

Oral and written comments will be accepted and treated equally. Parties wishing to make statements for the record should bring a copy of their statements to the hearings. Oral statements may be limited in length, if the number of parties present at the hearings necessitates such a limitation. There are no limits to the length of written comments or materials presented at the hearings or mailed to the Service. Written comments carry the same weight as oral comments. Legal notices announcing the date, time, and location of the hearings are being published in newspapers concurrently with this **Federal Register** notice.

Comments from all interested parties must be received by September 30, 1998.

Author

The primary author of this notice is Jeri Wood, U.S. Fish and Wildlife Service, 1387 S. Vinnell Way, #368, Boise, Idaho 83704.

Authority

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

Dated: August 3, 1998.

Thomas J. Dwyer,

Acting Regional Director, Region 1, Portland, Oregon.

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DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

50 CFR Part 17

RIN 1018-AF04

Endangered and Threatened Wildlife and Plants; Proposed Rule To Remove the Peregrine Falcon in North America From the List of Endangered and Threatened Wildlife

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Proposed rule.

SUMMARY: The U.S. Fish and Wildlife Service (Service) proposes to remove the peregrine falcon (*Falco peregrinus*) in North America from the List of Endangered and Threatened Wildlife. The Service proposes this action because the available data indicate that this species has recovered following restrictions on organochlorine pesticides in the United States and Canada and following implementation of successful management activities. Currently, a minimum of 1,388

American peregrine falcon pairs are found in Alaska, Canada, and the Western United States, and a minimum of 205 peregrine falcon pairs are found in the Eastern and Midwestern United States. Overall productivity goals in four American peregrine falcon recovery plans were met or exceeded, and most recovery goals for the eastern peregrine falcon population have been met. The proposed action, if finalized, would remove the American peregrine falcon (*Falco peregrinus anatum*) as an endangered species from the List of Endangered and Threatened Wildlife and would remove the designation of endangered due to similarity of appearance for any free-flying peregrine falcons within the 48 conterminous States. It would remove all Endangered Species Act protections from all subspecies and populations of North American *Falco peregrinus*. It would not affect protection provided to this species by the Migratory Bird Treaty Act (MBTA) and the Convention on International Trade in Endangered Species (CITES). It would not affect the endangered listing status of the Eurasian peregrine falcon (*Falco peregrinus peregrinus*) under the Endangered Species Act.

This proposed rule includes a proposed 5-year post-delisting monitoring plan as required for species that are delisted due to recovery. Monitoring will include population trends, productivity, and contaminant exposure. This proposed rule also provides notice that the collection of information from the public expected to be associated with the monitoring has been submitted to the Office of Management and Budget for approval under the provisions of the Paperwork Reduction Act of 1995.

DATES: Comments from all interested parties on the peregrine delisting proposal must be received by November 24, 1998. Public hearing requests must be received by October 13, 1998.

Comments from all interested parties on the collection of information from the public during the 5-year monitoring period will be considered if received on or before October 26, 1998. OMB has up to 60 days to approve or disapprove information collection but may respond after 30 days. Therefore, to ensure maximum consideration, OMB should receive public comments by September 25, 1998.

ADDRESSES: Comments and other information concerning this proposal to remove the peregrine falcon from the endangered species list should be sent to Diane Noda, Field Supervisor, U.S. Fish and Wildlife Service, Ventura Fish

and Wildlife Office, 2493 Portola Road, Suite B, Ventura, California 93003 (facsimile: (805)644-3958). Comments and materials received will be available for public inspection, by appointment, during normal business hours at the above address.

Comments and suggestions on specific information collection requirements should be sent to the Desk Officer for the Interior Department, Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503. The comments and suggestions should also be directed to Rebecca Mullin, Service Information Collection Clearance Officer, U.S. Fish and Wildlife Service, MS 224 ARLSQ, 1849 C Street, N.W., Washington, DC 20240.

FOR FURTHER INFORMATION CONTACT:

Robert Mesta at the above Ventura, California, address, or at (805) 644-1766, for further information on the proposed removal of the peregrine falcon from the endangered species list. To request a copy of the information collection request, explanatory information and related forms, contact Rebecca Mullin at (703) 358-2287.

SUPPLEMENTARY INFORMATION:

Background

The peregrine falcon is a medium-sized raptor weighing approximately 1000 grams (36 ounces) and having a wing span of 112 centimeters (44 inches). The adult peregrine falcon has a dark gray back and crown, dark bars or streaks on a pale chest and abdomen, and heavy malar (cheek) stripes on the face. Immature falcons are buff-colored in front and have dark brown backs; adults are white or buff in front and bluish-gray on their backs. Peregrines prey almost entirely on other birds, and occasionally on bats, caught in midair.

The peregrine falcon has an almost worldwide distribution, with three subspecies recognized in North America (Brown and Amadon 1968). The Peale's falcon (*F.p. pealei*) is a year-round resident of the northwest Pacific coast from northern Washington through British Columbia to the Aleutian Islands. The Arctic peregrine falcon (*F.p. tundrius*) nests in the tundra of Alaska, Canada, and Greenland and is typically a long-distance migrant, wintering as far south as South America. The American peregrine falcon occurs throughout much of North America from the subarctic boreal forests of Alaska and Canada south to Mexico. The American peregrine falcon nests from central Alaska, central Yukon Territory, and northern Alberta and Saskatchewan, east to the Maritimes and

south (excluding coastal areas north of the Columbia River in Washington and British Columbia) throughout western Canada and the United States to Baja California, Sonora, and the highlands of central Mexico (48 FR 8799, March 1, 1983). American peregrine falcons that nest in subarctic areas generally winter in South America, while those that nest at lower latitudes exhibit variable migratory behavior; some are nonmigratory (Yates *et al.* 1988).

Since the early 1970s, efforts to reestablish peregrine falcons in the Eastern and Midwestern United States have successfully returned this species to areas from which it had been extirpated (See "Eastern United States" under "Peregrine Falcon Recovery"). Peregrine falcons are now found nesting in all States within their historical range east of the 100th meridian, except for Rhode Island and Arkansas.

Peregrine falcons declined precipitously in North America following World War II (Kiff 1988). Research implicated organochlorine pesticides, mainly 1,1,1-trichloro-2,2-bis(*p*-chlorophenyl)-ethane (DDT), applied in the United States and Canada during this same period, as causing the decline (for a review, see Risebrough and Peakall 1988). Use of these chemicals peaked in the 1950s and early 1960s and continued through the early 1970s. Organochlorines and their metabolites, including DDT and its principal metabolite DDE (1,1-dichloro-2,2-bis(*p*-chlorophenyl)-ethylene), aldrin, dieldrin, and others, are stable, persistent compounds that are stored in the fatty tissues of animals ingesting contaminated food (Fyfe *et al.* 1988). Peregrine falcons and other animals near the top of the food web, including ospreys (*Pandion haliaetus*), bald eagles (*Haliaeetus leucocephalus*), and brown pelicans (*Pelecanus occidentalis*), gradually accumulated these toxins by eating contaminated prey.

Organochlorines can affect peregrine falcons either by causing direct mortality or by adversely affecting reproduction. Because mortality in wild birds is difficult to study, the effect of organochlorines on mortality is not as well known as the effects on reproduction. Organochlorines can adversely affect reproduction by causing egg breakage, adding, hatching failure, and abnormal reproductive behavior by the parent birds (Risebrough and Peakall 1988). DDE, a metabolite of DDT, prevents normal calcium deposition during eggshell formation, resulting in thin-shelled eggs that are susceptible to breakage during incubation. In general, populations laying eggs with shells that averaged greater than 17 percent thinner

than normal, pre-DDT eggs had such high rates of reproductive failure that the number of peregrine falcon pairs declined (Peakall and Kiff 1988).

During the period of DDT use in North America, eggshell thinning and nesting failures were widespread in peregrine falcons, and in some areas, successful reproduction virtually ceased (Hickey and Anderson 1969). As a result, there was a slow but drastic decline in the number of peregrine falcons in many areas of North America. The degree of exposure to these pesticides varied among different regions, and peregrine falcon numbers in more contaminated areas suffered greater declines. Peregrine falcons that nested outside of agricultural and forested areas where DDT was heavily used were affected less, although some individuals wintered in areas of pesticide use. Presumably all individuals ate some migratory prey containing organochlorines (for reviews, see Hickey and Anderson 1969; Kiff 1988; Peakall and Kiff 1988).

Peregrine falcons nesting in the agricultural and forested areas east of the Mississippi River in the United States and in Eastern Canada south of the boreal forest were the most heavily contaminated and were essentially extirpated by the mid-1960's (Berger *et al.* 1969). Peregrine falcons in the Great Plains States east of the Rocky Mountains and south of the boreal forest in Canada and the United States were also extirpated in the DDT era (Cade 1975, Enderson *et al.* 1995). No active eyries were found in surveys of 133 formerly used peregrine falcon eyries in the latter part of the 1964 nesting season in the Eastern United States and the Maritime Provinces in Canada (Berger *et al.* 1969). By 1975, there were only three peregrine falcon pairs in Alberta, and no other peregrine falcon pairs were found south of latitude 60° North and east of the Rocky Mountains in Canada (Erickson *et al.* 1988).

West of the 100th meridian, peregrine falcons were not extirpated, but were significantly reduced. Only 33 percent of historical nest sites in the Rocky Mountains were still occupied by 1965 (Enderson 1969). The peregrine falcon disappeared as a breeding species from southern California, and major declines also occurred in other parts of the western United States and in much of southern Canada and the Northwest Territories (Kiff 1988). In contrast, peregrine falcons in most areas of the Pacific coast of Alaska remained fairly stable during this period, owing to their lower exposure to organochlorine pesticides. Throughout much of western North America, the exact degree of most

local declines remains somewhat speculative due to a lack of accurate pre-pesticide era census data. For example, in the southwestern United States and mainland Mexico, peregrine falcons were not censused until after the beginning of the use of organochlorines (Kiff 1988).

Previous Federal Actions

Population declines due to negative impacts of DDT and its metabolites on peregrine falcon reproduction and survival led the Service to list two of the three North American subspecies, the Arctic peregrine falcon (*Falco peregrinus tundrius*) and the American peregrine falcon, as endangered in 1970 under the Endangered Species Conservation Act of 1969 (Pub.L. 91-135, 83 Stat. 275). Arctic and American peregrine falcons were included in the list of threatened and endangered foreign species on June 2, 1970 (35 FR 8495), and the native list of endangered and threatened species on October 13, 1970 (35 FR 16047). Upon passage of the Endangered Species Act (Act) of 1973, the native and foreign species lists were combined into a single list of endangered and threatened species. Both the American and Arctic peregrine falcon subspecies were listed as endangered throughout their respective ranges. Only the Peale's peregrine falcon was reproducing at near normal levels with only traces of DDT.

On March 1, 1983 (48 FR 8796), the Service published a proposed rule to (1) reclassify the Arctic peregrine falcon from endangered to threatened, (2) clarify that the peregrines nesting in western Washington were to be considered American peregrine falcons for purposes of the Act, and (3) designate all free-flying peregrine falcons in the 48 conterminous States as endangered under similarity of appearance provisions under section 4(e) of the Act. A rule finalizing the proposal was published on March 20, 1984 (49 FR 10520). Pursuant to the similarity of appearance provisions, species that are not considered to be endangered or threatened may nevertheless be treated as such for the purpose of providing protection to a species that is biologically endangered or threatened.

On June 12, 1991, the Service announced in the **Federal Register** (56 FR 26969) a notice of status review of the American peregrine falcon and the Arctic peregrine falcon. The Arctic peregrine falcon was subsequently removed as a threatened species from the List of Endangered and Threatened Wildlife on October 5, 1994 (59 FR 50796) but was still protected from

direct take in the lower 48 States due to the similarity of appearance provision because the American peregrine falcon was still listed as endangered.

The Service published an Advanced Notice of a Proposal to Remove the American Peregrine Falcon from the List

of Endangered and Threatened Wildlife (60 FR 34406) on June 30, 1995, based on data indicating this subspecies was recovered following restrictions on the use of organochlorine pesticides in the United States and Canada and because of successful management activities,

including the reintroduction of captive-bred and relocated wild hatchling peregrine falcons. Current data provides additional support for recovery of all North American peregrine falcons, including the American peregrine falcon subspecies (Table 1).

TABLE 1. AMERICAN PEREGRINE FALCON AND EASTERN PEREGRINE FALCON RECOVERY PLAN GOALS AND CURRENT (1997) RECOVERY STATUS.

Recovery plan	Delisting goal	Current status	Comments/degree to which delisting goals are met
Alaska:			
Pairs	28 pairs	301 pairs	Exceeded goal by 273 pairs.
Productivity (young/pair)	1.8 yg/pr	2.0 yg/pr	Exceeded goal.
DDT (parts per million)	less than 5 ppm	3.5 ppm	Exceeded goal.
Eggshell thinning	less than 10%	12.1%	Goal not met, but has not prevented recovery; goal probably too conservative.
Canada:			
Pairs	60 pairs (10 each in 6 zones).	319 pairs	Exceeded goal by 259 pairs.
Productivity	1.5 yg/pr	1.8 yg/pr	Exceeded goal.
Pacific Coast:			
Pairs	185 pairs	239 pairs	Exceeded goal by 54 pairs.
Productivity	1.5 yg/pr	1.5 yg/pr	Goal met.
Rocky Mountain/Southwest:			
Pairs	183 pairs	529 pairs	Exceeded goal by 346 pairs.
Productivity	1.25 yg/pr	1.4 yg/pr	Exceeded goal.
Eggshell thinning	less than 10%		Goal measured by only a few States; cannot be assessed.
Eastern:			
Pairs	175–200 pairs (with no fewer than 20–25 in each of 5 recovery zones).	174 pairs	Exceeded goal in 3 zones; goals in other 2 zones probably have been met; an additional 31 peregrine falcon pairs occur in several Midwestern States not included under the Eastern Plan.

Peregrine Falcon Recovery

The most significant factor in the recovery of the peregrine falcon was the restriction placed on the use of organochlorine pesticides. Use of DDT was banned in Canada in 1970 and in the United States in 1972 (37 FR 13369, July 7, 1972). Restrictions that controlled the use of aldrin and dieldrin were imposed in the United States in 1974 (39 FR 37246, October 18, 1974). Since implementation of these restrictions, residues of the pesticides have significantly decreased in many regions where they were formerly used. Consequently, reproductive rates in most surviving peregrine falcon populations in North America improved, and numbers began to increase (Kiff 1988).

Section 4(f) of the Act directs the Service to develop and implement recovery plans for listed species. Recovery plans for peregrine falcons called for captive rearing and release of birds in several areas of North America. In the Eastern United States where peregrine falcons were extirpated, the initial recovery objective was to reestablish peregrine falcons through

the release of offspring from a variety of wild stocks being held in captivity by falconers. The first experimental releases of captive-produced young occurred in 1974 and 1975 in the United States.

Later, reintroduction was also pursued in Eastern Canada using only *Falco peregrinus anatum* breeding stock from the boreal part of the species' range. All peregrine falcons released to augment wild populations in western North America west of the 100th meridian, where small numbers of American peregrines survived the pesticide era, were derived from western *F. p. anatum* stock.

In Alaska and northwest Canada, American peregrine falcon populations were locally depressed, but enough individuals survived the pesticide era to allow populations to expand without the need for release of captive-bred falcons. Likewise, in the Southwestern United States, very few captive-bred birds were released, and populations recovered naturally following restrictions on the use of organochlorine pesticides. In southwest Canada, the northern Rocky Mountain States, and the Pacific Coast States, however, local

populations were greatly depressed or extirpated, and over 3400 young American peregrine falcons were released to promote recovery in those areas (Anderson *et al.* 1995).

American peregrine falcon population growth was noted in Alaska in the late 1970s (Ambrose *et al.* 1988b) and by 1980 in many other areas (Anderson *et al.* 1995). The rate of increase varied among regions of North America, undoubtedly influenced by variation in patterns of pesticide use, potential differences in the rate of pesticide degradation, and the degree to which local populations had declined. Populations in some portions of the range of American peregrine falcons, such as Alaska and northwest Canada and Southwestern United States, reached densities several years ago that suggested recovery was approaching completion (Ambrose *et al.* 1988b; Mossop 1988; G. Holroyd, Canadian Wildlife Service, *in litt.* 1993; Anderson *et al.* 1995). Residual organochlorine pesticide contamination continues to affect eggshells in some areas, such as portions of coastal California (Jarman 1994) and western Texas (Bonnie R. McKinney, Texas Parks and Wildlife

Department, pers. comm. 1997), but these effects are localized. Despite these localized effects and the variation in the rate of increase among regions, local populations throughout North America have increased in size, and positive trends in nearly all areas suggest that an extensive recovery of American peregrine falcons has taken place.

Eastern Peregrine Population

The Eastern peregrine population has a relatively unique history and complex status under the Act. As stated previously, peregrine falcons were extirpated in the eastern United States and southeastern Canada by the mid-1960s. In 1974, shortly after the passage of the Endangered Species Act of 1973, the National Audubon Society sponsored a meeting of experts in peregrine biology, including representatives from the Service, to address the conservation of the species in North America. This sparked the beginning of an effort to reestablish the peregrine in the East through the introduction of offspring from parents of multiple subspecies. Peregrine falcons were raised in captivity from parent subspecies then listed as endangered (*Falco peregrinus anatum*, *F. p. tundrius*, *F. p. peregrinus*), unlisted subspecies (*F. p. pealei*, *F. p. brookei*, etc.), and combinations of these subspecies. The first experimental releases of captive-produced young in the eastern States occurred in 1974 and 1975. These and future releases, coordinated by the Service, State fish and wildlife agencies, and representatives of The Peregrine Fund, demonstrated that hacking, the practice of retaining and feeding young captive-bred birds in partial captivity until they learn to fly and hunt on their own, was an effective method of introducing captive-bred peregrines to the wild (U.S. Fish and Wildlife Service 1991). Releases, primarily of *Falco peregrinus anatum*, continue on a small scale today.

In 1978, the Director of the Service issued a policy statement confirming support for the use of North American peregrines to establish an Eastern peregrine falcon population, supported with endangered species funds, and the use of peregrines from other geographic areas for specific research purposes. The policy applied only to peregrine falcons in the east.

In 1979, the Service published the first Eastern Peregrine Falcon Recovery Plan, the first of four U.S. regional plans to be developed, to guide the restoration of the peregrine in the East. The Eastern Plan covered the areas extending to the western borders of the States of

Minnesota, Iowa, Missouri, Arkansas, Louisiana, and included the Gulf Coast of Texas. The primary objective of the Plan was to restore a new self-sustaining population of peregrine falcons in the eastern United States through preservation and management of essential habitat, captive propagation and release, protection of the population from take, elimination of harmful environmental pollutants, and public education.

Reflecting a 1983 Department of the Interior Solicitor opinion that progeny of intercrosses between listed and unlisted species were not covered under the Act, the Service modified the regulatory status of mixed heritage birds. Through the rulemaking process reclassifying the Arctic peregrine falcon from threatened to endangered status (48 FR 8796, March 1, 1983; 49 FR 10520, March 20, 1984), all free-flying *Falco peregrinus* in the lower 48 States were designated as Endangered due to Similarity of Appearance to "pure" listed American and Arctic peregrines (*F. p. anatum* and *F. p. tundrius*). This was done because the intercrossed birds were not readily distinguishable from American and Arctic peregrines, making enforcement of the taking prohibitions of the Act for listed subspecies difficult. The Similarity of Appearance provision of section 4(e) of the Act provides that species (or subspecies or other groups of wildlife) that are not considered to be biologically Endangered or Threatened may nevertheless be treated as such for the purpose of providing protection to a species that is. Accordingly, to ensure protection from illegal take of American and Arctic peregrine falcons that may be nesting, migrating, or wintering in the lower 48 States, the Service extended the taking prohibitions of section 9 of the Act to all free-flying peregrines in the lower 48 States through the Similarity of Appearance provision.

The 1983 Solicitor opinion that progeny of intercrosses were not covered by the Act was subsequently withdrawn by the Solicitor's Office in 1990. Thus, notwithstanding the Similarity of Appearance designation, the Service has continued to fully support the restoration of the Eastern peregrine under the 1991 revised Eastern recovery plan. The Eastern peregrine falcon is being considered on a par with the American peregrine falcon.

Recovery Status

Section 4(f) of the Act directs the Service to develop and implement recovery plans for listed species. In some cases, the Service appoints recovery teams of experts to assist in the

writing of recovery plans. In cooperation with the Service, recovery teams produced four regional peregrine falcon recovery plans, including three recovery plans for the American peregrine falcon in Alaska and the Western United States, and one for the peregrine in the Eastern United States. Although no United States recovery plans established recovery criteria for peregrine falcons nesting outside of the United States, the Canadian Wildlife Service published an *Anatum* Peregrine Falcon Recovery Plan (Erickson *et. al.* 1988) for American peregrine falcons in Canada. The current status of the subspecies in Mexico is discussed below, although no recovery plan or recovery objectives were established for Mexico.

To aid in assessing peregrine falcon recovery, the current status is compared to specific recovery plan objectives for American peregrine falcons in (1) Alaska, (2) Canada, (3) the Pacific Coast, and (4) the Rocky Mountains and the Southwest, and for (5) the peregrine falcons in the Eastern United States.

Alaska

The Peregrine Falcon Recovery Plan, Alaska Population (Alaska Recovery Plan) (U.S. Fish and Wildlife Service 1982a) includes both Arctic and American peregrine falcons nesting in Alaska. The following discussion relates only to provisions regarding the American peregrine falcon, as the Arctic peregrine falcon was delisted on October 5, 1994 (59 FR 50796).

The Alaskan Recovery Plan established recovery objectives based on four measurements for assessing the status of American peregrine falcons including (1) population size, (2) reproductive performance, (3) pesticide residues in eggs, and (4) eggshell thickness. The recovery objectives included (1) 28 nesting pairs in 2 specified study areas (16 in upper Yukon and 12 in upper Tanana), (2) an average of 1.8 young per territorial pair, (3) average organochlorine concentration in eggs of less than 5 ppm (parts per million ppm, wet weight basis DDE), and (4) eggshells no more than 10 percent thinner than pre-DDT era eggshells. The Alaska Recovery Plan suggested that these objectives be maintained in the specified study areas for 5 years before reclassifying from endangered to threatened status and remain constant or improve for an additional 5 years before delisting.

Surveys were conducted in the two study areas, the upper Yukon and Tanana Rivers, for which historical population data were available using consistent methodology from 1973 to

the present so trends would be discernable. Surveys conducted between 1966 and 1997 along the upper Yukon River demonstrated increases in the number of occupied nesting territories from a low of 11 known pairs in 1973 to 44 pairs in 1997 (Ambrose *et al.* 1988b; Robert Ambrose, U.S. Fish and Wildlife Service, *in litt.* 1997a). Similarly, along the upper Tanana River, the number of occupied nesting territories increased from 2 in 1975 to 27 in 1997 (R. Ambrose, *in litt.* 1997a). The recovery objective of 28 occupied nesting territories in the 2 study areas was first achieved (post-DDT) in 1982 and the number has increased steadily since that time to the current level of 71 occupied nesting territories in 1997 (R. Ambrose, pers. comm. 1997). Thus, the recovery objective of 28 occupied nesting territories has been achieved and surpassed for 15 years.

Productivity measured along the upper Yukon and Tanana Rivers fell to a low of about 1.0 young per territorial pair per year (yg/pr) in the late 1960s, but began to increase in the mid-1970s. By 1982, productivity exceeded the objective of 1.8 yg/pr and varied between approximately 1.6 and 3.0 yg/pr each year since then; the annual average productivity was 2.0 yg/pr (N=283 nests/pairs) between 1994 and 1997 (R. Ambrose, *in litt.* 1997a). From the late 1970s to the present, productivity was sufficient to allow an average annual increase of approximately 8 percent in the number of breeding pairs. Productivity was similar in several other areas in interior Alaska (R. Ambrose, pers. comm. 1997). A minimum of 301 breeding pairs of American peregrine falcons currently nest in Alaska.

Mean concentrations of DDE in peregrine falcon eggs in excess of 15–20 ppm are associated with high rates of nesting failure, whereas productivity is usually sufficient to maintain population size if residues average less than this concentration (Peakall *et al.* 1975, Newton *et al.* 1989). In Alaska, average DDE residues in American peregrine falcons averaged 12.2 ppm from 1979 to 1984, 5.8 ppm from 1988 to 1991, and 3.5 ppm from 1993 to 1995 (R. Ambrose, *in litt.* 1997b) and probably declined below the recovery objective of 5 ppm sometime between 1984 and 1988 (Ambrose *et al.* 1988a).

In Alaska, eggshells were estimated to be as much as 20–22 percent thinner than pre-DDT era shells in the mid-1960s (Cade *et al.* 1968). By the early 1980s, shells were about 14 percent thinner than before the DDT era (Ambrose *et al.* 1988a; R. Ambrose, pers. comm. 1995). Eggshell thickness

averaged 13.0 percent from 1979 to 1984, 13.1 from 1988 to 1991 and 12.1 from 1993 to 1995 (R. Ambrose, *in litt.* 1997b). The average thickness of pre-DDT American peregrine falcon eggs from Alaska is not precisely known, so current estimates of thinning could be inaccurate to some degree. Reproduction has been sufficient, however, to allow consistent population growth since the late 1970's, and productivity has, on average, exceeded its stated recovery objective for 15 years.

In summary, based on the most current information (1997 survey and early 1990 contamination data) the Service concludes that the basic goals underlying all four objectives have been met or exceeded. The number of pairs occupying nesting territories in the two study areas and productivity exceeded, on average, the recovery objectives for the past 15 years. Neither DDE residues in eggs nor eggshell thinning has prevented a dramatic population growth since the late 1970's.

Canada

The 1988 *Anatum* Peregrine Falcon Recovery Plan for Canada (Canadian Recovery Plan) (Erickson *et al.* 1988) categorizes the historical range of the American peregrine falcon throughout Canada into three regions, which include the Western Mountains, Interior Plains, and the Eastern Seaboard and Great Lakes. These regions are subdivided into nine zones on the basis of historical population levels, habitat, political boundaries, and restoration needs. The zones are (1) Maritime, (2) Great Lakes, (3) Prairies, (4) Mackenzie River Valley, (5) Northern Mountains, (6) Southern Mountains, (7) Eastern Mackenzie Watershed, (8) Western Canadian Shield, and the (9) Eastern Canadian Shield. Coastal British Columbia is excluded from consideration in the Canadian Recovery Plan since this area is considered to be occupied by *F. p. pealei*.

The goal of the Canadian Recovery Plan is to increase the wild American peregrine falcon population in Canada so the subspecies is no longer considered endangered or threatened by the Committee on the Status of Endangered Wildlife in Canada. The proposed objectives are (1) to establish by 1992 a minimum of 10 territorial American peregrine falcon pairs in each of Zones 1 to 6 and (2) to establish by 1997, in each of 5 of these 6 zones, a minimum of 10 pairs naturally fledging 15 (1.5 yg/yr) or more young annually, measured as a 5-year average beginning in 1993. No recovery goals were established for Zones 7, 8, and 9. The Canadian Recovery Plan does not

contain separate objectives for reclassification of the subspecies in Canada from its current endangered status to threatened.

The Canadian Wildlife Service has coordinated and published a national range-wide peregrine falcon population survey once every 5 years starting in 1990. The results of the 1995 national population survey were used in the following status summary of the American peregrine falcon in Canada (Ursula Banasch, Canadian Wildlife Service, *in litt.* 1997).

There are 98 known nest sites in Zones 1 and 2 (southern Ontario and Quebec, northern Great Lakes, Bay of Fundy and Labrador), and surveys located 64 pairs. There are 98 known nest sites in Zone 3 (Manitoba, Saskatchewan and Alberta), and surveys located 41 pairs. There are 117 known nest sites in Zone 4 (eastern N.W. Territories), and surveys located 83 pairs. There are 125 known nest sites in Zone 5 (Yukon), and surveys located 113 pairs. There are 50 known nest sites in Zone 6 (Interior British Columbia), and surveys located 18 pairs. The total known number of pairs for all six zones in 1995 was 319, with minimum goals achieved for every recovery zone.

The only comprehensive range-wide productivity surveys available to the Service were the national population surveys coordinated by the Canadian Wildlife Service in 1990 and 1995 (U. Banasch, *in litt.* 1997; Holroyd and Banasch 1996). Surveys conducted in the intervening years were not nationally coordinated and therefore were not complete. Thus, the Service used the combined average annual productivity data collected in the 1990 and 1995 surveys to address this recovery objective.

In Zones 1 and 2, average productivity was 1.7 yg/pr (N=104 nests). In Zone 3, average productivity was 1.5 yg/pr (N=55). In Zone 4, average productivity was 2.0 yg/pr (N=171). In Zone 5, average productivity was 1.8 yg/pr (N=626). No productivity data were available for Zone 6. The 2-year average annual productivity for the Canadian population of American peregrine falcons was 1.8 yg/pr.

In summary, the Canadian Recovery Plan identified two objectives to determine recovery for the American peregrine falcon population in Canada. Based on current available information, it is apparent that both objectives have been met. The total number of pairs for all 6 zones in 1995 was 319, with minimum goals achieved for every recovery zone. This count exceeds the total recovery goal of 60 pairs by 259. The average annual productivity data

for 1990 and 1995 either met or exceeded objectives in 5 of the 6 zones with an average annual productivity of 1.8 yg/pr for the Canadian American peregrine falcon population.

Although the Canadian Recovery Plan did not identify pesticide residue or eggshell thinning levels as recovery objectives, 205 eggs and 62 samples from 28 specimens of peregrine falcons were collected in Canada between 1965 and 1987 to assess organochlorine residue concentrations. In all three subspecies (*Falco peregrinus anatum*, *F. p. tundrius*, *F. p. pealei*) the proportion of specimens having residue concentrations above established critical values (concentration at which egg failure occurs, which varies among organochlorine contaminants) has decreased and can be correlated with improvements in the reproductive success of the population (Peakall *et al.* 1990).

Pacific Coast

The Pacific Coast Recovery Plan (U.S. Fish and Wildlife Service 1982b) for the American Peregrine Falcon, Pacific Population, recommends that (1) 122 pairs be established in a specified distribution spanning California, Washington, Oregon, and Nevada and that (2) these pairs achieve an average fledging success of 1.5 yg/pr for consideration of reclassification to threatened status. It further recommends that with attainment of (3) 185 wild, self-sustaining pairs (California 120, Oregon 30, Washington 30, Nevada 5) and (4) an average fledging success of 1.5 yg/pr for a 5-year period the subspecies can be considered for delisting. Only the latter two objectives regarding delisting are discussed in this proposal. The Pacific Population Plan defines a "self-sustaining" population as one whose natural productivity without human management is equal to or greater than its mortality.

By 1976, because of DDT, no American peregrine falcons could be found at 14 historical sites in Washington; Oregon had also lost most of its peregrine falcons. In addition, only 1 or 2 pairs remained on the California coast, with no more than 10 nest sites known to be occupied in the entire State (Cade 1994). A steadily increasing number of American peregrine falcon pairs breeding in Washington, Oregon, and Nevada were indicated by surveys from 1991 to 1997; known pairs in Washington increased from 17 to 44, in Oregon from 23 to 42, and in Nevada from 3 to 6 (Gary Herron, Nevada Division of Wildlife, pers. comm. 1997; Martin Nugent, Oregon Department of Fish and Wildlife, *in litt.*

1997; David Anderson, Washington Department of Fish and Game, *in litt.* 1997). The number of American peregrine falcons in California increased from an estimated low of 5–10 breeding pairs in the early 1970's (Herman 1971) to a minimum of 147 occupied sites in 1997 (Santa Cruz Predatory Bird Research Group 1997). The increase in California has been concurrent with the restriction of DDT and management that included the release of over 750 American peregrine falcons, including captive-reared and relocated wild hatchlings, through 1997 (Walton 1997). Recovery of American peregrine falcons in some areas of California, however, has been impeded by continuing elevated DDT levels (Jarman 1994, Walton 1997). Based on currently available information, it is evident that the first recovery objective has been met; a minimum known population of 239 pairs exceeds the delisting goal of 185 by 54 pairs, and the distribution goals also have been met in all four States. Surveys conducted from 1991 to 1997 demonstrate a steadily increasing number of American peregrine falcon pairs, indicating that natural productivity is greater than mortality in this recovery region.

Productivity measured in Washington between 1993 and 1997 ranged from 1.3 to 1.8 yg/pr, with an average of 1.5 yg/pr (N=159) (D. Anderson, *in litt.* 1997). In Oregon, productivity between 1993 and 1997 ranged from 0.8 to 1.9 yg/pr, with an average of 1.3 yg/pr (N=127) (M. Nugent, *in litt.* 1997). Between 1993 and 1997, productivity in California ranged from 1.4 to 1.7 yg/pr, (N=356) with an average of 1.6 yg/pr (J. Linthicum, *in litt.* 1997). No productivity data were available for Nevada.

Productivity, an important measure of population health, can be difficult to determine in wide-ranging species nesting in remote landscapes that are often difficult to access. However, data available indicate that the average productivity from 1993 to 1997 in Washington, Oregon and California was 1.5 yg/pr; therefore, the Service considers this objective to be met.

The release of captive-bred American peregrine falcons was suspended in Nevada in 1989, in California in 1992 (although the relocation of wild hatchlings continued), and in Oregon and Washington in 1995. The effect of these releases on population growth and stability in this region are not yet completely known. As a result of lower than expected first-year mortality of released birds, the augmentation program accelerated the growth of the Pacific population (Brian Walton, Santa

Cruz Predatory Bird Research Group, pers. comm. 1997).

The Pacific Population Plan did not identify pesticide residue or eggshell thinning levels as recovery objectives. However, organochlorine residues and eggshell thinning have been measured in California since the early 1970's. Jarman (1994) reported DDE concentrations in 105 peregrine eggs collected in 1987–1992 from California, and 11 eggs from Oregon from 1990 to 1993. Data collected in 9 study regions in California (Jarman 1994) indicated the highest concentrations of DDE were found in California eggs from the Channel Islands and midcoast with 21 and 13 ppm, respectively. The southern coast and San Francisco regions had the lowest concentrations of 5.5 and 4.3 ppm, respectively. The DDE concentrations in eggs collected along the coast of California (between San Francisco Bay and 34° N) did not decrease between 1969 and 1992 (Jarman 1994). Eggs from Oregon contained DDE levels of 10 ppm.

Eggshells from coastal California continue to show thinning. In northern and central coastal California, eggshells collected between 1975 and 1995 averaged 17.7 and 19.1 percent thinner than pre-DDT era, respectively (J. Linthicum, *in litt.* 1996). In northern interior California, where 104 of the 186 sites known to be active at least once since 1975 (1975–1993), eggshells averaged 15.6 percent thinner than pre-DDT era shells (J. Linthicum, *in litt.* 1996). Eggshells collected on the Channel Islands off the southern coast of California in 1992–1995 averaged 19.4 percent thinner than those collected in California prior to 1947 (J. Linthicum, *in litt.* 1996). In montane California, the average has been 15 percent thinner than normal, and in eggshells from the southern interior (coastal mountains) sites the average has been 17.9 percent thinner than normal (J. Linthicum, *in litt.* 1996). Urban pairs experienced eggshell thinning averaging 8.7 percent in the San Francisco area and 10.9 in the Los Angeles/Orange County area. A summary of 633 clutch mean measurements representing 1,237 samples of one or more eggshells collected between 1975 and 1995 from the historical range of the American peregrine falcon in California averaged 16.1 percent thinning (J. Linthicum, *in litt.* 1996). However, current reproduction supports an expanding population in most areas despite high organochlorine residue concentrations and associated eggshell thinning that still occurs in some areas of the Pacific population.

Rocky Mountain/Southwest

The American Peregrine Falcon Rocky Mountain/Southwest Population Recovery Plan (U.S. Fish and Wildlife Service 1984) established three recovery objectives for reclassification, including (1) increasing the *Falco peregrinus anatum* population in the Rocky Mountain/Southwest region to a minimum of 183 breeding pairs with the following distribution: Arizona (46), Colorado (31), Idaho (17), Montana (20), Nebraska (1), New Mexico (23), North Dakota (1), South Dakota (1), Texas (8), Utah (21), and Wyoming (14); (2) sustaining a long-term average production of 1.25 yg/pr without manipulation by 1995; and (3) observing eggshell thickness within 10 percent of pre-DDT eggshells for a 5-year span.

The prairie States of North Dakota, South Dakota, Nebraska, Kansas, and Oklahoma contain little peregrine falcon habitat, and historical data are incomplete. No recovery goals for a specific number of peregrine falcon pairs were set for Kansas or Oklahoma; peregrine falcons are not known to have nested in Oklahoma. Currently, Nebraska and Kansas each have one peregrine falcon pair (Tordoff, Martell, and Redig 1997); no peregrine falcon pairs are known to occur in North Dakota, South Dakota, or Oklahoma.

The Rocky Mountain/Southwest population of the American peregrine falcon has made a profound comeback since the late 1970's when surveys showed no occupied nest sites in Idaho, Montana, or Wyoming and few pairs in Colorado, New Mexico, and the Colorado Plateau, including parts of southern Utah and Arizona (Cade 1994). Surveys conducted from 1991 to 1997 indicate that the number of American peregrine falcon pairs in the Rocky Mountain/Southwest population is steadily increasing. In 1991, this population supported 367 known pairs; in 1997 the number of pairs increased to 575 (Greg Beatty, Arizona Game and Fish Department, *in litt.* 1997). Surveys conducted from 1992 to 1997 showed that, with the exception of Idaho, North Dakota, and South Dakota, all States within the Rocky Mountain/Southwest population have met their specific recovery goals for breeding pairs.

The current minimum known number of peregrine falcon pairs for each State include Arizona 159, Colorado 81, Idaho 15, Montana 23, Nebraska 1, New Mexico 40, North Dakota 0, South Dakota 0, Texas 15, Utah 154, Wyoming 40, and Kansas 1 (Jennifer Fowler-Propst, U.S. Fish and Wildlife Service, *in litt.* 1996; G. Beatty, *in litt.* 1997; James H. Enderson, Western Peregrine

Falcon Recovery Team, pers. comm. 1997; Frank Howe, Utah Division of Wildlife Resources, *in litt.* 1997; John Beals, Idaho Fish and Game, pers. comm. 1997; Bill Heinrich, The Peregrine Fund, pers. comm. 1997; Mckinney 1994; B. R. Mckinney, pers. comm. 1997; Dennis Flath, Montana Department of Fish and Parks, *in litt.* 1977). The current Rocky Mountain/Southwest population is 529, which surpasses the recovery objective of 183 by 346 pairs.

Between 1989 and 1997 the average productivity in Arizona was 1.1 yg/pr (N=294) (Ward and Siemens 1995; Duane Shroufe, Arizona Game and Fish Dept., *in litt.* 1996; G. Beatty, *in litt.* 1997). Although recent productivity averages have fallen below the 1.25 yg/pr recovery goal, Arizona has sustained a 24-year average of 1.4 yg/pr.

In 1973, 1974, and 1975, productivity in Colorado was 0.2, 1.9, and 0.7 yg/pr respectively, reflecting the irregular and generally poor productivity typical of the 1970's (Platt and Enderson 1988). From 1990 to 1997, production averaged 1.5 yg/pr (Gerry Craig, Colorado Division of Wildlife, *in litt.* 1995; J.H. Enderson, pers. comm. 1997). Productivity measured in Colorado from 1972 to 1997 ranged from 0 to 2.5 yg/pr, with an average of 1.5 yg/pr (N=611) for the 26-year period (G. Craig, *in litt.* 1995; J.H. Enderson, pers. comm. 1997).

In Idaho, productivity recorded from 1988 to 1997 ranged from 0 to 2.5 yg/pr, with an average of 1.7 yg/pr for this 10-year period (N=103) (Wayne Melquist, Idaho Fish and Game, *in litt.* 1996; J. Beals, pers. comm. 1997). In Montana, productivity between 1984 and 1997 ranged from 0.3 to 3.0 yg/pr, with an average of 1.7 yg/pr for the 14-year period (N=119) (D. Flath, pers. comm. 1997; Duane Shroufe, Arizona Game and Fish Department, *in litt.* 1996). In Nebraska, productivity between 1992 and 1997 for a single pair ranged from 0 to 3.0 yg/pr, with an average of 1.0 yg/pr for the 6-year period (N=6) (L. Kiff, *in litt.* 1997).

New Mexico has sustained an 11-year (1986–1997) average productivity of 1.71 yg/pr (N=246) (Sartor O. Williams, New Mexico Dept. of Game & Fish, *in litt.* 1997). Productivity in 1995, 1996, and 1997 was 1.3 (N=43), 1.5 (N=44), and 1.6 (N=40) yg/pr, respectively (J. Fowler-Propst, *in litt.* 1997). New Mexico has maintained a 22-year average productivity of 1.6 yg/pr.

In Texas, productivity recorded from 1975 to 1997 ranged from 0 to 2.3 yg/pr, with an average of 0.9 yg/pr for the 23-year period (Mckinney 1994; B. Mckinney, pers. comm. 1997). Peregrine falcon surveys conducted in the Big

Bend National Park, Texas, between 1986 and 1989 recorded an average productivity of 1.08 yg/pr (Moore 1989).

In Utah, between 1985 and 1987, productivity averaged 0.8 yg/pr. From 1991 to 1996, productivity ranged from 0.9 to 2.0 yg/pr, with an average of 1.3 yg/pr for the 6-year period (Bunnell 1994; F.H. Howe, *in litt.* 1997). In Wyoming, productivity between 1984 and 1997 ranged from 0.9 to 3.0 yg/pr with an average of 1.7 yg/pr for the 14-year period (Joe White, Wyoming Game and Fish Department, *in litt.* 1995; B.H. Heinrich, pers. comm. 1997). In Kansas, productivity between 1993 and 1997 ranged from 0 to 3.0 yg/pr, with an average of 1.0 yg/pr for the 4-year period (L. Kiff, *in litt.* 1997).

With the exception of Texas, Nebraska, and Kansas, the long-term productivity goal of 1.25 yg/pr for the Rocky Mountain/Southwest region has been exceeded by all States with breeding American peregrine falcons. Although Texas has exceeded its goal for number of pairs, heavy metal contamination, particularly mercury, in adults and nestlings may be depressing productivity (Andrew Sansom, Texas Parks and Wildlife Department, *in litt.* 1995). Residual mercury contamination from mines operated along the Rio Grande River in the early 1900's are the suspected source of this contamination (B. Mckinney, pers. comm. 1997). Nebraska and Kansas have had only one peregrine falcon pair each since 1992, and breeding has been sporadic in both States.

The average productivity for the nine States supporting breeding populations is 1.4 yg/pr, well above the goal of 1.25 yg/pr goal. Even though Texas, Nebraska, and Kansas have not yet met the productivity goal, productivity throughout the Rocky Mountain/Southwest region has been more than sufficient for recruitment to exceed mortality, so dramatic population growth has resulted.

In Arizona, eggshells collected between 1978 and 1983 averaged 14.2 percent thinner, and 20 eggshell replicates collected from 1989 to 1994 averaged 13 percent thinner than pre-DDT era eggshells (Ellis *et al.* 1989, Ward and Siemens 1995). In Colorado and New Mexico, shells from 260 eggs laid between 1977 and 1985 averaged 12 percent thinner than pre-DDT eggshells (Enderson *et al.* 1988). In another analysis of eggs from New Mexico, eggshells collected in 1977 averaged 20 percent thinner than pre-DDT eggshells, but in 1985 averaged only 14 percent thinner (Ponton *et al.* 1988). Eggshell thickness measurements for Colorado from 1973 to 1997 included a maximum

of 25.1 percent thinner and a minimum of 6.0 percent thinner than pre-DDT eggshells, with an average thinning of 13.5 percent. Only in Colorado has the objective for eggshell thickness been achieved. In 1990, 1991, 1992, 1993, and 1994 measurements of 10.6, 11.7, 8.6, 8.1, and 6.0 percent thinning, respectively, the average of the annual means was 9.0 percent thinning for this period (G. Craig, *in litt.* 1995). Although the recovery objective was not met in other States in the region, there is a general trend toward thicker eggshells in measurements taken since the mid-1970's (L. Kiff, pers. comm. 1995).

In summary, the first recovery objective in the Rocky Mountain/Southwest Recovery Plan has been met; the current population of 529 pairs exceeds the goal of 183 pairs by 346 pairs. These pairs are distributed throughout the Rocky Mountain/Southwest States. By the mid-1980's the practice of fostering chicks into active nests was terminated; therefore, the long-term average productivity this recovery region has demonstrated has been accomplished without nest manipulation. The second objective of 1.25 yg/pr for 5 years has been met by all Rocky Mountain/Southwest States that have breeding American peregrine falcons except Texas, Nebraska, and Kansas. The current reproductive level of the 10 States with breeding populations (including Texas, Nebraska, and Kansas) is 1.4 yg/pr, exceeding the second objective. Therefore, the Service considers the intent of this objective met. Based on the degree of recovery achieved, the third objective, that average eggshell thickness is within 10 percent of the pre-DDT era average for 5 years, appears to be conservative. The increase in numbers of American peregrine falcons indicates the subspecies has recovered without the necessity of reaching this specific recovery objective.

The Rocky Mountain/Southwest Recovery Plan did not identify pesticide residue levels as a recovery objective. However, organochlorine pesticide residues in American peregrine falcon eggs measured in Colorado and New Mexico between 1973 and 1979 averaged 26 ppm DDE, but the average declined to 15 ppm by 1980–1983 (Enderson *et al.* 1988). The average concentration in eggs collected in Colorado from 1986 to 1989 was 11 ppm; however, the sample included only 5 eggs (Jarman *et al.* 1993).

Eastern United States

The Peregrine Falcon, Eastern Population Recovery Plan, first published in 1979 (Eastern Plan) and

revised in 1985 and 1991 (U.S. Fish and Wildlife Service 1991), addressed the recovery of the peregrine falcon in the Eastern United States, which was established beginning in 1974 and 1975 by releasing captive-bred peregrine falcons of mixed genetic heritage. The recovery plan established two recovery objectives including (1) a minimum of 20–25 nesting pairs in each of 5 recovery units to be established and sustained for a minimum of 3 years, and (2) an overall minimum of 175–200 pairs demonstrating successful, sustained nesting. The five recovery units are (1) Mid-Atlantic Coast, (2) Northern New York and New England, (3) Southern Appalachians, (4) Great Lakes, and (5) Southern New England/Central Appalachians.

The first recovery objective has been substantially achieved, with 3 of the 5 recovery units (Mid-Atlantic Coast, Northern New York and New England, and Great Lakes) surpassing 20–25 nesting pairs of peregrine falcons for 3 years. The Mid-Atlantic Coast unit had 58 pairs fledging 76 young in 1997 and averaged 60 pairs and 90 fledglings annually from 1995 to 1997. The Northern New York and New England unit had 49 pairs fledging 65 young in 1997 and averaged 43 pairs and 59 fledglings annually from 1995 to 1997 (Mike Amaral, U.S. Fish and Wildlife Service, *in litt.* 1997). The Great Lakes unit had 42 pairs fledging 78 young in 1997 and averaged 36 pairs and 63 fledglings from 1995 to 1997 (L. Kiff, *in litt.* 1997). The Southern Appalachians unit had 11 pairs fledging 23 young in 1997, and the Southern New England and Central Appalachians unit had 14 pairs fledging 20 young in 1997 (L. Kiff, *in litt.* 1997; David Flemming, U.S. Fish and Wildlife Service, *in litt.* 1997). In 1997, there was a total of 174 pairs counted in the 5 Eastern State recovery units, almost the minimum recovery level of the Eastern Plan. The recovery goal, however, may already have been exceeded because up to 10 percent of territorial pairs in any given year escape detection and are not counted (Cade *et al.* 1988a). Importantly, the number of territorial pairs recorded in the eastern peregrine falcon recovery area has increased an average of 10 per cent annually for the past 5 years (1992–1997). Equally important is that the productivity of these pairs during the same 5-year period has averaged 1.5 fledged young per territorial pair.

As of 1997, there were at least 31 peregrine pairs in 6 Midwestern States nesting outside the recovery area delineated for those States in the 1991 recovery plan—the birds are nesting successfully in a greater area than

believed likely in 1991. Peregrine falcons now found in Midwestern States are the result of captive-reared and released birds and others that probably came from the peregrine falcons released in the eastern States. Although there appears to be a zone of no nesting in the northeastern Great Plains that separates the western native American peregrine falcons from the introduced eastern peregrine falcons (C. Kjos, pers. comm. 1997), the genetic origins of the midwestern peregrine falcons are unknown, and the potential for interchange of individuals between the two areas cannot be dismissed. There are now more than 200 pairs of peregrine falcons in the Midwestern and Eastern States where peregrine falcons had been extirpated.

Mexico

None of the existing recovery plans written for peregrine falcons in North America established recovery criteria for birds that nest in Mexico. There is very little historical or recent information on peregrine falcons in Mexico for accurately assessing their current status in Mexico.

Porter *et al.* (1988) reported 42 known nesting territories on the western side of the Baja California Peninsula. From 1966 through 1971, only three pairs occurred in this region and none were found in 1976 (Porter *et al.* 1988), indicating a substantial decline had occurred by the mid-1970's. Most of these territories apparently have not been checked since that time, but seven pairs were located in 1985–1992 in areas not occupied in the years just before (Massey and Palacios 1994).

In 1993, three active American peregrine falcon nests were discovered in Ojo de Liebre (Scammon's) Lagoon on the western side of the Baja California Peninsula in an area without historical nesting records (Castellanos *et al.* 1994). The central west coast of the Baja California Peninsula was an important breeding area with an historical population of about 13 pairs (Banks 1969). Between 1980 and 1994, Castellanos *et al.* (1997) conducted breeding surveys of American peregrine falcons in this area of the coast and found 10 nesting pairs. Castellanos *et al.* (1997) studied the reproductive success of three pairs in 1993 and five pairs in 1994 located at Ojo de Liebre and San Ignacio Lagoons. An average of three eggs, 1.8 nestlings, and 1.6 fledglings were produced per nest. This productivity appears to be within the range of normal productivity for healthy populations (Cade *et al.* 1988b). These observations suggest some recent

recovery on the west coast of the Baja California Peninsula.

On the western (Gulf of California) side of mainland Mexico, Porter *et al.* (1988) reported 23 historical nest sites. A number of new nest sites were found in this area in 1966–1984, increasing the number of known nest sites to 51. Territory occupancy averaged about 82 percent in 1967–1971 and 77 percent in 1971–1975, indicating that territory occupancy in that area never declined as significantly as on the west side of the Baja California Peninsula. Porter and Jenkins (1988) believed that the number of occupied territories in the Gulf area increased after 1967 following a reduction in DDE residues in prey.

Between 1989 and 1997, Robert Mesta, U.S. Fish and Wildlife Service, (*in litt.* 1997) found three pairs of American peregrine falcons, one pair on the Rio Aros and two on the Rio Yaqui, Sonora. Hunt *et al.* (1988) found 14 occupied American peregrine falcon nesting territories in the highlands of northeast Mexico in 1982. In this area and adjacent West Texas, territory occupancy averaged about 70 percent during 1973–1985.

Most of what is known about productivity and pesticide residues in Mexico comes from the western mainland near the Gulf of California. Porter *et al.* (1988) found that productivity along the Gulf of California in 1965–1984 was “somewhat less than normal,” and 5 added eggs collected in 1976–1984 averaged 12.8 ppm DDE with a range of 2.4–25.0 ppm (Porter and Jenkins 1988). DDE residues in prey in the Gulf area declined from the 1960’s to the 1980’s, and this decline correlated with increases in productivity and the number of breeding pairs (Porter and Jenkins 1988). Some prey, however, still contained high pesticide residues, and reproduction appeared to be affected by organochlorine at 3 of 15 nests examined (Porter and Jenkins 1988).

Hunt *et al.* (1988) found that only 5 of 14 pairs produced young in northeast Mexico in 1982. Hunt *et al.* (1988) reported significant DDE residues in peregrine falcon prey species in western Texas in the mid 1980’s, but prey species in Mexico were not sampled.

In summary, there has been little research on the distribution, numbers, and status of American peregrine falcons in Mexico, and most research took place in the Baja California Peninsula and the Gulf of California regions. Numbers on the west coast of the Baja California Peninsula declined significantly (Porter *et al.* 1988), but observations suggest that numbers may have increased in recent years (Massey and Palacios 1994, Castellanos *et al.*

1994, Castellanos *et al.* 1997). In the Gulf of California area, territory occupancy never was known to drop below 77 percent (Porter *et al.* 1988), but it increased in the 1970’s and 1980’s (Porter and Jenkins 1988). An unknown number of pairs inhabit the Chihuahuan Desert and the Sierra Madre Occidental in the interior of Mexico.

No information on population trends for American peregrine falcons in Mexico is available; however, the status of the Mexican population may be similar to that of the population occupying similar habitat in nearby Arizona (G. Hunt, pers. comm. 1997). Exposure to organochlorine-based pesticides continues to be a threat to Mexican-nesting populations. In 1997, as part of the North American Free Trade Agreement (NAFTA), the Commission for Environmental Cooperation (CEC) established a North American Regional Action Plan (NARAP) on DDT, which proposes a phased reduction, resulting in the eventual elimination of DDT used for malaria control in Mexico. Specific goals of the NARAP are to (1) reduce the use of DDT for malaria control in Mexico by 80 percent in 5 years (beginning in 1997); (2) eliminate the illegal use of DDT in agriculture in Mexico; (3) develop a cooperative approach to minimize movement of malaria-infected mosquitos across borders and reduce the illegal importation of DDT; and (4) advance global controls on DDT production, export and use.

Eliminating protection for peregrine falcons under the Act is unlikely to increase the risk to American peregrine falcons nesting in Mexico. Adverse effects of organochlorine pesticides in the environment remains an international concern, not only for peregrine falcons nesting in Mexico, but for peregrine falcons wintering in or migrating through Latin America. By undertaking the steps proposed in the NARAP, the United States, Canada, and Mexico are committing to ongoing cooperative activities and yearly reporting on progress made on these initiatives and objectives. Annual reports will be submitted to the North American Working Group for the Sound Management of Chemicals, and subsequently disseminated to the Council of the Commission for Environmental Cooperation and the public.

Summary of Peregrine Falcon Recovery

Five regional peregrine falcon recovery plans, four for American peregrine falcons in Canada and the Western United States and one for the

Eastern United States introduced peregrine falcon population, were written to guide recovery efforts and establish criteria to be used in measuring recovery. These recovery plans included objectives using population size and reproductive performance to measure recovery. Only two of the recovery plans included specific objectives that applied to pesticide residues in eggs and eggshell thinning. The combined population size goal for the 4 American peregrine falcon recovery plans is 456 pairs. Currently, a minimum of 1,388 pairs occupy the range of the American peregrine falcon in Alaska, Canada, and the Western United States, 174 peregrine falcon pairs are found in the 5 recovery units included in the Eastern Plan, and an additional 31 peregrine falcon pairs occur in Midwestern States in areas not included in the Eastern Plan recovery units.

Other objectives, including those for pesticide residues in eggs and the degree to which eggshells are thinner than pre-pesticide era eggshells, vary among the plans. In the case of eggshell thinning, current measurements obtained in some areas fall short of recovery objectives. Eggshell thinning was originally suggested by recovery teams as an indicator of whether organochlorine contamination was preventing species recovery. Despite the failure of populations in localized areas to meet recovery objectives, overall, populations of American peregrine falcons have increased considerably. This increase continues to occur even after reintroduction efforts have been curtailed. The consistent and geographically widespread trends in increasing population size demonstrate that current levels of reproductive failure, pesticide residues, and eggshell thinning still affecting American peregrine falcons in some areas have not prevented recovery of the subspecies in most of North America. Exposure to environmental contaminants remains a concern that must continue to be addressed internationally in order to protect nesting, migrating, and wintering populations of American peregrine falcons outside the United States.

Summary of Issues and Recommendations

In the Advanced Notice of a Proposal to Remove the American Peregrine Falcon from the List of Endangered and Threatened Wildlife (60 FR 34406, June 30, 1995), the Service requested that all interested parties provide data and comments on the status and possible proposal to delist the American

peregrine falcon. The Service provided the governments of Canada and Mexico with the Advanced Notice. Canada responded and provided data but gave no position on the proposal, and Mexico did not respond. The Service received a total of 171 comment letters from 43 States and Canada, which included 12 Federal resource and 32 State resource agencies, 41 falconry associations or falconers, 13 conservation organizations, and 45 private individuals. Of the responses received, 92 supported the proposal to delist, 46 opposed the proposal, 13 supported downlisting, and 20 expressed no opinion. These comments and responses are available for public inspection, by appointment, during normal business hours (see "Addresses"). Those responses objecting to the Service's proposal contained several concerns, presented below with the Service's response.

Issue 1: The data do not support delisting the American peregrine falcon throughout its range in the continental United States. There should be a combination of downlisting, delisting, and no change in status for individual recovery areas based on the degree of attainment of recovery plan objectives regarding not only numbers of peregrine falcons, but also productivity and eggshell thinning goals. The Service should consider downlisting the American peregrine falcon to threatened rather than delisting.

Service Response: Data for 1996–1997, which were not available at the time of the advanced delisting notice, have been included in this proposed rule. These more recent data show improvements in numbers of breeding pairs of peregrine falcons and productivity since 1994 (Refer to Table 1, "Recovery Status," and "Summary of American Peregrine Falcon Recovery"), and demonstrate that goals set for numbers and productivity by the four American peregrine falcon recovery plans have been met or exceeded. The combined population size goal for the 4 American peregrine falcon recovery plans is 456 pairs. Currently, a minimum of 1,388 known pairs occupy sites in Alaska, Canada, and the Western United States. A number of additional pairs have probably been undetected.

Only the Alaska recovery plan set a goal for DDT levels, and only two recovery plans (Alaska and Rocky Mountain/Southwest) specified objectives for eggshell thinning. The Alaska Plan set a delisting goal of less than 5 ppm DDT and less than 10 percent eggshell thinning. Recent data for American peregrine falcon eggs indicate DDT levels at less than 3.5

ppm, exceeding that goal, and eggshell thinning is at 12.5 percent. Measurements for eggshell thinning have not been consistently taken in the Rocky Mountain/Southwest States. Colorado has met the recovery plan eggshell thinning goal of less than 10 percent; the average of the annual means for 1990–1994 was 9.0 percent. Data for other States show a general trend toward thicker eggshells since the mid-1970's (refer to "Rocky Mountain/Southwest" under "Recovery Status"). Overall productivity goals were met or exceeded in the four American peregrine falcon recovery plans using productivity as a recovery criterion.

Three of five peregrine falcon recovery units in the Eastern United States have met recovery goals, and 174 pairs documented in 1997 indicate the overall recovery goal of 175–200 pairs has probably been met when considering that up to 10 percent of territorial pairs in any given year escape detection (Cade *et al.* 1988a). In addition, another 31 pairs are nesting in areas of the Midwest outside the recovery units specified in the eastern plan but nevertheless contribute to overall restoration goals.

The Service believes that the species has essentially achieved the goals established for recovery and, in many areas, has exceeded the goals. The Service believes the available information supports full delisting of the species throughout its range, although some recovery plan areas are experiencing slower recovery due to fluxes in productivity or residual DDT/DDE impacts. The trends in productivity, however, as well as DDT/DDE reduction, clearly indicate continued population increases. The Service believes that, when viewed on a range-wide or even region-wide basis, the species clearly is not in danger of extinction throughout a significant portion of its range and warrants full delisting.

Issue 2: American peregrine falcons should not be delisted because they have not been restored throughout the historical range.

Service Response: Restoration of the American peregrine falcon throughout the historical range was not a goal of any of the recovery plans written for this subspecies and is not required for recovery. Generally, the goal of a recovery program is to restore the species to a point at which protection under the Act is no longer required. To be recovered, a species must not be endangered with extinction, or be likely to become endangered within the foreseeable future. As a species recovers in numbers and populations expand,

more of the historical range can be reoccupied where appropriate habitat remains. In the case of the peregrine falcon, a significant amount of unoccupied but suitable habitat remains, so continued expansion is expected.

Issue 3: There are gaps in the scientific knowledge about American peregrine biology. A population viability analysis has not been done; genetic diversity, viable population size, knowledge of population dynamics, and long-term stability of populations have not been determined.

Service Response: A complete understanding of the biology of a species is not required to determine a species' conservation status under the Act. Population viability analyses are important tools for attempting to quantify threats to a species, particularly those facing loss and fragmentation of habitat, and the consequences of conservation actions, as well as aiding in identifying critical factors for study, management, and monitoring. These analyses are not essential, however, to determine when a species has achieved recovery, particularly in the case of the American peregrine falcon. It is evident that recovery of this subspecies has been largely achieved by eliminating the use of DDT and by successful management activities, including the reintroduction of captive-bred American peregrine falcons. Recovery goals established for the species have been met or exceeded, with few exceptions.

Issue 4: Organochlorine pesticides still persist within the breeding range of the American peregrine falcon and continue to depress natural productivity.

Service Response: Continued exposure to organochlorines in areas outside the U.S. remains a concern that must be addressed internationally. The North American Regional Action Plan on DDT, an ongoing effort under the North American Working Group for the Sound Management of Chemicals, has specific goals to reduce and eliminate the use of DDT and advance global controls on DDT production, export and use. Monitoring organochlorine exposure and productivity of American peregrine falcon populations breeding and nesting in Mexico and Latin America could potentially be funded and part of post-delisting monitoring for this subspecies. American peregrine falcons have increased throughout their historical range in the U.S. despite the continued presence of organochlorine residues in certain populations (e.g., coastal California). American peregrine falcon populations have met or

exceeded recovery goals in the four recovery plans (Table 1), and the Service believes removing the endangered status of this subspecies is appropriate. Bioaccumulation of organochlorine residues will be monitored in the United States during the minimum 5-year post-delisting monitoring period. Refer to "Summary of Factors Affecting the Species, E. *Other natural or manmade factors affecting its continued existence*" for an in-depth discussion. See also Service response to issue 9.

Issue 5: The continued unrestricted use of organochlorine pesticides in Latin America places the American peregrine falcon at risk of contamination while on migration and on its wintering grounds.

Service Response: Comparisons of blood samples collected during fall and spring migration indicate that, although migrant peregrine falcons accumulate pesticides while wintering in Latin America, DDE residues in the blood taken from female peregrine falcons captured during spring migration at Padre Island, Texas decreased between 1978 and 1994 below levels that would affect reproduction (Henny *et al.* 1996). Despite the continued use of organochlorines in Latin America, the American peregrine falcon has recovered over most of its historic range, and Arctic peregrine falcons, which also winter in Latin America, have been delisted. Refer to "Summary of Factors Affecting the Species, E. *Other natural or manmade factors affecting its continued existence*" for an in-depth discussion. The North American Working Group for the Sound Management of Chemicals promotes a regional perspective that encourages the active involvement of Central and South American countries in the implementation of the North American Regional Action Plan (NARAP) on DDT, and is facilitating international cooperation on combating malaria in these regions without the continued use of organochlorine pesticides.

Issue 6: The take of American peregrine falcons for falconry after its delisting will create an additional threat to the subspecies.

Service Response: Delisting the American peregrine falcon will not affect the protection given to all migratory bird species, including the peregrine falcon, under the Migratory Bird Treaty Act. The regulations issued pursuant to the Migratory Bird Treaty Act allow for issuance of permits to take raptors for falconry provided the taking will not threaten wildlife populations (50 CFR 21.28 and 13.21(b)). The Service will establish biological criteria

for the issuance of permits for take of peregrine falcons for falconry to ensure the taking does not negatively impact wild populations, particularly those in need of further recovery. These criteria will pertain to all wild North American peregrine falcons and will apply to all current and future falconry and raptor propagation permit holders. Until such time as these criteria are in place, take for falconry and raptor propagation purposes under the Migratory Bird Treaty Act will not be authorized. The Service expects to finalize the criteria before it issues a final decision on this delisting proposal. The effects of take for falconry will be assessed during the minimum 5-year post-delisting monitoring period following delisting. Refer to "Summary of Factors Affecting the Species" (paragraph D) and "Effects of this Rule" for further information.

Issue 7: The Service cannot consider delisting the American peregrine falcon until all recovery goals in the four existing recovery plans for this subspecies have been met or exceeded.

Service Response: Section 4(f) of the Act directs the Service to develop and implement recovery plans for species of animals or plants listed as endangered or threatened. Recovery is the process by which the decline of an endangered or threatened species is arrested or reversed and threats to its survival are neutralized so that long-term survival in nature can be ensured. The goal of this process is the maintenance of secure, self-sustaining wild populations of species with the minimum investment of resources. One of the main purposes of the recovery plan is to enumerate goals (guidelines) that will help the Service to determine when recovery for a particular species has been achieved. The Act does not require that all of the specific recovery goals for a listed species must be met or exceeded before it can be delisted.

The Service determines whether recovery has been achieved based on a species' performance relative to the goals set in its recovery plan and the best available scientific information. A species is recovered when it is no longer endangered with extinction (i.e., endangered), or likely to become endangered within the foreseeable future throughout all or a significant portion of its range (i.e., threatened). The peregrine falcon meets these requirements for removal from the List of Endangered and Threatened Wildlife.

The American peregrine falcon has either met, exceeded, or is very close to meeting the recovery goals set for this subspecies throughout its range, and the specific goals not met are not factors preventing recovery. The Service

considers that the intent of all the objectives have been met and that the recovery of the species justifies a proposal to delist.

Issue 8: The eastern peregrine falcon population has not met the recovery goals set for it in the Eastern Recovery Plan and, therefore, should not be delisted.

Service Response: Current data, through 1997, on the status of the eastern peregrine falcon population indicate that the intent of the recovery goals set for this population have been met. The recovery plan established two recovery objectives including (1) a minimum of 20–25 nesting pairs in each of five recovery units to be established and sustained for a minimum of 3 years, and (2) an overall minimum of 175–200 pairs demonstrating successful, sustained nesting. Three of the five recovery units (Mid-Atlantic Coast, Northern New York and New England, and Great Lakes) have surpassed the nesting pair goal for 3 years. The Southern Appalachians and Southern New England/Central Appalachians units may not yet have achieved the recommended number of breeding pair goals established for those areas. However, the overall minimum of 175–200 successful pairs in the eastern region has been largely achieved, and over the past 5 years (1992–1997), the number of territorial pairs has increased an average of 10 per cent annually. There are now more than 200 pairs of peregrine falcons in the midwestern and eastern States where falcons had been extirpated, and pairs are successfully nesting throughout a greater range than anticipated in 1991. The Service believes the intent of the recovery objectives have been satisfied and that recovery of the peregrine in the eastern United States is sufficiently established. Refer to "Recovery Status" for additional discussion on this subject.

Issue 9: The status of the American peregrine falcon in Mexico has not been adequately addressed.

Service Response: While population status and trends for falcons nesting in Sonora and the highlands of Central Mexico is not known, American peregrine falcon populations in the United States and Canada, including those migrating from Latin America to nest, have met or exceeded the criteria for delisting. Removing protection for the species under United States domestic law is not anticipated to either benefit or harm American peregrine falcons in Mexico. Environmental exposure to organochlorine pesticides continues to be a concern for resident nesting American peregrine falcons in Sonora and the highlands of Central

Mexico, because it is likely that productivity in these local populations is being adversely affected. Delisting does not eliminate the need for continued international efforts regarding contaminants monitoring in Mexico. Current DDT production is restricted to one facility in Mexico, which supplies DDT for authorized government use in malaria vector control. DDT is registered only for use in government-sponsored public health campaigns, and continues to be an important tool in the fight against malaria transmission, although new, less environmentally harmful measures are being investigated. Sixty percent of Mexico's territory, from sea level to 1,800 meters above sea level, presents favorable conditions for malaria transmission. This includes the Pacific coast, the Gulf of Mexico slopes, the Yucatan peninsula and interior basins of the high plateau. In some cases, targeted malaria control areas may overlap with nesting American peregrine falcons. Refer to "Mexico" under "Recovery Status" for additional discussion on this subject.

Issue 10: Post-declassification monitoring for 5 years is essential.

Service Response: The Service agrees. The Endangered Species Act requires the Secretary to implement a system in cooperation with the States to monitor effectively for not less than 5 years the status of all species which have recovered to the point that protection of the Act is no longer required (section 4(g)). If it becomes evident during the course of the post-delisting monitoring that the species again required protection of the Act, it would be relisted. Refer to "Monitoring" under "Future Conservation Measures" for the proposed development of a post-delisting monitoring program for the peregrine falcon, and the conditions under which this subspecies might be relisted.

Summary of Factors Affecting the Species

Section 4 of the Endangered Species Act and regulations (50 CFR Part 424) promulgated to implement the listing provisions of the Act, set forth the procedures for listing, reclassifying, and delisting species on the Federal lists. A species may be listed if one or more of the five factors described in section 4(a)(1) of the Act threatens the continued existence of the species. A species may be delisted, according to 50 CFR 424.11(d), if the best scientific and commercial data available substantiate that the species is neither endangered or threatened because of (1) extinction, (2) recovery, or (3) because the original data

for classification of the species were in error.

After a thorough review of all available information, the Service has determined a substantial peregrine falcon recovery has taken place since the early 1980's. The Service determines that none of the five factors addressed in section 4(a)(1) of the Act, and discussed below, is currently affecting the species, including the American peregrine falcon subspecies and introduced peregrine falcon populations, such that the species is endangered (in danger of extinction throughout all or a significant portion of its range) or threatened (likely to become endangered in the foreseeable future throughout all or a significant portion of its range). These factors and their application to the peregrine falcon in North America are as follows:

A. The Present or Threatened Destruction, Modification, or Curtailment of Its Habitat or Range

Peregrine falcons occupy a variety of habitat types and nest from the boreal forest region of Alaska and Canada, through much of Canada and the western United States, south to parts of central and western Mexico. Nesting habitat includes cliffs and bluffs in boreal forests, coastal cliffs and islands, urban skyscrapers and other structures, and cliffs and buttes in southwestern deserts. In some breeding areas, such as the southern United States, some or all of the birds remain year-round on their nesting territories. In other breeding areas, particularly in high latitudes, many or all of the individuals are highly migratory; these individuals occupy a number of regions and habitat types throughout the year as they nest, migrate to and from wintering areas, and occupy their wintering ranges. Due to the extensive geographic distribution of the peregrine falcon, the wide variety of habitat types in which the species nests, and the immense area that some of the more migratory individuals occupy during a year, the peregrine falcon occupies an extremely broad array of areas and habitats throughout its range. As a result, the degree to which peregrine falcons have been affected by human-caused habitat modification varies widely by region, habitat type, and individual falcons within the population.

As human population has grown in North America, the rate of habitat alteration has unquestionably increased. Certainly some peregrine falcon habitat has been destroyed, such as the many wetlands drained in recent years that were previously used by peregrine falcons for foraging or as migratory

staging areas during spring and fall. But peregrine falcons have colonized many cities in North America due to the abundance of nest sites on buildings and the abundance of prey, such as feral rock doves (*Columba livia*), that thrive in urban areas. Therefore, some forms of habitat modification have negatively affected peregrine falcons while other forms have benefited them. It would be difficult to estimate the net, overall effect of habitat modification on the species throughout North America.

Although the rate of habitat modification in North America has increased in recent decades, the number of American peregrine falcons occupying the region has increased substantially since the late 1970's or early 1980's. In several parts of their range, including parts of Alaska, the Yukon and Northwest Territories, California, and the southwestern United States, the number of breeding pairs has increased rapidly in recent years, and some local populations now occur at very high densities (R. Ambrose, pers. comm. 1997; G. Holroyd, pers. comm. 1997; Enderson *et al.* 1995). Because these rapid population growth rates and high densities were achieved despite considerable habitat modification in North America, the Service concludes that habitat modification or destruction has not been a limiting factor in peregrine recovery. It does not currently threaten the existence of the American peregrine falcon nor is it likely to in the foreseeable future.

B. Overutilization for Commercial, Recreational, Scientific, or Educational Purposes

Delisting the peregrine falcon will not result in overutilization because the delisting will not affect protection provided to all subspecies of the peregrine falcon by the Migratory Bird Treaty Act. The take of all migratory birds, including peregrine falcons, is governed by the Migratory Bird Treaty Act's regulation of the taking of migratory birds for educational, scientific, and recreational purposes and requiring harvest be limited to levels that prevent overutilization (See "D. The inadequacy of existing regulatory mechanisms").

C. Disease or Predation

Although individuals are vulnerable to disease and predation, these factors are not known to affect the peregrine falcon at the population level. Great horned owls are natural predators of peregrine falcons (U.S. Fish and Wildlife Service 1991) and may be responsible for the slow recovery of peregrine falcons in two recovery areas

in the reestablished eastern population (M. Amaral *in litt.* 1995). Great horned owl predation was not documented as a significant cause of the decline in peregrine falcons and has not affected the species' overall recovery.

D. The Inadequacy of Existing Regulatory Mechanisms

Upon delisting, peregrine falcons will no longer be protected from take and commerce by the Endangered Species Act. However, peregrine falcons will still be protected by the Migratory Bird Treaty Act (16 U.S.C. 703). Section 704 of the Migratory Bird Treaty Act states that the Secretary of the Interior is authorized and directed to determine if, and by what means, the take of migratory birds should be allowed and to adopt suitable regulations permitting and governing the take. In adopting regulations, the Secretary is to consider such factors as distribution and abundance to ensure that take is compatible with the protection of the species.

The Migratory Bird Treaty Act and its implementing regulations (50 CFR Parts 20 and 21) prohibit take, possession, import, export, transport, selling, purchase, barter, or offering for sale, purchase or barter, any migratory bird, their eggs, parts, and nests, except as authorized under a valid permit (50 CFR 21.11). Certain exceptions apply to employees of the Department of the Interior to enforce the Migratory Bird Treaty Act, to Federal Government employees, and to State game departments, municipal game farms or parks, and public museums, public zoological parks, accredited institutional members of the American Association of Zoological Parks and Aquariums (now called the American Zoo and Aquarium Association) and public scientific or educational institutions.

The Migratory Bird Treaty Act and implementing regulations allow for the taking and use of migratory birds, but require that such use not adversely affect populations. Regulations at 50 CFR 21.28 and 21.30 specifically authorize the issuance of permits to take, possess, transport and engage in commerce with raptors for falconry purposes and for propagation purposes. Certain criteria must be met prior to issuance of these permits, including a requirement that the issuance will not threaten a wildlife population (50 CFR 13.21(b)(4)). The Service will develop specific biological criteria to govern the take of peregrine falcons prior to authorizing take for falconry and raptor propagation under the Migratory Bird Treaty Act. No take of wild North

American peregrines will be authorized until these criteria are in place. The criteria will apply to all current and future falconry and raptor propagation permit holders. In addition to considering the effect on wild populations, issuance of raptor propagation permits requires that the Service consider whether suitable captive stock is available and whether wild stock is needed to enhance the genetic variability of captive stock (50 CFR 21.30(c)(4)). These regulatory provisions under the Migratory Bird Treaty Act will adequately protect against excessive take of peregrine falcons (see additional discussion of the Migratory Bird Treaty Act in the Effects of this Rule section below). Protective measures could be expanded, if necessary, by promulgation of a regulation under the Migratory Bird Treaty Act by the Service following or during the assessment of the effects of this take on peregrine falcons during the 5-year post-listing monitoring period. Therefore, in the event the peregrine falcon is delisted under the Endangered Species Act, the Service has authority under the Migratory Bird Treaty Act to ensure the conservation of the species.

In the absence of habitat protection under the Endangered Species Act, there are no other existing Federal laws that specifically protect the habitat of this species (see "Critical Habitat"); however, loss of habitat has not been identified as a threat to the species and was not a factor identified as contributing to the species original decline.

An important regulatory mechanism affecting peregrine falcons is the requirement that pesticides be registered with the Environmental Protection Agency (EPA). Under the authority of the Federal Insecticide, Fungicide, and Rodenticide Act (7 U.S.C. 136), the Environmental Protection Agency requires environmental testing of all new pesticides. Testing the effects of pesticides on representative wildlife species prior to pesticide registration is specifically required. This protection from effects of pesticides would not be altered by delisting the peregrine falcon.

On July 1, 1975, peregrine falcons were included in Appendix I of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). This treaty was established to prevent international trade that may be detrimental to the survival of plants and animals. Generally, both import and export permits are required by the importing and exporting countries before an Appendix I species may be shipped, and Appendix I species may not be imported

for primarily commercial purposes. Although CITES does not itself regulate take or domestic trade, CITES permits may not be issued if the export will be detrimental to the survival of the species or if the specimens were not legally acquired. This protection would not be altered by delisting the peregrine falcon under the Act.

Peregrine falcons will still be afforded some protection by land management agencies under laws such as the National Forest Management Act (16 U.S.C. 1600) and the Federal Land Management and Policy Act (43 U.S.C. 1701). National Forest Management Act regulations specify that "fish and wildlife habitat shall be managed to maintain viable populations of existing native and desired non-native vertebrate species in the planning area." (36 CFR 219.19). Guidelines for each planning area must provide for a diversity of plant and animal communities based on the suitability of a specific land area. Regional Foresters are responsible for identifying sensitive species occurring within their Region. Sensitive species are those that may require special management emphasis to ensure their viability and to preclude trends toward endangerment that would result in the need for Federal listing. In the event the peregrine falcon is delisted, Regional Foresters will consider the need for designating the peregrine falcon as a sensitive species to ensure that forest management activities do not contribute to a need for relisting. The Federal Land Policy and Management Act requires that public lands be managed to protect the quality of scientific, ecological, and environmental qualities, among others, and to preserve and protect certain lands in their natural condition to provide food and habitat for fish and wildlife.

Federal delisting of the peregrine falcon will not remove the peregrine falcon from State threatened and endangered species lists, or suspend any other legal protections provided by State law. States may have more restrictive laws protecting wildlife, including restrictions on falconry, and may retain State threatened or endangered status for the peregrine falcon. Falconry permits will still be required under Federal migratory bird regulations, which are administered by cooperating States under a Federal/State permit application program (50 CFR 21.28).

E. Other Natural or Manmade Factors Affecting Its Continued Existence

Egg collecting, shooting, harvest for falconry, habitat destruction, climate change, and the extinction of passenger pigeons were all proposed as possible

factors causing or contributing to the decline in peregrine falcon populations in North America; however, no evidence supports any of these factors as causing the widespread reproductive failure and population decline that occurred. In contrast, an overwhelming body of evidence has been accumulated showing that organochlorine pesticides affected survival and reproductive performance sufficiently to cause the decline. There currently is no question within the scientific community that contamination with organochlorines was the principal cause for the drastic declines and extirpations in peregrine falcon populations that took place in most parts of North America.

Although the use of organochlorine pesticides has been restricted in the United States and Canada since the early 1970s, use continues in areas of Latin America. It has been shown, by comparing blood samples collected during fall and spring migration, that migrant peregrine falcons bioaccumulate organochlorines while wintering in Latin America (Henny *et al.* 1982). Henny *et al.* (1996) demonstrated that DDE residues in the blood taken from female peregrine falcons captured during spring migration at Padre Island, Texas decreased between 1978 and 1994. In second-year peregrines, residues dropped from 1.43 ppm in 1978–1979 to only 0.25 ppm in 1994 and from 0.88 to 0.41 ppm for older peregrines; these levels are well below those that would affect reproduction.

The widespread reproductive failure and population crash in North America coincided with the period of heavy organochlorine use in the United States. Although there was not an immediate lowering of pesticide residues in eggs following restrictions on the use of organochlorines north of Mexico (Enderson *et al.* 1995), residues gradually declined following the restrictions (Ambrose *et al.* 1988b, Enderson *et al.* 1988, Peakall *et al.* 1990), and most surviving populations began to increase in numbers thereafter. Despite the continued use of organochlorines in Latin America, populations of American peregrine falcons in North America have recovered substantially in recent years. In fact, Arctic peregrine falcons that winter predominantly in Latin America recovered to the point that the subspecies was removed from the List of Threatened and Endangered Wildlife on October 4, 1994 (59 FR 50796).

Additionally, some of the avian prey used during the nesting season by peregrine falcons throughout North America also winter in Latin America.

Many of these prey return to their nesting areas with pesticide residues accumulated during the winter (Fyfe *et al.* 1990). Peregrine falcons preying upon these birds during the summer are further exposed to Latin American pesticides. While overall, pesticide use in Latin America has apparently not adversely affected reproductive success and productivity in American peregrine falcon populations in North America, monitoring levels of organochlorines in the subspecies must continue, and more effort must be placed in monitoring and remediating organochlorine exposure in populations nesting and migrating outside the United States.

The Service recognizes that certain populations of American peregrine falcons have recovered to a lesser degree and that in some of these populations organochlorine residues are still high and reproductive rates remain lower than normal. The Channel Islands off southern California are still plagued by high organochlorine residues and eggshell thinning (Jarman 1994). Despite the residual effects of organochlorines on the Channel Islands, this population is continuing to increase, although some of the increase could be the result of the release of a significant number of captive-bred young (B. Walton, pers. comm. 1997) or dispersal from other areas where recovery is greater. Based on published values in the literature, detected concentrations of DDT in peregrine falcon eggs collected in New Jersey were sufficient to impact reproduction. Productivity and eggshell thinning data, however, did not support a conclusion of reproductive impairment due to DDT contamination (U.S. Fish and Wildlife Service and New Jersey Department of Environmental Protection 1997). Jarman (1994) suggested that these locally higher egg residues result from a local point source of DDT or DDE. As a result, the effects are localized, and the observations do not reflect the current status of peregrine falcons as a whole. In general, numbers of peregrine falcons have increased throughout their historical ranges despite the effects of localized organochlorine residues.

Similarly, American peregrine falcons in southwest Canada have not recovered as well as in most other regions of North America. Despite the release of several hundred captive-bred young in the prairie Provinces and western Canada (Holroyd and Banasch 1990), the number of pairs occupying territories is still well below the number of known historical nest sites (G. Holroyd, *in litt.* 1993), which is probably an underestimate of the actual number of historical nest sites. In southern Canada,

including the prairie region, the proportion of reintroduced young that entered the breeding population has been considerably lower than in the United States (Peakall 1990, Enderson *et al.* 1995). The factor or factors causing this lower recruitment rate remain unknown, but survivorship of peregrine falcons released into this area may be lower than in adjacent portions of the subspecies' range. Pesticide residues in American peregrine falcon eggs do not appear to be higher in southwest Canada than in the United States (Peakall *et al.* 1990). Therefore, higher residual organochlorine contamination is apparently not responsible, and the number of pairs occupying this region continues to increase.

In summary, exposure to organochlorine pesticides caused drastic population declines in peregrine falcons. Following restrictions on the use of organochlorines in the United States and Canada, residues in eggs declined and reproduction rates improved. Improved reproduction, combined with the release of thousands of captive-reared young and relocated wild hatchlings, allowed the American peregrine falcon to recover and peregrine falcons to be successfully reestablished in those areas of the historical range from which the species had been extirpated. Pesticide residues, reproductive rates, and the rate of recovery have varied among regions within the vast range of this species. In some areas, such as portions of California, the lingering effects of DDT have caused reproductive rates to remain low. Point source contamination may even cause continued reproductive problems in these areas in California. In southwest Canada, the rate of recovery, or onset of recovery, apparently lagged behind most other areas, but recent trends suggest that historical nest sites will continue to be gradually recolonized. Although the recovery of the peregrine falcon is not complete throughout all parts of the historical range in North America, those areas in which recovery has been slow represent a small portion of the species' range. Furthermore, evidence collected in recent years shows that a combination of lingering residues of organochlorines in North America and contamination resulting from the continued use of organochlorines in Latin America has not prevented a widespread and substantial recovery of peregrine falcons as numbers of peregrine falcons continue to increase. The Service concludes, therefore, that the continued existence of the American peregrine falcon and the reestablished peregrine

populations in the eastern and Midwestern States are no longer threatened by exposure to organochlorine pesticides.

Due to the reduction in the effects of pesticides and widespread positive trends in population size, the Service believes that the American peregrine falcon has recovered and is no longer endangered with extinction or likely to become endangered within the foreseeable future throughout all or a significant portion of its range. The Service proposes to remove the peregrine falcon from the List of Endangered and Threatened Wildlife, removing endangered status for the American peregrine falcon and the Similarity of Appearance provision for all free-flying peregrine falcons within the 48 conterminous States.

Effects of This Rule

Finalization of this proposed rule will affect the protection afforded to peregrine falcons under the Endangered Species Act. It will not affect the status of the Eurasian peregrine falcon (*F. p. peregrinus*), currently listed under the Act as endangered wherever it occurs. The endangered designation under the Act for the American peregrine falcon will be removed and the designation of "Endangered due to Similarity of Appearance" designation for all free-flying peregrine falcons found within the 48 conterminous United States, including the Arctic and Peale's peregrine falcons and the reestablished eastern and midwestern populations, will be removed. Therefore, taking, interstate commerce, import, and export of North American peregrine falcons will no longer be prohibited under the Act. In addition, Federal agencies will no longer be required to consult with the Service under section 7 of the Act in the event activities they authorize, fund or carry out adversely affect peregrine falcons. However, removal of the protection of the Endangered Species Act will not affect the protection afforded all migratory bird species, including all peregrine falcons, under the Migratory Bird Treaty Act.

The Migratory Bird Treaty Act governs the taking, killing, possession, transportation, and importation of migratory birds, their eggs, parts, and nests. Implementing regulations (50 CFR 20 and 21) include provisions for the taking of migratory birds for educational, scientific, and recreational purposes. Special regulations pertaining to raptors are found in 50 CFR 21.28 to 21.30. These regulations allow for the taking, possession, transport, import, purchase, and barter of raptors for purposes of falconry and captive

propagation pursuant to State and Federal permits. If this delisting proposal is finalized, the taking of peregrine falcons from the wild for falconry and propagation will be allowable. Unpermitted take of peregrine falcons for falconry and raptor propagation will be a violation of the Migratory Bird Treaty Act. In accordance with general permit regulation requirements that the issuance of permits not threaten wildlife populations (50 CFR 13.21(b)), authorization to take peregrines under the Migratory Bird Treaty Act will be subject to biological criteria that will be issued by the Service. The criteria will pertain to all wild North American peregrine falcons and will apply to all current and future falconry and raptor propagation permit holders. Take of peregrines will not be authorized under the Migratory Bird Treaty Act until these biological criteria are in place. The Service expects to issue final criteria prior to finalizing a decision on this proposal to delist the peregrine.

The take and use of peregrine falcons must comply with appropriate State regulations. State regulations applying to falconry currently vary among States and are subject to change over time. The applicable State regulations may be more but not less restrictive than Federal regulations.

This rule will not affect the peregrine falcon's Appendix I status under CITES, and CITES permits will still be required to import and export peregrine falcons to and from the United States. CITES permits will not be granted if the export will be detrimental to the survival of the species or if the falcon was not legally acquired.

Critical Habitat

Critical habitat for the American peregrine falcon includes five areas in northern California (50 CFR 17.95). The Act defines critical habitat as "specific areas within the geographical area occupied by the species, at the time it is listed on which are found those physical or biological features essential to the conservation of the species and which may require special management considerations or protection." Since critical habitat can be designated only for species listed as endangered or threatened under the Act, existing critical habitat will lose this current designation when the American peregrine falcon is delisted.

Future Conservation Measures

Section 4(g)(1) of the Act requires that the Secretary of the Interior, through the Service, implement a monitoring program for not less than 5 years for all

species that have been recovered and delisted. The purpose of this requirement is to develop a program that detects the failure of any delisted species to sustain itself without the protective measures provided by the Act. If at any time during the 5-year monitoring program, data indicate that protective status under the Act should be reinstated, the Service can initiate listing procedures, including, if appropriate, emergency listing. At the conclusion of the monitoring period, the Service will review all available information to determine if relisting, the continuation of monitoring, or the termination of monitoring is appropriate.

Monitoring

The Service's Region 1 in consultation with Service biologists in Regions 2, 3, 4, 5, 6, and 7 will coordinate with existing recovery teams, working groups, State resource agencies, and interested scientific organizations to develop and implement an effective 5-year monitoring program to track the population status of the peregrine falcon. The Service will encourage Canada and Mexico to establish monitoring plans that will produce comparable data.

The Service will use, to the fullest extent possible, information routinely collected by researchers and land managers in a variety of organizations and agencies. This data, however, will only supplement data collected under a systematic monitoring program. Sites or areas will be specifically selected for monitoring to provide a subset of data that is representative of the species' status throughout its range. The following minimum measures will be used to track the status of the peregrine falcon, although the specific approaches to monitoring may vary among regions.

1. Annual Occupancy Surveys

To detect changes in the use of nesting territories, samples of breeding pairs will be surveyed each breeding season in a statistically valid manner. Survey areas, timing, and survey methods must be consistent among surveys conducted over several years.

2. Productivity

To assess productivity, the number of young produced per territorial pair will be recorded in the survey areas. The Service will also use information from all study areas where appropriate data are available in addition to systematic monitoring of productivity of selected sites.

3. Contaminants

In areas where depressed reproduction may be caused by residual organochlorine pesticides, eggshell thickness and contaminant concentrations in addled eggs will be analyzed to monitor organochlorine pesticides and other environmental contaminants. Additional sampling to detect contaminants may include blood analysis and collection of egg and blood samples from peregrine falcons in selected areas where reproduction is not depressed by environmental contaminants to detect changes in contaminant levels on a broader scale in the United States, as well as to continue to evaluate the effects of contaminants on American peregrines migrating to Latin America in winter.

The North American Regional Action Plan (NARAP) on DDT was developed by parties to the North American Free Trade Agreement (NAFTA), working with the Secretariat for the (North American) Commission for Environmental Cooperation (CEC), under Council Resolution #95-05. This tri-lateral forum between the United States, Canada, and Mexico, may provide funding opportunities for monitoring organochlorine exposure, and productivity in American peregrine falcon populations nesting in Mexico.

4. Take for Falconry

Authorization to take peregrine falcons for falconry purposes under the Migratory Bird Treaty Act will be subject to biological criteria established by the Service. The Service will work with the States to monitor levels of actual take of peregrine falcons authorized under State/Federal falconry and raptor propagation permits.

After completion of the mandated 5-year monitoring program, the Service will review all available monitoring data to determine whether relisting, continuation of monitoring, or termination of monitoring is appropriate. The Service will consider relisting if, during or after the 5-year monitoring effort, the Service determines a reversal of recovery has taken place. The Service will consider relisting the peregrine falcon if (1) major breeding areas do not maintain 60 percent occupancy of sites, as measured by the number of sites documented as occupied by peregrine pairs in the first year of monitoring; (2) there is a clear and substantial trend of reduced productivity below that of growing or stable populations (i.e., average productivity drops below 1.0 young per territorial pair for two consecutive surveys, without mitigating

circumstances, such as abnormal weather conditions); (3) exposure to organochlorine pesticides, organophosphate pesticides, or other environmental contaminants increases to levels shown to be deleterious to the species in more than a few, isolated populations; or (4) in the case of other extenuating circumstances that would warrant relisting.

If the Service determines at the end of the mandatory 5-year monitoring period that recovery is complete, and factors that led to the listing of subspecies of peregrine falcon, or any new factors, have been sufficiently reduced or eliminated, monitoring may be reduced or terminated. If data show that peregrine falcon populations are declining or if one or more factors that have the potential to cause decline are identified, the Service will continue monitoring beyond the 5-year period and may modify the monitoring program based on an evaluation of the results of the initial 5-year monitoring program.

Public Comments Solicited

The Service requests comments on three aspects of this proposed rulemaking: (1) the proposed removal of the peregrine falcon from the List of Endangered and Threatened Wildlife, (2) the clarity of this proposal, pursuant to Executive Order 12866, which requires agencies to write clear regulations, and (3) the collection of information from the public during the 5-year monitoring period, which requires Office of Management and Budget (OMB) approval under the Paperwork Reduction Act.

Proposed Delisting

The Service intends that any final action resulting from this proposal to remove the peregrine falcon from the List of Endangered and Threatened Wildlife 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 should be sent to the Service's Ventura, California, Field Office (see ADDRESSES section). Comments particularly are sought concerning:

- (1) biological, commercial trade, or other relevant data concerning any threat (or lack thereof) to this species;
- (2) additional information concerning the range, distribution, and population size of this species;

(3) current or planned activities in the range of this subspecies and their possible impacts on this species;

(4) data on population trends in Mexico;

(5) information and comments on the potential impacts of falconry on peregrine falcon populations; and

(6) information and comments pertaining to the proposed monitoring program contained in this proposal.

The final decision on this proposal for the peregrine falcon will take into consideration the comments and any additional information received by the Service during the comment period.

The Act provides for one or more public hearings on this proposal, if requested. Requests must be received within 45 days of the date of publication of this proposal. Such requests must be made in writing and sent to the Ventura Field Office address in the ADDRESSES section at the beginning of this proposed rule.

Executive Order 12866

Executive Order 12866 requires agencies to write regulations that are easy to understand. The Service invites your comments on how to make this proposal easier to understand including answers to questions such as the following: (1) Is the discussion in the "Supplementary Information" section of the preamble helpful in understanding the proposal? (2) Does the proposal contain technical language or jargon that interferes with its clarity? (3) Does the format of the proposal (grouping and order of sections, use of headings, paragraphing, etc.) aid or reduce its clarity? What else could the Service do to make the proposal easier to understand?

Send a copy of any comments that concern how the Service could make this notice easier to understand to: Office of Regulatory Affairs, Department of the Interior, Room 7229, 1849 C Street, NW, Washington, DC 20240. You may also e-mail the comments to: Exsec@ios.doi.gov.

Paperwork Reduction Act

OMB regulations at 5 CFR 1320, which implement provisions of the Paperwork Reduction Act, require that interested members of the public and affected agencies have an opportunity to comment on agency information collection and recordkeeping activities (see 5 CFR 1320.8(d)). The Service intends to collect information from the public during the mandatory 5-year monitoring period following delisting of the peregrine falcon. A description of the information collection burden and the comments requested on this

collection are included in the Paperwork Reduction Act section below.

Paperwork Reduction Act

Section 4(g) of the Endangered Species Act requires that all species that are delisted due to recovery be monitored for a minimum of 5 years. A general description of the information that will be collected during the monitoring period was provided above in the *Monitoring* section of this proposal. Implementation of the monitoring plan will include collections of information from the public that require approval by OMB under the Paperwork Reduction Act of 1995 (Pub. L. 104–13; 44 U.S.C. 3501 et seq.).

Simultaneous to publication of this proposed delisting rule, the Service is initiating the process of information collection approval from OMB. The Service may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number.

The Service intends to collect information from researchers and land managers in a variety of organizations and agencies. Some of the information gathered will be part of already ongoing State, Federal, or private monitoring programs. The Service also will use information from other study areas where appropriate data are available.

The information collected will allow the Service to detect any failure of the species to sustain itself following delisting. If during this monitoring period the Service determines that the species is not sufficiently maintaining its recovered status, the species could be relisted as endangered or threatened under the Act.

The Service estimates approximately 20 respondents to requests for information on the status of peregrine falcon per year. Different respondents may provide one or more types of information. A total of 12.5 burden hours per year are estimated for the potential 20 respondents, as indicated in the following table.

Type of information	Number of requests annually*	Average time required per response (minutes)	Annual burden hours
Nest occupancy	20	15	5
Productivity	20	15	5
Contaminants	10	15	2.5

*The total number of individual respondents anticipated is 20. The figures in this column should not be viewed cumulatively.

OMB regulations at 5 CFR 1320, which implement provisions of the Paperwork Reduction Act, require that interested members of the public and affected agencies have an opportunity to comment on information collection and recordkeeping activities (see 5 CFR 1320.8(d)). Comments are invited on— (1) whether the collection of information is necessary for the proper performance of the functions of the agency, including whether the information will have practical utility; (2) the accuracy of the agency's estimate of the burden of the collection of information; (3) ways to enhance the quality, utility, and clarity of the information to be collected; and, (4) ways to minimize the burden of the collection of information on respondents, including through the use of appropriate automated, electronic, mechanical, or other technological collection techniques or other forms of information technology. Comments on information collection should be sent to OMB and to the Service's Information Collection Clearance Officer at the addresses included in the **ADDRESSES** section at the beginning of this proposed rule.

National Environmental Policy Act

The Service has determined that an Environmental Assessment or Environmental Impact Statement, 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).

Listing Priority Guidance

The Service has implemented a series of listing priority guidance since 1996 to clarify the order in which it will process rulemaking actions. The need for this guidance arose following major disruptions in the Service's listing budget beginning in Fiscal Year 1995 and a moratorium on certain listing actions during parts of Fiscal Years 1995 and 1996. The intent of the guidance is to focus Service efforts on listing actions that will provide the greatest conservation benefits to imperiled species in the most expeditious and biologically sound manner. The Service's Listing Priority Guidance for Fiscal Years 1998 and 1999 was published on May 8, 1998 (63 FR 25502) and reflects the significant progress the Service has made in addressing its backlog. The Fiscal Year 1998 and 1999 Listing Priority Guidance gives highest priority (Tier 1) to processing emergency rules to add species to the Lists of Endangered and Threatened Wildlife and Plants; second priority (Tier 2) to processing final determinations on proposals to add species to the lists, processing new proposals to add species to the Lists,

processing administrative findings on petitions (to add species to the lists, delist species, or reclassify listed species), and processing a limited number of proposed or final rules to delist or reclassify species; and third priority (Tier 3) to processing proposed or final rules designating critical habitat. Processing of this delisting proposal is a Tier 2 action.

Processing of this proposed delisting conforms with the guidance for Fiscal Years 1998 and 1999. The processing of certain high-priority delisting actions will result in significant, albeit indirect, conservation benefits. As long as a species remains on the endangered and threatened list, Service funds are expended reviewing regulated activities pursuant to section 10 (prohibited activities) and engaging in consultations with other Federal agencies under section 7 (interagency cooperation) of the Act. Following delisting, resources currently devoted to these activities will be redirected to other listed species more deserving of conservation efforts. Moreover, the Service is obligated to keep the lists of endangered and threatened species accurate.

References Cited

A complete list of all references cited herein is available upon request from the Ventura Fish and Wildlife Field Office (see **ADDRESSES** section).

Author

The primary author of this proposed rule is Robert Mesta, U.S. Fish and Wildlife Service, Ventura Fish and Wildlife Office (see **ADDRESSES** section), (805/644-1766).

List of Subjects in 50 CFR Part 17

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

Proposed Regulation Promulgation

For the reasons set out in the preamble, 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; Pub. L. 99-625, 100 Stat. 3500, unless otherwise noted.

§ 17.11 [Amended]

2. Section 17.11(h) is proposed to be amended by removing the entries for the “Falcon, American peregrine, *Falco peregrinus anatum*” and “Falcon, peregrine, *Falco peregrinus*” under

“BIRDS”, from the List of Endangered and Threatened Wildlife. [Note—This rule does not affect the entry for “Falcon, Eurasian peregrine, *Falco peregrinus peregrinus*.”]

§ 17.95 [Amended]

3. Amend section 17.95(b) by removing the critical habitat entry for “American peregrine falcon (*Falco peregrinus anatum*).”

Dated: July 31, 1998.

Jamie Rappaport Clark,

Director, U.S. Fish and Wildlife Service.

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