



BUTTERFLY CONSERVATION SA INC.

NEWSLETTER

No. 44: February, 2012

Below and continued on page 7 is an article by BCSA Chairman, David Keane in the prestigious journal 'Butterfly' The magazine of Butterfly Conservation from the UK

Butterfly Conservation

DOWN UNDER

David Keane explains how he established Butterfly Conservation in South Australia.

My interest in butterflies and moths began from my childhood days in southern England. I grew up in the Kent countryside near Ashford in the 1950's. I also attended schools in Devon and Sussex before emigrating to Australia in 1964. Like many children I collected and displayed the insects I studied. My interest aligned more to botany as I started to breed caterpillars; I had to find what they ate. That led me to searching foodplant sites and discovering specific diet requirements. To learn about plants, caterpillars, the adult Lepidoptera and their requirements a whole ecology needed to be understood.

On a trip back to my home town in 1997 I met up with members of the Kent Branch of Butterfly Conservation and they took me to various sites. I was impressed and inspired by their dedication and enthusiasm and wanted to start a - continued page 7

Australia as a whole has about 400 butterfly species and over 10,000 moth species



Fiery Jewel *Hypochrysope ignita* Above: Underwing Below: Upper wing. Photos RHFisher



IN THIS ISSUE

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PUBLIC TALKS PROGRAM next talk: 6th March

"From shore to sea; sea shells, sea dragons and other amazing sea creatures" further details page 2.



Photo left: BCSA committee 2011
Gerry Butler, Beth Keane, Jill Davy, Gil Hollamby, Jan Forrest, Mike Moore.
Absent: David Keane (photographer)
Vanesa Duran and Roger Grund.
Above: the cover of 'Butterfly' Butterfly Conservation magazine from the UK.

BUTTERFLY CONSERVATION SA. INC. for membership enquiries and annual membership payments (\$10):
Treasurer: 5 Oakleigh Road, MARION. 5043 S.AUST.

PUBLIC TALKS PROGRAM

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

At the Clarence Park Community Centre
72-74 East Avenue, Black Forest.
Bus route W91/W90: stop 10.
Noarlunga Train service: Clarence Park Station
Glenelg Tram: Forestville stop 4, 9min walk south.

Entry by donation (minimum of \$2).
Please bring supper to share, tea/coffee will be supplied.
Meetings should conclude by 8.30pm.

At the start of each meeting (other than in Aug) a ten minute presentation on a 'Butterfly of the Month' will be given by a BCSA committee member.

6th March "From shore to sea; sea shells, sea dragons and other amazing sea creatures" Helen Tassie from the Malacological Society will talk about South Australian marine invertebrates, how they live, what they eat and their possible usefulness to us.

3rd April "Wildlife conservation in your back yard" James Smith of fauNature helps people to attract wildlife to, or manage the species they find, in their own backyard. This presentation will consider the vertebrate wildlife we find in Adelaide, what is "Wildlife Friendly" and why the backyard is so important for broader conservation.

1st May "Aboriginal use of the Adelaide Plains Flora" This interesting talk by anthropologist Dr. Philip Clarke will consider how Aboriginal people used local plants as food and medicine, as well as to make their artefacts.

5th June "Whales and Dolphins in SA and how research at the SA Museum helps to conserve them" Museum Researcher Dr. Cath Kemper will talk about the diversity of cetaceans in South Australia and how data from studying dead animals are combined with data from the sightings programme to learn more about these special mammals.

3rd July 3rd July "Climate – Why does the rain fall and the wind blow?" Founding Professor of Meteorology at the Flinders University of SA Emeritus Professor Peter Schwerdfeger has published over 100 papers and authored two internationally published books. This talk will be of interest to everyone.

7th Aug. BCSA AGM at 6.30 Talk commences 7.00pm
"Native Bees" Many of our native bees have remarkable and interesting life histories, hear about them and what you can do in your garden to attract them from Museum researcher Dr. Remko Leijds.

4th Sept. "Adelaide Moths" BCSA Life Member Roger Grund has spent the previous year investigating the moths in his backyard on the hills-face at Torrens Park. He will talk about those findings with images of a variety of moths seen, including some early stage images.

2nd Oct. "Antarctic Peninsula January – March 2009: wildlife, scenery and tour guiding." Hon. Research Associate at the SAMuseum Dr. Peter Shaughnessy has studied marine mammals for over 40 years His talk will provide visitors with a glimpse into Antarctic life including, seals and seabirds.

6th Nov. "Bats – survivors in today's world" Adelaide's own batman Terry Reardon will provide a fascinating insight into the habits of South Australian bats and how you can help to conserve them.

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

OUT OF PRINT BOOK SALE "BUTTERFLIES OF SOUTH AUSTRALIA"

R.H.Fisher

Contact: David Keane

dkeane@iweb.net.au

Cost: \$42 includes postage

UPDATE ON *Lucia limbaria* AT VICTORIA PARK

Following our wonderful winter rain the area where the butterfly food plant *Oxalis perennans* grows the area was found to be overgrown with weeds. Fortunately an email to our good friends at the Adelaide City Council works department requesting the area be mowed brought a quick response.

The need to monitor and undertake bushcare work continues however as more weeds encroach into this important area.

We are also keen to be find out more about the proposed Keswick stormwater detention basin planned for the parklands as this may impact on the *Lucia limbaria* butterfly site at Victoria Park.

If you are interested in assisting with either of these projects please contact BCSA committee member Gerry Butler gerry.butler@ozemail.com.au or alternatively the South Parklands Landcare Group or Parklands Preservation Society.

Australian Entomological Supplies Pty. Ltd.



go to:
www.entosupplies.com.au for all your entomological equipment and books.

BUTTERFLY FACT SHEETS

With such a low membership fee it is proving uneconomical to provide coloured fact sheets with newsletters that are posted. Fact sheets will now be incorporated into the newsletter in black and should these members wish to print these in colour, copies can be found on our website.

If any member would like to receive A4 coloured versions please send a stamped self addressed envelope and 60cents for each fact sheet to be enclosed.

Fact sheets now available as follows:

Lucia limbaria (March 2011 newsletter)

Vanessa kershawi (Aug 2011 newsletter)

Vanessa itea (Nov 2011 newsletter)

Heteronymph merope (Nov 2011 newsletter)

Papilio anactus (Feb 2012 newsletter)

Theclinestes albocincta (Feb 2012 newsletter)

those in production to be included in future newsletters:

Zizina labradus

Junonia villida

Danaus plexippus

Delias aganippe

Bitter-bush Blue



also known as 'Grund's Blue'

- Class:** Insecta
Order: Lepidoptera
Family: Lycaenidae
Genus: *Theclinesstes*
Species: *albocincta*

This pretty blue once used to occur along the beaches of Adelaide, but urbanisation has caused its demise from those areas. Its wing colour is environmentally controlled such that butterflies breeding near beaches have full blue colouration on the wing uppersides, but in populations occurring further away from the sea the blue colour reduces in area until finally in deep inland areas the butterflies are totally devoid of blue colour. There is sometimes a mass emergence when hundreds of butterflies are seen flying around the foodplants.



Description

Wingspan: male 28mm, female 30mm. The forewings are angular and there is a short stubby tail on the hindwing.

Upperside: The upperside has variable amounts of blue in the males, and the females even less amounts of blue when flying in the same areas as the males.

Underside: The underside is pale brown, the forewing having straight bars and the hindwing has a large central dark area and usually two small black spots near the tail. Those butterflies flying in winter can be nearly black on the undersides.

Larval foodplants:

The larvae feed on bitterbush (Euphorbiaceae). In coastal areas they use *Adriana quadripartita* form *klotzschii* (coast bitterbush), while inland they use *Adriana urticoides* var. *hookeri* (mallee bitterbush or waterbush). The plant is dioecious, having separate male and female plants. The larvae are attended by or at least are harmlessly associated with most types of ants in the general area of the foodplant, as the ants also feed from nectary glands occurring on the *Adriana*.



Larvae attended by *Camponotus teribrans* ants. Photo: LFHunt.



Eggs, 3rd instar larvae, final instar larvae, pupa, adult female, adult male and adult underside. Photos: LFHunt

**BUTTERFLY
 CONSERVATION
 SA. Inc.**

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

BUTTERFLY CONSERVATION SA Inc. FACT SHEET *Theclinesstes albocincta* page 2

Habitat and Ecology:

Its foodplants favour dune areas. In coastal areas the plants occur in the back-dune habitat, while inland the plants are associated with red dunes. The plants require a reliable source of fresh water, which is held within the dunes, hence the plant common name of waterbush. The larvae will eat all parts of the plants but favour the purple flower heads on the male plants. The butterfly occurs only near its foodplants.

Distribution

The blue form of the butterfly occurs in coastal dune areas of South Australia including Kangaroo Island. The inland form of the butterfly, devoid of blue colour, occurs wherever there is sufficient density of *Adriana* foodplants.



Flight period:

It is possible to find these butterflies flying throughout the year, but they are most common during spring to autumn. They are very rarely seen during



winter. They can complete a brood in 3-6 weeks in summer.

Threats:

Coastal habitat is under constant threat from urbanisation in the form of beachside marina and holiday-shack developments. Inland habitat can be affected by drought and trampling by pastoral animals.

Conservation Strategy:

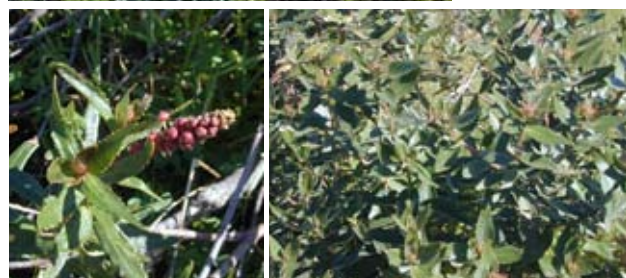
Coastal management policies need to recognise the dependence of the butterfly on the *Adriana* growing in the back-dune environment and therefore coastal dunes need to remain undisturbed. The latter plant would also be beneficial in preventing further scouring of beach sand. Near Adelaide, the butterfly and foodplant needs to be re-introduced, particularly to conserved coastal dune areas. The foodplant would also make an attractive addition to gardens and the roadside



Adriana hookeri Photo: RGrund



Habitat of *Theclinesstes albocincta* Photo: RGrund



Adriana quadripartita form *klotzschii* (coast bitterbush) top left and above left male plant, above right female plant. Photos: JAF Forrest

ACKNOWLEDGEMENTS *Theclinesstes albocincta* fact sheet:

Majority of text, map and flight bar from: 'Butterflies of South Australia' website by Roger Grund.
 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, October, 2011.

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 our book 'Attracting Butterflies to your Garden, what to grow and conserve in the Adelaide region' or to purchase a 'Butterfly Garden' DVD contact the Secretary, c/- South Australian Museum, North Terrace, ADELAIDE 5000.

WEBSITE: www.butterflygardening.net.au
EMAIL: info@butterflygardening.net.au

Dainty Swallowtail

also known as 'Dingy Swallowtail or Small Citrus Butterfly'

Class: Insecta
Order: Lepidoptera
Family: Papilionidae
Genus: *Papilio*
Species: *anactus*

The Dainty (or Dingy) Swallowtail also known as the Small Citrus Butterfly evolved on native citrus plants in the eastern states. It belongs to a group of swallowtails that mimic poisonous or unpalatable butterflies. The Dainty Swallowtail mimics the wing colours of the male Greasy Swallowtail (*Cressida cressida*), which gets its poisonous properties from its food plant Dutchman's Pipe (*Aristolochia*). It advertises its poisonous nature by the presence of red warning colour spots on the hindwings and body. For the mimic butterfly its protection only works if it occurs in much lower numbers than the model, and this is the case for the Dainty Swallowtail. Like most of the swallowtails, they usually feed from flowers while on the wing, similar to hummingbirds.

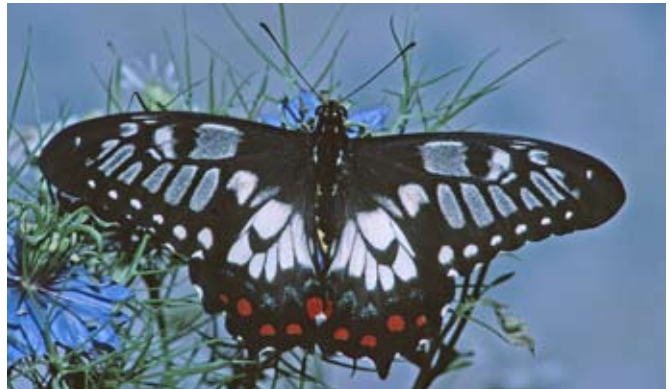
Description

Wingspan: male 67mm; female 72mm.

Upperside: Both sexes have distinctive black and white markings, and outer hindwing rows of small blue spots followed by larger red (warning) spots. One of the hindwing veins extends beyond the wing edge and forms a short tail. The sexes are very similar, with the female best differentiated by its larger abdominal size, and that it often has a white spot in the small black patch present within the large white hindwing patch. The Dainty Swallowtail is similar to the female Orchard Swallowtail (*Papilio aegeus*), which can also occur in South Australia, but differs by its much smaller size and by the presence of the small black patch within the large white hindwing patch.

Larval foodplants:

Native and introduced 'Citrus-type' Rutaceae including *Citrus* species (grape-fruit, lemon, lime, mandarin, orange, etc), *Citrus glauca* (desert lime), *Fortunella* species (kumquat), *Poncirus trifoliata* (trifoliolate orange, wild orange). Larvae eat the softer green parts of the foodplant.



Pupa photo RHFisher, all other photos: LFHunt

BUTTERFLY CONSERVATION SA Inc. FACT SHEET *Papilio anactus* page 2

Habitat and Ecology:

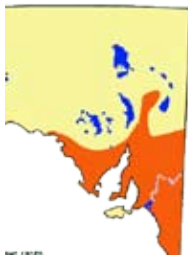
The Dainty Swallowtail occurs in open forest and woodland in the eastern states. In South Australia it is generally an urban or orchard butterfly. One of its native foodplants, *Citrus glauca*, occurs in the northern pastoral areas but it is too rare to support viable populations of the butterfly. Immature larvae have black and yellowish markings that resemble bird droppings. The mature larva is strikingly marked with large orange-yellow spots. When disturbed, the larva can evert a fleshy forked organ (osmeterium) from



behind the head, and this emits a pungent liquid that deters predators. The green or brown pupa resembles a broken stem on the foodplant.

Distribution

The Dainty Swallowtail is an eastern states subtropical butterfly that has spread to South Australia along the Murray Valley with the development of citrus orchards. It was first recorded in this state in the late 1920s and can now be found in orchards and most large urban areas where citrus trees are cultivated, although it has yet to reach Kangaroo Island.



Flight period:

It flies during the warmer months, usually from October to early May. There are continuous broods over the warmer months, which can be completed in as little as 5-6 weeks. It normally overwinters as pupae.



Threats:

It is considered a minor pest in *Citrus* orchards and is not normally singled out for spraying but it will succumb when other *Citrus* pests are sprayed.

Conservation Strategy:

The Dainty Swallowtail numbers appear to be stable in South Australia, although it is never a common butterfly. Males often collect on hill tops.



Desert lime *Citrus glauca*
Photos: top RHFisher, close up of plant RGrund



Orange
Citrus sinensis
Photo: RGrund

ACKNOWLEDGEMENTS *Papilio anactus* fact sheet:
Majority of text, map and flight bar from: '*Butterflies of South Australia*' website by Roger Grund.
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group in South Australia where butterflies too were under threat. I still get inspiration from *Butterfly* magazine when it arrives from the UK.

The state of South Australia is about four times the size of the UK and has a population of around 1.6 million, about the same as that of Hampshire.

Much of the state is desert although there are more lush areas around the capital and main city, Adelaide. Butterfly Conservation South Australia – nearly always referred to as BCSA – is based in Adelaide. It continues to grow. It promotes education about butterflies and its aim is to bring together experts and their knowledge with gardeners and others the working 'on the ground' in conservation.

We have 78 recorded butterfly species in South Australia – although only one of them is found nowhere else. There are over 2,000 species of moths. Australia as a whole has about 400 butterfly species and over 10,000 moth species. Ten of our species are threatened by the loss of their habitat, mainly native sedges and mistletoe, which they use exclusively. The other butterflies have managed to adapt to use of introduced plants in place of the native vegetation.

The local "bible" for butterflies is the comprehensive *Butterflies of South Australia* by R.H. Fisher (1978).

BCSA has the Wood White butterfly as its logo. The group works in close association with the South Australia Museum where all records and collections are kept. It produces four colourful magazines a year featuring South Australia's butterflies and, more recently, moths. Members and landholders are encouraged to photograph and record their Lepidoptera. Moths have a low profile here, but this is gradually changing as people see their beauty and recognise their importance in the ecology.

BCSA maintains a presence with information stands at events, expos, native plant sales and local agricultural shows, has produced a series of species information sheets and provides speakers for meetings. In conjunction with the Museum an exhibition entitled *Where have all the butterflies gone?* was generated, along with a travelling display on habitats and life cycles.

Biodiversity under threat

A decade on from my Kent visit, with the public demanding ever more information about butterflies, we decided to produce a book featuring the advantages of butterfly gardening and explaining the needs of butterflies. The book *Attracting Butterflies to your Garden* (Hunt, Grund, Keane & Forrest, 2007) is a beautiful and useful publication with images of foodplants, eggs, caterpillars, adults and their specific habitats.

Grasses and undershrubs are an important food source for caterpillars. Our lands are often over-grazed. Biodiversity in South Australia is under threat from human pressures and climate change. Native grasses and sedges are disappearing habitats. Weeds now play an important role in providing food for butterflies and moths. We have produced a 'butterfly site' scheme which encourages people to identify potential 'butterfly hot spots'. Many schools, parks, community gardens, private properties and the zoos now have sites. The programme encourages the creation of butterfly gardens and encourages people to learn about foodplants, habitat and the natural sustainable landscape.

Website for BCSA
www.chariot.net.au/~bcsa/



Top right: Common Brown *Heteronympha merope* on Kiss Me Quick

Top middle: BCSA members enjoying an outing

Right: Small Grass Yellow *Eurema smilax*

TREES FOR LIFE WORKSHOPS

Trees for Life are running a series of Introductory Bush Regeneration Workshops this year. The one day workshop covers topics such as the values of and threats to remnant native vegetation, strategic approaches to bush restoration, maximising biodiversity outcomes and practical minimal disturbance techniques.

As DENR has purchased a number of spots for Friends Group volunteers, the course is free if you book through our Secretary Jan Forrest or the Chairman David Keane if Jan is away.



One day workshops: 9.00am - 4.30pm - classroom and 1 - 2 hour field trip.

Saturday	17th March	Brooklyn Park
Tuesday	17th April	Mt.Barker
Saturday	28th April	Port Elliot
Saturday	5th May	Morphett Vale
Thursday	10th May	Auburn
Saturday	26th May	Tea Tree Gully
Tuesday	5th June	Strathalbyn
Saturday	16th June	Brooklyn Park
Saturday	30th June	Brooklyn Park
Thursday	19th June	Elizabeth

Saturday	28th July	Brighton
Saturday	4th August	Tanunda
Tuesday	14th August	Aberfoyle Park
Saturday	15th September	Murray Bridge
Saturday	6th October	Willunga
Thursday	18th October	Mt.Barker
Tuesday	6th November	Brooklyn Park
Saturday	17th November	Stirling

GOVERNMENT HOUSE OPEN DAY

18th March, 2012
 FREE ADMISSION
 from 10.00am - 4.00pm

FRIENDS OF PARKS AGM

Ted and Molly Hughes Conference Centre
 Para Wirra Recreation Park
 Monday 14th May 2012
 10.00am
 Nomination forms for Board of Management
 positions now available from Secretary
 Jan Forrest.

BUTTERFLY CONSERVATION SA Inc.

Chairman: David Keane dkeane@iweb.net.au
 Secretary and Newsletter Editor: Jan Forrest OAM C/- South Australian Museum, North Terrace, ADELAIDE, 5000 ph H (08) 8297 8230.
 email <jan.forrest@samuseum.sa.gov.au> or <jan_forrest@bigpond.com>
 Treasurer : 5 Oakleigh Road, MARION. 5043 S.AUST.

OUTREACH PROGRAM

The full exhibition and AO size panels from the Exhibition "Where have all the Butterflies gone?" are available from Jan Forrest at the South Australian Museum for use by Landcare and other Conservation groups at seminars, conferences and workshops or just for display. Included are five introductory panels, and seventeen panels from seven habitat areas: Coastal, Grasses, Mallee, Urban, Migration/ Vagrant, Eucalyptus Forrest/Woodland, Arid, Wetland and Lower South East.

DIARY DATES

COMMITTEE MEETINGS - Meetings are normally held bi-monthly (usually the second Monday of the month) at 6.00pm at a committee members home. All members are welcome to attend. If you would like to attend please contact Secretary Jan Forrest.

Next Committee Meeting: 5th or 19th March, 2012.

PUBLIC TALKS PROGRAM: first Tuesday March - Nov., Clarence Park Community Centre 6.15pm for a 6.30pm start to 8.30pm.

Next talk: 6th March: "From shore to sea; sea shells, sea dragons and other amazing sea creatures" by Helen Tassie

WEB SITES

"Butterfly Gardening" - www.butterflygardening.net.au
 'Butterfly Conservation SA Inc.' <http://www.chariot.net.au/~bcsa/index.htm>
 'South Australian Butterflies' (Roger Grund private site)
 - <http://www.sabutterflies.org.au> (change of url)
 'Butterfly Watch' and 'Butterfly Challenge' - SAMuseum website
www.samuseum.sa.gov.au then click on 'Whats On' then 'online exhibitions'.
Teacher Resources (Jackie Miers) - http://www.teachers.ash.org.au/jmresources/butadelaide/Butterflies_of_Adelaide.html

WELCOME TO NEW MEMBERS:

Barbara Roberts
 Vicki Minear
 E.J. Fenton

MEMBERSHIP FEES will be due at the end of June 2012

A notice of renewal will be included in the next newsletter

DON'T FORGET: PUBLIC TALKS PROGRAM see page 2

Next Talk: Tuesday 6th March at 6.15pm

