John Stansbury: a 17-year riparian buffer retrospective

Conservation buffer planting still providing host of benefits

John Stansbury's place sits atop a ridge in Windsor, encompassing 50 acres of stunning wildlife habitat overlooking the West Branch of the Sheepscot River. The property contains mixed forest with about 15 acres of hayground. Back in 2006, John took this already productive habitat and added complex and diverse wildlife functionality by planting a 2.5 acre riparian buffer along the river. Today, the buffer has matured and provides a host of benefits from habitat to water quality.

As a long-time resident of the area, John Stansbury is no stranger to conservation practices. He contracted the production of a forest management plan for the property and completed his first Natural Resources Conservation Service (NRCS) – Wildlife Habitat Incentive Program (WHIP) project, under which he changed the management of his hayfields to delay mowing until nesting grassland birds were flighted. A subsequent WHIP contract provided cost-share for bird nest box installation as well as the buffer planting.

While planning his conservation buffer planting, John recalls that U.S. Fish and Wildlife biologist, Ron Joseph, came out to his property and identified bird calls as they were walking the land. Three of these calls were from birds considered "fairly rare" for the area, John remembers. "I thought 'this is cool!"

One of the birds identified on that visit was the beautiful black and yellow Prairie Warbler, a bird that is swiftly declining across most of its range (https://www.allaboutbirds.org/guide/Prairie Warbler/lifehistory). After that visit, John was even more committed to finding ways to enhance and maintain bird and other wildlife habitat on his land.

John's riparian buffer establishment was nested within the mosaic of a large, on-going watershed initiative focusing on the West Branch of the Sheepscot. The initiative promoted and implemented a variety of conservation practices within the watershed.

To establish the 200-yard-wide buffer, John worked closely with NRCS's Peter Abello, who was then Kennebec County Conservation Technician. The Kennebec County Soil and Water Conservation District was a source for some of the many plants that were needed for this endeavor – including more than 400 trees and 500 shrubs. The planting focused on wildlife food sources and native species, and included winterberry, witch hazel, nannyberry, sugar maple, white oak, black walnut, ash species, cedar and spruce, high-bush cranberries and blueberries and several willow species.

Over the years, the buffer has matured and taken on a life of its own. Deer, other mammals and many bird species regularly travel through and shelter in the area. Some of the initial plantings, however, have not stood the test of time.



Below: Looking out on the riparian buffer in 2023. pc John Stansbury

"The beavers ate every single willow we planted," John smiles ruefully. "And many of the sugar maples were lost during a flood in 2019."

But John has remained steadfast in his passion for keeping this resource functioning for its many wildlife and environmental benefits. His connection to the land and continuing observation of the wildlife that use it help guide his on-going management of the buffer.

"I'm just a steward of the land," he asserts. "My job is to sustain and improve habitat during my lifetime and set things up for the coming generations."



Above, from left, NRCS' Peter Abello and USFWS biologist Ron Joseph listen for birds with landowner John Stansbury while planning the conservation buffer planting in 2006. Below, Ron Joseph walks through the newly planted trees. Photos Amanda Burton

Inset: a Prairie Warbler like the one heard on the Stansbury property. Photo by <u>Tyler Jamieson Moulton</u>



What exactly is a riparian forest buffer?

It is a woodland area adjacent to streams, rivers, or wetlands. To provide maximum benefits, structure and composition is important, providing diverse native, mixedheight vegetation. When managed correctly, these ecosystems provide a host of benefits, such as:

- Improvement in the quantity and quality of habitat for wildlife, invertebrate species, fish, native pollinators, and other organisms
- Building habitat connectivity
- Reduction of transport of sediment, pathogens, chemicals, pesticides, and nutrients to surface and groundwater
- Maintaining or increasing total carbon stored in soils and/or perennial biomass to support climate resilience
- Lowering elevated stream water temperatures, providing better habitat for aquatic life
- Protecting adjacent uplands from seasonal flooding damage
- Restoring ecosystem diversity, structure, and composition

As wildlife habitat, riparian areas can play an important role in providing space, cover, and food for a wide variety of species. In fact, research shows that riparian areas may host substantially more diverse flora and fauna as compared to upland forests (https://www.uvm.edu/seagrant/watershed-forestry-partnership/why-riparian-forest-buffers). Creating a network of functional riparian forests can connect important larger habitat for migrating species such as big game and bird species in particular need of conservation action, including the Golden-winged Warbler and American Woodcock.

If you are interested in learning more about creating or enhancing a riparian buffer, contact your local NRCS office and their Soil & Water Conservation District partners.

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