Estimating Natal Origins of Migratory Juvenile Northern Goshawks Using Stable Hydrogen Isotopes (Poster)

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From 2004 to 2007, we collected hatch-year feathers from 44 juvenile Northern Goshawks (*Accipiter gentilis*) captured at our Rocky Mountain Front banding station near Lincoln, Montana. Due to the relative scarcity and secretive nature of goshawks, little is understood about their migration patterns or the geographic origins of birds encountered at research sites. Most studies suggest goshawks are partial migrants, often moving <100km, but select band returns and radio and satellite telemetry have shown some individuals occasionally travel thousands of kilometers. We performed a stable hydrogen isotope analysis on the feathers we collected from young goshawks to determine their predicted natal origin. We found that 68% of goshawks had predicted natal origins relatively close to our capture site, 25% from areas in northwestern Canada and eastern Alaska, and 7% somewhere significantly south or east of our capture site. We did not find any significant patterns with sex and passage date or latitudinal origin, nor did we find a meaningful relationship between latitudinal origin and passage date. Our findings support the current understandings of goshawk migration, with a majority of individuals traveling short distances from their natal grounds and a few outliers traveling great distances, not always in a southerly direction.