SATELLITE TRACKING OF GOLDEN EAGLES FROM AUTUMN MIGRATION STUDY SITES IN NEVADA AND NEIGHBORING AREAS

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INTRODUCTION

The Golden Eagle (Aquila chrysaetos) is a partial migrant, with northern populations largely migratory and southern populations comparatively sedentary. In North America, precise handling and radio-tracking demonstrated the large subpopulations of adults typical among breeding distribution of Golden Eagles associated with breeding populations in central California, Utah, Washington, Idaho, and Colorado. Breeding adults and some immature eagles are also identified subsistence in southeastern Rocky Mountains and the Northern Rockies by the WRMI.,

Understanding the temporal and spatial aspects of population migration is critical for interpreting trends in long migration patterns and assessing the human activities and habitat changes may affect these trends. Documenting the details of a species’ movement ecology, including seasonal variations in migration behavior, geography, and feeding habitat, and identifying region-specific conservation priorities and strategies. The Golden Eagles, in particular, those distributed across the extensive range in North America. I report the temporal and spatial movement patterns of a sample of Golden Eagles captured and outfitted with satellite

FIELD METHODS

Outfitted 55 Golden Eagles from October 1999 to October 2000 within three regional migration corridors (see figure above, and right). For example, movements in Western and New Mexico ranging from roughly 1300 km to 700 km, both during migration periods and every 4 days during non-migration periods. Expected battery life was 3 to 6 months.

Location Data Collection and Processing

Using ARGOS data collection and location system, and Dragonfly (2003), ARGOS filter algorithm to exclude outliers.

Data Summaries and Analyses

To evaluate regional differences in migration ecology, I identified individual eagles as regional residents, long-distance migrants, or migratory residents. Data were collected during different migration years, ranging from 1999 to 2000.

To assess differences in range use between Wednesdays, I added 100 km to each

Route Lengths at Migration

Regional residents moved less, earlier, in spring, and later in autumn.

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Most deployments in Nevada and New Mexico; regional residents moved less,

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