

Retention forestry now sparing trees and benefitting biodiversity worldwide

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The management practice known as retention forestry, which involves deliberately leaving selected trees standing when wood is harvested, has spread to forests over much of the world and is bringing broad benefits to conservation, according to an assessment published in the July 2012 issue of *BioScience*. The study, by an international group of researchers headed by Lena Gustafsson of the Swedish University of Agricultural Sciences in Uppsala, concludes that the practice can complement reserve-based conservation in landscapes with widely varying histories, by preserving the complexity associated with natural forests. This contrasts with the ecological simplification that usually results from traditional industrial forest management.

Retention forestry started 25 years ago in northwestern North America under the names of "new forestry" and "green-tree retention." Both live and [dead trees](#) may be retained, with a preference for large specimens and for rare species. The practice brings a variety of benefits: it maintains the supply of [ecosystem services](#), increases [public acceptance](#) of harvesting, and ensures the continuity of key habitat components, for example, with corresponding benefits for tree-dwelling plants, wood-inhabiting insects, and fungi. Retention forestry also has fewer off-site impacts than traditional industrial [forest management](#) and brings aesthetic benefits.

Retention forestry has not yet been fully implemented in [tropical forests](#), although some elements of it are present. Elsewhere, forestry companies have often taken a lead role in developing the retention approach,

especially in parts of the United States, Australia, Canada, and several European countries. Certification by organizations such as the Forest Stewardship Council, as well as legal policy instruments, has helped advance the practice.

The *BioScience* authors maintain that a minimum of 5 to 10 percent of trees should be retained in proper retention forestry. But more research is needed to learn how best to practice it in different areas and when different requirements predominate. There is also an urgent need to understand better the effects of retention forestry on flows of water and nutrients.

More information: Retention Forestry to Maintain Multifunctional Forests: A World Perspective.

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