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Source: The Auk, 135(1) : 165-166

Published By: American Ornithological Society

URL: https://doi.org/10.1642/AUK-17-167.1

The Auk
Ornithological Advances
AmericanOrnithology.org

Volume 135, 2018, pp. 165–166
DOI: 10.1642/AUK-17-167.1

EARLY PROFESSIONAL AWARDS

Ned K. Johnson Young Investigator Award 2017, to Michael Butler

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Published December 27, 2017

The American Ornithological Society (AOS) bestows the Ned K. Johnson Young Investigator Award to recognize outstanding and promising work by a researcher early in his or her career (up to five years post-Ph.D.) in any field of ornithology. The 2017 award is given to Dr. Michael Butler.

The award recognizes work described in Mike's paper "Physiological underpinnings of avian ecology," presented at the AOS Annual Meeting. The abstract reads: "Some of the most important breakthroughs in ornithology occur when scientists from different disciplines tackle phenomena from multiple vantage points. Here, I explore how ecological factors such as activity patterns, foraging, sexual selection, and signaling are informed by examining physiological processes. Specifically, I examine how variation in circulating nutrient levels, immune response, and oxidative physiology contributes to our understanding of behavioral ecology and other ecological patterns. For example, female mallards that circulate higher levels of antioxidants lay eggs with shells that are more chromatic, and these more colorful eggs contain more antioxidant-rich yolks, suggesting a signaling role for eggshell coloration. However, I also address a challenge experienced by many eco-physiologists; physiological data are frequently difficult to interpret and sometimes produce counter-intuitive conclusions. For example, in work with European starlings, I found that more chromatic eggshells were associated with yolks that were actually less antioxidant-rich, a result in direct opposition to my work with mallards. To reconcile these and other such seemingly contradictory results, I explore the concept of hormesis, which provides a compelling framework for interpreting many such discrepancies. A hormetic approach posits that small challenges confer a net fitness benefit relative not only to high-intensity stressors, but also relative to no stressor at all. After examining multiple data sets, it seems likely that hormesis is a potentially underappreciated phenomenon, and I explore several avenues for future investigation."

Michael Butler

Mike is currently an assistant professor at Lafayette College in Easton, Pennsylvania. He received his B.A. in biology and physics from Bowdoin College (2002), working heavily with Amy Johnson and Nat Wheelwright; his M.S. in raptor biology from Boise State University (2006), supervised by Al Dufty, Jr.; and his Ph.D. in biology from Arizona State University (2012), supervised by Kevin McGraw. His research efforts fall into a wide

range of categories, including biomechanics, ecoimmunology, physiology, and behavioral ecology, driven by an underlying research interest in examining how animals meet challenges posed by the environment. To investigate these topics, Mike has performed studies with species as diverse as Mallards, Savannah Sparrows, American Kestrels, Great-tailed Grackles, European Starlings, House Finches, corn snakes, Gila monsters, chameleons, and—on one occasion—sharks. In addition to research, Mike enjoys teaching undergraduates and training the next generation of scientists. Mike has nearly 40 peer-reviewed publications and received the Aaron O. Hoff Superior Teaching Award in 2015.

The Ned K. Johnson Young Investigator Award recognizes work by an ornithologist early in his or her career who shows distinct promise for future leadership in the profession. The award was established in 2006 to honor Ned K. Johnson, a lifelong supporter of the AOU and its former president (1996–1998). The award consists of a framed certificate and an honorarium provided through the endowed Ned K. Johnson Fund of the AOS. To learn more about eligibility, go to http://www.americanornithology.org/content/aos-johnson-award. To read about previous recipients, go to http://www.americanornithology.org/content/aos-johnson-award-recipients.