Centres of Plant Diversity (CPD)

DEFINITION

Sites of global botanical importance based on their high plant endemism and species richness.

DESCRIPTION

The Centres of Plant Diversity (CPD) project completed by the International Union for Conservation of Nature (IUCN) and the World Wide Fund for Nature (WWF) aimed to identify those areas around the world, which, if conserved, would safeguard the greatest number of plant species. The project also aimed to document the many benefits, economic and scientific, that the conservation of those areas would bring to society and to outline the potential value of each for sustainable development, as well as to outline a strategy for the conservation of the areas selected. [1] The CPD sites vary enormously in size, from extensive mountain systems, to island complexes and small forest areas. They are distributed around the globe, grouped into three geographical regions - Europe, Africa, South West Asia and the Middle East; Asia, Australasia and the Pacific; and the Americas.

SUPPORTED BY

The International Union for the Conservation of Nature (IUCN) and the World Wide Fund for Nature (WWF).

YEAR OF CREATION

1988. The CPDs were outlined in a three-volume publication (1994-1997) [1] and are not being further updated.

COVERAGE

Global in extent with 234 sites in various countries around the world (1998). [1]

CRITERIA

The criteria adopted for the selection of sites and vegetation types was based principally on a requirement that each must have one or both of the following two characteristics: [1]

- The area was evidently species rich, even though the number of species present may not be accurately known;
- The area was known to contain a large number of species endemic to it.

The following characteristics were also considered in the selection process involving extensive consultations with experts in all the major regions of the world:

- The site contained an important gene pool of plants of value to humans or that are potentially useful;
- The site contained a diverse range of habitat types;
- The site contained a significant proportion of species adapted to special edaphic conditions;
- The site was threatened or under imminent threat of large-scale devastation.

Most mainland sites have in excess of 1000 vascular plant species, of which at least 10% are endemic, including some that are termed ‘strict endemics’- those endemic to the site. Island sites typically have fewer species, but a higher percentage of these are endemic. To qualify, island sites must have flora that contained at least 50 endemic species or at least 10% of the flora must have been endemic at the time of the assessment. [1]

MANAGEMENT

There is no specific management prescribed for CPD sites, although many are represented (at least in part) in existing protected areas, or are proposed for inclusion. Of the 233 sites for which data are available, 35% and 21% have more than 50% and 100% of the area within legally protected areas respectively. In terms of threat, 19% of sites have been classed as severely threatened, 32% as threatened, and 18% as vulnerable or at risk, many of which are in the tropics. [1] Organisations such as the WWF discourage extractive activities in priority conservation areas outside of protected areas, such as CPD sites. [2]

BUSINESS RELEVANCE

Legal and compliance – An area was not required to have any specific legal protection for designation as a CPD site. Legal recognition and protection can, however, be present either for some parts or the entire area of a CPD, as a result of their inclusion within other legally protected areas.

Biodiversity importance – The CPD are each important for the conservation of global plant diversity. These areas were identified based not only on high irreplaceability of species, but also include high vulnerability of the area, and therefore many are likely to hold significant biodiversity value. CPD sites vary greatly in size and those that are spread over large areas are of limited use for site-scale assessment and decision making.

Social-cultural values – The criteria for identification of the CPDs do not explicitly mention the involvement of local and indigenous communities in protection and management. However, in many CPD sites especially in the tropics and subtropics, local communities who depend on these sites for subsistence and income, and who protect these areas for certain religious and cultural values can be found.

REFERENCES & WEBSITE

1. WWF and IUCN (1994–97) Centres of Plant Diversity: a guide and strategy for their conservation. Gland, Switzerland and Cambridge, UK: World Wide Fund for Nature and IUCN. 3 volumes: Volume 1: Europe, Africa, South West Asia and the Middle East (1994), Volume 2: Asia, Australasia and the Pacific (1995), Volume 3: The Americas (1997)
2. Dudley, N. and Stolton, S. To dig or not to dig? Criteria for determining the acceptability of mineral exploration, extraction and transport from ecological and social perspectives. WWF International and WWF-UK



Samarias gorge, Crete, Greece. The island of Crete is a CPD.

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Category:

Biodiversity designations

Tools

A map of CPD is available from UNEP-WCMC

Maps and data sheets of CPD for the Americas is available from the Smithsonian Institution

Links

WWF International

IUCN

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