

Invest in islands to save most species

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LOOKING for a sound investment to combat the biodiversity crisis? Spend your cash on an island. It turns out they are about nine times as valuable as an equally large piece of mainland. So says the first worldwide analysis of the importance of different regions for maintaining global biodiversity.

While it is common knowledge that islands generally house a high number of species that live only in that location, the total diversity of life on most islands is relatively low compared with mainland areas. As a result, their importance for conservation efforts hasn't been clear, says a team from the Universities of Bonn and Eberswalde, Germany, and the University of California, San Diego.

To settle this question, they calculated a new combined index which takes into account both the number of unique species in a given region and the total number of different species living there. This "endemism richness" scale measures how much a given area of land contributes to global biodiversity. The team evaluated the endemism richness of plants and vertebrate land animals for 90 regions covering most of the Earth's surface. They discovered that values for islands were 9.5 times higher for plants and 8.1 times higher for vertebrates, compared with similarly sized regions of mainland (Proceedings of the National Academy of Sciences, DOI: 10.1073/pnas.0810306106). Tropical islands scored highest, with New Caledonia topping the list.

"The results should lead to an increased investment in conservation on tropical island biodiversity hotspots," says Thomas Brooks, head of Conservation Priorities and Responses at Conservation International's Center for Applied Biodiversity Science in Arlington, Virginia.