

HILARY S. COOLEY

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EDUCATION

PhD • Natural Resource Sciences • Washington State University, 2008.

Dissertation Title: Effects of hunting on cougar population and community ecology.

MS • Natural Resource Sciences • Washington State University, 2004.

Thesis Title: Cougar prey selection in a white-tailed deer and mule deer community.

BS • Recreation Management / Natural Resources • University of Vermont, 1997.

PROFESSIONAL EXPERIENCE

UTAH STATE UNIVERSITY • Instructor

2009 to present

- Teaching undergraduate course, *Ecology of our Changing World* (online & in class).
- Teaching & development of graduate course, *Ecological Applications* (distance).

UTAH DIVISION OF WILDLIFE RESOURCES • Consultant

2008 to 2009

Author & editor for Western Assoc. Fish and Wildlife Agencies guide, *Managing Cougars in North America*.

- **Collaboration:** Collaborated with 15 wildlife managers to produce management guide.
- **Organization:** Organized writing and revisions of 10 chapters and assimilated into book form.

WASHINGTON DEPT. OF FISH & WILDLIFE • Consultant

2008

Senior contributor to cougar harvest guidelines and regulations. Provided key data, analysis, and interpretation of cougar vital rates and population growth models.

- **Statistical Analysis:** Analyzed cougar survival, fecundity, and density data. Created dual-sex, age specific Leslie matrix to model harvest quotas and population growth.

WASHINGTON STATE UNIVERSITY • Research Assistant

2002 to 2008

Conducted research on predator prey relationships and impacts of hunting on cougar population demography.

- **Statistical Analysis:** Constructed population models to compare demographics between 2 areas; used multivariate analyses to investigate cause-specific mortality; developed new density estimation technique; conducted cougar prey selection analysis, which included prey surveys, intensive radio-telemetry, and kill site investigations.
- **Fundraising:** Developed and submitted 6 grant proposals to support research. Successful grants include 4-year National Science Foundation Research Grant and Natural Resources Conservation Endowment Grant.
- **Management:** Managed large wildlife research project, including project design, field work, and budgets.
- **Supervisory:** Trained and supervised 8 project staff, including graduate students and research assistants.

- **Public Relations:** Skilled in diplomatic relations and conflict management. Frequent communication with various interest groups, collaborating agencies. Numerous oral presentations to a variety of audiences.

WASHINGTON STATE UNIVERSITY • Instructor

2006 to 2007

- Taught undergraduate course, *Natural Resource Ecology*
- Teaching Assistant, undergraduate course, *Population Ecology*

RELEVANT PROJECTS

- A comparison of methods for assessing carnivore density from radio collar data • 2007 - present
- Effects of hunting on cougar population and community ecology • 2002 - 2008
- Effects of hunting on cougar/human conflicts • 2004 - 2008
- Cougar prey selection in a white-tailed deer and mule deer community • 2002 – 2004

PUBLICATIONS

Cooley, H.S., R.B. Wielgus, H.S. Robinson, G. Koehler, and B. Maletzke. 2009. Does hunting regulate cougar populations: a test of the compensatory mortality hypothesis. *Ecology* 90: 2913–2921.

Cooley, H.S., R.B. Wielgus, G. Koehler, and B. Maletzke. 2009. Source populations in carnivore management: cougar demography and emigration in a lightly hunted population. *Animal Conservation* 12: 321-328.

Cooley, H.S., H.S. Robinson, R.B. Wielgus and C.M. Lambert. 2008. Cougar prey selection in a white-tailed deer and mule deer community. *Journal of Wildlife Management* 72:99-106.

Robinson, H.S., R.B. Wielgus, H.S. Cooley, and S.W. Cooley. 2008. Implications of sink populations in large carnivore management: cougar demography and immigration in a hunted population. *Ecological Applications*. 18:1028-1037.

Packer, C., M. Kosmala, H. S. Cooley, H. Brink, L. Pintea, et al. 2009. The role of sport hunting in monitoring, conserving and controlling carnivore populations. *PLoS ONE* 4(6): e5941.

Lambert, C.M., R.B. Wielgus, H.S. Robinson, D.D. Katnik, H.S. Cruickshank (Cooley), R. Clarke, and J. Almack. 2006. Cougar population dynamics and viability in the Pacific Northwest. *Journal of Wildlife Management* 70:246-254.

Gese, E., H. Cooley, and F. Knowlton. *In Review*. Monitoring population sizes and trends. Pages xxx-xxx in *Carnivore Monitoring Techniques*. Edited by L. Boitani and R. Powell. Cambridge University Press.

Cooley, H.S., K. Bunnell, D. Stoner, and M. Wolfe. *In Review*. Population Management: Cougar Hunting. Pages xxx-xxx in *Managing Cougars in North America*. Edited by H. Cooley. Berryman Institute.

Cooley, H.S., R.B. Wielgus, H.S. Robinson, and G. Koehler. *In Revision*. A comparison of methods for assessing carnivore density from radio collar data. *Journal of Wildlife Management*.

SELECTED PRESENTATIONS

- 2009 • Understanding Mtn. Lions. Sportsmen Assoc. Sponsor. Impacts of Hunting on Cougars. Missoula MT.
- 2009 • ID Wildlife Society Meeting. Does Hunting Regulate Cougar Populations? Moscow ID.
- 2009 • Utah State Univ. Dept. Wildland Resources. Seminar Series. Cougar Demography. Logan UT.
- 2008 • Black Hills Mtn. Lion Fdn. Educational Seminar. Effects of Hunting on Cougars. Rapid City, SD.
- 2008 • Washington State Senate Meeting. Effects of Hunting on Cougar Populations. Spokane WA.
- 2008 • Ninth Annual Mountain Lion Workshop. Effects of Hunting on Cougar Populations. Sun Valley ID.
- 2008 • NW Wildlife Society Annual Meeting. Effects of Hunting on Cougar Populations. Spokane WA.
- 2007 • WA Fish & Wildlife Coop. Research Unit. Effects of Hunting on Cougar Populations. Seattle, WA.
- 2007 • WA & OR Wildlife Society Meeting. Effects of Hunting on Cougar Populations. Pendleton OR.
- 2007 • Spokane Community College. Guest Lecture. Cougar Ecology & Field Ecology. Spokane WA.
- 2007 • Tiverton Land Trust. Educational Seminar. Cougar Ecology & Field Ecology. Tiverton RI.
- 2006 • Washington State University. Guest Lecture, Wildlife Mortality. Pullman WA.
- 2006 • The Wheeler School. Educational Seminar. Cougar Ecology & Field Ecology. Providence, RI.
- 2005 • Eighth Annual Mountain Lion Workshop. Cougar Prey Selection. Leavenworth WA.
- 2004 • Carnivores 2004 Conference. Cougar Prey Selection. Santa Fe NM.
- 2004 • WA Fish & Wildlife Coop. Research Unit. Cougar Prey Selection. Seattle WA.
- 2003 • International Mtn. Caribou Technical Committee Meeting. Cougar Prey Selection. Spokane WA.
- 2003 • WA Department of Fish and Wildlife Regional Meeting. Cougar Prey Selection. Chewelah WA.

GRANTS & AWARDS

- Washington Fish and Wildlife Cooperative Research Unit Presentation Award, 2007.
- Co-preparer National Science Foundation, Biological Sciences Directorate Grant, 2004. Effects of anthropogenic disturbance on large carnivore population and community ecology.
- Natural Resources Conservation Endowment Grant, 2004.
- Washington State University, Graduate School Travel Grant, 2002, 2004.

PROFESSIONAL MEMBERSHIPS

- Wild Felid Association, 2007 to present.
- Wildlife Society, 2002 to present.
- Graduate Women in Science, 2006 to present.
- Graduate and Professional Student Association, Washington State University, 2006 to 2007.

REFERENCES

Dr. David Koons, Assistant Professor
Dept. Wildland Resources
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Dr. Hugh Robinson, Postdoctoral Researcher
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Dr. Robert Wielgus, Associate Professor
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Dr. Gary Koehler, Wildlife Researcher
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Dr. Keith Blatner, Professor and Chair
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