

# Jason Ager Koontz

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## Education

2000 Ph.D. (Botany) Washington State University, Pullman, WA  
1995 M.S. (Botany) Miami University, Oxford, OH  
1993 B.S. (Botany) Iowa State University, Ames, IA (*with Distinction, Honors Program, and Phi Beta Kappa*)

## Current Position

8/18: Promoted to Full Professor  
7/17-present: Co-Chair of Environmental Studies  
7/14-7/17: Chair of Biology  
8/11-7/14: Co-Chair of Biology  
8/10: Tenured and promoted to Associate Professor  
9/04-8/10: Assistant Professor of Biology

## Courses as Instructor of Record

Fall 2019 – present (semester calendar)

Principles of Biology: Organisms to Ecosystems w/lab (BIOL140/140L), Conservation Biology (BIOL327), Conservation Biology Senior Inquiry capstone (BIOL464), Collections-based Senior Inquiry capstone (BIOL465), Special Topics, January-term, Local Biodiversity (ENVR380), Sustainability: The Ecological Dimension w/lab (ENVR 100/100L), Environmental Studies Capstone Experience I/senior seminar (ENVR 401).

Fall 2004 – Spring 2019 (trimester calendar)

Becoming Biologists (BI150), General Botany (BI220), Cell Biology (BI210), Nutrition (BI263; 2004-2006), Natural History of Ireland (BI328; 2010, 2013), Special Topics: Conservation Biology (BI410), Conservation Biology Senior Inquiry capstone (BI464)

## Non-Academic Positions

5/12-present: Research Associate, California Botanic Garden, Claremont, CA.

1/06-present: Research Associate, Department of Botany, The Field Museum of Natural History, Chicago, IL.

10/04-present: Adjunct Assistant Professional Scientist, Illinois Natural History Survey, Prairie Research Institute, University of Illinois Urbana-Champaign, IL.

5/00-9/04: Assistant Research Scientist III, Plant Systematist, Centers for Biodiversity and Wildlife and Plant Ecology, Illinois Natural History Survey, Champaign, IL.

## Academic Positions

10/01-12/07: Affiliate Assistant Professor, Department of Plant Biology, University of Illinois at Urbana-Champaign, IL.

8/95-5/00: Graduate Teaching Assistant, Department of Botany, Washington State University, Pullman, WA

8/93-8/95: Graduate Assistant, Department of Botany, Miami University, Oxford, OH

## Professional Societies

Society of Herbarium Curators, American Society of Plant Taxonomists, Botanical Society of America, Society for Conservation Biology, California Botanical Society, Southern California Botanists, Illinois State Academy of Science, National Association of Biology Teachers, California Native Plant Society, Illinois Native Plant Society, *Delphinium* Society

## Certifications

I100 Incident Command, L180 Human Factors on the Fire Line, S130 Firefighter Training, and S190 Introduction to Wildland Fire Behavior (IL Dept. of Natural Resources and National Wildfire Coordinating Group)

## Grants & Awards Received (since 2007)

- L.P. Jones Fellowship Award, Augustana College; 2020—"Producing a field guide to Southern California larkspurs" \$2,475.
- Faculty Research Fund, Augustana College; 2020—"Image collection for field guide to Southern California Larkspurs" \$2,000.
- Faculty Research Fund, Augustana College; 2019—"Writing in winter: a larkspur field guide in San Diego, CA" \$2,050.
- Faculty Research Fund, Augustana College; 2013—"June 2013 larkspur hunt: More fieldwork in southern California" \$2,220.
- Faculty Research Fund, Augustana College; 2012—"Understanding *Delphinium*: Fieldwork in southern California" \$1,900.
- US Fish and Wildlife Service; 2011—"Seed ecology and population genetic studies for *Scutellaria floridana* (Florida scullcap) and *Pinguicula ionantha* (Panhandle butterwort)" \$21,390. (B. Molano-Flores and J. Coons, co-PIs)
- Council on International Educational Exchange; 2008—Ping Faculty Development Fellowship to attend the CIEE International Faculty Development Seminar, "Celtic Tiger: Reality or Myth" \$1,500.
- Large Grants Project, Wildlife Preservation Fund, Illinois Department of Natural Resources; 2007—"Demographic and genetic evidence to determine the rarity status of wild blue larkspur (*Delphinium carolinianum*) in Illinois" \$14,487.
- New Faculty Research Award, Augustana College; 2007—"Using AFLP markers to test the hybrid origin of gypsum-loving larkspur" \$4,000.
- Faculty Research Fund, Augustana College; 2007—"What is the distribution and abundance of wild blue larkspur in Illinois?" \$1,800.

## Peer-Reviewed Publications

- Vanderplank S, O'Connor K, **Koontz J**, Munson B, Lawson D, and Rice J. 2022. Conservation assessment for *Delphinium variegatum* subsp. *kinkiense* (San Clemente Island larkspur, Ranunculaceae). California Botanic Garden Occasional Publications No. 20. 54 pages.
- Zangori L and **Koontz JA**. 2017. Supporting upper-level undergraduate students in building a systems perspective in a botany course. *Journal of Biological Education* 51(4): 399–411
- Zaya DN, Molano-Flores B, Feist MA, **Koontz JA**, Coons J. 2017. Assessing genetic diversity for the USA endemic carnivorous plant *Pinguicula ionantha* R.K. Godfrey (Lentibulariaceae). *Conservation Genetics* 18(1): 171-180.
- Bryant B\*, Eyler B\*, Johnsrud S\*, **Koontz J**. 2012. Genetic variation in the Illinois-threatened hill prairie larkspur. *Proceedings of the 22<sup>nd</sup> North American Prairie Conference*: 96-100. \*Augustana student authors.
- Fuhr S, Douglas K, **Koontz J**, Scott L, Wegman-Geedey D. 2012. Using scientific process (as defined by the inquiry wheel) to guide multi-session inquiry-based laboratory experiences in the biology major. *Proceedings of the Association for Biology Laboratory Education* 33: 251-258.
- Koontz JA**, Warnock MJ. 2012. *Delphinium*, pp. 1136-1143 *In* The Jepson Manual, 2<sup>nd</sup> ed, Baldwin B et al. [eds]. California: Berkeley.
- Koontz JA**, Warnock MJ, Wilken DH. 2012. *Consolida*, p. 1136 *In* The Jepson Manual, 2<sup>nd</sup> ed, Baldwin B et al. [eds]. California: Berkeley.
- Koontz JA**, Lundberg J, Soltis DE. 2007. Rousseeaceae, pp. 611-613 *In* The Families and Genera of Vascular Plants, K. Kubitzki [ed.], vol. VIII, Flowering Plants, Eudicots, Asterales, J. W. Kadereit and C. Jeffrey [eds.]. Springer: Berlin.

Scott LM, Molano-Flores B, **Koontz JA**. 2007. Genetic variation and cross pollination potential in the USFS regional forester's sensitive species *Rudbeckia fulgida* var. *sullivantii* (Asteraceae) and its cultivar. Transactions of the Illinois Academy of Science 100: 129-144.

Molano-Flores B, **Koontz JA**, Feist MA. 2007. Genetic diversity of the threatened species *Agalinis auriculata* (Orobanchaceae) and two congeners using RAPD and allozyme markers. American Midland Naturalist 158: 279-291

Molano-Flores B, **Koontz JA**, Feist MA. 2007. Seed germination in the Illinois-threatened *Agalinis auriculata* (Michx.) Blake (Orobanchaceae). Castanea 72: 116-118

**Koontz JA**, Soltis PS, Soltis DE. 2004. Using phylogeny reconstruction to test hypotheses of hybrid origin in *Delphinium* section *Diedropetala* (Ranunculaceae). Systematic Botany 29: 345-357.

**Koontz JA**, Soltis PS, Brunsfeld SJ. 2001. Genetic diversity and tests of the hybrid origin of the endangered yellow larkspur. Conservation Biology 15: 1608-1618.

**Koontz JA** and Soltis PS. 2001. Polyploidy and segregation analyses in *Delphinium gypsophilum* (Ranunculaceae). Madroño 48: 90-97.

Soltis DE, Kuzoff RK, Mort ME, Zanis M, Fishbein M, Hufford L, **Koontz J**, Arroyo MK. 2001. Elucidating deep-level phylogenetic relationships in Saxifragaceae using sequences for six chloroplastic and nuclear DNA regions. Annals of the Missouri Botanical Garden 88: 669-693.

**Koontz JA** and Soltis SE. 1999. DNA sequence data reveal polyphyly of Brexioidae (Brexioideae; Saxifragaceae sensu lato). Plant Systematics and Evolution 219: 199-208.

Brubaker CL, **Koontz JA**, Wendel JF. 1993. Bidirectional cytoplasmic and nuclear introgression in the New World cottons, *Gossypium barbadense* and *G. hirsutum* (Malvaceae). American Journal of Botany 80: 1203-1208.

### **Other Publications (since 2007)**

Primer S, Molano-Flores B, Coons J, Annis J, O'Brien J, **Koontz J**. 2013. Conservation and management of a rare carnivorous plant, *Pinguicula ionantha*, in the Florida Panhandle. Illinois Natural History Survey Reports 409 (Winter): 1 and 8.

Koontz JA. 2007. Book Review: Flowers: How They Changed the World. Systematic Botany 32: 701-702.

### **Papers in Preparation**

Koontz JA. 2022 (anticipated). Field guide to southern California Larkspurs (*Delphinium*). Crossosoma. *Accepted pending revisions. Revisions submitted 15 July 2022.*

### **Papers Presented (since 2007)**

Parsley KM, Sabel JL, Zangori L, **Koontz J**. 2019. A mixed-methods evaluation of plant blindness and botanical literacy in an undergraduate botany course. 92<sup>nd</sup> Annual National Association for Research in Science Teaching (NARST) International Conference, Baltimore, MD.

Zangori L and **Koontz JA**. 2015. Integrating ecology in an undergraduate botany course. National Association of Biology Teachers Professional Development Conference, Providence, RI. Abstracts for this meeting are peer-reviewed.

Bryant B\*, Eyley B\*, Johnsrud S\*, **Koontz J**. 2010. Genetic variation in the Illinois-threatened hill prairie larkspur. 22<sup>nd</sup> North American Prairie Conference, Cedar Falls, IA. \*Augustana student author

Badtke L\*, Linscott T, **Koontz J**. 2007. Using AFLPs for genetic analyses of the rare oconee bell (*Shortia galacifolia*). Botany 2007, Chicago, IL. \*Augustana student author

**Koontz JA** and Segraves KA. 2007. AFLP data refute hypothesis of hybrid speciation in *Delphinium*. Botany 2007, Chicago, IL.

### Posters Presented (since 2007) \**Augustana student author*

Lundborg P\*, Schlabowske H\*, **Koontz J.** 2022. Assessment of the negative role garlic mustard has on urban forest diversity. Annual meeting of the Mississippi River Research Consortium, Lacrosse, WI.  
<https://digitalcommons.augustana.edu/umcindependent/6>

Schlabowske H\*, Lundborg P\*, **Koontz J.**, and Reisner M. 2022. Assessment of the negative role amur honeysuckle has on urban forest diversity. Annual meeting of the Mississippi River Research Consortium, LaCrosse, WI.  
<https://digitalcommons.augustana.edu/umcindependent/4>

Parsley KM, Sabel JL, Zangori L, **Koontz J.** 2018. A mixed-methods evaluation of plant blindness and botanical literacy in undergraduate botany students. Society for the Advancement of Biology Education Research (SABER) annual conference, Twin Cities, MN.

Parsley KM, Sabel JL, Zangori L, **Koontz J.** 2018. A mixed-methods evaluation of plant blindness and botanical literacy in undergraduate botany students. National Association of Biology Teachers (NABT) Professional Development Conference, San Diego, CA. Abstracts for this meeting are peer-reviewed.

Zangori L. and **Koontz J.** 2016. Supporting upper-level undergraduate students in building a systems perspective within a botany course. 2016 annual meeting of Modeling and Model-Based Reasoning in STEM, Purdue University, West Lafayette, IN.

Eyler EA\* and **Koontz JA.** 2009. A threatened existence: a tale of the Illinois hill prairie larkspur. Illinois State Academy of Science Meeting, Edwardsville, IL.

### Invited Seminars (since 2007)

Koontz JA. 2019. Larkspur lunacy: daft devotion to *Delphinium* in Illinois and California. Department of Botany, San Diego Natural History Museum. April 19.

Koontz JA. 2017. How to do biology research at a small college: examples of conservation and SoTL. Department of Biology, Western Illinois University, Macomb. February 22.

Koontz JA. 2015. Conservation biology in larkspurs (*Delphinium*; Ranunculaceae): examples from Illinois and California. Department of Biology, University of South Dakota. February 23.

Koontz JA. 2008. *Delphinium* ID: Why a good key is hard to find. 32<sup>nd</sup> Annual Southern California Botanists Symposium, California State University, Fullerton. October 18.

### Service

#### *Augustana College*

AAUP Chapter, President (2021-present); Phi Beta Kappa, Zeta of Illinois, President (2019-present); New Faculty mentor to Olivia Melton (Accounting; 2018-19) Augustan Future Initiatives Think Tank (by Presidential invitation) 2015-17; Environmental Studies Advisory Board (2015-present); Faculty Leadership Academy (2015-17); Field Stations Advisory Board (2016-present); Pre-Medicine Advisory Board (2014-17); General Education Committee (2010-11); Women's and Gender Studies Program Advisory Board (2009-10); New Faculty mentor to Paul Croll (Sociology; 2008-09); Teagle Capstone Assessment Committee (2008-12); Faculty Senate (2006-09, 2011-13; Steering Committee, representing Assistant Professor Rank 2007-08, Associate Professor Rank 2010-11); Global Affect, Faculty Advisor (2005-11); Student Publications Board (2005-07); Library/Bookstore Committee (2005-09; Chair 2007-09); Landscape Taskforce (2005-07); Project Kaleidoscope (PKAL) Leadership Initiative (2004-06); Faculty mentor for United Board for Christian Higher Education in Asia Scholars (Dr. Rachel Daniel, India) 2004-05.

#### *Community*

Friends of Hauberg Civic Center (Board Secretary, 2016-19; volunteer 2016-present); Quad City Botanical Center Education Committee (2009-14); State-Wide Illinois Master Naturalist Advisory Committee, University of Illinois Extension (2006-07); State-Wide Illinois Master Naturalist Partnering Agencies Subcommittee, University of Illinois Extension (2007-11), Master Naturalist Advisory Committee, University of Illinois Extension-Rock Island County (2005-11); Grand Prairie Friends Board of Directors (2002-04; President, 2004)

### *Professional*

Associate Editor, systematics, *Erigenia* (peer-reviewed journal of the IL Native Plant Society; 2017-present). Society of Conservation Biology's Ecology Footprint Committee (2010-present); Manuscript reviewer for: *American Journal of Botany*, *Biodiversity and Conservation*, *Canadian Journal of Botany*, *Castanea*, *International Journal of Plant Sciences*, *Molecular Phylogeny and Evolution*, *Natural Areas Journal*, *New Phytologist*, *Novon*, *Rhodora*, *Systematic Botany*, and *Western North American Naturalist*

External Co-Evaluator (with Deb Tobiason, Carthage College) for Luther College's Biology Department's Program Review, Spring 2017

### **Graduate Students (graduation date)**

Fengjie Sun, Ph.D. 2003. Plant Biology, University of Illinois at Urbana-Champaign. Served on graduate committee.

Lynne (Elrick) Scott, M.S. 2005. Natural Resources and Environmental Sciences, University of Illinois at Urbana-Champaign. Co-Advisor with Brenda Molano-Flores.

Eloisa Lasso, Ph.D. 2008. Program in Ecology and Evolutionary Biology, University of Illinois at Urbana-Champaign. Served on preliminary exam committee.

### **Undergraduate Research Students (graduation date) and project(s)**

Ashley Hagemann. 2006. Developing and testing the utility of ISSR markers in Baker's larkspur.

Andrea Gschwend. 2006. Developing AFLP makers in Baker's larkspur (recipient of a 2005-2006 Biology Club Undergraduate Research Grant)

Laura Badtke. 2007. Developing AFLP makers in Baker's larkspur (recipient of a 2005-2006 Berntsen Student Research Award). Genetic Diversity analysis of the rare Oconee Bell using AFLP markers (recipient of a 2006-2007 Hill-Erickson Student Research Grant).

Jonathan Seyfert. 2009. Using STRUCTURE to analyze AFLP data.

Elizabeth Eyler. 2009. Demography and genetic variation in hill prairie larkspur.

Jayne Krippel. 2011. Demography and genetic variation in hill prairie larkspur.

Stefan Johnsrud. 2010. Demography and genetic variation in hill prairie larkspur.

Brooke Bryant. 2011. Demography and genetic variation in hill prairie larkspur.

### **Honors Projects (LS330) mentored**

Laura Badtke. 2007. The fight to be seen and heard: A biological and cultural investigation of the discriminatory medicalization of the dwarf and deaf communities.