

BUTTERFLY CONSERVATION SAINC.

NEWSLETTER

No. 37: May 2010

BUTTERFLY TRAIL IN THE LEBOMBO MOUNTAINS, SOUTH AFRICA

Andy Young

In the north of Zululand, near the Swaziland border lie the Lebombo Mountains. This range of relatively small mountains are around the same size as our Mt. Lofty Ranges, however the already high elevation of the surrounding plain lifts them above the magic 1000m mark. These mountains are characterized by vine thicket and rain-forest in the gullies that scour their slopes with mountain meadows and light woodland in drier, higher areas.

During 2001 I spent an eventful seven weeks in the Pongola game reserve, as a guest of the 'Space For Elephants' foundation. The Pongola Game Reserve is a relatively small game park (by South African standards) of 63 km by 87 km. The reserve surrounds the artificial reservoir of Lake Pongolapoort, which itself is about 35 km long by 15 km wide. On the northern fringe of the lake the majestic Lebombos sweep down to the waters edge- a wonderful setting.

While on my visit, Digs Pascoe of 'Space For Elephants' asked me if I would care to initiate a 'butterfly trail' from the shores of Lake Pongolapoort, to the Jozini Rd that traverses the range. This side of the reserve was relatively undeveloped and poaching had become a problem. Looking at the mixed terrain of lake fringe and gully vine thickets, head high expanses of cane grass, the habitat of the deadly Black Mamba, open veldt woodland and the higher mountain meadows, with their flowering plants and scattered flowering trees, there were a multitude of niche habitats for various butterfly species to occupy.

Early one morning, my friend Lee Venter, then manager of the 'Loose Mongoose' research camp, started our ascent of the Lebombos to flag the initial proposed route of our trail. We worked from the shore of the lake, went about one hundred meters parallel with the access road- and then struck into the virgin bush, skirting a dense shoreline vine thicket patch.

As we climbed up the foot-hill slopes and the first 15 minutes had slipped past, with just an odd Pierid being sighted, I turned nervously to Lee and said that I hoped that there would be at least a few butterflies on our butterfly trail.... A few minutes more and a Banded Zulu Hesperiid flew past, as more butterflies started moving and we both started to feel better. Butterflies on our butterfly trail!

By eleven o'clock there were plate sized Swallowtails zooming around, as large and beautiful nyphalids and clouds of Pierids flew in all directions. Every now and then a zipping Skipper or jewel like Lycaenid would perch on a branch or a stem and take "center stage". We wove in and out of the dark and moody forest pockets in the gullies, where I pictured rough

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Author Andy Young enjoys a cuppa on the back verandah of his bush hide-away near Vivonne Bay Kangaroo Island Photo: Jan Forrest (you can blame me Andy!)

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

If you currently receive a posted newsletter and would like a **coloured** PDF please provide the secretary with your email address. Alternatively the newsletter may be downloaded from the BCSA website.

Come to a "Walk & Talk" for Natural Resource Management Volunteers On behalf of the Adelaide and Mount Lofty Ranges Natural Resources Management Board, I am pleased to invite environmental volunteers to 'Walk & Talk' events across the region These events include a walk around a community group project site, presentations about current environmental works and an opportunity to share your experiences with fellow volunteers over As a way of saying thank you for your committed efforts to protect our environment, it would be our pleasure if you would join us at your nearest local event: Saturday 15 May 2010, 10am – 2pm Sinclair's Gully Winery with Friends of Moores Road Central Hills followed by Scenic Hotel, Norton Summit. (rsvp by 10 May) Sunday 16 May 2010, 10am - 2pm Fleurieu Aldinga Scrub Conservation Park with Friends of Aldinga Scrub Conservation Park Saltbush Bistro, Aldinga Beach. (rsvp by 10 May) Northern Saturday 22 May 2010, 10am - 2pm Altona CSR Landcare Reserve with Williamstown, Lyndoch Landcare Group followed by Jacobs Creek Visitor Centre, Rowland Flat. (rsvp by 17 May) Urban Sunday 23 May 2010, 10am - 2pm Waite Arboretum with Friends of Waite Arboretum followed by Lirra Lirra Café, Urrbrae (rsvp by 17 May) The events promise to be both interesting and informative, with a social atmosphere for like-minded volunteers to get together and network. Lunch will be provided. Be sure to RSVP as numbers are limited - rsvp@adelaide.nrm.sa.gov.au or 8273 9100 A detailed program and location map will be provided when you register Thank you again for your generosity in giving your time and effort to care for the precious natural resources of this region.

WHAT DO MOTHS EAT?

Eucalypts and acacias (largest group in Australia), Leguminosae, Leptospermum, Grasses, Pinus, Citrus and many weed species. Fungi, lichens, mosses, ferns, ants nests, flowers, dead insects, paperwasp nests, spider webs, human food stuffs, carpets, hair, beeswax, animal fibres & feathers, bark & wood, dead plant materials, leaf litter, roots, fruits, seeds, galls, predators, animal dung, some are parasitic and carnivorous. Caterpillars come in many weird forms. As you can see with the list above it's an extremely varied diet. Caterpillars come in many forms as the images below show.



Yes, this is a moth caterpillar!

Do you have your copy of our book 'Attracting Butterflies to your Garden, what to grow and conserve in the Adelaide Region'?

Members may purchase one book for \$20 and other copies for \$25 each. They make great presents.

SAFE CHEMICAL HANDLING TRAINING FOR VOLUNTEERS

Saturday 19 June, 2010 - 10.00 am - 1.30 pm Volunteer Centre, Belair National Park (near Long Gully Oval)

RSVP: by 4 June, as places are limited. To: Pam Smith, Volunteer Support Unit, Department of Environment, GPO Box 1047

ADELAIDE SA 5001

PRESIDING MEMBER

www.amlrnrm.sa.gov.au

Email: pamela.smith@sa.gov.au

Phone: 8124 4784 Fax: 8124 4850 change.

REGISTRATION OF INTEREST

From time time we receive information from the Department of Environment or other agencies regarding events, trainings, talks, field days and seminars.

If you would like to be informed via email of these events please contact the Secretary, Jan Forrest via email at forrestjan@adam.com.au.

COMMUNITY SUSTAINABILITY GRANTS

Small grants of up to \$3,000 and larger grants of up to \$10,000 are being offered. Applications are open now and will close at 5pm on Friday, 28 May 2010.

Community Sustainability Grants have been designed by Conservation Council SA and the Government of South Australia specifically to help groups and non-government organisations become more sustainable in light of climate

The grants will be available to innovative projects that educate community to bring about sustained behaviour change. Projects that include an on-ground component are also eligible for funding.

If you have an innovative project that engages community to undertake sustainable behaviour, we encourage you to apply.

For more information, please visit www.conservationsa. org.au or ring 8223 5155.

hewn seats and tables gracing shaded forest floors, already free of undergrowth in the gloom (I kept hoping I was going to see the feared Gaboon Viper, rare but not unknown in these areas....). Then we would push through the thorny vine tangle at the edge of the vine thicket and emerge back into the daylight world of the more open veldt sections.

As we wound our way up the slope through these areas, we found a poaches snare concealed near a tree in the grass. Lee was clearly worried- poaches tend to carry old rifles and 'pangas' or cane knives and have been known to wield them in anger. Just as we were on the point of moving on and reporting our find to the reserve managers, we heard a gabble of distant Zulu coming down the slope- the poachers were on their way back to check their snare! "What shall we do?!?" whispered a clearly worried Lee. I had a moment of pure Aussie bush inspiration, and let out the loudest "cooee" that I could muster, which echoed and rolled around the groins and clefts of the mountains.

Lee looked at me with a stunned "what the hell did you do that for" expression on his face, that broke into a grin as first the Zulu voices went silent for a second or so, then changed into a rapid babble of Zulu as the owners of the voices raced back up the slope of the mountains- clearly they weren't familiar with our Australian bush call either!

Up and up we went, pausing to examine some spectacular and colourful moths we found along the way, as well as an even more colourful Crag Lizard that we unsuccessfully tried to entice from a crack

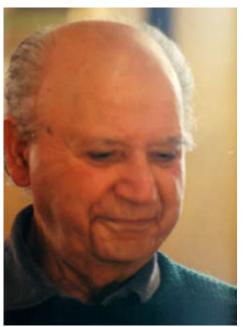
in a boulder where it had locked itself in with the raiseable spines on it's tail, in a similar manner to our Cunninghams Skink. We eventually entered the high meadow zone, where a lush green grassy sward was studied by a variety of flowering plants. The trees that were dotted amongst this meadow like environment were also characterised by large, pink flowers, a little like quince blossom.

We walked through this idyllic scene and eventually hit upon the road which marked the end of our trail, then followed our flags down the slope back to the lake.

Seven years have passed since this wonderful day on the Lebombo mountain slopes and I'm heading of to Maputaland once again in a month or two. (Ed note: Andy has been to Africa again and now returned). I have found out that the butterfly trail has been developed, using the route we plotted that day, and the ideas that Lee and myself visualised during the climb. I am very much looking forward to reporting to butterfly conservation members and all others who have an interest in ecotourism with a butterfly flavour, on how the Lebombo Butterfly Trail circa 2008 looks. I hope to send everybody pictures and tales from this most beautiful part of the world, where the dreams of childhood, long lost, once more manifested and have led me to where I am today.

Ed Note: Andy has promised a follow up article for us with stunning images of African butterflies he has encountered on his travels.

LOSS OF A GREAT COMPANION AND LEPIDOPTERIST



We regret the loss of a lovely quiet and humble man from Malta, Sam Aquilina, who lived somewhat as a reclusive near Cudlee Creek in the serene part of the Adelaide Hills. I met Sam in the 1970's when I was studying with his son, Paul at the Adelaide Botanic Gardens. Sam introduced me to his vast butterfly and moth collection and awakened me to appreciate nature even more than I did. Many of his early specimens were collected during wartime in New Guinea. This was practiced as an attempt of distraction and contemplation from the futility of it all. Butterflies seemed so beautiful to Sam during the dark and senseless days which took him off into another world of the uniqueness of nature.

Sam was one of our first members of Butterfly Conservation SA and helped broaden our knowledge on butterflies and especially moths. Moths were a passion to Sam as he collected and studied them from around his property, collating a lifetime of information and experience.

Sam had an interest in all aspects of nature which included breeding rare and unusual finches, another Darwin in the making! Taxidermy was self taught and was carried out to perfection on many birds that died in his care. Sam was also an accomplished musician, teacher and wood carver.

Sam was a gentle man and was always welcoming to me and showed me all the things he was up to with enthusiasm, a great smile and warmth. I will miss him as will many others that knew him. You have past on your love for ever. See you in another chrysalis of life. Rest in peace Sam.

RAISING BUTTERFLIES (and moths) AT HOME

Mike Moore

As a Lepidopterist one of the activities that you end engaging in is the raising of butterflies and moths at home.

There are three reasons for doing this –

- You can learn more about the habits and life cycle of the insect in question
- · You can raise perfect specimens for your collection
- Taking eggs or young caterpillars from the wild is less damaging to the population than taking adults.

Unfortunately you can end up with plants in pots just on the off chance that you will collect an egg or caterpillar.

Most butterflies can be raised in jars although skippers, because of their long life cycle, most of it spent as a caterpillar, are more difficult.

Raising Butterflies in Jars is very simple.

Collect a Screw Top Jar.

I find appropriate coffee jars, vegemite jars and pasta sauce bottles good to use. The latter have the advantage of being square and hence do not roll when placed on their side.

Do not use pressure seal jars because caterpillars are hydrostatic organisms (full of fluid) and could be affected by the pressure changes in opening and shutting the sealing lid.

Some collectors do not like using plastic containers although I have not had any problems with plastic containers. Some plastics release hormone like chemicals and these may upset the caterpillars' development.

When hatching caterpillars from eggs I usually start with a small jar. I usually lay my jars on their side.

Using a small jar has pluses and minuses. On the plus side, you only need a small amount of plant material in the jar and you can find the tiny caterpillar when it comes time to clean the jar and/or replace the food. On the minus side, because you only have a small amount of plant material in the jar it tends to dry out quickly meaning more regular replacement. This regular replacement is critical during the time the egg is developing when no caterpillar is present so that when the egg hatches the hatchling has something good to eat.

The Paper Bed

Cut a piece of paper to lie flat in the jar. I usually use kitchen paper towel but toilet paper will do.

Cut it to fit. (I usually cut it slightly undersize)

If it is too big it provides enticing nooks and crannies for caterpillars to crawl into meaning that at cleaning time they might be damaged by unsuspected rough handling.

The paper is valuable for the following reasons.

- Moist plants can transpire in the jar forming a water film. The paper absorbs much of this and the caterpillar is less likely to become trapped in liquid.
- Most of the caterpillar poo (frass) ends up on the paper so that it can easily be cleaned off and the paper re-used.
- Any liquid released by the caterpillar or emerged adult can be absorbed by the paper and not be available to trap the
 insect larva or adult.

When cleaning the jar or replacing the food you can carefully grab the paper with tweezers and pull everything out more easily. When doing this CARE must be taken. Many caterpillars love to hide under the paper meaning that careless handling could damage them. I always look under the paper from outside of the jar before I remove it to make sure I know where the caterpillars are located.

A Piece of Bark

If the butterfly species lives on or near the bark of tree or shrub I always make sure I put a piece of bark in the jar.

- Many butterflies hide during the day on or under bark and doing this makes them feel more secure.
- Caterpillars when they ecdyse (shed their skin) need a firm base to grasp on to and the bark provides this.

Food

Remember butterflies have very specific food requirements and so you must have the correct food on hand. Some butterflies can be transferred onto other food plants but this is usually the exception rather than the rule. If at all possible try to maintain them on what-ever plant species they were collected on.

For young caterpillars I try to provide young shoots. Many plants have within them toxins to stop animals predating upon them. Young leaves have less toxins and are probably more palatable for smaller caterpillars.

Provide enough food so that moisture levels in the jar are sufficient to keep all of the plant material moist. Caterpillars cannot eat dry leaves.

Extra Moisture

This can be provided by placing a wet but squeezed wad of absorbent paper or cotton wool in the jar. If I do this and I only do it irregularly I trap the wad in the lid. Remember caterpillars do not handle wetness at all well so you do not want liquid water free in your breeding chamber.

Replacing The Food.

Ideally this would be done every second or third day.

Cleaning The Jars

Some people clean the jars, ie wash and dry them regularly. I do not usually do this. I find that as long as the frass is cleaned out completely each time you add new food you do not need to clean the jars. If however, the frass starts to go mouldy (usually through too infrequent cleaning) then you will need to clean the jars thoroughly.

Positioning

Ideally the jars should placed in a location where they can be easily and regularly accessed by you. They must not ever be in direct sunlight but placed in a location where the natural rhythms of light and dark are present. Unless you have a dedicated study that you regularly use or such, this is difficult to achieve in a household.

I often place a tea towel over the jars, keeping them permanently shaded but still able to detect the normal diurnal cycles.

Handling The Caterpillars

Caterpillars are rather fragile so try to avoid touching, or prodding or poking the caterpillars. If you feel you need to clean them or move them along use a paint brush to very gently brush away what is annoying you or them. That is why you need to be careful locating them before you add new food. If when maintaining the jars the caterpillars are located on the food I cut the leaf or twig or piece of paper bedding off the old plant or bed and place it back in the jar and add new food around it.

When shedding their skin caterpillars will often sit motionless for days. It is imperative that they are not disturbed during this time, so cut off the substrate (leaf, twig or occasionally paper bedding) and place it carefully back in the jar after maintenance. If they are ecdysing on the bark all the better.

How Many Caterpillars?

Firstly the smaller the jar the fewer the caterpillars. The larger the caterpillars the larger the jar! Some Lycaenid (Blues) species can be carnivorous, but in my experience that has related to the amount of fresh food available. Perhaps in a medium sized Vegamite jar two small caterpillars. Pasta sauce three small, two larger?

Keeping the numbers down in the jar also helps if any of them have/get diseased. If a caterpillar becomes diseased it inevitably dies, and will probably take any others in the jar with it. If this happens makes sure you do not transfer the disease to the other caterpillars.

Pupation

It is always a relief when the caterpillars pupate. Although disaster can still strike, the task of feeding them and cleaning them is over. Clean out the jar. Make sure you have a paper bed in place. Position the pupae such that it is easy for the adults to emerge. Some species produce hanging pupae (often on the lid) and these need to be placed in a larger space.

When the adults emerge they are going to need to have enough room to pump up their wings so pupation might be a good time to change the jar to a larger one. A small aquarium or a hatching chamber? DO NOT TOUCH THE PUPA.

In the past I have also

- Taken off lid and covered the opening with choule secured by an elastic band. I do this to let the pupa dry off and to aid the drying off of the butterflies wings.
- Tipped the jar upright (Circle of paper in the bottom!) and placed a climbing stick in there too.

Problems

The only problems I have encountered is usually with the nature of the food plant, mainly keeping it fresh.

Wanderer butterflies use Milkweed as their food plant. This plant has a sticky white sap it exudes non-stop from the cut end of the branches. If this is placed in a jar the jar become sticky with the sap. The caterpillars also produce vast amounts of poo and the whole jar becomes a putrid sticky mass in which the caterpillars can become stuck. This is one of those species where it is better to place a cut stem in water make sure to cover the top of the vase or jar with paper, and pierce through it with the plant cutting, otherwise the caterpillars will inevitably fall into the water.

Because the butterflies are exposed be very careful with any sprays used around the house. Fly spray also kills caterpillars.

Placing a plant piece in water can prolong its longevity but of course you can't do that in jars. My friend Lindsay Hunt

used to use this technique for *Candalides* species that live on a thin soft climbing parasitic plant called Dodder.

The nettles that Australian Admirals use also present their own problems. As they die off, they contract and dry whilst the caterpillar is trying to make a shelter out of silk and cut leaf. All this can make quite a mess in the jar particularly if the caterpillars are small. What I have done in the past is to let the eggs hatch on the plant in the garden and collected caterpillars when they are larger and easier to see and manage.

This was, I thought, to be a short piece but have got quite carried away. I hope you have enjoyed reading it and enthused to try; All you need are eggs or caterpillars.

The Cabbage White butterflies are a good species to begin with.

Cabbage White Butterfly

Class: Insecta Order: Lepidoptera Family: Pieridae Genus: Pieris Species: rapae

The best known of the whites, it is often a pest in our vegetable gardens. Originally a Northern Hemisphere butterfly, it was first reported from Australia at Melbourne in 1929. It was first documented from South Australia in 1940, and within two years was quite widespread in the southern parts of the state. It is presently one of the most common butterflies in temperate South Australia, with its larvae adapting well to the extensive broad-acre cultivation of canola (*Brassica napus*) in agricultural areas.

Distribution

The butterfly occurs throughout the temperate and sub-tropical latitudes of Australia, including Kangaroo Island and Tasmania. It generally occurs wherever there is human habitation. In South Australia it is rarely seen in the hot, northern pastoral areas.



Larval Foodplants

The butterfly requires foodplants containing mustard glycosides. These include most plants of the Brassicaceae family including Alyssum spp. Arabis spp. (rock cress), Barbarea spp. (wintercress), cruciferous crops Brassica spp. (broccoli, brussel sprouts, cabbage, canola, cauliflower, mustard, radish, rape, turnip), Cakile edentula (American sea-rocket), Cardamine spp. (bitter cress), Cardaria draba (hoary cress), Descurainia sophia (flaxweed), Eruca sativa (purple-vein rocket), Erysimum spp. (mustards), Hesperis spp (rocket), Hirschfeldia incana (buchan weed), Lepidium spp. incl. L. africanum (peppercress), Lobularia maritima (sweet alyssum), Lunaria spp. (honesty), Matthiola incana (common stock), Raphanus sativus (radish), R. raphanistrum (wild radish), Rorippa spp. incl. R. nasturtium-aquaticum

(watercress), *R. palustris* (yellow cress), *Sisymbrium* spp. incl. *S. irio* (London rocket), *S. officinale* (hedge mustard) (Brassicaceae); also *Capparis* spp. *Cleome* spp. incl. *Cleome viscosa* (tickweed) (Capparaceae); *Reseda* spp. (mignonettes) incl. *R. odorata* (sweet mignonette) (Resedaceae); *Tropaeolum* spp. (nasturtiums) incl. *T. majus* (Tropaeolaceae); *Nicotiana tabacum* (tobacco) (Solanaceae). The larvae eat the leaves and softer green parts of the foodplants.

Habitat and Ecology

This butterfly is most common in the southern settled areas wherever its introduced foodplants are cultivated or have escaped as weeds. Most of the weedy foodplants require assured rainfall, and can be found in most habitats. In the northern pastoral areas many of the mustard weeds now occur along the ephemeral creeks and rivers. It is sometimes confused with the Caper White, but the latter is easily distinguished by the black wing margins.

In the more northern areas or the Riverland there is potential for confusion with several other white migrant butterflies, but the two or three prominent black spots readily visible on the wing uppersides of the Cabbage White is the best method for separation.

The entire life history of the butterfly is poisonous to varying degrees. The larval foodplants contain mustard glycosides which the larva is able to assimilate and convert to mustard oils (isothiocyanate irritant poisons) to be retained in its body as a protection against predation. These poisons can be passed on to the pupa and the adult butterfly. The poisons are also probably passed onto the eggs by the female adult butterfly to complete the cycle. These poisons are usually in sufficient concentrations to only sicken the vertebrate predators or at least taste unpalatable, so that the predators can learn from the mistake and pass on the experience. They are not meant to cause death as this would likely result in larger numbers of the insect being killed.

This butterfly is sometimes called the Cabbage Moth, which is incorrect. The Cabbage Moth is a small true moth, which like the Cabbage White, is an introduced pest that has a destructive liking for cruciferous crops.

Flight period



In southern temperate areas it is possible to find flying butterflies throughout the year. It normally overwinters as pupae, but some adults also hibernate during the winter months, and will briefly emerge from hiding on the occasional, hot fine winter day to fly and feed.

Threats

No major threats

Conservation

None required. Thrives in urban gardens and considered a pest.

Cabbage White Butterfly Pieris rapae













Images from top left to right:
Adult upperside: Photo E.Steele-Collins
Larva: Photo RHFisher
Mating Adults: Photo LFHunt
Pupa: Photo RHFisher
Egg: Photo RHFisher
Adult underside: Photo RHFisher

JOINT GENERAL MEETING OF NATURE CONSERVATION SOCIETY OF SA AND BIOLOGY SOCIETY OF SA

Thursday, 6th May 2010 5.30pm for 6.00pm Benham Lecture Theatre, Benham Building, The University of Adelaide, North Terrace Campus (second building along Victoria

Drivefrom the corner of Victoria Drive and Frome Road)

This meeting features two talks;

- Pollination biology and ecology of saltmarsh communities in S.A. (with a focus on the impacts of introduced plants, *Limonium* spp.) by Melissa Schlein PhD candidate at Flinders University of South Australia(recipient of the 2008 NCSSA Conservation Biology Grant)
- Are Mount Lofty Ranges woodland birds declining?: a snapshot of 10 years of monitoring data by Tina GillespieMount Lofty Ranges Woodland Bird Project Officer

Also the 2010 winners of the BSSA Field Research Grant & NCSSA Conservation Biology Grant will be announced.

All Welcome

THANKS

Very many thanks to members assisting at the Sunday Mail Expo held at Wayville during the Anzac weekend. This was a particularly successful promotion with over \$500 taken in book sales and memberships. Particular thanks to Bill Rowlands, Jill Davy and friend, Gill Hollamby and his wife and Jan Forrest.

Thanks also to Richard Rowlands, Roger Grund, Lois Hasenohr, Bill Rowlands and Jan Forrest for help provided at the Australian Plants Society show and sale held during the 1 - 2nd May weekend.

Please contact Secretary Jan Forrest 82978230 if you would like to help out at any of these events. The next one will be at Morphettvill Racecourse 22-24 Oct at the Channel 7 Gardening and Outdoor Renovation Show - you get free entry!!!!

BUTTERFLY CONSERVATION SA Inc.

Chairman: David Keane

Secretary and Newsletter Editor: Jan Forrest OAM C/- South Australian Museum, North Terrace, ADELAIDE, 5000 ph H (08) 82978230. email < jan.forrest@samuseum.sa.gov.au > or <forrestjan@adam.com.au> 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 in the Urrbrae Wetlands Resource Centre, Cross Roads, Urrbrae or at a committee members home. All members are welcome to attend. If you would like to attend please contact Secretary Jan Forrest. **Next Meeting**: 14th June 6.00pm, 30 Churchill Avenue, CLARENCE PARK.

GENERAL MEETINGS - The planned monthly general meetings with a guest speaker will now commence in February 2011. Program, venue and dates to be advised.

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.chariot.net.au/~rgrund/index.htm
- '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:

TAETIA MCEWEN
ALLISON BUNTING
LINDA JEFFREE
DAVID POLDEN
TREVOR STEELS
MARY HARRISON
MOYSTYN GALE
DIANA MITCHELL
SUZANNE ARBON
ROSLIND ELLIS
DI NESS
ANN RAHALEY
MARIA CAMMARANO

2010 AGM

Tues 14th September at the Clarence Park Community Centre 72-74 East Avenue, Black Forest at 7.30 pm

