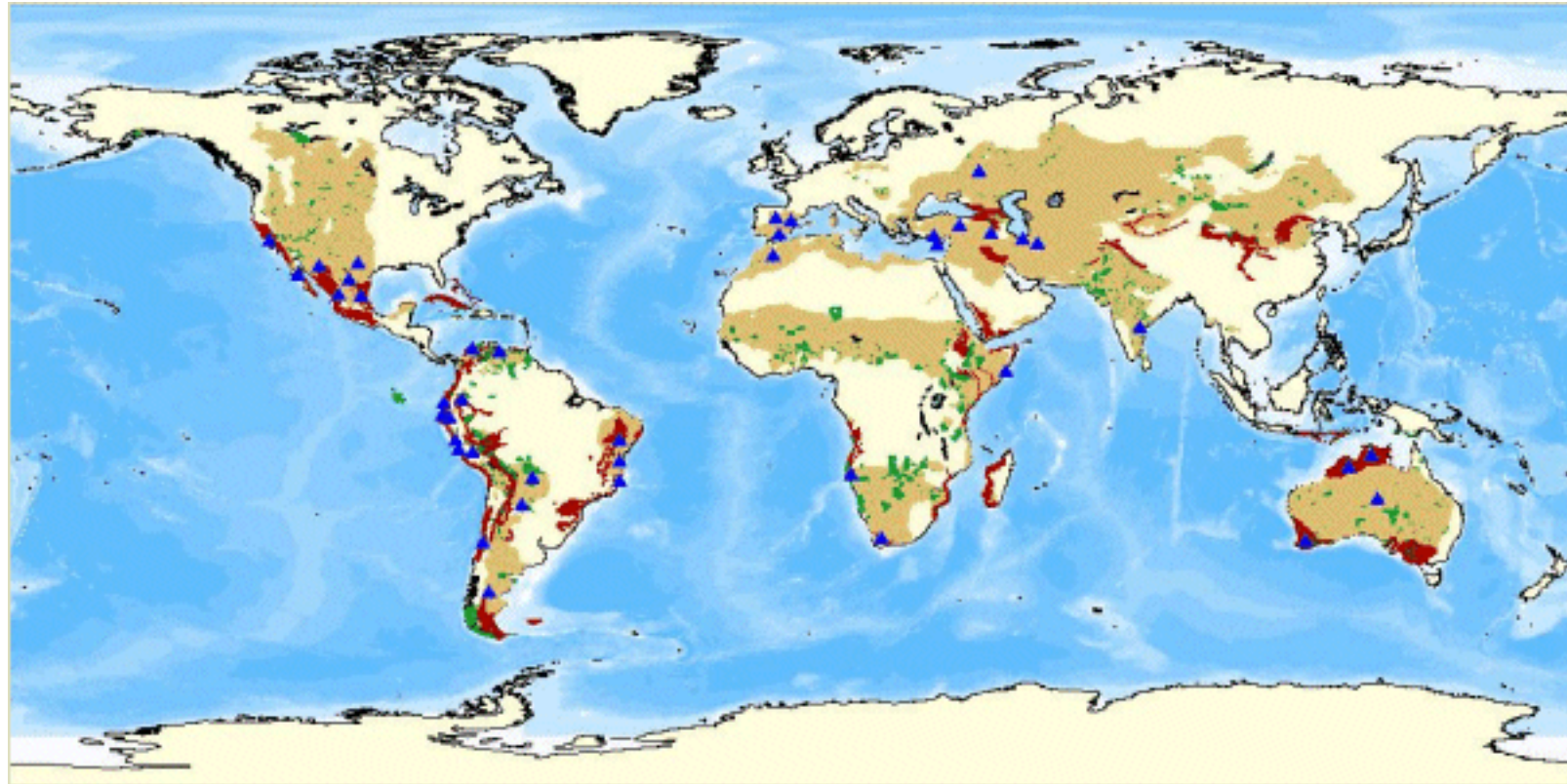


Drylands: Biodiversity Conservation



Map Projection: Geographic

Citation: WRI. 2002. World Resources Institute. Drylands, People, and Ecosystem Goods and Services: A Web-based Geospatial Analysis. Available online at: <http://www.wri.org>.

Analytical Overview:

Analyses were conducted to determine which Endemic Bird Areas (EBAs) and Protected Areas contained areas of dryland. These areas were included in whole and were not simply clipped to the drylands extent, as in other maps. For this reason, certain portions of EBAs as well as protected areas may be located where there is not dryland. Centers of Plant Diversity were clipped to the drylands extent.

Description:

When three types of biodiversity conservation areas are combined on one map-- Centers of Plant Diversity (CPD), Endemic Bird Areas (EBA), and Protected Areas (PA) --several patterns emerge in relation to drylands:

- Every continent has some type of conservation area designated within the dryland aridity zones and thus preserving dryland biodiversity;

- Endemic Bird Areas and Centers of Plant Diversity within drylands are generally close to or overlap with each other; both are poorly represented in much of central Asia, the drylands of Africa, and the drylands of Canada and the United States.

- South America and Australia appear to be the regions best represented by all three dryland biodiversity conservation areas: EBAs, CPDs, and protected areas.

An area on the mainland qualifies as a CPD if it contains at least 1,000 vascular plant species and at least 10 percent endemism; island centers must contain at least 50 endemics or at least 10 percent endemic flora. CPDs house important gene pools of plants of value to humans, encompass a diverse range of habitat types, support a significant proportion of species adapted to special soil conditions, and are subject to the threats of large-scale devastation.

Endemic Bird Areas have been mapped by BirdLife International. An EBA is defined as an area which encompasses overlapping breeding ranges of restricted-range bird species – landbirds which have had a breeding range of less than 50,000 km² throughout historical times (i.e. post-1800, in the period since ornithological recording began). Some birds that have small ranges today were historically widespread, and are therefore not treated as restricted-range species. Extinct birds that qualify on range size are included. Protected areas (PAs) around the globe, as defined by IUCN-The World Conservation Union, include areas of land and/or sea especially dedicated to the protection and maintenance of biological diversity, and of natural and associated cultural resources, and managed through legal or other effective means.

Drylands cover almost 54 million km² of the globe. Semi-arid areas are most extensive followed by arid areas and then dry sub-humid lands. These aridity zones spread across all continents, but are found most predominantly in Asia and Africa.