

Abstract:

In this paper I deal with island biogeography and its applicability to isolated mountaintops, as an ecological equivalent of true islands. I discuss both true and mountain islands regarding their origin and the influence of long-term climate evolution on Earth. I underline some features of mountain islands, resulting from their topography and the dissimilarities of both types of island barriers. I find that mountain and true island communities might or might not have a number of species in a state of equilibrium, caused by balance between species immigration on island and their extinction. If the number of species on island is not in equilibrium, species extinction is not balanced by species immigration. I consider patterns of island communities, mainly nestedness, which has been frequently studied on mountain, as well as true islands. I discuss distribution patterns concerning invertebrates. And finally, I concentrate on recent methods of mountain island research and discuss mountain island isolation issues in terms of global warming.