



$$n_1(y, t+1) = \sum_{a=2}^4 \int_{\Omega} F_a(y, x) n_a(x, t) dx$$

$$n_{a+1}(y, t+1) = \int_{\Omega} P_a(y, x) n_a(x, t) dx \quad (\text{for } a=1,2,3)$$

$$n_4(y, t+1) = \int_{\Omega} P_3(y, x) n_3(x, t) dx + \int_{\Omega} P_4(y, x) n_4(x, t) dx$$

# ECOL 8100: Perspectives in Evolutionary Ecology

Spring 2012

1-3 credits, #98-152

## Special Topic: Quantitative Genetic Modeling

Evolutionary ecology is a broad, vibrant, and dynamic field with a large body of tools that change rapidly. Perspectives in Evolutionary Ecology is an annual seminar devoted to keeping up with these techniques, and spanning fields such as ecological phylogenetics, adaptive modeling, and evolutionary demography. This Spring, we will learn optimality and quantitative genetic modeling in R, using D. Roff's Modeling Evolution as a text. As a class, we will discuss both foundational and current papers dealing with these two modeling methods, and conduct our own analyses in R using real data to make informed predictions about evolutionary change in traits of interest.

Students will be expected to contribute actively by leading discussions and conducting analyses based on programming methods learned in the seminar. Students enrolling for 3 credits will be expected to conduct a novel research project during the course. Course will meet weekly each Wed, 2:30 – 3:20 PM, in the Ecology seminar room (117).

For additional information, please contact:  
Prof. Richard Shefferson, dormancy@uga.edu