



BUTTERFLY CONSERVATION SA Inc.

NEWSLETTER

No. 13: May 2003

Yellowish Sedge-skipper *Hesperilla flavescens flavia* Waterhouse

This wetland skipper has suffered considerably from the clearance of our coastal wetlands where it once used to be common. It is closely related to the Donnysa Sedge-skipper (*Hesperilla donnysa*). Males are very fast fliers and it is almost impossible to follow them with the eye.



Upper-side view
Photo:
R.H.Fisher



Under-side view. Photo: R.Grund

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Diagnostics.

Small size, male wingspan 36mm, female 40mm. Generally brown above with some yellow markings on the forewing, and a yellow blaze on the hindwing. The forewing has a heavy suffusion of yellow from where its common name derives and what differentiates it from the Donnysa skipper. The male has a narrow grey-black sex mark in the forewing. The hindwing underside is grey with a curved series of small yellow filled dark brown circles in the outer part of the wing, and a similar but larger circle in the centre of the wing.

Larval foodplants.

The larvae usually feed on *Gahnia filum* (Cyperaceae) (thatching grass or smooth-leaved saw-sedge) a tall tussocky sedge, and will sometimes feed on the smaller *Gahnia deusta* (mallee saw-sedge) that maybe growing nearby.

Yellowish Sedge-skipper continued

Habitat and Ecology.

Gahnia filum is tolerant of brackish water and normally grows in coastal estuarine and deltaic wetland systems, and around the perimeters of some near-coastal salt and brackish-water lakes. *Gahnia deusta* requires limestone based heaths and mallee woodland habitat.

Distribution.

Now extinct near Adelaide where it once inhabited wetlands occurring north from West Beach to St Kilda. There is still a good population on southern Yorke Peninsula, and there are small populations along the Coorong and on southern Eyre Peninsula.

Flight period.

The skipper is double brooded, and has separate flights in spring and autumn. The double broods occur as two distinct broods that each usually last one year, i.e. eggs laid in spring or autumn will respectively produce an adult flight during the following spring or autumn, for brood periods of 12 months. The skipper overwinters as larvae.



Threats.

This skipper has suffered considerably from the agricultural and urban disturbances of its wetland habitats. The draining of wetlands puts terminal summer stress on the tall saw-sedges causing them to in-roll their leaves, which makes them unpalatable to the larvae leading to their demise.

Conservation.

The retention of coastal saw-sedge wetland habitat is essential for the continuing survival of this skipper. The draining of remaining pristine wetlands needs to cease. It is a very tough and resilient skipper and is well adapted to the coastal saw-sedge habitats, and is capable of persisting even in very degraded habitats. Even with minor rehabilitation of the wetlands, this skipper would make a quick recovery.

Roger Grund

SUPPORT FROM NATURE FOUNDATION OF SOUTH AUSTRALIA

Thanks to financial support from the SA Nature Foundation a number of life history transparencies from the R.H.Fisher transparency collection are being duplicated. The original slide collection is now housed at the SAMuseum and as original material is not available to borrow for talks, this duplicate set will be available to members and others to borrow for a short period of time for talks and presentations.

Although the material may be borrowed free of charge from the Museum, a loan agreement will be required to be signed to ensure material is not copied for unauthorised use. As well as duplicating the slides, volunteers at the SAMuseum will be digitizing the images at low resolution and several different power-point presentations will be prepared.

Further information from Senior Collection Manager, Entomology Section, SAMuseum.

We are grateful to Bob Fisher for his generous support in allowing his material to be duplicated for this purpose as it will enable members to provide information to the community on the life history stages and habitat requirements of many of our beautiful butterflies.

INTERNATIONAL POSTAL STATIONERY

Eight butterflies selected on the basis of geographical and family diversity and visual attractiveness feature on International Postal envelopes and Aerogrammes. Artist is Ego Guiotto who 2002 illustrated the Cocos (Keeling) Island Sea Turtles and Christmas Island Birds stamps. None of the butterflies featured have previously been included on Australian philatelic products.

Three butterflies Large Grass Yellow; Fiery Jewel and Common Eggfly have been recorded from South Australia.



Large Grass Yellow
Eurema hecabe



Fiery Jewel
Hypochrysops ignitus



Common Eggfly
Hypolimnas bolina



Blue Argus
Junonia orithya



Spotted sedge-skipper
Hesperilla ornata



Red Bodied Swallowtail
Pachliopta polydorus



Silky Hairstreak
Pseudalmenus chlorinda



Blue Triangle
Graphium sarpedon



The Milkthief

There have been a few theories for the origins of the word "Butterfly", try these two from a nineteenth century dictionary (found in an antique shop).

The German word "*molkendieb*" when translated means "milk-thief", from the fact that people formerly believed that the butterfly, elves or witches in its shape, stole milk and butter. The legend may have arisen out of this Germanic name.

Maybe because butter mysteriously disappears that is said that butter flies!

Another German word "*boterschijte*" refers to the colour of the excrement of certain butterflies, yellow.

I can remember stealing milk (bottles) off people's front steps in England when I was a child, I wonder if that classes as an origin for butterfly, "*bottlestole*" a Keanish word.

D.Keane (Irish origin)
Milk-thief Conservation SA Inc.

MEMBERSHIP RENEWAL TIME

It is now time to renew your membership for the 2003-2-004 financial year.

If you have not already paid please forward membership fee of \$10 to:

**Butterfly Conservation SA Inc.,
Treasurer, Lois Hasenohr,
Unit 13, 4 Randolph Avenue,
PARKSIDE 5063**

BSCA Invertebrates Quiz No.1

1. What world record does the Queen Alexandra's Birdwing hold?
2. What type of jelly is fed by worker bees?
3. What type of "fly" is a Daddy Long Legs?
4. The Boll Weevil is a highly destructive insect to which crop?
5. How many legs per segment does a millipede have?
6. What kind of moth is Britain's "Death's Head"?
7. Which insect sleeps for 17 years and awakes for 5 weeks?
8. What caterpillar do we associate with *Morus alba*?
9. Ladybird was a nickname of which US president's wife?
10. How many times its own length can a flea jump?

Re-introduction of the Bitter-bush blue butterfly *Theclinesstes albocincta*

BCSA has recently obtained an Enviro grant to re-introduce *Adriana klotzii* in coastal areas where it previously occurred and to eventually re-introduce the Bitter-bush blue butterfly *Theclinesstes albocincta*.

The host-plant *Adriana klotzii* is presently being propagated at a local nursery. When the plants are available existing coastcare groups will be encouraged to plant this host-plant to assist with regeneration of this plant.

In time, as strong populations of the host-plant are established it is hoped that the butterfly will become re-established. Alternatively, larvae may be re-introduced from similar local areas where the butterfly currently exists.

**WEBSITE ADDRESS: 'Butterflies of South Australia'
(produced by Roger Grund) <http://www.chariot.net.au/rgrund/index.htm>**

PROFILE—COMMITTEE MEMBER TREVOR ROWE

My interest in natural history goes back to my very early years, the 1930s, although then it was confined largely to the invertebrates and particularly to the insects. My bedroom was a nightmare to my mother, with every horizontal surface being covered by boxes and jars containing anything from ichneumon wasp larvae slowly devouring some unfortunate caterpillar to a spider being fed on flies or cockroaches. A butterfly net was part of my homespun equipment and I can recall that there was always a variety of species of butterflies to be observed and caught, and that their numbers were not lacking. Just lie still in the grass or flower beds and there they would be – or so it seems in retrospect.



Lacking a mentor, preserving and pinning was not part of my repertoire. I purchased a Japanese microscope for 1/6d [or one shilling and sixpence, now 15 cents, for the non cognoscenti] which I set up with a somewhat crude but workable epi light for indoor and night time use. For another shilling I could have bought one with a rack and pinion! I discovered that the old acetate film when burnt gave off a smoke which was highly toxic to insects, and with a magnifying glass, a round flask of large jar, the sun and a piece of old film I had an effective if clumsy killing method. Ethyl acetate is much easier these days.

Following secondary education I became a teacher in the SA Education Department and nature study became a significant part of the [my] curriculum. I resigned after some eight years, joined a Commonwealth department, returned to University studies and eventually became a registered psychologist. I have often wondered just how I became so far removed in my career from my enduring interest in natural history. Other activities have included amateur theatre, chess and more latterly campervanning. Music generally has always been important and I currently play clarinet [badly] with a small amateur [very] group.

Although shelved, my interest persisted, and during a three year tour of duty in Tasmania I came across a new but damaged biological microscope, a real one this time, which I duly bought and repaired. The hobby revived. On returning to Adelaide the walk-in wardrobe we designed into our new home in 1968 never was as it became in fact my laboratory and over time was equipped with several microscopes, various photographic and other attachments, low heat oven, microtomes, biological stains and an extensive range of chemical reagents etc. For many years thereon I was a member of the SA Microscopical Society, now almost defunct, and its occasional president. From psychologist in the CPS I passed on to administration to finally retire in late 1987. Through a bit of serendipity it so happened that a Dr Peter O'Donohue was looking for a volunteer research assistant to help with an ABRs study investigating free living protozoa in the Murray/Darling basin. The study eventually extended to the rivers of Queensland and Kakadu and I remained part of our small team of three for the next seven years, attending the IMVS for at least one day a week as well working on material in my home lab. The work on specimens involved collecting, culturing, preserving, video recording, staining, and photography using the SEM.

In recent years I was led back to butterflies by a niece who was growing the swan bush, *A. fruticosa*, and I found revisiting and breeding old friends the Monarchs a most rewarding experience. This has in turn led to the occasional breeding of other rare and exotic species. I am however most disappointed at the rarity and indeed the disappearance of many of those other old friends the skippers, and the browns etc in the suburbs of Adelaide. I then found the BCSA and I find myself most consonant with its objectives to preserve or revive those species which still exist.

SIGHTING OF TAILED EMPEROR

Polyura sempronius

Member Simon Brown reports seeing a second instar larva of the Tailed Emperor *Polyura sempronius* feeding on *Acacia pycnantha* in his garden at Clarence Park. Whilst this species has been reported feeding on other *Acacia* species, so far this is the first report of it feeding on the Golden Wattle.

Photo: RH Fisher



AN IMAGE DATABASE

Two BCSA members Trevor Rowe and Roger Grund recently completed a project to set up a comprehensive digital photographic record of all butterflies which are local to or may eventually be found in South Australia. The images were required as a resource from which reproductions can be made as necessary for identification charts, posters, field guides etc.

Working at the SA Museum one day a week for a number of months the two members photographed specimens from the Museum collection and covered every known species, subspecies and variant, with images taken of both males and females, including top and under views. The museum collection was supplemented where necessary by specimens from the private collections of Roger Grund, Lindsay Hunt and Mike Moore.

For the technically minded the images were recorded on a five megapixel Nikon 5000 digital camera set for a maximum resolution, in TIF format, of more than 14 megabytes per image. Such a large size will provide the greatest flexibility in the future use of these images. Illumination was provided by standard (non digital) ring flash activated by a slave unit attached to the ring flash and activated by the flash on the Nikon, this eliminated shadow effects.

The images were downloaded into a computer then burnt onto CDs. In all, eighteen discs were necessary to hold on record the approximately 830 images. A copy of the CD's have been lodged with the S.A.Museum images collection as well as BCSA.

A third member Mike Moore of the BCSA is currently entering the image information into a data-base which will enable ready access to any particular species with a number of image choices being presented. When completed these records will also be incorporated in the SAMuseum Entomology Section images database which currently records over 1500 images from the R.H.Fisher life history transparency collection. In addition to location numbers, the data-base will also show family, genus, species, subspecies, wing measurements, and if the information is available, where found, by whom and when.

Thanks to the Museum for access to the Museum collection and for the use of photographic and computer equipment. Thanks also to Roger Grund, Mike Moore and Lindsay Hunt for providing access to their specimens.

Trevor Rowe

BUTTERFLY CONSERVATION SA Inc.

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Treasurer : Lois Hasenohr , Unit 13, 4 Randolph Avenue, PARKSIDE. 5063

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

MEETINGS -

Committee meetings are held monthly (usually the second Monday of the month) at 6.00pm in the Urrbrae Wetlands Resource Centre, Cross Roads, Urrbrae. All members are welcome to attend. If you would like further information or receive an agenda please contact the Secretary Jan Forrest at the address above.

WEB SITE (produced by Roger Grund)

'South Australian Butterflies' <http://www.chariot.net.au/~rgrund/index.htm>

Answers to quiz on page 4

1. World's largest butterfly
2. Royal 3. Crane 4.
Cotton 5. 4
6. Hawkmoth 7. Cicada 8.
Silkworm 9. L. B. J. 10.
100.

