



BUTTERFLY CONSERVATION SA INC.

NEWSLETTER

No. 77: November 2021

WHY NECTAR IS IMPORTANT TO BUTTERFLIES AND WHERE THEY FIND IT

- a talk by Dr. Peter McQuillan

If you missed Dr Peter McQuillan's talk on 4th November, 2021, at the South Australian Museum then you missed a treat. It is not too late though, as the talk has now been uploaded to the BCSA YouTube channel and members on email will have already received the link to upload the talk.

https://www.youtube.com/watch?v=Ff53G41w_XE

Peter spent his Covid lock-down time last year scouring the internet to view and record over 3000 images of butterflies feeding and has now recorded the butterfly species and native plant species on which they were feeding. Once this information has been published in a scientific journal our newsletter will feature a fact sheet to assist members to choose plants for their garden that we know that butterflies prefer.

His criteria for choosing each image was that the butterfly proboscis or feeding tube had to be extended into the flower to eliminate individuals just resting on a flower top. The flower was a native species, primarily because he found it easier to identify the native plants, although Peter is now seeking further images of butterflies feeding on non-native plants, providing the information on the identification of the plant can accompany the image.

We were fascinated to see a graph of the colour range that different butterfly families see and to hear about the evolution of the proboscis or feeding tube.

If you would like to assist Peter to continue this fascinating research, be on the lookout for butterflies feeding and take some pictures. He can identify the butterfly, if you can identify the plant! Upload them to the Butterflies Australia app., iNaturalist, post them on the BCSA Facebook page or send them directly to editor@butterflyconservationsa.net.au with your contact details and we will pass them onto Peter.



IN THIS ISSUE

- Why nectar is important to butterflies and where they find it.
- Rewilding Greenfield Wetlands
- Volunteers needed to sort transparencies
- Moths and their common names Pt. I
- Annual Report 2020 - 2021
- 2020 - 2021 Financial Statement
- New record for the Chequered Copper
- Sophies Patch
- Science Week at East Adelaide School
- Butterfly Conservation Workshop
- IUCN Invertebrate Workshop
- Public Talks Program
- Living with a Snotty Gobble parasite - *Candalides hyacinthinus*
- What's for sale?
- New Members
- Diary Notes



Heteronymph merope on flowering gum, *Vanessa kershawi* (yellow flower), *Polyura sempronius* on fermenting grapes and gum sap. Photos LFHunt. Above: *Vanessa kershawi* on everlastings. Photo: Matthew Endacott. Below: Chairman Gerry Butler with Peter McQuillan at the SA Museum talk. Photo: Jan Forrest.

BUTTERFLY CONSERVATION SA. INC. Membership enquiries: membership@butterflyconservationsa.net.au or online: www.butterflyconservationsa.net.au/product/become-a-member/ Membership payments (\$10pa - plus \$10 for posted 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 EFT: treasurer@butterflyconservationsa.net.au with name, amount and item.

REWILDING GREENFIELD WETLANDS.

On 17th June I represented Butterfly Conservation SA at a release of caterpillars of the Yellowish Sedge Skipper (*Hesperilla flavescens*) in the Greenfields Wetlands alongside the Salisbury – Port Adelaide Expressway.

This once common butterfly had disappeared from this area around 1980 mainly due to loss of habitat which led to the dying out of the sedge *Gahnia filum*, the caterpillars' food plant. Over a number of years of clean up and revegetation with *Gahnia filum*, coordinated by Greening Adelaide with cooperation of the Salisbury and Adelaide Plains Councils and with the help of volunteers including Peri Coleman (BCSA member and advocate for coastal areas and wildlife north of Adelaide) has been restored to a condition which should again be suitable habitat for this butterfly.

Flinders University are very interested in this revegetation believing that thatching grass, *Gahnia*, is a very efficient carbon sequester.

The day was a bit dreary and sticky underfoot but everyone was enthusiastic for the butterfly. Alex Stolarski, Ento Search, had collected late instar larvae from Southern Eyre Peninsula and transported them individually in small vials with a piece of *Gahnia* leaf, 65 in total.

We were shown how to safely handle and introduce each caterpillar to a *Gahnia* plant and then given a couple each to let go.

Select a healthy *Gahnia* clump with fresh young leaves and tie their tops in a bunch with a cable tie, then tuck into the clump a caterpillar shelter (a short piece of wide paper drinking straw, with the closed end downwards).

Using the piece of leaf which came in the vial gently introduce the caterpillar to its 'new home' head pointing upward'. In a few minutes most of them had deserted the safety of their straw house and were investigating and in some cases tasting their plant. Some clumps were then covered with fairly large holed wire netting to protect the new arrivals from predators. Wrens could still get to through this mesh.

Continued monitoring is planned to check the success of this release and plans are to release adult butterflies later as the weather warms in Spring.

This is not the only project of bringing this butterfly back to the Adelaide coastal strip. Andrew Lines, BCSA member, is part of a group rewilding the Washpool at Aldinga, in this case releasing individuals collected from Southern Yorke Peninsula. And there have been some releases closer to Adelaide.

Thank you Darren Kennedy, Coastal Conservation Officer, for this opportunity.

Gil Hollamby



Above: Alex Stolarski and Peri Coleman; larval shelter nestled in the *Gahnia* clump; newly released larva.

VOLUNTEERS NEEDED TO HELP SORT ROGER'S TRANSPARENCIES

Although we have access to the Robert Fisher and Lindsay Hunt life history image collections Roger Grund's material contains life histories of many other Australian species, so digitising this material will make it available to all.

Can you spare an hour or a few hours a week to help us sort and catalogue Roger's transparency collection ready for professional scanning?

The contents of each box of slides are recorded in a book and each individual slide also has the details written on the slide itself. So it should not be difficult to locate individual slides

As scanning is expensive we plan to choose the best examples of each life history stage, hostplant and habitat, i.e. around ten or twelve images for each species.

If this is something that interests you, it can be done at home or if we have a team maybe we could have a 'working bee' with some laughter thrown in.

Please contact Jan Forrest janf@butterflyconservationsa.net.au if you can help. Or, if you need more information ring her on 0419 990 430 for a chat. This is something our management group cannot do without extra help.

MOTHS AND THEIR COMMON NAMES – PART I

I have become fascinated with common names of insects recently and how we (the scientific and field naturalist community) can make them more interesting and consumable to the general public. Scientific names are very important to be specific about each species but for the general public and enthusiasts to use catchy and sometimes interesting common name could improve the view of nature by the broader populous. Here is one example, the *Macrocosma* moth, or Showy Geometrid, is a moth of the Geometridae family (which I never thought I'd ever see by the way), but did encounter them twice only this last summer-autumn.

I live on a 15 acre property (5km SW of Mt Gambier) and I regularly use a UV light trap and sheets to attract insects to understand what species occur in our area while we monitor our revegetation area during the long term restoration process. Our property was pasture paddocks back in 1996 then, by 1997-98 it was covered in plantings of local native trees, shrubs and an increasing variety of understorey - for the dual purpose of attracting native animals (of all kinds) and to provide shelter for a new home. So after some 20 years now we have amassed a large collection of insects - which seems to keep growing!!!

So there is always something new arriving. On a warm night earlier this year (in February), I woke at the regular time of 3.30am and decided to go out and check the light sheet. It was a perfect night and a good catch but to my surprise three *Niceteria macrocosma* were also present. One on the ground sheet, and two in the grass nearby (see photos).

I was unfamiliar with this moth, having only seen it in books and I couldn't believe my eyes when it flashed a bright yellow underwing at me as I approached to photograph it. I couldn't contain my excitement, so carefully carried one in to show my wife (Toni) who at that time was now also awake. We saw an almost purplish hue to the forewing markings of black, greys to white and marvelled over its bright yellow underwing colour and abdomen.

Niceteria macrocosma is a unique species in Australia being placed in its own genus, its known to feed on eucalypts and other trees in the Myrtaceae family, has a flight period of late summer into autumn, and is attracted to lights only late into the night i.e. 2300-0300hrs. Its range is from southern Queensland, New South Wales, Victoria, Tasmania and as far west as the Mt Lofty Ranges in SA. After consulting the BCSA Caterpillars book, Atlas of Living Australia and iNaturalist apps, I noticed there are gaps in its distribution between central Victoria to Adelaide - with no historic records for south-east SA or far western Victoria at all.

Well, this species is now known from Nelson and near Mt Gambier in Feb-Mar 2021, so we can add a few new dots to our maps. And iNaturalist has added a record near Heywood (Vic) in the last few months too.

This moth has been referred to in several texts as the

Macrocosma Moth and the Showy Geometrid and one of the "most striking moths" hence the name 'Showy' which is indisputable. However, what I saw when the moth was at rest (and looking over photographs later) is that the forewings hide the showiness, behaving somewhat like a 'mask' with eyes, protecting the moth by providing camouflage when at rest. So therefore, the moth's last line of defence (against a potential predator) is in-fact the striking or in Nature's case 'frightening' bright yellow underwing (and abdomen) which it can reveal at will.

This moth (as described by P McQuillan) can also dart off almost unnoticed. The genus *Catocala* (Noctuidae) are referred to as 'Underwings' having a strikingly coloured hindwing (although not as striking as our 'Niceteria') which are believed to have this bright colouring to ward off predators in a similar manner to eye spots on other moths and butterflies.

So, I am putting some interesting observations and characteristics of this moth together to now propose an additional or new common name for this species of 'Masked Yellow-wing'.

Bryan Haywood
Bryton Wood
Moorak (SA)



AGM 7th September, 2021

CHAIRPERSON'S ANNUAL REPORT 2020 - 2021



Welcome to the 2021 Annual General Meeting, especially to those members and guests who are here in the meeting room and on Zoom. We continue to live in challenging times and we are very thankful for the leadership of our political and medical authorities for providing us with a COVID Safe environment

in SA. Who would have thought that this pandemic would have impeded our activities so much.

THANKYOU

I would like to start this report with a big thankyou to our members and volunteers, especially those who provide service to the organisation on the Management Committee. In particular I would like to thank:

- our Secretary Sukhpreet Singh Bala for his service and we thank him for undertaking this administrative role;
- our previous Treasurer Divya Patel and current Treasurer Dan Daneshi for their diligent work in managing our finances.

The Management Committee is also made up of:

- our Membership and past Minutes Secretary Gil Hollamby; thanks for his bountiful energy, including numerous public events where he has spread the word about Lepidoptera and Insects in general, through collating and responding to the many enquiries on our 'info@' line;
- our very hardworking Newsletter Editor Jan Forrest OAM, who also does much of the graphic design for BCSA and who undertakes many speaking engagements on behalf of the association;
- our past Social Media (Facebook) Administrator Cristy Seymour keeping us in the public eye;
- our Online Store Manager, Marion Moore, who has kept up with the website online sales of our books and other resources;
- our Publications Officer Sarah Macdonald, who has also taken on Facebook posts, for her enthusiasm and diligence in getting our publications into 30 retail outlets in SA and interstate (WA, Vic, Tas and Qld);
- our Hospitality Manager Bernadette Johnson has managed the catering at Plympton CC;
- our Website Manager, Lionel Edwards, who has kept on top of the maintenance required, to keep both our websites running, with technical support from our service provider
- Klik Advertising. We have received significant support above and beyond our contractual arrangements and we thank Gareth Diprose and James Taylor at Klik for their work.
- our other Management Committee members: Mike Moore, Anne Frodsham (Minutes Secretary), Andrew Walters, Andrew Lines, Bryan Haywood and Public Officer Beth Keane, who have contributed to our governance and the many tasks that are needed to keep your association running efficiently.

We sincerely thank those members who are standing down this year and encourage other members to participate in the governance of our association.

GOVERNANCE

Our governance continued to be tested in 2021, with the changing regulations around meetings and the requirement for a COVID Safe Plan. In addition, all community groups were advised that organisations which undertake public events need to have their volunteers accredited with a 'Working with Children Check'. This has been a requirement since the 1st July 2020 and is now in place for the BCSA and will be reviewed later this month by the Executive Committee.

The Management Committee recently agreed on the implementation of a Conflict of Interest and Financial Management Policies in association with the setting up of a Fundraising Committee and a Project Assessment Committee. The checks and balances associated with these policies will enable all decisions to be equitable and transparent.

DEDUCTIBLE GIFT RECIPIENT (DGR) AND CHARITY STATUS

Our Butterfly Conservation Fund Committee, chaired by John Wilson, will produce the first statutory report about our Deductible Gift Recipient (DGR) fund which is starting to see a steady stream of donations. Our DGR and Charity status from the Australian Charities and Not-For-Profit Commission (ACNC), enables us to offer to potential donors a tax deductible opportunity for their sponsorship dollars. We encourage members and their friends to donate to the Butterfly Conservation Fund and if you know of a potential benefactor please advise our Committee. The Committee anticipates that, with the assistance of members, we will raise more funds for the Butterfly Conservation Fund, which will be used for conservation projects.

FINANCES AND OUR BOOKS

The 2020-2021 financial year has been a very rewarding one for the association. We continue to punch way above our weight, with the education and information resources that we provide to our members and the wider community. Sales of our 2 books, have continued to be strong with our butterfly book 'Attracting Butterflies to your Garden', by Hunt, Grund, Keane and Forrest (2016) selling 271 copies this financial year and over the 5 years since the 2nd Edition was published we have distributed 1831 copies (current stock is 2169), as gifts to speakers, community groups and schools; and through sales to members, general public and our retailers.

Our Moth book 'Caterpillars, Moths and their plants of southern Australia' McQuillan, Forrest, Keane and Grund (2019) is being well received across Australia and this financial year we sold 250 copies and have distributed 1001 copies (stock is 1999) since December 2019, including many copies to local and interstate bookshops and organisations.



Our association has many ways of pursuing its aims and objectives and the continued successful distribution of these books, recommended by many experts such as Sophie Thomson and James Smith and sister groups such as 'Bringing Back the Butterflies', an initiative of members of the Australian Association of Environment Educators

(SA) (AAEE), is doing just that. They use and distribute our book, resources and expertise to encourage gardeners, schools and individuals to take responsibility for caring for our environment. The sale of our books in the retail outlets in Adelaide, interstate outlets and other organisations is essential for the successful distribution of our books.

ONLINE SALES

In addition to our retail outlets, we rely heavily on our online shop where we make significant sales of our membership, books and other resources. This steady flow of sales, managed very ably by Marion Moore, enables us to make direct sales to many people who hear about us or find us on the internet. The 'Membership Book Combos' are very popular and enable these new members to get an understanding of what we can deliver in further learning resources and activities.

NEWSLETTER AND PUBLIC TALKS

Our very hardworking Newsletter Editor has continued to deliver a high quality quarterly newsletter for our membership and we thank Jan for this significant effort and Konica Minolta for their support in printing the hardcopies. Jan has also consistently delivered the very enlightening Public Talks program, especially this 11th program, which we are enjoying in 2021. The delivery over the last year has been a mix of face-to-face and Zoom, and our speakers have been very generous with their time and expertise. The BCSA Committee is getting full value from its Zoom subscription with many Committee meetings and special events (e.g. National Science Week 2021 featuring Professor Mike Kearney) on Zoom. We anticipate that as we have now gone back to some face-to-face meetings we will re-engage with some members who have been unable to attend.

The final talk for 2021 will be a special ticketed event with catering, using our online store link, at the SA Museum and this talk by Dr Peter McQuillan will be livestreamed on our YouTube channel and recorded for future viewing.

MEMBERSHIP

Increasing and retaining the membership of the Butterfly Conservation SA is a significant goal of our Committee and we appreciate the work by Gil that goes into welcoming the new members and providing all members with the frequent email updates to keep information flowing. We are pleased to say that our organisation has grown significantly over the last 23 years, but COVID has affected us. Here are a few statistics that show how:

Trends in BCSA Membership

	July 2019	July 2020	July 2021
Unfinancial	60	64	66
Financial 1 year	64	108	187
2 years	189	161	75
3 or more	59	31	14
Life paid	33	34	38
Life Honorary	3	3	3
Complimentary Newsletter	20	41	22
Total	348	337	317
New members	70	98	89

As you can see we lose about 65 members each year who do not renew their membership and we do our best to contact them and encourage renewal. It is obvious that COVID has affected our new member uptake, for multiple years, as our Credit Provider for online services mandated that membership extent could not be greater than 1 year.

SOME OF THE PROJECTS IN THE PIPELINE:

Friends of Chequered Copper (*Lucia limbaria*) Butterfly

monitoring program in Pakapakanthi/ Victoria Park/Park 16 in partnership with the City of Adelaide. We were unsuccessful in getting continuing funding for this monitoring project, but nevertheless we continued our work. I would like to acknowledge the volunteers who assist with the monitoring, especially Greg Coote for his marvellous camera skills. We collaborated with City of Adelaide to have a Nature Festival event at the biodiversity site at Pakapakanthi/Victoria Park/Park 16 on 30 September 2020, to commence 2020-21 activities.



In May 2021 we developed an idea with Jacqui Hunter from Hunter Gatherings for a theatrical event 'Herding Caterpillars' and with funding for professional actors and costumes, it had a delayed World Premiere on May 16 in Park 17. The video is on our YouTube site and subsequent performances are planned for later this month in Tranmere at 'A Day at The Gums' Nature Festival event.



Restoration of the **World Hepialidae website**: BCSA has facilitated the rescue of the John Grehan's important website on Hepialidae, information about this large family of which is second to none. A link is on our website and Mike Moore is leading this project.

Re-wilding programs with Green Adelaide, we are currently engaging with the Green Adelaide Landscape Board to develop a program of awareness about butterflies and moths, which will culminate in a public workshop led by Dr Peter McQuillan and Bryan Haywood and DEW staff, into the threatening processes. The 3 species identified in the publicity material circulated earlier this year by Green Adelaide, include the Bitterbush Blue, the Yellowish Sedge Skipper and the Chequered Copper butterfly. Many of our members along with other associates are working on these programs already and we want to gather their expertise for the betterment of all Lepidoptera.

Development of **self-guided butterfly host plant walks** in the Adelaide and Wittunga Botanic Gardens and Monarto Zoo is being led by Anne Frodsham and Jan Forrest OAM.

Other projects are being discussed by the Management Committee and shortly Expression of Interest proposals will be sought from members and the wider community.

COMMUNICATION

It is truly amazing to see the many and varied enquiries that we receive by email, Facebook or on the phone. The thirst for knowledge by the wider community, about butterflies and moths is awesome. We have many enquiries from gardening clubs and community organisations, schools, individuals, artists, industry and government agencies, which we respond to in the best way we can. Many people are sharing photos of our diverse ecosystem and we use them when we can.

It is also very heartening to receive the thanks and accolades from organisations and individuals that we help or involve in collaborative projects. We do not have boundless energy, but we give our best and your membership of the Butterfly Conservation SA is most appreciated.

There are many other opportunities for members and friends to get involved and connect with Nature. Please be involved.

Many thanks and keep safe.

Gerry Butler,
Chairperson 7.9.2021

FINANCIAL STATEMENT 20.21 - NOTE

Why we do not have audited financial statements in time for the AGM?

Our constitution (Clause 12 d) requires us to present an audited statement of our accounts every year to the members at our AGM. Over recent times it has become difficult to find a low-priced auditor to undertake audits for the Not-for-Profit sector. Many quotes come in the thousands of dollars and are outside the capacity of our association to commit to.

We have benefitted recently by the services of Louise Cocks and Associates, who undertook the 2019-2020 audit, but she is winding up her business ready for retirement and has been unable to undertake this work.

The Australian Charities and Not for Profits Commission (ACNC) only mandates an audit of an association's financial reports when they exceed \$500,000.

It is the Committee's intention that we get advice from an accounting practice and have them undertake an audit of our 2020-2021 financial reports in the near future. The Committee will also discuss a proposal that we remove the requirement for annual audits and undertake audits on a timeframe of 3 yearly audits. Member's comments are welcome on this proposal and also suggestions of accounting practices who we could approach.

Dan Daneshi, Treasurer, 7/9/21

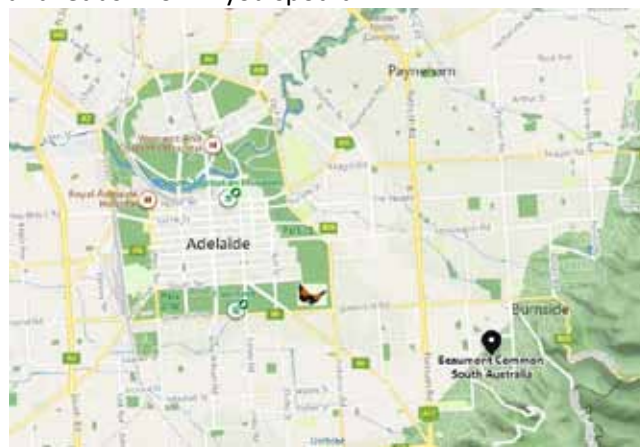
NEW RECORD FOR ADELAIDE'S CHEQUERED COPPER *Lucia limbaria*

A colony of *Lucia limbaria* the Chequered Copper butterfly has recently been found in the Beaumont Common. This is exciting news as it extends the range of this species from the Adelaide park-lands where Friends of the Adelaide Copper have been undertaking survey work for the last five years to an area several kilometres to the south east.



Another colony was observed several years ago in a back yard at Elizabeth Vale to the north of the city and this small colony is still surviving.

So keep an eye out for this special butterfly species and let us know if you spot it.



SOPHIES PATCH 2021



Volunteers Sarah and the effervescent author, Linda Shmith of *The Making of a Monarch* on Saturday 6th November at Sophie's Patch.

SPRING IN THE GARDEN

The Tea Tree Gully Heritage Museum event was held on Sunday Oct 17. It was a lovely garden and atmosphere, perfect weather, live music, a good selection of stalls with plants, Devonshire teas, home made products and produce and more... Not busy but a fairly steady flow of interested visitors to the BCSA stall, entertained and informed by the enthusiastic volunteers. Thanks to the team that helped.

BUTTERFLY CONSERVATION SA FINANCIAL REPORT FY2020-2021

	30-Jun-2021	30-Jun-2020
Balance Sheet summary:		
Cash Assets: 30/6/21 and 30/6/20	39,020.66	30,896.78
Inventories: 30/6/21 and 30/6/20	34,525.72	38,688.11
Total Members' Funds: 30/6/21 and 30/6/20	74,735.67	69,584.89
Profit and Loss summary:		
Total Income: 30/6/21 and 30/6/20	17,768.41	15,768.90
Highlights:		
· Trading Profit: 30/6/21 and 30/6/20	7,644.56	9,056.05
· Donations: 30/6/21 and 30/6/20	3,448.15	434.90
· Membership (combined email and posted): 30/6/21 and 30/6/20	4,410.00	2,771.00
· Grants: 30/6/21 and 30/6/20	2,056.00	2,500.00
Lowlights:		
· Public talks (drop in door takings): 30/6/21 and 30/6/20	161.25	814.10
Total Expenditure:	12,617.63	7,900.85
Highlights:		
· Website expenses: : 30/6/21 and 30/6/20	1,847.56	519.67
· Grant – Chequered Copper: 30/6/21 and 30/6/20	475.00	1,934.98
· Herding Caterpillars Performance and NSW webinar event: 30/6/21 and 30/6/20	5,540.80	0.00
Environment & Science Media P/L - Shoot and edit Ogyris otanes video and edit Chequered Copper butterfly video	800.00	
Environment & Science Media P/L - GST Paid	80.00	
Professor R.L. Kitching AM DSs - Preparation and presentation of National Science Week lecture "Lycaenidae"	700.00	
Australian Plants Society (SA Region) Inc. - Standard site	50.00	
Marian F McDuie - GIS Consultation – Chequered Copper Butterfly (for services to rebuild and publish the data from the previous seasons surveys and collate additional material (photos, videos and text) in a revised version of the Herding Caterpillars ArcGIS Story Map for National Science Week Thursday 20th August 2020.)	640.00	
Klik - Web: Design, Research, prototyping, design, UX development	1,962.46	
Klik - GST Paid	196.24	
Curtis Shipley - Herding Caterpillars actor-rehearsal-photoshoot-performance	481.05	
Hunter Gatherer designs - Herding Caterpillars	100.00	
Performance-Ant extra performers	50.00	
Hunter Gatherer designs - Costume materials	50.00	
Stephanie Daughtry - Performer/Director of The Butterfly Play:	481.05	
Sundries 30/6/21 and 30/6/20	1,060.73	521.74
Premium Teardrop Flags Printing	737.00	
Reimbursement	173.78	
Net Equity: 30/6/21 and 30/6/20	5,150.78	7,868.05

SCIENCE WEEK AT EAST ADELAIDE SCHOOL - 17TH AUGUST, 2021

Michelle Kershaw is a Science Teacher at East Adelaide Primary School and contacted BCSA for a talk during Science Week. There were 4, Year-1 classes, grouped into two sessions.

We reviewed:

- * **The life cycle of the butterfly,**
- * **Host and Nectar plants,**
- * **What butterflies do for our environment and**
- * **Introduced species.**

The Life Cycle of The Butterfly:

I set up my life cycle poster and asked the children if we could refresh what they knew about it. Beginning with hatching from an egg and asking the children what they thought the caterpillar ate first? We talked about the caterpillar moulting several times because its skin was too tight – just like how their shoes and clothes get too tight and they get a bigger set of shoes and clothes. One of the children asked, 'how do caterpillars stay on the leaf?' We discussed how they spin silk from their spinneret near their mouth as soon as they emerge from their egg. They have 6 true legs, like an insect and prolegs with many fine hairs that hook into the silk and allow them to rest under a leaf or climb high up a window. I mentioned that I raise them inside the house and sometimes lose them. We discussed the process of caterpillar to chrysalis – that it takes many steps – that the Wanderer caterpillar can wander quite far from their host plant to find a safe place to change into a chrysalis. We practised a new word – eclose – to explain the process of the butterfly emerging from its chrysalis. They knew what close was, so eclose was the opposite for a chrysalis.

Host plants:

We discussed the fact that host plants are food for caterpillars. And different caterpillars become a particular butterfly. I referred to BCSA's *Attracting Butterflies to your Garden* and showed them examples of a host plant and matching butterfly. I took some narrow and broad leaf milk weed, a small branch of my lemon tree, caper bush and some stinging nettle (laminated). I also left a chrysalis of an Australian Admiral and told them that since I did not know when this caterpillar had changed, I did not know when it would eclose. I was able to show them photos of the caterpillar on its host plant: the Monarch caterpillar on milkweed and Dainty Swallowtail caterpillar on my lemon tree. I had photos of the Caper White butterfly to match with the caper bush and Australian Admiral to match with stinging nettle.

Nectar Plants:

We discussed how nectar plants provide food for butterflies. Considering that it was still winter, nectar plants were limited. I took in non-invasive lantana, lavender, *Brachyscome*, marigold, hardenbergia and a small grevillea – we discussed the idea that the proboscis will find nectar at the bottom of a small tubular flower and that some flowers that look like one flower, have many, many flowers. I demonstrated this by holding one daisy and removing the petals to see the many flowers in the centre. I left a list of suggested nectar plants that included: buzz buddleia, *Bursaria spinosa*, *Senecio viravira*, bottlebrush, *Brachyscome*, Zinnia, Common everlasting, and any daisy like flower. We practiced

curling and uncurling our proboscis and saying the word. Discussions were had regarding: What are wings made of? How do caterpillars breathe and taste? How big do butterflies get? I said it is predetermined by their species and gave an example of an Ulysses in Qld and our much smaller Common grass blue.

Butterflies in our environment:

I asked the class what jobs they thought the butterfly did in the garden? And we quickly got to an answer of 'pollination.'



'What about caterpillars?' I asked. Food for birds, some said hawks, and eagles but we agreed birds in general. What does it mean if we see butterflies in our garden? One girl answered, 'No poisons.'

Yes!' I replied.

We also talked about the need for a variety of host and nectar plants, shade and water. Not a monoculture. I talked about driving along a country road and seeing a large field of Canola, the yellow flowers would be great for the bees, but it wouldn't be good for butterflies.

The discussion about caterpillars being eaten by birds brought up the idea of predators. I talked about accidentally squashing the Wanderer caterpillar crawling in my house, that caterpillars can run out of food and wasps inject the caterpillars which meant they never became butterflies. We sang, 'five caterpillars' – a rhyme about caterpillars dying from different problems and only one surviving to become a butterfly. This led into a guessing game of how many eggs does a butterfly lay and how many survive to become butterflies.

One boy reminded me that they are caterpillars first, so we refreshed my question to ask how many eggs survive to hatch, become a small caterpillar, a bigger caterpillar, a chrysalis and then a butterfly? We laughed about that. Another question, 'Are caterpillars baby butterflies?' No, they are different. 'How or when was the first caterpillar?' I told them 'I don't know that answer, but I believe that butterflies evolved with flowers.'

Introduced Species:

At BCSA's recent Public Talk and thanks to Chris Sanderson, Michael Braby and the Australian Museum website I learnt that we have three introduced butterflies: The Tawny Coster from India and Sri Lanka made its way, via Thailand, about 30 years ago. The Cabbage White hitched a ride on vegetables from New Zealand about 100 years ago and the Monarch established itself from North America about 150 years ago when milkweed colonised itself. I told the children that my first ancestor arrived about 180 years ago, so this tells me that humans, insects, animals, plants and seeds have spread to many places around the world and colonised there. Some are helpful, some neutral and some are damaging.

I asked them if they all liked honey. A resounding 'Yes,' was the answer. Well then, we're all happy about the European Honeybee. One child told me he didn't like the New Zealand bee. 'I said I'll have to investigate that one, I don't know anything about it.' I told the children, 'The Cabbage White butterfly's caterpillar eats some of the vegetables in our garden - do you think humans are happy about this caterpillar?'

There were a variety of yes and no answers.

At the end of the first group, I presented the BCSA book, *Attracting Butterflies to your Garden*, suggested that the teachers look at the BUTTERFLIES AUSTRALIA App and left some leaflets.

Editor Note: thank you Linda for representing BCSA at this and at other schools giving talks and promoting butterflies and invertebrate biodiversity to our youngest enthusiasts.

BUTTERFLY CONSERVATION WORKSHOP

Friday 5th November 2021;

City of Adelaide

A very successful workshop with key stakeholders from Greening Adelaide, Department of Environment and Water, Local Government and community, was held on Friday 5th November at the City of Adelaide offices.

Facilitated by BCSA and Greening Adelaide, Dr. Chris Daniels, Chair of Greening Adelaide provided an overview of the National Park City concept followed by Dr. Peter McQuillan BCSA science advocate and author of our book *Caterpillars, moths and their plants of southern Australia* provided an overview of Butterfly Conservation in South Australia.

Other speakers included:

BCSA committee member Bryan Haywood, whose passion is working towards listing invertebrates especially butterflies on the national endangered species lists.

Jason van Weenen and Elisa Sparrow - the proposed butterfly rewilding project under the Green Adelaide proposal.

Tony Flaherty - the Yellowish sedge-skipper relocation and work being done along the coastal strip of the Adelaide plains and the Bitterbush-blue relocation project

Helen Owens from DEW on Data management and mapping processes.

BCSA member Mike Moore then provided an overview of the Butterflies Australia app.

Mike Moore and Peter McQuillan spoke about priority species and habitats in the Adelaide area and beyond and opened up discussion on future processes for action planning and prioritisation.

The workshop provided the opportunity for those present to think more closely about butterflies and other invertebrates and the priorities for habitat restoration and conservation.

Thanks to Gerry Butler Chairperson of BCSA for his work in putting this workshop together and for bringing together this team of practitioners to provide a backdrop of the work being done and still to be done in the Green Adelaide space, as it relates to butterflies and invertebrate conservation.

PUBLIC TALKS PROGRAM 2022

Our Public Talks Convener Jan Forrest is presently working on putting together the 2022 Public Talks program.

Thanks to those members who have already put forward suggestions however if you would like to suggest someone or would like to hear about a certain topic, please contact Jan on janf@butterflyconservationsa.net.au.

Thanks in advance.

INTERNATIONAL UNION FOR CONSERVATION OF NATURE INVERTEBRATE WORKSHOP

30th September 2021

Butterflies on the List

Species Conservation Assessments have recently been undertaken on selected invertebrates in South Australia.

The assessments were undertaken by a small group of experts who assigned conservation ratings according to species' threat level and likelihood of extinction.

The process was based on the IUCN Red List Categories and Criteria, which form a widely used and understood system for classifying plant and animal species at risk of extinction.

As well as assigning conservation ratings, the assessment process:

- identifies gaps in our knowledge on species' ecology, biology, and so on;
- identifies regionally threatened and declining species not previously identified;
- can help to inform regional fire management plans and operations;
- helps to identify threatening processes that affect a range of species; and
- can help to inform a multi-species and landscape-scale management approach.

The assessment process began with a workshop coordinated by Nature Glenelg Trust and held in Adelaide on September 30th. In attendance were Department for Environment and Water - Threatened Species team members, along with 10 other scientists and field ecologists who have expertise on a range of invertebrates including Isopods, Butterflies, Moths, Katydid, Spiders, Mites, Beetles, and Bees.

Each participant came equipped with species specific information to help answer a series of questions relating to the five IUCN assessment categories. In order to determine the threatened status of a species, the assessment calls for a range of information including:

- Extent of occurrence
- Area of Occupancy
- Number of locations
- Observed, estimated, projected or inferred declines
- Population size
- Probability of extinction within 10-20-100 years

The workshop ran for 5+ hours during which the panel deliberated over some species more than others depending on the detail of data available.

Based on these discussions, eight invertebrate species were suggested as candidates to be nominated for listing under the NPW Act and/or EPBC Act, and information relevant to the assessments was captured.

This first round of invertebrate assessments will help to refine the process, documentation, and data for future larger rounds.

The species with commenced assessments so far are:

Native bees

Green Carpenter Bee

Butterflies

Orange Ochre

Silver Xenica

Arid Bronze Azure

Beetles

Splendid Jewel Beetle

Isopods

Mound Springs Isopod

Moths

Rufous Rain Moth

Pale Sun-moth

We look forward to updating readers over the coming months on this unique invertebrate project.

Bryan Haywood

Nature Glenelg Trust

Committee member BCSA



Orange Ochre *Trapezites eliena* - Source: Roger Grund



Silver Xenica *Oriexenica lathoniella herceus* – Source: Bryan Haywood



Pale Sun-moth *Synemon selene* - Source Roger

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*

LIVING WITH A SNOTTY-GOBBLE PARASITE



The Western Dusky-blue, *Candalides hyacinthinus*, is a small butterfly with bright purple upper wings, edged with brown-grey and white. Underneath they are grey-brown and spotted with rings. The wingspan is up to 30 mm. It lives mainly in eucalypt woodlands in the Mt Lofty Ranges around Adelaide where it is uncommon because the plant it relies on, Coarse Dodder-laurel, is usually removed by gardeners.

Coarse Dodder-laurel, *Cassytha melantha*, also known as Snotty-gobble, is a hemi-parasitic plant that gets nutrition from its host plant but also photosynthesises. Dodder-laurel doesn't have leaves so photosynthesis is through its green stems. It will strangle the host if fire isn't periodically used as a management tool in bushland, but killing the host does help open up the understorey to light. Dodder-laurel is spread by birds that eat the fruit and defecate the seed onto other plants. Western Dusky-blue caterpillars feed on the buds, flowers, fruits and soft stems of this plant.

One way you could help to provide suitable habitat for the butterfly is to collect seed of the Coarse Dodder-laurel and smear it on the stems of gum trees in your garden. You may have to remove the Coarse Dodder-laurel by pulling it off the host plant from time to time, so it doesn't suffocate it.

Reprinted from *Green Adelaide Nature Education Weekly Digest*
29th August, 2021.



Left: *Papilio anactus* adult feeding on nectar. Photo M.Broug.



All photos LF Hunt.

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

BOOKS *"Caterpillars, moths and their plants of southern Australia"* Published BCSA September, 2019 Our price \$30, plus postage.

"Attracting butterflies to your garden, what to grow and conserve in the Adelaide Region" **2nd EDITION** Published by 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 by BCSA 2014. \$10 a set of two, includes postage.

"Moths of the Adelaide Region" \$10 Set of four A3 includes postage.

Free download available. **Single posters:** *"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, inc. plastic stake and postage.

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 please email: info@butterflyconservationsa.net.au.



WELCOME TO NEW MEMBERS

Chris Adams

Helen Weekes

Dragos Moise

Michele Wagnitz

Michelle van der Werf

Sally Jones

Doris Cheung

Sharron Videon

Merridee McClean

Emma Lewer

Debra Trinne

Jane Forrest

Rachel Eckermann

Gerry Carne

Bryan McMahon

Frances Buring-Pichler

David Booth

Allison Graham

Kearn Jones

Gerard Proust

Angela Baker

Keith Barrie

Annette Bernauer

Diana Bickford

Kelly Cations

Nayia Cominos

Jackie Crampton

Sibylle Faeh

Mostyn Grigg

Sharon Grigoryan

Trudie Jaques

Karen Jahn

Rosemary Maslin

Danni Paterson

Abhishek Shaw

Kate Thorsteinsen

Det Voges

Graeme Walter

Greg Were

Maxine Whitehill

BUTTERFLY CONSERVATION SA Inc.

An affiliated organisation of the South Australian Museum and Friends of Parks.

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Secretary: Sukhpreet Singh Bala - secretary@butterflyconservationsa.net.au

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Membership: Gil Hollamby - membership@butterflyconservation.sa.net.au

Newsletter Editor and Public Talks Convener: Jan Forrest OAM -

editor@butterflyconservationsa.net.au C/- South Australian Museum.

Committee: Bernadette Johnson, Bryan Haywood (endangered species advocate), Anne Frodsham and Lionel Edwards (website).

Book sales: Sarah Macdonald - publications@butterflyconservationsa.net.au

Consultants: Roger Grund and Dr. Peter McQuillan.

Public Officer: Beth Keane

DIARY DATES

COMMITTEE MEETINGS - Meetings are normally held bi-monthly (usually the second Monday of the 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. 1st March. 6.30pm

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 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>



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