

Forests and forestry in New South Wales

Forests NSW Community Programs

Here are answers to questions often asked about forestry and forest management.

Why do we need forests?

Forests are needed to conserve biodiversity and cultural heritage, and to generate products such as timber to meet community demand.

Forests have always been valuable to humans, providing shelter and protection, fuel and building materials, and a source of many foods and drinking water. As civilisations developed, forests were seen as obstacles standing in the way of progress and future development, occupying the land needed for farming and urban development. Vast areas of forest have been cleared to make way for these activities.

Today, the most pressing long-term effects of extensive forest clearing are soil erosion, in particular the irreplaceable loss of valuable topsoil, siltation of rivers and other water courses, shortages of timber and the loss of unique wildlife. After two centuries of European settlement, Australia provides many examples of the ill effects of excessive forest clearing mainly for agriculture.

Today, we are just as dependent on forests as past generations. Forests produce timber and other materials, protect water catchments, and provide habitat for wildlife. They also provide places for recreation, purify the air we breathe and the water we drink, and provide breathtaking vistas and areas of natural beauty.

Most of Australia's remaining forested areas are managed by national or state agencies. Publicly-owned forests in NSW are managed as State forests, national parks, nature reserves, community conservation areas, water catchment

reserves, vacant Crown land and state recreation areas. The forest areas we have today in Australia exist because they were reserved for timber and other values. State forests in NSW are managed to ensure that forests will continue to exist and provide their many benefits and values. Within these forests large areas of special conservation value are reserved, forming an important part of the NSW reserve system.

Today there are more than two million hectares of State forests in NSW. These forests include rainforest reserves, native forests, cypress pine forests, exotic pine plantations and eucalypt plantations.

What do we get from State forests?

Timber from State forests is used in: home construction for framing, flooring and weatherboards; furniture, tools and toys; railway sleepers; bridge girders; wharf piles; poles to support our telephone and electricity wires; fence posts; props for underground mining and pulpwood for paper and building boards – to name just a few.

Other products obtained from State forests include fuel wood, essential oils for medicinal and industrial use, charcoal, brush for brush fencing, seeds, nuts and honey.

Some State forests are sometimes leased to farmers for grazing sheep and cattle, to supplement fodder supplies.

Forests are good for absorbing carbon dioxide emissions from the atmosphere. Trees use the carbon to make sugar, starch and complex molecules like cellulose and lignin - forming wood, branches, roots, leaves and bark. About half a tree's dry weight is carbon. If a forest is planted on cleared grazing land, the growing trees dramatically increase the total carbon stored on the land. Forests NSW is working to reduce

greenhouse gas emissions and expand the use of planted forests as carbon 'sinks'.

State forests provide large areas of little disturbed native forest and plantation habitat. Even established exotic pine plantations support a surprisingly large number of animal species.

Areas within State forests that are important for conservation are set aside and excluded from logging under the forest management zoning system, which outlines management intent for every area of forest. These special conservation areas range from rainforest to old growth forest.

Forests also play an important role in water catchments. Most of our major rivers have at least part of their headwaters in State forests. From these forests comes water that is used for town and rural supplies. Forests filter rainwater and runoff entering watercourses, ensuring good water quality.

State forests also have aesthetic value, contributing to the attractive landscape and rural scenery of NSW. They beautify the landscape and create constant variety in the pattern of land use.

State forests also provide many recreational opportunities. Forest roads give access to areas of natural beauty and to scenic lookouts. Picnic areas, camping sites, walking trails, forest drives and other recreation facilities have been installed in many State forests for the enjoyment of forest users.

What kinds of forest do we have in New South Wales?

Forests contain hundreds of different species of plants and animals that have adapted over time to their particular environmental conditions. It is the mix of plants (especially the trees) growing in an area which define the forest type of the area. Forests of a particular forest type are a collection of several tree species growing together. Many forest types can be recognised in NSW.

More than 600 different species of trees occur in State forests. More than 200 species are eucalypts, including gums, stringybarks, ironbarks, bloodwoods and many others. There are 200 or so rainforest species; about 100 species of acacias (wattles); a variety of she-oaks (casuarinas); cypress pines; a large number of eucalypt-like trees, such as the apples (angophoras), turpentine, brush box and more.

Different tree species have their own particular growing requirements, such as soil type, water and nutrients, climate, position (aspect) and fire-

resistance. As a result, each species is confined to certain places, sometimes growing with a large number of other species, as in some rainforests, or sometimes with only a few or no other species, such as the river red gums along the banks of inland rivers.

How are State forests managed?

State forests in NSW are managed for multiple use on an ecologically sustainable basis. That is, they are managed in such a way as to conserve the forests, preserving unique flora and fauna species and their habitats, and also ensuring the continued supply of timber and other products.

Values and uses of forests include:

- Aboriginal and heritage sites
- aesthetic views
- recreation
- sustainability through forest preservation
- water catchment (water quality and use)
- wildlife habitat
- beekeeping
- bush foods and medicines
- education
- fuel wood and biomass production
- grazing
- recreation
- timber supply
- wildlife conservation
- carbon absorption and credits
- salinity control

Managing a State forest requires extensive planning and assessment of all activities. Forest activities that impact on soil, water and flora and fauna populations, distribution and habitats are carefully monitored.

Professional foresters, ecologists, soil scientists and other experts manage State forests in NSW. They have the task of planning, evaluating and monitoring all forest activities and impacts, to ensure that all the values and uses of the forest are maintained.

Forests NSW manages forests by:

- planning – timber harvesting activities, including harvesting plans, road construction, recreation areas, hazard reduction burns, forest reserves
- assessing – forest growth, post-logging and post-fire regeneration, logging impacts on the forest environment, flora and fauna populations.

Forest assessments conducted as part of the Regional Forest Agreement process have identified and protected natural, cultural and indigenous values and formalised the high conservation reserves in the State forests and national park estate.

The forestry activities carried out in a State forest are governed by laws, standards and conditions agreed by State and Federal governments, and authorisation for these activities is given as an Integrated Forest Operations Approval (IFOA), regulated by agencies including the Department of Environment and Climate Change and NSW Department of Primary Industries.

Further Information

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Disclaimer: The information contained in this publication is based on knowledge and understanding at the time of writing (April 2008). However, because of advances in knowledge, users are reminded of the need to ensure that information upon which they rely is up-to-date and to check currency of the information with the appropriate officer of New South Wales Department of Primary Industries or the user's independent adviser.

Forests and Forestry in NSW



Use Primefact 687 'Forests and forestry in New South Wales' to answer the questions below.
Questions marked with * require a personal response or further research.

Q1 *What two activities have resulted in the clearing of vast areas of forest?*

Q2 *What do people depend on forests for?*

Q3 *The total area of NSW is 80.2 million hectares. 27 million hectares of NSW is forested.* (Source: Department of Agriculture, Fisheries and Forestry, Australia's Forests at a Glance 2005.)

(a) Complete the sentence. Publicly owned forests are managed as....?

(b) What percentage of NSW forests are managed as State forest?

(c) Complete the sentence. State forests include.....?

Q4 *List 10 uses of timber obtained from NSW State forests.*

Q5 *Explain the role forests play in reducing greenhouse gas emissions.*

Q6 *How do landowners and the community benefit from planting forests?*

Q7 *Name two areas excluded from timber harvesting in NSW.*

Q8 *Beside forest products, what are forests valued and used for?*

Q9 *How many species of trees can be found in NSW State forests? Give a further breakdown of this figure by classifying main groupings of trees.*

Q10 *State forests are managed for multiple-use on an ecologically sustainable basis.*

*(a) Define multiple-use **

*(b) Explain the term “ecologically sustainable” **

Q11 *How are State forests managed?*

Q12 *What are the advantages of sourcing timber from NSW State forests? **
