

Simpson Index – habitat islands and biodiversity

1. Calculate the community diversity from your 2 areas using the Simpson Index.

$$\frac{N(N-1)}{\sum n(n-1)}$$

2. Which island (s) had the highest diversity?
3. Did fragmentation of the habitat (a smaller “island”) affect the diversity of the species found? In other words, explain why which size islands had the greatest diversity.
4. Would Habitat A of 10 species (2 individuals of each) be more or less diverse than Habitat B containing 1 species with 85 individuals and 9 other species with 1 representative of each? Explain.
5. If you were designing a biological reserve on the basis of your data, what size island would be ideal? Why?

Simpson Index – habitat islands and biodiversity

1. Calculate the community diversity from your 2 areas using the Simpson Index.

$$\frac{N(N-1)}{\sum n(n-1)}$$

2. Which island (s) had the highest diversity?
3. Did fragmentation of the habitat (a smaller “island”) affect the diversity of the species found? In other words, explain why which size islands had the greatest diversity.
4. Would Habitat A of 10 species (2 individuals of each) be more or less diverse than Habitat B containing 1 species with 85 individuals and 9 other species with 1 representative of each? Explain.
5. If you were designing a biological reserve on the basis of your data, what size island would be ideal? Why?