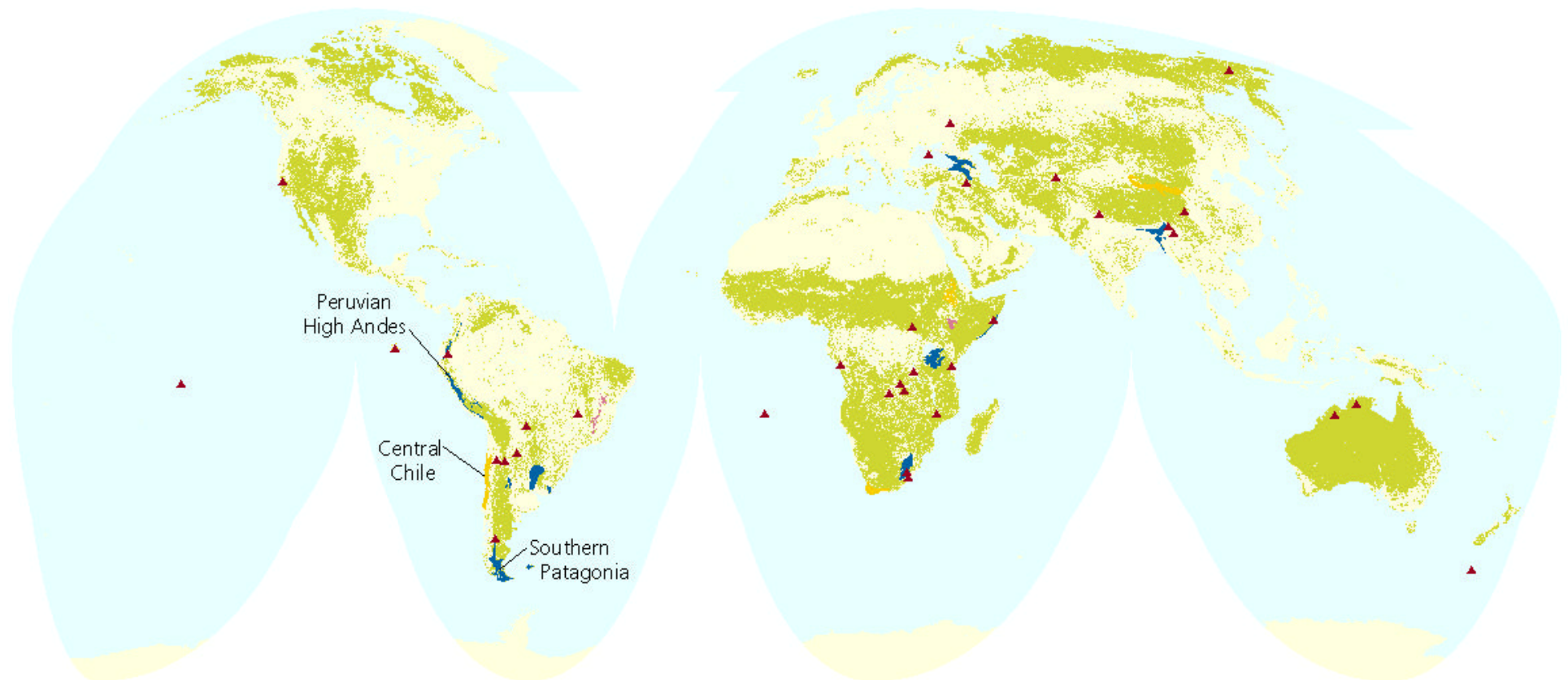


Endemic Bird Areas and Centers of Plant Diversity in Grasslands



Map Projection: Interrupted Goode's Homolosine

Citation: World Resources Institute - PAGE, 2000

Notes:

▲ Centers of plant diversity

Key habitat of endemic bird area

■ Scrub

■ Savanna

■ Grassland

Map Description:

Map 13 shows the distribution of Endemic Bird Areas (EBAs) and Centers of Plant Diversity (CPDs) found primarily in grassland areas.

Although the key habitat in most EBAs is forest, grassland is the key habitat in 23 or approximately 11 percent of the 217 EBAs. Each EBA is assigned a biological importance rank from 1 to 3 (most biologically important) on the basis of its size and the number and taxonomic uniqueness of its restricted-range species. Of the 23 EBAs in which grassland/savanna/scrub is the major habitat type, 3 have the highest rank for biological importance: the Peruvian High Andes, Central Chile, and Southern Patagonia. The Peruvian High Andes EBA is 100,000 km² of arid and semi-humid montane scrub, grassland, and woodland with 29 restricted-range species, 11 of which are threatened. The Central Chile EBA is 160,000 km² of scrub and semi-arid grassland with 8 restricted-range species (0 threatened). The Southern Patagonia EBA is 170,000 km² of sparse steppe vegetation and tussock grasslands with 10 restricted-range species, 1 of which is threatened. Although not assigned the highest rank for biological importance, grassland biodiversity is great in many other EBAs.

At least 40 of 234 CPDs are found in grassland areas, with an additional 70 containing some grassland habitat. Thus, nearly half of the CPDs include some area of grassland. These grassland CPDs represent areas where the diversity of grassland plants is high and where conservation practices could safeguard a great variety of species. For example, the Mahale-Karobwa Hills in Tanzania includes Zambezian woodland and grassland vegetation with approximately 2,000 vascular plant species, endemic or rare butterflies, and populations of chimpanzees and monkeys; the Upemba National Park in the Democratic Republic of Congo includes miombo woodland and grassland vegetation, with an estimated 2,400 or more vascular plant species.

Analytical Overview:

BirdLife International defines an Endemic Bird Area as "An area which encompasses the overlapping breeding ranges of restricted-range bird species, such that the complete ranges of two or more restricted-range species are entirely included within the boundary of the EBA. This does not necessarily mean that the complete ranges of all of an EBA's restricted-range species are entirely included within the boundary of that single EBA, as some species may be shared between EBAs." (Stattersfield et al., 1998:24.)

The IUCN-World Conservation Union, and World Wildlife Fund-US (WWF-US) have identified 234 Centers of Plant Diversity (CPDs) worldwide (Davis et al. 1994 and 1995). To qualify as CPDs, mainland centers must contain 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. The size of CPDs ranges from approximately 100 to more than 1 million km².

Source:

1. Davis, S.D., V.H. Heywood, and A.C. Hamilton. 1994, Centres of Plant Diversity: A Guide and Strategy for their Conservation. :IUCN-World Conservation Union and World Wildlife Fund.
2. Davis, S.D., V.H. Heywood, and A.C. Hamilton. 1995, Centres of Plant Diversity: A Guide and Strategy for their Conservation. :IUCN-World Conservation Union and World Wildlife Fund.
3. GLCCD, 1998. Global Land Cover Characteristics Database, Version 1.2.. Loveland, T.R., B.C. Reed, J.F. Brown, D.O. Ohlen, Z. Zhu, L. Yang, and J. Merchant. 1998. "Development of a Global Land Cover Characteristics Database and IGBP DISCover from 1-km AVHRR Data" International Journal of Remote Sensing 21(6-7): 1303-1330. Available On-line at: <http://edcaac.usgs.gov/glcc/glcc.html>. Global Land Cover Characteristics Database, Version 1.2.
4. Stattersfield, A.J., M.J. Crosby, A.J. Long, and D.C. Wege. 1998. "Endemic Bird Areas of the World: Priorities for Biodiversity Conservation". Birdlife Conservation Series No. 7: 846.