#### **BUTTERFLY CONSERVATION SAINC.**

Founded 25th July 1998 Adelaide, South Australia.

### NEWSLETTER

No. 86: November 2023

## BUTTERFLY CONSERVATION SA 25<sup>TH</sup> ANNIVERSARY 2024 CALENDAR



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### WELCOME TO NEW MEMBERS

Robert Blackburn
Tahnee Thomas (Adelaide
Cemeteries)
Amelia Filippini
Julie Johnson
Di Reynolds
Louise Sutton
June Liddy
Guanmin Hu
Alicia Pike
Amy Reed (Hills Community
Christian School)
Meranda Findlay
Michlle Knynenburg
Brendon Carrick (Urban Creek
Life, Eco Systems)
Justin Richards
Eileen Sullivan
Linda Harrison
Victoria Harrison
lan Kerr Grant



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

#### **BUTTERFLY CONSERVATION SA Inc.**

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

Postal Address; PO Box 4, DAW PARK 5041 South Australia

Email: info@butterflyconservationsa.net.au

Chairman: vacant- Acting Chairman - Gerry Butler chairman@butterflyconservationsa.net.au

Secretary: Alex Coombe- secretary@butterflyconservationsa.net.au Treasurer: vacant - treasurer@butterflyconservationsa.net.au Interim Treasurer: Karen Rodda willing to mentor a new person.

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

Newsletter Editor: Jan Forrest OAM

- editor@butterflyconservationsa.net.au 0419990430

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

Website: Lionel Edwards - web@butterflyconservationsa.net.au

Committee: Bernadette Johnson, Bryan Haywood (endangered species advocate),

Mike Moore, Ann Winter, Gerry Butler, Peter McQuillan.

On-line sales: Pushpa Osborne - onlineorders@butterflyconservationsa.net.au

Friends of the Chequered Copper Butterfly - co-ordinator Gerry Butler.

Newsletter Proofreader and Editor - Judith Lydeamore

Public Officer: John Wilson.

#### **DIARY DATES**

**COMMITTEE MEETINGS:** Meetings are normally held bi-monthly

(usually the second Monday of the month) at 7.00pm venue currently, the APS meeting rooms All members are welcome to attend. If you would like to attend please contact Acting Chairman Gerry Butler on 0407972149.

#### WEB SITES

 $\textbf{BCSA official website: Butterfly Conservation SA-} \underline{\text{https://butterflyconservationsa.net.au/}}$ 

South Australian Butterflies and Moths: <a href="https://sabutterflies.org.au/home/">https://sabutterflies.org.au/home/</a>

YouTube: https://www.youtube.com/channel/UC3LZ9HPh1-DlH-01YIObkiA?view\_as=subscriber

**Butterflies Australia** https://www.butterflies.org.au/external/home **Moths and Butterflies Australasia Inc.** (MABA): https://maba.org.au/

#### MEMBERSHIP ENQUIRIES:

membership@butterflyconservationsa.net.au or online: www.butterflyconservationsa.net.au/product/become-a-member/

#### **Membership payments:**

\$20pa - plus \$10 for a mailed newsletter: 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.





#### VISIT TO THE BEE HUB AND WALK IN BROWNHILL **CREEK EXPLORING BANDICOOT HABITAT**

On Sunday 29th October a small group of members met at the Bee Hub in Brownhill Creek, then across to the creek area to explore the habitat of a small subpopulation of nationally endangered southern brown bandicoots (Isoodon obesulus).

We followed a walking track up the creek for about 1km checking out work being done removing weeds to give the remnant grasses and other plants an opportunity to re-establish themselves. See photo below where weeding around native grasses has taken place.

It was encouraging to see how the native raspberry (Rubus parvifolius) has been spreading and we found many plants amongst introduced blackberry bushes (Rubus fruticosus).

The top photo on the right #1 is the introduced blackberry. Once you understand the difference, the native plant is easy to identify. The introduced blackberry leaf is larger with leaves coming from a central stem whereas the native plant see photo below #2 has several leaves. The flower of the introduced species (see hand holding a flower at the bottom of image 3) is whitish and larger whereas the native flower is smallish and pink (images 3, 4 and 6).







Photos Jan Forrest: 1.Introduced Blackberry leaves. 2. Native Rasberry leaves. 3. Flowers of both species. Photo: Greg Coote: 4. and 6 Flowers of Native Rasberry. Photos: Jan Forrest: 5, 7 and 9 Members on walk. 8. Native grass with sticks around to mark where weeding has occurred. Photo: Greg Coote: 10. Wanderer butterfly.

National Science Week 2024 - Herding Caterpillars Festival 21-25 August 2024 (to be confirmed however anticipate a 5 day event with a 'Gala Event' on Wednesday 21/8/24 by invitation which members of BCSA could attend.

Nature Festival 2024 - Butterfly Festival event (yet to be developed) during the period 28th September-13th October 2024 (preferably 12-13<sup>th</sup> October).

If you would like to be involved in either of these projects please contact Gerry Butler (see page 2 for details.

#### **PUBLIC TALKS PROGRAM 2024**

We are seeking a convener for this position. Jan Forrest OAM has carried out this role for 13 years and would like a break, due to other commitments.

Jan is available to assist in seeking speakers from an extensive list. If you would like to take on this role please contact Jan on 0419 990 430 or Acting Chairman Gerry Butler, or Secretary Alex Coombe. See page 2 for their contact details.













### BUTTERFLY CONSERVATION NEWSLETTER Number 86 November 2023. BRIEF REPORT ON SPENDING OF 2023 BCSA GRANT MONIES

Michael Moore, Honorary Researcher, South Australian Museum

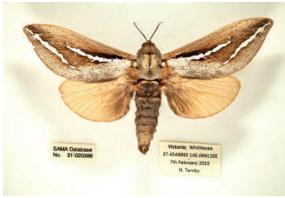
For the past twelve years I have been researching moths in the family Hepialidae, commonly known as Rain Moths in many parts of Australia.

During that time I have focused mainly on their taxonomy by collecting and naming previously undescribed (new) species. In all my taxonomic papers I prefer to have genetic support for my morphological conclusions as I believe any decisions made are more securely based. In all previous cases, that genetic evidence has been in the form of the genetic sequence of the Mitochondrial Co 1 gene (mt COI). This gene is widely used in taxonomic papers for this purpose and even though there are issues with this gene, it is very good at discriminating between species and, in large part, we have found this to be a good gene for our purpose. What it does not always do well is to demonstrate relationships and evolutionary patterns.

My colleagues and I at the South Australian Museum have constructed the first mt COI trees of all of the Australian genera in this family: they use all of the available sequences from all of the international sources.

Although we have worked in all of the Australian genera, I have concentrated the major part of my research on the genus Abantiades. These are medium to large sized moths that come in three forms, based on the forking of the pectinations (lateral projections) on their antenna. One group has them tri-forked, another bi-forked, and the third un-forked. Most but not all of these moth species emerge in response to the cold, wet autumnal fronts that sweep across the southern part of the continent. Other arid habitat species may emerge during a particularly wet few days in summer, and northern species will emerge in response to wet conditions from January to July. Predicting these situations is very difficult, giving only a very small opportunity to collect. Understandably these specimens can be very rare in collections.

Speaking very generally, we are finding that within Abantiades, morphologically distinct clades (groups of species) exist but that the species within those clades can be morphologically almost identical to each other. For example the Labyrinthicus clade is thought by us now to have four(five) species within it (Abantiades labyrinthicus, A. rubrus and A. mcquiilani).



Abantiades labyrinthicus



Abantiades rubrus



Abantiades mcquiilani

The clade is distinctive from other Abantiades clades because of the wing patterning, but within that clade the five species look very similar and can only be definitively told apart either by looking at their genitalia (reproductive parts) involving a dissection or by sequencing their mt COI.

In our studies of Abantiades, we have been delighted by the species discrimination shown by sequencing the mt COI gene. However there have been two situations where it has not worked well and those two cases are in the two most widespread clades, namely *Abantiades argentata* and *Abantiades atripalpis* which are both tri-forked.

Abantiades argentata clade shows only minute sequence changes in the mt COI between the differing groups of which it is composed (see later.) This clade is spread over much of southern and central Australia. In the Abantiades atripalpis clade there were differences in the mt COI but not, we felt, large enough to be definitive.

In consequence, we decided to look at the nuclear DNA (DNA present in the nucleus of the cell rather than just the tiny piece present in their [and our] mitochondria) of these species using a new technique, known as Single Nucleotide Polymorphisms or Sn(i)p for short. In this new technique, the nuclear DNA is chopped and the identical small pieces of DNA are identified and sorted for every specimen provided. These pieces are then compared, looking for single DNA base changes.

Unfortunately, techniques when new are expensive and although the price of this work has diminished over the last year or so, the sale price that we managed to achieve was four times the expense of mt COI sequencing. We provided 180 specimens from six Abantiades clades. Most of them were of the two abovementioned species but we

#### **BUTTERFLY CONSERVATION NEWSLETTER Number 86 November 2023.**

also provided material from *A. labyrinthicus*, *A. aurilegulus*, *A. leucochiton*, and *A. albofasciatus*.

The results were worth the expense!

They have shown the following. In *Abantiades argentata* there were four recognisable groups; in the *Abantiades atripalpis* there were four recognisable groups; in *Abantiades labyrinthicus* there were four recognisable groups; in *Abantiades aurilegulus* two recognisable groups; and in *Abantiades albofasciatus* two recognisable groups.

My task now is to look at each of these "recognisable groups" and compare their morphologies with the type species in each group looking for differences. For reasons explained earlier, these differences are most likely to be found in the genitalia, so much dissection and lots of imaging are lying ahead.

If morphological differences can be shown, then the new distinctive group is most likely a distinct species in its own right. So, from just from the single experiment described above and run by us, we could yield 9 new species of Abantiades moths.

Though there is much work to be done and the resultant paper might take two years to get to publishing, this work is important in that it provides insights into evolution in Australia, and at the very least demonstrates to us just how lucky we are to live on this Continent amongst this diversity of fauna.

Many thanks go to the BCSA for the part funding they provided for this exciting research.

#### MANAGEMENT PLAN FOR NORTH LOFTY PARKS

A new management plan for 7 parks across the North Lofty District is being developed by the Department for Environment and Water to facilitate effective management of the parks in the region.

As a valued stakeholder, the Department's planning team is seeking your input to assist in the development of the plan.

The parks to be covered by the plan include:

- · Sandy Creek Conservation Park
- · Charleston Conservation Park
- Cromer Conservation Park
- · Warren Conservation Park
- · Hale Conservation Park
- Cudlee Creek Conservation Park
- · Wiljani Conservation Park

The draft management plan will be released for the 3-month public consultation period in the next few months. Once adopted, it will establish the coordinated and long-term direction for management of the parks, focus on the key values and critical threats, and provide strategies to manage them.

To provide input, or to arrange a meeting to discuss further, please contact Park Planning Officer Bec Brown at 0467 770 173 or via DEWProtectedAreaManagement@sa.gov.au

#### **YUNDI - A GREAT DAY OUT**

John Fargher, our host, was a most generous, informative, attentive and very experienced host. The property is beautiful.

Once farmland, it is now at various stages of recovery after about 4 years of continuing and concerted regeneration work. With dams, swamps, a lovely, part pink gum, part stringybark, remnant woodland and newly seeded trial areas of swamp heath and open gum forest, the property offers a fantastic diversity of flora and fauna.

Even though a few people couldn't make it, we had 8 enthusiastic bug hunters, 4 of whom stayed for the light trap/sheets in the evening.

A cool day with the odd drizzle, it was not the most conducive for arthropods. We still managed to photograph well over 60 species and we all came away knowing we'd benefitted from that day of exploration and at least 2 participants will be uploading their finds on iNaturalist where they will be identified and stored for research and reference.

Thanks go to Sarah McDonald for organising this great day.







Photos: Sarah Macdonald. Looking for critters and some we found at Yundi.



Photo: Yundi Nature Conservancy. Night collecting.





## BUTTERFLY CONSERVATION NEWSLETTER Number 86 November 2023. REPORT ON A FIELD TRIP UNDERTAKEN FEB-JUNE 2023 TO COLLECT FRESH SAMPLES OF AUSTRALIAN HEPIALIDS

Michael Moore

In 2020 my colleague Mark Stevens and I successfully applied for an Australian Biological Research Scheme (ABRS) grant. Unfortunately, Covid had a significant effect on the progression of the work in this project and a field trip that had been planned for 2021 has just been completed .

The project is looking at the phylogeny (evolutionary history and development) of the moths in the Family Hepialidae (Rain, Ghost, Splendid or Swift moths – this common name depends on where you live!). We originally thought we would concentrate mainly on the Australian fauna but because we have been able to source material from all over the World, we have extended the global aspects of the research. Nothing like this has been attempted with this group before, and indeed not much has been done with many of the insect groups.

One of our co-collaborators, Andreas Zwick at the Australian National Insect Collection (ANIC) in Canberra, will extract and sequence the entire mitochondrial genome from every specimen. [Mitochondria are the cell organelles that provide the energy necessary to continue life for each and every cell. All organisms except bacteria and blue-green algae have mitochondria.]

This genome is about 11,000 base pairs and by comparing the differences in this string of bases, one can get a very strong idea on the relationships between the groups and most importantly when those divergences took place. This allows us to draw up a possible evolutionary timeline.

In genetic work fresh DNA is best and so I was tasked with collecting as many species as I could.

Hoping that La Niña would hang around for a third summer, I decided we would go in late February to southern Queensland. Early rain would, I had hoped, cause the Hepialids to emerge earlier than normal. The world weather patterns, detecting my determination, decided they would frustrate me by closing down La Niña.

This meant we arrived in to beautiful warm sunny skies and dry days and nights. Even though the weather was not propitious, we did set up light sheets but with no Hepialid success and, unfortunately, this set the tone for the next four months.

The eastern leg saw us travel down the east coast to Mallacoota, across to Bright and Chiltern and back to Adelaide, and then across to WA. On the eastern leg we saw lots of interesting things but collected only a few Hepialids.

To collect Hepialid moths, you need a fair volume of rain and no moon visible. Often these two things go together but not always. Regularly, we had a little rain during the day with overcast skies, only to see the clouds depart at night leaving us with a bright moon, or we would have overcast nights but no associated rain, or it would have rained three days previously but not when we were present. But, of course, you also can get too much rain!

This happened only on one of the nights but it was the most propitious night whilst in the Gibraltar Range. We had already collected one Hepialid specimen when the heavens opened up. Although Hepialids will fly during heavy rain, everything including you gets soaked in the process and the moths can become stuck to the sodden ground. Because we had to navigate a dirt road back to the camp we packed and left early and frustrated.

In the six to seven weeks of this leg of the trip, we did collect some specimens but all in all this was a most surprisingly unsuccessful leg.

We had three nights back in Adelaide before we headed to Western Australia.

In WA the frustrations were much the same, but to this we added some surprisingly cold nights. Hepialids can manage cold nights by shivering and warming themselves up. Whether they only can do this in their pupal cases before emergence I do not know but suspect not.

Whilst we collected bits and pieces in some of the places, we did have two fair nights at Walpole, a fair night in Mukinbudin and a good night at Geraldton, and we finished up with two excellent nights in Kalbarri.

The forecast was for gale force winds and plenty of rain. That arrived at about 2 am on our first night there. Having had similar weather in Walpole we somehow slept through it, and on awakening the next morning we were delighted to see the toilet block festooned with moths. Later that morning we went into another caravan park and found an even better collection. Moths were also spread throughout the township.

We determined that we would go into the National Park that night to a site we had previously reconnoitred and after a bit of to-ing and fro-ing we set off into the wind and rain. Inland, as expected, the conditions were much better and by 6 pm we were set up. Between 6 pm and 8 pm it was windy and it rained a bit, but we collected about a dozen *Fraus* spp. (small Hepialids ) and 8 specimens of *Abantiades* spp. Seven of those large moths were made up of 3 "new" undescribed species and one was the same as the species collected in the caravan parks in the morning.

Three new species in one night is something very special and rounded off a poor collecting trip with bells and whistles. Frustration abounded when, after almost two days of torrential rain, the clouds departed on this successful night to leave a moonlit night.

This trip also highlighted that toilet blocks and well-lit buildings are good places to find these moths. Because these facilities generally run their lights all night they are beacons in the darkness for these moths. Almost all the specimens at Walpole were collected at the toilets, similarly at Geraldton and Mukinbudin. We do spend a lot of time around toilets!!

Our collecting takes us to some out of the way places and therefore we see some interesting places as a tourist. It surprises us to realise how much we have seen of southwestern WA in our three trips there.

Most of the collected specimens have now been pinned and dried and are awaiting investigation. Fortunately, my friends have supplemented our collection efforts and we have ended up with a good proportion of the Abantiades and Fraus species, though other genera are somewhat thinly represented.

Marion and I were away about 17 weeks in total and travelled 21,000 kms.









Left: Abantiades albofasciatus and A. argentata.

Above from top: Abantiades atripalpis, A. aurilegulus and A. zonatriticum.

#### **NANGAWOOKA FLORA RESERVE**



BCSA stand at Nangawooka Flora Reserve which is looked after by a Friends Group closely affiliated with the Australian Plant Society. The reserve is located just outside Victor Harbor(opposite Urimbirra Fauna Park) on the main Victor Harbour Road, 5 acres in size and contains a large collection of Australian native plants. Photo: Iain Lancusch (Chair, Goolw Cittaslow Envinoment Group and Vice President of Goolwa Cittaslow Karen Lane (Hon Life Member) and Gerry Butler (Chair BCSA).

#### THE INDISPENSABLE MAN

One day when you're feeling important;
One day when your ego's in bloom;
Some time when you take it for granted,
You're the best qualified in the room;
Some time when you think that your going,
would leave an unfillable hole;
Just follow this simple instruction
And see how it humbles your soul.

Take a bucket and fill it with water;
Put your hands in it up to your wrists;
Pull them out - and the hole that remains;
Is the measure of how much you'll be missed.
You may splash as your please when you enter;
You may stir up the water galore;
But stop - and you'll find in a second,
That it looks just the same as before.

The moral of this is quite simple; Do just the best that you can, and be proud of yourself - but remember; There is <u>no indispensable man</u>.

Saxon White Kessinger

Editor note: I found this in a magazine 60 years ago and it has been on my notice board ever since, giving an opportunity from time to time, to reflect.

#### **CALENDAR ORDER FORM**

If emailing order form and paying by EFT: please email this order form to: onlinesales@butterflyconservationsa.net.au when paying by Electronic Funds Transfer (EFT) email Treasurer as well, as noted below. If posting order form: mail to PO Box 4, DAW PARK. 5041 and include your cheque.

Name:	•••••	
Tel (home):	Mobile:	
Email:		(please print clearly)
Postal address:		
Suburb:	Postcode:	State:
Number required:@ \$20 each (in	ncludes postage). Total cost: \$	

Payment options:

By post: Cheques to be made out to:

Butterfly Conservation SA Inc. and posted to: Treasurer, PO Box 4, DAW PARK 5041.

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





#### **PUBLIC TALK DINNER MEETING**













### PRESENTATION OF HONORARY LIFE MEMBERS CERTIFICATES 7th November 2023 by Chairman Gerry Butler



Left to right, top to bottom: Jill Davy. Jill has been a member for 23 years and from 2002 served on the committee for more than ten years. She continues to be an active member of the organisation.

Gill Hollamby is presently our Membership Secretary on the committee and has been a member for 21 years. His enthusiasm to provide talks to community organisations on behalf of BCSA is greatly appreciated.

Chris and Karen Lane joined BCSA in 2005 and both have made significant contributions over many years, Chris in assisting BCSA to become affiliated with Konica Minolta and Karen as a specialist in re-vegetation and propagation and promoting butterfly host plants.

Margaret Lee has been a member for 20 years and has supported BCSA through her involvement with the Australian Plants Society in particular facilitating joint displays.

Judith Lydeamore has been a member for 18 years; her contribution has been in taking on the enormous task of proof-reeding and editing the book *Caterpillars Moths and their plants of southern Australia*. She continues to proof read our newsletters

Mike Moore is an inaugural member of BCSA having been at the very first meeting in 1998. He has continues to contribute since that time, in particular providing identifications and providing the 'butterfly of the month' segment at Public Talks. Bryan Haywood has been a member for 24 years. As the endangered species advocate for BCSA, Bryan's work in this field for BCSA has been outstanding. A country member (SE), unfortunately he was not available for the presentation.

#### **BUTTERFLY CONSERVATION NEWSLETTER Number 86 November 2023.**

#### **SUMMARY OF FACT SHEETS AVAILABLE**

Note: our original website provided a one page fact sheet for each species featured in the book 'Attracting butterflies to your garden, what to grow and conserve in the Adelaide region'.

More information was then provided for a number of species as listed below and published in our Newsletters. The 'one-pagers' are still available for download from the website as are the two-page versions. Over time we hope to eventually publish a two-page version for all South Australian species.

If anyone would like to assist with this project, contact Jan Forrest.

NAME	COMMON NAME	NEW FORMAT	PRINTED IN NEWSLETTER	Book and BG website as one page
Abantiades atripalpis	Rain Moths	2 pages	May-21	<del>' '</del>
Anisynta cynone	Mottled Grass-skipper	2 pages	Aug-21	1 page
Antipoda atralba	Black and White Sedge Skipper			1 page
Belenoise java teutonia	Caper White	2 pages	Nov-20	
Candalides acastus	Blotched Dusky Blue			1 page
Candalides heathi heathi	Rayed Blue		Aug-21	
Candalides hyacintha simplex	Western Dusky Blue			1 page
Cephrenes augiades sperthius	Orange Palm Dart		1	1 page
Danaus petilia	Lesser Wanderer		1	1 page
Danaus plexippus plexippus	Monarch or Wanderer	2 pages	May-18	
Rearing Monarch caterpillars		2pages	May-18	<u> </u>
Danaus plexippus plexippus	Raising Wanderer caterpillars	2 pages		1 page
Delias aganippe	Wood White	2 pages	Oct-18	1 page
Eurema smilax	Small Grass-yellow			1 page
Geitonura acantha ocrea	Ringed Xenica			1 page
Geitonura klugi	Marbled Xenica			1 page
Hesperilla chrysotricha	Golden-haired Sedge-skipper	2 pages	Aug-19	1 page
Hesperilla donnysa	Donnysa Skipper			1 page
Hesperilla flavescens	Yellowish Sedge-skipper	2 pages	Feb-21	
Hesperilla idiothia clara	Flame Sedge-skipper			1 page
Heteronympha merope merope	Common Brown	2 pages	Aug-19	
Jalmenus icilius	Icilius Blue			1 page
Junonia villida calybe	Meadow Argus	2 pages	July-12	1 page
Lampides boeticus	Long-tailed Pea-blue	2 pages	Aug-18	
Lucia limbaria	Chequered Copper	2 pages	Jan-18 Apr-23	1 nage
Motasingha trimaculata trimaculata	Large Brown Skipper			1 page
Nacaduba biocellata	Two-spotted Line-blue			1 page
Neolucia agricola agricola	Fringed Heath-blue			1 page
Ocybadistes walkeri	Southern Grass-dart			1 page
Ogyris amaryllis meridionalis	Satin Azure			1 page
Ogyris genoveva	Genoveve Azure	2 pages	May-21	
Ogyris olane	Broad-margined Azure		1	1 page
Ogyris otanes	Small Brown Azure			n/a
Papilio aegeus	Orchard Swallowtail		1	n/a
Papilio anactus	Dingy Swallowtail	2 pages	Feb-12 Jan-19	1 page
Papilio demoleus sthelenus	Chequered Swallowtail		0411 10	1 page
Pieris rapae	Cabbage White			1 page
Polyura sempronius	Tailed Emperor	2 pages	Jan-18	1 page
Taractocera papyria Theclinesthes albocincta	White-banded Grass-dart			1 page
A guide to identifying Bitterbush Blue		2 pages	Aug-18	
eggs, larvae and adults.	Bitterbush blue	1 page	May-19	1 page
A guide to identifying the Bitterbush Blue butterfly from other Lycaenids	Bitter state in state	1 page	   May-19	
Theclinesthes miskini	Wattle Blue		1	1 page
Theclinesthes serpentata serpentata	Saltbush Blue	2 pages	Feh-21	1 page
Trapezites lutea	Yellow Ochre	<u> </u>	1 05-21	1 page
Trapezites inted Trapezites phigalia	Heath Ochre	2 pages	Dec-10	1 page
Vanessa itea	Australian Admiral	2 pages		1 page
Vanessa kershawi	Australian Painted Lady	2 pages		1 page
Vallooda Kolollavvi	Common Grass-blue	r pages		1 page

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



**NEW LIMITED STOCK: 25th ANNIVERSARY HATS:** Beige, broad brim, BCSA 25th logo, chin strap. \$20. CALENDAR \$20 see also order form.

**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.

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 <a href="https://butterflyconservationsa.net.au/shop/">https://butterflyconservationsa.net.au/shop/</a> and sign up for a membership/book deal. For queries email: info@butterflyconservationsa.net.au.









### Butterfly Conservation South Australia Inc.

presents the fourteenth

# PUBLIC TALKS PROGRAM 2024

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 for Plympton 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 \$5).

**Bookings** not required

www.butterflvconservationsa.net.au

Please bring supper to share.

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 BCSA activities will be made by a committee member.

DON'T FORGET TO BYO CUP.

Photo Robert H. Fisher: Rayed Blue butterfly Candalides heathi



KONICA MINOLTA

#### **PUBLIC TALKS PROGRAM 2024**

**5th March** *The Ogyris genus of Lycaenid butterfly.* Presented by member Mike Moore.

Mike will talk about the new work recently published by Beaver and Braby on Ogyris taxonomy. This work includes the description of a number of new species and a reorganisation of existing taxa. This research includes the study of a number of Australia's most iconic *Ogyris* species. In it Mike will discuss a little of the history of this work and the conclusions reached by these researchers.

### 2nd April Taking photos. How to get the best out of your camera on your phone.

Presented by member Jan Forrest OAM+.

The digital age has transformed photography and taking pictures now is as simple as pulling a phone out of your pocket. The medium may have changed, however the principles of taking a good photo have not.

Bring your camera and phone to experiment, as we look at the use of light, composition and phone/camera settings you may not have used. Jan will finish off with hints on micro, macro and astro photography.

7th May: Planning your garden. TO BE CONFIRMED Landscape designer Annette Burmeister will provide an insight into how gardens are designed and provide hints about what to consider when you are planning a new garden or revitalizing your existing garden.

### CONGRATULATIONS TO OUR CALENDAR COMPETITION WINNERS

The subcommittee of Dr Peter McQuillan, Sarah Macdonald, Ann Winter and Gerry Butler reviewed the 412 images from 26 photographers recommending three photographers for the prizes as follows:

1<sup>st</sup> Marianne Broug Satin-green Forester moth on the cover and featured in November.

2<sup>nd</sup> Greg Coote caterpillar featured in September.

3<sup>rd</sup> Matt Endacott Chequered Swallowtails in April.



### **SOPHIE'S PATCH 2023**









Photos: Darren Clement Courtesy Sophie's patch newsletter, with thanks.