Models

There was a nice special section in Ecology a few years ago with several important papers: Matson P. and A. Berryman. 1992. Ratio-dependent predator-prey theory. Ecology 73:1528-1528

I particularly used this one to develop my lection material:

Berryman, A. A. 1992. The origins and evolution of predator prey theory. Ecology 73:1530-1535

The debate rages on:

Berryman Aa, Gutierrez Ap, Arditi R. 1995. Credible, Parsimonious And Useful Predator-Prey Models - A Reply. Ecology 76:1980-1985

Ginzburg LR. 1998. Assuming reproduction to be a function of consumption raises doubts about some popular predator-prey models. Journal of Animal Ecology 67:325-327

A different approach:

Rose KA, Rutherford ES, McDermot DS, Forney JL, Mills EL. 1999. Individual-based model of yellow perch and walleye populations in Oneida Lake. Ecological Monographs 69:127-154

Blaine TW, DeAngelis DL . 1997. The interaction of spatial scale and predator-prey functional response. Ecological Modelling 95:319-328

A nod to the systems view:

Kitchell JF, Eby LA, He X., et al. 1994. Predator-prey dynamics in an ecosystem context. J Fish Biol 45: 209-226 Suppl. A

Lundberg P, Fryxell Jm . 1995. Expected Population-Density Versus Productivity In Ratio-Dependent And Prey-Dependent Models. American Naturalist 146:153-161

The paradox of enrichment updated:

Abrams PA, Walters CJ. 1996. Invulnerable prey and the paradox of enrichment. Ecology 77:1125-1133

Murdoch WW, Nisbet RM, McCauley E, deRoos AM, Gurney WSC. 1998. Plankton abundance and dynamics across nutrient levels: Tests of hypotheses. Ecology 79:1339-1356

Empirical Functional Response:

Trexler, J., C. McCulloch, and J. Travis. 1988. How can the functional response best be determined? Oecologia 76:206-214

Juliano, S. A. 1993. Nonlinear curve fitting: predation and functional response curves, pp 159-182. In S. M. Scheiner and J. Gurevitch, eds. Design and Analysis of Ecological Experiments. Chapman and Hall.