(19) GENETIC CHARACTERISTICS OF GOSHAWKS (ACCIPITER GENTILIS) OF SOUTHEASTERN COASTAL ALASKA

Sandra Talbot¹*, Judy Gust¹, Barbara Pierson¹, Julie Unland¹, Sarah Sonsthagen², Craig Flatten, Frank Doyle³, Don Doyle⁴, Ted Swem⁵, Phillip Schempf ⁶, Kim Titus⁷, and Todd Mahon⁸

² Department of Zoology, Brigham Young University, Provo. UT 84057

³ Wildlife Dynamics Consulting, Telkwa, British Columbia VOJ 2X0, Canada

⁵ Ecological Services Field Office, US Fish and Wildlife Service, Fairbanks, AK99701

⁸ Wildfor Consultants, Smithers, British Columbia V0J 2N0, Canada

Goshawks (Accipiter gentilis) inhabiting coastal habitats of southeastern Alaska are considered to represent the subspecies A. g. laingi, the Queen Charlotte Goshawk. Meristic data collected from goshawks throughout North America suggest goshawks from this region are morphologically differentiated from goshawks elsewhere. However, earlier genetic studies using dominant markers indicate little differentiation among populations, or subspecies, across North America, including southeastern Alaska. We have developed molecular markers that differ in mode and rate of inheritance to examine genetic relationships among goshawks in southeastern Alaska relative to populations elsewhere. These include 9 autosomal microsatellite markers, and markers on the maternally-inherited mitochondrial DNA (mtDNA). We discuss preliminary data from markers assayed from goshawks inhabiting the southeastern coastal habitats of Alaska, coastal British Columbia, interior Alaska and British Columbia, and Utah. We also present future research directions.

¹ Alaska Science Center, US Geological Survey, 1011 E Tudor Road, Anchorage, AK 99503, sandy talbot@usgs.gov

⁴Ministry of Environment, Lands and Parks, Nanaimo, British Columbia V9T 6J9, Canada

⁶ Juneau Fish and Wildlife Service Office, US Fish and Wildlife Service, Juneau, AK99801

⁷ Division of Wildlife Conservation, Alaska Department of Fish and Game, Douglas, AK 99824



