

SYSTEM DIMENSIONS	CHEMICAL AND PHYSICAL	BIOLOGICAL COMPONENTS	HUMAN USES
Extent	Nutrients, Carbon, Oxygen	Plants and Animals	Food, Fiber, and Water
Pattern	Contaminants Physical	Communities Ecological Productivity	Recreation and Other Services

⊖ Forest Community Types with Significantly Reduced Area

What Is This Indicator, and Why Is It Important? This indicator would report whether those forest community types that cover significantly fewer acres than they did in presettlement times are increasing or decreasing in area, and by how much. It would also report the total area occupied by these much-reduced forest community types—those that have been reduced by 70% or more in area.

Forest community types, such as Virginia pine–oak, American beech–southern magnolia, Douglas fir, and longleaf pine–oak, are characterized by certain plant and animal species that depend on the particular habitat provided by that forest type. When the area occupied by a forest community declines, populations of animals and plants that are highly dependent upon that community type may also decrease.

Some forest community types occupy much less area than they did at the time of European settlement. For example, redwood forest, which occupied an estimated 2.19 million acres before European settlement, now occupies 1.32 million acres, a decline of 40%. Similarly, Great Lakes pine forest, which occupied an estimated 18 million acres before European settlement, now occupies 4.1 million acres, a decline of 77%, and oak savanna, which covered about 30 million acres of the Midwest at the time of European settlement, covered only about 7000 acres, or about 0.02% of its historic area, in 1985.

These declines may result from outright conversion, such as the clearing of forests for agriculture, or they may result from less direct changes: when fire is suppressed for long periods, different species thrive, creating a different community type.

Why Can't This Indicator Be Reported at This Time? Data on historic and current area of many forest types are not available. Methods are being developed to obtain estimates of current area from existing USDA Forest Service data. It is also possible to estimate historic area, but this has not been done on a comprehensive basis.

The technical note for this indicator is on page 243.

Total Area of Forest Community Types with Significantly Reduced Area



Change in Area of Forest Community Types with Significantly Reduced Area

