# REHABILITATING BIG SCRUB RAINFOREST REMNANTS

### **OVERVIEW** of the project

The Big Scrub is a subtropical rainforest vegetation community that previously covered 75,000 ha of northern New South Wales. Today only 1% of the rainforest remains as isolated remnants, mostly on private land. The Big Scrub rainforest is of high conservation significance and is listed as an Endangered Ecological Community. Since 1997, the Big Scrub Rainforest Landcare Group has been actively restoring these, that typically support a high diversity of species and a range of endangered plants and animals.

This project funded two years of restoration work on 15 rainforest remnants covering 78 ha. Work involved primary and follow-up weeding, community education, planting young stock and monitoring and evaluation. The Landcare Group also developed an annual event, the Big Scrub Rainforest Day, that has proven highly successful in engaging the local community in rainforest restoration and ecology.



Training landholders in rainforest rehabilitation

### how the project was carried out



Brochure advertising the Big Scrub Rainforest Day

Restoration of each site followed actions proposed in a management plan previously developed for many of the remnants. The initial step was to exclude cattle from the sites and to minimise other threats and disturbance as much as possible.

Qualifiedbush regenerators were then employed to undertake weed control work at all 15 sites. Professional contractors were used as high level skills in plant identification and herbicide use are required to avoid killing native plants.

In addition to rehabilitation, community education was achieved through three field days a year, and an annual Big Scrub Rainforest Day that has developed into one of the largest community Landcare events in New South Wales. The program for the Rainforest Day included birdwatching walks, an expert panel discussion on biodiversity, guided rainforest ecology walks, workshops on rainforest restoration techniques and children's activities. In 2005 the Big Scrub Rainforest Day was attended by 4000 people. In 2006 the event attracted 1500 people despite wet weather.

A monitoring and evaluation program has been developed with the assistance of Environmental Training and Education (EnviTE NSW). At each remnant, change in the abundance and distribution of weeds and native species was measured in 5m by 5m quadrats and the results recorded and analysed in a database.

#### **OUTCOMES** now and in the future

Primary weeding was carried out at five remnants and follow-up weeding occurred in all remnants, with 44 ha of rainforest weeded. Over 341 days of bush regeneration was undertaken across 15 rainforest remnants. Following the weeding program, five of

the remnants are now considered at a maintenance stage. One rainforest remnant adjoining Booyong Flora Reserve has 1.6 ha of new habitat created through the establishment of 2500 new plants.

The Big Scrub Rainforest Days have greatly increased community understanding of the value and significance of Big Scrub rainforest. The field days have also enhanced landholder and community knowledge and skills in vegetation restoration.

The restoration work has improved biodiversity values and threatened species habitat at each remnant which increases their conservation significance and long term viability. Restored remnants are visited by environmental groups, TAFE and university students, farming and Landcare groups and therefore play an important role in continued community education in relation to rainforest ecology and restoration.

## benefits, challenges & lessons learned

Big Scrub Rainforest Landcare Group has developed valuable partnerships during their restoration work, including EnviTE NSW, Lismore and Ballina Councils and Rous Water.

One of the challenges faced by the group has been the effective monitoring of the restoration sites. It can be difficult to demonstrate change in rainforest regeneration using photos alone, as the vegetation is often dense and shaded. The group addressed this problem by developing a simple but rigorous monitoring program that records information on height, cover, abundance and floristic composition for each of the vegetation layers in the rainforest.

The Landcare group has learnt the importance of long term commitment to vegetation restoration sites to achieve sustainable outcomes. Follow-up weeding work might take up to five years because many weeds have long-lived soil propagules. Planning of on-ground maintenance and continuation of funding is an integral part of the group's overall project planning.



