

Explaining Biodiversity: Why so many ground finches in the Galapagos?

Name _____

Period _____ Date _____


We've figured out something about how new species arise, and we have some kind of explanation for how the more than seventeen species of finches endemic to the Galapagos islands came to be. *But why so many species?* What factors might have led to such diversity?

We're going to consider our question by looking at only the six species of ground finches. Your task is to read over the cards for these six. Each card describes the dietary and habitat needs of the species, plus where it is found geographically. Use the Galapagos map you've been given to study the distribution of each species (the patterns of where it is located). You might want to number your species from 1 to 6 and then use the numbers to label their locations on the map.

Using the data, the map, and your whiteboards, uncover any patterns you think might help to answer our question about why there are six different species of ground finches in the Galapagos.

You may use the table below to help if you wish or you may create something similar with your group on your whiteboard.

Finch Cards: Why so many ground finches in the Galapagos?



Large Ground Finch
(*Geospiza magnirostris*)

Diet: Feeds mainly on large seeds but also takes *Opuntia* cactus fruits, caterpillars and large insects. It feeds on seeds of *Bursera graveolens*, but its main seed source includes the woody seeds of *Tribulus cistoides*. Its large, strong bill allows it to crack open these hard seeds.

Habitat: Frequents arid scrubs in the lowland areas of each island.

Location (islands where this species is found): Wolf, Pinta, Marchena, Genovesa, Isabela, Fernandina, Santiago, Rabida, Pinzon, and Santa Cruz islands.

Species	Diet	Habitat	Similarities to Other Ground Finches	Differences from Other Ground Finches

Q. Why do you think there are so many different species of ground finches in the Galapagos?