

The Ledermann Lectures

The Ledermann Lecture in Natural History and Conservation Biology is a scholarly event held every year to celebrate the memory of Ingeborg and Christoph Ledermann. Chris Ledermann was a prominent New York business leader and headed the West German Chamber of Commerce in New York City. Inge Ledermann was an accomplished journalist and public relations expert. Although New York City was the center of their professional activities, Rhode Island's natural areas were their passion and frequent weekend retreat. The Ledermanns were regular visitors to the Ocean State and avid nature lovers. Chris and Inge spent many weekends scouring our coast, estuaries, forests, and wetlands in search of interesting birds and other wildlife. The time they spent exploring Rhode Island's natural areas was the Ledermanns' way of recharging their batteries required to sustain the fast-paced life in the New York City business world.

To honor the Ledermanns' love for the natural areas of Rhode Island and their passion for protecting the environmental quality of our State, The University of Rhode Island (URI) Department of Natural Resources Science (NRS) has established an annual lecture -- the Ledermann Lecture -- to be given in the Fall of each year. The topic of the lecture will be natural history or conservation of the plants, animals, and ecosystems in Rhode Island or southern New England. The annual lecture is given by a distinguished scholar in ecology or conservation science. The Ledermann Lecture is free and open to the URI community and the general public.



Ingeborg and Christoph Ledermann

The Ledermann Lectures are made possible by a generous endowment from an anonymous donor to the College of the Environment and Life Sciences. The endowment is managed by the University of Rhode Island Foundation. For further information, contact Dr. Peter Paton, Chairman, Department of Natural Resources Science, University of Rhode Island, Kingston, RI 02881. ppaton@uri.edu, www.nrs.uri.edu

2007 LEDERMANN LECTURE IN NATURAL HISTORY AND CONSERVATION BIOLOGY

Metapopulations and Their Application to Wildlife Conservation: A Case Study of the Marbled Salamander in Massachusetts

Dr. Kevin McGarigal

**University of Massachusetts
Amherst**

November 19, 3:00 PM

**Weaver Auditorium
Coastal Institute Kingston
University of Rhode Island**

The 2007 Ledermann Lecture is Co-sponsored by the Department of Natural Resources Science and the CELS Ecology Seminar Series

Dr. McGarigal earned his Ph.D. in the Forest Sciences Department at Oregon State University in 1993, where he studied the relationship



between landscape structure and avian abundance patterns in the Oregon Coast Range. Prior to that he received his M.S. degree from the Fisheries and Wildlife Department at Oregon State University in 1988 where he studied the interactions between humans and bald eagles on the lower Columbia River. Dr. McGarigal is currently a landscape ecologist and professor in the Department of Natural Resources Conservation at the University of Massachusetts, Amherst.

Dr. McGarigal's overall professional goal is to improve our understanding of how landscapes are structured physically and biologically and the agents responsible for those patterns, how these patterns affect the distribution and dynamics of animal populations, how these patterns and processes change over time, and how to apply this information to better manage natural resources over multiple spatial and temporal scales. Accordingly, a major goal of his research program is to provide natural resource managers with information and tools that will enable them to become better stewards of healthy and sustainable ecosystems.

Recent Publications

- Timm, B.C., K. McGarigal, and C.L. Jenkins. (Accepted). Emigration orientation of juvenile pond-breeding amphibians in western Massachusetts. *Copeia*.
- Timm, B. C., K. McGarigal, and B. W. Compton. (In press). Timing of large movement events of pond-breeding amphibians in western Massachusetts, USA. *Biological Conservation*.
- Compton, B.W., K. McGarigal, S.A. Cushman, and L.R. Gamble. (In press). A resistant kernel model of connectivity for vernal pool amphibians. *Conservation Biology*.
- Gamble, L. R., K. McGarigal, C. L. Jenkins, and B. C. Timm. 2006. Limitations of regulated "buffer zones" for the conservation of marbled salamanders. *Wetlands* 26(2):298-306
- McGarigal, K., S. A. Cushman, M. C. Neel, and E. Ene. 2002. FRAGSTATS: Spatial Pattern Analysis Program for Categorical Maps. www.umass.edu/landeco/research/fragstats/fragstats.html

Books

- Leitão, A.B., J. Miller, J. Ahern, and K. McGarigal. 2006. *Measuring Landscapes: A Planners Handbook*. Island Press, Washington, D.C.
- McGarigal, K., S. A. Cushman, and S. G. Stafford. 2000. *Multivariate Statistics for Wildlife and Ecology Research*. Springer-Verlag, New York.

