(2) When:
(A) One of the following is a party to the proceeding or has an interest in the proceeding:
(i) The Department or any component of the Department;
(ii) Any Department employee acting in his or her official capacity;
(iii) Any Departmental employee acting in his or her individual capacity if the Department or the DOJ has agreed to represent that employee or pay for private representation of the employee;
(iv) The United States, when the DOJ determines that the Department is likely to be affected by the proceeding; and
(B) The Department deems the disclosure to be:
(i) Relevant and necessary to the proceeding; and
(ii) Compatible with the purposes for which the records were compiled.

POLICIES AND PRACTICES FOR STORING, RETRIEVING, ACCESSING, RETAINING, AND DISPOSING OF RECORDS IN THE SYSTEM:

STORAGE:
Information in this system of records is maintained in electronic format on a system hard drive.

RETRIEVABILITY:
This specific system has the capability of performing searches through email archive information identified in the “Category of records” section above using any word or number criteria. This capability makes it unique from other email archive systems that are maintained by Interior bureaus/offices, and therefore, this system becomes subject to Privacy Act requirements.

SAFEGUARDS:
The contractor maintaining this system must follow the requirements under 5 U.S.C. 552a(e)(10) and 43 CFR 2.51 for security standards. A security plan was developed to prevent unauthorized access to the system. The plan addresses application security, administration/user security, and application agreements. Access to the system is limited to authorized personnel whose official duties require such access. The EEAS system will be maintained at the Government contractor’s facility at a secured data center.

RECORD ACCESS PROCEDURES:
To request access to records, follow procedures in the “Notification procedure” section above. The request must meet the requirements of 43 CFR 2.60. Provide with your request:
(a) Proof of your identity;
(b) List of all the names by which you have been known, such as maiden name or alias;
(c) Your Social Security Number;
(d) Your mailing address;
(e) Time period(s) that records pertaining to you may have been created or maintained, to the extent known by you (See 43 CFR 2.60(b)(3)); and
(f) Specific description or identification of the records you are requesting (including whether you are asking for a copy of all of your records or only a specific part of them), and the maximum amount of money that you are willing to pay for their copying (See 43 CFR 2.63(b)(4)).

RECORD SOURCE CATEGORIES:
Some information maintained in the system is collected from mag-tapes provided by Interior bureau/office email backup systems from those installations identified in the “Categories of individuals” section above. This information is downloaded onto a hard drive managed by the contractor and stored digitally. Information from Interior bureau/office e-mail servers will be captured in real time, transmitted electronically through secure networks, and captured and stored electronically into the EEAS.

EXEMPTIONS CLAIMED FOR THE SYSTEM:
None.

BILLING CODE 4310–02–P

DEPARTMENT OF THE INTERIOR
Fish and Wildlife Service

Endangered and Threatened Wildlife and Plants; 90-Day Finding for a Petition to List the Tri-State Area Flock of Trumpeter Swans as Threatened

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Notice of 90-day petition finding.

SUMMARY: We, the Fish and Wildlife Service (Service), announce a 90-day finding for a petition to list the Tri-State Area flock of trumpeter swans (Cygnus buccinator) as an endangered or threatened species under the Endangered Species Act of 1973. We find that the petition does not provide substantial information indicating that this flock is a Distinct Population Segment (DPS) that may warrant listing. We will not be initiating a further status review in response to the petition. However, we ask the public to submit to us any new information that becomes available concerning the status of or threats to this flock of trumpeter swans. This information will help us monitor and manage this species.

DATES: The finding announced in this document was made on January 15, 2003. You may submit new information concerning this species for our consideration at any time.

ADDRESSES: Submit information, data, or comments concerning this petition to the Assistant Regional Director, Ecological Services, U.S. Fish and Wildlife Service, P.O. Box 25486, DFC, Denver, CO 80225–0486. The petition, finding, and supporting data are available for public inspection, by appointment, during normal business hours, at the above address, and on our website at: http://www.r6.fws.gov/birds/trumpeterswan/.

FOR FURTHER INFORMATION CONTACT: Chuck Davis, Endangered Species Listing Coordinator, at the above address, or by telephone at 303–236–7400, extension 235, or by email at chuck.davis@fws.gov.

SUPPLEMENTARY INFORMATION:
Background

Section 4(b)(3)(A) of the Endangered Species Act of 1973, as amended (Act) (16 U.S.C. 1531 et seq.), requires that we make a finding on whether a petition to list, delist, or reclassify a species presents substantial scientific or commercial information to demonstrate that the petitioned action may be warranted. This finding is to be based on all information available to us at the time we make the finding. To the maximum extent practicable, this finding is to be made within 90 days of our receipt of the petition, and the notice of the finding is to be published promptly in the Federal Register. Our standard for substantial information within the Code of Federal Regulations (CFR) with regard to a 90-day petition finding is “that amount of information that would lead a reasonable person to believe that the measure proposed in the petition may be warranted” (50 CFR 424.14(b)(1)). If we find that substantial information was presented, we are required to promptly commence a review of the status of the involved species, if one has not already been initiated under our internal candidate assessment process.

In 1989, we were petitioned to list a portion of the trumpeter swans in North America (Rocky Mountain Population (RMP), see below) as threatened. However, the petition presented information that we deemed insufficient to warrant proceeding with a status review (55 FR 17646 to 17648; April 16, 1990).

On August 25, 2000, we received a petition to list the Greater Yellowstone (Tri-State) breeding population of the trumpeter swan as threatened or endangered. The petitioners, the Biodiversity Legal Foundation and Fund for Animals, assert that the Tri-State Area flock meets the definition of a DPS, as defined in our policy published February 7, 1996 (61 FR 4722), and, therefore, warrants listing because of its low population numbers and other threats, including the allowed take of trumpeter swans during the hunting seasons in Utah and Nevada.

On September 22, 2000, we notified the petitioners that our Listing Priority Guidance, published in the Federal Register (64 FR 57114) on October 22, 1999, designated the processing of new listing petitions as a Priority 4 activity (i.e., of lower priority than processing emergency listings, processing determinations on proposed species, and resolving the status of candidate species). We further informed the petitioners that we consider the Tri-State Area trumpeter swan flock as a portion of the RMP, which has had an increasing number of swans since the 1960s. Therefore, we did not find a compelling reason to consider the petition under emergency listing criteria, and no funds were available to proceed with an administrative finding at that time.

On October 25, 2000, the petitioners and the Utah Environmental Congress, Margaret Pettis, and Mack P. Bray, filed a formal complaint in Federal District Court for the District of Columbia (Fund for Animals v. Clark, 00–CV–02558) alleging that we violated the Act by failing to publish a 90-day finding for their petition. Plaintiffs also allege that the Service violated provisions of the MBTA, the National Environmental Policy Act (NEPA), and the Administrative Procedures Act by allowing implementation of a limited trumpeter swan hunting season in 2000. The case was settled on March 23, 2001, when we agreed to reevaluate our compliance with the MBTA and NEPA for the 2002 hunting season regulations. On February 5, 2001, we received a 60-day notice of intent from Meyer and Glitzenstein, legal representatives for the petitioners, alleging that we had violated the Act by failing to make a finding as to whether the petition to list the Tri-State Area trumpeter swan flock presented substantial information indicating that listing may be warranted. We responded on April 4, 2001, reiterating that we would not be able to begin an evaluation of the petition until the work on the higher-priority activities was completed. On September 6, 2001, Meyer and Glitzenstein filed another 60-day notice alleging that we violated the Act by failing to make a 12-month finding within 1 year of the receipt of the trumpeter swan petition.

On October 3, 2001, plaintiffs were joined by the Humane Society of the United States in a new complaint alleging that our reevaluation of the swan hunting regulations was not adequate, and that we had violated the Act by failing to prepare a 90-day finding on the swan petition (Fund for Animals et al. v. Norton, 01–CV–2078 (RMU)).

On March 5, 2002, plaintiffs filed an amended complaint to include the allegation that we had violated the Act by failing to complete a 12-month finding on the swan petition. The case has been briefed and a decision is pending from the court.

Petitioners’ Assumptions

Petitioners assert that the Tri-State “population segment” of trumpeter swans, a group of largely non-migratory swans that breed and winter in the Greater Yellowstone area in and around Yellowstone National Park in Wyoming, Montana, and Idaho, qualifies as a listable entity under the Act in accordance with our DPS policy cited above. The petition asserts that the Tri-State segment is geographically and biologically distinct from other trumpeter swan groups in North America and the United States. The petitioners propose that the segment is discrete because it is separated by physical, physiological, ecological, behavioral, “or other factors,” and is separated by approximately 400 miles from any other significant breeding groups of this species. Petitioners also assert that the Tri-State Area flock is distinct from other swan flocks in Canada by reason of the international boundary and alleged differences in exploitation and management of this species between Canada and the United States.

Petitioners allege that the Tri-State Area flock has lost “more than 30 percent of its adults in the past decades, and is in an imperiled situation.” The petition recommends that we consider emergency listing of the petitioned DPS.

Distinct Population Segment Analysis

Under the Act, we must consider for listing any species, subspecies, or, for vertebrates, any DPS of these taxa, if sufficient information is present to indicate that such action may be warranted.

To implement the measures prescribed by the Act and its Congressional guidance, we developed policy that addresses the recognition of DPSs for potential listing actions (61 FR 4722; February 17, 1996). The policy allows for more refined application of the Act that reflects the biological needs of the taxon being considered and avoids the inclusion of entities that do not require its protective measures.

The Act’s legislative history (Senate Report 96–151, 1st Session) indicates that Congress expects the Services (Fish and Wildlife Service and National Marine Fisheries Service) to use the DPS designation “sparingly and only when the biological evidence indicates that such action is warranted” (emphasis added).

The background information included with the publication of our final DPS policy indicates that any interpretation adopted for DPS determination should be consistent with the purposes of the Act (i.e., “to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved, to provide a program for conservation of such endangered species and threatened species, and to
take such steps as may be appropriate to achieve the purposes of the treaties and conventions set forth in subsection (a) of this section" (emphasis added).

Under our DPS policy, we use two elements to assess whether a population segment under consideration for listing may be recognized as a DPS. The elements are: (1) The population segment’s discreteness from the remainder of the taxon; and (2) the population segment’s significance to the taxon to which it belongs. Both elements must be present for a segment to qualify as a DPS. When responding to a listing petition, we are required to use all information available to us at the time we make the finding. If we determine that a population segment being considered for listing represents a DPS, then the level of threat to the population segment is evaluated based on the five listing factors established by the Act to determine if listing it as either threatened or endangered is warranted.

Those listing factors are: (1) The present or threatened destruction, modification, or curtailment of habitat or range; (2) overutilization for commercial, recreational, scientific, or educational purposes; (3) disease or predation; (4) the inadequacy of existing regulatory mechanisms; and, (5) other natural and manmade factors affecting its continued existence. Listing is warranted if one or more of those threats could lead to the extinction of the species throughout all or a significant portion of the range of the species in the foreseeable future.

Discreteness—A population segment of a vertebrate species may be considered discrete if it satisfies either one of the following two conditions: (1) It is markedly separated from other populations of the same taxon as a consequence of physical, physiological, ecological, or behavioral factors. Quantitative measures of genetic or morphological discontinuity may provide evidence of this separation, (2) It is delimited by international governmental boundaries within which differences in control of exploitation, management of habitat, conservation status, or regulatory mechanisms exist that are significant with regard to conservation of the taxon.

The petition asserts that the Tri-State segment of trumpeter swans is geographically and biologically distinct from other trumpeter swans in North America and the United States. The petitioners propose that the segment is discrete because it is separated by physical, physiological, ecological, behavioral, “or other factors,” and is separated by approximately 400 miles from any other significant breeding groups of this species. Petitioners also assert that the Tri-State Area flock is distinct from other swan flocks in Canada because of the presence of the international boundary and because of alleged differences in exploitation and management of this species between Canada and the United States. Below we discuss in detail the conditions for which we will consider a population to be discrete under the DPS policy as applied to the Tri-State Area flock.

(1) Is the Tri-State Area Flock Markedly Separated From Other Populations of the Same Taxon as a Consequence of Physical, Physiological, Ecological, or Behavioral Factors?

Historic range maps indicate that the trumpeter swan had a more contiguous distribution than exists today. As the species’ range was restricted due to overexploitation and habitat loss, remnant groups of birds inhabited disjunct breeding areas. Although the exact time at which the present degree of separation occurred is unknown, we believe that it occurred during the peak of trade in swan skins in the mid- to late 1800s. Trumpeter swans have relatively long life spans; birds more than 24 years old have been recaptured in the wild (Kennard 1975). Hence, relatively few (perhaps 6 or 7) generations of trumpeter swans have elapsed since that time. Suzuki et al. (1981) state that only one immigrating individual per generation is necessary to maintain genetic continuity between spatially segregated groups of individuals within a species. Mills and Allendorf (1996) suggest a minimum range of 1 to 10 individuals per generation is needed to maintain gene flow between groups of animals. Limited monitoring studies have documented several individuals in non-natal nesting areas (Gale et al. 1987, Dubovsky and Cornely 2002) and one mixed-group (i.e., Canadian/Tri-State) pairing (Shea and Drewien 1999).

Further, the Interior Canada and Tri-State birds are spatially segregated only during the nesting season; they are sympatric (overlapping in range) during winter, when pairing usually occurs (Johnsgard 1978, Gale et al. 1987). For these reasons, we conclude it is unlikely that the Tri-State Area flock has become genetically distinct from the Interior Canada birds. Even if little or no movement of birds between flocks has occurred, there is no evidence that a sufficient amount of time has passed since the mid-1800s for morphology, behavior, and genetics of Tri-State birds to become distinctly different from those of other flocks.

Recently, the Service, in consultation with the Flyway Councils, divided trumpeter swans into three administrative populations on the basis of areas in which they nest. These populations are defined primarily for management purposes and not in recognition of reproductive isolation or genetic differentiation (Trost et al. 2000). In fact, one of the populations is derived exclusively from birds and eggs translocated from the other two populations.

The Pacific Coast Population (PCP) is comprised primarily of birds that nest in Alaska and winter along the west coast of Canada and the United States as far south as Oregon (Figure 1). Observations of a very limited number of marked birds from this group suggest that birds nesting in Alaska do not often migrate or winter east of British Columbia or the Pacific Coast States (Dubovsky and Cornely 2002).

The RMP is comprised of birds that nest east of the range of the PCP to areas just east of the western border of Saskatchewan and points south. Most birds in the RMP winter at the confluence of the borders of Montana, Idaho, and Wyoming (hereafter termed the “Tri-State” Area) (Subcommittee on Rocky Mountain Trumpeter Swans 1998).

The Interior Population (IP) is comprised of birds that nest east of the range of the RMP. The IP is the result of extensive restoration efforts, and is composed almost exclusively of PCP and RMP birds and eggs that were translocated to these eastern areas. Birds from the IP tend to winter primarily in areas near to or south of their nesting grounds (Dubovsky and Cornely 2002).

Of all the populations, the status of the RMP has been subject to the largest amount of debate over the years. The RMP is comprised primarily of two groups of birds: one that nests in Canada and the other that nests in the Tri-State Area. The latter group contained only about 70 birds in the early 1930s. These were erroneously thought to be the only free-ranging trumpeter swans in the world (Banko 1960). The birds nested primarily in Yellowstone National Park and the Centennial Valley area of Montana, and wintered in those areas and adjacent areas in Idaho (Banko 1960).
Current Trumpeter Swan Range

Map Features

- **Current Range**
  Adapted from Bellrose (1976), Gale et al (1987), and unpublished band-recovery data Dobovske and Comely (2002)

- **General Nesting Grounds**
  Cauthen (2001)

- **General Fall Migration Routes**

- **General Population Boundaries**

Map compiled by USFWS, Ecological Services, Bismarck, ND, January 2003. All features are for representative purposes only and may not depict the actual size, shape and/or boundary.

**Figure 1.**
Our analysis of the trumpeter swan Tri-State segment indicates that these birds are derived from a remnant flock that survived the market hunting overexploitation of the species that occurred in North America prior to the protections of the MBTA in 1918. Some swans found refuge in the isolated and protected environs of Yellowstone National Park, high-elevation areas that have harsh winters and a short nesting season compared to lower elevations. Some people speculate that Tri-State swans are adapted to this marginal habitat. However, we have found no scientific evidence to support such a conclusion. No evidence indicates that the birds in this flock were isolated for periods of time sufficient for such adaptations to occur. Some have speculated that the swans that nested in the Tri-State Area once migrated elsewhere for the winter, but we know of no data to verify whether they were migratory or not prior to European settlement of the Tri-State Area (Gale et al. 1987, Dubovsky and Cornely 2002). Implementation of an artificial feeding program beginning in 1935 may have modified the swans’ natural migratory behavior, but that also is conjecture (Dubovsky and Cornely 2002).

The petition alleges that the Tri-State Area flock is discrete from other portions of the North American trumpeter swan population in part because the Tri-State birds are separated from other breeding populations by approximately 400 miles. The petitioners assert that breeding pairs are not formed between the Tri-State birds and other swan populations.

There are no known physical, physiological, or behavioral differences between any of the trumpeter swan flocks in North America (Gale et al. 1987). Even if most of the Tri-State swans do not migrate to nesting grounds in Canada (which available data suggest) (Dubovsky and Cornely 2002), this behavior is not evolutionarily significant within the meaning of our DPS policy. Numerous flocks of geese and swans (including trumpeters) in the United States exhibit nonmigratory behavior because sufficient life requisites exist in the flocks’ habitat throughout the year. Therefore, the fact that the birds in the Tri-State Area flock are not known to migrate long distances is not a unique behavioral trait within the meaning of the DPS policy.

The petitioners allege, based on neck-collar observations, that the Canadian- and United States-nesting birds are reproductively isolated because birds have not been seen nesting on their natal grounds. However, although many swans have been marked over the years, observations of marked swans are of a limited value in establishing the reproductive isolation of the Tri-State Area flock. Many observations of marked swans were of those that had been trapped and translocated. It is not appropriate to use observations of these birds to make inferences about natural movements and pairing behavior of free-flying wild trumpeter swans. Further, many swans are marked but never seen again, or are seen only during the first few years after marking (e.g., Gale et al. 1987:286, Shea and Drewien 1994). Given that swans are long-lived, much of the neck-collar data may reflect only a small fraction of these birds’ reproductive lifetime and thus is not indicative of all of an individual bird’s movement patterns. Trumpeter swans also inhabit many remote areas that are not amenable to direct observations of the birds. Therefore, it is plausible that some marked birds may nest in remote areas that are not their natal nesting grounds. Lastly, one observation of a mixed-group (Canadian/Tri-State) pairing has been documented (Shea and Drewien 1999); mark-recovery information indicates two Tri-State Area nesting birds were sighted in Alberta (Dubovsky and Cornely 2002), and two birds marked in Grande Prairie summered in the Tri-State Area (Gale et al. 1987). These instances suggest that some reproductive intermingling of the two flocks may be occurring, that gene flow is possible between the groups, and that sampling procedures may simply have been inadequate to detect much interchange to date. Therefore, we conclude that current information does not support the petitioner’s allegations that the Tri-State Area flock is reproductively isolated.

Our DPS policy provides that quantitative measures of genetic or morphological discontinuity may provide evidence of discreteness. As discussed in detail below based on current trumpeter swan genetic information, we conclude that available information does not provide evidence of genetic discontinuity that would support the contention that the Tri-State Area flock is discrete.

(2) Is the Tri-State Area Flock Delimited by International Governmental Boundaries Within Which Differences in Control of Exploitation, Management of Habitat, Conservation Status, or Regulatory Mechanisms Exist That Are Significant With Regard to Conservation of the Taxon?

Under the DPS policy, we specifically look for differences in regulatory mechanisms between nations that are significant in light of section 4(c)(1)(D) of the Act (e.g., whether inadequate regulatory mechanisms in one nation as compared to another may contribute to species endangerment), such that it would be consistent with the purposes of the Act to delineate a population based on a non-biological element. Simply stated, we look for regulatory differences between nations that are relevant to a listing decision and that would warrant separating populations of a taxon using international boundaries.

The petitioners allege that the Tri-State Area flock should be considered distinct from other trumpeter swan flocks in North America because of a difference in management and exploitation of the species in Canada. However, migratory waterfowl are managed under the auspices of international treaties, including the Migratory Bird Treaty with Canada which the MBTA implements, and highly structured international entities, such as the Flyway Councils. The goals of the Pacific Flyway Council concerning trumpeter swan management are international in scope (i.e., the Council contains representatives from both Canada and the United States) and include encouraging growth of the Canadian flocks while rebuilding United States breeding flocks of trumpeter swans (Subcommittee on Rocky Mountain Trumpeter Swans 1998). Public education goals and research needs include the same tasks in both countries. The Province of Alberta has supported management actions in the United States, including implementation of a general swan season (U.S. Department of the Interior 2001).

With regard to habitat management, the United States and Canada protect breeding areas, conduct swan transplants, band or otherwise mark birds, and monitor population status. Establishment of annual sport-hunting regulations in both countries is completed in accordance with the Convention Between the United States and Great Britain (for Canada) for the Protection of Migratory Birds (1916 Treaty). Both countries also publish draft regulations that are subject to public review and comment. Neither country has a sport-hunting season specifically for trumpeter swans. Swans in both countries are protected by similar regulatory processes. Canada and the United States (Alaska) allow subsistence take of swans during the spring and summer. As discussed earlier in this document, the United States has established a limited quota for allowable take of trumpeter swans as part of the package of trumpeter swan conservation measures. All waterfowl hunting
regulations in both countries are subject to annual review and revision. Therefore, we find no significant differences in trumpeter swan management between Canada and the United States within the meaning of our DPS policy.

In Canada, the trumpeter swan was listed as a vulnerable species in 1978 (Mackay 1978), but the species was moved to the not-at-risk category after re-examination in 1996 (Committee on the Status of Endangered Wildlife in Canada 2002). The species is listed as a vulnerable species in Alberta (Government of Alberta 2002), which means that without management and protection, the species could become threatened or endangered within the province (emphasis added). However, management actions to enhance trumpeter swan abundance and distribution in Alberta are the same as those in the rest of Canada and the Pacific Flyway, as discussed above.

Trumpeter swans and tundra swans are both large white birds with black bills; the two are extremely difficult to distinguish from each other at a distance. Both species can occur in the same area during some parts of the year. Since the 1960s we have sanctioned hunting of tundra swans (Cygnus columbianus) under the provisions of the Migratory Bird Treaty Act (MBTA). Prior to 1995, season lengths for tundra swans were quite long (approximately 100 days); the amount of area open to hunting was large (essentially the entire State of Utah and areas of high swan use in Nevada and Montana). Illegal harvest of trumpeter swans during tundra swan hunting seasons occurred, probably by accident resulting from misidentification. The degree of take was unknown because no monitoring of species-specific swan harvests was conducted.

The RMP has been increasing at an average annual rate of 4.6 percent since 1968. The low rate of expansion of trumpeter swans into new wintering areas is believed by managers to limit further improvement of the status of the species (Subcommittee on Rocky Mountain Trumpeter Swans 1998). The Pacific Flyway’s subcommittee on Rocky Mountain Trumpeter Swans determined that translocation of trumpeter swans to new wintering locations was a possible means of expanding the wintering range of the swans. Some of the Subcommittee members from States with potentially suitable wintering areas for translocated birds would not agree to relocations unless hunters who mistakenly shot a trumpeter swan during the general swan season were relieved of liability under the MBTA (U.S. Department of the Interior 2001).

Therefore, to enhance the potential for trumpeter swan range expansion and limit the likely but unknown amount of harvest of trumpeter swans, several modifications to swan seasons were implemented in 1995. First, the area open to swan hunting was greatly reduced, and in Utah (where most swans were harvested) the area was restricted to only portions of six counties in the northwest corner of the State. The season ending date was changed from late January to early December, thus reducing the season length by 40 percent, in order to reduce the likelihood of sport-hunting mortality for trumpeter swans that may migrate into the hunt areas when more-nothernly wetlands in the Tri-State Area freeze. We included provisions for a limited take (quotas) of trumpeter swans in Utah (15 individuals) and Nevada (5 individuals) to protect hunters from criminal liability if they accidentally shoot a trumpeter swan, because it often is not possible for hunters to distinguish the two species from each other in the field. If the quota was reached in a particular state, all swan hunting would be closed in that State for the remainder of the season. Finally, monitoring of swan harvest was intensified to enhance detection of trumpeter swans taken during hunts. In 2000, the area open to swan hunting in Utah was reduced even further, and the quota was reduced to 10 individuals (U.S. Department of the Interior 2001). There is no indication that the harvest serves as a threat to the continued health of either the Rocky Mountain trumpeter swan population or the Tri-State Area flock (see Table 1) and, therefore, the take is not significant to the conservation of the taxon within the meaning of section 4(a)(1)(D) of the Act.

Although the available evidence does not demonstrate that the Tri-State flock is discrete under the DPS policy, this flock could potentially be considered to be physically separated to some degree from the rest of the RMP during the breeding season. Further, our DPS policy does not require absolute reproductive isolation as a prerequisite to recognizing a DPS. Therefore, we have taken the further step of considering the biological and ecological significance of the Tri-State Area flock in light of Congressional guidance that the authority to list DPSs be used “sparingly” while encouraging the conservation of genetic diversity. In carrying out a identification, we consider available scientific evidence of the discrete population segment’s importance to the taxon to which it belongs.

**Significance**—Our DPS policy provides several examples of the types of information that may demonstrate the significance of a population segment to the remainder of its taxon, including:

1. Persistence of the discrete population segment in an ecological setting unusual or unique for the taxon;
2. Evidence that the discrete population segment differs markedly from other population segments in its genetic characteristics;
3. Evidence that the discrete population segment represents the only surviving natural occurrence of a taxon that may be more abundant elsewhere as an introduced population outside its historic range; and
4. Evidence that loss of the discrete population segment would result in a significant gap in the range of the taxon. While significance is not necessarily limited to these examples, we began by considering each example with respect to the Tri-State Area flock.

**Ecological setting**—The petitioners allege that the Tri-State Area flock is an important remnant population of trumpeter swans in the lower 48 States and, therefore, meets the significance criterion of the DPS policy. Tri-state swans utilize wetland habitats in the region that provide requisite feeding, resting, nesting and brood rearing habitats. Trumpeters breed in relatively small, shallow wetlands at a wide range of elevations from just above sea-level to montane areas in North America. The fact that trumpeter swans breed in suitable wetlands in a variety of geographically diverse settings does not suggest that the Tri-State Area flock is likely to represent a significant resource in terms of the overall welfare of the species. The higher elevation, montane wetlands appear to provide more marginal breeding habitat for swans because of the shorter nesting and brooding season compared to wetlands at lower elevations.

**Genetic characteristics**—No evidence exists to indicate that the Tri-State Area flock is different genetically from other trumpeter swans.

The Tri-State birds exhibit no morphological differences from other trumpeter swans in North America (Gale et al. 1987). Several studies have been conducted to investigate genetic similarities among different groups of trumpeter swans nesting in North America (Barrett and Vyse 1982, Marsolais and White 1997, Pelizza, unpub. ms.). However, to date only one of those studies has been accepted for publication in a professional journal. Barrett and Vyse (1982) compared blood proteins among
swans from Alaska (PCP), Red Rock Lakes NWR (birds of the Tri-State Area flock of the RMP), and Grande Prairie, Alberta (Canada-nesting RMP). All three groups of swans shared a common allele for all loci surveyed, and the mean heterozygosity of the three groups was not different. However, the Alaskan birds possessed alternate alleles at several loci, suggesting that the Alaskan group may differ somewhat from the Grande Prairie and Red Rock Lakes NWR birds. The genetic distance among the three groups was identical, indicating a close genetic relationship among the groups, and led the authors to conclude that the groups sampled were “virtually identical based on the index of genetic distance.”

Marsolais and White (1997) studied Band-Sharing Coefficients (BSCs) of birds sampled from the PCP, RMP (both Tri-State- and Grande Prairie-nesting birds), and the IP (Ontario flock, comprised of translocated birds from mixed PF/RMP lineages). They found that the IP and RMP birds had much higher BSCs than those of PCP birds, suggesting less genetic diversity in the former two groups. They hypothesized that the low genetic diversity could have been the result of these groups experiencing population “bottlenecks.” That is, as the range of the trumpeter swan decreased in the 1800s, the few spatially disjoint groups that remained established at that time were composed of birds with similar genetic traits.

However, as the petitioners (Biodiversity Legal Foundation et al. 2000, quoting Marsolais 1994) stipulate, “the fact that the tristate and interior Canadian populations did not have significantly different mean BSCs, suggests that the tristate population is not less genetically variable than the interior Canadian population.” Marsolais (1994) goes on to state that genetic differences may exist and could be detected using other techniques. However, subsequent studies to address this latter contention have not been conducted.

Pelizza (unpub. ms.) studied allele frequencies among birds sampled from the PCP, Tri-State-nesting birds, and the High Plains flock of the IP. His results indicated that some differences existed between the PCP birds and those from the latter two groups, but that birds from the Tri-State Area and the High Plains flock were essentially identical. He did not collect samples from the Interior Canada flock.

Thus, although several studies have been conducted, only one has examined directly the genetic relationship between the Canadian- and United States-nesting segments of the RMP. Although that study suggested no differences between the groups, the methods used (starch gel electrophoresis) are dated compared to contemporary techniques using mitochondrial DNA and microsatellites. Thus, Oyler-McCance and Quinn (2001) have initiated a study to better assess potential differences among the two groups of birds. This current study should document the extent of interchange between the Canadian and Tri-State Area flocks of the RMP. The proposed techniques recently have been used to distinguish among sage grouse populations (Oyler-McCance et al. 1999).

On the basis of the foregoing discussion of current trumpeter swan genetic information, we conclude that available information does not provide evidence of genetic discontinuity within the meaning of our DPS policy.

(3) Only surviving natural occurrence—A population segment may be significant under the DPS policy if it is the only surviving natural occurrence of a taxon that may be more abundant elsewhere as an introduced population outside its historic range. This is not the case with the Tri-State Area trumpeter swan flock.

(4) Gap in range—If the Tri-State Area flock were lost, there would not be a significant gap in the range of this species because extant breeding and wintering trumpeter swans are dispersed across North America. The creation of a gap in a species’ range can have bearing on gene flow and the demographic stability of a species as a whole. Further, peripheral populations may have genetic characteristics essential to the overall long-term conservation of the species (i.e., they may be genetically different than more central populations) (Lesica and Allendorf 1995). Thus, the consideration of the species’ range and the potential for creating a gap in that range can be significant to the conservation of a taxon. However, in this case the potential loss of the Tri-State Area flock is unlikely to have any such effects. Managers have repeatedly established or re-established breeding flocks of trumpeter swans in various areas of the United States and Canada. Restoration flocks derived from exclusively Tri-State Area-nesting swans have been established at several locations, and the loss of a nesting flock in one area would not affect the conservation of the taxon within the meaning of our DPS policy. In addition, several restoration flocks were established with swans from both the Tri-State Area flock and the Pacific Population. Further, RMP swans from Canada winter in the Tri-State Area; thus, trumpeter swans would occur in the area for at least a portion of every year, and may attempt to pioneer vacant areas (note previously mentioned observations of the Interior Canada flock birds in the Tri-State Area during the summer).

Our DPS policy identifies these factors as examples of the types of information that may demonstrate the significance of a population. There may be other considerations we have not explicitly addressed here. However, we do not find another basis to support a conclusion that the Tri-State Area flock is significant to trumpeter swans in North America such that it warrants listing under the Act. In particular, these facts indicate the opposite: (1) The Tri-State Area flock represents only 1 to 3 percent of all trumpeter swans in North America, (2) it has been highly manipulated to the extent that it is probably the least “natural” of all trumpeter swan flocks, and (3) a high percentage of restoration flocks outside the Tri-State Area include descendants of Tri-State Area birds that are likely to be genetically similar to those in the Tri-State Area. As previously mentioned, Congressional guidance states that the authority to list DPSs is to be used “sparingly” while encouraging the conservation of genetic diversity. We considered the available scientific evidence regarding the Tri-State Area flock’s importance to the taxon to which it belongs and conclude that it is not significant.

## Table 1.—Incidence of Trumpeter Swan Harvest During Swan Season in the Pacific Flyway

<table>
<thead>
<tr>
<th>Year</th>
<th>Utah</th>
<th>Montana (PF)</th>
<th>Montana (CF)</th>
<th>Nevada</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Swans examined</td>
<td>Trumpeters detected</td>
<td>Swans examined</td>
<td>Trumpeters detected</td>
</tr>
<tr>
<td>1994</td>
<td>474</td>
<td>0</td>
<td>219 (juvenile)</td>
<td>31</td>
</tr>
</tbody>
</table>

Vol. 68, No. 18 / Tuesday, January 28, 2003 / Notices 4227
TABLE 1.—INCIDENCE OF TRUMPETER SWAN HARVEST DURING SWAN SEASON IN THE PACIFIC FLYWAY—Continued

<table>
<thead>
<tr>
<th>Year</th>
<th>Utah</th>
<th>Montana (PF)</th>
<th>Montana (CF)</th>
<th>Nevada</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Swans examined</td>
<td>Trumpeters detected</td>
<td>Swans examined</td>
<td>Trumpeters detected</td>
</tr>
<tr>
<td>1995</td>
<td>244</td>
<td>3 (1 adult, 2 juveniles)</td>
<td>110</td>
<td>3 (juveniles)</td>
</tr>
<tr>
<td>1996</td>
<td>701</td>
<td>7 (4 adults, 3 juveniles)</td>
<td>181</td>
<td>3 (adults)</td>
</tr>
<tr>
<td>1997</td>
<td>497</td>
<td>3 (2 adults, 1 juvenile)</td>
<td>217</td>
<td>1 (adult)</td>
</tr>
<tr>
<td>1998</td>
<td>879</td>
<td>1 (juvenile)</td>
<td>168</td>
<td>3 (2 adults, 1 juvenile)</td>
</tr>
<tr>
<td>1999</td>
<td>647</td>
<td>0</td>
<td>153</td>
<td>7 (4 adults, 3 juveniles)</td>
</tr>
<tr>
<td>2000</td>
<td>454</td>
<td>1 (adult)</td>
<td>203</td>
<td>3 (2 adults, 1 juvenile)</td>
</tr>
<tr>
<td>2001</td>
<td>229</td>
<td>0</td>
<td>244</td>
<td>0</td>
</tr>
</tbody>
</table>

1 Most if not all of these swans likely are from the Interior Canada flock.
2 In 1996, six of the seven trumpeters detected in Utah’s harvest were swans marked and translocated from Idaho and released in Utah as part of a research proposal. The other swan was a marked swan that was translocated from Idaho to Oregon 2 years earlier.

Petition Finding

On the basis of the data in our files, we find that the Tri-State Area flock of trumpeter swans does not constitute a DPS in the meaning of the Act and, therefore, is not a listable entity. The available information does not demonstrate that the flock is discrete, because the proposed DPS is not markedly separated from other segments of trumpeter swans in North America and is not significant under the DPS policy. The petitioners assert that the largely nonmigratory behavior exhibited by this group of birds indicates that the segment is distinct from other flocks because it is physically separated by several hundred miles from other breeding populations. However, current banding and marking information, although limited in extent, indicates that there is some dispersal of swans from the Yellowstone Ecosystem to other parts of the RMP area and vice versa, and that pairings between Tri-State birds and Canadian birds can be expected to occur. All trumpeter swans in the RMP are sympatric during several months (approximate November to March) of the year. Pairing of trumpeter swans generally occurs during the fall and winter months (Johnsgard 1978, Gale et al. 1987). Thus, this mixing of birds in winter provides the opportunity for such pairings to occur. One interflock pairing has been documented (Gale et al. 1987). Current data do not provide evidence that the Tri-State Area flock is genetically different than other trumpeter swan flocks, and no data suggest physical, physiological, ecological, or significant behavioral differences between the birds in the Yellowstone Ecosystem and the rest of North America.

The petitioners allege that the trumpeter swans in the lower 48 States are managed differently than the Canadian birds, but we find that essentially no differences in management exist, because both countries are party to the Migratory Bird Treaty, coordinate on planning and implementation of swan management goals, conduct similar management activities, and promote population growth of flocks. Both trumpeter and tundra swans are cooperatively managed by Canadian and United States Federal agencies, States, and Provinces through management plans developed specifically for these species.

In North America the species has increased from less than 4,000 birds in 1968 to nearly 24,000 birds in 2000, which represents an average annual population growth of 5.9 percent (Dubovsky and Cornely 2002). The RMP increased from approximately 800 birds in 1968 to more than 3,600 birds in 2000 (Gaithamer 2001). This RMP average population growth rate was 4.8 percent per year. Therefore, we conclude that the trumpeter swan is not in need of additional protection beyond the current provisions of the MBTA.

References Cited

A complete list of References Cited is available from the Regional Office or our website (see ADDRESSES).

Author

The primary author of this document is Chuck Davis, Region 6 Endangered Species Listing Coordinator (see ADDRESSES).

Authority

The authority for this action is the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 et seq.).

Marshall P. Jones, Jr.,
Acting Director, U.S. Fish and Wildlife Service.

DEPARTMENT OF THE INTERIOR
Fish and Wildlife Service
Notice of Availability of a Draft Recovery Plan for the Rough Popcorn Flower (Plagiobothrys hirtus) for Review and Comment

AGENCY: Fish and Wildlife Service, Interior.
ACTION: Notice of document availability.
SUMMARY: We, the U.S. Fish and Wildlife Service, announce the availability for public review of a draft