

savannas of Texas and Tamaulipas and the drier interior grasslands. Numerous egg sets were collected in southern Texas between 1888 and 1915 (Hector 1981).

Populations of the northern aplomado falcon began to decline during the first half of the twentieth century. Prior to reintroduction efforts in Texas, the last known breeding of this species within the United States occurred near Deming, New Mexico, in 1952. Breeding pairs became established in Texas once again in 1995, as a result of reintroduction efforts. There have been no verified sightings of northern aplomado falcons in Arizona since 1940 (Philips *et al.* 1964). Sightings of northern aplomado falcons have continued in New Mexico since the 1950s, but with only a handful of unconfirmed sightings per decade from the 1970s and 1980s despite many searches by ornithologists. The frequency of sightings ranged from 1 to 6 confirmed sightings per year throughout the 1990s. These sightings were followed by an unsuccessful nesting attempt in New Mexico in 2001, and the successful fledging of 3 nestlings from a nest in 2002.

There remains some debate concerning the exact cause of the decline of the northern aplomado falcon. Hypotheses implicating habitat loss, pesticide use, climatic change, egg and skin collecting, disease, and others have been advanced. We may therefore never fully understand the chain of events that led to the virtual extirpation of this species throughout the northernmost portion of its range (Cade *et al.* 1991). Unquestionably, grassland savannas in the southwestern United States underwent a substantial physical change during the decline of the northern aplomado falcon. Naturally occurring range fires maintained the humid grasslands of coastal Texas and Tamaulipas, once known as the "Wild Horse Prairie." By World War II much of that prairie had been tilled into crops, and, with the control of range fires, what prairie remained soon became overgrown with brush species such as Honey Mesquite (*Prosopis glandulosa*), Blackbrush Acacia (*Acacia rigidula*), Huisache (*Acacia smallii*), and Live Oak (*Quercus virginiana*) (Bogusch 1952). Brush encroachment may have increased the density of the great-horned owl (*Bubo virginianus*), a principal predator of falcons. Already greatly reduced in number and isolated through habitat loss, the remaining falcons may have been eliminated by the widespread use of organochlorines in agriculture (Kiff *et al.* 1980).

The decline of the northern aplomado falcon in the drier grasslands of west

Texas, New Mexico, and Arizona may have resulted from different causes. Grasslands then were substantially altered both by farming and by intense overgrazing that reached its peak during 1870–1890 (Hastings and Turner 1965). The latter is believed to have reduced the diversity of the native short grass prairie. In time, these grasslands likely became less productive for the bird species upon which falcons preyed.

We listed the northern aplomado falcon as an endangered species in 1986 and published a Recovery Plan in 1990. As of September 2002, at least 37 pairs of falcons have become established in Texas as a result of release efforts. Monitoring efforts in northern Mexico indicate a population of 30–35 naturally occurring pairs currently exists in northern Chihuahua.

An active release effort is currently ongoing in both south and west Texas. The Peregrine Fund, a nonprofit, nongovernmental conservation organization, began recovery efforts during 1978–1988 when 25 young falcons were collected from nests in Mexico to establish a captive breeding program. The Peregrine Fund conducted a pilot release project during 1985–1989, and restoration began on a larger scale in 1993 with modified hacking procedures developed from Peregrine Falcon reintroduction. Although captive propagation of this species has been challenging, The Peregrine Fund has released 813 captive-bred falcons into Texas by the "hacking method." As of spring 2002, 37 established pairs have successfully fledged more than 92 young in a region where this species had been absent for over 50 years. Releases are being conducted on private property under a Safe Harbor Agreement enrolling 1.4 million acres in south and west Texas.

Experimental Populations

We are committed to the long-term recovery of the northern aplomado falcon (*Falco femoralis septentrionalis*) in accordance with the recommendations of the 1990 recovery plan for this species. One of the primary goals of the Northern Aplomado Falcon Recovery Plan is to "Reestablish the northern aplomado falcon in the U.S. and Mexico." Use of our authorities under section 10(j) of the Act (described below) may be a useful tool to achieve this recovery goal in Arizona and New Mexico. The purpose of this scoping process is to aid the development of an environmental assessment by collecting comments on this alternative as well as developing other alternatives that are consistent with the species' Recovery Plan.

Congress made significant changes to the Act in 1982 with addition of section 10(j), which provides for the designation of specific reintroduced populations of listed species as "experimental populations." Previously, we had authority to reintroduce populations into unoccupied portions of a listed species' historical range when doing so would foster the conservation and recovery of the species. However, local citizens often opposed these reintroductions because they were concerned about placement of restrictions and prohibitions on Federal and private activities. Under section 10(j), the Secretary of the Department of the Interior can designate reintroduced populations established outside the species' current range, but within its historical range, as "experimental." On the basis of the best available information, we must determine whether an experimental population is "essential" or "nonessential" to the continued existence of the species. Regulatory restrictions are considerably reduced under a Nonessential Experimental Population (NEP) designation.

Under the Act, species listed as endangered or threatened are afforded protection primarily through the prohibitions of section 9 and the requirements of section 7. Section 9 of the Act prohibits the take of endangered wildlife. "Take" is defined by the Act as to harass, harm, pursue, hunt, shoot, wound, trap, capture, or collect, or attempt to engage in any such conduct. Service regulations (50 CFR 17.31) generally extend the prohibition of take to threatened wildlife. Section 7 of the Act outlines the procedures for Federal interagency cooperation to conserve federally listed species and protect designated critical habitats. It mandates all Federal agencies to determine how to use their existing authorities to further the purposes of the Act to aid in recovering listed species. It also states that Federal agencies will, in consultation with the Service, ensure that any action they authorize, fund, or carry out is not likely to jeopardize the continued existence of a listed species or result in the destruction or adverse modification of designated critical habitat. Section 7 of the Act does not affect activities undertaken on private lands unless they are authorized, funded, or carried out by a Federal agency.

For purposes of section 9 of the Act, a population designated as experimental is treated as threatened regardless of the species' designation elsewhere in its range. Through section 4(d) of the Act, threatened designation allows us greater