

Erratum

Bruggeman, J.E., D.E. Andersen, and J.E. Woodford. 2009. Bioregional monitoring of northern goshawks in the western Great Lakes. Final Report. Minnesota Cooperative Fish and Wildlife Research Unit, St. Paul, Minnesota, USA.

In the process of publishing results from our bioregional survey of Northern Goshawks (*Accipiter gentilis*) in the western Great Lakes region, reviewers noted an error in our estimate of variance associated with the proportion of PSUs we estimated to be occupied by goshawks. That error was corrected in the manuscript (Bruggeman et al. 2011) recently published in the *Journal of Raptor Research*. That published manuscript includes the appropriate variance estimate and a description of how that variance estimate was derived.

Because the estimate of variance associated with the proportion of PSUs occupied by goshawks across our entire study area we used was incorrect, so too are the standard errors associated with the number of PSUs occupied by goshawks we reported for the entire study area. We incorrectly reported the number of PSUs occupied by goshawks across our entire study area as $5,184 \pm 199$ in our 2009 final report (Bruggeman et al. 2009). The correct value is instead, $5,184 \pm 914$ occupied PSUs. The correct 95% confidence interval is (3,365, 7,004). The corresponding PSU occupancy rate is 0.266 ± 0.047 with a 95% confidence interval of (0.173, 0.359).

Similarly, the correct standard errors and confidence intervals for the number of PSUs occupied by goshawks at the level of states and national forests are as follows:

| State or National Forest | Number of PSUs occupied \pm standard error | 95% confidence interval |
|--|---|-------------------------|
| Michigan | $1,413 \pm 379$ | 634, 2,192 |
| Hiawatha National Forest | 145 ± 145 | 0, 499 |
| Ottawa National Forest | 265 ± 173 | 0, 662 |
| Minnesota | $3,949 \pm 1,541$ | 812, 7,085 |
| Chippewa National Forest | 271 ± 175 | 0, 684 |
| Superior National Forest | 216 ± 215 | 0, 684 |
| Wisconsin | 903 ± 445 | 0, 1,815 |
| Chequamegon-Nicolet National Forest | 442 ± 284 | 0, 1,114 |

Finally, larger variance estimates for occupancy (and therefore larger standard errors for the number of occupied PSUs) influences the statistical power to detect trends in occupancy through time. Revised estimates of power to detect trends in occupancy are presented in Bruggeman et al. (2011), and suggest that larger sample sizes or longer time intervals than indicated in our final report (Bruggeman et al. 2009) are necessary to detect meaningful trends.

Literature Cited

Bruggeman, J.E., D.E. Andersen, and J.E. Woodford. 2011. Northern goshawk monitoring in the western Great Lakes bioregion. *Journal of Raptor Research* 45:290-303.