

APPENDIX 3N

RAPTOR PREY BASE STUDY

During the 2001 Wild Horse Ridge permit expansion C. W. Mining impacted wildlife by disturbing less than one acre of big game grazing range. The construction may have also caused the loss of one unconfirmed red tail hawk nest. In order to mitigate these losses C. W. Mining agreed to do a prey base study. Although the study was not a conventional mitigation it was decided upon because the regulating agency felt that traditional mitigation options were ineffective and was considering including vegetation enhancement for raptor prey as a mitigation. In order to make this type of mitigation effective the regulating agency needed to determine what prey the raptors were eating. This study was the first step in gathering that information. This study was completed in the fall of 2005

The Division of Wildlife Resources selected 10 nests in or near mine sites located throughout Carbon and Emery county. The nests were selected based on their location, elevation, and accessibility. After the raptors had migrated rock climbers were then used to rappel into the nest and gather any material found. During recovery of the material the integrity of the nests were preserved so material was only gathered from the top of the nests and no part of the nest was dismantled to access lower layers from previous years. The remains recovered represented prey from the spring of 2005.

The material collected was then sent to the Integrative Biology Department at Brigham Young University and was analyzed by Professor Clayton White. Only basic analysis was performed since it was determined that the limited data gathered from DNA analysis did not justify the cost.

The table below shows the results of Dr. White's analysis of the identifiable remains.

High Elevation	Low Elevation	Mixed Elevation
Yellow Bellied Marmot (8)	Domestic Cat (1)	Rock Squirrel (2)
Snowshoe Hare (1)	Morning dove (1)	Feral Pigeon (1)
Clark's Nutcracker (1)		Lepus spp. (2)