

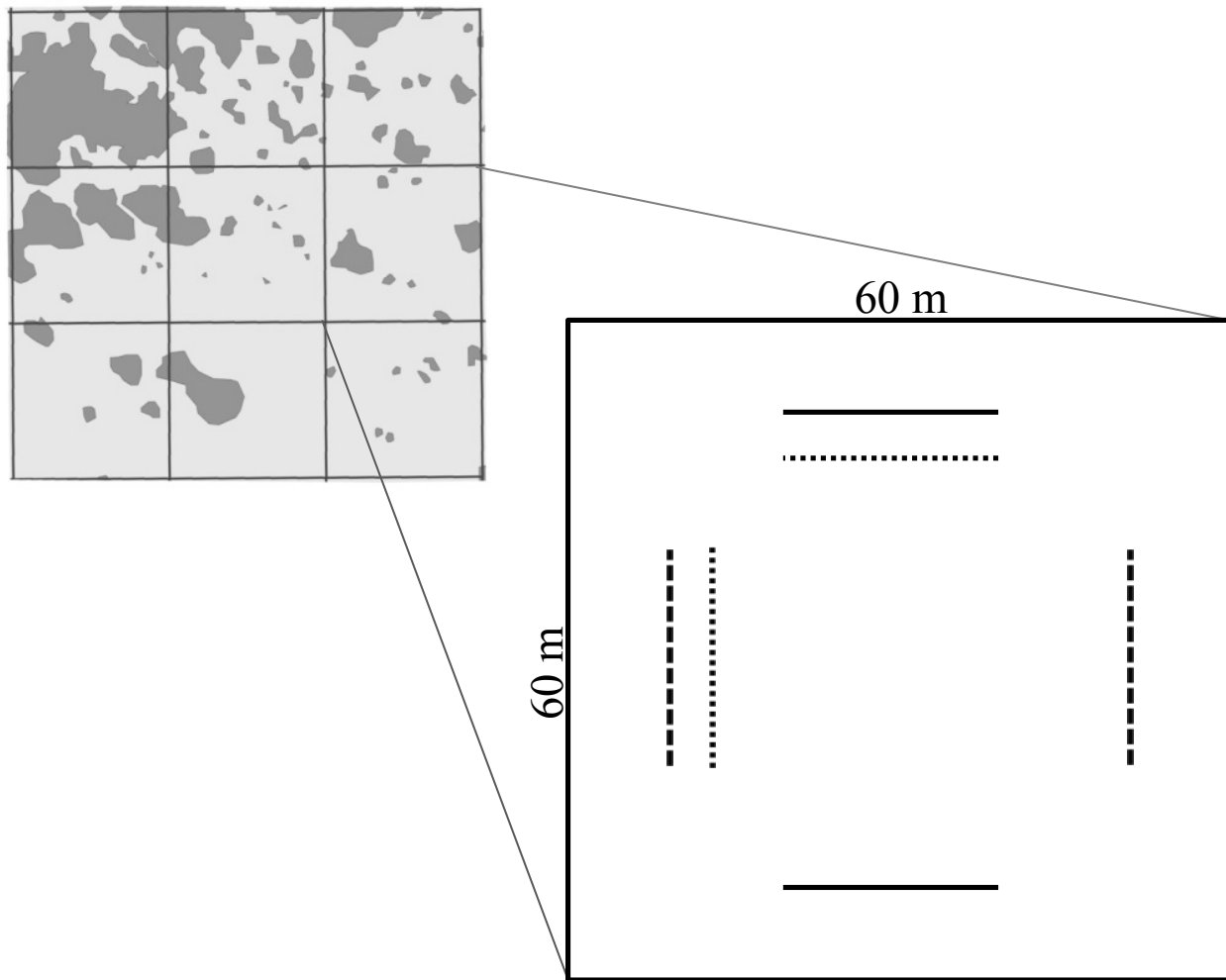
Ecography

ECOG-00137

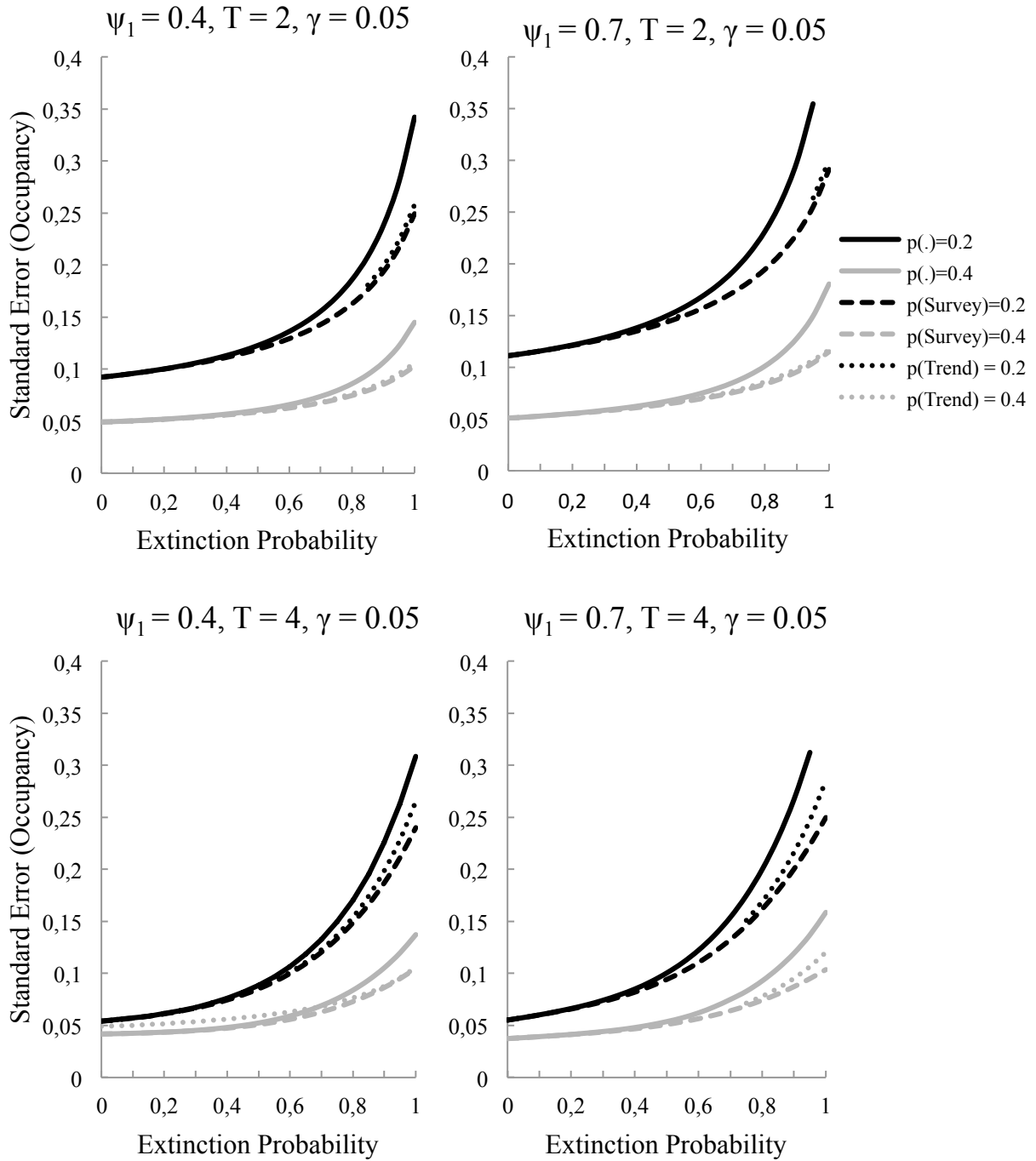
Otto, C. R. V., Bailey, L. L. and Roloff, G. J. 2013.
Improving species occupancy estimation when
sampling violates the closure assumption. – *Ecography*
36: xxx–xxx.

Supplementary material

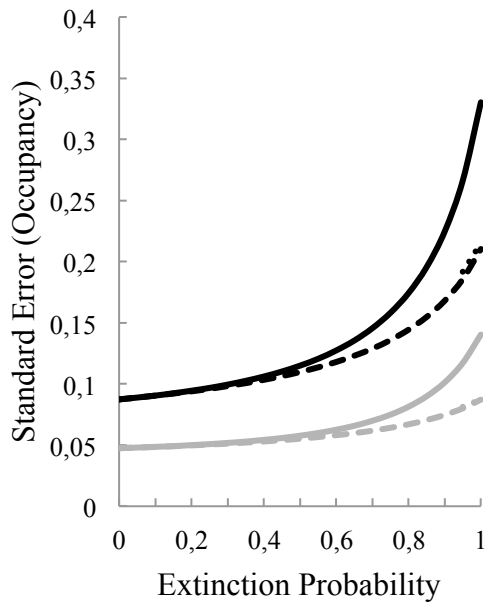
Appendix 1. Sampling lattice of 60×60 -m cells overlaid on an aspen stand and systematically located sampling transects (in one random cell) for estimating red-backed salamander occupancy, extinction, and detection probability in northern Michigan, USA, 2009. Dark gray polygons in the background image represent unharvested canopy trees following timber harvest. Solid, dashed, and dotted lines in the foreground image represent 20-m transects initially surveyed in May, June, and July, respectively.



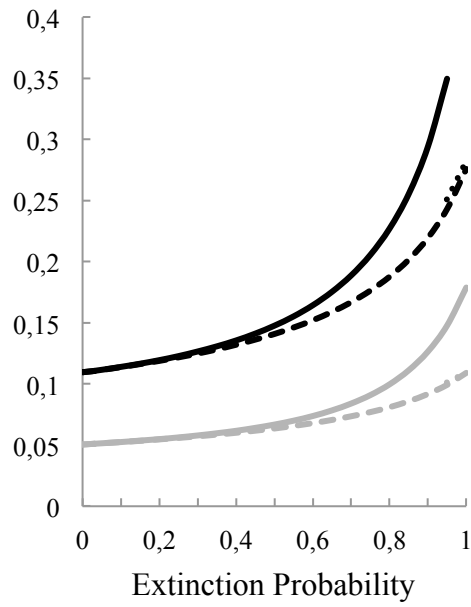
Appendix 2. Standard errors for occupancy estimates in closed occupancy models (*i.e.*, single-season; MacKenzie et al. 2002) when sites are open to local extinction events between primary periods. See Figure 4 for description of symbols and simulation overview.



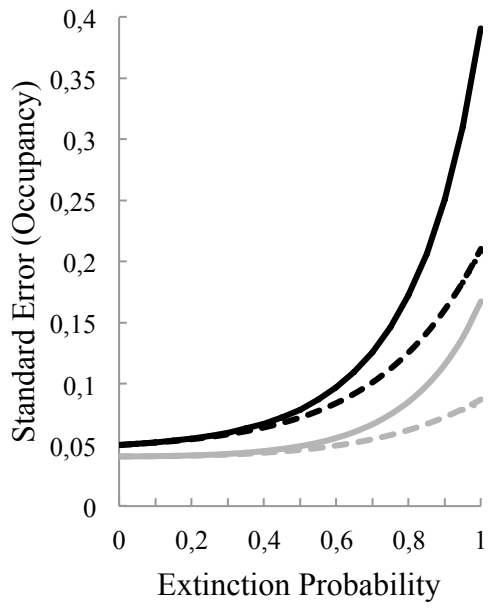
$\psi_1 = 0.4, T = 2, \gamma = 0.0$



$\psi_1 = 0.7, T = 2, \gamma = 0.0$



$\psi_1 = 0.4, T = 4, \gamma = 0.0$



$\psi_1 = 0.7, T = 4, \gamma = 0.0$

