

Coyote Related Problems Studied

A 3-year study was started in fall, 1991, to assess the extent of coyote related problems in the NP System and study the ecology and human interactions of coyotes in and along the boundary of Saguaro National Monument (SAGU). The research is being directed by William Shaw, School of Renewable Natural Resources, U/AZ, and Norman Smith, AZ Cooperative Fisheries and Wildlife Research Unit, USFWS, in cooperation with the CPSU at U/AZ.

Graduate student Dixie Bounds completed a preliminary NPS-wide survey of coyote presence, human/coyote interactions and problems, movements, and population trends, to which 86 percent of the NPS units responded. A more extensive survey now is being developed and will be sent those areas having coyotes in order further to query the management, exploitation, habitats, disease, human interactions, and other wildlife interactions, and benefits/costs related to having coyotes in those units.

At SAGU, a geographic information system (GIS) will be used for analysis of relocation data related to this study. Grad student Mark McClure is studying population numbers and diets of coyotes living near the SAGU boundary. The mark-recapture method is being employed to determine population density in the urban site. Scat analysis and small mammal surveys will help determine coyote diets there.

Biological technician Kathy Hiett (CPSU/UA) assisted in the trapping and radio-collaring phased and will continue to provide field support. The research areas comprise a control area south of the monument and a study area located within the monument along the western boundary. Trapping and radio-collaring of individuals was completed in October and November 1991. A total of 10 coyotes, 5 males, 5 females (7 adults, 3 juveniles) either were radio-collared or fitted with ear tags in the urban site. In the control site, a total of 4 individuals, 2 males, 2 females, (4 adults) also were radio-collared. Radio-tracking and mark-recapture data will be collected through 1993.

The study will provide management guidelines and recommendations for addressing coyote-related issues in NPs.