

# Biology Seminar

---

**Dr. Frank Hailer**

National Zoological Park & National Museum of Natural History  
Smithsonian Institution, Washington, DC

## **Population genetic structure in endangered species and the context of life history: examples from eagles and tropical seabirds**

Many decisions in conservation biology are today benefiting from genetic methods being applied to endangered species. Genetic data can shed light on a variety of different questions. For instance, information from DNA is commonly used to designate species and management units, to detect and prevent inbreeding depression, and to expand our knowledge about recent and contemporary gene flow patterns.

When interpreting genetic data it is important to keep in mind the specific life history of the species in question. Using studies on white-tailed eagles (a Palearctic raptor), magnificent frigatebirds and brown boobies (tropical seabirds) I will describe how knowledge about life history traits such as generation time, flight energetics and feeding ecology is important to understand population genetic data. I will also point to various conservation concerns affecting those taxa.



**Mar 5, 2010**

**2:00 PM**

**ENV130 (EESAT)**