BUTTERFLY CONSERVATION SA INC.

Founded 25th July, 1998 Adelaide, South Australia.

NEWSLETTER

No. 80: August 2022

IN THIS ISSUE

Herding Caterpillars in 3D

BCSA is collaborating with the arts community to link arts, science and technology in a story about the Chequered Copper (*Lucia limbaria*) butterfly's mutual symbiosis with a common black ant.

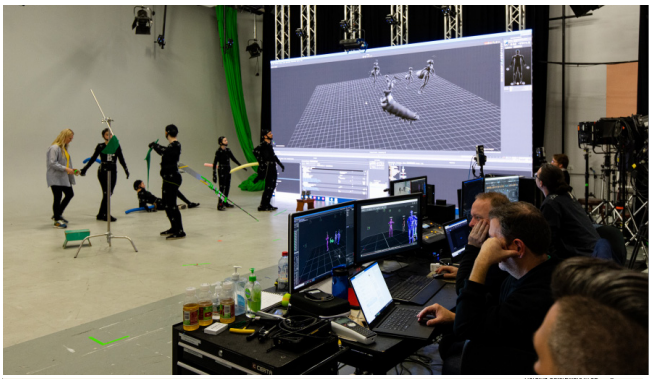
The Creative Director of this 3D project, Rosina Possingham, was working on the Parklands project in May 2021. At this time the world premiere of the 'Herding Caterpillars' theatrical event was being performed by artists from the Open Space Contemporary Arts (OSCA). Newsletter 75 May 2021.

Rosina and BCSA Chairman Gerry Butler met in the parklands and discussed the idea of re imagining the Herding Caterpillars performance in 3D. The concept and overall plan on how to produce this in 'The Void' motion capture studio was developed and an application for funding of this event to be performed at the 2022 Nature Festival was successful.

Recently the artists have been working to produce a 6 minute virtual production of the Herding Caterpillars performance.

It will include four ants, an egg that hatches to a caterpillar, that is then herded to its host plant and the ant nest, fed and finally grows into a butterfly.

Continued page 3



Photos Greg Coote: HERDING CATERPILLARS IN 3D a symbiotic relationship between three distinct species.

BUTTERFLY CONSERVATION SA. INC. Membership enquiries: membership@butterflyconservationsa.net.au or online: www.butterflyconservationsa.net.au/product/become-a-member/ Membership payments ($20pa - less $10 for email newsletters): to Treasurer: PO Box 4, DAW PARK 5041. Cheques to be made out to: Butterfly Conservation SA Inc. EFT details: BSB 633-000 Account No:152785838 Bank: Bendigo Bank. Account Name: Butterfly Conservation SA Inc.
Please email Treasurer if paying by direct debit: treasurer@butterflyconservationsa.net.au with name, amount and item.





CONGRATULATIONS ROGER GRUND OAM

Roger Grund was presented with his Order of Australia Medal at Myrtle Bank on 28th June by the Governor of South Australia Her Excellency the Honourable Frances Adamson AC.

Photos: Medal presentation by Her Excellency; Roger with Jan Forrest OAM; Roger and wife Rosemary; group photo with daughter Larissa, wife Rosemary and the Governor; Roger and the Governor enjoy refreshments.

IMPORTANCE OF THE RAIN MOTH TO WAIKERIE

The Waikerie Silo Art mural is located in a unique cliff top position in the heart of town. The silos showcase artworks on both sides. They can be seen from within the town and the River Murray. The theme of the big double silo project is “Healthy River, Healthy Community“. The silo project has been funded by the South Australian Government and supported by Nature Foundation SA.

The silos have been painted by artists Garry Duncan and Jimmy Dvate.

Of interest to BCSA members is the depiction of three ‘rain moths’ at the base of the silo art and also rain moths depicted on council rubbish bins.

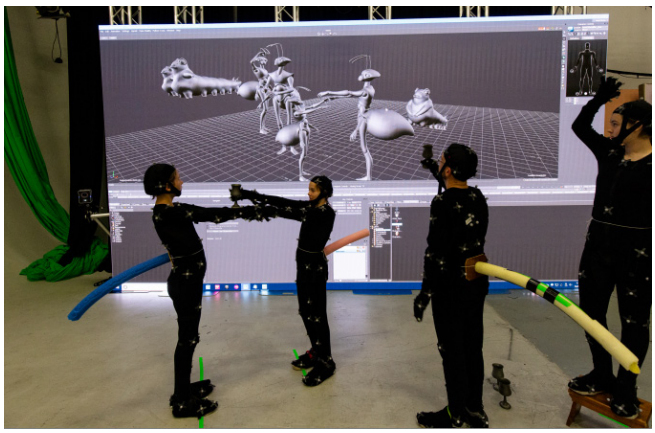
The name for the town of Waikerie is derived from the Indigenous word for the Giant Swift Moth *Abantiades* (previously *Trictena*) *argentata*), which is “Weikari”.

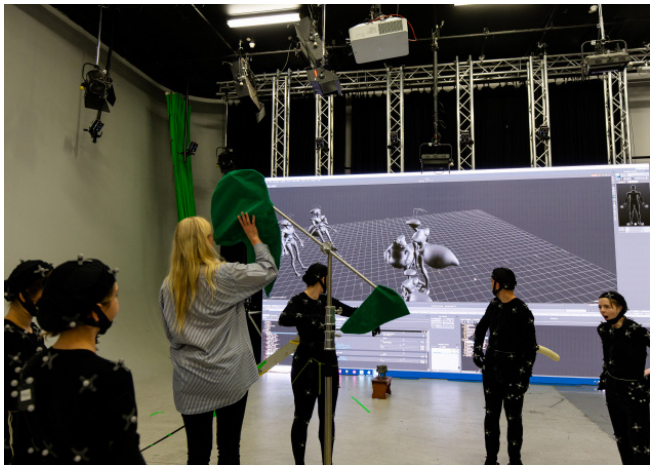
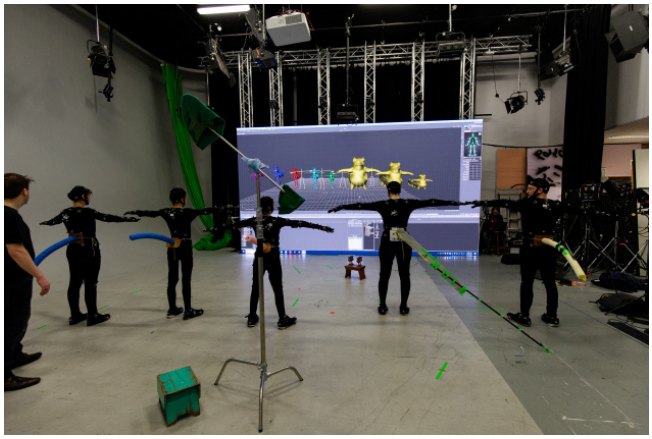
Known locally as the Rain Moth, as its name suggests the adult moth generally appears after rain.


Photos: Jan Forrest.

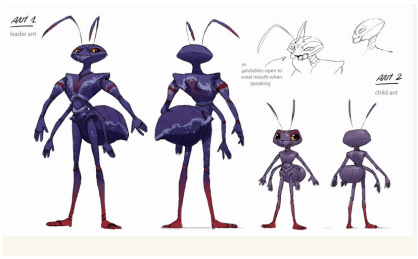
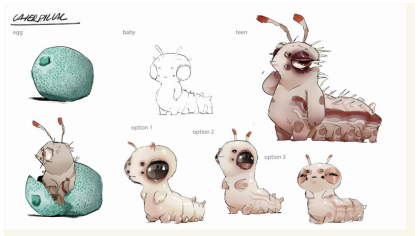
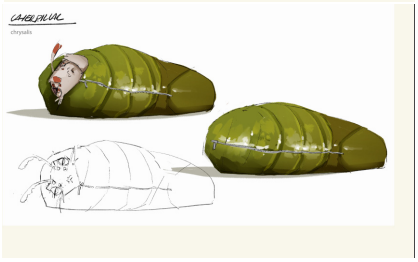
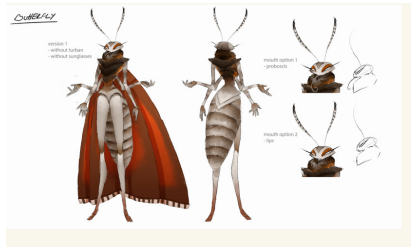
The caterpillars, or ‘Bardi Grub’ are a popular fishing bait, and live in tunnels in the ground where they feed on the roots of adjacent native trees such as Black Box Gums or River Red Gums.

HERDING CATERPILLARS IN 3D *Continued from page 1.*



Production team photos and illustrations

Continued from page 1.

An augmented reality (AR) experience with sculptural elements will be available at three sites: the South Australian Museum lawns, MOD (University of South Australia, next to the Morphett Street bridge) and Park 16 Victoria Park / Pakapakanthi (where Chequered Copper butterfly was re-discovered in 2011).

At these sites there will QR codes and signage to download the Herding Caterpillars in 3D App. On this home screen will be a 30 second looping animation which features the mutual symbiosis with the caterpillar being herded by the ants on its host plant *Oxalis perennans.*

Further information on the other sites will be included and information about the project and external links. Here also will be commissioned sculptures which incorporate butterflies, caterpillars, ants and *Oxalis* plants.

The virtual reality (VR) experience will be held in the State Library Institute building, Hetzel room on Saturday 15th and Sunday 16th October.

Time slots will be allocated through a Nature Festival booking system and the experience will run every half hour for a 15 minute session to enable cleaning of headsets between each session.

We now invite you to be part of this exciting event by volunteering at these public showings. We need helpers to 'herd' the visitors to their seats, take tickets and assist with cleaning headsets in between performances, promoting butterfly conservation and management of any merchandise.

Members and volunteers will be invited to the opening night on Friday 14th October with priority tickets provided to our volunteers.

If you are willing to volunteer please contact Gerry Butler via email, at Chairman@butterflyconservationsa.net.au

PROFILE - CHAIRMAN GERRY BUTLER

I have been a member of Butterfly Conservation SA since 2008 when David Keane, our deceased Life Member, sold me a copy of the Butterfly book with membership at the Mt Pleasant Show. I joined the Committee not long after when the Committee put out a call for more members to get involved in the governance of the association.

In my professional and volunteer roles, I have always put care for the environment, and wide engagement with community, at the forefront.

My first professional career was as a Petroleum Geologist for 14 years, where I met Roger Grund OAM, and then I switched to Community Landcare Project Officer for 20 years. Through my adult life I have been involved in organic agriculture (local through to international), Landcare (local through to national) and Butterfly Conservation from young to old.

I participate in a large number of community organisations and encourage others to do so to their capacity. Currently I am involved in the Management Committee of the Landcare Association of SA of which I am a Life Member, Chairperson of The Gums Landcare Group, a member of Campbelltown Players (theatre group) and a working Group member of the Newton Community Garden.

I feel it is important to step-up for community activities and, over the last 2 years during the COVID pandemic, I have volunteered in the Campbelltown Meals on Wheels kitchen.

To enable our society to function and enjoy our democracy I participate as an Electoral Officer in State and Federal Elections. It gives me great satisfaction to enable electors to cast their vote.

I undertake many speaking engagement at schools, community groups and aged care facilities, speaking on a diversity of topics. Networking and collaboration on Arts, Science and Technology are of great interest to me and as one of the ways we can prosper as individuals and contribute to society.

Thank you for being a member of Butterfly Conservation SA.
Gerry Butler

Photos Jan Forrest: Gerry and committee member Sarah at the BCSA stall Australian Plants Society Sept. 2020; with the South Australian Museum Director at the launch of the moth book Sept. 2019; and below hosting an event at Park 16 Victoria Park / Paka-pakanthi March 2020.

LOBETHAL COMMUNITY ASSOCIATION PRESENTS

LOBETHAL GARDENING FESTIVAL 2022

Celebrating well-being, through gardening.

SUNDAY 6 NOVEMBER 2022
10 AM - 4 PM

Visit the Lobethal Community Association Facebook page for more details.
Tickets on sale early September.

NOMINATIONS FOR THE BCSA COMMITTEE ARE NOW BEING RECEIVED

see page 15 for the nomination form

GOOD FOR MORE THAN A KISS:
FIND OUT WHY MISTLETOE IS AN IMPORTANT PART OF NATURE.

You're probably familiar with the Christmas tradition of kissing under the mistletoe. Did you know about its slanderous reputation as a tree killer? Read on to find out the truth.

While there are 1000+ different species of mistletoe across the globe, the most well-known is the European mistletoe (*Viscum album*).

Here in Australia there are almost 100 native species of mistletoe – and in greater Adelaide, there's just 5 including box mistletoe (*Amyema miquelii*), wire-leaf mistletoe (*Amyema preissii*), tea-tree mistletoe (*Amyema melaleucae*), drooping mistletoe (*Amyema pendula* ssp. *pendula*) and harlequin mistletoe (*Lysiana exocarpii*).

You are most likely to find mistletoe living in the crown (where the branches grow out of the trunk) of its host plant.

Mistletoes are 'semi-parasitic' plants, which means that they create some food themselves and rely on a host plant (like a tree) for the rest.

Is mistletoe bad for a tree?
Native mistletoe is misunderstood in Australia because it is a semi-parasitic plant.

As a semi-parasitic plant, mistletoes rely on their host tree for survival, but if the tree dies, they die too. So they really don't want to hurt their host – who gives them life.

Mistletoes don't usually damage host trees or any other plant that they attach themselves to, and this living on a tree life is all a part of the natural environment.

Plus trees can shake them off if they really wanted. Trees are known to drop a branch when wanting to remove mistletoe on them.

What are the benefits of mistletoe?
Mistletoe is great for:

- Bird food, particularly for the aptly named mistletoe bird.
- Host plant for the rare southern purple azure butterfly and 3 other local butterfly species. Note: Harlequin mistletoe is not a butterfly host plant.
- Being a cool spot for bird nests.
- Creating tree hollows. When a tree drops a limb to shake off mistletoe this can create a new hollow for local birds and animals.

So if you spot some mistletoe in your garden, think twice before removing it.

How does mistletoe grow?
Mistletoes don't have the same root system as other plants.

They have a 'haustorium' which means a stem or root that can attach and grow (by taking some nutrients and water) on a host plant.

Mistletoes can change the way they look to match their host. For example, box mistletoe has leaves shaped like Eucalyptus leaves.

This is because they share hormones with their host trees, and it may be a mistletoe camouflage survival tactic to avoid being a possum snack.

Once established, mistletoe takes a little while to flower and produce fruit.

How to "seed" mistletoe.
You've read the benefits. Now here's 7 steps to seed/propagate mistletoe in your yard:

- Find a healthy and not too young tree to be the host.
- Locate some fruiting mistletoe.
- Pick some ripe fruit from the mistletoe
- Pop the seed out of the fruit. It'll be sticky.
- Find a branch on your host tree about the width of a pencil.
- Wipe the sticky seed onto the branch's underside.
- Wait and see if it takes and grows.
- **Top tip:** To maximise your success, seed more than one plant per branch. If they all start growing, remove the extras, leaving just one.

Spread the mistletoe love.
Mistletoe is an important part of a healthy environment.

You can help by:

- Spreading the word about the important role mistletoe plays in Adelaide's environment.
- Leaving native mistletoe if you spot it on a tree at home
- Finding opportunities to propagate native mistletoe – just give it a go!

Reprinted from Green Adelaide Nature Education Weekly Digest and 'BLOGS AND NEWS'

Photo top left R. Sandercock: *Amyema melaleucae.* All other photos R.Grund: below, *Amyema miquelii,* top right *Amyema* sp., right *Amyema pendula* on *Eucalyptus baxteri.*

GIRL GUIDES TURN UNWANTED ELECTION POSTERS INTO TREE GUARDS

Jan Forrest OAM

Girl Guides from Flagstaff Hill, Highgate, 3rd Goodwood (and some parents) and Hackam recently placed tree guards made from election corflute posters around new trees and shrubs being planted along Pedlars Creek at their campsite *Douglas Scrub* at Blewitt Springs.

This great idea to re-cycle election posters no longer required, means they will not immediately go to land-fill.

Seek out those who stood for office (especially those who lost their bid for election) and if they do not want their corflute election posters you can turn them into tree guards for the cost only of a tree stake and two cable ties, plus your time to make them.

You will need:

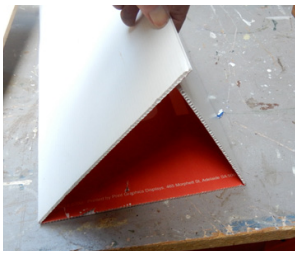
stanley knife or strong cutter
blunt metal object e.g. handle of a kitchen knife or spoon
small hollow hole punch or small drill bit
large hollow hole pinch or large drill bit
wooden template to measure the width of one triangle side and use as a straight edge in which to score your fold.

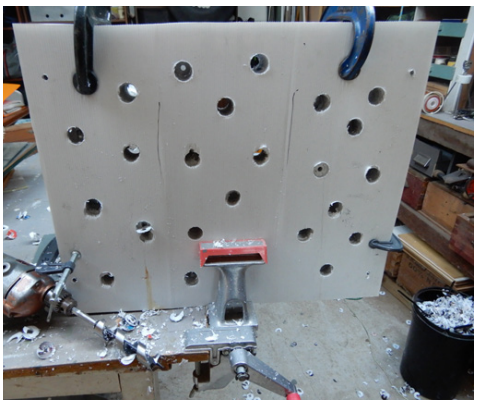
Instructions:

Cut the poster into half with a stanley knife.
Fold this half into three, image side up, by placing a template on one side, score against the template with a blunt edged object (we used the handle of a kitchen knife) then fold up against the template. Make sure you do not cut the plastic face.
NOTE: If the grain runs 'across' you may need to 'score' on both sides and hammer the edges.
Fold this side over then score with blunt object and fold.
Punch a hole 5cm down from the top and not too close to the edge in the four corners or alternatively clamp 20 or so signs together and drill all these holes through them all.
To give more light and let air through so the guard does not blow over either punch or drill 4 or 5 large 2cm holes in each of the 3 sides. We clamped 20 signs together and drilled these holes through them all.

To assemble:

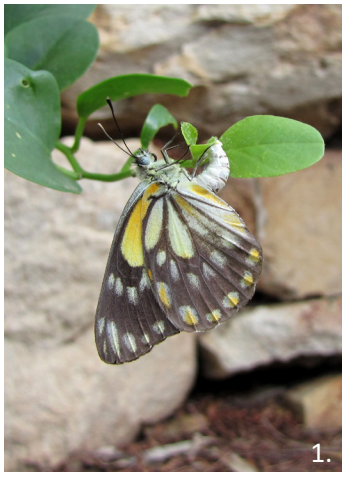
Fold the guard into a triangle, place a cable tie loosely through the small holes you have made in the corners. Place a 25 x 25 x 600 (or longer) garden stake through the cable ties and tighten sufficiently to hold the sides together around the stake. Hammer in the stake. Tighten cable ties, not too tight so the stake can slide out easily when it comes time to remove.





PHOTOGRAPHIC STUDY - CAPER WHITE BUTTERFLY *Belenois java*

Photographer: *Helen P. Wilmore*



Photos: 1. Female butterfly laying eggs. 2. A cluster of newly laid eggs on a *Capparis spinosa* leaf. 3. Eggs appear pale orange as caterpillars develop inside. 4. Black heads of caterpillars close to hatching can be seen inside the eggs. 5a. Newly hatched caterpillars eat their own egg shells (close up). 5b. Newly hatched caterpillars eat their own egg shells. 6. First instar caterpillars turn greenish-brown after feeding on the host plant. 7. The caterpillar hairs (setae) secrete sticky droplets of poisonous fluid - and collect caterpillar frass! 8. Early instar caterpillars arch upwards and the skin separates at the neck prior to shedding. 9. Caterpillars leave newly shed skins on the leaf. 10. Young caterpillars group together. 11. Caterpillars lining up in rows on a leaf. 12. The caper white caterpillar has distinctive features. 13. A caterpillar weakened by extreme heat falls prey to an ant. 14. The caterpillar's posterior end is attached to a leaf and skin shedding begins. 15. Squeezing out of its old skin. 16. The old face comes off and the new face gradually turns black.

17. Caterpillar and its old skin. 18a., b., c., d., e. Caterpillar growing bigger. 19. Late instar caterpillar with poison-tipped setae (hairs). 20a. b., c. Final instar caterpillar. 21. The final instar caterpillar stops eating and wanders to find somewhere to pupate. 22. The caterpillar's body shortens as it prepares for pupation. 23. Prior to pupation the caterpillar turns reddish-brown. 24. The caterpillar moves its head from left to right to attach itself with silk. 25. The caterpillar hangs around and undergoes further changes before pupating. 26. Caterpillar ready to pupate.

27. The caterpillar sheds its last skin and turns into a pupa. 28. The newly formed pupa already resembles a butterfly. 29. A pupa, or chrysalis, will flip from one side to the other when disturbed. 30. The underside of a pupa showing a network of silk with three main attachment points. 31. Caper white chrysalises come in a variety of colours. 32. A chrysalis casing starting to crack as the butterfly prepares to emerge. 33a., b., c., A butterfly begins to emerge. 34a. A butterfly emerging.

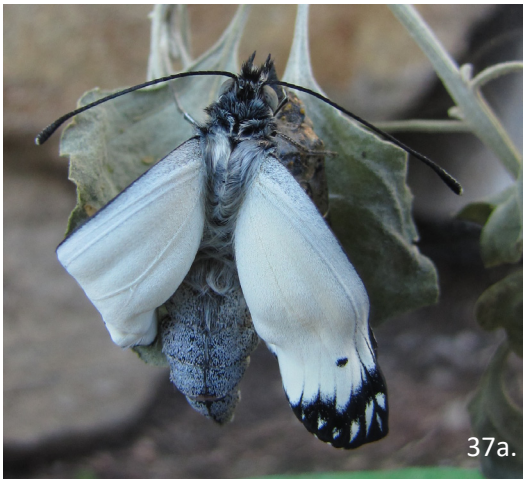

34b.


35a.


35b.


35c.

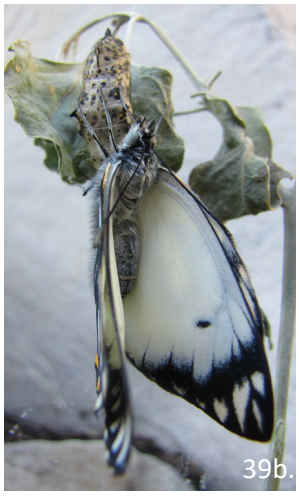

36.


37a.

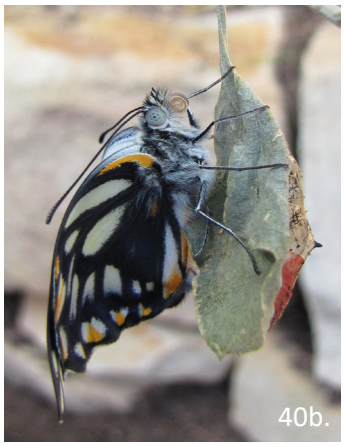

37b.

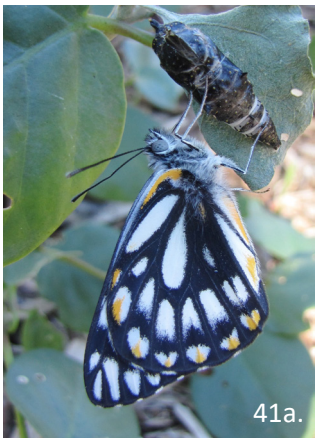

38.


39a.


39b.


40a.


40b.


41a.


41b.


42

34b. A butterfly emerging. 35a., b., c. The emerging butterfly excretes red-coloured liquid meconium containing waste materials. 36. A newly emerged butterfly. 37a., b. The newly emerged butterfly has crumpled wings. 38. Empty chrysalis case with red-coloured meconium from the newly emerged butterfly. 39a., b. A butterfly hangs upside-down as its wings expand. 40a., b. The butterfly's wings need to fully expand before they dry and harden. 41a., b. Newly emerged butterfly preparing for flight as it warms up. 42. The butterfly's compound eyes can see in many directions.

ABOUT THE PHOTOGRAPHER

Helen P. Wilmore

Helen has a PhD in human embryonic genetics, and a curiosity for biological processes and how creatures grow and develop. She developed an amateur interest in butterflies after being inspired by Gil Hollamby talking for Butterfly Conservation SA in Gawler in 2017.

With a half-acre garden, Helen already had many native plants and she added butterfly-attracting local species sourced from the Gawler Environment and Heritage Association nursery. Frustrated by glimpsing large, colourful butterflies flying through, she then planted patches of specific caterpillar food plants to tempt these butterflies to linger: caper bushes (*Capparis spinosa*) for the caper white (*Belenois java*), cotton bushes (*Gomphocarpus fruticosus* and *Asclepias curassavica*) for the monarch (*Danaus plexippus*) and the occasional passing lesser wanderer (*Danaus petilia*), and she asked her husband to stop picking dainty swallowtail caterpillars (*Papilio anactus*) off their various citrus trees.

No longer working in the scientific field, Helen now focuses on family, the garden, and volunteering with local community groups. She also has time to enjoy photographing all kinds of subjects from people and landscapes to garden wildlife and insects. With close-up photography of butterflies and caterpillars, she has been able to visually capture curious phenomena and behaviours, as seen in this study.

A little research, using websites like the BCSA and Roger Grund sites, have then helped her to explain what the camera sees. The photographs were taken of *Belenois java* in the wild and also humanely kept for short periods in various glass containers (like a fish tank and a glass kettle), in order to observe them closely and to capture processes like caterpillars pupating, which are over in minutes. Helen used a Canon PowerShot SX1 IS (much loved and now worn out - since replaced with an entry level SLR and a modern bridge camera).

Helen has photographed and videoed the various life stages of several butterfly species and hopes to share future images with BCSA members.

GREAT SOUTHERN BIOBLITZ 2022

Increasing biodiversity awareness through Citizen Science

The Great Southern BioBlitz (GSB) is an international event of intense biological surveying in an attempt to record all the living species within designated areas across the Southern Hemisphere during Spring. It highlights the immense biodiversity spread across the Southern Hemisphere in the flourishing springtime, as well as engaging the public in science and nature learning using the citizen science platform, iNaturalist.

The Great Southern Bioblitz will be held from 28 to 31 October, incorporating different communities, areas and regions across the Southern Hemisphere.

If you are interested in taking part go to: **https://www.greatsouthernbioblitz.org** for more information.

HISTORICAL BUTTERFLY SURVEYS

From the mid 1990s and early 2000's Roger Grund, often with the late Lindsay Hunt, conducted surveys of many parts of South Australia documenting the butterflies and plants of remnant vegetation in government reserves and parks, council owned land, road reserves and private land both heritage listed and not heritage listed.

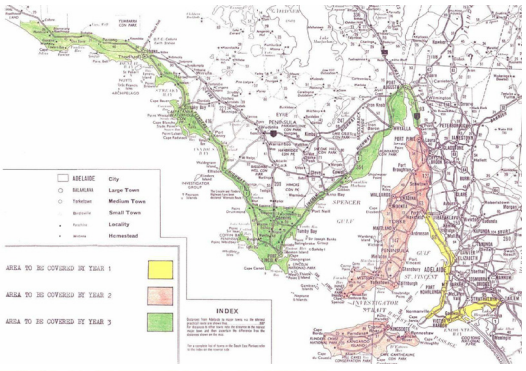
These reports were funded by the Wildlife Fund and the Department of Environment. Although not available to the general public, copies of particular areas can be made available from the Department of Environment and from BCSA for land owners, councils and Friends Groups with a genuine interest in a particular area of native vegetation.

The reports cover:

- Location and area of the land surveyed.
- Date and length of time taken to undertake the survey.
- Primary vegetation dominance.
- Condition of remnant vegetation.
- Comprehensive list of resident butterfly foodplants.
- Historical butterfly records from this area.
- Actual butterfly populations sighted.
- Additional likely resident butterfly species.
- Summary.
- Conservation status of area observed.

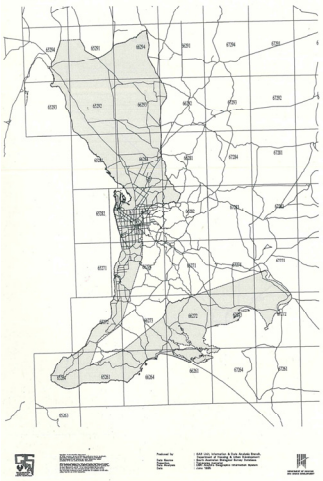
Reports are available for the following areas:

Fleurieu Peninsula.
Mid North / Southern Flinders Ranges.
North East Eyre Peninsula.
Southern Eyre Peninsula.
Lower South East.
Yellow Sedge-skipper on Yorke Peninsula.



The map above shows the extent of the areas surveyed on Eyre and Yorke Peninsulas and the lower Flinders Ranges. These surveys took part from 1998 to 2003.

Although Kangaroo Island is noted we have not yet located this full report although individual species were surveyed from time to time.



The map on the left shows the extent of the survey area on the Fleurieu Peninsula. These surveys took place from 1995 to 1998.

Butterfly Conservation South Australia Inc.

presents the twelfth

PUBLIC TALKS PROGRAM for 2022

On the first Tuesday of the month March to November at 6.15pm for a prompt 6.30pm start.

At the Plympton Community Centre
34 Long Street, Plympton.
(200 metres E of Marion Rd, and 300 metres N of Anzac Highway).

Public transport options include:
Bus from the city via Anzac Highway.
Routes: 245, 248, 262, 263, 265, M44, N262.
Closest stop is Stop 9, then approximately 350 metre walk along Long Street.
Bus from the city via Marion Road.
Routes 100, 101, H20. Closest stop is Stop 10 (east side is approximately 100 metres south of Long street). Stop 10 (west side is on the other side of Moringie Ave. approx. 100 metres north of Long Street). Then approx. 250 metre walk along Long Street.
Entry by donation (minimum of $2).
Bookings not required
Please bring supper to share (unless otherwise advised). Bring your own cup, tea/coffee will be supplied.
Meetings should conclude by 8.30pm.
At the start of each meeting a ten minute presentation on a *'Butterfly of the Month'* will be given by a BCSA committee member.
DON'T FORGET TO BYO CUP.

Photo Marianne Broug: Dainty Swallowtail butterfly *Papilio anactus*

KONICA MINOLTA

BUTTERFLY CONSERVATION SA INC.
C/- PO Box 4, DAW PARK. 5041.
For further information contact: Jan Forrest 8297 8230
Annual membership: **$10** per year. Plus $10 if you choose to receive the newsletter via mail. Life Membership $200.

Website: www.butterflyconservationsa.net.au

Resources for sale: at public talk meetings or on-line at www.butterflyconservationsa.net.au/shop.
Books ***'Attracting butterflies to your garden, what to grow and conserve in the Adelaide region'*** (2nd edition).
'***Caterpillars moths and their plants of southern Australia'***.
Large **spider posters,** A3 size **moth posters** and **plant tags.**

www.butterflyconservationsa.net.au

2022 ANNUAL GENERAL MEETING

Prior to the September Public Talk on 6th September our 24th Annual General Meeting will be held. If you have an interest in helping us to promote the conservation of butterflies and other insects and to promote invertebrate biodiversity **please take this opportunity to join the committee.**

We meet bi-monthly usually at a member's home for a meal at 6.00pm, with the meeting starting at 7.00pm and generally running for about two hours.

PUBLIC TALKS PROGRAM 2022

6th Sept. 6.30pm *BCSA AGM* 7.00pm Public Talk *Cat Tracker: where do cats roam?* The Cat Tracker project explored the movement of pet cats, with over 400 cats tracked in South Australia. Discover how far cats roamed and the impact of the project on cat owners. Presented by Dr. Philip Roetman.

Dr. Philip Roetman was involved in running innovative citizen science projects and events at UniSA from 2007 until 2018. These projects engaged thousands of citizen scientists in activities like counting koalas, tracking cats, spotlighting in rock pools, and recording bat calls.

The data collected have been useful in understanding the distributions of species, the home-ranges of domestic pets, the management of abundant species, and the locations of threatened species. Projects included BioBlitz events, the Great Koala Count 2, Cat Tracker, Birding the 'burbs, Little Corellas, Edible Gardens, Fluker Posts and Goanna Watch. Philip is now an adjunct with UniSA.

The Cat Tracker Project was just one of these projects and Philip's talk will provide a fascinating insight into just what your pets get up to when they are let loose in the neighbourhood, especially at night.

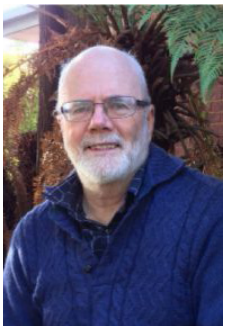
4th Oct. *The Bandicoot Superhighway project.* Sturt Upper Reaches Landcare Group President Danny Rohrlach will talk about this innovative and ambitious project, bringing together community, philanthropy and government in a unique partnership to protect our endangered bandicoots through improving and linking natural habitat; revegetation; educational workshops; translocating bandicoots and citizen science.

Danny began working in environmental restoration in 1998 and established his own business Minimal Disturbance Bushcare in 2007. Having grown to a staff of 10, MDB supplies bushcare and biodiversity services to a range of private, local government and government clients.

Danny is also President of the Sturt Upper Reaches Landcare Group (SURLG), and worked with SURLG volunteers to establish the Olibel project in 2012 to protect and enhance habitat for Bandicoots and all biodiversity in the local area between Mark Oliphant Conservation Park and Belair National Park.

The Olibel concept has grown over time, and using the Southern Brown Bandicoot as a "flagship species" SURLG has further developed the idea into the Bandicoot Superhighway project, the topic for Danny's presentation.

1st Nov. ***What caterpillar is that?*** Dr Peter McQuillan will provide an overview of the characteristics and biology of caterpillars and similar looking larvae. As well, there will be a sneak preview of a proposed web-based identification tool connected to a phone app. to assist in identifying caterpillars. **This talk will be a ticketed event with catering provided.** Further details to be advised.



This is an exciting new project being developed by Dr. Peter McQuillan and Jan Forrest OAM.

Following on from the successful BCSA book "*Caterpillars, moths and their plants of southern Australia"* a new website and phone app. is being developed and will feature around 300 species and over 600 images of caterpillars and their adult butterflies and moths. A number of supporting fact sheets will be produced.

Peter will provide an overview of how this website is being planned to enable users to identify 'their' caterpillar through a process of elimination by checking characteristics such as colour, spots, stripes, movement, feeding, habit etc.

This event is being planned as an end of year celebration with canapes and drinks. A small fee to cover the costs will be incurred and members will be advised of arrangements closer to the date; alternatively, check our website for details.

PLANTING ON OUR PROPERTY TLOPERI SANCTUARY, HINDMARSH ISLAND/ KUMARANGK.

Karen Lane.

Tloperi was purchased in 2010 by Chris and Karen Lane. The 80-acre property on Hindmarsh Island/Kumarangk is very close to the Coorong National Park and Lawarrii Conservation Park at the Murray mouth in South Australia.

Prior to purchase the property had been continually farmed since 1856 and was devoid of any native vegetation. Since then, over 68,000 locally indigenous plants have been planted, purchased, and also grown by Karen through funding from programs including federal and state funding through MMER (HI Landcare), CLLMM (Goolwa to Wellington LAP), a Round One Federal Biodiversity Grant and this year a Hills and Fleurieu Landscape Board grant and also Goolwa Cittaslow Environment Group's generous plant donations.

We have recreated the ephemeral wetlands, inland sand dunes and woodland that would have originally been found on this part of Hindmarsh Island/Kumarangk and have attracted 5 species of bats, 5 species of frogs, over 60 species of birds, many reptiles and at least four rare butterfly species to the property. Natural recruitment of plants is increasing rapidly but there is still a need to increase the diversity and structure of the planting on the property.

On June 4th 2022, the weather was forecast for a high chance of rain and moderate winds, but even so thirty-four (AMAZING!!) intrepid planters descended on Tloperi to extend a large butterfly habitat on the eastern front sand dunes and infill on the western boundary as well.

People came from Adelaide, Victor Harbour, Goolwa and Hindmarsh Island/Kumarangk, some were friends we knew from down here, others were from Adelaide Bring Back the Butterflies Group, Butterfly Conservation SA, Friends of Glenthorne Farm, and members from the Goolwa Cittaslow Environment Group and other Goolwa Cittaslow members as well.

From 10am to 12 noon we planted over 900 butterfly plants on the western front sand dune. We planted a yummy smorgasbord of locally indigenous nectar plants for butterflies (and native birds and lizards as well) including *Dianella brevicaulmis*, *Kunzea pomifera* and *Hardenbergia violacea* and dozens of other species and also butterfly host plants, *Poa poiformis* for the Spotted Grass Skipper butterflies and *Adriana klotzschii* for the Bitter Bush Blue butterflies that live on the sand dunes here.

Over a thousand plants were grown and donated to us by the Goolwa Cittaslow Environment Group but some were too small to be planted so will wait till later to be put in, 500 plants were purchased from Clayton Bay Community nursery and grown by Phil Collins (who collected some of the seed and cuttings from here) and community volunteers and were paid for from a Hills and Fleurieu Landscape Board Grass Roots grant. I also grew a few hundred plants this year as well. The planting project was registered with Planet Ark, so everyone's efforts have been recorded at a national level.

Just after 12 we stopped for a sausage sizzle, hot drinks and cakes including some amazing cakes made by my friend Mette and a big thank you to Brian and Neil for cooking the BBQ for us and thanks to Iain from Cittaslow for donating most of the sausages. After lunch about 15 people decided to keep going and we all headed off to the Eastern boundary to put in another approx. 300 shrubs to infill previous planting.

All in all, it was a wonderful day, everyone enjoyed the planting, the weather was good with just the odd shower and over 1200 plants were put in the ground and guarded in total.

Many thanks from us and all the wildlife at Tloperi to Nev, Maggi, Mette, Brian, Kerry, Di, Debra, David, Roxanne, Abigail, Steve, Alan, Chris (hole digger extraordinaire,1200 holes augured over 2 days before we planted !!), Tammy, Karen, Debbie, Angela, Iain (amazing organiser and grower of plants), Olaf, Sandra, Bob, Judy, Sue, Alex, Bart, Lloyd, Kate, Susan, Deidre, Steve, Judith and Martin (and some one's name I couldn't read from the list and anyone else who didn't sign in!).

THANK YOU all.

PROFILE - MEMBERSHIP OFFICER GIL HOLLAMBY

If you want to know what is happening in a society, the best way is to get on its committee, which I did, eventually becoming membership officer of Butterfly Conservation SA. I joined BCSA soon after retiring and got back into entomology as a hobby. And at about the same time in 2002 I became a volunteer crew member on South Australia's tall sailing ship 'STV One and All'.

My passion started in Grade 3 at Goodwood PS when my teacher Horace Billing got me enthralled in nature, then my father, a commercial traveller, fostered my enthusiasm by taking me on his travels during school holidays. While he was peddling his wares I would go beachcombing or bird watching or seeing what was under the bark of trees along the road by which he was going to leave the town, and when I couldn't go, I eagerly awaited seeing what he had found. One time he brought an albatross that had drowned in a West Coast storm.

I didn't play regular team sports because of the weekend commitments. I just wanted to go exploring the bush nearby–Brown Hill Creek, Sturt Creek Gorge and Marino Rocks. Mostly I went alone and by bicycle . It was on these hikes that I really became aware of nature and how it was all connected, and so started my interest in classifying things and their relationships. Because of the numbers and diversity of certain groups of animals, insects (but not spiders as no books), molluscs and other marine life, I concentrated on them using books on classification.

At Primary and High School (Unley) I got the nickname 'Bugs', which my friends of that era still call me. The Handbooks of the Flora and Fauna of South Australia and Black's Flora were my reading matter. I'm not good at naming birds because I'm red colour blind, but enjoy observing them and their behaviour, especially in my now older more sedentary outside life.

As a family we were very religious and not well off. I was the eldest child and had three siblings, John , David and Jenni, and being the eldest probably helped as I was well tutored at home and did well in High School, winning scholarships which enabled me to attend The University of Adelaide. I selected to study for a Degree in Agricultural Science as it had a course in Entomology, where I came up against the theory of evolution, in direct opposition to my then creationist religious beliefs.

Evolution made so much sense (even to the sequence of evolution and creation being in the same time order). I read more and more about Charles Darwin. My parents did not like this but in their love for me let me follow my own path. Unfortunately, I lost my entire early collection of natural history specimens, insects, wet preserved marine life and shells, in a shed fire where my 'museum' was, but my study books and notes were thankfully in the house.

My graduate years were a bit chaotic but I found solace in the on-farm obligatory work experience needed to graduate in Ag. Science and looked forward to working fulltime during university holidays. A big turning point came at the end of Zoology I with a series of 10 lectures on Genetics, explaining evolution and inheritance. I enjoyed the logic of the science so restructured my final years to include Genetics, Agriculture, Botany and Entomology. After graduating and on one of my many visits to the SA Museum, I broached the subject of working there only to find no positions available and very little field work. I wanted a career that had a fair amount of field work.

Another of my inspiring teachers, Prof. Colin Donald, convinced me to apply for an Assistant Wheat Breeder position at Roseworthy Agricultural College because 'it was made for me', so I applied and duly made my way to Roseworthy on a Saturday for an interview where not only the tasks of my research were set out but the expectations of being an academic at an Agricultural College full of 18- to 21-year-old male students from very diverse backgrounds around South Australia.

It was compulsory to live on Campus because you were expected to attend the evening meal, on occasions inspect the dormitories after dark, manage one of the College Groups, and deliver lectures and practical classes in Biology.

To many this might seem a bit much but for me it was fabulous. Living in meant very cheap accommodation and food, managing a group would help me get to know them (I chose the swimming club) and taking the Biology lectures would enable me to keep on with Entomology (Applied Entomology at least). Cheap accommodation solved my housing situation when I married about 15 months after starting and I could work in the science lab in the evening. I lived on Campus until 1996, along with my wife and two children who all enjoyed the campus community living.

My career as a Wheat Breeder grew and grew, and I with it. As I became more adept, Rex Krause, my senior, went into College administration and then to the SA Dept of Agriculture in 1972, leaving the breeding program to me.

A professional entomologist came on staff and took over the lectures. I

Gil at a BCSA excursion to Port Gawler to look for the bitterbush blue butterfly Feb 2019.

Gil (far left) with BCSA committee at BCSA Forum Nov. 2016.

was seconded to the CSIRO Genetics Department at Black Mountain ACT for 15 months, which allowed me to continue with insects, collecting and describing chromosome numbers in local Curculionid beetles.

In 1976 I went on a three-and-a-half-month study tour of plant breeding institutions in North America, Europe and Baltic countries with plenty of free time to chase insects. On returning home the wheat breeding work completely consumed me and entomology took a back step for the rest of my working life.

My specimens suffered a bit during the next few years and some boxes were destroyed by the larvae of Anthrenus, Museum Beetle. I took up pursuits like riding on or chasing the few steam trains left in SA, becoming a competitive orienteer on weekends, woodturning and snorkelling, and having a daughter and a son took up lots of time too.

I was successful at wheat breeding, releasing 13 new varieties, most of which were accepted and grown by farmers. These varieties had 'cold steel weapon names', e.g. Halberd, Spear, Dagger, Machete, Kukri. Spear was the most widely grown variety across WA, SA and Victoria for much of the 1990s.

Roseworthy College was annexed by the University of Adelaide in 1991 and the breeding program was to be privatized, allowing royalties to be collected and used to enhance the program; a big difference from 'going cap in hand' for funding from government and research funding organizations. I used this opportunity to retire and return to my early passion of Entomology.

Gil's garden at Williamstown where the caper bush attracts this species every year.

The BCSA team at the Vounteer Day march along King William Street on 16th May from the Parade Ground to Victoria Square.

PUBLIC TALKS ZOOM MASTER and CINEMATOGRAPHER ARE STILL WANTED

Are you an experienced Zoom master or movie maker? Or would you like to have a go?

Since Covid we have been offering our Public Talks via Zoom as well as in-person attendance at the Plympton Community Centre. This means that country members and those with compromised immune systems are able to take part in the Public Talks program.

However, juggling chairing of the meeting with managing the Zoom functions as well as recording the talk has not been an easy task for our Chairman Gerry Butler and he would like some help.

We would like to film the talk via a camera rather than record via Zoom to provide a high quality recording of the event so it can viewed later, especially if videos are included as these become very pixilated through the Zoom process.

If you are willing to give either of these tasks a go please contact Gerry at chairman@butterflyconservationsa.net.au. He will guide you through the process and will be there on hand to help you.

Members are advised that the ANNUAL GENERAL MEETING and PUBLIC TALK will be held at the Plympton Community Hall and via ZOOM on 6th September, 2022 at 6.30pm.

Members for whom we have an email address will be advised of the Zoom arrangements prior to the meeting.

NOMINATION FORM for the 2022 – 2023 year

Completed Nomination Forms can either be emailed (secretary@butterflyconservationsa.net.au) or posted (PO Box 4, Daw Park, SA 5041), or hand delivered to the Secretary at AGM. You may nominate yourself.

I ..... (name of nominator), being a member of Butterfly Conservation SA,

hereby nominate: .....

to the position of: Chairperson, Secretary, Treasurer, Committee Member (please circle)

Tasks on the committee can include: minute secretary, web master, social media co-ordinator, public talks convener, newsletter editor, online sales manager and publications manager. If you have an interest in assisting in one of these roles please circle.

Signed: ..... (Nominator) Seconded by: .....

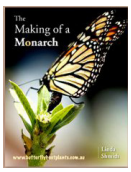
Nomination accepted: .....

WHAT'S FOR SALE? - IN OUR ON-LINE SHOP

BOOKS: ***"Caterpillars, moths and their plants of southern Australia"*** Published BCSA 2019. Our price $30, plus postage.
"Attracting butterflies to your garden, what to grow and conserve in the Adelaide Region" 2nd EDITION Published BCSA 2016. Our price $25 (financial members may purchase a book for $20) plus postage.
"The Making of a Monarch" by Linda Shmith. Cost $20 plus postage.

DVD: ***"Butterfly Garden"*** produced by Tracy Baron and Carolyn Herbert - $20 each (BCSA financial members price $15) plus postage. Limited stock available.

POSTERS: ***"Spiders and their allies of the Adelaide Region"*** Published BCSA 2014. $10 a set of two, plus postage.
"Moths of the Adelaide Region" Published BCSA 2016 $10 Set of four A3 plus postage. Free download available. **Single posters:** Published Nick Birks ***"Bats of SE South Australia"*** and ***"The Bilby –Endangered Species"*** posters are available for $5 each, plus postage.
FREE Orchid Posters. Plus postage. Posters are free to schools, but incur postage.



SITE SIGNS: to obtain an application form to register a butterfly site click on the site sign logo. Cost $60 includes postage.

PLANT TAGS: See list and form available on website. $2.00 per tag, includes plastic stake and postage.

Butterfly Site

If you would like become a member, order any of our merchandise, including books, plant tags, site signs or posters, check out the **ON-LINE STORE** at **https://butterflyconservationsa.net.au/shop/**
For queries email: info@butterflyconservationsa.net.au .

BUTTERFLY CONSERVATION SA Inc.

An affiliated organisation of the South Australian Museum and Friends of Parks.
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Treasurer: Dan Daneshi - treasurer@butterflyconservationsa.net.au 0468449 331
Membership: Gil Hollamby - membership@butterflyconservation.sa.net.Newsletter Editor and Public Talks Convener: Jan Forrest OAM - editor@butterflyconservationsa.net.au C/- South Australian Museum 0419990430.
Committee: Bernadette Johnson, Bryan Haywood (endangered species advocate), Anne Frodsham and Lionel Edwards (website).
Book sales: Sarah Macdonald - publications@butterflyconservationsa.net.au
Newsletter proof reader and editor - Judith Lydeamore
Consultants: Roger Grund OAM and Dr. Peter McQuillan.
Public Officer: Beth Keane

DIARY DATES

COMMITTEE MEETINGS: Meetings are normally held bi-monthly (usually the second Monday of he month) at 6.00pm at a committee member's home. All members are welcome to attend. If you would like to attend please contact Chairman Gerry Butler on 0407972149.

PUBLIC TALKS PROGRAM 2021: first Tuesday March – November, at the Plympton Community Centre, 34 Long Street, Plympton, 6.15pm for a 6.30pm start to 8.30pm. with an option for some talks to be viewed via Zoom. Please watch your email for information regarding public talks.

NEXT TALK. 6th Sept. 6.30pm *BCSA AGM*
7.00pm Public Talk *Cat Tracker.* Presented by Dr. Philip Roetman.

WEB SITES

BCSA official website: Butterfly Conservation SA - www.butterflyconservationsa.net.au
The former domain name **Butterfly Gardening** - www.butterflygardening.net.au is also still available and links directly to the new BCSA site.

South Australian Butterflies and Moths: https://sabutterflies.org.au (authored by Roger Grund OAM and now managed by BCSA).

Landscape SA Boards, Urban Biodiversity: https://landscape.sa.gov.au/hf/plants-and-animals/native-plants-animals-and-biodiversity/urban-biodiversity

Butterfly Conservation South Australia Inc.

Seek by iNaturalist

A great app. for schools and families who want to spend more time exploring nature together.

The app. is child-safe; no registration is involved and no user data is collected.

The image recognition technology is based on millions of observations submitted to iNaturalist and partner sites.

Check it out: https://www.inaturalist.org/pages/seek_app

WELCOME TO NEW MEMBERS

Vivienne WARD
Sarah BIRD
Jenny WESTALL
Lynette SMITH
Samantha PATTERSON
Jessica BLOWN
Ruth HODSON
Jeanette WILSON
Margret ROWLEY
David CLARKE
Betty BREZOVSKIS
Kaye WALKER
Kathy DARLING-BROOKES
Andrea SZABO
Laurie McCANN
Hannah JONES
Kylie BARHAM
Sarah LUSCOMBE
Davies BRANWEN
Simon BOWDEN
Fiona MORRISON
Nick HAUSCHILD
Tim WALSH
Lisa MORTIMORE
Melina MAGDALENA
Steve HUGHES
Alexandra TUFFIN
Tina TREFFERS

KONICA MINOLTA

BCSA thanks Konica Minolta for their generous support to BCSA.
Konica Minolta is a Landcare Australia National Partner