

BRETT W. BENZ

Division of Ornithology

University of Michigan Museum of Zoology

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Education

Ph.D. with honors, Ecology and Evolutionary Biology, University of Kansas, 2011.

Dissertation: Deciphering the evolutionary history of the montane New Guinea avifauna:
Comparative phylogeography and insights from paleodistributional
modeling in a dynamic landscape.

B.S., Biology, University of Kansas, 1999.

Professional Experience and Appointments

2019 – Present	Collection Manager. Division of Ornithology. University of Michigan Museum of Zoology.
2017 – Present	Research Associate. Department of Ornithology. American Museum of Natural History.
2014 – 2016	Curatorial Associate. Division of Vertebrate Zoology. American Museum of Natural History.
2012 – 2014	Chapman Postdoctoral Fellow. Department of Ornithology. American Museum of Natural History.
2011 – 2012	Ornithology Field Course Instructor for the Papua New Guinea Institute of Biological Research.
2009 – 2010	Teaching Assistant, University of Kansas, Introductory Biology.
2007 – 2009	Research Assistant, University of Kansas, NSF EPSCOR grant: Understanding and Forecasting the Ecological Consequences of Environmental Changes, (EPS-05553722) to Krishtalka, L., Peterson, A.T., and others.
2006 – 2007	Teaching Assistant, University of Kansas, Introductory Biology.
2004 – 2006	Research Assistant, University of Kansas, U.S. Department of Defense grant: Bioterrorism Risk Analysis, to Peterson, A.T. and others.
2000 – 2003	Curatorial Assistant, University of Kansas, Department of Ornithology.

Grants and Fellowships

2014 – 2015	Explore21 Grant—Biodiversity survey of the New Guinea highlands (\$81,850)
2007 – 2008	Wildlife Conservation Society Research Fellowship (\$20,995)
2006 – 2008	KUNHM Panorama Grant (\$2300)
2001 – 2002	Rudkin Research Grant (\$4935)

Peer Reviewed Publications

- Oliveros, C. H., Field, D.J., Ksepka, D.T., Barker, F.K., Alexio, A., Andersen, M.J., Alstrom, P., **Benz, B.W.**, Braun, E.L., Braun, M.J. & 22 additional authors. Earth history and the passerine superradiation. *PNAS*. 116(16) 7916-7925. doi:10.1073/pnas1813206116.
- Prost, S., Armstrong, E., Nylander, J., Thomas, G. WC., Suh, A., Petersen, B., Dalen, L., **Benz, B.W.**, Blom, M.PK., Palkopoulou, E., Ericson, P.GP., & Irestedt, M. (2019) Comparative analyses identify genomic features potentially involved in the evolution of birds-of-paradise. *GigaScience*. doi:10.1093/gigascience/giz 003/-5300102.
- Moyle, R.G., Oliveros, C.H., Anderson, M.J., Hosner, P.A., **Benz, B.W.**, Manthey, J.D., Travers, S.L., Brown, R.M., & Faircloth, B.C. (2016) Tectonic collision and uplift of Wallacea triggered the global songbird radiation. *Nature Communications*. 7:12709 doi: 10.1038/ncomms12709.
- **Benz, B.W.**, Robbins, M.B., & Zimmer, K.J. (2015) Phylogenetic relationships of the Helmeted Woodpecker (*Dryocopus galeatus*): A case of interspecific mimicry? *The Auk*. 132: 938-950.
- **Benz, B.W.** & Robbins, M.B. (2011) Molecular phylogenetics, vocalizations, and species limits in Celeus woodpeckers. *Molecular Phylogenetics and Evolution*. 60: 29-44.
- Robbins, M.B., **Benz, B.W.**, Nyari, A.S., & Papes, M. (2010) Survey of riparian bird species along the Buffalo National River, Arkansas May/June 2006. *Bluebird*. 78:136-140.
- Robbins, M.B., Nyari, A.S., Papes, M., **Benz, B.W.**, & Barber, B.R. (2010) River-based surveys for assessing riparian bird populations: Cerulean Warbler as a test case. *Southeastern Naturalist*. 9(1): 95-104.
- Jonsson, K.A., Bowie, R.C.K., Moyle, R.G., Christidis, L., Norman, J.A., **Benz, B.W.**, & Fjeldsa, J. (2010) Historical biogeography of an Indo-Pacific passerine bird family (Pachycephalidae): different colonization patterns in the Indonesian and Melanesian archipelagos. *Journal of Biogeography*. 37(2) 245-257.
- Robbins, M.B., Nyari, A.S., Papes, M., & **Benz, B.W.** (2009) Song rates, mating status, and territory size of Cerulean Warblers in Missouri Ozark riparian forest. *The Wilson Journal of Ornithology*. 121 (2): 283-289.
- Nyari, A.S., **Benz, B.W.**, Jonsson, K.A., Fjeldsa, J., & Moyle, R.G. (2009) Phylogenetic relationships of fantails (Aves: Rhipiduridae). *Zoologica Scripta*. 38 (6): 553-561.
- Boyd, R.L., Nyári, Á.S., Benz, B.W., & Chen, G. (2008) Aves, province of Guizhou, China. Check List. 4(2):107-114.
- Peterson, A.T., **Benz, B.W.**, & Papeş, M. (2007) Entry pathways for highly pathogenic H5N1 avian influenza into North America via bird migration. *PLoS ONE*. 2(2): e261. doi:10.1371/journal.pone.0000261
- Pramuk, J.B., Grose, M.J., Clarke, A.L., Greenbaum, E., Bonaccorso, E., Guayasamin, J.M., Smith-Pardo, A.H., **Benz, B.W.**, Harris, B.R., Siegfried, E., Reid, Y.R., Holcroft-Benson, N., & Wiley, E.O. (2007) Phylogeny of finescale shiners of the genus *Lythrurus* (Cypriniformes: Cyprinidae) inferred from four mitochondrial genes. *Molecular Phylogenetics and Evolution*. 42: 247–297.
- **Benz, B.W.**, Robbins, M.B. & Peterson, A.T. (2006) Evolutionary history of woodpeckers

and allies (Aves: Picidae): Placing key taxa on the phylogenetic tree. Molecular Phylogenetics and Evolution. 40: 389-399.

- Benz, B.W. & Martin, C.E. (2006) Foliar trichomes, boundary layers, and gas exchange in 12 species of epiphytic Tillandsia (Bromeliaceae). Journal of Plant Phys. 163: 648-656.
- Kamal, I.M., Papes, M., Williams, R., Benz, B.W., & Peterson, A.T. (2006) Global invasive potential of ten parasitic witchweeds and related Orobanchaceae. AMBIO. 35(5): 1-10.
- Komar, O., Robbins, M.B., Guzman Contreras, G., Benz, B.W., Klenk, K., Blitvich, B.J., Marlenee, N.L., Burkhalter, K.L., Beckett, S., Gonzalvez, G., Pena, C.J., Peterson, A.T., & Komar, N. (2005) West Nile Virus survey of birds and mosquitoes in the Dominican Republic. Vector-Borne and Zoonotic Diseases. 5:120-126.
- Komar, O., Benz, B.W., & Chen, G. (2005) Late summer ornithological Inventories of Mt. Shunhuang and Mt. Dawei in Hunan, China. Zoological Research. 26 (1): 31-39.
- Komar, O., Benz, B.W., & Chen, G. (2004) Notes on Elliot's Pheasant *Syrmaticus ellioti*, Streak-breasted Scimitar Babbler *Pomatorhinus ruficollis*, and Mountain Scops Owl *Otus pilocephalus* from Hunan, China. Forktail. (20) 90-92.
- Rojas-Soto, O.R., Garcia-Rojo, E.A., Sanchez-Gonzalez, L.A., Lapez de Aquino, S.A., Liebig-Fossas, I., Puebla-Olivares, F., Navarro, A.G., & Benz, B.W. (2004) Noteworthy Avifaunal Records from the Baja California Peninsula, Mexico. Western Birds. 35(4): 215- 218.
- Robbins, M.B., Barber, B.R., & Benz, B.W. (2001) Breeding birds of northeastern Missouri. Bluebird. 68: 7-21.
- Watson, D.M., & Benz, B.W. (1999) The Paint-billed Crake breeding in Costa Rica. Wilson Bulletin. 111(3): 422-424.

Select Research Presentations

- Benz, B.W., & Moyle, R.G. (2016) Phylogenetic relationships of myzomelid honeyeaters reveal contrasting patterns of diversification in Australasia. National American Ornithology Conference. August. Oral.
- Benz, B.W. (2014) Evolution of interspecific social dominance mimicry in Atlantic Forest woodpeckers. Division of Zoology. American Museum of Natural History. Oral.
- Benz, B.W. (2013) Deciphering the evolutionary history of the montane New Guinea avifauna:Comparative phylogeography and insights from paleodistributional modeling in a dynamic landscape. National meeting of the American Ornithologists' Union, Chicago, IL, August. Oral.
- Benz, B.W. (2009) Phylogeography, courtship ethology, and species limits in the Macgregor's Bowerbird Complex (*Ptilonorhynchidae: Amblyornis macgregoriae*); National meeting of the American Ornithologists' Union, Philadelphia, PA, August. Oral.
- Benz, B.W. & Robbins, M.B. (2007) Molecular phylogenetics and species limits in Celeus woodpeckers; National meeting of the American Ornithologists' Union, Laramie, Wyoming. August. Poster.
- Benz, B.W., Robbins, M.B., & Peterson, A.T. (2007) Pleistocene and contemporary biogeography of *Chordeiles minor* (Aves: Caprimulgidae). EPSCOR conference, Kansas State University. Poster.

- **Benz, B.W.**, Robbins, M.B., & Peterson, A.T. (2005) Molecular phylogenetics and historical biogeography of the piculets (Picumninae: Picidae). National meeting of the American Ornithologists' Union, Santa Barbara, California, August. Oral.

Select Invited Presentations

- **Benz, B.W.**, Sweet, P.R., & Raxworthy, C.J. (2015) Biological Exploration of the New Guinea Highlands. SciCafe. American Museum of Natural History.
- **Benz, B.W.** (2012) The art of courtship: A glimpse into the lives of New Guinea's bowerbirds and birds of paradise. Columbia University.
- **Benz, B.W.** (2009) Comparative phylogeography reveals disparate patterns of avian diversification across the New Guinea highlands. Kansas State University.
- **Benz, B.W.** (2004) Ornithological Exploration in Papua New Guinea. Kansas City Audubon Society.

Select Contributed Talks and Posters

- American Ornithological Society Meeting—Tucson, Arizona; 2018
- Conference of the International Biogeography Society—Tucson, Arizona; 2017
- Society of Systematic Biologists Meeting—Baton Rouge, Louisiana; 2017
- North American Ornithological Conference—Washington, DC; 2016.

Fieldwork Experience

Papua New Guinea: Biodiversity inventories and behavioral research on bowerbirds (2001, '02, '03, '06, '07, '08, '09, '11, '12, '14; '17, '18; 28.5 months in total).

Indonesia: Behavioral research on *Amblyornis* bowerbirds in West Papua Province (2008; 1 month).

China: Biodiversity inventories & H5N1 avian flu surveys in Hunan & Guizhou Province (2002, 2006; 3.5 months).

Dominican Republic: Biodiversity inventories & West Nile virus surveys, Rio Chacuey & Sierra Bahoruco (2003; 1 month).

Guyana: Barima River and Kaieteur Falls avifaunal inventories (2002; 1.5 months).

Mexico: Baja Peninsula bird surveys (2001; 1 month).

Missouri Ozarks: Cerulean Warbler Surveys (June 2001, '02, '03, '04, '05, '06, '07; 2 months).

Costa Rica: Avifaunal inventories (1995, '96, '97, '98; 4 months).

Professional Society Memberships

- American Ornithological Society
- Society of Systematic Biologists

Journal Referee

- Journal of Biogeography • The AUK: Ornithological Advances • Evolution
- Molecular Phylogenetics and Evolution • Folia Zoologica • Tropical Conservation Science
- Bulletin of the British Ornithologist's Club • Zootaxa • PeerJ

Select Popular Accounts of Research

- The Guardian. "Why you can thank geology for your morning songbird chorus." Published online, October 19, 2016, by Hanneke Meijer.
- Australian Geographic. "The world's songbirds island-hopped out of Australia." Published online, August 31, 2016, by Karl Gruber.
- Audubon Magazine. "A Woodpecker Disguised as...Another Woodpecker?" Published online August 17, 2015, by Elizabeth Deatrick.
- Science Daily. "Deceptive Woodpecker uses mimicry to avoid competition." Published online August 11, 2015.
- National Geographic. "Build it and they will come." Published online and in print July 2010, by Virginia Morell and Tim Laman.
- Kansas Alumni Magazine. "Peril in Paradise." Published in print March, 2007, by Chris Lazzarino.