
DETERMINING SEX IN GOLDEN EAGLES USING FOOT DISPLACEMENT

Vincent Slabe,* Raptor View Research Institute, POB 4323, Missoula, Montana 59806.

Rob Domenech, Raptor View Research Institute, POB 4323, Missoula, Montana 59806.

David Ellis, Institute for Raptor Studies, Oracle, Arizona 85623

The Golden Eagle (*Aquila chysaetos*) is one of the most widespread raptors in the world. Attempts have been made in the past to determine sex in Golden Eagles (GOEA) through individual and combined morphometric measurements. Due to the gender overlap within these measurements, the GOEA is one of several diurnal raptor species in North America that cannot be conclusively sexed in the hand. Sex in GOEAs is currently determined only through DNA analysis. Determining sex in the hand would increase the value of information collected by banders in the field, unable to devote time or resources to conduct blood or tissue assays. David Ellis, the author of the GOEA monograph, has developed an instrument under the assumption that foot volume could be definably different between male and female GOEA's. This method measures the volume of the eagle's foot, hallux claws, and lower part of the tarsus by the amount of water (cc) displaced. The technique is in its infancy and will be refined as needed. Since 2008, Raptor View Research Institute (RVRI) has measured foot displacement on 36 GOEAs captured on migration in Montana. Our preliminary data shows a 3 cc separation in foot displacement between male and female GOEAs.