

breeding facilities are not included in exhibits and are under 24 hour surveillance by condor keepers or video cameras. Only essential program personnel are granted access to the captive population. The captive population is given excellent care and to date there have been no deaths of adults or sub-adults. In addition, the geographic separation of the three breeding facilities protects the captive population from the threat of extinction due to a single catastrophic event.

The reproductive rate of the captive population dramatically exceeds the mortality rate of the wild population. All condors lost in the reintroduction efforts can be replaced by current chick production, while the captive population continues to increase. The extant population will not be adversely effected by the proposed reintroduction since it is hundreds of miles away (see below).

By mid-1987, every surviving individual of the species was held in captivity following agreement that the decline of the wild population to eight surviving adults had demonstrated that the wild population was destined for extinction (Geyer et al. 1993). Genetic management, which includes control of all matings, has preserved the genetic viability of the extant captive population. No California condor hatched in captivity is considered for release to the wild unless its founder line is well-represented in the captive population. All release candidates are genetically redundant and their loss will not jeopardize the diversity of the existing condor gene pool.

The proposed reintroduction project will further the recovery of the species by—establishing a second wild population, ensuring the existence of a wild population if a catastrophic event eliminates the southern California population, enhancing the opportunity to manage the genetic diversity of the wild population, and avoiding the potential risks inherent in overcrowding the captive population.

#### Location of Reintroduced Population

Under section 10(j)(1) of the Act, an experimental population must be separate geographically from nonexperimental populations of the same species. The last recorded sighting of a California condor in the area of the proposed experimental release occurred in 1924, when Edouard Jacot observed a condor feeding on a carcass with golden eagles near the town of Williams, Arizona (Rea 1983). The last known free-flying California condor was captured April 19, 1987, in southern California and placed in the captive

breeding program. To date there have been no verified sightings of California condors in the wild and condor researchers are confident that there are no undocumented wild condors in the proposed release area or anywhere else in their historic range. Since January 1992, five releases of young California condors have taken place in Ventura and Santa Barbara counties, California. Currently, 13 endangered California condors are located in the wild back country of Santa Barbara County. This non-captive population is located approximately 720 kilometers (km) (450 miles (mi)) west of the proposed release site. The longest flight by these recently reintroduced condors has been approximately 40 km (25 mi), with typical daily flights from 8 km (5 mi) to 16 km (10 mi). According to Meretsky and Snyder (1992) the foraging flights by breeding California condors in the 1980's were from 70 km (44 mi) to 180 km (112 mi). Based on this information, the Service does not believe there will be any immigration/emigration between the existing non-captive and the proposed nonessential experimental populations.

The release site for reintroducing California condors into northern Arizona will be on the Vermilion Cliffs, in the southwestern corner of the Paria Plateau. However, the designated nonessential experimental population area will be significantly larger and include portions of three states—Arizona, Nevada, and Utah. The southern boundary is Interstate Highway 40 in Arizona from its junction with Highway 191 west across Arizona to Kingman; the western boundary starts at Kingman, goes northwest on Highway 93 to Interstate Highway 15, continues northeasterly on Interstate Highway 15 in Nevada, to Interstate Highway 70 in Utah; where the northern boundary starts and goes across Utah to Highway 191; where the eastern boundary starts and goes south through Utah until Highway 191 meets Interstate Highway 40 in Arizona (Fig. 1).

#### Management

The Vermilion Cliffs reintroduction project will be undertaken by the Service and its primary cooperators the Arizona Game and Fish Department and the BLM. Other cooperators that will provide support on an as-needed basis include—Grand Canyon National Park, Glen Canyon National Recreation Area, Kaibab National Forest, the Hualapai Tribe, the Navajo Nation, LAZ, Zoological Society of San Diego (the Zoological Society includes the SDWAP and SDZ), The Phoenix Zoo and The Peregrine Fund. All cooperators will

participate in this recovery project under the general guidance of a Memorandum of Understanding written to promote recovery of the California condor. Reintroduction procedures were explained above under "Background, 5. Reintroduction Protocols."

The reintroduction site is surrounded by remote Federal or Indian Reservation lands with only a few small private inholdings. The current general management scheme for these lands will not affect the establishment of a nonessential experimental population in this area. Furthermore, the designation of nonessential experimental will encourage local cooperation as a result of the management flexibility allowed under this designation. The Service considers the nonessential experimental population designation and associated reintroduction plan necessary to receive cooperation of the affected landowners, agencies, and recreational interests in the area.

A designation of nonessential experimental prohibits the application of section 7(a)(2) of the Act except on NWR and NPS lands. This will ensure that current land uses and activities (such as, but not limited to, forest management, agriculture, mining, livestock grazing, sport hunting and fishing, and non-consumptive outdoor recreational activities) will not be restricted.

The progress of the reintroduction project will receive an informal review on an annual basis by the primary cooperators and a formal evaluation by all cooperators within the first five years after the first release to evaluate the reintroduction project and determine future management needs. Once recovery goals are met for downlisting the species, a rule will be proposed to address the downlisting. The 5-year evaluation will not include a reevaluation of the "nonessential experimental" designation for this population. The Service does not foresee any likely situation which would call for altering the nonessential experimental status of this population.

#### Public Comments Solicited

The Service intends that any action resulting from this proposed rulemaking to determine the northern Arizona California condor population as a nonessential experimental population be as effective as possible. The Service therefore solicits comments or recommendations concerning any aspect of this proposed rule (see ADDRESSES section) from Federal, State, public, and local government agencies, the scientific community, industry, or any other interested party. Comments