and farmland to development. More imperiled species call the Southeast



U.S. Fish & Wildlife Service

to land trust partners and the Service, provide limited funds to support operations and maintenance, and reserve the carbon credits to report for themselves under long-term agreements.

In March, the Service announced a new partnership with the Conservation Fund and its Go Zero™ initiative that gives individuals and organizations a way to offset their carbon emissions by contributing funds to plant native trees on national wildlife refuges. It's a voluntary, non-regulatory program to reduce carbon emissions. The Fund, in cooperation with the Service, expects to restore at least 1,000 acres of restored native wildlife habitat to the refuge system through reforestation by planting at least 400,000 trees annually. That means each year, the Service will plant enough trees to sequester at least 300,000 tons of carbon over 90-plus years.

With ever-tightening budgets, the Service is pursuing strategic, landscape-level conservation activities aimed at ensuring the right conservation activities take place in the right places. Carbon sequestration will become even more prominent as a tool to support restoration of native habitats benefiting priority fish and wildlife populations. With this and other innovative conservation tools, the Service and its partners will enhance and connect critical wildlife corridors and blocks of habitat in the most important areas based on the best science available related to climate change impacts and mitigation needs.

The next frontier for this effort involves working with private landowners and developing incentives – possibly relying upon the wetlands reserve, grasslands reserve, and conservation reserve programs – to conserve and restore native habitats on private lands.

Restoring native wildlife habitats and capturing carbon represents a “win-win” for the Service and its partners. Expanding terrestrial carbon sequestration activities will be an increasingly important part of the Service’s conservation work.

