

Two groups of animals are defined as different species, when individuals from one group don't mate and reproduce with those from the other. One way for one species to split into two is for populations to separate geographically. Over many generations they can undergo enough changes in their respective habitats, that if, and when they come back together again, they don't mate. Now suppose that a population of these lizards ended up in an area that is much more open and sunnier. In that case, a light colored dewlap isn't very effective. So over time the population would evolve to have darker dewlaps. If for some reason these two populations come together, the females would no longer recognize the males as members of the same species. They wouldn't mate. They would be reproductively isolated. Once new species have formed, competition drives the evolution of body types. Species living in the same area compete for resources. But if members of one species move into another habitat, they can use resources not available to the other species. Over many generations, natural selection favors traits that enables species to occupy different habitats.