



BUTTERFLY CONSERVATION SA Inc.

NEWSLETTER

No. 5: October 2000

Common Brown (*Heteronympha merope merope*) Fabricius

For the full data sheet information go to Roger Grund's website
<http://www.adelaide.net.au/~reid/>

Interesting aspects: A very interesting butterfly which has adapted well to the loss of forests of Australia since the Miocene geological time period (20 million years BP). The sexes are strongly dimorphic (different appearance). Both sexes start emerging in mid-spring, the females mate and then go into hiding (aestivate), which they continue to do so until the following early autumn, some four months away. The females may occasionally emerge during the early mornings or late evenings, or on cool overcast days, particularly to suck on moisture, but do not actively feed from flowers during the day. Although fertile, they remain in a non-gravid state (eggs not developed) until the early autumn. Egg development and laying then commences.

The females have a particular liking for moisture, and the rare mid-summer shower will bring them out from hiding. Even garden sprinklers will make them briefly active.

The butterflies have an irregular flight, and prefer to settle on or near the ground. Like most satyrs, the wing undersides are cryptically camouflaged, and it is very difficult to detect these butterflies when they are settled with wings closed and erect, owing to their close resemblance to the ground, or to dead leaf and plant debris.

Life History

Larval food-host: Native and introduced grasses incl. **Agrostis capillaris*, **Brachypodium distachyon* (false brome), **Bromus catharticus* (prairie grass), **Cynodon dactylon* (couch), **Ehrharta erecta* (panic veldt grass), **Ehrharta longiflora* (annual veldt grass), *Microlaena stipoides*, **Pennisetum clandestinum* (kikuyu), *Poa poiiformis* (coast tussock grass), **P. pratensis* (Kentucky blue-grass), *P. tenera*, *Themeda triandra* (Poaceae); also rarely on *Gahnia sieberiana* (red-fruit saw-sedge) (Cyperaceae). The larvae feed on the leaves.

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11th December, 2000
ALL WELCOME

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WEEDING BETWEEN THE LINES

Butterflies and Plants – by David & Beth Keane

When is a weed a weed? People classify plants into categories according to the perspective they are viewing from: introduced or indigenous, native or exotic, agricultural, horticultural, natural, weed. It is useful for us to list plants as weeds for eradication to protect our agricultural or horticultural endeavours, or to list them as unwanted species to protect our National Parks and areas of native vegetation. We label them according to their threat or usefulness to us, their nuisance value or appeal.

Butterflies see more simply: useful plant, shelter plant, nectar plant, egg laying plant. Since many of the native plants with which butterflies evolved are now disappearing they have adapted to using the introduced plants humans have brought into their ecosystems. It doesn't matter to butterflies that we may consider this plant a weed, or that we think the plant is in an inappropriate place.

Sometimes we need to view plants from the butterfly perspective instead of the human one. Is our neat, clipped, trimmed, tidy garden what a butterfly is looking for? Probably not – what we define as a weedy, messy corner is their happy hunting ground for food and security. Is the bare roadside sprayed with chemicals to exterminate weeds and now devoid of all things green and growing of any use to a butterfly?

The wild corners of our gardens are very often where we see butterflies. They like shelter from wind, places to sun themselves, a variety of nectar bearing flowers, shallow pools to drink from, wafting grasses to rest upon.

Our roadsides are very often the last remnants of vegetation in a vast expanse of cultivated land. The communities of trees, grasses, flowering shrubs and ants necessary for a butterfly lifestyle are sadly few and far between. Most of our butterfly and moth species need a complex mixture of elements in the ecosystem to thrive. We do not even begin to understand many of these relationships as yet, but we continue to erode the biodiversity which sustains them. We spray all the grasses on the roadside, not distinguishing between native grasses and introduced ones. Not every grass is a weed. Native grasses pose much less fire risk than exotic ones.

Certainly weeds and introduced plants need to be controlled, but there are places where they can be left. There are only about 60 proclaimed pest plants in South Australia, but in the process of removing pest plants we often remove all the plants, or fail to recognise the useful ones to keep in place. Weeds arrive because the conditions in which they thrive have been provided, usually by human attempts to clean up!

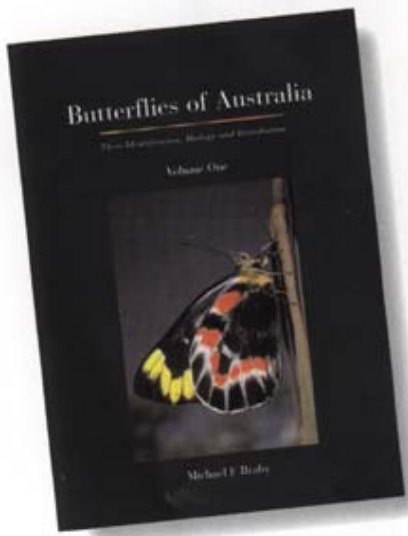
We clear areas, disturb the soil, remove the plant cover, kill off the root systems, leave bare open patches of ground. The plants opportunistic and hardy enough to survive in the tough conditions are weeds. We see the new weeds emerge, and hasten to eradicate again. In the next round a different, even tougher weed is the only survivor. Do we continue in this way for the next thousand years? We continue to sterilise and degrade our environment, instead of creating a balanced system which does not require repeated human intervention.



Kath Alcock sketch

Where have all the butterflies gone? They are gone because they are running out of natural places to live and flourish. They don't eat concrete and don't wear protection against chemicals and pollution. We need to grow in our understanding of what butterflies and moths need. What relationships and associations with plants and other insects are essential for them? What habitat can we provide and protect for them? When is the best time to remove weeds so we don't kill their eggs? We must understand their life cycle and their lifestyle.

Our next article will look in more detail at some of these connections.

BOOK REVIEW**Butterflies of Australia
Their Identification, Biology and Distribution
Michael F. Braby**

Michael Braby's book "Australian Butterflies" will be the leading reference book in this subject area for many years and as such is a must for the serious collector. Its relaxed informative style however also makes it entirely suitable for the budding lepidopterist or general reader of Natural History.

This book draws together all of the information written on the subject matter, (every paper written on Australian butterflies was collected and read!!) but also many pieces of verbal information passed on by reliable and respected workers in the field are included.

Each species of butterfly or skipper is dealt with separately. The treatment includes notes on

- trivial or common names
- description (not overly detailed), similar looking species and their delineation
- life histories and a description of the juvenile stages
- an extensive list of known food plants
- subspecies and their identification
- in depth comment on distribution (very useful)
- notes on life history including points of particular interest

For me, this last section makes the book much more than just a reference by bringing the species more alive.

Accompanying the text is a large black and white photograph that highlights the diagnostic features to look for and a distribution map of the species and subspecies. Rarely does this in depth treatment of the butterfly take up less than two pages within the book. There have been many additions to the species listings since the last major work and as expected all of these are included. Colour plates of all species and subspecies are included along with relevant colour pictures of life cycle stages.

Braby has carefully analysed the subspecific status within many species, most particularly the Hesperids and will upset some collectors by his "lumper" approach. Few people have the opportunity of looking carefully of the whole variety within a species but I am sure M. Braby will promote many discussions about his taxonomy.

Because of the large amount of detail provided the book has had to be split into two parts. My first criticism of the work is that the colour plates are all collected at the back of Book 1. Having the relevant plates (based on the Families) within relevant parts would have made them more useable because at present if dealing with a species in Book 2 one needs to have both parts handy. I also think that within the books the colour plates should be in a more prominent location.

It would have been nice too if the individual pictures accompanying the species notes could have been in colour. This would of course have increased the already considerable cost of the book and others might argue that a black and white picture makes one concentrate more of the diagnostic features and less on the potentially variable colour.

Distribution maps are always difficult to achieve and must be somewhat "fluffy" in nature, but from a South Australian view point, the Eyre Peninsular and Kangaroo Island distribution maps need improving, the former being particularly deficient.

Michael Braby should be delighted with the product and I thank him and commend him on his labours.

Mike Moore

**MEMBER PROFILE - Lois Hasenohr**

Lois is a current member of the committee and is also a fundraiser.

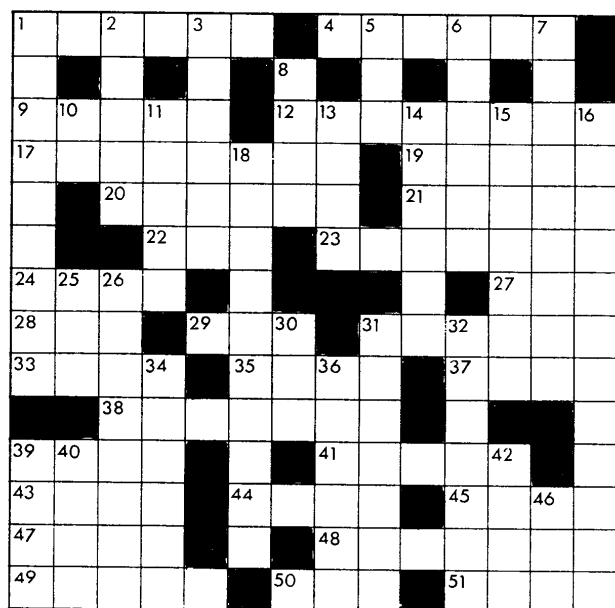
Lois was for many years a veterinary nurse and is now a theatre and period costume maker and textile artist. She is a keen gardener and bird watcher with a great love for the Australian bush. This varied background has led her to her current fascination with butterflies. Last season she was thrilled to be able to send some of her hand-raised pupae to the Butterfly House in the Melbourne Zoo to strengthen their breeding stock.

She is passionate about attracting butterflies to her

suburban garden and enjoys collecting and sharing information through an amateur butterfly network. She can be contacted on (08) 8297 5841.

CHRISTMAS MEETING

11th December, 2000 at the Urrbrae Wetlands Resource Centre, Cross Roads URRBRAE. at 7.30
Meeting to commence with a tour of the Wetlands please bring a plate



BUTTERFLY CONSERVATION SA
CROSSWORD No.1 D.Keane

ACROSS

- 1. & 2. down. Common butterfly seen in SA with "eyes" on wings.
- 4. Genus of SA azure butterflies, iridescent blue.
- 9. Woolly moth associated with a big cat in the woods.
- 12. Butterflies with a high naval rank, *Vanessa*.
- 17. Two winged insect pest of homes, *Musca domestica*.
- 19. Species name meaning white of snow.
- 20. Striation associated with 9 across.
- 21. A "strict" hind part of a boat.
- 22. Part of a butterfly that is compound.
- 23. A "Brown" butterfly, a woodland deity.
- 24. Pertaining to having wings.
- 27. Eaten.
- 28. Fastening unit for insect setting boards.
- 29. Cereal grass.
- 31. Famous "Hardy" National Park in Transvaal.
- 33. The distance between the wing tips of a butterfly.
- 35. Middle name for the Caper White butterfly, near Krakatoa!
- 37. Butterfly appearances become ---- each year.
- 38. "Jute rag", a region of India.
- 39. South Australian skipper butterfly, the "Southern ----".
- 41. Romany moth associated with boats and planes.
- 43. South Australia's gemstone emblem.
- 44. "----" Blyton of Noddy fame.
- 45. Type of monkey, related to Hugo Munro.
- 47. British hawk moth, feeding on the Linden tree.
- 48. African country, capital Monrovia.
- 49. Sense of mouth parts.
- 50. One of 12 across, *Vanessa atalanta*.
- 51. Positions, as in mounting insects.

IS THIS YOUR LAST NEWSLETTER??

Dear Members

Are you one of the 51 members who are no longer financial? We have received 66 membership renewals and donations this financial year.

If you have not paid your membership renewal (\$10 due 1st July) then this will be your last newsletter, as we cannot provide them without your financial support. Please renew to help us protect and preserve Butterflies and their habitats.

David Keane
Membership Secretary/Treasurer

DOWN

- 1. Equipment for capturing night Lepidoptera.
- 2. See 1 across, mythological giant with a 100 eyes.
- 3. Mechanical planetarium.
- 5. Moth of eucalypts, the "--- Emperor".
- 6. Uncommon (noun).
- 7. Hardened plates that form an insects body.
- 8. A sensory organ of insects.
- 10. Species of Peacock butterfly and moon of Jupiter.
- 11. Chemical compound.
- 13. Colouring substance.
- 14. Development stages of a butterfly.
- 15. An arithmetical mean.
- 16. Golden Lilies of the Valley or Chinese lanterns.
- 18. A beautiful SA butterfly, an "ignited gem!"
- 25. Characteristic of the mint family flower.
- 26. Flutterby is one, plural.
- 30. Hearing organ.
- 31. American grasshopper.
- 32. Australian blue swallowtail butterfly.(James Joyce)
- 34. A small nut.
- 36. A butterfly's ability to colonise a new habitat.
- 39. A told blockhead.
- 40. ----ceae (Umbelliferae), and Western Samoan capital
- 42. Ready or prepared in Ayre.
- 46. Young of furred animals.

Answers next issue

BUTTERFLY CONSERVATION SA Inc.
Membership \$10.00 pa
Applications and renewals to: David Keane
c/- P.O. INGLEWOOD, 5133 S.A.

Common Brown (*Heteronympha merope merope*) Fab. Cont. from page 1

Eggs: Small, pale yellow, subspherical (domal), expanding basally, base and apex flattened, with very indistinct vertical ridges. If growing foodplant is present then the eggs are laid near ground level in small batches on the undersides of the foodplant leaf. If the foodplant is not in a growing state, then eggs are laid on the dead leaves or on other debris in the vicinity of the foodplant. Females become gravid during March, when they start laying eggs, and continue laying through April to mid May until they die out. The eggs hatch in about 12 days.

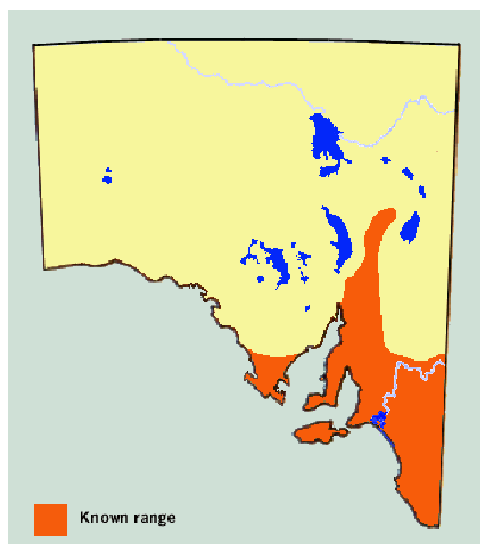
Larvae: Initially, pale greyish yellow, later becoming green after eating the green leaves of the foodplant, and with sparse long black hairs. Head brownish black, smooth, shining, with short hairs

Initially the immature larvae nibble the leaf edges, but later instars devour the entire leaf. The early instars with long hairs have small droplets at the hair ends, a feature seen in many Pieridae and Satyrinae larvae. The composition of the fluid is unknown but is believed to be a deterrent to predators. In later instars, the long hairs are lost, and the tail becomes forked, typical for the Satyrinae.

The mature larvae are short cylindrical shaped, about 35 mm long, being fatter in the middle, the lateral edge is slightly flanged. They are sometimes coloured in shades of green, but more usually are speckled pinkish brown with pale coloured wavy lateral and sublateral longitudinal lines, and a broken black dorsal longitudinal line. The body is without long hairs, but bears numerous short pointed setae imparting a rough scabrous appearance. The head is large, rugose, brown with black markings and numerous short hairs. The top of the head is flat, with a pair of inconspicuous, vestigial horns.

Pupae: Greyish brown with darker cryptic markings, short and fat, about 17 mm long, slightly rugose but without hairs, the cremaster is short and spinose. Pupation takes place during early spring, either at the base of the foodplant in a silk lined cavity formed by the larvae, or more often on the ground where the pupation occurs beneath vegetation debris, or in a shallow larvae formed cavity in the soil loosely lined with silk. The pupae lie loose. The pupal duration is variable from as little as 15 days to more than 40 days. The average in the Adelaide area is about 42 days.

Flight period in S.A.: Early October to mid May. Only one brood a year. The bulk of the brood emerge together in late spring, but both sexes continue to emerge sporadically into January. Females aestivate until early autumn before commencing egg laying. In contrast, the males which do not aestivate, gradually die off, and apart from the rare late emergence, the males have mostly disappeared by late summer. In the cooler areas such as the Mt Lofty Range and the Lower Southeast the females often congregate in large numbers during the late summer and autumn.



Distribution: Occurs in woodland areas in the southern temperate parts of the state receiving more than about 250 mm of annual rainfall. In the Flinders Ranges it is mainly confined to the protected and shady moist valleys. Also occurs on Kangaroo Island and some other smaller islands.

Habitat: The butterfly occurs in open woodland and forest, having some grass in the understorey.

Conservation Status in S.A.: Locally common.

Threats: No major threats.

Conservation Strategy: None required.

BUTTERFLY WEEKEND ON ROTAMAH ISLAND

Last February we enjoyed a fascinating butterfly weekend on Rotamah Island with Charles McCubbin, one of Australia's best-known butterfly experts and artists. Rotamah Island Bird Observatory, in the Gippsland Lakes National Park, is owned by Birds Australia and runs a busy program of weekend activities for nature lovers. On the first night Charles treated us to a slide presentation of some of his field trips emphasizing the importance of preserving the environment and habitats. For the next 2 days Charles led us around the island teaching us, not just about butterflies, but also about the other insects, birds, and plants and how they form an interdependent ecosystem. We netted and identified 7 species of butterflies: Klug's Xenica, Saltpan Blue, Symmomus Skipper, Common Brown, Spotted Brown, Shouldered Brown, and Southern Ringed Xenica. Charles was a wealth of information and very generous with his time, continuing to answer questions through dinner and as we relaxed on the verandah watching the rosellas, emus and kangaroos. One of the highlights for us was the evening meeting when the rangers officially recorded in the database all of our bird and animal sightings. The accommodation was basic but comfortable and the food was hearty. The rangers made us feel very welcome and there was a great sense of camaraderie among the guests, with those who had stayed before showing newcomers the routine in and around the homestead. This weekend is scheduled again next February 23rd to 25th and we highly recommend it. For more details contact Craig & Liz Doolan (rangers) on (03) 5156 6398 or check out the Rotamah website at <http://www.i-o.net.au/members/rotamah>.

Kim Sinclair & Helen Woodward

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.

email <forrest.jan@saugov.sa.gov.au >

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, John Hunwick and Bob Edge

Honorary Member: RH (Bob) Fisher OAM

OUTREACH PROGRAM

AO size panels from the Exhibition "Where have all the Butterflies gone?" are available free of charge 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 at the Urrbrae Wetlands Resource Centre, Cross Roads, Urrbrae and all members are welcome to attend. Our next meeting will be held on 13th November at 6.00 pm. If you would like further information or receive an agenda please contact the Secretary Jan Forrest at the address above.

CHRISTMAS MEETING will be held on 11th December at 7.30 pm. At the Urrbrae Wetlands Resource Centre, Cross Roads, URRBRAE and will commence with a tour of the wetlands. Please bring a plate.

ALL MEMBERS ARE WELCOME, feel free to bring a friend.

WEB SITE (produced by Roger Grund)

'South Australian Butterflies' <http://www.adelaide.net.au/~reid/>

We welcome the following new members:

ERIKA LAWLEY
HELEN BIZZAI
S. DAVIS
PATRICK HONAN
NATASHA
HONCZAROV
ROBYN
DANGERFIELD
G. SARA
MARY-ANN & ROGER
FARGHER

DON'T FORGET OUR
CHRISTMAS MEETING
commencing with a tour of
the URRBRAE WET-
LANDS at 7.30 pm
On
Monday 11th December
Please bring a plate



