

Plant Rarity Under Federal and State Laws and Regulations

Various government laws, regulations and policies protect rare plants. Probably the most surprising aspect of rare plant protection is that, unlike animals, plants are the property of the landowner whether that might be an individual, corporation, or government agency. This means that the protection of rare plants is under control of the landowner unless, in some cases, a government-regulated action is affecting them. Then the government entity regulating the action may require that protection efforts take place to preserve the rare plants and their habitat.

Federal Law

One of the results of the environmental movement of the 1960s and 70s was the enactment of the Endangered Species Act of 1973 (<https://www.fws.gov/endangered/laws-policies/index.html>). The Act was designed to prevent the extinction of plants and animals, addressing problems of both exploitation and habitat destruction. The Act defines an endangered species as any species of animal or plant that is in danger of extinction over all or a significant portion of its range. A threatened species is defined as one that is likely to become endangered. The Act regulates the "taking" of endangered and threatened plants on federal land or when they are affected by federal actions or the use of federal funds. Specific protection is outlined in the Endangered Species Act of 1973 and states: It is unlawful for any person subject to the jurisdiction of the United States to:

- import any such species into, or export any such species from, the United States;
- remove and reduce to possession any such species from areas under Federal jurisdiction; maliciously damage or destroy any such species on any such area; or remove, cut, dig up, or damage or destroy any such species on any other area in knowing violation of any law or regulation of any state or in the course of any violation of a state criminal trespass law;
- deliver, receive, carry, transport, or ship in interstate or foreign commerce, by any means whatsoever and in the course of a commercial activity, any such species;
- sell or offer for sale in interstate or foreign commerce any such species; or
- violate any regulation pertaining to such species or to any threatened species of plants pursuant to section 4 of this Act and promulgated by the Secretary pursuant to authority provided by this Act.

Exceptions to these provisions include seeds of cultivated threatened plants, under certain circumstances possession of plants in a conservation program by an employee or designate of the Service and those plants exempted by a special rule.

A particularly important section of the Act promotes the conservation of habitats of endangered and threatened species. The Act authorized the acquisition of land for the protection of habitats of these species and directs federal agencies to ensure that their activities or those authorized or funded by them do not jeopardize the continued existence of endangered and threatened species.

The Act prescribes strict procedural guidelines for determination of status and listing of species. These provide that species be listed only after extensive input and review by biologists, the states and the general public. This procedure insures that only species in need of protection are listed, and it provides baseline data from which further population monitoring may proceed.

Presently, 11 New York rare plants are on the federal endangered and threatened list:

Endangered

Agalinis decemloba - Sandplain Agalinis - presently known from Long Island

Schwalbea americana - Chaffseed - historically known from the Albany Pine Bush

Scirpus ancistrochaetus - Northeastern Bulrush – presently known in Steuben County

Threatened

Aconitum noveboracense - Northern Monk's-hood - presently known from the Catskills

Amaranthus pumilus - Seabeach Amaranth - presently known from Long Island

Asplenium scolopendrium var. *americanum* - Hart's Tongue Fern - presently known from Central New York

Helonias bullata - Swamp Pink - historically known from Staten Island

Isotria medeoloides - Small Whorled Pogonia - presently known from Eastern New York

Platanthera leucophaea - Prairie Fringed Orchid - historically known from Central New York

Rhodiola integrifolia ssp. *leedyi* - Leedy's Roseroot - presently known from the Finger Lakes Region

Solidago houghtonii - Houghton's Goldenrod - presently known from Western New York

The U.S. Fish and Wildlife Service regulates federally endangered and threatened plants. This includes listing new species, developing recovery plans, delisting species, reviewing projects, and assessing damage and penalties when plants are impacted. For this region, there are offices in Boston, MA; Cortland, NY; and Islip, Long Island.

State Laws and Regulations

Rare plants have been protected in New York State since 1933. After a long history of expanded protection efforts, the latest regulation was enacted in June 1989 and includes three rarity categories (endangered, threatened, and rare) and one non-rare protection category (exploitably vulnerable).

The categories of the rare plant protected list are defined as follows: **Endangered:** listed species are those with

5 or fewer extant sites, or

fewer than 1,000 individuals, or

restricted to fewer than 4 U.S.G.S. 7 1/2 minute topographical maps, or

species listed as endangered by the U. S. Department of Interior, as enumerated in the Code of Federal Regulations 50 CFR 17.11.

Threatened: listed species are those with

6 to fewer than 20 extant sites, or

1,000 to fewer than 3,000 individuals, or

restricted to not less than 4 or more than 7 U.S.G.S. 7 1/2-minute topographical maps, or

listed as threatened by the U. S. Department of the Interior, as enumerated in the Code of Federal Regulations 50 CFR 17.11.

Rare: listed species have

20 to 35 extant sites, or

3,000 to 5,000 individuals statewide.

Exploitably vulnerable: listed species are likely to become threatened in the near future throughout all or a significant portion of their range within the state if causal factors continue unchecked.

The exploitably vulnerable category contains plants that are likely to be picked for commercial and personal purposes and affords the landowner extra protection ability.

Rare plants included on the list are protected under New York State Environmental Conservation Law section 9-1503. Part (f) of the law reads as follows: "It is a violation for any person, anywhere in the state to pick, pluck, sever, remove, damage by the application of herbicides or defoliant, or carry away, without the consent of the owner, any protected plant. Each protected plant so picked, plucked, severed, removed, damaged or carried away shall constitute a separate violation." Violators of the regulation are subject to fines of \$25 per plant illegally taken.

The New York Natural Heritage Program was established in 1985 as a contract unit within the DEC. The program assumed from the state museum the job of compiling a status list for rare plants in the state. Each year a rare plant status review meeting is sponsored by the Natural Heritage Program botanist to review the ranks and taxonomy of the listed plants. The meeting includes a DEC representative, and other botanists from around the state who are familiar with rare plants. After the meeting the list is updated, and each plant is assigned a global and state rarity rank devised by NatureServe. This list has no legal status but is used by the DEC as a basis for the legal protected list that they produce. Since it is updated yearly it often differs slightly from the DEC list which is updated over a multi-year time frame.

Since the Heritage Program began, the status list has changed significantly. On the positive side many plants that were originally thought to be rare were shown to be more common after historical sites and potential habitat were searched. Over 70 plants that had not been seen in over 20 years were rediscovered, many of them with historical records over 50 years old. On the negative side many plants were determined to be extirpated from the state after years of searching failed to turn up a single plant. As time goes by and we gather more information on the status of rare plants the lists will become more refined and accurate.

State Environmental Quality Review Act and Lead Agency Regulations

In New York State, when a development or other type of project is proposed that may affect rare plants, an environmental impact assessment may be required as prescribed by the State Environmental Quality Review Act (SEQR). The SEQR process considers the environmental factors of a project and assists in the decision-making process at the earliest possible time.

The History of New York's Plant Protection Efforts

Listing and protection of rare plants in New York is not new. Since the early published floras of the 19th century by John Torrey and others, New York botanists have documented plants they thought were rare in the state. After the turn of the century state botanist Homer House and others began to officially protect these rarities through protection laws.

On April 24, 1933, ten flowering plants and all ferns were listed under Section 1425, subdivision 2 of the Penal Law and protected from harm on all state, county, city, town or village land. It was even illegal for a landowner to destroy Hart's Tongue fern on private property in Onondaga and Madison counties.

In 1950 the law was amended to prohibit the destruction of *Cypripedium candidum*, small white lady's-slipper, from any site in Genesee County.

For over 30 years, this meager list was the only protection afforded the state's rare plants. Then disaster struck. The Penal Code was revised in 1965 and, for unknown reasons, rare plant protection was dropped from the law on Sept. 1, 1967. Unfortunately, a 1967 bill to restore subdivision 2 to the law was not passed. Plant protection was now left to the Penal Code under sections 140.05, criminal trespass in the third degree, and section 155.25, petit larceny even though no specific mention of plants was made. Fortunately, some years before, plants were included in the general protection provisions of New York State Environmental Conservation Law. The Division of Lands and Forests had included penalties for removing trees or plant material from state lands. The Division of Parks allowed any regional park commission to draw up specific regulations for protection of plants and most of the state park commissions wrote regulations protecting plants. The Division of Fish and Game prohibited the destruction of plants on State Game Management areas. The Department of Transportation also prohibited the removal of plants from rest areas.

Even so, after 1967 there was no longer any special protection for specific plants nor was there specific protection for the landowner against collection of rare plants on private land. Officials in the Conservation Department and professional botanists considered this protection status inadequate and many garden clubs felt they needed specific lists for protection and education purposes. This concern provoked an effort to rewrite conservation laws to include specific lists of rare plants that would be protected.

Spurred on by the federal Endangered Species Act, the DEC in 1974 enacted a new conservation law (9-1503) that prohibited anyone from taking a protected plant from any land without the permission of the landowner. The associated Department regulation NYCRR 193.3 listed about 40 specific plants and various groupings of plants such as most ferns, all orchids and all clubmosses. The Department also appointed J.W. (Wint) Aldrich to establish an Advisory Committee on Protected Native Flora under the chairmanship of Stanley J. Smith, Curator of Botany at the State Museum. The Committee consisted of 40 members, and in early 1975 they promulgated an expanded list of plants that should be afforded

protection under the conservation law. Stanley Smith attempted to give each rare plant a rarity rank using a rating system he devised based on federal and state status, range, habitat, and population numbers. In 1976, a bill was introduced in the assembly and senate to allow the DEC to adopt these expanded, categorized lists for formal state protection. Unfortunately, this effort failed and the new lists were not adopted. The committee's work continued until late 1978 when it recommended that the state botanist, Dr. Richard Mitchell, publish a preliminary list of rare, endangered, and threatened plants in New York State. The list could be used by DEC for environmental analysis and project review, but a final list would be prepared by the Museum to be adopted in regulation. The preliminary list was published by the museum in 1979 (Mitchell 1979), but a final list completed in 1981, took eight more years to be adopted by DEC.

In 1981 the list of rare plants was published in the book *Rare Plants of New York State* (Mitchell and Sheviak 1981). Each plant was given a rarity ranking devised by Mitchell and listed as Endangered, Threatened, Commercially Exploitable or Extirpated and each rank except Commercially Exploitable was given a priority ranking of 1-3. This ranking system was also used in Mitchell and Tucker's state checklist of 1997 (Mitchell and Tucker 1997).

In the early 1980s, Michael Birmingham of the Division of Lands and Forests of the Department of Environmental Conservation renewed the state's efforts to assemble a list of rare plants to include in protected plant regulation under the existing Conservation Law. The new list was based on the rare plant status list developed by Steve Clemants of the New York Natural Heritage Program and Dr. Mitchell's list. There were 475 species and varieties proposed for listing. They were assembled in four categories, Endangered, Threatened, Exploitably Vulnerable, and Rare (see explanations under State Law). A public hearing on the proposed amendment to the regulation was held in November 1988 and only minor changes resulted. The regulation was submitted to the state's Environmental Board and was formally adopted on June 22, 1989.

An updated list was compiled in 1999 and adopted under state regulation in March 2000 and again in 2010. The new list encompasses all of the rare plants on the New York Natural Heritage Rare Plant Status List plus the Exploitably Vulnerable list.

Citations

Mitchell, Richard S. 1979. Preliminary Lists of Rare, Endangered and Threatened Plant Species in New York State. New York State Museum Leaflet No. 21.

Mitchell, Richard S. and Charles J. Sheviak. 1981. *Rare Plants of New York State*. New York State Museum Bulletin No. 445.

Mitchell, Richard S. and Gordon C. Tucker. 1997. Revised Checklist of New York State Plants. New York State Museum Bulletin No. 490.