

SPECIES VIABILITY EVALUATION

Frequently Asked Questions

Finger Lakes National Forest

What is a species viability evaluation?

It is a qualitative process for gathering information on species for which viability may be a concern now or during the next 10-20 years. The process includes identifying at-risk species, compiling literature and unpublished information on those species, gathering expert opinion, and using that information to develop and analyze Forest Plan revision alternatives. Earlier in Forest Plan revision, this process was known as a population viability assessment or PVA. This name has been changed to alleviate confusion with the scientific, quantitative population viability analysis, which is also known as a PVA, which we are not planning to undertake.

What does viability mean?

According to the Committee of Scientists' Report (1999), a viable species is one consisting of self-sustaining and interacting populations that are well-distributed throughout the species' range. Self-sustaining populations are those that are sufficiently abundant and have sufficient diversity to display the array of life history strategies and forms to provide for their long-term persistence and adaptability over time. The definition of the term well-distributed can vary based on current, historic, and potential population and habitat conditions. Maintaining viability is a means of ensuring, as much as possible, that a species will not go extinct in the foreseeable future. ***What is an acceptable level of assurance of viability?***

Because species and their environments are dynamic, there is not a single population size above which a species is viable and below which it will become extinct. Viability is best expressed as a level of risk of extinction. The acceptable level of risk must be determined through the revision process.

What types of species are included in the SVE?

The 1982 and 2000 planning regulations both require that viability be maintained for native and desired non-native species. Native species are species indigenous to the planning area. Desired non-native species are those species that are not indigenous to an area but are valued for their social, cultural or economic value. The Finger Lakes National Forest included vertebrate and invertebrate wildlife and vascular plants in the process.

How were species chosen for the SVE?

First, existing lists or other compilations of potentially rare species in the Finger Lakes region of New York were reviewed. From these, two lists (one for animals, one for plants) of species that might be at-risk were developed. Information on the range, status, known locations, habitat needs, and threats of each species was gathered. Based on this information, some species were identified for definite inclusion in the SVE, while others were proposed to drop from further consideration. Experts at New York's Division of Fish, Wildlife & Marine Resources and New York's Natural Heritage Program, as well as local experts, reviewed the lists. These people provided additional information on many species, identified species likely to occur on the Finger Lakes National Forest for which they have viability concerns, and recommended additional

contacts for species about which they had little information. Additional experts, including academicians and consultants, were consulted as needed to gather enough location and status information on each species to allow for an initial determination on whether a viability concern exists or may develop in the next 10-20 years. A determination on inclusion in the SVE process was made for each species based on the information gathered.

The reasons for including many species in the viability evaluation are:

- Species is federally listed as endangered or threatened and identified by the U.S. Fish and Wildlife Service as a species to be addressed by the Finger Lakes NF
- Species is listed as a Regional Forester's sensitive species for the Finger Lakes NF
- Species is state listed as endangered or threatened and known or likely to occur on the Finger Lakes NF
- Species has a state Heritage ranking of S1 or S2 and is known or likely to occur on the Finger Lakes NF

The reasons for excluding many species from the viability evaluation are:

- Species range does not include the Finger Lakes NF
- Species' habitat does not occur on the Finger Lakes NF
- State Heritage ranking of S4 or S5 (apparently secure or secure) in New York, unless other information indicates substantial near-term future risk
- Species considered extirpated from New York

Not all of these reasons are absolute, nor do they address all species. The decision to include or exclude many species from the viability evaluation was based on best judgment, given available information, of the status of the species and whether it is likely to occur on the Finger Lakes National Forest. Some species are naturally rare, but have stable populations; most of these were not included. Other species may occur near the Forest, but are not likely to occur on the Forest due to limited habitat or range limitations; these species were not included. Migratory species that only use the Forest(s) during the winter were usually not included. Some species that are currently considered common but are experiencing dramatic declines were included due to concern for their viability in the next 10-20 years.

What information will be used to evaluate viability for these species?

Current literature on species has been compiled and reviewed. Information gathered during these literature reviews indicated that some species on the initial list were not truly at-risk, while others were determined to be less likely to occur on the Forest. Next, scientists and others with expertise and local knowledge of the species were asked to participate on panels to gather unpublished data and other information to supplement the literature review findings, and to provide their expert opinion on the viability status of each species. Again, after this review some species were determined to be less likely to occur on the Forests, or were determined to not be truly at risk. A working list of species to be considered in Forest Plan revision is being generated based on this review. As additional new information on these and other species is obtained by the Forests, adjustments will continue to be made as needed. Information compiled during this part of the analysis will be summarized in 2-4 page documents for each species for use during plan revision and project analysis. In addition to literature review forms and summaries, we have compiled through this process an extensive library of information on these species, as well

as contacts with leading experts. All of this information will be available for our use in the analysis of management options during plan revision.

What are viability outcomes?

Viability outcomes were developed for this process by reviewing similar analyses within the Forest Service and elsewhere. Outcomes are qualitative assessments of the risk each species faces to remain viable. Five outcomes were defined, and experts were asked to assign an outcome to each species for the species' range and on the Forest. Outcomes were assigned for both current conditions and potential future conditions over the next 20 years. These outcomes were critical in helping to determine whether species would continue to be tracked as species of viability concern during plan revision.

Outcomes

Outcome A - populations are essentially as healthy as ever

Outcome B - habitat and/or populations reduced some but still doing well

Outcome C - habitat and/or populations reduced quite a bit, minimally viable

Outcome D and E - major reductions that mean the species is not viable

How will viability information be incorporated into Forest Plan revision?

Information gathered will be used to develop conservation approaches to address identified risk factors. These approaches will include management options, where feasible, to eliminate or mitigate viability risks. Management options will be included wherever possible in alternatives during the alternative development phase. Through development of multiple alternatives, each including a variety of management options for at-risk species and habitats, the range of opportunities for conserving at-risk species will be evaluated. Species experts will also be consulted during this analysis to help evaluate viability outcomes for these species.

EXPERT PANELISTS FOR SPECIES VIABILITY EVALUATION FINGER LAKES NATIONAL FOREST

Plants

Charles Sheviak, New York State Museum, Albany, NY (orchid specialty)
Troy Weldy, New York Natural Heritage Program, Albany, NY
David Werier, consultant, Brooktondale, NY
F. Robert Wesley, consultant, Ithaca, NY
Robert Zaremba, consultant, Chatham, MA (formerly with NYNHP)

Animals:

Amphibians and Reptiles

Alvin Breisch, New York State Herpetology Atlas, NY Department of Environmental Conservation, Albany, NY
Peter Ducey, SUNY, Cortland, NY
Evan Grant, consultant, College Park, MD
Suzanne Gregoire, Kestral Haven Avian Migration Observatory, Burdett, NY
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Birds

Michael Burger, New York Audubon Society, Ithaca, NY
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Ken Rosenberg, Ornithology Lab, Cornell University, Ithaca, NY
Charles Smith, Cornell University, Ithaca, NY

Insects (Odonates & Lepidoptera)

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Mammals

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