

Topic: Population dynamics

1. Population dynamics with age and spatial structure

Text book type stuff:

1. Botsford, White and Hastings “population dynamics for conservation” 2019
2. Caswell "Matrix population models" 2001

2. Grouped genetic -demographic models

Quantitative genetics theory:

1. Slatkin, M. (1970). Selection and Polygenic Characters. *Proceedings of the National Academy of Sciences*, 66, 87–93.
2. Barton, N.H., Etheridge, A.M. & Véber, A. (2017). The infinitesimal model: Definition, derivation, and implications. *Theoretical Population Biology*, 118, 50–73.
3. Barton, N.H. & Turelli, M. (2004). Effects of Genetic Drift on Variance Components under a General Model of Epistasis. *Evolution*, 58, 23.

Demographic quantitative genetic models

1. Gomulkiewicz, R. & Holt, R.D. (1995). WHEN DOES EVOLUTION BY NATURAL SELECTION PREVENT EXTINCTION? *Evolution*, 49, 201–207.
2. Yang, L., Waples, R.S. & Baskett, M.L. (n.d.). Life history and temporal variability of escape events interactively determine the fitness consequences of aquaculture escapees on wild populations, 53.
3. Baskett, M.L. & Waples, R.S. (2013). Evaluating Alternative Strategies for Minimizing Unintended Fitness Consequences of Cultured Individuals on Wild Populations: Minimizing Captive-Wild Fitness Effects. *Conservation Biology*, 27, 83–94.
4. Tufto, J. (2001). Effects of Releasing Maladapted Individuals: A Demographic–Evolutionary Model. *The American Naturalist*, 158, 331–340.

3. Transient population dynamics

1. Caswell, H. (2007). Sensitivity analysis of transient population dynamics: Transient sensitivity analysis. *Ecology Letters*, 10, 1–15.

Nonlinear dynamics

2. Hastings, A., Abbott, K.C., Cuddington, K., Francis, T., Gellner, G., Lai, Y.-C., Morozov, A., Petrovskii, S., Scranton, K. & Zeeman, M.L. (2018). Transient phenomena in ecology. *Science*, 361, eaat6412.

Application to adaptive management

1. White, J.W., Botsford, L.W., Hastings, A., Baskett, M.L., Kaplan, D.M. & Barnett, L.A.K. (2013). Transient responses of fished populations to marine reserve establishment. *Conservation Letters*, 12.

2. Nickols, K.J., White, J.W., Malone, D., Carr, M.H., Starr, R.M., Baskett, M.L., Hastings, A. & Botsford, L.W. (2019). Setting ecological expectations for adaptive management of marine protected areas. *J Appl Ecol*, 56, 2376–2385.

Environmental variability and demographic stochasticity:

1. Chapter 13-15 Casell 2001

2. Chapter 4 Botsford, White and Hastings

3. Neubert, M.G. & Caswell, H. (1997). ALTERNATIVES TO RESILIENCE FOR MEASURING THE RESPONSES OF ECOLOGICAL SYSTEMS TO PERTURBATIONS, 78, 13.