

SUMMARY - 1987*The Mexican Wolf, 1987*

During 1987, four pups were born from a single breeding at WCSRC. The single death for the year was one of these pups. One other pairing did not produce pups, even though ties were observed. The male (#30) was later determined to be cryptorchid. Two other males (#9, #40) within the program were also found to suffer from this condition in 1987.

The chronic lack of wolf holding space was somewhat relieved, when the Mexican government requested that three pairs of captive raised wolves be sent to three facilities in Mexico. This was accomplished in September.

The report on the "Genetic assessment of the current captive breeding program for the Mexican wolf (Canis lupus baileyi)" by William Shields, Alan Templeton, and Scott Davis was completed in 1987. This report was made under contract from the New Mexico Department of Game and Fish (Contract # 516.6-73-13). It provided breeding strategy for the MWCMC, and also genetically assessed the advisability of adding the ASDM/GR lineage to the breeding program. The report summary follows:

Genealogical analysis of the captive population of the certified Mexican wolf indicates that the small number of founders used to found this line has resulted in intense and increasing levels of inbreeding. Currently there is no evidence of any inbreeding depression, but the narrow genetic base could result in problems for the recovery program. To reduce the potential inbreeding we would recommend adding founders to the certified lineage. Since capture of wild wolves is considered unlikely, if not impossible, we recommend adding founders from the certified line's nearest wolf relatives.

Molecular genetic analyses, including starch-gel electrophoresis and restriction enzyme polymorphism studies of mitochondrial DNA, indicate that a second captive population of wolves (the Arizona-Sonorra Desert Museum/Ghost Ranch, ASDM/GR line), is either from the same or very closely related source population. Thus, we recommend that these 2 lines of Mexican wolf be carefully merged in order to maintain or increase the genetic diversity of the animals to be reintroduced into the wild.

The ASDM/GR lineage originated at ASDM in 1959 and 1961 from two wolves. This lineage was then deleted from the program in the late 1970's, because of questions concerning their genetic heritage. Currently at least 12 ASDM/GR lineage wolves still exist in captivity. The Shields/Templeton/Davis report was positive for including them. However the USFWS sent the report out for independent review before final determination. Final determination is pending at this date.

The MWCMC meeting was held at the WCSRC in September. Breeding strategy for 1988 was developed, however plans were thwarted when USFWS's needs changed at the end of the year.