

CURRICULUM VITAE

Joseph Raymond Coelho

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Education

1984. B.S. Biology. University of California, Riverside
1989. Ph.D. Environmental, Population and Organismic Biology. University of Colorado, Boulder.

Professional Organizations

Entomological Society of America
International Society of Hymenopterists
Kansas Entomological Society

Publications

Manard, K.D. and J.R. Coelho. 2018. Insects in folk music. American Entomologist 64: in review.

Coelho, J.R., C.W. Holliday, J.M. Hastings and C.M. Phillips. 2016. Thermal biology of Pacific cicada killers, *Sphecius convallis* Patton, in the upper Sonoran desert. Journal of Thermal Biology 57:101–109.

Cooley, J.R., D.C. Marshall, A.F. Richards, R.D. Alexander, M.D. Irwin, J.R. Coelho & C. Simon. 2013. The distribution of periodical cicada Brood III in 1997, with special emphasis on Illinois (Hemiptera: *Magicicada* spp.). American Entomologist 59:9-14.

Coelho, J.R., J.M. Hastings and C.W. Holliday. 2012. Near-optimal foraging in the Pacific cicada killer *Sphecius convallis* Patton (Hymenoptera: Crabronidae). Insects 3(1):133-140.

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- Coelho, J.R., C.W. Holliday and J.M. Hastings. 2011. The geographic distributions of cicada killers (*Sphecius*; Hymenoptera, Crabronidae) in the Americas. *The Open Entomology Journal* 5:31-38.
- Coelho, J.R. 2011. Noninsect arthropods in popular music. *Insects* 2(2):253-263.
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- Hastings, J.M., C.W. Holliday, and J.R. Coelho. 2008. Body size relationship between *Sphecius speciosus* (Hymenoptera: Crabronidae) and their prey: prey size determines wasp size. *Florida Entomologist* 91(4):657-663.
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- Hastings, J.M., P. J. Schultheis, M.K. Whitson, C.W. Holliday, J.R. Coelho, and A.M. Mendell. 2008. DNA Barcoding of New World Cicada Killers (Hymenoptera: Crabronidae). *ZooTaxa* 1713:27-28.
- Coelho, J.R., J.M. Hastings, C.W. Holliday, and A.M. Mendell. 2008. Load carriage during foraging in two species of solitary wasps. *Journal of Hymenoptera Research* 17(1):57-63.
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- Coelho, J.R. 2006. Abraham Merritt's *The Drone*: a forgotten classic of entomological fantasy. American Entomologist 52(2):70-71.
- Coelho, J.R. 2004. Insects in rock and roll cover art. American Entomologist 50(3):142-151.
- Coelho, J.R. 2003. Thorax temperature and honey-crop load of honey bee undertakers as potential constraints on task performance. Ex Scientia 9:16-25.
- Coelho, J.R. 2002. Spurred on to greater depths. Natural History 111(6):20-22
- Coelho, J.R. 2002. Living the Sporting Life: Adventures and Misadventures in the Outdoors. eBookMall.com, 101 pp.
- Coelho, J.R. 2001. The natural history and ecology of antlions (Neuroptera: Myrmeleontidae). Ex Scientia 7:3-12.
- Coelho, J.R. and C.W. Holliday. 2001. Effects of size and flight performance on intermale mate competition in the cicada killer, *Sphecius speciosus* Drury (Hymenoptera: Sphecidae). Journal of Insect Behavior 14(3):345-351.
- Coelho, J.R. 2001. Behavioral and physiological thermoregulation in male cicada killers (*Sphecius speciosus*) during territorial behavior. Journal of Thermal Biology 26(2):109-116.
- Edgar, P.K. and J.R. Coelho. 2000. Load-lifting constraints on provisioning and nest building in the carpenter wasp, *Monobia quadridens* L. (Hymenoptera: Eumenidae). Journal of Hymenoptera Research 9(2):370-376.
- Coelho, J.R. 2000. Insects in rock and roll music. American Entomologist 46(3):186-200.
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- Carter, P., J.B. Mitton, T.D. Kocher, and J.R. Coelho. 2000. Maintenance of the ADH polymorphism in tiger salamanders II. Differences in biochemical function among allozymes. Functional Ecology 14(1):70-76.
- Coelho, J.R. and L.D. LaDage. 1999. Foraging capacity of the great golden digger wasp, *Sphex ichneumoneus* L. Ecological Entomology 24:480-483.

- Coelho, J.R. 1999. Body temperature and flight muscle ratio in the burrowing mayfly, *Hexagenia bilineata*. Journal of Freshwater Ecology 14(3):337-341.
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- Coelho, J.R. 1998. An acoustical and physiological analysis of buzzing in cicada killer wasps (*Sphecius speciosus*). Journal of Comparative Physiology A 183 (6):745-751.
- Coelho, J.R. 1997. Sexual size dimorphism and flight behavior in cicada killers (*Sphecius speciosus*). Oikos 79:371-375.
- Meehan, R. and Coelho, J.R. 1997. Instructor's manual and test item file to accompany *Life* 3rd ed by R. Lewis. WCB McGraw Hill, Dubuque, Iowa, 327 pp.
- Coelho, J.R. 1996. The flight characteristics of drones in relation to mating. BeeScience 4(1):21-25.
- Coelho, J.R. and A.J. Ross. 1996. Body temperature and thermoregulation in two species of yellowjackets, *Vespula germanica* and *V. maculifrons*. Journal of Comparative Physiology B: Biochemical, Systemic, and Environmental Physiology 166(1):68-76.
- Coelho, J.R., and J. Hoagland. 1995. Load-lifting capacity and foraging of three species of yellowjackets (*Vespula*) on honey-bee corpses. Functional Ecology 9:171-174.
- Ross, A.J., and J.R. Coelho. 1995. The effect of thorax temperature on flight speed in honey bee drones (*Apis mellifera*). Pages 987-991 in Proceedings of the Undergraduate Research Conference. Volume III (Robert D. Yearout, ed.). University of North Carolina at Asheville, 1149 pp.
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Coelho, J.R. 1991. The effect of thorax temperature on force production during tethered flight in honeybee (*Apis mellifera*) drones, workers, and queens. *Physiological Zoology* 64(3):823-835.

Coelho, J.R. 1991. Heat transfer and body temperature in honey bee drones and workers (Hymenoptera: Apidae). *Environmental Entomology* 20(6):1627-1635.

Snyder, G.K., J.R. Coelho, and D. R. Jensen. 1991. Body temperature regulation and oxygen consumption in young chicks fed thyroid hormone. *Canadian Journal of Zoology* 69:1842-1847.

Snyder, G.K. and J.R. Coelho. 1989. Microvascular development in chick anterior latissimus dorsi following hypertrophy. *Journal of Anatomy* 162:215-224.

Coelho, J.R. and A.J. Moore. 1989. Allometry of resting metabolic rate in cockroaches. *Comparative Biochemistry and Physiology* 94A(4):587-590.

Coelho, J.R. and J.B. Mitton. 1988. Oxygen consumption during hovering is associated with genetic variation of enzymes in honeybees. *Functional Ecology* 2:141-146.

Grants

2009. Illinois Rain Garden Initiative. \$500.

Recent Presentations

2016. "Insects in fireworks." International Congress of Entomology, Orlando, FL.

2013. "Theft of prey cicadas from Pacific cicada killers (*Sphecius convallis* Patton) by birds." Entomological Society of America National Meeting, Austin, TX.

Professional Experience

2015 - present. Professor. Biology Program, Quincy University, Quincy, IL

2008 - 2015. Associate Professor. Biology Program, Quincy University, Quincy, IL

2004 - 2008. Assistant Professor. Biology Program, Quincy University, Quincy, IL

2001 - 2004. Associate Professor and Chair. Dept. of Biology, Culver-Stockton College.

1999 - 2001. Assistant Professor. Dept. of Biology, Culver-Stockton College, Canton, MO.

1993 - 1999. Assistant Professor. Dept. of Biological Sciences, Western Illinois University, Macomb, IL

1990 - 1993. Assistant Professor. Dept. of Biology, Marian College, Indianapolis, IN.