Ancient and Endangered Forests Defined

Ancient and endangered forests are defined as intact forest landscape mosaics, naturally rare forest types, forest types that have been made rare due to human activity, and/or other forests that are ecologically critical for the protection of biological diversity.

Ecological components of endangered forests are: Intact forest landscapes; remnant forests and restoration cores; landscape connectivity; rare forest types; forests of high species richness; forests containing high concentrations of rare and endangered species; forests of high endemism (belonging exclusively to or confined to a specific place); core habitat for focal species; and forests exhibiting rare ecological and evolutionary phenomena.

As a starting point to geographically locate ancient and endangered forests, maps of High Conservation Value Forests (HCVF)(1), as defined by the Forest Stewardship Council (FSC), and of intact forest landscapes (IFL), can be used and paired with maps of other key ecological values like the habitat range of key endangered species and forests containing high concentrations of terrestrial carbon and High Carbon Stocks (HCS).

The Science behind the definition

Canopy relies on a number of scientific processes and sources to define ancient and endangered forests. Specifically, three comprehensive and complimentary science-based tools form part of the screening process. They include:

1. High Conservation Value Forest (HCVF) definition utilized by the Forest Stewardship Council (FSC)(1) and World Wildlife Fund and the High Conservation Value Initiative, endorsed by the Forest Products Association of Canada. However, given that HCVF assessments do not capture all of the ecological qualities that inform endangered forest definitions, Canopy utilizes two additional criteria.
2. Wye Group’s endangered forest definition(2) and
3. Data from the World Resources Institute and Global Forest Watch Canada’s Large Intact Forest Landscapes Mapping Project(3)

Notes and additional resources

1. High Conservation Value Forests (HCV) are defined by the Forest Stewardship Council as forests of outstanding and critical importance due to their high environmental, socio-economic biodiversity or landscape values, according to six HCV categories:
1. Forest areas containing globally, nationally or regionally significant concentrations of biodiversity values;
2. Forest areas containing globally, regionally or nationally significant large landscape level forests;
3. Forest areas that are in or contain rare, threatened or endangered ecosystems;
4. Forest areas that provide basic services of nature in critical situations;
5. Forest areas fundamental to meeting basic needs of local communities;
6. Forest areas critical to local communities' traditional cultural identity.

2. The Wye Group Report on the Ecological Components of Endangered Forests has been reviewed by conservation groups, corporations, and scientists such as Dr. Jim Stritholtt, President and Executive Director of the Conservation Biology Institute, and has been adopted by corporations such as JP Morgan Chase in their policies. The ecological components of endangered forests are:

1) Intact forest landscapes;
2) Remnant forests and restoration cores;
3) Landscape connectivity;
4) Rare forest types (composition and structure);
5) Forests of high species richness (alpha and beta diversity);
6) Forests containing high concentrations of rare and endangered species;
7) Forests of high endemism;
8) Core habitat for focal species (aquatic and terrestrial);
9) Forests exhibiting rare ecological and evolutionary phenomena.

Download the Wye Group Report PDF.

3. The World Resource Institute and Global Forest Watch Canada’s Large Intact Forest Landscapes mapping project is a multi-year endeavor supported by conservation groups, corporations such as Bank of America, industry associations such as the Forest Products Association of Canada, and scientists such as affiliated with Yale School of Forestry & Environmental Studies. The World Resources Institute cites 'ancient forests' as old-growth forests.