

# Humanities Seminars Program

## *Natural History and Ecology of the Southwest*

Dr. David N. Byrne

[dbyrne@email.arizona.edu](mailto:dbyrne@email.arizona.edu)

Tuesdays 9:00 a.m. – noon

May 3 – 26, 2016

While many people living in Tucson and its surrounding are experienced outdoor aficionados, most people lack a proper introduction to our near neighbors, even those plants and animals that live in close proximity in our urban environment. Certainly, we can choose to ignore the flora and fauna of our desert community and function reasonably well. Our lives are enriched, however, if we take the time to develop a better understanding of our companion species, perhaps to embrace them. Since ecology is the scientific analysis and study of interactions among organisms and their environment, we will also explore these aspects of their existence. Lectures will explain; some basic biological principles, how deserts are defined, how our deserts align themselves, and how biological organisms connect. Finally, you will be provided with a sampling of information concerning the major taxa.

### **Lecture topics**

- May 3; Introduction, Plants of the Southwest
- May 10; Evolution and Adaptation, Arthropods of the Southwest
- May 17; Arthropods of the Southwest, Fish of the Southwest
- May 24; Reptiles and amphibians of the Southwest
- May 31; Birds, Mammals of the Southwest

Selected readings will be from the following RECOMMENDED TEXT:

Phillips, Steven John and Patricia Wentworth Comus, Eds.

*A Natural History of the Sonoran Desert*. University of California Press, 2015. ISBN-10: 052028

## Supplemental Reading Suggestions

- Beck, D. D. 2005. *Biology of Gila Monsters and Beaded Lizards*. University of California Press, Berkeley, CA, 211 pp.
- Bohin, F, B. Devaux, and A. Dupré. 2006. *Turtles of the World*. The Johns Hopkins University Press, Baltimore, 416 pp.
- Borrer, D. J. 1971. *Dictionary of Word Roots and Combining Forms*. Mayfield Publishing Company, Palo Alto, CA, 134 pp.
- Brown, D. E., 1994. *Biotic Communities: Southwestern United States and Northwestern Mexico*. University of Utah Press, Salt Lake City, UT, 342 pp.
- Cartaino, C. 2011. *Myths and Truth About Coyotes*. Menasha Ridge Press, Birmingham, AL, 189 pp.
- Cowen, R., and J. H. Lipps. 2000. The origin of feathers and the origin of flight in birds. In Cowen, R., *History of Life*, 3rd edition, Chapters 13 and 14. Malden, Mass.: Blackwell Science.
- Coyne, J. A. 2009. *Why Evolution Is True*. Penguin Books, London, 282 pp.
- Dawkins, R. 1989. *The Selfish Gene*. The Oxford University Press. New York, 360 pp.
- Foelix, R. F. *Biology of Spiders*. Oxford University Press, London, 419 pp.
- Greene, H. 2000. *Snakes: the Evolution of Mystery in Nature*. University of California Press, Berkeley, CA, 351 pp.
- Jones, L. L. C. and R. E. Lovich (eds.) *Lizards of the American Southwest*. Rio Nuevo Press, Tucson, AZ, 567 pp.
- Kavanagh, J. 2014. *The Nature of Arizona: An Introduction to Familiar Plants, Animals & Outstanding Natural Attractions*. Waterford Press Inc., Christchurch, NZ, 173 pp.
- Klauber, L. M. 1982. *Rattlesnakes: Their Habits, Life Histories, and Influence on Mankind*, University of California Press, Berkeley, CA, 350 pp.
- Manaster, J., 2006. *Javelinas: Collared Peccaries of the Southwest*. Texas Tech University Press, Lubbock. 85 pp.
- Richardson, P. 2002. *Bats*. Smithsonian Institution Press, Washington, DC, 112 pp.
- Sherbrooke, W. C. 2003. *Introduction to Horned Lizards of North America*. University of California Press, Berkeley, CA. 177 pp.
- Smith, R. L. 1982. *Venomous Animals of Arizona*. University of Arizona, Cooperative Extension, Tucson, AZ, 134 pp.
- Stanley, D. G., S. P. D. Riley, and B. L. Cypher. 2010. *Urban Carnivores: Ecology, Conflict, and Conservation*. The Johns Hopkins University Press, Baltimore, 285 pp.
- Tellman, B. (ed.) 2002. *Invasive Exotic Species in the Sonoran Region*. University of Arizona Press, Tucson, AZ, 424 pp.
- Tilford, T., 2015. *The Complete Book of Hummingbirds*. Thunder Bay Press, San Diego. 192 pp.