

Publications

The following is a list of scientific reports and other publications by personnel in the Wildlife Populations and Research Unit for the approximate period of March 2010 thru February 2011.

Some titles by Unit personnel pertain to work done while employed by the MNDNR, while other titles are from work done elsewhere (e.g. as graduate student, employed by another agency, while on leave of absence, etc.)

An asterisk (*) before an author's name indicates the report was listed as in press or in review in previous publication of the Summaries of Wildlife Research Findings.

Included under scientific reports are those that have not been published and those accepted for publication (in press).

Names in **bold** indicate a MNDNR employee.

Wetland Wildlife Populations and Research Group

Publication List (2010-2011)

Hanson, M. A., B. R. Herwig, K. D. Zimmer, **J. Fieberg**, S. R. Vaughn, R. G. Wright, and J. A. Younk. 2011. Factors influencing aquatic invertebrate populations in shallow lakes in prairie and parkland regions of Minnesota, USA. *Wetlands: In Review*.

Herwig, B. R., K. D. Zimmer, **M. A. Hanson**, M. L. Konsti, J. A. Younk, **R. W. Wright**, S. R. Vaughn, and M. E. Haustein. 2010. Factors influencing fish distributions in shallow lakes in prairie and prairie-parkland regions of Minnesota, USA. *Wetlands* 30:609-619.

Friederichs, S. J., K. D. Zimmer, B. R. Herwig, **M. A. Hanson**, and **J. Fieberg**. 2010. Total phosphorus and piscivore mass as drivers of food web characteristics in shallow lakes. *Oikos* 120:756-765.

Forest Wildlife Populations and Research Group

Publication List (2010-2011)

- Baker, L. R., T. W. Arnold, O. S. Olubode, and **D. L. Garshelis**. 2011. Considerations for using occupancy surveys to monitor forest primates: a case study with Sclater's monkey (*Cercopithecus sclateri*). *Population Ecology*: In press.
- ***DelGiudice, G. D., B. A. Sampson, M. S. Lenarz**, M. W. Schrage, and A. J. Edwards. 2011. Winter body condition of moose (*Alces alces*) in a declining population in northeastern Minnesota. *Journal of Wildlife Diseases* 47:30-40.
- Garshelis, D. L.** 2011. Andean bear density and abundance estimates—how reliable and useful are they? *Ursus* 22:47–64.
- *Hwang, M-H., **D. L. Garshelis**, Y-H. Wu, and Y. Wang. 2010. Home ranges of Asiatic black bears in the Central Mountains of Taiwan: gauging whether a reserve is big enough. *Ursus* 21:81–96.
- *Laske, T. G., H. J. Harlow, **D. L. Garshelis**, and P. Iaizzo. 2010. Extreme respiratory sinus arrhythmia enables hibernating black bear survival - physiological insights and applications to human medicine. *Journal of Cardiovascular Translational Research* 3: 559–569.
- Laske, T. G., **D. L. Garshelis**, and P. Iaizzo. 2011. Monitoring the wild black bear's reaction to human and environmental stressors. *BMC Physiology*: In press.
- ***Lenarz, M. S., J. Fieberg**, M. W. Schrage, and A. J. Edwards. 2010. Living on the edge: viability of moose in northeastern Minnesota. *Journal of Wildlife Management* 74:1013-1023.
- Lenarz, M. S., R. G. Wright**, M. S. Schrage, and A. J. Edwards. 2011. Compositional analysis of moose habitat in northeastern Minnesota. *Alces*: In review.
- Liu, F., W. J. McShea, **D. L. Garshelis**, X. Zhu, D. Wang, and L. Shao. 2011. Human-wildlife conflicts influence attitudes but not necessarily behaviors: factors driving the poaching of bears in China. *Biological Conservation* 144:538–547.
- Martin, D. J., B. R. McMillan, **J. D. Erb**, T. A. Gorman, and D. P. Walsh. 2010. Diel activity patterns of river otters (*Lutra canadensis*) in southeastern Minnesota. *Journal of Mammalogy* 91:1213-1224.
- McGowan, C. P., M. C. Runge, and **M. A. Larson**. 2011. Incorporating parametric uncertainty into population viability analysis models. *Biological Conservation* 144: In press.
- Noyce, K. V.**, and **D. L. Garshelis**. 2011. Seasonal migrations of black bears (*Ursus americanus*): causes and consequences. *Behavioral Ecology and Sociobiology* 65: 823-835.
- Peacock, E., K. Titus, **D. L. Garshelis**, M. M. Peacock, and M. Kuc. 2011. Mark-recapture using tetracycline and genetics reveals record-high bear density. *Journal of Wildlife Management*: In press.

Reidy, J. L., F. R. Thompson, III, and **J. W. Bailey**. 2011. Comparison of methods for estimating density of forest songbirds from point counts. *Journal of Wildlife Management* 75:558-568.

*Steinmetz, R., and **D. L. Garshelis**. 2010. Estimating ages of bear claw marks in Southeast Asian tropical forests as an aid to population monitoring. *Ursus* 21:143–153.

Steinmetz, R., **D. L. Garshelis**, W. Chutipong, and N. Seuaturien. 2011. The shared preference niche of sympatric Asiatic black bears and sun bears in a tropical forest mosaic. *PLoS ONE* 6(1):e14509.

**In press* last year.

Farmland Wildlife Populations and Research Group**Publication List (2010-2011)**

- Carbaugh, J. S., D. L. Combs, and **E. M. Dunton**. 2010. Nest site selection and nesting ecology of giant Canada geese in central Tennessee. *Human-Wildlife Interactions* 4:207-212.
- Cornicelli, L.**, and **M. D. Grund**. 2011. Assessing deer hunter attitudes toward regulatory change using self-selected respondents. *Human Dimensions of Wildlife* 16:174-182.
- Cornicelli, L.**, **M. D. Grund**, and **J. Fieberg**. 2011. Hunter perceptions and acceptance of alternative deer management regulations. *Wildlife Society Bulletin*: In press.
- Dunton, E. M.**, and D. L. Combs. 2010. Movements, habitat selection, associations, and survival of giant Canada goose broods in central Tennessee. *Human-Wildlife Interactions* 4:192-201.
- Dunton, E. M.**, **J. Fieberg**, and **K. J. Haroldson**. 2011. Living on the edge: diet selection and body condition of wild turkeys in northern Minnesota. *Proceedings of the National Wild Turkey Symposium* 10: In press.
- Fieberg, J.**, **L. Cornicelli**, D. C. Fulton, and **M. D. Grund**. 2010. Design and analysis of simple choice surveys for natural resource management. *Journal of Wildlife Management* 74:871-879.
- Grund, M. D.**, **L. Cornicelli**, L. T. Carlson, and **E. Butler**. 2010. Bullet fragmentation and lead deposition in white-tailed deer and domestic sheep. *Human-Wildlife Interactions* 4:257-265.
- Grund, M. D.** 2011. Survival analysis and computer simulations of lethal and contraceptive management strategies for urban deer. *Human-Wildlife Interactions* 5:23-31.
- Harwood, A.**, B. McMillan, **K. Haroldson**, and **J. Giudice**. 2011. Probability of detection in crowing surveys of ring-necked pheasants. *Journal of Wildlife Management*: Submitted.
- Parent, C. J., B. J. Goodwin, and **E. M. Dunton**. 2011. Survival of wild turkey hens transplanted beyond their ancestral range in northwestern Minnesota. *Proceedings of the National Wild Turkey Symposium* 10: In press.
- Tranel, M. A.** 2010. Preliminary findings of interseeding forbs in native grass stands. In D. W. Williams and D. D. Smith, editors. *Proceedings of the North American Prairie Conference* 22: In press.

Wildlife Biometrics Unit**Publication List (2010-2011)**

- Aing, C., S. Halls, K. Oken, R. Dobrow, and **J. Fieberg**. 2011. A Bayesian hierarchical occupancy model for track surveys conducted in a series of linear, spatially correlated sites. *Journal of Applied Ecology*: In press.
- Giudice, J., J. Fieberg, and M. Lenarz**. 2011. Spending degrees of freedom in a poor economy: a case study of building a sightability model for moose in northeastern Minnesota. *Journal of Wildlife Management*: In press.
- Matthiopoulos, J., M. Hebblewhite, G. Aarts, and **J. Fieberg**. 2011. Generalized functional responses for species distributions. *Ecology* 92:583-589.
- Fieberg, J., K. W. Shertzer, P. B. Conn, K. V. Noyce, and D. L. Garshelis**. 2010. Integrated population modeling of black bears in Minnesota: implications for monitoring and management. *Plos One* 5(8): e12114. Doi:10.1371/journal.pone.0012114.
- Fieberg, J., J. Matthiopoulos, M. Hebblewhite, M. S. Boyce, J. L. Frair**. 2010. Correlation and studies of habitat selection: problem, red herring, or opportunity? *Philosophical Transactions of the Royal Society, Series B* 365:2233-2244.
- Frair, J. L., **J. Fieberg**, M. Hebblewhite, F. Cagnacci, N. DeCesare, and L. Pedrotti. 2010. Resolving issues of imprecise and habitat-biased locations in ecological analyses using GPS telemetry data. *Philosophical Transactions of the Royal Society, Series B* 365:2187-2200.
- Kie, J. G., Matthiopoulos, **J., Fieberg, J., Mitchell, M.S., Powell, R. A., Cagnacci, F., Gaillard, J-M., and P. Moorcroft**. 2010. The home-range concept: are traditional estimators still relevant with modern telemetry technology? *Philosophical Transactions of the Royal Society, Series B* 365:2221-2231.