



BUTTERFLY CONSERVATION SA INC.

NEWSLETTER

No. 73: November 2020

THE PARKLANDS PROJECT

To celebrate Nature and the Adelaide Parklands a partnership between Hunter Gatherings, Open Space Contemporary Arts (OSCA), Trees For Life and the Nature Conservation Society (SA) has culminated in a festival called the 'Parklands Project' on Sunday 22 November from 1200-1400 in Carraigeway Park/Park 17. Access the festival from the corner of South and East Terrace.

Amongst the music, artworks and tours in the parklands a unique theatrical event will portray the story of the Chequered Copper butterfly. A tour will be led by volunteers from the Friends of the Chequered Copper (*Lucia limbaria*) butterfly.

This exciting partnership between Butterfly Conservation SA and OSCA will showcase the mutualistic symbiosis of the ant and the caterpillar that can be seen in lifesize in Pakapakanthi/Victoria Park/Park 16. We will be theatrically showcasing the reward and benefits that the ants and caterpillars exchange, including honeydew and pheromones.

It is well known in education and science communication that using theatre to tell a story, particularly of something that is hard to see with the naked eye, is a worthwhile exercise. Researchers have shown that 'theatrical elements that seem to be important in children's recollection of the play were the narrative, props and stage effects, and characters. In the children's memory, science was intertwined with the theatrical elements. Nonetheless, children could distinguish well between scientific facts and the fictive narrative.' (Peleg, R and Tsabari, A B ; October 2011; [Journal of Science Education and Technology](#) 20(5):508-524).

As well as being a lot of fun, the opportunity to reach out to a new audience and partner with different sectors of the community, is very important for the Butterfly Conservation SA. It is one of many ways to get our message out to the wider community, about the importance of conservation and management of habitat for all creatures, including Lepidoptera.

IN THIS ISSUE

- The parklands project
- 2019- 2020 Chairmans Report
- Caper White Fact Sheet
- Caper White records from Loxton
- Caper Tree localities required
- Botanic Gardens Tree Selector
- The Dung Beetle Date
- Moths of Victoria Part 9
- Something to crow about
- 2019 - 2020 Financial Statements
- Public Talks Program 2021
- Chequered Copper Butterfly
- Visit to Hindmarsh Island
- Reduce your tax
- Friends of the Chequered Copper
- APS show
- Microscope for your phone
- Sophies Patch
- What's for sale?
- New Members
- Committee details
- Diary Notes

SUNDAY 22 NOVEMBER 2020

THE PARK LANDS PROJECT

A ONE-DAY FESTIVAL WHERE ART, MUSIC & CITIZEN SCIENCE MEETS NATURE

LINE UP

ARTISTS
LOUISE FLAHERTY &
BELINDA GEHLERT
LAURA WILLS
ROSINA POSSINGHAM

12 NOON NAOMI KEYTE MUSICIAN
12:30 OPENING & WELCOME TO COUNTRY
1-3:30PM FAMILY FRIENDLY WORKSHOP, WALKS & TALKS
3:30PM MUSIC
4PM CLOSE

The Park Lands Project is a collaborative partnership between: The Nature Conservation Society of South Australia, Trees For Life, Hunter Gatherings and OSCA: Open Space Contemporary Arts.

For more information open-space.org.au

OSCA

GREENHILL ROAD

This project is proudly supported by:
Inspiring South Australia, the City of Adelaide and the Commonwealth of Australia as represented by the Department of Industry, Innovation and Science.

INSPIRING SOUTH AUSTRALIA
CITY OF ADELAIDE
AUSTRALIAN GOVERNMENT
Department of Industry, Innovation and Science

Sunday 22nd November from 12.00 noon. FREE entry.

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.

**Butterfly Conservation South Australia Annual General Meeting
1st September 2020
Plympton Community Centre**

CHAIRPERSON'S REPORT

Welcome to the 2020 Annual General Meeting and I particularly welcome those members and guests who are here in the meeting room and on Zoom. We 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.

THANKYOUS

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 outgoing Secretary Brett Oakes for his service and we wish him well in his new career and we thank him for his ongoing membership; and
- our previous Treasurer Dianne Lynch and current Treasurer Divya Patel for their diligent work in managing our finances.

The Management Committee is also made up of:

- our Membership and Minutes Secretary Gil Hollamby; thanks for his bountiful energy, including at the numerous public events where he has spread the word about Lepidoptera and Insects and 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 contributed enormously to the production of the Moth Book;
- our Social Media (Facebook) Administrator Cristy Seymour keeping us in the public eye;
- our Online Store Managers, Mike and Marion Moore, who have kept up with the website online sales of our books and other resources;
- our Hospitality Manager Bernadette Johnson has managed the catering at Plympton CC;
- our other Management Committee members: Anne Frodsham, Andrew Walters, Andrew Lines, Bryan Haywood and Beth Keane, who contribute to our governance and the many tasks that are needed to keep your association running efficiently.



Last, but not least, I would like to thank 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 for their work.

GOVERNANCE

Our governance has been tested in 2020 with the introduction of regulations around meetings and the requirement for a COVID Safe Plan, which Brett has taken the lead on and the Committee has responded well with assistance to implement the 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.

DEDUCTIBLE GIFT RECIPIENT (DGR) AND CHARITY STATUS

The association achieved a significant milestone in March 2020 with the granting of Deductible Gift Recipient (DGR) status by the Australian Government Minister for the environment and subsequently Charity status from the Australian Charities and Not-For-Profit Commission (ACNC), which enables us now to offer to potential sponsors a tax deductible opportunity for their sponsorship dollars. Many thanks to John Wilson for his diligent work on the DGR application over 4 years. 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 is discussing fundraising, and the potential appointment of a Fundraising Manager, to assist with raising funds for the Butterfly Conservation Fund, which will be used for conservation projects.

FINANCES AND OUR BOOKS

The 2019-2020 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. In 2019, with the accumulated human and financial resources of our organisation over 6 years, we self-published 'Caterpillars, Moths and their Plants of southern Australia'. I would like to acknowledge the generous support of the authors Dr Peter McQuillan, Jan Forrest OAM, David Keane and Roger Grund and the many photographers and artists that contributed their work. The successful public launch at the SA Museum on 5 December 2020, with the Director Brian Oldman and Dr Peter McQuillan, was very well received, providing an enlightening discussion in a wonderful setting. Sales of the book have gone very well and to the end of the financial year we had distributed 917 copies, 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 the 2nd edition of our butterfly book 'Attracting Butterflies to your Garden', by Hunt, Grund, Keane and Forrest (2016) is selling well, and is recommended by many experts such as Sophie Thomson and James Smith. Sister groups such as 'Bringing Back the Butterflies', an initiative of members of the Australian Association of Environment Educators (SA) (AAEE), use and distribute our book, resources and expertise to encourage gardeners, schools and individuals to take responsibility for caring for our environment. Over the 4 years since the 2nd Edition was published we have distributed 1659 copies as gifts to speakers and through sales to members, general public and our retailers. We now have our books in 11 retail outlets in Adelaide, 5 interstate outlets and 4 organisations that regularly purchase significant quantities 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 the membership and we thank her 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 the current 10th anniversary program, which we are enjoying in 2020. The delivery this year has been predominantly on Zoom, due to COVID, and our speakers have been very generous with their time and expertise. The BCSA Committee took the decision to get full value from its monthly Zoom subscription and we have had many Committee meetings and special events (e.g. 'Rain Moths' with Peter McQuillan and National Science Week 2020 'Herding Caterpillars' – Lycaenid Family with Roger Kitching et al) on Zoom, enabling us to practice social distancing, which has engaged a new cohort of members and guests. Whilst we appreciate that we have picked up new audience members, this has meant that some members, without the capacity to Zoom, have been excluded. We anticipate that as we have now gone back to some face-to-face meetings we will re-engage with these members.

MEMBERSHIP

Increasing 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 few years and a few statistics show how:

Trends in BCSA Membership

	JULY2018	July 2019	July 2020
Unfinancial	104	92	64
Financial 1 year	121	127	189
2 years	30	41	42
3 or more	26	19	17

Life-paid	24	37	33
Life-Honorary	3	3	3
Complimentary newsletter	17	19	20
Total 2020			370
New members	57	70	98

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 will be seeking continuing funding for this monitoring project and I would like to acknowledge the volunteers who assist with the monitoring, especially Greg Coote for his marvellous camera skills. We will be collaborating with City of Adelaide to have an Amongst It Festival of Nature in the biodiversity site at Pakapakanthi on 30 September to commence 2020-21 activities.

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 to this website will be on our website soon and Mike Moore is leading this project.

Reintroduction programs, include participation in the Bitterbush Blue relocation and other coastal butterfly species such as the Yellowish Sedge Skipper, are being supported by members including Andrew Lines.

Development of a species list to be incorporated onto the **Threatened Species list** for SA species. There are currently no insects on this list and this project is being led by Bryan Haywood.

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

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.

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.
1 September 2020

Financial Statements on Page 9.



PUBLIC TALK 1st September at the Plympton Community Centre. Guest Speaker mammalogist Dr. Cath Kemper. Photo: Jan Forrest.

Caper White

Class: Insecta
Order: Lepidoptera
Family: Pieridae
Genus: *Belenois*
Species: *java*

This butterfly is a migrant to South Australia. Every few years there are immense migratory flights of adult butterflies sometimes with thousands of individuals, commencing in the north of the state and moving south to Adelaide, Mount Gambier and Kangaroo Island. Locally common in breeding areas and during southern migrations. In the northern breeding areas of South Australia, numbers of the butterfly tend to be more common about their foodplants during the warmer months. Most of the migrating butterflies seen in South Australia probably have their origin from the inland areas of New South Wales and Queensland.

Description

Wingspan: Male: 55mm, Female: 55mm

Upperside:

Both the fore and hind wings are white, edged with a wide-ish black band itself punctuated with an array of white variably shaped spots.

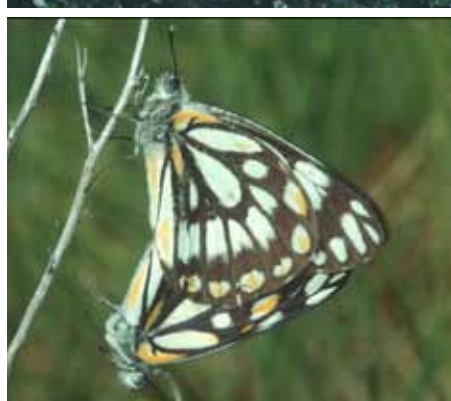
In males the band can be quite narrow but is usually considerably wider in the females, indeed in some females this band can occupy significant areas of the upper wing area.

Underside:

As with many Pieridae butterflies it is the underside of the wings that sets the heart racing. In males the upper forewing and lower forewing are similar, but the hind wing differs in having the veins thickly covered with black scales producing a number of variably shaped white areas edged black. The terminal row of white spots have within them a deep yellow blotch.



Photos. Above, adult male underside. Right, close up of eggs, eggs on leaves, first instar larvae, mature larvae, pupa, adult male upperside and mating adults. Photos: LFHunt.



**BUTTERFLY
CONSERVATION
SA. Inc.**

**C/- SA Museum
North Terrace,
ADELAIDE 5000
S. AUSTRALIA**



In females the under part of the forewing is usually coloured deep yellow, and the hindwing has a wide suffusion of black edging with little white area. As in the male the terminal row of spots have deep yellow blotches within.

Distribution

The butterfly breeds mainly in northern South Australia and migrates south. This butterfly also occurs in Queensland and migrates south through New South Wales and into Victoria.



Larval Foodplants

Capparis species including *C. mitchellii* (tree caper) (Capparaceae). In central west New South Wales the foodplant is a broom like tree *Apophyllum anomalum* (Capparaceae), which does not occur in South Australia. The larvae eat all the softer green parts of the foodplant and if that has been demolished then they will also eat the green bark off older twigs.

Habitat and Ecology

Within South Australia its foodplants have only been recorded to grow naturally in the northern Flinders Ranges and in the extreme northeast area of the state. The foodplant in these locations is the tree caper, which occurs sparsely and is unlikely to produce the immense numbers of butterflies seen during the big migrations. In the northern Flinders Ranges the plant tends to frequent the ravines and rocky areas.

Flight period

Near its foodplant in northern pastoral areas it is possible to find the butterfly throughout the year. In the southern settled areas it is most commonly seen in the spring and early summer during its main southerly migration.



Threats

There are no major threats to the butterflies within South Australia. In western NSW and southwest Queensland, the butterfly breeds in the plague locust belt and it is likely that the locust controls have an influence on butterfly numbers.

Conservation

The tree caper, the only larval foodplant of the butterfly to occur in South Australia, does not appear to be reproducing itself satisfactorily in S.A. due to the effects of past droughts and the grazing by animals. An attempt should therefore be made to revegetate the tree in suitable areas. It will require protection from both grazing animals and from the caterpillars of this butterfly while still in the immature thorny stage of growth.



Photos: Top left, adult female upperside. Photo: LFHunt. Above, caterpillar host plant *Capparis mitchellii* (tree caper) mature tree. Photo: Ivan Holliday. Right, close up of the tree caper flower. Photo: Roger Grund.

ACKNOWLEDGEMENTS *Belenois java* fact sheet:

Majority of text, map and flight bar from: 'SA butterflies and moths' website <https://sabutterflies.org.au> by Roger Grund much of which includes biological information by the late Lindsay Hunt. Other references and contributors include: Michael Moore; Fisher RH 1978 *Butterflies of South Australia*; Braby MF 2004 *The complete field guide to Butterflies of Australia*; Dashorst RM & Jessop JP 'Plants of the Adelaide Plains & Hills'. Production: Jan Forrest OAM, November 2020.

BUTTERFLY CONSERVATION SA Inc.

is a not-for-profit organisation for those interested in conserving the habitat of Lepidoptera (butterflies and moths) and other animals.

For further Information or to purchase one of our books '*Attracting Butterflies to your Garden, what to grow and conserve in the Adelaide region*' and '*Caterpillars moths and their plants of southern Australia*' or to purchase a '*Butterfly Garden*' DVD, moth and spider posters contact the Secretary, c/- South Australian Museum, North Terrace, ADELAIDE 5000.

WEBSITE: www.butterflyconservationsa.net.au

EMAIL: info@butterflyconservation.net.au

Some Observations on the Flights of the Caper White and the Cabbage White Butterflies in the Riverland and Northern Mallee of SA

Caper White (*Belenois [Anaphaeis] java teutonia*) and Cabbage White (*Pieris rapae rapae*)

December 1992 to November 2020. PA Magarey, Loxton, SA. Email: pmagarey@riverland.net.au; Phone: 0418 808 296.

Year	From Date 1	Time 1	To Date 2	Caper White	Cabbage White	Flight	Location	Observations
1992 (Wet spring)	4th December			Yes		S-N	Loxton Cemetery	Mass migration occurring. Identified specimens using 'Australian Butterflies', McCubbin, C. (1971), pp.120, 124-126, and 'Butterflies of SA', Fisher, RH. (1978). Made approx. 7 counts across 100m field of view. Mean score = 35 CapW/minute ie approx. 2,100 insects/hr for approx. 5hr!! Adults on wing were also seen (no counts) by other observer (RTMcR Wood) near Swan Reach Rd turn-off near Pyap (in the west) and later by PAM at Loxton Nth (in the east) ie about 8km width at least. On 11th Feb 1993 PAM advised Mike Gemmal at SA Museum.
	5th December		7th December	Yes		S-N	Loxton	Lesser numbers seen
1993	10th November		14th November	Yes		+/- random	Loxton	Flying in groups of 3-4 most at chest to head high plus a 2-3 metres at times. More or less at random direction. Collected x1 female. Confirmed ID.
1995	29th October			Yes		E-W	Loxton	Group of five flying. Collected x1 female. Confirmed ID.
1999	20th November		2nd December	Yes		S-N	Loxton	x20-30 flying against strong headwind on 20th Nov.
2000	8th November		11th November	Yes		S-N	Loxton	More seen on 8th than 11th Nov.
2005	20th October			Yes		?N-S	Paringa	A colleague reported seeing these insects on wing at Paringa, SA.
	21st October	1:30pm		Yes		N-S	Loxton	1:30pm to 1:35pm counted x30 as I drove 3.3km E-W in 5min, ie approx. 360/hr.
	28th October	2pm		Yes		+/- random	Buckland Park	a few seen; perhaps feeding?
	31st October			Yes		N-S	Loxton	a few scattered seen, heading South
	1st November	1pm		Yes		S-N	Loxton	counted x21 as I drove LRC-Loxton, 3.3km E-W in 5min, ie approx. 250/hr. A few were flying +/- at random but general trend was to the North!
	2nd November	1pm		Yes		S-N	Loxton	counted x16 as I drove LRC-Loxton, 3.3km E-W in 5min, ie approx. 192/hr. A few were flying +/- at random but general trend was to the North!
2010	24th November		25th November	Yes		?S-N	Renmark plus	Nil to 10 (often x5) CapW/km seen while driving 100km/hr Renmark to Bendigo, Vic. and return.
	27th November			Yes		?S-N	Loxton	Some seen flying approx. 22nd Nov to 27th Nov
2013	21st October		22nd October		?Yes	SW- NE	Loxton - Tailem Bend	Prob. Cabbage Whitie, coll. x1 at Borrika
	26th October				?Yes	SW-NE	Taplan	Prob. Cabbage Whitie, coll. x2, Specimen #4-5
	22nd October		9th November	Yes		+/- random	Loxton	Scattered x1 and x2's, often more or less at random but sometimes S-N. ID as Caper White!
2020	20th October	5pm					Coromandel Valley	Saw scattered numbers in driving Loxton to Coro Valley 2pm-5pm.
(wet spring)	29th October	1pm-2pm		Yes	Yes	S-N	Loxton	x1 count only; approx. 53/hr at LRCentre.
	31st October	3:22pm		Yes	Yes	S-N	Loxton	x28/5min ie approx. 336/hr ; perhaps SE-NW.
	1st November	4:30pm		Yes	Yes	S-N	Loxton	x40/5min ie approx. 480/hr. Mixture of CapW and CabbW, PAM coll. x1 CabbW ?male Fifth St, Loxton; CH Wood coll. X1 CabbW ?female McEwn Street, Loxto, and x1 CapW (temporarily) - (photos taken).
	3rd November			Yes	Yes	S-N	Loxton	approx. 20 in 40min ie approx. x30/hr into gusty northerly headwind maxm 30km/hr (Bur of Met). Mixture of CapWh and CabbW says GO Furness, ex SARDI Entomologist at LRC.
Key:	Loxton	PA & CC Magarey's, 39 Second Street unless otherwise indicated.					ID	Identified.
	LRC	Loxton Research Centre					PAM	PA Magarey

CAPER WHITE BUTTERFLY

Every year around the first week of November we start to see Caper White butterflies *Belenois java* in our gardens.

The caterpillar host plant is the Caper tree *Capparis mitchelli* and in the Adelaide Botanic Gardens is a 70 year old tree and also two trees in the Waite Arboretum at Urrbrae. If you know where other *C. mitchelli* trees are found in Adelaide please let us know.

When BCSA first started we used to hold our Christmas party under largest of the Waite tree capers and could always guarantee seeing eggs, caterpillars and adults flying around..

In suburban gardens the adults often lay eggs on the introduced caper bush and reports of these trees being stripped by the caterpillars are often told however not all the caterpillars pupate and emerge as adults.

If you have one of these bushes in your garden please keep some notes of when butterflies first appear and information on the caterpillars to pass onto our membership officer Gil Hollamby.

Many thanks to Peter Magarey of Loxton for the above records of the Caper White and Cabbage White butterflies recorded at Loxton.

ADELAIDE BOTANIC GARDENS PLANT SELECTOR

<http://plantselector.botanicgardens.sa.gov.au/>

About Plant Selector +

The Plant Selector + is a website designed to help choose the right plants for the right places in South Australia. Plants include Australian native and exotic species. They are carefully screened to suit the soils and other conditions of the areas for which they are recommended. Plant selections are linked with both soil and landscape types.

This project has been assisted by the Local Government Research & Development Scheme and SA Water. Guidance and expertise has been contributed by: TREENET; State Flora plant nursery at Belair; Nursery & Garden Industry of South Australia; SA Water; local government representatives; independent landscape architects and designers; Botanic Gardens of South Australia horticultural staff; and Friends of the Botanic Gardens of South Australia.

For more information and guidelines for most effective use of this database view the Plant Selector + User Guide.

Membership officer Gill Hollamby has found this little gem. A poem about an ecoservice provided by dung beetles.

THE DUNG BEETLE DATE (KM Ebert)

One day I saw a dung beetle
Perched upon a leaf
Antennae open, flared so wide
Hoping for a feast

Then the scent of dung so sweet
Came wafting through the air
The beetle flew direct and true
To find this food so rare

A gleaming pile of fresh new poo
Was there upon the ground
The beetle dove and dug right in
His dinner he had found

And as he slurped upon the gravy
He felt a bumping at his side It was a lovely beetle lady
Could this be his new bride?

They shared a meal together
And talked of larvae, life and dung
Before the night was over
Digging had begun

Filled with dung provisions
They made a tunnel deep and wide
And laid their eggs within it
Soon larvae would abide

And so, the story goes
of dung beetles so renowned
They keep our planet cleaner
With behaviour so profound

from NewsBOIC Issue No.11

MOTHS OF VICTORIA PART 9

The new 'Moths of Victoria' part 9 is now available from the Entomological Society of Victoria. You can order on line at entsocvic.org.au. Click on publications. Cost \$12 plus postage.

Part 9 covers Cutworms and their allies from the superfamily Noctuoidea this is the third book on this superfamily.

A must for every library.



SOMETHING TO CROW ABOUT

What's in a name? Most people would consider the Lion (*Panthera leo*), Cougar (*Puma concolor*), Bobcat (*Lynx rufus*), Caracal (*Caracal caracal*) and the Domestic Cat (*Felis catus*) to all be cats, even though they are in different genera, because all are members of the family Felidae.



Why then do people insist on differentiating crows and ravens? All of the world's crows and ravens, plus rooks and jackdaws, are in a single genus, *Corvus*, in the family Corvidae. Other members of the family include choughs, jays and the European, Asian and American magpies (but not Australian Magpies).

The genus name *Corvus* is the Latin word for raven, which has come from the Indo-European word 'ker', which describes the guttural noise these birds make. This is, of course, related to the word 'crow', which also describes a loud noise birds make (as in a crowing rooster). Therefore, crows and ravens are members of the same genus, so much more closely related to each other than the different cats are, and their common names both describe the loud calls they make.

Some corvids have black feathers with a grey base, some black feathers with a black base, some are black and white, but there is no consistent distinction to separate the common names crow and raven. Crow is typically, but not always, assigned to the smaller species, and raven to the larger ones. However, the Little Raven is the same size (40-50cm) as the American Crow but smaller than the Hooded Crow (48-52cm). Yet you are still likely to hear people argue that the only crows we have in Adelaide are in the football team. It's enough to drive you raven mad!



There are roughly 45 different species of *Corvus* throughout the world. In Australia, there are five native species: Torresian Crow, Little Crow, Australian Raven, Forest Raven and the above mentioned Little Raven. All can be found in South Australia, but a 2012 study reported in South Australian Ornithologist states that due to the incorrect use of features to identify them, and the extreme difficulty in seeing the correct diagnostic features in the field, there is realistically only one species likely to be found in and around Adelaide, the Little Raven (*Corvus mellori*).

So while we don't have Torresian or Little Crows in Adelaide, we do have crows; Little Ravens!

Reprinted from Green Adelaide Nature Education Weekly Digest 25th October, 2020. Little Raven photo: Steve Walker

BCSA 2019 - 2020 FINANCIAL STATEMENTS

Copies of the full statements including notes may be obtained from the Treasurer.

BUTTERFLY CONSERVATION SOUTH AUSTRALIA INC.	
Committees Report	
For the year ended 30 June, 2020	
Your committee members submit the financial accounts of the BUTTERFLY CONSERVATION SOUTH AUSTRALIA INC. for the financial year ended 30 June, 2020.	
Committee Members	
The names of the committee at the date of this report are:	
Gerry Butler (Chairman), Brett Oakes (Secretary), Divya Patel (Treasurer), Mike Moore, Jan Forrest, Anne Frodsham, Gil Hollamby, Bernadette Johnson, Cristy Seymour, Andrew Walters, Andrew Lines, Bryan Haywood and Beth Keane (Public Officer).	
Principal Activities	
The principal activities of the association during the financial year were: butterfly and moth study and conservation.	
Significant Changes	
No significant change in the nature of these activities occurred during the year.	
Operating Result	
The profit from ordinary activities after providing for income tax amounted to	
Year ended	Year ended
30 June 2020	30 June 2019
\$ 7,868.05	\$ 3,351.19
Signed in accordance with a resolution of the Member of the Committee:	
 	

BUTTERFLY CONSERVATION SOUTH AUSTRALIA INC.		
Trading Account		
For the year ended 30 June, 2020		
	2020	2019
	\$	\$
Trading Income		
Sales - Butterfly books	6,445.34	5,081.59
Sales - Monarch books	495.00	480.00
Sales - Moth books	11,902.49	
Sales - Spider posters	80.00	20.00
Sales - Moth posters	10.00	40.00
Sales - Orchid posters	10.00	
Sales - Postage	1,076.30	302.00
Sales - Site signs	330.00	165.00
Sales - Plant tags	122.00	156.00
Total Trading Income	20,471.13	6,244.59
Cost of Sales		
Add:		
Opening stock	18,942.80	24,416.43
Purchases - books	29,611.48	2,946.12
Purchases - posters		71.80
Purchases - tags & signs	847.00	756.80
Purchases - packaging	701.91	
	50,103.19	28,191.15
Less:		
Closing stock	38,688.11	18,942.80
	38,688.11	18,942.80
Cost of Sales	11,415.08	9,248.35
Gross Profit from Trading	9,056.05	(3,003.76)

BUTTERFLY CONSERVATION SOUTH AUSTRALIA INC.			
Balance Sheet As At 30 June, 2020			
	Note	2020	2019
Current Assets			
Cash assets	2	30,896.78	40,274.04
Inventories		38,688.11	18,942.80
Total Current Assets		69,584.89	59,216.84
Total Assets		69,584.89	59,216.84
Net Assets		69,584.89	59,216.84
Members' Funds			
Retained profits		69,584.89	59,216.84
Total Members' Funds		69,584.89	59,216.84

BUTTERFLY CONSERVATION SOUTH AUSTRALIA INC.		
Income & Expenditure Statement		
For the year ended 30 June, 2020		
	2020	2019
	\$	\$
Income		
Trading profit	9,056.05	(3,003.76)
Donations received	434.90	2,211.00
Membership fees	2,771.00	4,646.00
Income from Public talks	814.10	1,035.50
Interest received	192.83	579.51
Subsidies & Grants received	2,500.00	5,000.00
Total income	15,768.90	(0,468.25)
Expenses		
Advertising and promotion	754.70	
Audit fees	440.00	396.00
Bank Merchant Fees	91.27	53.10
Cash over & short		40.00
Commissions	118.20	
Computer supplies	380.00	
Discounts Allowed		15.00
Grant expenditure - Chequered Copper	1,934.98	2,083.45
Parking	10.83	35.22
Postage	8.95	
Postage & stationery	2,245.48	308.66
Public meetings expenses	663.18	471.48
Repairs & maintenance	80.88	286.00
Returns & refunds	35.95	
Subscriptions	95.00	
Sundry expenses	521.74	842.80
Telephone		26.45
Website expenses	519.67	2,538.90
Total expenses	7,900.85	7,117.06
Profit from ordinary activities before income tax	7,868.05	3,351.19
Income tax revenue relating to ordinary activities		
Net profit attributable to the association	7,868.05	3,351.19
Total changes in equity of the association	7,868.05	3,351.19

This accompanying notes form part of these financial statements.

BUTTERFLY CONSERVATION SOUTH AUSTRALIA INC.		
Income & Expenditure Statement		
For the year ended 30 June, 2020		
	2020	2019
	\$	\$
Opening retained profits	61,716.84	55,865.65
Net profit attributable to the association	7,868.05	3,351.19
Closing retained profits	69,584.89	59,216.84

Butterfly Conservation South Australia Inc.

presents the eleventh

PUBLIC TALKS PROGRAM for 2021

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 and 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.

In the case of an advertised speaker not being available, a speaker of similar interest will replace that advertised.



Photo RHFisher: Painted Lady butterfly *Vanessa kershawi*



www.butterflyconservationsa.net.au

PUBLIC TALK DATES for your Diary.

2021 Program will be published in the February newsletter

2nd March

6th April

4th May

1st June

6th July

3rd August

7th September (6.30pm Annual General Meeting of BCSA, 7.00pm Public Talk)

5th October

2nd November

VISIT TO KAREN AND CHRIS LANE'S PROPERTY AT HINDMARSH ISLAND 1st November 2020

Thanks go to Karen and Chris Lane for the opportunity to visit their property on Hindmarsh Island again this year. Not sure how many people came from BCSA however there were lots of cars!

The walk around the property to see the re-vegetation work was again a special treat and for those of you who have visited before below is 'the house'. Completely self sustainable and off the grid. Chris showed us his impressive array of solar panels and system and Karen's tour of newly planted areas of grassland and samphire were of great interest.

Thanks again Karen, Chris and Tammy.



Hindmarsh Island: Karen and Chris Lane new house back and front. Solar Panels, Chris shows us the batteries and system, checking out the Samphire area. Photos Jan Forrest.

REDUCE YOUR TAX - MAKE TAX DEDUCTIBLE DONATIONS TO THE BUTTERFLY CONSERVATION FUND

BCSA has been recognised by the Australian Tax Office and the Commonwealth Department of Agriculture, Water and the Environment as a Deductible Gift Recipient – in other words, we can receive donations that are deductible from the taxable income of the donor. What that does is reduce the cost to the donor of making a deduction – we hope that will enable people to donate more and will greatly enhance our ability to conserve butterflies, moths and other invertebrates as a critical part of the environment.

We have set up the Butterfly Conservation Fund, with committee members Jan Forrest, Mike Moore and John Wilson. The Fund will receive tax deductible donations, which must not be tied to any specific project. The Committee will identify and fund suitable strategic projects consistent with BCSA's aim.

The Committee are currently in the process of identifying and contacting possible donors, including philanthropic organisations, companies, purchasers of our merchandise, the public and our members. Suggestions of whom to approach for donations will be appreciated, also if you have a project that could be considered for funding please contact the Fund Committee members.

CHEQUERED COPPER BUTTERFLY

Are you interested in joining the 'Friends of the Chequered Copper Butterfly' group? If so, contact Chairperson Gerry Butler, see back page for his contact details.



Chairman Gerry Butler with our new Publications and Merchandise Officer Sarah McDonald at the Australian Plants Society plant sale at the Wayville showgrounds. Photo: Jan Forrest

Articles for the next newsletter to:
'The Editor', BCSA Newsletter, C/- editor@
butterflyconservationsa.net.au
Please send images separately as a .jpg, not embedded in
word documents.

MICROSCOPE FOR YOUR PHONE

For just \$5 in KMart this handy gadget is ideal for taking photographs of small items and whilst the depth of field is not great, by taking several photographs you can usually get one or two good shots.

The magnification is around x10 however when you enlarge the image on your phone itself you can go up to x30 with reasonable resolution.

So, go to toy department at KMart and look for the electronic gadgets. Was \$10 now only \$5.



Slide the phone between the top and lens and a light will automatically come on. Make sure the lens is lined up with the phone camera lens.

By enlarging the field of view on the camera itself you can extend the magnification.

These photos were taken of a caterpillar found feeding on blueberries at Blackwood.



Thanks to the members involved in the Sophies Patch display during November especially Anne Frodsham for her organisation and support to everyone involved. Photo: A. Frodsham

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

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

"Attracting butterflies to your garden, what to grow and conserve in the Adelaide Region" **NEW 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, has now been reprinted. Cost \$20 plus postage.

DVD *"Butterfly Garden"* produced by Tracy Baron and Carolyn Herbert - \$20 each (BCSA financial members price \$15) Plus postage.

POSTERS *"Spiders and their allies of the Adelaide Region"* Published by BCSA 2014. \$10 a set of two, plus postage.

"Moths of the Adelaide Region" \$10 Set of four A3 plus 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 \$50 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.

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: Gerry Butler - chairman@butterflyconservationsa.net.au 0407972149

Secretary: vacant - secretary@butterflyconservationsa.net.au 0415 997 526

Treasurer: Divia Patel - treasurer@butterflyconservationsa.net.au

Membership: Gil Hollamby - membership@butterflyconservationsa.net.au

Newsletter Editor and Public Talks Convener: Jan Forrest OAM -

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

Committee: Andrew Lines, Bernadette Johnson, Bryan Haywood (endangered species advocate), Anne Frodsham, Cristy Seymour (Social Media) Andrew Walters and Lionel Edwards (website).

Merchandise and sales: Sarah McDonald - 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 2020: 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.

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).

NRM Education - <http://www.naturalresources.sa.gov.au/adelaidemtloftyranges/home>
'Get involved' - 'Education' - for students, **school monitoring activities** / for educators.
See also other regional NRM Education sites

WELCOME TO NEW MEMBERS

Lucy Cahill Guthrie

Fleur Z

Darine Michael

(Charles Campbell College)

Tory Arbon

Mandy Dempsey

Julie Bunney

Peter Dunstan

(Kilkenny PS)

Adelaide Secondary

School of English

Veronica Joyce

(The Grove Edu Centre)

Fiona Voight

(Woodville Gdns School)

Timothy McGregor

Di Hogg

(Pt. Elliot Kindergarten)

Denise Pratt

Jenni Shore

Vanda Rounsefell

Dawn Franzmann

Bec Fittes

Vera Hughes

Joy Passmore

Anne Bourne

Hannah Elliott

Tash Kinnaid

Barb Odgers

Sheree Brooks

Sally-Anne Fowles

Fiona Ryan

Michael Mildren

Angela Crett

Cathy Walsh

Susan West

Heather Hartley

Don Soloma

Tom Salmon and Lyn Wilson



KONICA MINOLTA

Thanks to Chris Lane and
Konica Minolta for their generous
support to BCSA.

Konica Minolta is a Landcare Australia
National Partner



Butterfly-Conservation-South-Australia



ButterflyConSA



Butterfly_Conversation_SA