



BUTTERFLY CONSERVATION SA Inc.

NEWSLETTER

No. 3 March 2000

AN UNUSUAL BUTTERFLY EVENT

For reasons unknown the beautiful wood-white butterfly (*Delias aganippe*) has become all too rare in South Australia, despite abundant foodplant.

For at least the last decade experienced butterfly watchers would be fortunate to see more than one or two butterflies in a season and so, on a recent trip to the South East of the state (7-10 March) with Roger Grund, I was surprised to see some 20-30 of these butterflies.

The first sightings were occasional butterflies flying across the road from near Tailem Bend. Along the Coorong we stopped several times to find up to 4 or 5 wood-whites flying around flowering pink-gums. Individuals were observed right down to Millicent and two butterflies had been observed two weeks earlier south east of Mt. Gambier. On the return journey about 8 butterflies were seen hill-topping at Naracoorte.

On March 13th I observed 5 butterflies hill-topping at Mt. Barker in the Mt. Lofty Ranges however Roger Grund at Mt. Lofty saw no butterflies.

Fisher (1987) records that in February 1971 "this butterfly was flying in hundreds over flowering *Callistemon* sp. near Robe" and further observed that "population numbers seem to vary considerably from year to year".

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INVITATION

Members and friends of Butterfly Conservation SA in conjunction with the Mineral Club of South Australia are invited to a private viewing of the exhibitions

"Where have all the Butterflies Gone"
and the new
"Mineral Gallery"

at the

South Australian Museum, North Terrace, Adelaide

on Monday 1st May 6.00pm—7.30pm
Drinks and nibbles will follow

Admission \$5.00 to cover costs of Security Staff

RSVP: 8297 8230

MEET THE LEPIDOPTERA Part 3.

THE ORDER OF THINGS
CLASS INSECTA (Insects)
ORDER LEPIDOPTERA (Butterflies & Moths)
FAMILIES (of Butterflies)
HESPERIIDAE Skippers
PAPILIONIDAE Swallowtails
PIERIDAE Whites & Yellows
NYMPHALIDAE Browns, Nymphs & Danaids
LYCAENIDAE Blues & Coppers

In SA the **blues and coppers** (family Lycaenidae) comprise the greatest number of species. There are presently 26 recorded in the state. They are mostly small butterflies, but none the less are often highly coloured and many have interesting associations with ants. The larvae have special glands near their rear ends which produce both sweet secretions to feed the ants, and special scents to pacify the ants so the ants will not think they are a food morsel. This association with the ants affords the larvae some protection from other predators or parasites, and the larvae can often occur in large numbers either within the ants nest or within special chambers dug by the ants. The ants are often said to be farming the larvae, although in the eyes of the butterfly it could be the other way round.

This group is special as it includes the only butterfly endemic to our state, the Lithochroa Hairstreak (*Jalmenus lithochroa*), but which is not related to the Hairstreaks of the northern hemisphere. It can now only be found in the Flinders Ranges where it is threatened. Early lepidopterists found this species breeding on golden wattle (*Acacia pycnantha*) near Adelaide, but the butterfly has now disappeared from this area. **Butterfly Conservation South Australia Inc.** will be working on a program for its possible re-introduction in the future. The butterfly only uses the prickly *Acacia victoriae* in the Flinders Ranges where its larvae are protected by the large, ferocious meat-ant!

The blues and coppers have many interesting common names and include the iridescent Azures (*Ogyris* spp), Fiery Jewel, Grass Blues, and Small Copper. The larval foods are wide ranging and commonly include the Leguminosae family such as wattles (*Acacia* spp), the Sturt pea, running postman (*Kennedia prostrata*), pultenaeas, daviesias and even sweet peas. Food plants also come from the Lauraceae family (such as snotty-gobbles *Cassytha* spp), the Loranthaceae family which contains the mistletoes which are especially important for the *Ogyris* butterflies, the Proteaceae family (grevilleas and hakeas), Euphorbiaceae family (*Adriana* spp), Santalaceae which is the quandong family, plus many other foodplant groups. Several species actually use young ants as a food source. The Small Copper is the only copper to be presently found in the state, which

uses the creeping yellow oxalis as a food-plant. It is not related to the true coppers found in the northern hemisphere, and also oddly enough, in New Zealand.

Butterflies are attracted to gardens that contain sources of nectar for 'refuelling', targeting small cluster flowers such as scabious, buddleias, lantanas and verbenas. However the most important factor for their breeding is the food plants required by their larval stage, the caterpillars. **Butterfly Conservation S.A. Inc.** is endeavouring to provide interested groups with the information needed to promote butterfly conservation in South Australia. If you would like to find out more then why not join our group, **membership is only \$5. Phone (08) 8389 2352 and ask for David Keane or Beth Rostron.**

Can you help?

Recently the Editor received a telephone call from NSW member Ian Jeans of Bowral. Ian has planted many host plants on his property and in an effort to encourage butterflies to breed has asked for assistance to receive eggs and or larvae of butterflies from the Bowral area.

If you can help, contact the Editor for Ian's contact details.

AGM

The Annual General Meeting of BCSA will be held on Monday 14th August at a venue to be advised.

At this meeting election of office bearers will take place and the annual membership fee will be set.

At the March meeting of the committee it was agreed to recommend to the Annual meeting that the membership fee be increased to \$10 per person per annum.

An increase of membership fee will ensure costs for newsletter production, postage and other expenses can be covered.

In the meantime, donations such as paper, stamps and envelopes would be gratefully received.



Kath Alcock sketch

From the Chairman Beth Keane

Hello everyone, and greetings to our new members!

We finished the year with a very successful members meeting in December, attended by 26 folk who braved the hot conditions with admirable stamina. Our thanks to Lindsay Hunt and Roger Grund for their informative slide shows, and to Jan Forrest, Lois Hasenohr and Mike Moore for their organising skills and contributions.

Even during the summer holiday period action continued for butterfly conservation.

Entering this New Year BCSA continues to grow. We now have 88 members, and welcome new interstate members from W.A., Vic., N.S.W. and Qld. We have received many membership enquiries following the article on butterfly gardens in Better Homes and Gardens Jan 2000 issue, where we were listed as a contact.

The expertise of our members continues to attract requests for speakers by community and conservation groups. There are many interested in the lifestyle and habitat of our butterflies, and keen to learn more about what can be done for them.

Recognition of the enthusiasm, dedication and depth of knowledge of our South Australian experts was given at a weekend workshop conducted in mid January. This successful and inspiring workshop was part of the

development of a National Action Plan for endangered butterflies being conducted by entomologists from the CSIRO, and was attended by several of our members. A brief report of the workshop proceedings appears in this newsletter.

Looking forward we welcome the exhibition "Where Have All The Butterflies Gone?" back to the refurbished SA Museum. If you did not have the opportunity to visit the exhibition at the lovely Carrick Hill, now is the chance. The Museum venue will make the exhibition more accessible to larger numbers of visitors, and hopefully attract further membership enquiries for BCSA. It is heartening to see that the display panels from the exhibition have been booked steadily for loan by venues far afield, including libraries, community centres, Landcare Groups and conferences in regional centres.

The challenges I see in the coming year for BCSA include raising dollars to support our activities, targeting our education and awareness program to specific audiences, ensuring our work translates into conservation action occurring 'on the ground' for our butterflies, and further developing our members meetings and field work. A tall order, but one full of potential and excitement for our enthusiastic band!

Beth Keane

MEMBER PROFILE - LINDSAY HUNT

Lindsay developed a keen interest in butterflies as a young boy in a leafy suburb of Sydney where large Orchid Swallow-tails and Blue Triangles were regular visitors to the backyard. After moving to Adelaide at age 10 this interest waned due to the lack of readily visible butterflies.

In the mid 1980's he took up photography and began to photograph some of the more common Adelaide butterflies. About six years ago, after making several contacts, he decided to 'go and look'. This has resulted in finding, breeding and photographing most of south Australia's butterflies (some 5,500 photos).

Most of all, he enjoys observing the habits of butterflies and their larvae in the field, working alone as well as with other butterfly enthusiasts. The most outstanding event of all was, when on a field trip with Mike Moore, the discovery of a colony of *Ogyris idmohalmaturia* - a very rare butterfly which had not been caught for some 50 years. He has done many field trips with his friend Roger Grund, gaining knowledge and recording new butterfly records for South Australia.

Another most enjoyable highlight was to contribute some information about SA species to be used in the soon to be published book of Australian Butterflies.

<p>BUTTERFLY CONSERVATION SA Inc. Membership is just \$5.00 pa Applications to: David Keane c/- P.O. INGLEWOOD, 5133 S.A.</p>
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MASS MIGRATION OF 'THE CAPER WHITE BUTTERFLY'

The following excerpts from a letter sent in by member Egon Shore of Highbury.

On 1st December 1999, during the mass migration of the 'Caper White Butterfly'. I watched through my office window, the gradual build up through the morning of these butterflies until about midday, when they had become like snow flakes blowing in the wind!

At 2.00pm I left my office at Modbury for St Agnes. A distance of 1.8km's making a round trip of approximately 3.6km via Montague, North East and Tolley Roads.

During the drive to St. Agnes I counted 87 butterflies crossing through my line of site and on the return trip the count was 109. The time taken for the journey was 4.2 minutes each way. I observed that the butterflies seemed to be in pairs or in threes, often appearing to be in a string, all travelling north.

Maybe some members will find this of interest and perhaps those of you that are mathematically minded may be able to extrapolate the above and estimate how many butterflies there were flying on the day.

FURTHER INFORMATION

The Editor would like to receive further information on the Caper White migration last year so that a full picture of this event can be recorded. Please forward your sightings to the Editor or a member of the committee.



CAPER WHITE *Belonoides java* PIERIDAE
Photo courtesy Roger Grund's website 'South Australian Butterflies' <http://www.adelaide.net.au/~reid/>

BUTTERFLY ACTION PLAN WORKSHOP

15 people attended a workshop on January 15 and 16 to participate in development of a National Action Plan for butterfly conservation. The workshop was funded by Environment Australia, and facilitated by a team from CSIRO who are conducting workshops around Australia.

The agenda for Day 1 covered identification and distribution of butterflies, population estimation, threatening processes, and recovery actions, and called upon the knowledge base of SA enthusiasts and researchers. Day 2 moved into identification of threatening processes for each threatened taxon, actions to lower risk categories, Federal/ State/ Local government categories, protecting local populations, managing protected populations and a Code of Conduct for collectors of butterflies.

Some interesting points to emerge:

Very little research is conducted by institutions, it is almost all by amateur enthusiasts.

Having an Endangered classification makes it more difficult to research a butterfly and implement action plans for conservation. A high level of protection may not necessarily enhance preservation. Threats include towers on the top of hills, as butterflies engage in gatherings on high points, called "hilltopping", which is disturbed by construction activity.

Another threat is the slashing of roadsides and loss of gutters and drains as watering places.

The need to encourage research of conservation strategies.

The facilitators gathered invaluable information on SA butterflies, research and trends. Participants learnt a great deal about butterfly behaviour, the threats and actions to conserve butterflies and when the full report is made available an article with greater detail on threats and strategies will be published.

David Keane

In Search of the Yellow Sedge-skipper (*Hesperilla flavescens flavia*)

The field survey undertaken by Roger Grund on southern Yorke Peninsula for the endangered Yellowish Sedge-skipper (*Hesperilla flavescens flavia*) took place at the end of October (25 - 31) and the middle of November (15 - 18). The survey encompassed the entire area south of about Minlaton, plus a few checks in the north of the peninsula just to make sure suitable wetland habitat was not present. Contrary to expectations, it was found that a large area of the peninsula could be classed as wetland, and potential suitable habitat for the skipper. There were two types of wetland, either associated with the perimeters of saline lakes or as swamps associated with a shallow water table. In nearly all cases the dominant sedge associated with the wetlands was *Gahnia filum*, the larval foodplant of the skipper. The wetland distribution could be divided into five groups. The coastal wetlands, the Innes gypsum lakes, the Warooka wetlands, the Yorketown salt lakes, and the Minlaton - Yorketown wetlands.

The first group comprises two different types of wetland. There are those that occur coastally around the toe of the peninsula from Hardwicke Bay and westward around the toe to Sturt Bay in the south. Those wetlands are preserved in variable condition, but in most cases the wetland vegetation was in good condition and there was usually evidence for the skipper. The second group of coastal wetlands comprise samphire marsh in which there was no evidence of *Gahnia filum*. These marshes occurred on either side of the leg of the peninsula.

The Innes gypsum lakes occur in the south-west portion of the peninsula toe, within the Innes National Park. The wetland vegetation is protected, although gypsum mining on the lake is permitted. The condition of the *Gahnia filum* associated with these lakes is poor, probably a result of prior farming practices and also due to overgrazing by the large population of kangaroos afforded protection in the park. Surprisingly, the population density of the skipper was good, undoubtedly due to the park protection from the degrading effects of current farming practices.

The Warooka wetlands occur in a wide north-south strip from Point Turton in the north to Sturt Bay in the south, and spread between Peesey salt lakes in the east to the upland areas immediately to the west of Warooka. The wetlands are due entirely to a shallow water table, receiving the water as springs from the higher areas to the west. Where preserved, the wetland vegetation is in excellent condition containing large dense tussocks of *Gahnia filum*, and so long as the water table is not interfered with these tussocks should stay in that condition. The original distribution of the wetland was almost continuous, but has now been fragmented by farming. There are still large areas of remaining wetland, especially at Black Springs to the south of Point Turton. Evidence for the skipper was seen in all wetland remnants, although population densities were generally low which may be due to toxic spray drift from adjacent farms. The Chrysotricha Sedge-skipper (*Hesperilla chrysotricha*), last seen in these wetlands in 1976, was not evident, and it is likely to be now extinct on Yorke Peninsula.

The Yorketown salt lakes are widespread in a lunar half circle to the east, south and west of Yorketown, and contain the large lakes Fowler, Peesey and Weaver. Lakeside vegetation has been totally cleared from more than 95% of these lakes, but the few remaining intact vegetation remnants show that *Gahnia filum* formed part of the original wetland flora. However, the skipper was not evident in these *Gahnia* remnants, and are presumed lost due to past farming practices.

The Minlaton - Yorketown wetlands, occurring in a wide, non-continuous belt between Minlaton and Yorketown, are a group of mixed wetland types comprising both saline lakes and swamp. Associated vegetation is in variable condition, and there were only several sightings of the skipper, and always in the most pristine remnants. Previous major localities for the skipper, immediately to the west and south Minlaton where it was last recorded in 1964, no longer contain the skipper.

Overall, the field survey showed the skipper and its habitat is still reasonably widespread in the toe portion of the peninsula and is probably reasonably secure provided the effects of toxic spray drift from adjacent farmlands growing canola and legumes can be minimised. Several of the wetlands inhabited by the skipper currently have heritage agreements, and it is hoped that the information gained from the field survey will lead to further heritage agreements or sanctuaries being obtained on the more prime wetlands. The survey has also shown that this population of the skipper, although not exactly identical to the now probably extinct nominotypical population of the Adelaide Plains, can be considered as not threatened at this point in time.

Roger Grund

AN UNUSUAL BUTTERFLY EVENT continued from front page.

We feel that the above observations and records point to the conclusion that this butterfly undergoes migratory flights one of which is occurring presently (probably from the east). This is supported by the fact that during a number of trips to the South East over the past three summers we sighted only one wood white butterfly.

It is interesting that this flight of wood-white followed a massive migration of Caper-white into South Australia in late November 1999.

Although documentation of migratory tendencies for this particular butterfly is limited they have been noted in other closely related *Delias* spp. Many of the butterflies in the Whites and Yellows family Pieridae are vagrants and/or migrants.

It is hoped that the increased numbers of wood-whites in the State will result in increased breeding and a more permanent increase in the resident population.

Lindsay Hunt

We welcome the following new members:

CARMEL LUDLOW
TIM GUDGEON
JOHN L. PURNES
PETER CLARKE & SALLY FORWARD
EGEN & LIBBY SHORE
SOOZIE BICE
CAROL SHIELDS
ROBERT MEYERS
LEIGH BUNTING
NICK DAVIES
B & T HAWOOD
JILLIAN MANNING
PERI COLEMAN
MARY R. MUDGE
NICK DAVIES
B & T HAWWOOD
IAN JEANS
HEIDI COOK
MARGARET & BOB
ABBY GREEN
NICKI BOADEN
DON SANDS
TOM HANDS
MICHELLE BURROWS
NOELENE CARTER
MARCO SACCHI

BUTTERFLY CONSERVATION SA Inc.

Chairman: Beth Keane, C/- PO INGLEWOOD 5133 ph 08) 83892352

Secretary and Newsletter Editor: Jan Forrest OAM C/- South Australian Museum, North Terrace, ADELAIDE, 5000 ph 08) 82077503.

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Treasurer and Membership Secretary: David Keane, C/- P.O., INGLEWOOD 5133 ph 08) 83892352

email <dkeane@iweb.net.au >

Fundraising: Lois Hasenohr

Committee members: Marcus Pickett, Roger Grund, Lindsay Hunt, Mike Moore, and Bob Edge

Honorary Member: RH (Bob) Fisher OAM

DIARY DATES
EXHIBITION

The South Australian Museum in collaboration with members of Butterfly Conservation SA present the Exhibition: "Where have all the Butterflies Gone" Level 3 South Australian Museum.

SPECIAL VIEWING

Of the Exhibition "Where have all the Butterflies Gone?" and the new "Mineral Gallery" at The South Australian Museum on Monday 1st May 6.00pm-7.30pm Drinks and nibbles will follow, admission \$5.00

MEETINGS

Meetings of the committee are held on regular intervals and all members are welcome to attend. If you would like further information or receive an agenda please contact the Secretary Jan Forrest C/- South Australian Museum, North Terrace, Adelaide telephone 82077503 (w) or 82978230 (h and message bank) or via email on <forrest.jan@saugov.sa.gov.au>.

AGM

Monday 14th August. Venue to be advised.

YELLOW SEDGE SKIPPER RECOVERY PROGRAM

Survey work has now been completed by Roger Grund (see report on page five) and now we need to hear from members interested in taking part in Stage two of the project.

This will involve making contact with local land owners and local landcare groups.

If you are interested in attending a strategic planning meeting and becoming involved in Stage two of the project please contact Beth or David Keane on 08) 83892352.



MUSEUM ASKS FOR HELP

The Entomology section of the SA Museum has recently received an excellent collection of UK butterflies.

Is anyone available to assist to incorporate these into the state butterfly collection? Contact Jan Forrest 82077503 if you can help.