



Sourlands Ecosystem Preserve: Deep-Forest Species of the Sourlands

This land includes the first property purchased by D&R Greenway Land Trust for preservation, in partnership with New Jersey Audubon Society.

The initial property, acquired in 1992, was the first protected by a nonprofit land trust in New Jersey with the Green Acres Nonprofit Grant Program. It helped to inspire the preservation of thousands of interconnected acres that protect streams and headwaters, deep forest plant and wildlife habitat throughout the Sourlands, from Somerville to Lambertville, NJ.

A Vast Wilderness and Connected Greenway

D&R Greenway's Sourlands Ecosystem Preserve is part of the 90-square mile Sourland Mountain region that contains the largest contiguous forest in Central New Jersey. This extensive forest provides essential interior habitat for "edge sensitive" species that shy away from the forest edge and have a low tolerance for fragmented habitat. Forest connectivity is especially important for the State-endangered bobcat that avoids interactions with humans, and for reptiles such as the eastern box turtle and State-threatened wood turtle whose populations are declining largely due to road mortalities. For neotropical migratory birds such as the veery, ovenbird and other wood warblers, scarlet tanager, and wood thrush, this forest-interior habitat is critical for breeding.

The Sourlands supports vernal pools essential to the breeding success of amphibians including the spotted salamander and wood frog. These productive hatcheries are isolated depressions that fill with water in the early spring and dry out by late spring or summer. Due to their temporary nature, these pools are free from breeding populations of fish that would feed upon the egg masses of the amphibians. Other species that exploit or rely upon vernal pool habitat include reptiles such as the ribbon snake and spotted turtle, and invertebrates such as dragonflies, fairy shrimp, and water beetles.

Good Land Stewardship

This Preserve is managed by D&R Greenway staff and volunteers to provide and protect forest-interior habitat for wildlife and plant species. Two threats are forest gaps and over-browsing by white-tailed deer. Gaps, often created through past agricultural uses, fragment the forest and have a negative impact on edge sensitive species. An overabundance of white-tailed deer can damage the forest ecosystem by feeding on native trees and shrubs at such a fast rate that the forest cannot recover through natural regeneration.

To combat these threats, stewardship practices include: reforesting forest gaps with native shrubs and trees to scale down fragmentation; reducing the amount of invasive plant species and promoting more beneficial native plant diversity; managing white-tailed deer to allow for forest regeneration; and working to restore the forest understory for bird species that require this forest layer for nesting.

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Photo credits: Wood frog – Mary Holland, Spotted salamander – Mary Holland, Eastern box turtle – Ben Wurst, Eastern wood pewee – Terry Sohl, Ovenbird – Sharyn Magee, Wood thrush – Steve Maslowski, Veery – Don Freiday, Wood turtle – NJAS Parke, Cinnamon fern – Jared Rosenbaum



Pileated woodpecker
(*Hylatomus pileatus*)

Wood frog
(*Rana sylvatica*)

Spotted salamander
(*Ambystoma maculatum*)

Eastern box turtle
(*Terrapene carolina carolina*)



Eastern wood-pewee
(*Contopus virens*)

Ovenbird
(*Seiurus aurocapilla*)

Wood thrush
(*Hylocichla mustelina*)

Veery
(*Catharus fuscescens*)

Blue-winged warbler
(*Vermivora cyanoptera*)

Black-and-white warbler
(*Mniotilta varia*)

Wood turtle
(*Glyptemys insculpta*)

Bobcat
(*Lynx rufus*)