telecommunications infrastructure. In January of 1990, for example, AT&T experienced a large scale service failure when software used with its Signaling System 7 contained a coding error. Other major interexchange carriers also experienced significant outages. In June and July of 1991, local exchange carriers Pacific Bell and Bell Atlantic experienced major outages. At that time, the Commission had no systematic way by which to become informed quickly of significant service disruptions and was unable to determine whether certain kinds of technology or equipment threatened service reliability. Present Section 63.100 provided a vehicle by which the Commission became better and more quickly informed of certain significant outages.

3. The Report and Order adopting present § 63.100, 7 FCC Rcd 2010 (Released February 27, 1992), 56 FR 7883, March 5, 1992, requested that the Network Reliability Council, a federal advisory committee created by the Commission to provide advice to the Commission for enhancing network reliability, study and recommend suitable additions to the reporting requirement in § 63.100. The proposed amendment to § 63.100 incorporates many of the outage reporting recommendations of the Council. The Council's membership included all sectors of the telecommunications industry, as well as state regulators and representatives of large and small telecommunications consumers. All Council meetings were open to the public. Members of the public were invited to present written submissions for the Council's consideration. The final reporting recommendations, sent to the Commission on December 29, 1992, were the result of months of painstaking research by the Threshold Reporting Group, a research committee of the Council composed of industry and consumer telecommunications experts. A variety of possible reporting thresholds and conditions were considered by these experts, by the Council and by the Commission. (For a detailed research summary and analysis, see the Final Recommendation of the Threshold Reporting Group of the Network Reliability Council, December 15, 1992. This item is available for inspection and copying during normal working hours in room 6325 of the Commission's offices at 2025 M Street, NW., Washington, DC 20554; copies may also be purchased from the Commission's copy contractor, International Transcription Service, Inc., (202) 857–3800, 2100 M Street, NW., Suite 140, Washington, DC 20037).

4. The Commission has studied the recommendations and has tentatively concluded that, with certain modifications, their establishment in the form of the proposed new Section 63.100, while cost-effective and not unduly burdensome to the reporting parties, will significantly enhance the capacity of the Commission to monitor outages and to encourage the industry to find ways to further ensure network reliability. As with other Commission regulations, compliance with the proposed reporting requirements, if they are established, may be effectively enforced under 47 CFR 1.80.

Regulatory Flexibility Analysis: We certify that the Regulatory Flexibility Act of 1980 does not apply to this rulemaking proceeding because if the proposed rule amendment is promulgated, there will not be a significant economic impact on a substantial number of small business entities, as defined in section 601(3) of the Regulatory Flexibility Act. The Secretary shall send a copy of this NPRM, including the certification, to the Chief Counsel for advocacy of the small business administration in accordance with section 605(b) of the Regulatory Flexibility Act, Pub. L. No. 96–354, 94 Stat. 1167, 5 U.S.C. 601 *et seq.*

Ex Parte Presentations: This is a nonrestricted notice and comment rulemaking proceeding. *Ex parte* presentations are permitted except during the Sunshine Agenda period, provided they are disclosed as required by Commission rules. *See generally* 47 CFR 1.1202, 1.1203 and 1.1206(a).

Legal Basis: Sections 1, 4, 201–205, 218, 220 and 403 of the Communications Act of 1934, as amended.

List of Subjects in 47 CFR Part 63

Communications common carriers, Reporting and recordkeeping requirements, Service disruptions.

Federal Communications Commission.

William F. Caton,

Acting Secretary.

[FR Doc. 93–29710 Filed 12–3–93; 8:45 am]

BILLING CODE 6712-01-M

DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

50 CFR Part 17

RIN 1018–AC09

Endangered and Threatened Wildlife and Plants; Proposed Reclassification of Betula Uber (Virginia Round-Leaf Birch) From Endangered to Threatened

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Proposed rule.

SUMMARY: The U.S. Fish and Wildlife Service (Service) proposes to reclassify *Betula uber* (Ashe) Fernald (Virginia round-leaf birch) from endangered to threatened. This action is proposed due to substantial improvement in the status of this tree species, which is known from one naturally occurring population in southwestern Virginia. Although the natural population has decreased from 41 to 11 plants since the species' rediscovery in 1975, the establishment of 20 additional populations over the past decade has resulted in a dramatic increase in the total population to over 1,400 subadult trees. *Betula uber* seedlings also have been cultivated and distributed to interested individuals, arboreta, and botanical gardens throughout the United States and to two foreign countries.

This proposed reclassification is undertaken in fulfillment of section 4(c) of the Endangered Species Act (Act) of 1973, as amended, which requires the Service to periodically review and reclassify, as needed, the species on the Federal list of endangered and threatened wildlife and plants. The proposed change in classification, based on a thorough review of all information currently available for *Betula uber*, provides formal recognition of progress toward recovery of this species. Reclassification to threatened status will not significantly alter its protection under the Act.

DATES: Comments from all interested parties must be received by February 4, 1994. Public hearing requests must be received by January 20, 1994.

ADDRESSES: Comments and materials concerning this proposal should be sent to the Endangered Species Office, U.S. Fish and Wildlife Service, 300 Westgate Center Drive, Hadley, MA 01035–9589. Comments and materials received will be available for public inspection, by appointment, during normal business hours at the above address.

FOR FURTHER INFORMATION CONTACT: Ms. Debbie Mignogno at the above address, telephone (413/253–8627).

addition to increasing the number and geographical distribution of round-leaf birches in cultivation, making the plants available to the public was viewed as a way of possibly reducing vandalism to the natural population by changing the public's perception of the tree as rare.

While vandalism and collection remain concerns, the distribution of seedlings, along with public awareness efforts such as the interpretive activities at the Mt. Rogers National Recreation Area, and coordination with persons and agencies in the area whose activities could affect the species, have shown at least some indirect success in alleviating these problems. It was noted at the 1992 meeting of the *Betula uber* Protection, Management and Research Coordinating Committee that no vandalism was reported during the previous year in the introduced populations for the first time in five years.

C. *Disease or predation. Betula uber* is subject to a number of compromising factors, including diseases, insects, and herbivory. Additionally, white-tailed deer will rub saplings with their antlers, and this may nearly or completely girdle the main stem. While no serious problems with insect damage or disease have been observed in the natural population, three diseases were observed in the introduced populations during the 1989 growing season (C. Thomas, pers. comm., 1992), cankers, anthracnose, and a putative foliar virus. In 1991, the highest mortality rate of trees with basal cankers occurred in those trees located on poor or exposed sites or those which showed symptoms of die-back during the year. Plots were sprayed with pesticides between May and August 1991 to control fungal pathogens and insects that may be transmitting these fungi or creating wounds through which the fungal canker pathogens can enter. Damage to round-leaf birch leaves has also been incurred from Japanese beetles.

During 1992, considerable mortality of *Betula uber* was attributed to deer rubs. Browsing by deer and rabbit was evident in several of the established populations. While browsing may not cause direct mortality due to the capacity of *Betula uber* to resprout, it may decrease the birch's ability to compete with other plants, resulting in the demise of the tree. Wire cages, which were placed around the smaller trees to prevent further loss from browsing, may have been prematurely removed from some of the birch trees in June 1991. Further fencing is needed for protection. Additionally, approximately ten were found to be leaning. The cause is unknown, but the trees were staked in an attempt to stabilize them.

The maintenance activities described above will continue as part of the recovery program following reclassification of *Betula uber* to threatened.

D. *The inadequacy of existing regulatory mechanisms. Betula uber* is protected by the Federal Endangered Species Act of 1973, as amended, and by the Virginia Endangered Plant and Insect Act of 1979. The Virginia statute prohibits taking of endangered plants on both public and private lands, except by the private landowner. If the proposed reclassification to threatened status becomes final, no substantive change in the protection afforded this species under these laws is anticipated. Populations on private lands will still be subject to loss due to inadequate regulatory protection.

E. *Other natural or manmade factors affecting its continued existence.* Most of the loss in the natural population has been attributed to vandalism and collection. However, loss of individuals could continue to occur from such natural causes as competition from later successional species and flooding of Cressy Creek. Minimal reproduction in the natural population, probably due to the limited source of pollen, may result in the gradual and possibly irreversible decline of this population unless further management actions are taken.

The relatively low numbers and limited range of the species continue to make the Cressy Creek populations vulnerable to natural stresses or catastrophes. However, given the management tools developed for the species, as well as the variety of conditions under which the 20 introduced populations appear to grow, it is unlikely that a single natural stress would result in the loss of *Betula uber* in more than a portion of its existing range.

While the single natural population remains vulnerable to extirpation, due largely to past acts of vandalism and a continuing failure to reproduce, 19 of the 20 additional populations offer the possibility of self-maintenance, suggesting that it is unlikely that the round-leaf birch will disappear from its only known native watershed. The additional populations are believed to encompass the genetic diversity of the natural population. As of May 1992, more than 1,400 individuals occur within the Cressy Creek watershed, as compared to only 41 individuals known to be in existence when the Cressy Creek population was rediscovered in 1975.

Based on a review of the Virginia Round-Leaf Birch Recovery Plan (U.S. Fish and Wildlife Service 1990), the species' present status does not meet the criteria established for delisting the species. However, given the successful propagation and distribution of plants together with its current distribution and afforded protection, this rare birch is not in imminent danger of extinction. The best available data indicate that *Betula uber* qualifies as a threatened species. The Service has carefully assessed the best scientific and commercial information available regarding the past, present, and future threats faced by this species in determining to propose this rule. Based on this evaluation, the preferred action is to list *Betula uber* as threatened.

Available Conservation Measures

If made final, this rule would change the status of *Betula uber* at 50 CFR 17.12 from endangered to threatened. This rule would formally recognize that this species is no longer in imminent danger of extinction throughout a significant portion of it's range. The proposed change in classification does not significantly alter the protection for this species under the Act. Anyone taking, attempting to take, or otherwise possessing a *Betula uber* in an illegal manner would still be subject to penalty under Section 11 of the Act. There would be no difference in penalties for the illegal take of an endangered species versus a threatened species. Section 7 of the Act would still continue to protect this species from Federal actions that would jeopardize the continued existence of *Betula uber*.

Conservation measures prescribed by the Virginia Round-Leaf Birch Recovery Plan would proceed. Conservation measures identified in the species recovery plan include: Continued efforts to protect portions of the natural population that occur on private lands; expanded management of the natural population; continued efforts to facilitate natural regeneration; establishment of pollen and seed banks; continued maintenance of the additional populations, including control of disease and insect problems, prevention of browsing, and management of competing vegetation; further research into the plant's reproductive and genetic systems, as well as habitat requirements; and continued efforts to raise the public's awareness in regard to issues affecting this and other endangered plants (U.S. Fish and Wildlife Service 1990). According to the recovery plan, implementation of these recovery actions will take place over a period of

approximately 17 years, with full recovery of the species being achieved by the year 2010.

Public Comments Solicited

The Service intends that any final action resulting from this proposal will be as accurate and as effective as possible. Therefore, comments or suggestions from the public, other concerned governmental agencies, the scientific community, industry, or any other interested party concerning this proposed rule are hereby solicited. Comments particularly are sought concerning:

(1) Biological, commercial trade, or other relevant data concerning any threat (or lack thereof) to this species;

(2) The location of any additional populations of this species;

(3) Additional information concerning the range, distribution, and population size of this species; and

(4) Current or planned activities in the subject area and their possible impacts on this species.

Final promulgation of the regulation on *Betula uber* will take into consideration the comments and any additional information received by the Service, and such communications may lead to a final regulation that differs from this proposal.

The Endangered Species Act provides for a public hearing on this proposal, if requested. Requests must be received by January 20, 1994. Such requests must be made in writing and addressed to the agency identified under **ADDRESSES** above.

National Environmental Policy Act

The Fish and Wildlife Service has determined that an Environmental Assessment, as defined under the authority of the National Environmental Policy Act of 1969, need not be prepared in connection with regulations adopted pursuant to section 4(a) of the Endangered Species Act of 1973, as amended. A notice outlining the Service's reasons for this determination was published in the **Federal Register** on October 25, 1983 (48 FR 49244).

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Sharik, T.L. and R.H. Ford. 1984. Variation and taxonomy of *Betula uber*, *B. lenta*, and *B. alleghaniensis*. Brittonia 36(3):307–316.

Sharik, T.L., P.P. Feret and R.W. Dyer. 1990. Recovery of the endangered Virginia round-leaf birch (*Betula uber*): A decade of effort. Page 185–188. *IN*: Sheviak and D.J. Leopold (eds.) Ecosystem management: Rare species and significant habitats. 1990. New York State Museum Bulletin 471.

Virginia Department of Agriculture and Consumer Services. 1979. Endangered Plant and Insect Species Act. 1979 Cumulative Supplement to Code of Virginia 39: 3–6.

U.S. Fish and Wildlife Service. 1982. Virginia round-leaf birch recovery plan. Newton Corner, MA. 58 pp.

U.S. Fish and Wildlife Service. 1986. Virginia round-leaf birch recovery plan, first revision, Newton Corner, MA. 25 pp.

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Authors

The primary authors of this proposed rule are Ms. Mary Parkin and Ms. Donna Surabian, U.S. Fish and Wildlife Service, 300 Westgate Center Drive, Hadley, Massachusetts 01035–9589 (413) 253–8617.

List of Subjects in 50 CFR Part 17

Endangered and threatened species, Exports, Imports, Reporting and recordkeeping requirements, Transportation.

Proposed Regulation Promulgation

Accordingly, the Service hereby proposes to amend part 17, subchapter B of chapter I, title 50 of the Code of Federal Regulations, as set forth below:

PART 17—[AMENDED]

1. The authority citation for part 17 continues to read as follows:

Authority: 16 U.S.C. 1361–1407; 16 U.S.C. 1531–1544; 16 U.S.C. 4201–4245; Public Law 99–625, 100 Stat. 3500, unless otherwise noted.

2. § 17.12(h) is amended by revising the entry for *Betula uber* under the family Betulaceae to read as follows:

§ 17.12 Endangered and threatened plants.

* * * * *

(h) * * *

Species		Historic range	Status	When listed	Critical habitat	Special rules
Scientific name	Common name					
•	•	•	•	•	•	•
Betulaceae—Birch family:						
Betula uber	Virginia round-leaf birch	U.S.A. (VA)	T	39	NA	NA
•	•	•	•	•	•	•

Dated: October 28, 1993.

Richard N. Smith,

Acting Director, U.S. Fish and Wildlife Service.

[FR Doc. 93–29566 Filed 12–3–93; 8:45 am]

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DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

50 CFR Parts 215, 216, and 222

[Docket No. 930404–3104; I.D. 120293A]

RIN 0648–AD11

Protected Species Special Exception Permits

AGENCY: National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

ACTION: Proposed rule; extension of comment period.

SUMMARY: NMFS is extending the comment period on proposed rules to review regulations for protected species permits for purposes of public display, scientific research, and enhancement (58 FR 53320, October 14, 1993). Three public hearings have been scheduled to give interested members of the public an opportunity to provide comments on the proposed rule (58 FR 58680). NMFS has received requests for an extension of the

that a minimum of 10 populations would be self-sustaining. Each newly-established population consisted of 96 individuals, including both round-leaf and sweet birch progeny. Habitat management to promote the establishment of these populations included fencing trees from browsers, removing competing vegetation around individual transplants, and removing competing vegetation from the forests bordering the populations. As of May 1992, survival averaged 77.5% for all populations regardless of the mother tree species, and ranged from 7.2% to 96.9% (Sharik *et al.* 1990). On this basis, 19 of the additional populations offer the possibility of self-maintenance.

Retention of round-leaf germplasm began in 1975 when the U.S. National Arboretum transplanted three seedlings from the wild to its grounds in Washington, DC. Approximately 50 plants were produced from the 3 genotypes; these plants were distributed to arboreta, botanical gardens, and nurseries in the United States and 2 European countries (Sharik *et al.* 1990). In 1988, approximately 2,000 seedlings from crosses of selected genotypes were propagated for distribution to arboreta and botanical gardens for teaching and research. Since 1989, round-leaf birch seedlings have been distributed to other interested organizations and individuals under policy guidelines developed by the Virginia Agricultural Experiment Station. Recipients are required to cover costs and sign a waiver that they will not sell the plants or their offspring.

To increase awareness of the recovery effort and to minimize human impact on the natural population of round-leaf birch located on private property, the trees on public land have been the focus of an ongoing round-leaf birch interpretive program. A sign erected by the U.S. Forest Service gives the location of the largest round-leaf birch in the population—the Mt. Rogers Viewing Area—and a ramp provides a close-up view of the tree, which is enclosed by a chain-link fence. Informational materials and guides tell the round-leaf birch story from its discovery through current recovery activities.

After a decade of coordinated effort by Federal, state, and private agencies and institutions, as well as private landowners, the outlook for the Virginia round-leaf birch has brightened considerably. Because of the significant progress made toward recovery of the species and the species' current status, reclassification of the Virginia round-leaf birch to threatened status is warranted. The current status of *Betula uber* is described below:

1. Ten additional populations have been established in suitable habitat; these populations have showed an average survival rate of ≥ 75% over a 5 to 8 year period and have reached the stage of initiating reproduction.

2. Genotypes have been preserved through a program of sexual propagation and through maintenance of a breeding orchard.

3. The single natural population is extant, and there are opportunities to protect and manage its habitat.

4. Sufficient information is known to facilitate *Betula uber* reproduction through habitat management.

Based on a review of status information, research results, and further planned recovery actions, it appears highly likely that progress toward the delisting objective specified in the recovery plan will continue.

Summary of Factors Affecting the Species

Section 4(a)(1) of the Act and regulations promulgated to implement the listing provisions of the Act (50 CFR part 424) set forth the procedures for adding species to the Federal list. A species may be determined to be an endangered or threatened species due to one or more of the five factors described in section 4(a)(1). These factors and their application to *Betula uber* (Ashe) Fernald (Virginia round-leaf birch) are as follows:

A. *The present or threatened destruction, modification, or curtailment of its habitat or range.* The Virginia round-leaf birch is a pioneer species that succumbs to competition from longer-lived species. Under natural conditions, Virginia round-leaf birch habitat is threatened by factors such as drought, flooding, and competing vegetation. In this regard, by 1984 flooding and competition with later successional species had caused the death of 14 individual trees in the natural population.

There are 11 trees, 4 reproductively mature adults and 7 subadults, remaining in the natural population. Only 2 of the 11 trees occur on publicly protected land. The nine trees on private lands remain susceptible to adverse habitat modification or to vandalism. However, these threats have been greatly diminished through efforts to achieve landowner cooperation and public awareness together with the widespread distribution of artificially propagated seedlings to the public.

The optimum habitat requirements of this species apparently are very similar to these of sweet birch. Therefore, most of the 20 introduced populations were planted in areas where sweet birch was abundant and could be expected to regenerate well. Additionally, the 20 established populations were planted on U.S. Forest Service lands; thus protecting these individuals from take. Further, their habitats are protected from adverse modification and may be managed specifically to enhance the species' survival.

As part of the U.S. Forest Service's land management activities, competing vegetation is periodically removed from the base of the established trees. Because birches, in general, are known to be sensitive to elevated temperatures and reduced moisture (T.L. Sharik, Michigan Technological University, pers. comm., 1992), care is taken while raking around the trees to avoid removal of too much organic matter and exposure of the roots (C. Thomas, U.S. Forest Service, pers. comm., 1992).

On Forest Service land, a bank stabilization project located near the fenced enclosure of the largest *Betula uber* specimen at the Mt. Rogers Viewing Area was completed in the summer of 1992. This project, which was designed to hold excessive runoff in the existing stream channel in order to prevent flooding or erosion of birch habitat, has apparently achieved its aims without causing any unintended deleterious effects on the birch population.

B. *Overutilization for commercial, recreational, scientific, or educational purposes.* To date, the historical loss of 10 of the original 41 individuals in the population discovered in 1975 (Sharik et al. 1990) can be attributed to transplanting of individual trees on the privately-owned tracts and to vandalism. Collection accounts for an additional loss of 30 seedlings in 1981 from the private land portion of the natural regeneration study area (U.S. Fish and Wildlife Service 1990, Sharik et al. 1990). Beginning in 1988, in an attempt to reduce collection pressure, and to protect from loss of genetic diversity due to illegal collecting, seedlings were produced from controlled crosses at a breeding orchard located at the Reynolds Homestead Research Center in Critz, Virginia. The orchard is maintained by periodic mowing, weeding, inspection, and treatment for insects and diseases. The majority of the seedlings are in good to excellent condition.

Beginning in 1988, public arboreta, botanical gardens, nurseries, and other interested parties were informed of the availability of round-leaf birch seedlings produced from the breeding orchard, and many requests were filled, subject to the condition that the plants or their offspring were not to be sold. In

SUPPLEMENTARY INFORMATION:

Background

The Virginia round-leaf birch was originally described as a variety of the common sweet birch (*Betula lenta* L.) in 1918 by W.W. Ashe from trees he reported growing along the banks of Dickey Creek in Smyth County, Virginia (Ashe 1918). The taxon was subsequently elevated to the species level by M.L. Fernald. The round-leaf birch was not collected or observed during the 1950s and 1960s, and was assumed to be extinct until it was rediscovered in 1975 along the banks of Cressy Creek, approximately 2 kilometers (1 mile) from the type locality (Ogle and Mazzeo 1976). The general consensus among botanists working with the species is that Ashe probably erred in his original reference to Dickey Creek (Sharik and Ford 1984, Sharik, Feret and Dyer 1990). Since 1975, searches in the Cressy Creek and other watersheds over a three-county area have not revealed any additional populations in the wild.

Several lines of evidence now suggest a close evolutionary relationship between the Virginia round-leaf birch and the sweet birch. Both taxa are apparently diploids, with 28 pairs of chromosomes, and isozymes extracted from the cambium of both species show similar patterns (U.S. Fish and Wildlife Service 1990). The taxa overlap completely in flowering times, and they are interfertile (Sharik and Ford 1984, U.S. Fish and Wildlife Service 1990). The offspring of crosses between the two taxa typically possess either the round leaves characteristic of round-leaf birch or the ovate leaf shape typical of sweet birch. Preliminary analysis suggests that this difference in leaf shape may be controlled by a single gene (Sharik et al. 1990, U.S. Fish and Wildlife Service 1990). This subject warrants further data collection and analysis to determine the species' proper taxonomic status.

Betula uber is a moderate-sized tree in the Betulaceae family. It grows to 15 meters (45 feet) in height with smooth, dark brown to black, aromatic bark and a compact crown (Ogle and Mazzeo 1976, Sharik and Ford 1984, U.S. Fish and Wildlife Service 1990). Its leaves are round to slightly oblong and alternately arranged. The catkins have long, smooth scales with three broadly divergent lobes. Three winged nutlets or samaras are borne at the base of each scale (Sharik and Ford 1984). *Betula uber* flowers when the leaves emerge from the winter buds in April to early May (U.S. Fish and Wildlife Service 1986).

At the time of its rediscovery in 1975, the only known natural *Betula uber* population consisted of 41 individuals; by 1977 the population had declined to 26 individuals, and it is now down to 11 trees. This population is confined to a 100 meter-wide (100 yard-wide) band of highly disturbed second-growth forest along a one kilometer (1 mile) stretch of the Cressy Creek floodplain, a site nearly surrounded by agricultural land (Ogle and Mazzeo 1976, Ford, Sharik and Feret 1983). The strip of forest containing the round-leaf birch occurs within a much larger population of related dark-barked birch species (sweet birch and yellow birch, *B. alleghaniensis*). The round-leaf birch population extends over three contiguous ownerships comprising the Mount Rogers National Recreation Area in the Jefferson National Forest and two private tracts. In 1976, the Federal government and the private landowners erected protective fences around their respective segments of the population. This did not, however, prevent subsequent vandalism and transplanting of individual trees by private landowners, with a resultant loss of 12 round-leaf birches on the private lands.

Protection of the species gained momentum in 1977 with formation of the *Betula uber* Protection, Management and Research Coordinating Committee, which consists of representatives from the Federal and state governments, conservation organizations, universities, and the private sector. *Betula uber* was added to the U.S. Department of the Interior's list of endangered and threatened wildlife and plants on April 26, 1978 (Federal Register Vol. 43, No. 81, pp. 17910–17916), bringing it under the protection of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*). The species was also added to the Commonwealth of Virginia's Endangered Plant and Insect Species Act in 1979 (Virginia Department of Agriculture and Consumer Services 1979).

In 1982, the Service approved the Virginia Round-Leaf Birch Recovery Plan (U.S. Fish and Wildlife Service 1982), which was revised in 1986 and updated in 1990. The goal of this plan is to increase the number of round-leaf birches in the wild to a level where the species can be removed from the Federal list; this level is estimated at 500–1,000 individuals in each of 10 self-sustaining populations. These populations may include individuals of sweet birch which carry the roundleaf trait. Any population of round-leaf birch, whether natural or established through plantings, will be considered self-sustaining when it produces 500–1,000 individuals greater than 2 meters (6 feet) tall. Given the present status of round-leaf birch and current knowledge of its life history, this condition is projected to be met by the year 2010 in both the natural and additional populations. The 1990 plan does not document a reclassification objective: nevertheless, significant recovery progress can trigger consideration for reclassification to threatened.

The natural population has been monitored closely since 1978. Given the heavy mortality that has occurred in this population since 1975, an effort to enhance natural regeneration was implemented in 1981. Two small areas were cleared of vegetation within 60 meters (65 yards) of potential seed sources, one on public land and one on private land. Eighty-one round-leaf birch seedlings were recorded on the private property site. Round-leaf birch seedlings were not produced at the public land site, and this was attributed to the absence of a pollen source for the relatively isolated round-leaf birch mother trees growing there (Sharik et al. 1990). Initial survival and growth rates of the seedlings suggested that fitness in round-leaf birch may be as high as that in sweet birch (Sharik et al. 1990). However, all of the 30 round-leaf birch seedlings remaining after the end of the second growing season were gone by 1986, the apparent result of vandalism, as whole plants (including roots) were missing.

In 1984, The Nature Conservancy acquired 14 hectares (35 acres) of land adjacent to the natural population. The land was in turn purchased by the U.S. Forest Service in 1986 and has since been managed as potential round-leaf birch habitat; however, round-leaf birches currently do not occur there.

Given the initial success of experiments with birch regeneration, it was concluded that additional populations could be established and that they could be self-sustaining given periodic disturbance. In preparation for planting of seedlings, 20 small (0.1 hectare) (.3 acre) openings were cleared in wooded areas within the Cressy Creek watershed in locations where sweet birch was abundant. Seeds were collected from six round-leaf birch mother trees and four sweet birch mother trees, germinated in greenhouse conditions, and held in cultivation for two to three growing seasons before transplanting to the cleared areas in 1984 and 1985. Additional seeds were germinated in 1985 for transplanting in 1986 and 1987.

Five populations per year were established over the 4-year period, for a total of 20 populations, with the hope