

**GEORGE MASON UNIVERSITY
COLLEGE OF SCIENCE
BIOLOGY DEPARTMENT SEMINAR
Fall 2014**

David Luther, George Mason University, Biology Department

***“Mangroves: A global perspective on the evolution and conservation of their
terrestrial vertebrates”***

Mangrove ecosystems are found globally along tropical and subtropical coastlines. They exhibit a steep environmental gradient between inland and marine systems, providing a unique, selective environment that shapes local morphological, physiological, and behavioral adaptations. In the first global assessment of terrestrial vertebrate species that are restricted to mangrove ecosystems, we found 69 terrestrial vertebrate species endemic to mangroves, the majority of which are found in Asia and Australia. We also observed convergent evolution for disproportionately larger bill sizes in birds restricted to mangroves compared to their closest inland relatives. Finally we found that more than 34% of assessed mangrove-endemic vertebrates are globally threatened. In the seminar I will discuss the details of the ecology, evolution, and conservation of these mangrove-restricted species.

TUESDAY September 9, 2014

3:00-4:15 PM

Johnson Center Room 334 Meeting Room E

Sponsored by the Biology Department