

# Don DeAngelis



- Positions
  - ▣ Ecologist, Senior Scientist, USGS
  - ▣ Adjunct Professor, University of Miami
- Research Interests
  - ▣ Development of Individual-Based Population Models
  - ▣ Theoretical and Computational Ecology
  - ▣ Ecosystem Ecology
- Why Florida...
  - ▣ Excellent research opportunities and community of researchers

# DeAngelis Research Projects

## Modeling Everglades fish dynamics (GEFISH model)

- Seasonal dynamics and factors concentrating fish for availability to wading birds

## Effects of sea level rise and storm surges on coastal vegetation (MANTRA model)

- Modeling changes in ecotones between mangroves and freshwater vegetation

## Effects of plant toxins on herbivore-plant interactions (TDFRM model)

- Modeling plant defense impacts on snowshoe hare cycle, wolf-moose-plant interactions

## Effects of biocontrol of invasive plant on Everglades plant community structure

- Modeling biocontrol of Melaleuca and effects of native tree recovery

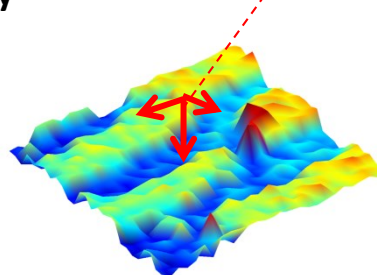
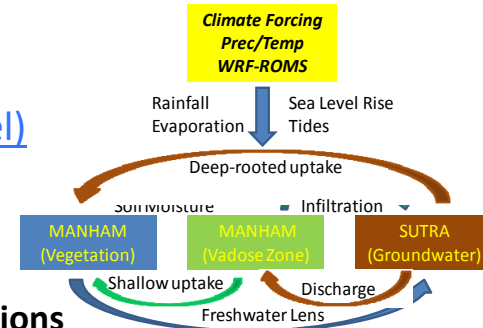
## Landscape dynamics of apple snails, snail kites (Eversnail model)

## Modeling effects of hydrology on populations across southern Florida

## Carbon dynamics in wetlands

- Modeling carbon dynamics in Florida wetlands

### MANTRA model



### GEFISH: Fish stranding hotspots

