1023-92-1207   **Holly D. Gaff*** (`hgaff@epi.umaryland.edu`), 660 W. Redwood St, Howard Hall 140D, University of Maryland, DEPM, Baltimore, MD 21201, and **Louis Gross** (`gross@tiem.utk.edu`), Department of Ecology and Evol Bio, University of Tennessee, Knoxville, TN 37996-1610. *Making Models Useful to Decision-Makers.*

Mathematical models can be very useful to explore various environmental systems, but often the results of this research are not used by real-world decision makers. I will discuss examples of projects, ATLSS and a Rift Valley Fever model, that work to bridge this divide. ATLSS is a project that has developed models of the freshwater wetlands of the Everglades and Big Cypress Swamp in south Florida. The results of these models have been used to guide the choices of the current restoration plan. The Rift Valley Fever project is concerned with identifying locations of high risk for accidental or intentional introduction into the United States based on environmental conditions. Both projects face similar challenges of developing models that "right" answer questions, translating the results into meaningful insights for non-mathematicians and building the relationships with decision makers to attempt to prevent misuse of models. (Received September 25, 2006)