

Solutions

2.1 A Separate a habitat observation from a causal claim about a niche boundary. Absence from a site can reflect dispersal, detection, abiotic conditions or interactions. Resource partitioning can reduce overlap, but an observational difference alone does not prove that competition caused it. Compare alternative explanations and the timescale of evidence.

2.2 observed percentage = $12/40 \times 100 = 30\%$.

2.3 False. A niche is not identical to a trophic level or a habitat. A realized niche is a context-dependent model, and an incomplete survey cannot establish every tolerance limit or competitive interaction.

2.4 ecological niche. ecological niche means The resource use, conditions and interactions associated with an organism's role.

3.1 Seed use 60% and 20%; both use both resources. Overlap alone does not prove resource limitation or competition; availability, season and interactions need evidence.