

## MURRAY F. BUELL AWARD

Murray F. Buell ascribed great importance to the participation of students at meetings and to excellence in the presentation of papers. To honor his dedication to the Ecological Society of America and to the younger generation of ecologists, this award is presented to a student for the outstanding oral paper presented at the Society's annual meeting.

The winner of the Murray F. Buell award in 2003 is James Vonesh for his paper "Multi-predator effects across life-history stages: non-additivity of egg- and larval-stage predation in an African treefrog," which is based on his doctoral research at the University of Florida; he will finish this fall under the supervision of Craig W. Osenberg. The Buell judges noted that James had conducted a well-designed experiment informed by field observations to examine whether the density- and size-mediated effects of early life-stage predators can significantly alter predator-prey interactions in later stages. He found that predator effects across stages were not independent, survival was greater than that predicted from the independent effects of predators, and both the density and size effects of early predators enhanced survival in later stages. James followed up this



**James R. Vonesh**

primary conclusion by addressing the unexpected result that smaller tadpoles had higher survival than larger tadpoles. To do this, he developed a simulation model parameterized with data from additional experiments that were designed to describe the functional form of density- and size-specific predation and growth rates of small/early hatched vs. large/late hatched tadpoles. Simulation results showed that the surprising pattern of survival observed in the principal experiment (i.e., small tadpoles did better) could have arisen via fairly simple mechanisms: compensatory growth in small tadpoles coupled with a hump-shaped pattern of size/density specific risk. Small/early hatched tadpoles grew more rapidly through the vulnerable size classes to achieve higher overall survival. James did an excellent job of introducing a complex topic to his audience; his methods were sound, his analyses were creative, and his conclusions were thorough. James' work significantly enhances our understanding of trade-offs in predation risk across life history stages, and paves the way for better theoretical models based on empirical results. James received his M.S. from the University of Florida in 1998, and his B.S. in 1991 from Eckerd College in St. Petersburg, Florida.

## Berkowitz



The Buell Award Selection Committee also gave an Honourable Mention to Nicholas S. G. Williams for his paper, “The influence of plant species attributes on local extinctions in urban and rural grasslands.” Nick is a student at the Australian Research Centre for Urban Ecology in the School of Botany, University of Melbourne.

*Student Awards Selection Committee: Karen Clancy (Chair), Anita Davelos, Paul Marino, Christopher Sacchi, J. Alan Yeakley.*