

JACOB L. BERL

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EDUCATION

Ph.D., Purdue University – 2017

Major: Wildlife Science

Advisors: Dr. Rob Swihart and Dr. Liz Flaherty

Cumulative GPA: 3.72

M.S., West Virginia University – 2013

Major: Wildlife and Fisheries Resources

Advisor: Dr. John Edwards

Cumulative GPA: 3.92

B.S., Humboldt State University – 2011

Major: Wildlife Management and Conservation

Minor: Natural Resources

Advisor: Dr. Mark Colwell

Cumulative GPA: 3.81

CERTIFICATIONS

Certified Peace Officer – 2017

- Patrol Academy, Idaho Peace Officer Standards and Training (POST)

Associate Wildlife Biologist – 2013

- Wildlife Society Certification Program
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POSITIONS

Conservation Officer, 2017 – present

Enforcement Bureau, Idaho Department of Fish and Game, Upper Snake Region, Idaho Falls, Idaho

Graduate Research Assistant, 2014 – 2017

Department of Forestry and Natural Resources, Purdue University, West Lafayette, Indiana

Graduate Teaching Assistant, 2011 – 2013

Division of Forestry and Natural Resources, West Virginia University, Morgantown, West Virginia

Wildlife Technician, 2009 & 2010

Great Divide Ranger District, Chequamegon-Nicolet National Forest, Hayward, Wisconsin

PEER-REVIEWED PUBLICATIONS

* = *Undergraduate mentee*

- Berl, J.L.**, K.F. Kellner, E.A. Flaherty, and R.K. Swihart. *In revision*. Spatial variation in density of white-footed mice along edges in fragmented habitat. *American Midland Naturalist*.
- Berl, J.L.**, E.A. Flaherty, B.J. Danielson, K.F. Kellner and R.K. Swihart. 2017. Winter ecology of prairie deer mice (*Peromyscus maniculatus bairdii*) in row-crop fields: implications for agricultural ecosystem services. *Agriculture, Ecosystems, and Environment* *in press*.
- Abercrombie*, S.A., **J.L. Berl**, E.A. Flaherty, and R.K. Swihart. 2017. Seasonal foraging by forest mice enhances loss of weed seeds from crop field edges. *Northeastern Naturalist* *in press*.
- Berl J.L.**, M.W. Voorhees*, J.Y. Wu*, E.A. Flaherty, and R.K. Swihart. 2017. Collection of blood from wild-caught mice (*Peromyscus*) via sub-mandibular venipuncture. *Wildlife Society Bulletin* *in press*.
- Berl, J.L.**, E.A. Flaherty, A.J. Kuenzi, and R.K. Swihart. 2017. Interspecific comparison of hantavirus prevalence in *Peromyscus* from a fragmented agro-ecosystem in Indiana. *Journal of Wildlife Diseases* *in press*.
- Berl J.L.**, K.M. Verble*, E.A. Flaherty, and R.K. Swihart. 2017. Field discrimination of prairie deer mice and white-footed mice using morphological characteristics. *Prairie Naturalist* *in press*.
- Jones, M.D., **J.L. Berl**, A.N. Tri, J.W. Edwards, and H. Spiker. 2017. Fine-scale movements and spatial behaviors of bear hunters: Combining GPS with survey methods. *Human Dimensions of Wildlife* 22:362–373.
- Berl, J.L.**, H.A. Johnstone*, J.Y. Wu*, E.A. Flaherty, and R.K. Swihart. 2017. Winter preference for weed seed and waste grain by native mice in row-crop agriculture. *Weed Science* 65:406–412.
- Owen, S.F., **J.L. Berl**, J.W. Edwards, W.M. Ford and P.B. Wood. 2015. Raccoon spatial requirements and multi-scale habitat selection within an intensively managed central Appalachian forest. *American Midland Naturalist* 174:84–97.
- Frei, B., J.W. Fyles, **J.L. Berl**, J.W. Edwards, and J.J. Nocera. 2015. Low fecundity of red-headed woodpeckers at the northern edge of the range. *Wilson Journal of Ornithology* 127:639–645.
- Jones, M.D., **J.L. Berl**, A.N. Tri, J.W. Edwards, and H. Spiker. 2015. Predicting harvest vulnerability for a recovering population of black bears in western Maryland. *Ursus* 26:97–106.
- Berl, J.L.**, J.W. Edwards, and J.S. Bolsinger. 2015. Scale-dependent and multi-metric nest-habitat thresholds for red-headed woodpeckers at the northern periphery of their range. *Condor* 117:203–216.
- Owen, S.F., **J.L. Berl**, J.W. Edwards, W.M. Ford and P.B. Wood. 2015. Raccoon (*Procyon lotor*) diurnal den use within an intensively managed forest in central West Virginia. *Northeastern Naturalist* 22:41–52.
- Berl, J.L.**, J.W. Edwards, and J.S. Bolsinger, and T.E. Katzner. 2014. Survival of red-headed woodpeckers' (*Melanerpes erythrocephalus*) nests in northern New York. *Wilson Journal of Ornithology* 126:700–707.

- Berl, J.L.** 2013. American wigeon *Anas americana* vigilance behavior on suburban golf courses. *Wildfowl* 63:105–114.
- Berl, J.L.**, J.W. Edwards and J.S. Bolsinger. 2013. Attempted conspecific nest usurpation by red-headed woodpeckers (*Melanerpes erythrocephalus*). *Canadian Field-Naturalist* 127:343–345.
- Berl, J.L.**, and J.M. Black. 2011. Vigilance behaviour of American wigeon *Anas americana* foraging in pastures. *Wildfowl* 61:142–151.
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OTHER PUBLICATIONS

- Berl, J.L.** and J.W. Edwards. 2013. Red-headed Woodpecker habitat use and breeding ecology in New York State: A preliminary assessment. *Bluebird* 35:11–13.
- Berl, J.L.** and J.W. Edwards. 2012. Notes on a breeding population of Red-headed Woodpeckers in New York State. *Prothonotary* 78:92–93.
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PRESENTATIONS

Oral

- Berl, J.L.**, E.A. Flaherty, A.J. Kuenzi, and R.K. Swihart. 2017. Interspecific comparison of hantavirus prevalence in *Peromyscus* from an Indiana agro-ecosystem. *American Society of Mammalogists Annual Meeting, Moscow, ID*.
- Berl, J.L.**, S.A. Abercrombie*, H.A. Johnstone*, E.A. Flaherty, and R.K. Swihart. 2017. Winter ecology of prairie deer mice in midwestern row-crop agriculture and implications for ecosystem services. *American Society of Mammalogists Annual Meeting, Moscow, ID*.
- Berl, J.L.**, E.A. Flaherty, A.J. Kuenzi, and R.K. Swihart. 2017. Interspecific comparison of hantavirus prevalence in *Peromyscus* from an Indiana agro-ecosystem. *Indiana Academy of Sciences Annual Meeting, Indianapolis, IN*.
- Abercrombie*, S.A., **J.L. Berl**, E.A. Flaherty, and R.K. Swihart. 2016. Seasonal foraging by forest mice enhances loss of weed seeds from crop field edges. *The Wildlife Society National Meeting, Raleigh, NC*.
- Berl, J.L.**, S.A. Abercrombie*, H.A. Johnstone*, E.A. Flaherty, and R.K. Swihart. 2016. Ecology of prairie deer mice in midwestern row-crop agriculture and implications for ecosystem services. *The Wildlife Society National Meeting, Raleigh, NC*.
- Abercrombie*, S.A., **J.L. Berl**, E.A. Flaherty, and R.K. Swihart. 2016. Seasonal foraging by forest mice enhances loss of weed seeds from crop field edges. *Indiana Academy of Sciences Annual Meeting, Indianapolis, IN*.
- Berl, J.L.**, J.W. Edwards, J.S. Bolsinger, and T.E. Katzner. 2014. Scale dependent nest-habitat thresholds for red-headed woodpeckers at the northern limit of their range. *The Wildlife Society National Meeting, Pittsburgh, PA*.
- Berl, J.L.**, and J.W. Edwards. 2013. Red-headed Woodpecker breeding ecology and habitat use at the northern limit of its range. *West Virginia State Wildlife Society Conference, Buchannon, WV*.
- Berl, J.L.**, and J.W. Edwards. 2013. Red-headed Woodpecker breeding ecology and habitat use at the northern limit of its range. *West Virginia University Graduate Student Symposium, Morgantown, WV*.

- Berl, J.L.**, J.W. Edwards and J.S. Bolsinger. 2013. Red-headed Woodpecker breeding ecology and habitat use at the northern limit of its range. *Wilson Ornithological Society Annual Conference, Williamsburg, VA*.
- Berl, J.L.** 2012. Vigilance behaviour of American Wigeon *Anas americana* foraging in pastures. *Northeastern Association of Fish and Wildlife Agencies Student Colloquium, Charleston, WV*.

Poster

- Berl, J.L.**, S.A. Abercrombie*, H.A. Johnstone*, E.A. Flaherty, and R.K. Swihart. 2016. Ecology of prairie deer mice in midwestern row-crop agriculture and implications for ecosystem services. *American Society of Mammalogists Conference, Minneapolis, MN*.
- Palm, B.M., Z. Glas, **J.L. Berl**, and E.A. Flaherty. 2016. Determining food preferences of striped skunks (*Mephitis mephitis*). *Purdue Forestry and Natural Resources Poster Symposium*.
- Abercrombie*, S.A., **J.L. Berl**, E.A. Flaherty, and R.K. Swihart. 2016. Seasonal foraging by forest mice enhances loss of weed seeds from crop field edges. *Purdue Forestry and Natural Resources Poster Symposium*.
- Johnstone*, H.A., J.W. Wu*, **J.L. Berl**, E.A. Flaherty, and R.K. Swihart. 2016. Preference for weed seed and waste grain by native mice in row-crop agriculture. *Purdue Forestry and Natural Resources Poster Symposium*.
- Wu*, J.Y., **J.L. Berl**, E.A. Flaherty, and R.K. Swihart. 2016. Food preferences and nesting behavior of a captive population of native farmland mice. *Purdue Undergraduate Research Symposium*.
- Abercrombie*, S.A., **J.L. Berl**, E.A. Flaherty, and R.K. Swihart. 2016. Seasonal foraging by forest mice enhances loss of weed seeds from crop field edges. *Purdue Undergraduate Research Symposium*.
- Berl, J.L.**, S.A. Abercrombie*, H.A. Johnstone*, E.A. Flaherty, and R.K. Swihart. 2016. Ecology of prairie deer mice in midwestern row-crop agriculture and implications for ecosystem services. *Indiana Academy of Sciences Annual Meeting, Indianapolis, IN*.
- Berl, J.L.**, S.A. Abercrombie*, H.A. Johnstone*, E.A. Flaherty, and R.K. Swihart. 2016. Ecology of prairie deer mice in midwestern row-crop agriculture and implications for ecosystem services. *Indiana State Wildlife Society Conference, Bloomington, IN*.
- Abercrombie*, S.A., **J.L. Berl**, E.A. Flaherty, and R.K. Swihart. 2015. Weed seed predation services by native mice in Midwestern row-crop agriculture. *The Wildlife Society National Meeting, Winnipeg, MB*.
- Berl, J.L.**, E.A. Flaherty, and R.K. Swihart. 2015. Does intra-population niche partitioning lead to variation in the functional role of individuals within generalist populations? *The Wildlife Society National Meeting, Winnipeg, MB*.
- Berl, J.L.**, J.S. Bolsinger, and J.W. Edwards. 2013. Red-headed woodpecker nest-site selection and reproductive success at the northern limit of its range. *New York State Ornithological Association Annual Conference, New York, NY*.
- Berl, J.L.**, J.W. Edwards, and J.S. Bolsinger. 2013. Red-headed woodpecker nest-site selection and reproductive success at the northern limit of its range. *West Virginia State Wildlife Society Conference, Buchannon, WV*.
- Joseph*, M.A., and **J.L. Berl**. 2013. Recreational use patterns of the rail-trail system in Morgantown, West Virginia. *West Virginia University EnvironMentors Chapter Fair*.

Berl, J.L. 2011. Vigilance behaviour of American Wigeon *Anas americana* foraging in pastures. *Maryland/Delaware State Wildlife Society Meeting, Fredricksburg, MD.*

Extension Presentations

Berl, J.L., S.A. Abercrombie*, H.A. Johnstone*, E.A. Flaherty, and R.K. Swihart. 2016. Are Native Mice in Midwestern Agriculture Unwanted Pests or Friendly Neighbors? Northeast Indiana Agricultural Field Day. 67 participants.

Berl, J.L., S.A. Abercrombie*, H.A. Johnstone*, E.A. Flaherty, and R.K. Swihart. 2016. Are Native Mice in Midwestern Agriculture: Unwanted Pests or Friendly Neighbors? Southeast Indiana Agricultural Field Day. 93 participants.

GRANTS RECEIVED (\$ 47,382 total secured)

- (2016) Agricultural Science and Extension for Economic Development – \$ 28,378
Functional Role of Native Mice in Midwestern Agro-ecosystems: Unwanted Pests or Friendly Neighbors?
- (2015) USDA Sustainable Agriculture Research and Education – \$ 9,879
Functional Role of Native Mice in Midwestern Agro-ecosystems: Unwanted Pests or Friendly Neighbors?
- (2015) Indiana Academy of Sciences – \$ 3,000
Does Intra-population Niche Partitioning Lead to Variation in the Functional Role of Individuals within Generalist Populations?
- (2013) Norcross Wildlife Foundation – \$ 1,000
Red-headed Woodpecker Nest-site Selection and Nest Survival at the Northern Limit of Its Range
- (2013) New York State Bluebird Society – \$ 1,000
Red-headed Woodpecker Nest-site Selection and Nest Survival at the Northern Limit of Its Range
- (2013) Buffalo Ornithological Society – \$ 750
Predicting Hotspots and Estimating Carcass Persistence of Avian Roadside Mortality Events
- (2013) Northern New York Audubon – \$ 500
Predicting Hotspots and Estimating Carcass Persistence of Avian Roadside Mortality Events
- (2013) North American Bluebird Society – \$ 450
Predicting Hotspots and Estimating Carcass Persistence of Avian Roadside Mortality Events
- (2012) Buffalo Ornithological Society – \$ 725
Red-headed Woodpecker Nest-site Selection and Nest Survival at the Northern Limit of Its Range
- (2012) New York State Bluebird Society – \$ 1,000
Red-headed Woodpecker Foraging Ecology in Oak Savanna
- (2012) Northern New York Audubon – \$ 700
Red-headed Woodpecker Nest-site Selection and Nest Survival at the Northern Limit of Its Range

TEACHING EXPERIENCE

Purdue University

FNR 498: Role of Hunting in Wildlife Management (2016)

Instructor of Record (n = 17 students)

FNR 370: Wildlife Summer Practicum (2016)

Field Laboratory Assistant

FNR 341: Wildlife Habitat Management (2015)

Assistant Lecturer and Laboratory Instructor

FNR 242: Mammalogy (2014)

Laboratory Instructor

West Virginia University

WMAN 300: Wildlife and Fisheries Techniques (2011 & 2012)

Assistant Lecturer and Laboratory Instructor

WMAN 234: Forest Wildlife Management (2012 & 2013)

Laboratory Instructor

WMAN 450: Advanced Wildlife and Fisheries Management (2012 & 2013)

Senior Project Assistant

WMAN 175: Introduction to Wildlife and Fisheries Resources (2011 & 2012)

Field Laboratory Assistant

WMAN 224: Vertebrate Natural History (2011)

Laboratory Instructor

Undergraduate Research Mentorship

Sarah Abercrombie, Purdue Department of Forestry and Natural Resources

- Influence of season and distance from edge on weed seed predation in agriculture

Jonathan Wu, Purdue Department of Forestry and Natural Resources

- Species-specific tissue-diet stable isotope discrimination factors in sympatric rodents

Hunter Johnstone, Purdue Department of Forestry and Natural Resources

- Weed seed and waste grain preferences of native mice in row crop agriculture

Matthew Voorhees, Purdue Department of Forestry and Natural Resources

- Influence of sub-mandibular blood collection on survival of wild-caught mice

Kelton Verble, Purdue Department of Forestry and Natural Resources

- Field discrimination of *Peromyscus* from fragmented agro-ecosystems

Lucas Voorhees, Purdue Department of Forestry and Natural Resources

- A modified Sherman trap for minimally invasive collection of hair from small mammals

Jacob Gaeta, Purdue Department of Biology

- Vigilance behavior of white-tailed deer in agriculture: implications for crop damage

Other Teaching Experience

(2016) Recreational Hunting: Outdated Bloodsport or Useful Wildlife Management Tool?

Debate moderator for Purdue FNR Freshman Learning Community (8 students).

(2015) Workshop: Ecology of Deer Mice in Agriculture. Coordinated field day for Purdue FNR

Freshman Learning Community (9 students).

- (2015) Recreational Hunting: Outdated Bloodsport or Useful Wildlife Management Tool? Debate moderator for Purdue FNR Freshman Learning Community (7 students).
- (2013) Workshop: Application and Use of Radio Telemetry in Wildlife Management. Presented to WVU Wildlife Society Chapter (32 students).
- (2013) Interviewing for Wildlife and Fisheries Jobs. Presented to WVU Wildlife Society and American Fisheries Society Chapters (25 students).
- (2012) Upland Game Bird Ecology. Presented to WVU Wildlife Society Chapter (18 students).
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AWARDS AND RECOGNITIONS

- (2017) Graduate Teaching Award – Purdue Center for Instructional Excellence
- (2016) American Society of Mammalogists Travel Award (\$400)
- (2014) Wildlife Society Student Travel Award (\$300)
- (2013) Best Student Poster – West Virginia State Wildlife Society Conference (\$50)
- (2010) Mark Petty Bush Memorial Scholarship, \$2,500 – Wildlife Department, Humboldt State University
- (2010) Dr. Stanley Harris Scholarship, \$1,000 – Wildlife Department, Humboldt State University
- (2009 & 2010) US Forest Service Performance Award and Recognition
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SERVICE AND OUTREACH

- Instructor, Conservation Leaders for Tomorrow (CLfT) (2016 – present)
- Hunting awareness and education program
- Editor, *The Compass* (2015)
- Annual research and outreach journal of Purdue Department of Forestry and Natural Resources (48 pp.)
 - Oversaw article solicitation and content editing
- Department of Forestry and Natural Resources (Purdue) Graduate Student Council
- Vice president (2016–2017)
 - Faculty liaison (2015–2016)
- Purdue Student Chapter of The Wildlife Society
- Graduate Mentor (2015–2016 & 2016–2017)
- Greater Lafayette K-12 Science and Engineering Fair
- Volunteer Judge (2014, 2015)
- EnvironMentors Program Mentor (2012–2013)
- Mentored and advised a high school student to conduct a semester-long independent research project
- Division of Forestry and Natural Resources (WVU) Graduate Student Association
- Vice President (2012–2013)
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PROFESSIONAL MEMBERSHIPS

- Wildlife Society (2007–present)
- Wilson Ornithological Society (2011–present)
- American Society of Mammalogists (2014–present)

REVIEWER

Bird Study, Wilson Journal of Ornithology