A BIBLIOGRAPHY OF LITERATURE ON ECOLOGICAL DIVERSITY AND RELATED METHODOLOGY

by

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"Why diversity?" Recently a statistician noted that he never received a simple straightforward answer to this question from ecologists. But imagine the look of disappointment in an ecologist hearing this question. The diversity, or variety, of plants and animals on this planet is the very basis of the ecologist's profession.

Ecology is rooted in natural history. Perhaps the fundamental working craft of the ecologist is taxonomy; possibly the most elemental quantities recorded in ecological work are the numbers and abundances of species. Why are there so many species in the abundances that we observe? Indeed, almost any ecological study has some bearing on this question, as these quantities will be explained only after the interrelationships of the organisms and environments are fully understood.

So if you ask an ecologist "why diversity?" the response, if any, will likely echo the retort of the mountaineer Mallory when questioned about his own pursuits: "Because it is there!".

Here is a list of the publications in the literature on ecological diversity. We were particularly anxious to include works on conceptualization and statistical properties of diversity indices and models of species abundance as well as empirical studies in which these indices (including species richness!) and models were used. We have also included papers on island biogeography, niche theory and species packing, stability theory, and speciation as these topics are important to understanding why given diversities exist in given areas. This list is ever-growing and shows no hint of approaching "carrying capacity" yet. We would welcome copies of reprints, reports,disserations, etc., and also full references of any additional titles.

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