

abitat management and conservation is the bedrock on which we can build our fish and wildlife conservation success. Results from habitat management and conservation are always tangible, although not always immediate, and they can have a long-lasting, widespread impact. In addition, enhancing or restoring habitat for one species, such as wood ducks, can directly benefit other species, such as wood turtles. By removing a dam to improve trout habitat along the Castleton River, salamanders and freshwater mussels will also benefit from the flush of nutrients and connectivity for miles downstream. Creating young forest in the Lake Champlain Valley will add a surge of food and

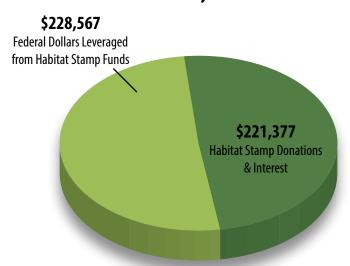
nesting cover for golden-winged warblers and other shrubloving songbirds and create new food sources and cover for white-tailed deer and turkeys.

Habitat management and conservation connects fish and wildlife species with what they need to survive and thrive throughout their range. Similarly, a donation to the habitat stamp fund touches all corners of our state and helps connect our fish and wildlife with the habitat they need. We appreciate every dollar that is raised through this fund and wholeheartedly thank you for your continued support and interest in conserving Vermont's fish, wildlife and the wild places that support them.

By The Numbers*

- 15,000 donations totaled \$214,699, earned \$6,678 in interest.
- \$168,532 in Habitat Stamp funds were spent and were matched by an additional \$228,567 in federal funds.

Total Conservation Funding: \$449,944 Where the Money Came From



Total Habitat Stamp Funds Spent: \$168,532** How the Money Was Spent



^{**} These figures only include Habitat Stamp fund expenditures, not federal funds.

^{*} Dates are 12/01/21 through 11/30/22

Birds and Beyond

In 2022, Vermont Fish & Wildlife Department (VFWD) wildlife biologists worked with private landowners and conservation partners to improve habitat for songbirds, pollinators, and other wildlife. During this past year, habitat biologist Andrea Shortsleeve carried out this work with a combination of private landowner site visits, habitat restoration projects and workshops.

Working with Private Landowners and Town Forests

Andrea assisted landowners on **25 different properties** in **19 towns** around the state of Vermont, offering expertise and guidance on the management and conservation of wildlife on private lands. This technical support provided one-on-one guidance to Vermont landowners to improve their properties for native pollinators, songbirds, amphibians, bats, deer, turkeys, and other wildlife.

In 2022, Andrea also provided technical assistance to communities for town forests and municipal public lands in **five towns**, including **Wolcott**, **Strafford**, **Cambridge**, **Hinesburg**, and **Plainfield**, by leading educational walks, developing habitat interpretive signage, giving community presentations, and providing supplemental wildlife information for forest plans.

Partnering in Conservation

In 2022, to provide Vermont landowners with the best possible technical assistance available, VFWD wildlife biologists worked with 22 different partner organizations, including Audubon Vermont, USDANRCS, Vermont Land Trust, Vermont Coverts, the National Wild Turkey Federation, and the Ruffed Grouse Society.

These partnerships have allowed VFWD to complete a variety of on-the-ground projects in a wide range of towns throughout Vermont, including **Hinesburg**, **Whitingham** and **Charleston** to improve upland, shrubland and streambank habitat by removing large amounts of invasive plants, planting native shrubs and trees, and regenerating alder stands. This habitat work will improve food resources and enhance connectivity for a variety of species in Vermont. Additionally, many of these partnerships increase opportunities to provide Vermonters with information, resources and peer networks concentrating on habitat improvement on private lands.

Delivering Interactive Workshops, Trainings and Other Resources

Wildlife biologists with the VFWD, along with various conservation partners, created and participated in more than **20 workshops, training events** and **virtual presentations**. Topics included: designing backyard



VFWD provided several communities with technical assistance to develop habitat interpretive signs for town forests and municipal public lands.

wildlife habitat, landscape conservation for private landowners, turkey hunting for youth, land ethic concepts for educators, winter wildlife ecology, and creating wildlife habitat through logging.

Department staff participated in two local news interviews for the well-known "Wildlife Watch" segment, a periodic program on the evening news used to highlight interesting wildlife stories for the public. Using that platform, department staff showcased the newly constructed Habitat Interpretative Trail at the **Dead Creek WMA** in **Addison**, built to provide visitors with suggestions to help promote habitat features in their own backyard, and showcased a set of highly successful habitat improvement projects on neighboring properties with mixed ownership in **Westford**.

Cold Water Connections

Aquatic habitat biologist Will Eldridge continued efforts to restore habitat for fish and other wildlife along streams and rivers throughout Vermont in 2022.

Eliminating Obstacles and Improving Aquatic Organism Passage

In 2022, Will worked with partners to reconnect streams and rivers by removing dams and upgrading culverts to increase the resilience of wild fish and other aquatic species. This summer, Habitat Stamp donations helped to remove the 18-foot-tall Pelletier Dam on the North Breton Brook in Castleton. Removing this dam was a major achievement and restored access to 37 miles of habitat for trout and other aquatic organisms on this tributary of the Castleton River. Public parking is also now available for fishing and wildlife activities on this 19-acre, department-owned parcel.

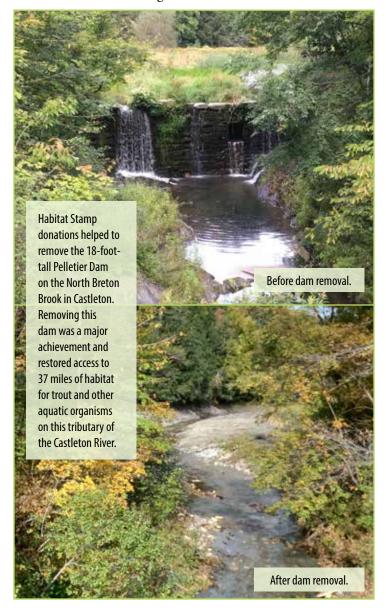
In addition to several other roles relating to aquatic connectivity, Will worked with **11 aquatic connectivity groups** around the state to enhance passage at road stream crossings and dams and taught *Rivers and Roads*

trainings to state and municipal staff and consultants. He also participated on the Vermont Dam Task Force and provided technical assistance to regional efforts around the state focused specifically on improving road stream crossings for fish and other aquatic organisms.

Improving Department Lands and Restoring Floodplains

In 2022, VFWD district biologists used Habitat Stamp funds to steward department-owned Streambank Management Areas (SMA) and have focused on increasing public awareness of these parcels. **Maps of the 200 Streambank Management Areas were created** and are now available on the VFWD website.

VFWD continued floodplain restoration on a 10-acre department-owned SMA along the Wild Branch in Wolcott. In May, staff from VFWD, The Nature Conservancy and Intervale Conservation nursery planted 2,000 trees with the help of AOT Secretary Flynn, ANR Secretary Moore and VFWD Commissioner Herrick. Will also worked with the Lamoille Regional Planning Commission to design a berm removal and reforestation



project on a 12-acre SMA along the Lamoille River, also in Wolcott.

Additionally in 2022, Habitat Stamp donations continued to support an experimental tree planting on the **Otter Creek WMA** to test forest restoration in the presence of beavers.

Stewardship and Outreach

Will likes to say 'fish grow on trees' because their leaves feed the bugs that feed the fish and trees also shade the water, filter pollutants, stabilize streambanks, and create excellent habitat when they add limbs, logs, and root wads to the stream. To help grow more fish, VFWD biologists used Habitat Stamp donations to work with partners in protecting and restoring forest communities along Vermont's streams and rivers, including a three-acre planting on the North Branch of the Winooski River in Worcester.

Will helped to develop the "Stream Wise" initiative, a collaborative effort to improve riparian areas on private lands and joined the Friends of the Winooski River and Lake Champlain Basin Program on a pilot outreach event for landowners in Marshfield. Landowners were so enthusiastic that partners can't wait to host more events in 2023!

Room to Roam

The Habitat Stamp is essential for the stewardship of the department's 101 Wildlife Management Areas (WMAs). Each dollar donated leverages an additional three dollars from the U.S. Fish & Wildlife Service for WMA habitat management.

During this past year, Habitat Stamp funds were used at WMAs throughout the state to control invasive plants that negatively impact native plants and bird populations, maintain forested openings where wildlife often feed, mowing grasslands to benefit bird habitat, and restoring riparian habitat by planting native trees and shrubs.

♦ Controlling Invasive Plants

In 2022, a substantial amount of Habitat Stamp funds was dedicated to controlling the spread of invasive shrubs on **30 acres** of department-owned lands at the **Windsor Grasslands, Whipstock Hill**, and **South Bay WMA**s in the towns of **Windsor**, **Bennington** and **Coventry**, respectively. This work is critical for restoring, improving and maintaining shrubland and forest habitat as aggressive invasive shrubs, like bush honeysuckle, buckthorn, and barberry, can impact the quality of wildlife habitat in multiple ways.

Invasive shrubs impact native food sources for wildlife by providing berries and seeds that are low in nutritional value for wildlife. They also outcompete and displace plants required by many native insect populations that are essential food for the nestlings of many songbirds. Invasive shrubs can inhibit the growth of native trees and shrubs, which limits the quality of shrub and young forest habitat required by numerous wildlife species. When invasive plants grow along streambanks and other waterways, they can displace native tree species essential for providing cooling shade, woody structure, leaf litter nutrients, and erosion control essential for productive fish habitat.

Supporting Native Plants

To supplement the invasive plant control work that was being done, Habitat Stamp funds were used to plant and enhance native shrubs and trees on state-owned land around the state.

Atherton Meadows WMA, Whitingham

- A half-acre of mature alders was cut to encourage stump sprouting and increase stem density, improving foraging cover and habitat for woodcock and grouse.
- 105 apple trees were 'released' by cutting down woody vegetation surrounding the individual trees that were competing for sunlight.
- 131 additional apple trees were pruned to favor the healthiest branches, with the intent of increasing vigor and fruit production.

Gale Meadows WMA, Londonderry and Winhall

• **36 apple tree saplings** were planted with help from the National Wild Turkey Federation.

Lewis Creek Streambank Parcel, Hinesburg

- Several bunches of native shrubs including greystemmed dogwood, chokeberry, and various viburnum species were planted in clumps throughout a retired pasture along Lewis Creek in Hinesburg in a partnership with Audubon Vermont.
- Oak seedlings and other wildlife-favored trees were planted amongst the bunches of shrubs to enhance wildlife food and structure to the riparian buffer, also in partnership with Audubon Vermont.

Acquisitions

During 2022, Habitat Stamp funds were used to obtain a right of way at **Kesick Swamp WMA** in **Sunderland**, which established a parking area and expanded public access into new parts of the WMA. Kesick Swamp is a historic beaver pond meadow with a small great blue heron rookery on site and is regularly used by moose, black bears, and a variety of waterfowl species. The WMA is a birding hotspot and is an excellent watchable-wildlife site, especially from a canoe or kayak.

In May 2022, all habitat stamp donations made during that month went to a specially designated project fund focused on expanding the **Otter Creek WMA** in **Wallingford**. This Wildlife Management Area showcases superb floodplain habitat in the upper part of Otter Creek, with areas of large wet meadows, habitat for

grassland birds, and alder swales to support woodcock and other shrubland birds. The expanded portion of the WMA will provide improved public access for trout fishing, duck hunting and wildlife watching.



Looking Ahead

The year 2023 promises to be another productive year for habitat conservation, restoration and enhancement in Vermont. VFWD is planning to conserve more forest habitat by expanding Atherton Meadows WMA. The department

is also planning habitat improvement projects with help from the Vermont Youth Conservation Corps at Birdseye WMA and Dead Creek WMA. There are many other habitat improvement projects planned for WMAs throughout the state that will benefit from habitat stamp funds.

Thank you for your donations in 2022. Your support conserves land, protects clean water and restores healthy wildlife habitat. Please help to continue Vermont's conservation legacy by donating to the 2023 Habitat Stamp: **vthabitatstamp.com**.



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