

## Indicator 2. Extent of Area by Forest Type and by Age-Class or Successional Stage

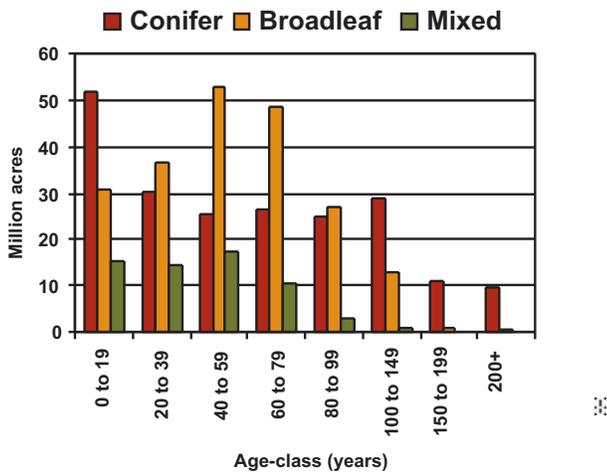


Figure 2-1. Distribution of timber land in the United States by stand-age-class and major forest type, 2002.

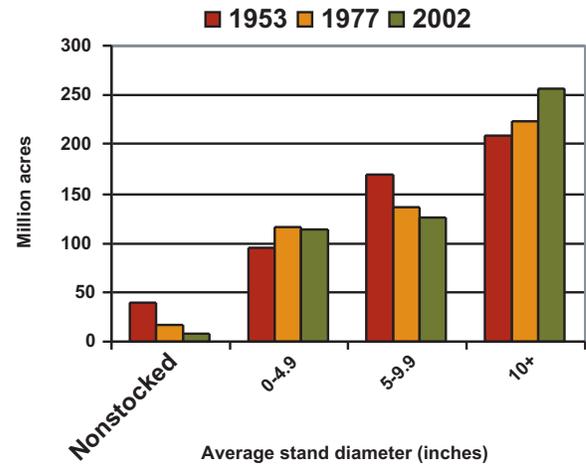


Figure 2-2. Area of timber land by average stand diameter class, 1953, 1977, 2002.

### What Is the Indicator and Why Is It Important?

This indicator uses age-class distribution by broad forest type as a coarse measure of the landscape-scale structure of the Nation's forests, where many species wholly or partly depend on a particular successional stage. A diverse distribution of forest lands across forest types and age-classes is an indicator of tree-size diversity and is important for determining timber growth and yield, the occurrence of specific guilds of wildlife, the presence of other nontimber forest products, and the forest's aesthetic and recreational values.

### What Does the Indicator Show?

Currently, age-class data is available only for timber land (about two-thirds of all forest land) and show a diversity of age-classes in all major forest types with conifer types skewed slightly to younger age-classes because of more intensive management for timber. Broadleaf types have a more normal distribution, showing a bulge in the 40- to 79-year age-class, as second- and third-growth forests in the East continue to mature. Preliminary inventory data on the remaining forests (primarily parks, wilderness, and low wood-productivity forests) are skewed toward older age-classes.

While trend data on age-class is sparse, historic data is available for average tree size in forest stands. Whether stands become more structurally diverse as they age depends on many factors, such as management and disturbance histories, adequate seed sources for regeneration, site conditions, climatic factors, and geophysical factors. The occurrence of insects and disease, whether endemic or epidemic, also plays a role in defining the forest's diversity.

Trends also show a steady decline in nonstocked areas over the past 50 years as poorly stocked stands are regenerated or converted to other uses. Stands averaging 0 to 5 inches in diameter increased as older stands were harvested and regenerated. Nearly 3 million acres of nonforest land were planted in the South as part of the Conservation Reserve Program in the 1980s and 1990s. Intermediate stands in the 6- to 10-inch diameter range have been declining, while stands averaging more than 11 inches in diameter have been rising. This latter trend is indicative of the dominant use in the United States of selective harvesting, which accounts for nearly two-thirds of all harvesting. Additionally, shifts in management policy, which have reduced harvesting on public forests in the West, are increasing the acreage of larger diameter stands in that region.