

FDOT District 1 SR 29 Panther Crossing Wildlife Monitoring

Location
Collier County,
Florida

Client
DRMP



This study involved coordination with the FDOT D1, Florida Fish and Wildlife Conservation Commission, and the United States Fish and Wildlife Service. The focus was to document wildlife utilization of two wildlife crossings specifically created for the Florida panther. The wildlife crossings (Pistol Pond and Bear Island Grade) were located several miles north of I-75 (Alligator Alley) on SR 29 in Collier County. The monitoring was conducted for one year before construction of the crossings and for two years following construction.

Both crossings were continuously monitored pre and post-construction using Reconyx infrared digital cameras. During pre-construction monitoring, the cameras were camouflaged to avoid theft. For post-construction monitoring each camera was housed in a heavy duty security enclosure. The security enclosure was affixed to the crossing by an adhesive and bolts. The data collected on each photograph included date (year, month, day), time (military), temperature (°F), and name of the crossing.

Each month the camera batteries were replaced and the compact flash storage

cards were swapped with blank storage cards. The compact flash card data was downloaded onto a computer hard drive and backed-up onto a portable hard drive. Following each year's monitoring, a report was prepared documenting the species photographed, the number of hourly time periods (24 time periods per day) each species was photographed, and number of photographs per species per crossing. ESA Scheda biologists graphed a species-specific yearlong utilization of each crossing over 24 time periods per day to document the time periods in which a species most frequently utilized a crossing. For the Florida panther, for each crossing two years of post-construction camera data were compared to document trends in the number of time periods and number of photographs per crossing over time.