

ADELAIDE'S COPPER *Lucia limbaria*

Articles from: BCSA Newsletter No. 41 May 2011.

The rare Chequered or Grassland Copper *Lucia limbaria* was last recorded on the Adelaide Plains from a single specimen in the South Australian Museum, collected in 1967 from Parkside. Further specimens in the SA Museum from the Adelaide plains were collected at Plympton in 1938, Parkside in 1942 and in 1900 it was recorded at Kensington. In March 2011, this butterfly was found at the southern end of Victoria Park and its survival in this location is remarkable.

Whilst the species is widespread and has been recorded from the Fleurieu Peninsula and the Mt. Lofty Ranges it is nowhere common. In pastureland the caterpillar host plant, *Oxalis perennans* struggles to survive amongst aggressive introduced grass species.

Original Adelaide City Council plans were to have placed playing fields over the entire southern end of the old racecourse. A huge amount of work by the Adelaide Parklands Preservation Society caused the original plans to be scrapped and a centrally located Conservation area of remnant vegetation was established. Then the butterfly was discovered to the south of this area.

A redeveloped plan saw plans for ten playing fields being drawn up that completely encircled

the Conservation area. In March BCSA committee members Mike Moore and Jan Forrest provided Councillors and staff of the Adelaide City Council with an overview of the needs of the butterfly and urged that consideration be given to protect the area where the highest concentration of host plant and attendant ant occurred.

On 27th April 2011 the Adelaide City Councillors made the courageous decision to NOT go ahead with a proposed tenth oval located directly in the area of the butterfly habitat area. This decision is applauded and our thanks go to the Mayor for his casting vote to not develop this area. Thanks also to Councillor Plumeridge and Adrian Stokes and staff at the ACC and DENHR staff for their support.

More consultation with the council is needed however, to protect the long term survival of this lovely butterfly species in the Victoria Park location.



Above: BCSA committee members Mike Moore and Gerry Butler inspect patches of *Oxalis perennans* at Victoria Park with Melanie Spurling (AMLR NRM Board -NRM Communities Officer). Top left: The host plant *Oxalis perennans*. Top right: the location of *Oxalis perennans*, the caterpillar foodplant, in the Victoria Park area. Photos: Jan Forrest



LUCIA LIMBARIA FOUND AT CLARE

On reading the last newsletter No 40, February 2011, I was interested to see a report on the Chequered Copper butterfly. I had recently noticed them in my garden in Clare and thought I would advise you of this as it appears they are not very common. I first noticed them mid February and saw them regularly for about 10 days. I have not seen them lately. They were flying closely above a patch of couch grass which has some *Oxalis* sp. (probably *O. corniculata*) in it and would then bask for a short time. This is the first time I have noticed them here and hopefully will see some again. We have a large garden planted with natives and see quite a few different butterflies here.

Pam O'Malley



Lucia limbaria adult
Photo: Pam O'Malley

We are delighted to report that this is a new record for the state, although not unexpected. The species is rare but also widespread.

COMMUNITY INVOLVEMENT IN BUTTERFLY HABITAT RESTORATION AT VICTORIA PARK.

Butterfly Conservation SA members, South Parklands Landcare Group members and other concerned landcarers have rallied to the charge to find out how they can be involved in protecting the habitat of the recently rediscovered butterfly *Lucia limbaria*.

Every person, who has been informed of the unique symbiotic relationship between the butterfly larvae, which are attended by numerous small, common black ants *Iridomyrmex* sp. (*gracilis* and *rufoniger* groups), is enthralled and wants to help in preserving this unique biodiversity.

The BCSA understands that maintenance of the *Oxalis perennans* (Native Sorrel) will not be a difficult task if sufficient numbers of volunteers are available to assist, to implement an appropriate conservation plan, using "Bushcare" techniques and the precautionary principle is applied to do no harm when undertaking this work.

One of the most important activities will be to develop an understanding of the plants, insects, spiders and some of this work has been done with identifying locations of plants and trap-door spider holes but there is much more to learn about this special area of Victoria Park.

Training in Bushcare techniques can, and will be provided, for any volunteers and this will be undertaken in association with mapping and research by the community commonly called "Citizen Science".

The BCSA encourages you to take an interest in this unique biodiversity and assist in protecting it for future generations.

Please contact BCSA committee member Gerry Butler if you are interested in becoming involved: gerry.butler@ozemail.com.au

REMNANT VEGETATION and BUTTERFLIES AT VICTORIA PARK

The results of the recent NCSSA survey are not yet available however these are some of the remnant plants known to occur in the Victoria Park DENR/ACC area to be managed by an NRM agreement:

Astrostipa gibbosa Fat Spear-grass - CS Rare in SA and regionally
Austrostipa curticoma Short-crested Spear Grass CS Uncommon regionally
Aristida behriana Brush Wire-grass CS Uncommon regionally
Elymus scaber Native Wheat-grass
Austrodanthonia caespitosa Common Wallaby-grass
Chloris truncata Windmill grass
Wurmbea dioica Early Star-lily, now not known to occur elsewhere on the Adelaide plains
Hypoxis glabella Tiny star
Calostemma purpureum Pink Garland-lily (it isn't a lily)
Arthropodium strictum Common Vanilla-lily
Oxalis perennans Native Sorrel (host plant of *Lucia limbaria* butterfly)
Dichondra repens Kidney weed
Portulaca oleracea Common purslane (it's also in the Southern area of the parklands)
Chenopodium pumilio Clammy goosefoot (also in the southern area of the parklands)
There is also a non-remnant significant tree *Eucalyptus camaldulensis* River Red Gum, planted decades ago.

Other butterflies

Several other species of butterfly have been observed in the area covered by the NRM agreement and south of this area (see map) where *Oxalis perennans* and the butterfly *Lucia limbaria* occur these include the Saltbush Blue butterfly *Theclinesithes serpentata* possibly feeding on a remnant chenopod, Common Grass Blues, Painted Ladies and the Meadow Argus.



Saltbush blue *Theclinesithes serpentata*
Photo: Malcolm Houston (Henley Beach April, 2011)



The Saltbush Blue butterfly is possibly feeding on this remnant chenopod Photo: Jan Forrest

from PARK LANDS NEWS MARCH 2009

Closing paragraph from an article by Darrell Kraehenbuehl BA AM

"From my point of view, I find that the Victoria Park area is a remarkable remaining grassland community that has survived 173 years of European settlement - an important survivor of South Australia's colonial history. Much of the native vegetation of Adelaide has been lost - at least we now have a chance to save a very interesting area from desecration".

MAP OF VICTORIA PARK



Map of Victoria Park (formerly racecourse) showing the occurrence of the rare Chequered Copper butterfly *Lucia limbaria* and it's hostplant the Native Sorrel *Oxalis perennans*. The area coloured yellow is the conservation area with NRM agreement status, some *Oxalis* occur in this area and some butterflies have been observed here, however a majority of the plants are OUTSIDE the protected area as noted in red and south towards the creek. Insert left, shows greatest concentration within this purple area of *Oxalis* (not same scale).

THE HABITAT

The area where the butterfly has survived all these years is quite remarkable, it looks like a field, however it may be this very neglect over the years that has been the salvation of the species in this area along with the fact that the larva lives underground in an ant nest and comes out to feed (possibly at night).

The host plant *Oxalis perennans* survives best where there are bare patches around it and not hemmed in by aggressive grasses. As a very low ground cover plant, the mowing of the area appears to have not affected the plant's survival. Although the attendant ant *Iridomyrmex* spp is a widespread common species we know little about its habits and needs. At present it appears to be fairly common in the area.

There are few nectar plants in the area for the adults to feed upon and they appear to have been feeding on 'common heliotrope' *Heliotropium europaeum*. We have suggested that this weed should be retained in the short term, pending the planting of local provenance flowering plants. Weeds are part of the habitat at present.

CALL TO ACTION

If you have an interest in the redevelopment of Victoria Park and the remnant vegetation write to the Lord Mayor of Adelaide, the Minister for Environment and the Chief Executive officer of the Department of Environment, Water and Natural Resources. .

In particular, if you would like the existing conservation area (in yellow) extended south to include the habitat of the butterfly Lucia limbaria it's host plant Oxalis perennans and the butterfly's attendant ant Iridomyrmex spp.

Ask to be kept informed on the potential flooding of the southern area as part of a possible flood mitigation scheme yet to be fully discussed and approved by council.

Maintenance of this area is on-going, if you would like to help please contact the Secretary Butterfly Conservation SA Inc., or the Parklands Preservation Society.