CERTIFIED LINEAGE, 1997

1. Established by one female and two male, wild-caught Mexican wolves.

2. No journal published or peer reviewed work pertaining to grey wolves supports the proposition that viable and self-sustaining populations of this species can be established by the release of captives bred up from only one female and two male wild-caught founders.

3. Reintroduction of the Mexican wolf, as proposed by the U.S. Fish and Wildlife Service, consists of the release of "Certified" lineage animals augmented by subsequent release of animals derived of Certified / Ghost Ranch / Aragon lineages. The genetic base of the Certified lineage consists of only one female and two male founders. The Aragon and Ghost Ranch lineages are compromised by hybridization with dogs.

4. Meaningful conclusion regarding the retention of genetic variability in the "Certified" lineage is precluded because only 1 of the last 89 and exactly 0 of the last 58 animals of the total number of animals which then made up this lineage (178) was actually sampled for retention of genetic variability.

5. Meaningful conclusion regarding differences between coyotes and the captive lineages of "Mexican wolves" is not possible because coyote populations and captive "Mexican wolf" lineages of similar biogeographic (southwestern) origin were not subjected to comparison.

6. Of the 6 coyote populations genetically sampled and compared to the 3, alleged "Mexican wolf" captive lineages, none are from the Southwest (Arizona, New Mexico, Texas, Colorado or Utah) or Mexico.

7. The influence of captive rearing on the non-maintenance of wolf morphological characteristics in this and the other captive lineages is poorly documented.

8. Reports of cryptorchidism in the "Certified" lineage highlight the possibility that inbreeding depression is already afflicting this line of captive Mexican wolves.

9. The reasonable probability has been established by Carrera that Mexican wolves exist in the wild in Mexico that could be captured and used to significantly broaden the genetic base of the "Certified" captive lineage.

GHOST RANCH LINEAGE, 1997

1. Origin of female founder not known with certainty.

2. Statements recorded at the time of the male founder's capture suggest that he was actually a wolf/dog hybrid.

3. The skull of the male founder, a key item in determining lineage purity and which is stated to have been retained by the Arizona Sonora Desert Museum, mysteriously disappeared from ASDM before it could be subjected to analysis.

4. Neither the founders of this lineage (2) nor any of the animals produced by the first three generations of captive breeding (19) were examined for purposes of establishing the alleged purity of this lineage.

5. After siring just one litter in 1963, the male founder escaped from the Arizona Sonora Desert Museum and was killed before he could be recaptured. The sole founding female was then bred back to her own sons and the progeny produced by these matings were then distributed to other zoos as brother/sister pairs.

6. There is a high degree of inbreeding in this lineage.

7. Management of this lineage has been haphazard, poorly documented and characterized by extensive full sibling and parent/progeny matings.

8. A quantitative evaluation of inbreeding in this lineage has not been undertaken and is not possible because detailed data pertaining to juvenile mortality and other fitness components is not available.

9. The influence of captive breeding and captive rearing on the development of morphological aberrations observed in this lineage (i.e., animals with shortened rostra, short legs, sickle tails and dual eye color) is poorly documented.

10. This lineage and the "Aragon" lineage are more closely related to each other than either is to the "Certified" lineage based on the results of genetic analyses.

11. There is considerable suspicion that one of the founders of the "Aragon" lineage was actually of "Ghost Ranch" lineage origin.

12. The Service's own genetic researchers cannot eliminate the possibility that the "Ghost Ranch" lineage originated from other North American wolves or a dog.

ARAGON LINEAGE, 1997

1. Origin of founders (2 or 3) unknown.

2. Founders obtained from the Chapultepec Zoo in Mexico City, but the origin of the Chapultepec stock is unknown.

3. None of the genetic researchers employed by the Service know exactly how many animals founded this lineage.

4. One of the founders is suspected to be of "Ghost Ranch" lineage origin.

5. Remains of the founders are not available for examination.

6. The early history of this lineage is unknown.

7. Breeding of this lineage is poorly documented.

8. This lineage has been subjected to close inbreeding (i.e., full sibling and parent/progeny matings) for over 30 years and is limited in living representation to just 8 animals.

9. Since the origin of the founders of this lineage is unknown, it is not possible to state, as the Service does, that the founding female was captured within some part of the ancestral range of the Mexican wolf.

10. A quantitative evaluation of inbreeding in this lineage has not been undertaken and is not possible because detailed data pertaining to juvenile mortality and other fitness components is not available.

11. The influence of captive breeding / captive rearing on the development of morphological aberrations observed in this lineage (i.e., animals with shortened rostra of skulls, short legs, sickle tails, etc.) is poorly documented.

12. It is not known whether, or to what degree, morphological aberrations observed (i.e., shortened rostra of skulls, short legs, sickle tails, etc.) in animals produced by this and the "Ghost Ranch" lineage are due to hybridization with other species (dog or coyote).

13. The Service's own genetic researchers cannot eliminate the possibility that the Aragon lineage originated from other North American wolves or a dog.

14. This lineage and the "Ghost Ranch" lineage are more closely related to each other than either is to the "Certified" lineage based on the results of genetic analyses.