

Taconic State Park BioBlitz

May 4-5, 2013



Some Taconic State Park BioBlitz participants, by Shereen Brock

On May 4, 2013, 32 scientific professionals gathered at Taconic State Park in Copake Falls, NY for a BioBlitz, a 24-hour inventory of the park's biodiversity. Our objectives were to look for rare species and significant natural communities in the park and document as many of the animals and plants living there as possible. This was a collaborative effort between the NY Natural Heritage Program (NYNHP) of the State University of NY College of Environmental Science and Forestry (SUNY ESF); the Office of Parks, Recreation, and Historic Preservation (State Parks); and Parks & Trails New York, who enlisted the help of scientists from various agencies, organizations, and universities. Participants included biologists with varying expertise

and affiliations including NYNHP, State Parks, NYS DEC, Audubon, SUNY Plattsburgh, NYS Museum, Lloyd Center for Environmental Studies, Carnegie Museum, among others. At least 11 different organizations were represented and participants from 4 states assisted in the effort.

Throughout the 24-hour period (9am Saturday May 4th to 9am the following morning), scientists formed small teams across affiliations and taxonomic expertise, targeting exemplary habitats in different areas of the park that could harbor rare species and high biodiversity. Teams visited forests and summits on Sunset Rock, and Alander, Brace and Cedar Mountains. We also surveyed Rudd Pond, wetlands and ponds near Mount Riga, Preachy Hollow, and Weed Mines, and several brooks throughout the park including Bash Bish and Cedar Brook, and Noster Kill. Participants enjoyed excellent weather (sunny and low 70s) across this beautiful terrain;



Conrad Vispo, Hawthorne Valley Farm by George Heitzman



Tim McCabe (NYS Museum) surveying for moths by George Heitzman

from scenic views of the ridge tops to lush wetlands in the valley. Our main targets were rocky summit communities, wetlands, birds, herps, plants, and invertebrates due to time and focus of the experts present. Night surveyors focused efforts on animals that can be more easily detected during nocturnal hours including moths, bats, and frogs. Finally, a handful of people wrapped up the bioblitz with early morning bird surveys on May 5th in hopes of adding a few more bird species to Saturday's list.

This event was a huge success at partnering professionals from several organizations to reach a common goal. We documented a total of at least 493 plants and animals in the park during the BioBlitz and updated observations of 12 significant natural community types. The break-down by taxa is as follows: at least 204 plant species and 289 animal species including 85 moths, 66 birds (resident and non-resident), 17 herps (amphibians, reptiles, and turtles), 14 mammals, 19 snails, 15 beetles, 14 ant species, 11 mayflies, 9 caddisflies, 7 stoneflies, 6 butterflies, 22 other invertebrates, and 4 species of fish. The list of species included entertaining names such as comb snaggletail (a snail), hedgehog arion (a slug), scribbler moth, and kinnikinnick (more commonly known as bearberry). Some of the highlights are noted below.



Tim Howard and Nick Conrad (NYNHP) by DJ Evans



Violet Wood-sorrel in flower (*Oxalis violacea*) by Kim Smith

A rare plant, Violet Wood-sorrel (*Oxalis violacea*), S2, G5, was detected on Cedar Mountain near the Massachusetts border, although the plant was not in flower at the time. A NYNHP biologist returned to the site later in the season to confirm identification. This rocky summit species was previously known from the park as one of 14 statewide locations, but this new sighting extends the known range at Taconic.



Violet Wood-sorrel (*Oxalis violacea*) by Richard Ring

The bird diversity was impressive and it should be noted that not all of the 66 species found during the BioBlitz are considered breeding residents. Due to the timing of the survey to coincide with I Love My Parks Day on May 4th, the BioBlitz occurred during bird migration and we therefore detected more species than those that breed in the park. This can serve as a

foundation for a Taconic State Park bird list such as the one for Fahnestock SP. Surveys during the breeding season and in winter can shed light on which species are true park residents and when visitors are likely to see the different birds.

Two moth experts and other scientists documented 85 species of moths in the park. We surveyed for moths on a pitch pine-oak-heath rocky summit and in hemlock-northern hardwood forests. While we were able to set a number of moth traps in various locations, there were many habitats that were not surveyed due to limited time and it is very likely that the park is home to even more moth species.



Mark Mellow (Lloyd Center for the Environment) identifying moths by Julie Lundgren

Mammal records included a bobcat sighting the evening of May 4. It also looks like we have the first detection of calls from Small-footed Bats (*Myotis leibii*) in the park. NYNHP staff will conduct follow-up surveys to confirm the presence of this rare species here.

Taconic State Park is home to several amphibian species, including early season breeders such as wood frogs, spring peepers, and spotted salamanders. These were all observed during the BioBlitz along with 14 other reptiles and amphibians, including the protected timber rattlesnake. This rare snake had been previously known from the park, and six individuals were observed during the BioBlitz. A female Four-toed Salamander (*Hemidactylium scutatum*), a Species of Greatest Conservation Need in NY, was observed on her nest in moss overhanging a small pond.



Four-toed Salamander (*Hemidactylium scutatum*) by Jesse Jaycox

Additional invertebrate experts targeted undersurveyed taxonomic groups such as ants, beetles, mayflies, stoneflies, caddisflies, and snails. This BioBlitz was a great way to bring in experts to catalog these species, most of which are not part of typical biological inventories. Together, species from these taxa comprised about 20% of the fauna observed.

The bioblitz was an extension of the long-standing partnership between NYNHP and OPRHP to document rare species and natural communities on OPRHP lands (State Parks & Historic Sites) across the state. Not only did the scientists have success finding rare species and updating rare habitats at Taconic State Park, but also found a wealth of biodiversity and enjoyed collaborating with one another on this lovely spring day.

We hope to continue these valuable efforts to bring experts together to share their knowledge and add to our understanding of the biota of NY's state parks and to encourage other opportunities for park staff to engage the public and share highlights.

By Erin White and Julie Lundgren