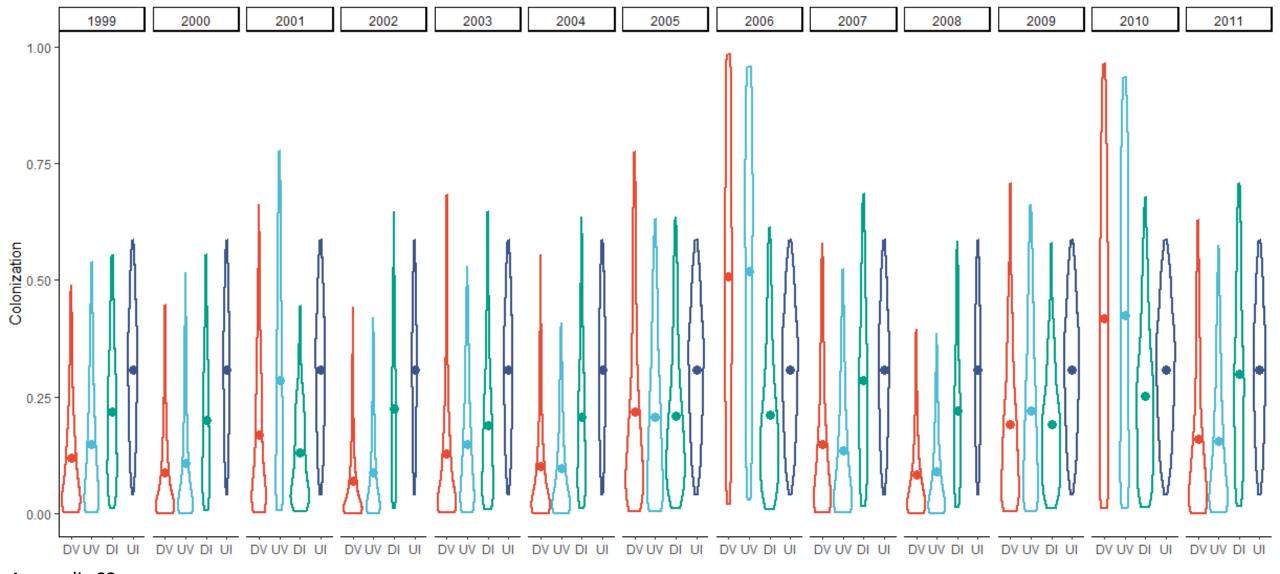


Appendix S3.

Figure S3A. This figure represents the realized connectivity between habitat patches across all 12 scenario years. Demographicallyweighted and time-varying connectivity (DV), unweighted and time-varying connectivity (UV), & demographically-weighted and time-invariant connectivity (DI) all contain varying levels of dynamism either accounted through model structure or through the inclusion of demographic data in the form of occupancy state-variables. Unweighted with time-invariant connectivity (UI) shows that no matter the observed occupancy in the landscape, the connectivity fails to shift, representing a structural view of the connectivity in the landscape. DV was the most supported connectivity model based on Bayesian model selection and the model UI was least supported.

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Appendix S3.

Figure S3B. This figure represents the distribution and range of realized landscape pixel values among patches across all years. Dots represent the mean landscape colonization potential for demographically-weighted and time-varying connectivity (DV), unweighted and time-varying connectivity (UV), & demographically-weighted and time-invariant connectivity (DI). This is similar to Figure 2A in text but includes a visualization of the distribution of landscape pixel values to illustrate differences between models.

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