

EDWARD O. GARTON, Emeritus Professor of Fish and Wildlife Science and Statistics

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Education:

1976 Ph.D. Ecology, University of California, Davis (Advisor: T. C. Foin)

1973 M.S. Ecology, University of California, Davis (Advisor: J. Sawyer)

1968 B.A. Biology, Stanford University, Stanford, CA

Experience:

1977-Pres. Professor, Department of Fish and Wildlife Resources, University of Idaho

1989-90 Fulbright Scholar, Moi University, Kenya,

1977 Post-doctoral Fellow, University of California, Davis

1968-71 Peace Corps Volunteer in Malaysia

Consultant to: Idaho Fish and Game Department, USDA Forest Service, Saskatchewan and British Columbia Wildlife Branch, National Park Service, Biological Resources Division-USGS, U. S. Fish and Wildlife Service

Specialty Areas of Interest:

Dynamics & Management of Bird, Mammal and Fish Populations; Population Estimation;

Modeling & Simulation of Population Processes

Honors and Awards:

Fulbright Fellowship to Kenya

Outstanding Researcher Award, College of Forestry, Wildlife, and Range Sciences 1987, 2010

Outstanding Teacher Award, Associated Students of University of Idaho

Outstanding Wildlifer Awards, Idaho Chapter & Northwest Section of The Wildlife Society

Outstanding Professional Paper & Monograph Awards, The Wildlife Society

University of Idaho Alumni Award for Excellence

Courses Taught at University of Idaho:

Fish and Wildlife Population Ecology Advanced Population Biology

Fish and Wildlife Population Analysis Fish and Wildlife Seminar

Continuing Education or Service Activities:

Introduction to Statistics and Data Analysis for Fish and Wildlife Biologists Workshop

Metapopulations of Plants and Animals Workshop

Application of Multivariate Statistical Methods to Fish and Wildlife Workshop

New Approaches to Estimating Home Range, Habitat Selection and Movements Workshop

Recent and Current Research:

New Approaches to Estimating Home Range, Habitat Selection and Movements

Impacts of a Reintroduced Wolf Population on Yellowstone Elk Populations

Monitoring Methods for Woodpeckers, Sage Grouse and Neotropical Migrant Birds

Population Ecology of Greater Sage Grouse, Trumpeter Swans and Whooping Cranes

Aerial Census Methods for Elk, Mule Deer, Pronghorn Antelope and Bighorn Sheep Populations

Significant Copyrighted Software: AERIAL SURVEY, HOME RANGE, SCAT and 12 databases of scientific literature (e.g. ESA, OSNA, TWS, AFS) by my company ABSEARCH in 1990s.

Some Significant and Recent Publications:

- Aycrigg, Jocelyn and Edward O. Garton. 2014. Linking Metapopulation Structure to Elk Population Management in Idaho: A Genetic Approach. *Journal of Mammalogy* 95:597-614.
- Meyer, Kevin A., Edward O. Garton and Daniel J. Schill. 2014. Bull trout trends in abundance and persistence probabilities in Idaho. *North American Journal of Fisheries Management* 34:202-241.
- Baumgardt, J. A., C. S. Goldberg, K. P. Reese, J. W. Connelly, D. D. Musil, E. O. Garton, and L. P. Waits. 2013. A method for estimating population sex ratio for sage-grouse using noninvasive genetic samples. *Molecular Ecology Resources* doi: 10.1111/1755-0998.12069
- Manning, Jeff and Edward O. Garton. 2012. A piecewise linear modeling approach for testing competing theories of habitat selection: an example with mule deer in northern winter ranges. *Oecologia* published online DOI 10.1007/s00442-012-2532-4
- Ruprecht, Joel S., David E. Ausband, Michael S. Mitchell, Edward O. Garton and Peter Zager. 2012. Homesite attendance based on sex, breeding status, and number of helpers in gray wolf packs. *Mammalogy* 93:1001-1012.
- Garton, Edward O., Jon S. Horne, Jocelyn L. Aycrigg, and John T. Ratti. 2012. Research and Experimental Design. Chapter 1, pp 1-40 *In* Silvy, Nova (ed.). Techniques For Wildlife Investigations and Management. Seventh edition, Vol. I *Wildlife Research Methods*. The Wildlife Society, Bethesda, MD.
- Manning, Jeff and Edward O. Garton. 2011. Reconstructing historical snow depth surfaces to evaluate changes in critical demographic rates and habitat components of snow-dependent and snow-restricted species. *Methods in Ecology and Evolution*. doi: 10.1111/j.2041-210X.2011.00144.x
- Hurley, Mark A., James W. Unsworth, Peter Zager, Mark Hebblewhite, Edward O. Garton, Debra M. Montgomery, John Skalski and Craig L. Maycock. 2011. Demographic response of mule deer to experimental reduction of coyotes and mountain lions in Southeastern Idaho. *Wildlife Monographs* 178:1-33.; DOI: 10.1002/wmon.4
- Garton, Edward O., John W. Connelly, Jon S. Horne, Christian Hagen, Anne Moser and Michael A. Schroeder. 2011. Greater Sage-Grouse Population Dynamics and Probability of Persistence. Pp. 293–382 in S. T. Knick and J. W. Connelly (editors), *Greater Sage-Grouse: Ecology and Conservation of a Landscape Species and its Habitats*. Studies in Avian Biology Series (vol. 38), University of California Press, Berkeley, CA.
- Horne, Jon S., Edward O. Garton, Stephen S. Crone, and Jesse L. Lewis. 2007. Analyzing animal movements using Brownian bridges. *Ecology* 88:2354-2363.
- Horne, Jon S. and Edward O. Garton. 2006. Selecting the best home range model: an information theoretic approach. *Ecology* 87:1146–1152
- Kelly, Brian T. and Edward O. Garton. 1997. Effects of prey size, meal size, meal composition, and daily frequency of feeding on the recovery of rodent remains from carnivore scats. *Canadian Journal of Zoology* 75:1811-1817.
- Hayward, G.D., P.H. Hayward, and E.O. Garton. 1993. Ecology of boreal owls in the northern Rocky Mountains, U.S.A. *Wildlife Monograph* 124:1-59.
- Samuel, M.D., E.O. Garton, M.W. Schlegel, and R.G. Carson. 1987. Visibility bias during aerial surveys of elk in northcentral Idaho. *Journal of Wildlife Management* 51:622-630.