

Island Biogeography Virtual Lab

<http://virtualbiologylab.org/ModelsHTML5/IslandBiogeography/IslandBiogeography.html?fbclid=IwAR10s-Gy-nezHjRyyjXQQYtLI7YRVbycRdXPuPWLtILNW-YJKIB657RX8Q>

Go to simulation, play around, observe

<http://virtualbiologylab.org/ModelsHTML5/IslandBiogeography/IslandBiogeography.html?fbclid=IwAR10s-Gy-nezHjRyyjXQQYtLI7YRVbycRdXPuPWLtILNW-YJKIB657RX8Q>

Observations . . .



Students, draw anywhere on this slide!

Pear Deck Interactive Slide
Do not remove this bar

How does island distance affect species richness?

1. Click on run experiments.
2. Hit Pause
3. Keep Islands the same size
4. Adjust the Island distance for one island, make it as far from the mainland as possible
5. Click on birds
6. Keep everything else the same Hit play, observe
7. Click on the to data arrow on the bottom right-

Which island has a greater number of species? Closer to mainland or farther away. Explain why you think this is.



Students, draw anywhere on this slide!

How does island diameter affect species richness?

1. Click refresh on browser
2. Click on run experiments.
3. Hit Pause
4. Shift the island distance to 90 Km for both island
5. Adjust the island diameter of one island and make it very small
6. Click on birds.
7. Hit play, observe
8. Click on the to data arrow on the bottom right-

Which island has a greater number of species? Larger or smaller Explain why you think this is.



Students, draw anywhere on this slide!

Think up your own variable to test

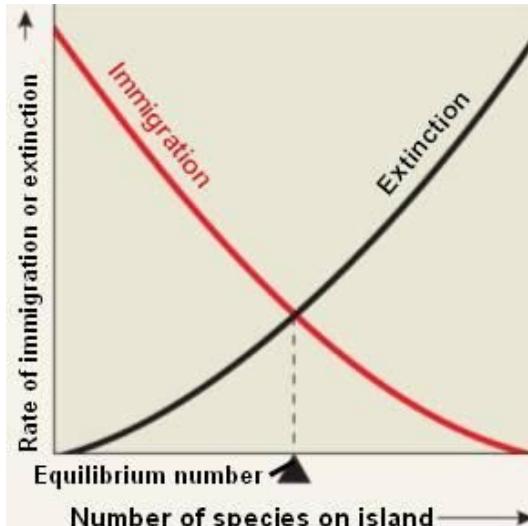
How does _____ affect species richness?

What did you find?

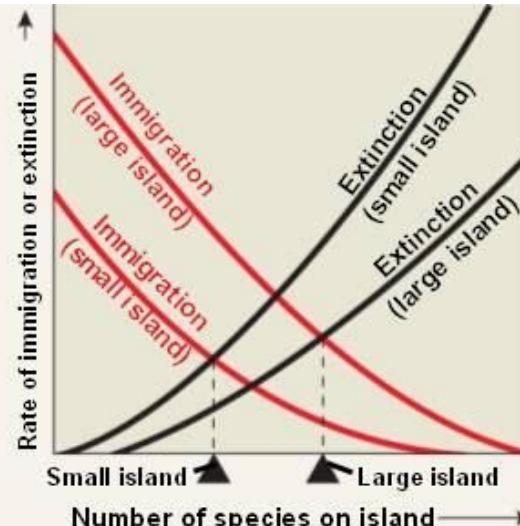


Students, draw anywhere on this slide!

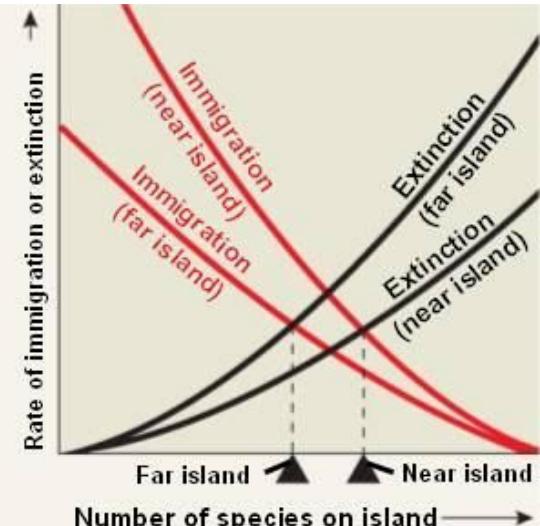
Theory of Island Biogeography



(a) Immigration and extinction rates



(b) Effect of island size



(c) Effect of distance from mainland

What is this graph telling us about the effect of island size and effect of distance from mainland?



Students, draw anywhere on this slide!

Biodiversity hotspots

What would the theory of island biogeography say about where to pick more areas to protect?

Biodiversity hotspot Cal academy science

