

OUR CONTINUING SUCCESS STORY



**Big Scrub
Rainforest
Conservancy**

The Voice of the Rainforest

About Big Scrub Rainforest Conservancy

Big Scrub Rainforest Conservancy (BSRC) previously known as Big Scrub Landcare was formed in 1993 as the community's response to Government inaction in dealing with threats to the survival of the remaining remnants of lowland subtropical rainforest (LSR) in the Big Scrub region of north-eastern NSW.

BSRC evolved and grew rapidly to become one of the largest, most active and successful rainforest conservation in Australia, with more than 550 members, thousands of social media followers and many awards.

It has an outstanding record of achievement in rainforest restoration and most recently has developed, in partnership with The Royal Botanic Garden Sydney, an internationally innovative genomics based approach to help save from extinction critically endangered lowland subtropical rainforest and its threatened species. BSRC is a not-for-profit charity with tax deductible gift status. **BSRC is the voice of the rainforest.**

Our Mission

Promoting, facilitating and undertaking long-term restoration and ongoing care of critically endangered lowland subtropical rainforest and the recovery of its threatened species.

Our Vision

Australia's remaining critically endangered lowland subtropical rainforest, its magnificent biodiversity and its many threatened species are saved from extinction.

Our Values

We operate in an ethical and professional manner and hold ourselves accountable to our members, partners, supporters, donors and the community.

We deal fairly and ethically with the people and organisations that provide us with goods and services.

We follow scientific best practice in all of our activities. We are committed to delivering projects on time, on budget and to achieving all targeted outcomes.

For more information visit our website:

www.bigscrubrainforest.org



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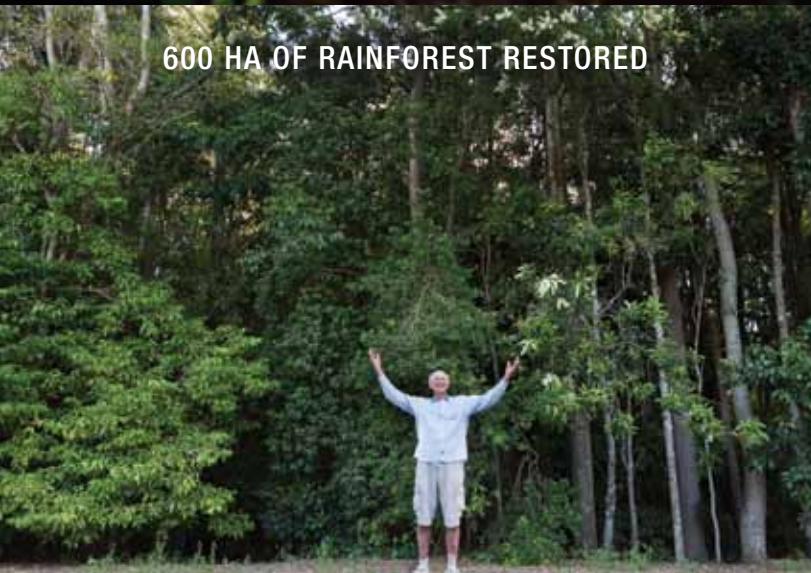
The Voice of the Rainforest



30 YEARS | 55 PROJECTS



25000 ATTENDEES AT BIG SCRUB DAYS



600 HA OF RAINFOREST RESTORED



FACILITATED PLANTING OF 2.5 MILLION TREES

99%

CLEARED



About the Big Scrub. Only 1% remains

Prior to European settlement, the Big Scrub was the largest contiguous area of lowland subtropical rainforest in Australia, covering 75,000 ha and accounting for 38% of its total area of 200,000 ha in NE NSW and SE Qld. Tragically, 99% of the Big Scrub was cleared, leaving only 1% as fragmented, isolated remnants scattered across the landscape between the northern NSW towns of Byron Bay, Ballina and Lismore.

These remnants are directly descended from the great rainforests of Gondwana that once covered most of Australia 40 m years ago and have great international conservation significance, with relict species whose lineages go back more than 180 million years.

The remnants support an incredibly rich biodiversity, comprising more than 400 plant species which include over 38 threatened flora species and providing habitat for a variety of fauna, including 61 threatened fauna species.

The survival of these priceless remnants of now critically endangered lowland subtropical rainforest is threatened by the invasion of 140 weed species and, in the longer term, by a lack of genetic diversity in many key structural and threatened plant species.



Our Programs

For 30 years BSRC has been promoting, facilitating and undertaking long-term restoration and ongoing care of critically endangered lowland subtropical rainforest and its threatened species within four key program areas.

Our primary focus to date has been the Big Scrub but our vision is to expand our activities beyond the Big Scrub.

Remnant Care Program

Remnant Care primarily involves the long-term control of the 140 species of weeds that threaten the survival of lowland subtropical rainforest. BSRC's professional rainforest regenerators implement state-of-the-art, species-specific control of weeds. This involves treatment of the initial weed infestation, control of weed regrowth, which for some species can continue for up to ten years, followed by continuing work to control fresh invasions of weeds.

Bush regenerators also, most importantly, carry out ongoing monitoring to record improvements in rainforest vegetation condition, reduced weed invasion and the location of individual threatened plants, which receive special care.

GIS mapping, aerial photo interpretation and satellite imagery are used to record and map where work is done at a site, for illustration in reports to grantors and to identify target remnants.

Rainforest restoration plans are developed to document in a remnant the environmental values, vegetation values, vegetation condition and strategies and actions to guide

weed control and any other required ecological restoration works.

Working in partnership with private landholders, NSW National Parks & Wildlife, all levels of government, and other community organisations, BSRC has delivered over the past 30 years outstanding outcomes via more than 40 Remnant Care projects funded by more than \$3.5 million in grants and donations. These projects have been on both private and public land, including the 10 Big Scrub remnants in NSW National Parks or Nature Reserves.

These projects have enabled BSRC to contribute to the ecological restoration of more than 50 lowland subtropical rainforest remnants of the Big Scrub with a total area of more than 600 ha and to fund restoration work in another 40 remnants elsewhere in the region from Grafton to the Queensland border.





Science Saving Rainforests Program

The problem

What remains of the 93% cleared, now critically endangered and highly fragmented lowland subtropical rainforest faces extinction because its key structural and threatened species mainly occur in small populations trapped in isolated remnants and are highly likely to lack genetic diversity and thus the evolutionary potential needed to avoid inbreeding depression and adapt in the long term to climate change, new diseases and new pests. Lack of genetic diversity in many key species also threatens the long-term viability of the 600 ha of restored rainforest that is developing from plantings of approximately 2.5 million trees in the Big Scrub region over the past 30 years.

Internationally innovative application of cutting edge genetic research to the rescue

Genetic diversity is a key indicator of species fitness and includes a species' capacity to survive and reproduce successfully, and to adapt to changing conditions, notably climate change, new diseases and new insects in the long-term. The Science Saving Rainforests (SSR) Program is applying the latest DNA sequencing and genome analysis technologies to assess the genetic diversity across the range of each of 30 key structural species and 30 threatened plant species of critically endangered lowland subtropical rainforest.

This involves collecting and carrying out DNA sequencing on more than 10,000 leaf samples. Our partner, The Royal Botanic Garden Sydney, then applies its skills and genome analysis software to identify up to 20 populations or individual trees of each species that collectively have the optimal genetic diversity to avoid inbreeding depression and provide the best

possible resilience to climate change, new diseases and new insect pests in the Big Scrub region.

Propagules, preferably cuttings, are then collected from each identified tree or a tree in each identified population of each of the 60 species.

The propagules are grown on in a specialist rainforest nursery to provide plants with the optimal genetics that will then be used by Big Scrub Rainforest Conservancy to:

- Establish a plantation comprising up to 20 individuals of each of the 60 structural and threatened species that will be a living seed bank to provide an ongoing source of seed for propagation into planting stock with optimal genetic diversity for use generally in restoration plantings of lowland sub-tropical rainforest and selected recovery plantings of the 30 threatened species;
- Establish a multi-species demonstration and recovery planting of critically endangered lowland subtropical rainforest comprising all of the 30 key structural species plus a wide range of pioneer, secondary and other mature phase species, which will provide the best possible habitat for the recovery of threatened species;
- Incorporate discrete populations of each of the 30 threatened species into the demonstration and recovery planting.

An added long-term benefit is that after the key structural species trees and, where included, threatened species trees in plantings commence fruiting, their seed and pollen, incorporating their optimal genetic diversity, will be spread across the landscape and into remnants and existing patches of restored rainforest.







Re-Establishing Rainforest Program

The Re-establishing Rainforest Program involves restoring rainforest on land that was cleared long ago.

We work with private and public landholders to restore rainforest by planting and natural regeneration to create new patches of rainforest, to expand existing remnants, to connect remnants and to convert camphor laurel forest and other weed infested areas to rainforest. This increases the area of rainforest habitat and facilitates landscape connectivity and species movement.

We run community planting days and provide advice and education materials, particularly our highly regarded manual: *Subtropical Rainforest Restoration: A practical manual for Landcare groups, land managers and rainforest regenerators*. To purchase a copy online, please go to our website www.bigscrubrainforest.org

To date, BSRC has facilitated the planting of about 2.5 million trees across the Big Scrub region, leading to the re-establishment of more than 600 ha of rainforest and increasing the area of remnant rainforest by 75%.





Connecting with our Community

Connecting with our Community is an important program. The highlight is the Big Scrub Rainforest Day, which BSRC has presented annually since 1999 except for 2021, when Covid19 restrictions caused its cancellation. It informs and engages with the community on all aspects of lowland subtropical rainforest and its restoration. The event comprises presentations, panel discussions, workshops, and rainforest walks led by expert rainforest scientists and restoration practitioners. It has attracted more than 25,000 attendees, making it one of the most successful and enduring conservation focussed community engagement events in Australia.

We also inform and educate landholders and interested community members via field days and site visits. BSRC has produced widely acclaimed manuals on subtropical rainforest

restoration and on the identification and control of subtropical rainforest weeds that have become standard reference texts in the community. BSRC and Rous County Council have produced a book on the social and ecological values of the Big Scrub called *The Big Scrub Rainforest: A Journey Through Time*, written and illustrated by a number of contributing experts. BSRC and its members also engage with the community about the restoration of lowland subtropical rainforest via articles in journals and other media and presentations at conferences.

We also engage with the broader community via social and other digital media, including our website, Facebook, Instagram, LinkedIn and a two-monthly e-newsletter.







Our people

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BSRC has been led with distinction since its establishment in 1993 by Co-founder and President, Dr Tony Parkes AO, who along with a PhD in Organic Chemistry and a successful career in business and finance, has restored 14 ha of lowland subtropical rainforest via the planting of 40,000 trees on his family's farm near Bangalow.

Other members of BSRC's Management Team are BSRC Co-founder and Vice-President, Mark Dunphy, who with a degree in Environmental Science is a pioneer bush regenerator, nurseryman and owner of Firewheel Nursery; Mr Martin Brook, experienced rainforest restorer and macadamia producer, is Chair and Co-founder of two very successful local businesses, Brookfarm and Cape Byron Distillery; Renee Borrow, first class honours degree in Environmental Science, is Manager; Georgina Jones, Secretary, and Kirralee Donavon, Projects Advisor, are also graduates in Environmental Science; and Chris Byrne, who has a journalism degree and extensive experience in digital media, is Communications Manager. BSRC also has a large statutory Management Committee, which has delegated day-to-day management to the Management Team.

Our people include, most importantly, more than 550 members who have extremely varied backgrounds including landholders, ecologists, bush regenerators, public servants, business people, students and members of the community who simply love and care about our rainforests.



Achievements and Awards

BSRC's most notable achievement is the successful conservation, in the Big Scrub region, of critically endangered lowland subtropical rainforest, its rich biodiversity and the habitat it provides for threatened flora and fauna.

Another major achievement was the listing of Lowland Rainforest of Subtropical Australia as a critically endangered ecological community under the Commonwealth Environment Protection and Biodiversity Conservation Act. BSRC's team of expert ecologists, botanists and geologists prepared the listing nomination and assisted in its assessment.

BSRC's significant conservation achievements include:

- Launching the Science Saving Rainforests program that is implementing an internationally innovative application of the latest DNA sequencing genome analysis technologies to saving from long-term extinction critically endangered lowland subtropical rainforest and 30 of its threatened plant species;
- Delivering the ecological restoration of more than 50 of the most important lowland subtropical rainforest remnants of the Big Scrub with a total area of more than 600 ha and funding restoration work in another 40 remnants elsewhere in the region from Grafton to the Qld border;
- Facilitating the planting of more than 2.5 million trees in the Big Scrub region that is restoring 600 ha of lowland subtropical rainforest and increasing its area by 75%.



Awards

- BSRC received the Society of Ecological Restoration Australasia (SERA) Award for Excellence in Ecological Restoration Practice 2016 for its Remnant Care and Rainforest Re-establishment programs.
- BSRC received the United Nations Australia's 2016 World Environmental Day Award for Biodiversity Conservation.
- BSRC won NSW Landcare Awards in 2001 and 2015.
- Dr Tony Parkes, Co-founder and President of Big Scrub Rainforest Conservancy and Big Scrub Landcare, received the Commonwealth Environment Minister's prestigious Community Environmental Leadership Award in 2016. He also received NSW Individual Landcarer of the Year awards in 2001 and 2015.
- In 2019 Dr Parkes received an Order of Australia (AO) for community service in the conservation of critically endangered lowland subtropical rainforest in northern NSW.

Our partners and supporters

Our highly-valued partners and supporters include:

- The Royal Botanic Garden Sydney's Research Centre for Ecosystem Resilience (ReCER)
- Stone and Wood Brewing Company
- Saving our Species unit of NSW Dept of Planning, and Environment
- NSW National Parks and Wildlife Service
- Firewheel Rainforest Nursery

- NSW Dept Primary Industries
- Dr Robert Kooyman
- Envite Environment
- Brookfarm and Cape Byron Distillery
- Rekindle Foundation
- Rous County Council
- Brunswick Valley Landcare and Richmond Landcare
- Lismore and Ballina Councils





Fundraising

Raising funds for the Science Saving Rainforests Program and our other programs is an ongoing challenge. Changing political priorities, budgetary pressures and increasing competition mean that we cannot rely on government for funding. We have to seek financial support from corporate and philanthropic donors including local and regional businesses as well as the broader community, while continuing to seek government grants when available.

Big Scrub Foundation

We established our sister organisation, the Big Scrub Foundation, as a specialist fund-raising organisation with the objective of providing regular ongoing funding for BSRC's programs to help save from extinction critically endangered lowland subtropical rainforest, with focus initially on the Big Scrub and nearby areas. The Foundation is a registered not-for-profit charity and has Deductible Gift Recipient (DGR) status, which enables donors to receive tax deductions on donations.

A key feature of the Foundation is its perpetual endowment fund that is professionally invested to provide a permanent source of income to help fund BSRC activities.

The vision of the Foundation is to increase the endowment fund to \$3 million through donations and bequests to provide sufficient permanent income to fund the ongoing care of the remnants and expansion of the Science Saving Rainforests Program.

Donating is easy: simply transfer funds directly to **Big Scrub Foundation's Deductible Gift Fund** account called the **Rainforest Treasury**

BSB: 062-565; Account number: 1083 3458

and email us at info@bigscrubrainforest.org advising us of your donation so that we can email you a receipt for your tax-deductible donation.

BSRC also has its not-for-profit charity, the Big Scrub Rainforest Fund, that has DGR status and receives on-line donations.

Funding supporters

We greatly appreciate the funding provided by the following generous donors and government agencies:

- Stone & Wood Brewing Company
- NSW Environmental Trust
- NSW Saving our Species
- Nogunosa Foundation
- Cornell Family
- WWW Foundation
- Rekindle Foundation
- Brookfarm and Cape Byron Distillery





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