

**William H. Karasov**  
**Professor, Department of Wildlife Ecology**

**Academic and Professional History:**

- PhD in Biology at University of California, Los Angeles in 1981; studied nutritional ecology.
- In 1985 joined University of Wisconsin-Madison after 4 years postdoctoral research on digestive physiology at UCLA Medical School.
- National Science Foundation Presidential Young Investigator 1985-1991; Fulbright Award 1997; Leverhulme Trust Visiting Professor at University of Wales, Bangor, United Kingdom 2001.
- International research experience during leaves of absence: Australia (1992), Israel (1997), U.K. (1985, 2002).
- International instructional experience: presented workshops on nutritional ecology and/or ecotoxicology in Israel (1992, 1997; Ben Gurion University), Argentina (1995, 1998; Univ. San Luis), Peoples Republic of China (2000: Kunming Institute of Zoology, Yunnan). Shorter Visiting Lectureships Australia (1996: James Cook University) and United Kingdom (2002; Univ. of Wales).

**Research Focus:** Through my research, I try to foster conceptual and methodological advances in physiology as they relate to animal ecology, evolution, and wildlife conservation and management. Most of my work is on ecological implications of digestion and the impact of naturally occurring and synthetic toxins on wildlife. One goal has been to develop an understanding of the integrated functioning of the gut within an ecological framework. Features of digestive physiology determine the value of food and have the potential to affect foraging behavior, dietary niche, and rates of production of individuals and populations.

**Graduate Training Focus:** Graduate education in my laboratory is multi-disciplinary by virtue of the integrative nature of the research and the participation of the students (22 so far, plus 12 postdoctoral scholars) in five different graduate programs (Wildlife Ecology, Zoology, Molecular and Environmental Toxicology, Nutrition, and Environmental Studies)

**Current Research Support:**

- National Science Foundation – Hydrosoluble nutrient and toxicant absorption by terrestrial vertebrates. PI. \$402,000 (8/01/02-7/31/05).
- U.S. Sea Grant Program - Direct effect of metals on behavior, sexual development, and reproduction of amphibians in Great Lakes ecosystems. PI. \$273,192 (3/01/01 – 2/28/04).
- Hatch/McIntyre-Stennis Research Award: Impact of phytochemicals on intestinal absorption. PI. \$80,400 (10/01/99 – 9/30/03).

**Past Research Support:**

- PI on five consecutive peer-reviewed NSF grants on physiological ecology over last two decades.
- PI on four consecutive peer-reviewed U.S. Sea Grant Program grants on ecotoxicology.
- Other major public/private funding sources: UW-Madison, Great Lakes Protection Fund, Electric Power Research Institute, Rob and Bessie Welder Wildlife Foundation, McGraw Wildlife Foundation, USDA.

**National and International Service**

2002 – current	Editorial Board of <i>Functional Ecology</i>
2000 - current	Editorial Board of <i>The Auk</i>
1998 - 2001	Editorial Board of <i>Physiological and Biochemical Zoology</i>
1995 - 1997	Editorial Board of <i>Ecology</i>
1993 - 2001	Editorial Board of <i>American Journal of Physiology</i>

**Select Publications** (Total since 1981 = 128 excluding published abstracts):

- Chediack, J.G., E. Caviedes-Vidal, W.H. Karasov, and M. Pestchanker. (2001) Passive absorption of hydrophilic carbohydrate probes by the house sparrow *Passer domesticus*. *Journal of Experimental Biology* 204, 723-731.
- McWilliams S. R., W. H. Karasov. (2001) Phenotypic flexibility in digestive system structure and function in migratory birds and its ecological significance. *Comparative Biochemistry and Physiology Part A* 128 579-593.
- Karasov, W.H. and M.W. Meyer (2000) Testing the role of contaminants in depressing avian numbers. *Revista Chilena de Historia Natural* 73:243-252.
- Mangione, A.M., M.D. Dearing, and W.H. Karasov (2000) Interpopulation differences in tolerance to creosote bush resin in desert woodrats (*Neotoma lepida*). *Ecology* 81:2067-2076.
- Karasov, W.H. and I.D. Hume. (1997) Vertebrate gastrointestinal system. Pp. 407-480 *In* Dantzler, W. *Handbook of Comparative Physiology*, Oxford University Press, New York.