

MICHAEL G. NEUBERT
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EDUCATION

Sc. B. (1988) Applied Mathematics / Biology (magna cum laude)
Brown University, Providence, Rhode Island

M. S. (1990) Applied Mathematics
University of Washington, Seattle, Washington

Ph. D. (1994) Applied Mathematics
University of Washington, Seattle, Washington

Postdoctoral (1994-1996) Biology Department
Woods Hole Oceanographic Institution

EMPLOYMENT

2006 – present J. Seward Johnson Chair, Education Coordinator, Biology Dept.
Woods Hole Oceanographic Institution, Woods Hole, MA

2000 – present Associate Scientist, Biology Department
Woods Hole Oceanographic Institution, Woods Hole, MA

1996 – 2000 Assistant Scientist, Biology Department
Woods Hole Oceanographic Institution, Woods Hole, MA

PUBLICATIONS (closely related to proposed project)

Joshi, H. R., G. E. Herrera, S. Lenhart and M. G. Neubert. 2008. Optimal dynamic harvest of a mobile renewable resource. *Natural Resource Modeling*, in press.

Neubert, M.G. and G. Herrera. 2008. Triple benefits from spatial resource management. *Theoretical Ecology* **1**:5-12.

Neubert, M. G. 2003. Marine reserves and optimal harvesting. *Ecology Letters* **6**:843–849.

Neubert, M. G., T. Klanjscek and H. Caswell. 2004. Reactivity and transient dynamics of predator-prey and food web models. *Ecological Modelling* **179**:29-38.

Neubert, M. G. and I. M. Parker. 2004. Projecting rates of spread for invasive species. *Risk Analysis* **24**:817–831.

- Marvier, M., P. Kareiva and M. G. Neubert. 2004. Habitat destruction, fragmentation, and disturbance promote invasion by habitat generalists in a multispecies metapopulation. *Risk Analysis* **24**:869–878.
- Neubert, M. G., M. Kot, and M. A. Lewis. 2000. Invasion speeds in fluctuating environments. *Proceedings of the Royal Society of London B* **267**:1603-1610.
- Neubert, M. G. and H. Caswell. 2000. Density-dependent vital rates and their population dynamic consequences. *Journal of Mathematical Biology* **41**:103-121.
- Neubert, M. G. and H. Caswell. 2000. Demography and dispersal: calculation and sensitivity analysis of invasion speeds for structured populations. *Ecology* **81**:1613-1628.
- Neubert, M. G., J. D. Murray and H. Caswell. 2002. Transient dynamics and pattern formation: reactivity is necessary for Turing instabilities. *Mathematical Biosciences* **175**:1-11.
- Neubert, M., S. Blumenshine, D. Duplisea, T. Jonsson, and B. Rashleigh. 2000. Body size and food web structure: testing the equiprobability assumption of the cascade model. *Oecologia* **123**:241-251.
- Neubert, M. G. and H. Caswell. 1997. Alternatives to resilience for measuring the responses of ecological systems to perturbations. *Ecology* **78**:653–665.

SYNERGISTIC ACTIVITIES

- Editorial Board, *The American Naturalist* (2008 – present).
- Editorial Board, *Ecology and Ecological Monographs* (2001 - 2004).
- Chair (2004 – present), Vice-Chair (2003-2004), and Secretary (1999-2001), Theoretical Ecology Section, Ecological Society of America.
- Organizer, *A New Synthesis of Demography and Dispersal*, a working group at the National Center for Ecological Analysis and Synthesis, Santa Barbara, California. (With H. Caswell, 2000-2003).
- Invited lecturer and participant, *NSF, NIH Workshop: Accelerating Mathematical-Biological Linkages*, Bethesda, MD (2003). Lectured on the nature of collaborations between mathematicians and ecologists. Helped develop a report on ways that NSF and NIH could accelerate activity in this area.
- Invited participant, MAA, AAAS, *ASM Workshop: Meeting the Challenges: Education Across the Biological, Mathematical, and Computer Sciences*, Bethesda, MD (2003). Helped to develop a report on undergraduate mathematics education for science majors, particularly biologists.

COLLABORATORS & OTHER AFFILIATIONS

Thesis advisor: Mark Kot, University of Washington.
Postdoctoral advisor: Hal Caswell, Woods Hole Oceanographic Institution.
Graduate Students (3): Tin Klanjscek, Petra Klepac, Amanda McDonald.
