

abstract:

In my talk I will focus on adaptation in life history traits to pool drying in an island frog system, and thermal adaptation in damselflies along a latitudinal gradient. I will show that: 1) tadpoles from islands with a high spatial variation in drying regime among pools show more plasticity in development rate, 2) tadpoles from islands with fast drying pools have a higher development rate, 3) the degree of phenotypic plasticity in development rate of tadpoles is positively correlated to the gene flow from other populations with different environments. Finally I will show that, northern damselfly species and northern populations of damselflies are thermal specialist rather than generalist in terms of thermal performance curves in growth rate. This last result highlights the importance of considering the within generation thermal variation during an organism lifetime.