

Indicator 3. Extent of Area by Forest Type in Protected Area Categories as Defined by IUCN or Other Classification Systems

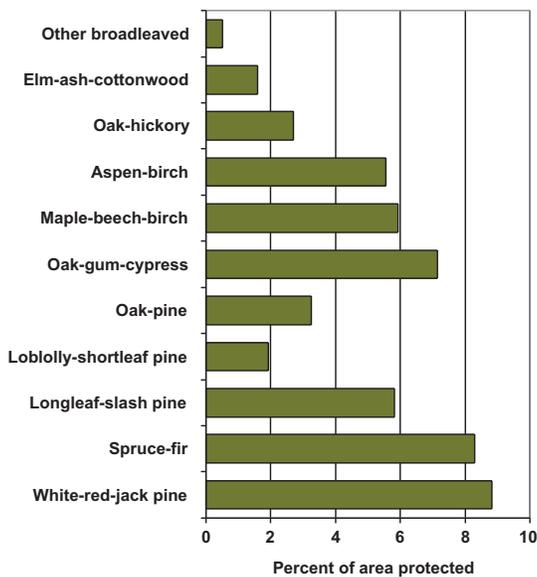


Figure 3-1. Percentage of forests protected in the East by forest type, 2001.

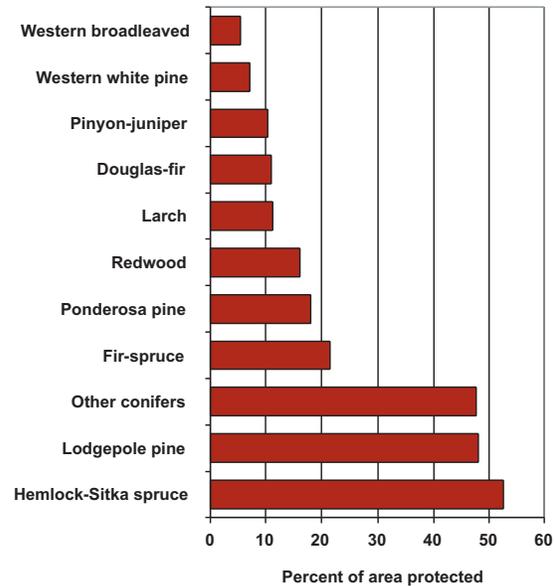


Figure 3-2. Percentage of forests protected in the West by forest type, 2001.

What Is the Indicator and Why Is It Important?

In the broadest sense, the area and proportion of forest ecosystems reserved in some form of protected condition provide some indication of the emphasis a society places on preserving representative ecosystems as a biodiversity conservation strategy. Important forest management questions also can be addressed by maintaining information on a network of comprehensive, adequate, and representative forest types within protected areas. Traditionally, protected areas have been set aside, in part, for their conservation, scenic, and recreational values, and might not represent the full range of biodiversity. Over time, forest types within protected areas will change. Adequate protection of the ecosystems and species in reserved areas may provide more management flexibility in forests under management for timber production and other extractive purposes.

What Does the Indicator Show?

The United States has a long history of forest protection, with Yellowstone, the world’s first national park, set aside in 1872. Protected areas of IUCN²⁸ categories I-VI are estimated to cover about 154 million acres (7 percent of all land in the United States), of which an estimated 106 million acres (14 percent of all forest land) is forested. Conifer forests, particularly those on public lands in the West (Rocky Mountain, Pacific Coast, and Alaska regions), occupy a larger percentage of protected area in the United States. A smaller proportion of broadleaf forest types is currently protected. Broadleaf forests occur predominantly on private lands in the East (north and south regions).

²⁸ Category I is an area of land and/or sea possessing some outstanding or representative ecosystems, geological or physiological features and/or species, available primarily for scientific research and/or environmental monitoring or a large area of unmodified or slightly modified land and/or sea, retaining its natural character and influence, without permanent or significant habitation, which is protected and managed so as to preserve its natural condition. Category II is a natural area of land and/or sea designated to (a) protect the ecological integrity of one or more ecosystems for present and future generations, (b) exclude exploitation or occupation inimical to the purposes of designation of the area, and (c) provide a foundation for spiritual, educational, recreational, and visitor opportunities, all of which must be environmentally and culturally comparable. Category III is an area of land and/or sea containing one or more specific natural or natural/cultural features of outstanding or unique value because of their inherent rarity, representative or aesthetic qualities, or cultural significance. Category IV is an area of land and/or sea subject to active intervention for management purposes to ensure the maintenance of habitats and/or to meet the requirements of specific species. Category V is an area of land with coast and sea, as appropriate, where the interaction of people and nature over time has produced an area of distinct character with significant aesthetic, ecological, and/or cultural value, and often with high biological diversity. Safeguarding the integrity of this traditional interaction is vital to the protection, maintenance, and evolution of such an area. Category VI is an area of land and/or sea containing predominantly unmodified natural systems, managed to ensure long-term protection and maintenance of biological diversity, while providing, at the same time, a sustainable flow of natural products and services to meet community needs.