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## WCS GUIDES CLIMATE ADAPTATION ON PRIVATE LANDS

**T**he boreal habitats of the Adirondacks—the bogs, conifer forests, and riverine wetlands that give the region much of its northern character—are at risk with a changing climate. Landowners who cherish and steward these habitats face a particular challenge: how to manage their properties to protect these habitats and maximize ecological benefits even as the climate changes. WCS is working with the owners of one such property to demonstrate how landowners in the Adirondacks can help increase ecosystem resilience by reducing other stressors and promoting healthy wildlife habitats.

WCS is working on the Intervale Lowland Preserve, a 135-acre mix of riparian habitats, wetlands, meadows, fields and early successional forests, located on the banks of the West Branch of the Ausable River outside of Lake Placid, NY. Larry and Nancy Master purchased the property with a goal of protecting it from development and enhancing the already-rich wildlife value of the property. To that end, the Master family has implemented a number of measures to meet their goals and mitigate the impacts from climate change.

To prohibit future development and minimize the impact of residential development, they have put a conservation easement on the land through the North Elba Land Conservancy. In developing the agreement, the Masters used WCS's science on the impacts of residential development, and emphasized the value of the property for educational and research purposes, specifically pointing out the opportunity for use as a site to monitor the effects of climate change.

The goal of addressing climate change impacts and promoting wildlife habitat protection on the Preserve has led to a partnership between WCS and the Masters to develop and test a broad range of tools and approaches to increase ecological resilience. Several strategies have been implemented including removing invasive species to maintain native biodiversity, converting large grassland areas to native grasses, providing nesting structures for birds, and installing "beaver deceivers" (man-made structures that maintain beaver wetlands while controlling objectionable flooding caused by plugged culverts). This partnership has also led to the creation of a website—[intervalelowlands.org](http://intervalelowlands.org)—which provides information on the property and serves as a portal for the accumulation of



The mix of floodplain, meadows, forests and riverine habitats of Intervale Lowlands make it an excellent place to learn about options for managing private lands with sensitivity to climate change impacts.

biological records and data on the site in order to support long-term monitoring efforts.

An important component of climate change adaptation is tracking how wildlife and habitats respond to impacts of climate change and learning how measures such as those described above promote ecological resilience. WCS is implementing a long term monitoring program at Intervale Lowlands focusing on species such as migratory birds, small mammals, insects, bats, and amphibians. This effort demonstrates the Masters' proactive approach to conserving components of their land and provides other landowners faced with similar challenges with information about how to make management decisions about species and habitats at risk under climate change.

While creating habitat and monitoring for biodiversity is not an unusual approach for conservationists, factoring climate change considerations into on-the-ground actions is a still-emerging field—a field in which WCS is a national leader. The partnership between WCS and the Masters builds on a climate change science and planning workshop looking at Adirondack boreal habitats led by Dr. Molly Cross and Dr. Erika Rowland. Through first the workshop and now this pilot initiative, WCS is helping the conservation community to move from climate change planning activities to taking on-the-ground actions that facilitate wildlife and ecosystems in adapting to changing conditions. Support for WCS's work on this project comes from the Doris Duke Charitable Foundation and generous individuals.