Conservation prioritization

"Where should we protect in order to prevent species extinctions while minimizing further biodiversity loss?"

What is the best spatial arrangement of protected area networks for biodiversity conservation and sustainable ecosystem services? "Nature conservation" is not as easy as one might think. Actually, it poses many questions and problems, as there are stark contrasts among species-specific endangeredness, importance of ecosystem services provided by the biodiversity, and functions of organisms among taxonomic groups (between plants and animals, for example). Moreover, balancing between nature conservation and socio-economic activity is of particular importance to the feasibility of conservation planning. Suppose it could simply afford to protect the whole Japan, it would be the best for biodiversity conservation. Obviously, it is not realistic. To ensure not only the effectiveness of conservation plans but also its feasibility, scientific inputs are imperative. Particularly, a range of solutions have to be proposed by collating and analyzing conservation effects and socio-economic costs associated with land use regulations in side of protected areas. Recent years have seen a big progress in algorithm developments regarding spatial prioritization designed specifically for identification of important areas for biodiversity conservation in consideration of various aspects of nature reserve establishment. In J-BMP, we provide distribution maps of priority areas, which effectively and efficiently capture the Japan's biodiversity, by applying Zonation, one of the leading algorithms of spatial conservation prioritization, and high resolution biogeographic information.

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