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A Rocha Australia ENEWS

Winter, 2021

We are a Christian organisation engaging communities in nature conservation

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Chair's report...

Welcome to the winter 2021 issue of A Rocha Australia's ENews.

During Covid lockdown or restrictions, travel to project sites and hosting A Rocha events have been curtailed across south-eastern Australia. However, we were able to hold some great events, which you can read about in this issue.

In late May vegetation surveys were undertaken across 18 plots at the Dusky Woodswallow Conservation Reserve in the NSW Central West. In late August two dozen people – from 8 to 96 years old – turned out at the Hart Road Wetlands at Aldinga, SA, to plant 200 sedges. You can also read about an

exciting project to bring back the Black-breasted Button-quail to Council parks in the Toowoomba region, thanks to the passionate dedication of volunteers removing weeds.

It has been very encouraging to hear about Creation care projects being developed by individual churches, often in response to alarming news reports of climate change impacts or scientists revealing biodiversity declines. I'd love to hear from you about what your church is doing. We've been hearing about some wonderful initiatives that might also inspire you. One has started a creation care group and some of its members are helping reduce weed infestation in local Council parks. Another is installing a community garden and using it to show God's love to the local community.

It was fantastic to take part in the A Rocha Worldwide Forum Festival in June. I do encourage you to watch some of the video clips from the Festival talks.



What causes these patterns in the leaf litter? Read on to find out!

Chair's report continued...

You can also learn about two sermons regarding Creation care from A Rocha Australia members based in Wagga Wagga, NSW.

The working group established by the board to develop criteria for purchasing land for conservation, and potentially an A Rocha field studies centre, has produced a draft approach that we will soon provide to experts for feedback. Professor Andrew Bennett and Rob Scriven have graciously provided their expertise and thoughtful advice – thanks both! It has been revealing. We have been exploring how to consider the merits of a particular property against ecological and conservation criteria, as well as criteria regarding how to engage the local community, attract visitors and volunteers, and develop partnerships with scientists, government agencies and Christian organisations.

I've been working with A Rocha UK and others from the A Rocha family to produce a brief for world leaders on the role of nature-based solutions to climate change ahead of the COP26 Climate Conference to be held in Glasgow from 31 October to 12 November. Climate solutions that involve nature could reduce global carbon emissions by at least 10 billion tons by 2030 according to scientists. A Rocha has been researching and implementing such solutions for decades, and showing how nature-based solutions are also in fact people-based solutions that show God's love for all creation. Here are some examples. Local communities that reduce deforestation and instead regrow forests can both store carbon in forest landscape that provide them with firewood and reduce erosion of soil. Farmers who switch from intensive use of nitrogen-based fertilisers to low-till agriculture can reduce nitrous oxide emissions and restore soil carbon levels. You can read more about this on pages 9 and 10.

On a very sobering note, the sixth assessment report of the Intergovernmental Panel on Climate Change was released in August provides very stark warnings. I encourage you to read it. The following headline statements give a snapshot:

Wow. They are not easy to read. Yet we also know that God's promises remain. Paul's encouraging comments to the early Christians in Rome spring to mind when reading the grim warnings from the IPCC, and watching the news of climate impacts – and nature declines – around the globe.

'And we rejoice in the hope of the glory of God...And hope does not disappoint us, because God has poured out his love into our hearts by the Holy Spirit, whom he has given us.'

Romans 5, v.2&5

So, may I encourage you to place your hope in God's love and promises day-by-day as we care for and experience his amazing Creation even as it suffers from pressures including biodiversity loss and human-induced climate change.

I hope you enjoy this issue of ENews.



Dr Stuart Blanch
President (Chair, board of directors)

It is unequivocal that human influence has warmed the atmosphere, ocean and land.

Human-induced climate change is already affecting many weather and climate extremes in every region across the globe.

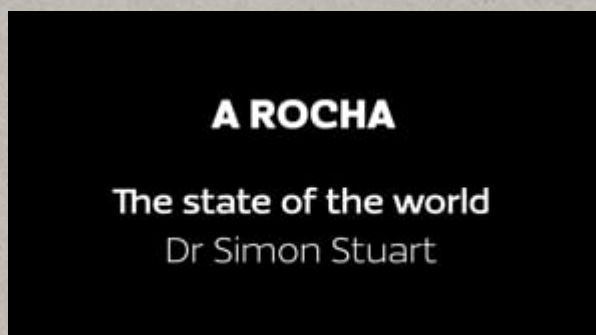
Global warming of 1.5°C and 2°C will be exceeded during the 21st century unless deep reductions in carbon dioxide (CO₂) and other greenhouse gas emissions occur in the coming decades.

From a physical science perspective, limiting human-induced global warming to a specific level requires limiting cumulative CO₂ emissions, reaching at least net zero CO₂ emissions, along with strong reductions in other greenhouse gas emissions.

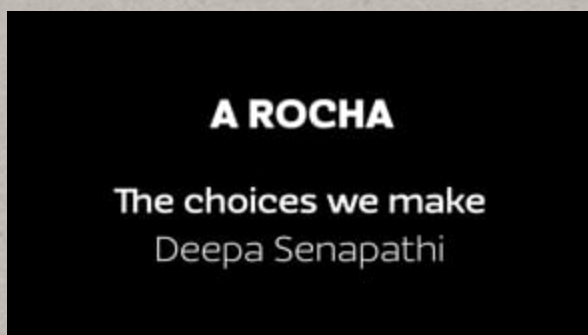
A Rocha Worldwide Forum Festival in June



It was encouraging to participate in the A Rocha worldwide family virtual get-together in early June, with thought-provoking talks, film screenings of country projects (see page 13), and time to share and pray together encouraged by our shared Christian faith and love for God's world. Some of the Big Talks have been uploaded for public viewing, these may be viewed by clicking on these black boxes:



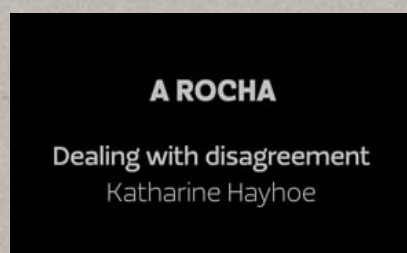
Simon is the Executive Director of A Rocha International and has over 30 years of experience with the International Union for Conservation of Nature.



Deepa is a Senior Research Fellow at the University of Reading, UK, and is on A Rocha International's Conservation Science Advisory Council.



Katharine Hayhoe is Chief Scientist for the Nature Conservancy and her current research focuses on analyzing models to help engineers, city managers and ecologists quantify the impacts of climate change. She often gives public talks on climate science, impacts, communication and faith and her upcoming book, [*Saving Us – A Climate Scientist's Case for Hope and Healing in a Divided World*](#), shows that small conversations can have astonishing results.



Vegetation surveying at Dusky Woodswallow Conservation Reserve, NSW

Further to the initial bird surveys undertaken by A Rocha Australia (ENews, Autumn 2021), vegetation surveying has commenced at Cassinia Environmental's Dusky Woodswallow Conservation Reserve at Alleena, NSW. In late May, ecologists Issy Lyons and Greg Stone, and technical assistant Joe Lisk visited the property for the purpose of identifying the dominant vegetation communities and establishing suitable locations for detailed surveys.



Large areas of the property were direct seeded in 2013

Following a preliminary reconnaissance of the 1700ha property, a total of 18 survey plots were selected within Box-ironbark woodland, Mallee shrubland, and revegetated areas. The location of each plot was recorded and marked in the field, and monitoring photographs taken. In future A Rocha Australia will return to the property to collect plot data which will provide an indication of vegetation structure, composition and functionality. This information – along with the bird survey results – will contribute to baseline data for an overall management and monitoring plan for Dusky Woodswallow Conservation Reserve.

Greg Stone –director, NSW

August planting session at Aldinga-Hart Road wetland, SA

A Rocha Australia and Onkaparinga Council organised a revegetation event on 22 August and it was wonderful to have such an amazing turnout – 22 adults & 2 children joined our planting session. Ages ranged from 96 years to 8 years!



Council provided 200 sedges (*Ghania filum*, *Ficinia nodosa*, *Cyperus gymnocaulos*, *Juncus pallidus* & *Cyperus vaginatus*). These were planted round the edges of a number of ponds. Fortunately, the soil was wet, so planting was easy. It was important though

to guard the plants as the kangaroo numbers are increasing in the area.

On the previous day, Paul Green, a member of A Rocha and well-known local ecologist, provided a fascinating and very informative talk on the local sedges at Hart Road wetland.

Sedgeland at Hart Road wetland provide important habitat for a range of species that live here permanently or visit occasionally.

In our Summer 2021 ENews we



provided results from our 2020 bird study, with 66 species recorded (59 being native species) over 38 surveys.



We were expecting rain but fortunately it held off until the next day when we also blessed with a beautiful double rainbow.

"And God said, "This is the sign [rainbow] of the covenant that I make between me and you and every living creature that is with you, for all future generations." Genesis 9: 12



Sally Shaw, director – SA

Bringing back the Black-breasted Button-quail, QLD

The United Nations has declared 2021–2030 as the Decade on Ecosystem Restoration and globally the A Rocha family hopes to make a significant contribution. In Australia, A Rocha has engaged in several partnerships that demonstrate restoration and its collaboration with Friends of the Escarpment Parks Toowoomba (FEP) at Redwood Park is a fine example. This 243-hectare property of Toowoomba Regional Council is draped on the eastern slopes of the Great Dividing Range beside an urban area of 120,000 people.

Sub-tropical climate, rich volcanic soils, moderate rainfall and 170 years of exposure to non-indigenous plants have contributed to major infestations of weeds in this part of Queensland. At Redwood Park, FEP has been helping Council to combat a suite of weeds that persistently threaten to destroy endangered ecosystems, notably, 40 ha of semi-evergreen vine-thicket ('dry rainforest' or 'softwood scrub'). Cat's claw creeper, Madeira vine and climbing asparagus fern tend to smother the ground layer and tree canopies of the scrub, radically



Semi-evergreen vine-thicket at Redwood Park, female Button-Quail at centre (remote camera image)

changing the vegetation structure and encouraging even more weeds. Loss of a shaded floor and its leaf litter is believed to have made Redwood Park temporarily uninhabitable for several ground-foraging animals and birds including the Noisy Pitta, Russet-tailed Thrush and Black-breasted Button-quail (Button-quail)—all of which have always had a patchy limited distribution in the Toowoomba region.



Black-breasted Button-quail, female at left, male at right (remote camera images).

In late 2020, A Rocha Australia started working alongside FEP to control major weeds at Redwood Park. Concerted efforts by FEP volunteers over nine preceding years saw large portions of the vine-thicket restored and in 2018 the Button-Quail was re-sighted after absence of many years. That year and the next marked the most...

...intense stage of a prolonged drought across much of Australia and many stressed trees in Redwood Park died back, exposing more of the ground to sunlight. With good rainfall from summer of 2020 to winter of 2021, the moist conditions led to an explosion of plant growth in the lowest layer, including dense stands of short weeds such as coral berry, cobbler's pegs, Brazilian nightshade and lantana. This phenomenon was another obstacle to the Button-quail and associated ground-foraging birds.



A Rocha Australia team member weeding out coral berry at Redwood Park



Coral berry infestation in semi-evergreen vine-thicket



Coral berry: leaves and fruit



A 'moonscape' of Button-quail feeding scrapes, Redwood Park, late dry season, December 2019

The Button-quail is famous for its habit of making a circular feeding scrape ('platelet') by standing on alternate legs as it scratches in the leaf litter and soil and pivots to complete a circle—as shown in this [video](#). Presence of fresh scrapes indicates that the birds are present...



A feeding scrape of a Button-quail



Multiple feeding scrapes

A small team of A Rocha Australia volunteers has laboured monthly with FEP to pull out weeds and reduce the waist-high sward of invasives in the vine-thicket at Redwood Park. The benefits for Button-quail have been immediate: more than once, fresh feeding scrapes have been seen throughout the weeded areas on the following day. Emplacement of remote cameras by A Rocha Australia also achieved a rare confirmation of breeding by Button-quail in the Park, with half-sized juveniles filmed accompanying an adult male, learning how to spin-and-scratch for their invertebrate food—this [video](#) shows them in action.



Fresh Button-quail feeding scrapes in recently weeded areas at Redwood Park

The challenge now is to complete weeding in a sizeable section of the scrub and establish a labour regime to maintain habitat for Button-quail and other animals for the longer term. A Rocha Australia volunteers can continue to participate in this habitat restoration and bird conservation initiative. Ultimately, the tree-destroying creepers must be brought under control—a difficult task by hand unless trials of biological controls prove effective.

The Black-breasted Button-quail (*Turnix melanogaster*) is listed as nationally vulnerable under the EPBC Act. More information can be accessed [here](#). There are seven species of button-quail in Australia. Surprising, Black-breasted button-quail are presently considered to be more closely related to shorebirds than to true quail.

Roger Jaensch – Executive Officer

Nature-based solutions to climate change–working draft



A Rocha UK has been leading development of a brief to world leaders and key decision makers leading into the COP26 climate conference in Glasgow this November regarding the important role Nature-based Solutions (NbS) have in mitigating and adapting to climate change. The following text from the advanced draft brief illustrates why they are important. The text is produced here with permission of A Rocha UK, whose endeavours are supported by A Rocha

International and members of the A Rocha family globally including A Rocha Australia.

Nature-based solutions are approaches that work with and enhance nature on land and sea to address societal challenges, including climate change. Nature-based solutions to climate change can both avoid greenhouse gas emissions and enhance carbon sinks on land and in the sea as well as build resilience and aid adaptation to climate change for both nature and people.

NbS therefore offer multiple benefits to people, climate and nature.

Nature stores biological carbon in a diverse array of ecosystems, such as forests including mangroves, soils, seagrass beds, crops, coral reefs, marine sediments, and wetlands.

When these are destroyed or damaged, the carbon dioxide, as well as other potent greenhouse gases such as methane and nitrous oxide are released into the atmosphere where they contribute to climate change for many decades. When ecosystems recover, they draw carbon out of the atmosphere and re-store it in the ecosystem. NbS can therefore help mitigate climate change by both reducing emissions into the atmosphere by avoiding ecosystem destruction, and by reducing atmospheric CO₂ when ecosystems are restored.

NbS can also help biodiversity as well as human societies adapt to the impacts of global heating. NbS that deliver larger and more connected ecosystems and in better condition, will allow species to move and adapt in response to a changing climate. NbS can moderate rising heat in urban areas, protect coastal areas from rising sea levels and increasing storm surges, and increase drought resistance of rangelands...



Scientific and Christian Principles for Nature-based Solutions to mitigate and adapt to Climate Change

– working draft

Based on our understanding of the science, our own experience and our Christian faith, we propose the following principles should be followed by decision-makers in relation to NbS.

- a. We support and encourage the use of NbS – to address climate change and to address habitat and species loss. NbS are an important complement to the rapid phase-out of fossil fuels and an end to large scale conversion of the world's carbon sinks.
- b. Governments, however, must be consistently clear that NbS are not a substitute for the rapid phase out of fossil fuels, but can only complement them to limit Earth's temperature rise as close as possible to 1.5°C under the Paris Agreement.
- c. NbS for climate action must also deliver *for* nature and not just be delivered *by* nature to ensure NbS are not detrimental to nature and people.
- d. NbS, therefore, should do no harm and be designed and implemented to demonstrate measurable positive outcomes to the climate and nature as well as providing health, wellbeing and economic opportunities for people.
- e. NbS should be implemented with the full engagement and consent of Indigenous Peoples and local communities in a way that respects their cultural and ecological rights through ensuring transparency, inclusion and equity; NbS should be developed in a bottom-up way that recognises local knowledge and customary practices that are beneficial to people, nature and climate, such as low or no-till farming practices.
- f. NbS for the specific purposes of combating climate change, are themselves no substitute for a comprehensive international drive to protect the Earth's remaining intact ecosystems and biomes which are hotspots for both biodiversity and carbon storage, while also protecting people from climate change impacts. NbS can contribute to this drive and must be pursued in a manner which is consistent with it.
- g. NbS must be undertaken rapidly and ambitiously. This will require adequate policy, governance and evaluation methods to encourage uptake from interconnected local projects to continental scale initiatives.

If carried out in the form above, we believe NbS to climate change would respect key biblical principles including:

- The Bible teaches us that the Earth was created by God to be good; humanity does not own it but rather people were created in God's image as stewards to 'work it and take care of it' (Genesis Chapters 1 and 2; Psalm 24:1–2; Psalm 50:10–12).
- Jesus's command that we should 'Love our neighbour as yourself' (Mark 12:31) rather than loving money (Matthew 6:24; Hebrews 13:5) and being greedy (Proverbs 1:19; Luke 12:15),
- Do not be hypocritical (Romans 12:9, Matthew 7:3–5).
- God's justice and mercy towards all Creation including the oppressed, marginalised, poor, vulnerable, orphans and powerless (Psalm 146:6–8; Psalm 10: 14–18; Amos 5:12; Zechariah 7:9–10; Micah 6:8; Matthew 25:35–36).
- Restitution should be made for stealing or harming others' property or livelihoods by repaying them at least the value of the damage caused (Exodus 22:1, 3–6; Leviticus:2–5; Luke 19:8)."

By Stuart Blanch

The Book of Esther and Creation Care

Recently my pastor took some long service leave, so I asked if I could preach from the Old Testament narrative of Esther. And in my preparation, I floundered. I mean I *really* floundered—I did so because of the ambiguities of the main protagonists in the story. So, for example:

- Does Esther, the Jewish orphan, willingly take part in the despot King Xerxes' ¹ beauty pageant, or was she forced!? (see Esther 2)
- Is Mordecai's defiance to the chief antagonist Haman in Esther 3, a petty family dispute carried over for several generations; or does he have more godly reasons to defy the king's second in command!?

And yet it is the very ambiguities of Esther that make it so relevant to our age.²

Is not my behavior as a Christian, ambiguous at times to what Christ has achieved for me on the Cross. At other times, it's downright rebellious.

Is this not often my behavior to creation care. Oh, I may mouth belief to the cause—but ask me to go without a daily triple shot macchiato, that I might support creation care activities in Africa. Get real!

But as is the Bible as a whole, Esther has some redemptive and restorative messages for us living in the now, not yet, time;³ including that of Creation Care.

They include:

- We can feel drained, exhausted, and discouraged in making a stand for God and the care of His creation; but there are great examples of courage despite opposition in the Bible and Christian history. Both Esther and Mordecai have pivot points in their lives where God gives them the strength to stand for Him, despite the consequences.⁴
- We need to keep in mind, as Mordecai declares to Esther regarding her role, that we are put on Earth '*for a time such as this*', and that God can enable us (see Esther 4:15).
- Thus, though Creation Care activities can be opposed by the powerful forces of greed and ignorance, and what we do may feel insignificant, it doesn't mean that God is not able to bless our work.
- We mustn't neglect prayer, as this is implicit in the activities of God's people in the book of Esther. An A Rocha member shared with me recently the difficult experience of arguing the case for habitat maintenance, with stakeholders for whom this is not a great concern. It struck me how much I need to pray for this person (and the stakeholders they're engaged with!!).
- That we need to keep the endgame in mind. Esther ends with a celebration of their salvation from genocide; the festival of Purim, that is still celebrated today. We look forward to the new heavens and earth, where all will be redeemed, including God's creation⁵.



Trusting that the Lord will bless you in your creation care activities, and that Esther might be an encouragement to you.

Rob Scriven, Wagga Wagga

¹ Some translations in Esther 1:1 have Ahasuerus—this is his Persian name. Xerxes is his Greek name.

² I remember telling a lady at church "I wish I'd chosen the book of Daniel—it's full of such triumphant events, like surviving furnaces, and lions' mouths being shut tight." Her sagely reply was that "Daniel may be triumphant, but Esther is relatable!" Esther also describes the remnant of Israel in exile, which many Christians in the developed world now perceive as our situation.

³ In the sense that Christ is King, but we don't currently see everything held in submission to Him, including the use of His creation.

⁴ We can't always claim the same outcome as happened for Esther, Mordecai and the other Jews in Xerxes kingdom; but we can presuppose that what we do in Creation Care is God honoring; and that God will work through us in His Sovereign will, in ways we don't expect.

⁵ Creation will not be destroyed by fire, as many Christians claim, using 2 Peter 3 as a proof text. Rather this text describes a refining, including the removal of the futility, that from Genesis 3, creation has been subject to (Rom. 8:20).



Rob is married to Kate, has three adult children, and has retired in Wagga Wagga, NSW. He did an MSc at UNSW; and worked in the rangelands (Broken Hill and Hay) as a Soil Conservationist, including the management of 'Protected Lands' native vegetation. He was then Manager of Sustainable Landscapes (soil, land & vegetation investments on private land) for the Murrumbidgee Catchment Authority. He attends St Aidan's Presbyterian Church.

More from Wagga Wagga...

Reuben Robinson shares a sermon [recording](#) from a Creation Care service held at Wagga Wagga Baptist Church. He reports:

"We had a video presentation celebrating God's plants and animals, a kids' talk about the gift of creation, prayers by our Creation Care committee, and music celebrating God's majesty in creation and creation praising God. I gave a sermon on the biblical principles of creation care, starting with Genesis 1 but looking at a number of bible passages. During the sermon I spoke about my own experience of creation growing up at Braidwood, NSW"

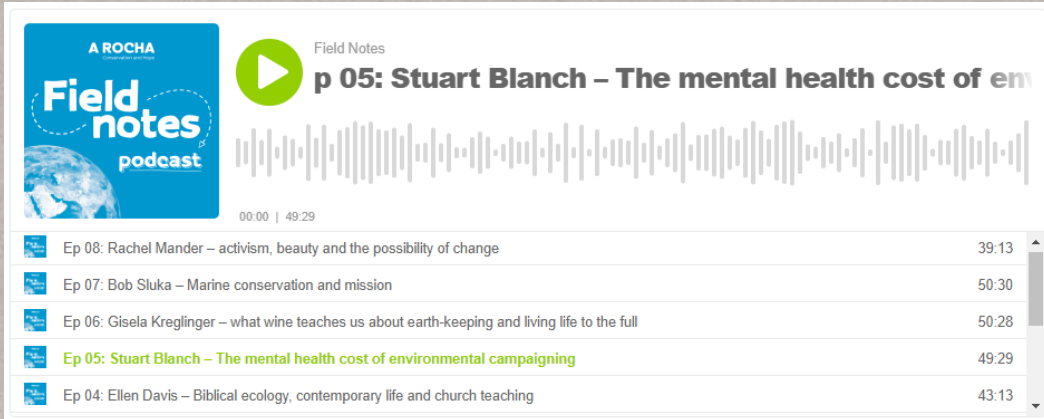


In the sermon Reuben gives some great practical examples of how the church can get involved in Creation Care. Thanks for sharing this, Reuben. We look forward to sharing from other churches in upcoming ENews editions.

In other news...

Have time to listen to podcasts?

A Rocha has always been a voice of hope in the environmental space. Hosted by Peter Harris and Bryony Loveless, the [Field Notes podcast](#) is an exploration of the ideas, practice and experience making a difference on the ground, through conversations with people who really know what they are talking about – from conservation scientists, explorers and biologists, to artists, entrepreneurs and theologians. They have hopeful stories to tell. New episodes every two weeks.



The screenshot shows the 'Field Notes' podcast player interface. At the top left is the 'A ROCHA' logo and 'Field notes podcast' with a globe icon. A green play button icon is followed by the text 'Field Notes' and 'p 05: Stuart Blanch – The mental health cost of environmental campaigning'. Below this is a waveform visualization and a progress bar showing '00:00 | 49:29'. A list of episodes is shown below:

Episode	Duration
Ep 08: Rachel Mander – activism, beauty and the possibility of change	39:13
Ep 07: Bob Sluka – Marine conservation and mission	50:30
Ep 06: Gisela Kreglinger – what wine teaches us about earth-keeping and living life to the full	50:28
Ep 05: Stuart Blanch – The mental health cost of environmental campaigning	49:29
Ep 04: Ellen Davis – Biblical ecology, contemporary life and church teaching	43:13

Forum Festival film screenings

Here are links to some of the films shown during the festival. They will be kept available until the end of the year:



Consider becoming a member

A Rocha Australia is very close to having 100 members. Members are important for good governance and having this number will help establish our position when applying for grant funding. We welcome more people to get involved. Please consider applying for membership, application form is [here](#).

GET INVOLVED



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Send feedback and suggested events or articles for the Spring ENews by 15 Nov to australia.comms@arocha.org