

GARDEN

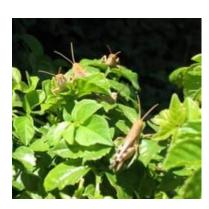
FOR WILDLIFE

Wildlife News









They make the land come alive with every step, escorting you down the driveway in waves and clouds. They eat your vegies, but they feed the birds and lizards. Have patience! Remember the desert operates in 'Boom and Bust' cycles in response to rain. It has rained, plants and animals are 'booming'. If there is no more rain over the next few months and things dry out, the 'bust' will begin and grasshopper populations will subside. So enjoy them while they last! As these grasshoppers mung into your citrus, have a close look at them. You may have already noticed the incredible variation. And there are crickets and katydids, mantids and stick insects amongst them. Here are a few orthopterans (grasshoppers, crickets and katydids belong to the Orthoptera Order) for you to try and identify:

Grasshoppers



The Leopard Grasshopper

Stropis maculosa
Family: ACRIDIDAE

Striking with its dark spots, the Leopard Grasshopper is commonly seen in a variety of habitats in Alice Springs. They are herbivourous, however the native diet is contrary to the name, they don't eat grass as a first choice, they eat a variety of herbaceous plants including your prized herbs, Caltrop, Boerhavia coccinea, citrus leaves, etc before they switch the grasses that are left over. Pictured above are some colour variations.





The Toadhopper

Buforania crassa Family: ACRIDIDAE

Sub-family: CATANTOPINAE

The Toadhopper is a plump Northern Territorian spurthroated grasshopper. It can grow to at least 10cm long with a thorax of around 3.5cm wide! It can be found on shellite or rocky substrate where it camouflages well against the red rock. The diet is largely unknown, but includes native Eremophila's.











Spur-throated grasshoppers & locusts

Possibly Catantops spp. (left)

Family: ACRIDIDAE

Sub-family: CATANTOPINAE

(Left: grasshopper, right: locust). There are many species of 'Spurthroated Grasshoppers'. The grasshoppers pictured left are very common at the moment, but not in plague proportions, even though it may feel that way!



Gumleaf Grasshopper

Goniaea australasiae Family: ACRIDIDAE

Insects are consumed in large numbers every day by birds, mammals, reptiles, other insects and invertebrates. To avoid becoming part of the food chain for long enough to develop and reproduce, the Gumleaf Grasshopper employs a fantastic leaf-like camouflage. It is a common species, occurring Australia-wide. (Photographed above in its fifth instar.)



Blistered Pyrgomorph/Blistered Grasshopper

Monistria pustulifera Family: PYRGOMORPHIDAE

The Blistered Prygomorph occurs all over Australia, and lays her eggs in sandy sediments. Pictured top right is a mating pair; male is smaller and mounted on the larger female. The strong colours are a clear indicator to predators that they do not taste good and to leave them alone. They feed on strongly scented plants, such as Eremophilas, that most herbivores don't touch.



Slant-faced Grasshoppers

Family: ACRIDIDAE Sub-family: ACRIDINAE

These grass hoppers are common and contain many species. They can often be distinguished by the angle of their face and

antennae (hence the name).



The Little Black-kneed Field grasshopper

Family: ACRIDIDAE Possibly Macrotona spp.

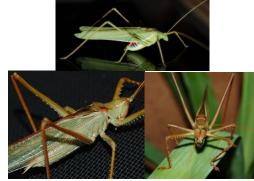
This grasshopper is one of the most common over a longer time period and, like most grasshoppers, doesn't feed on grass by preference but on herbaceous (broad leafed) plants, including shrubs, until only the grasses are left for food.



Grasshopper Nymphs

The grasshoppers pictured above are in the 'nymph' phase, or 'instar', of their lives. They have not yet fully developed, and do not have wings. These nymphs may look completely different to the adults (e.g. these nymphs pictured are likely to change colour, or some insects, such as various species of katydid, will have a nymph phase that mimics an ant or other insect) and will develop wings.

Katydids



Family: TETTIGONIIDAE

Katydids are more closely related to crickets than grasshoppers and



Superb katydid

You may be lucky enough to see the Superb Katydid, *Alectoria superba*. This spectacular species is relatively uncommon and



can be distinguished from grasshoppers by their very long antennae which exceed the body length. Grasshopper antennae tend to be short and thick. There are many different species in Alice Springs, some of which are predatory and some eat leaves, flowers, bark, and seeds. They are mostly active at night – you will hear them calling amongst the crickets. The sound is made by rubbing the hind angles of their front wings. Nymphs often look very different to adults, often mimicing other insects to avoid predators. Adults are frequently green, camouflaging in foliage. Common species to Alice are the Bush Katydids, *Elephantodeta spp.*

there are both yellow and green colour morphs. The function of the disc-shaped crest at the back of the head is unknown, though perhaps for protection. We have not seen any during this period, so let us know if you have!

Crickets



Raspy cricket - nymph

Hadrogryllacris sp.
Family: GRYLLACRIDIDAE

Raspy crickets are a nocturnal predatory cricket, and therefore have sharp mouth parts and can give you a bite if you try to handle them.



Mole cricket

G. coarctata and G. monanka are the only species found in the NT.

Family: GRYLLOTALPIDAE

Mole crickets spend most of their lives underground in extensive tunnel systems and are nocturnal. They have shovel-like forearms for burrowing and swimming, and are omnivorous feeding on worms, larvae, grass and roots.



Cave crickets

Endacusta sp.
Family: GRYLLIDAE

There are 5 species of Cave Cricket in the NT. They can be found on rock faces, under the bark of trees or in caves.

Some useful web sites for looking up grasshoppers:

http://www.brisbaneinsects.com/brisbane grasshoppers/index.html

http://www.pbase.com/larena/grasshoppers_crickets

http://lifeunseen.com/index12.php

These classifications are preliminary, and if anyone has any further information/corrections please let us know!



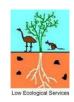
A Special Visitor to the Poo Ponds: Banded Stilt (*Cladorhynchus leucocephalus*)

The rain has brought us many marvellous things, and amongst those things is a very special visitor to the Sewage Treatment Ponds, the Banded Stilt. This rare wader has come to the poo ponds - a favourite hang-out for many water birds - and the adjacent flooded wetlands to take advantage of the abundance of food now available after the recent rainfall. Sixteen Banded Stilts in total have been spotted in amongst flocks of Red-necked Avocets and Black-Winged Stilts (of which there are plenty at the poo ponds).









Banded Stilts are plump waders about 35-43cm, and have long pink-orange legs, black wings and, during breeding season, a white head and body with a broad chestnut band across the chest and extending down the belly. Immature stilts lack the chestnut band, and wings are brown and legs dull

pink. Adult males and females look similar. The Black-winged Stilt is very similar in appearance to the Banded Stilt, but lacks the chestnut band.

Banded Stilts are native to Australia, with dispersive behaviour (movements are often in response to availability of feeding and breeding habitat). Populations may move to the coast when the arid inland is dry, returning to breed after rain or flooding. Banded Stilts feed in salt lakes, wading in shallow water picking and probing or swimming often some distance from the shore. They will feed, generally during the day, on crustaceans, molluscs, insects, vegetation, seeds and roots in the water and muds.

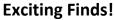


Breeding *only* takes place on small islands in arid **inland salt lakes**, and only after rain and flooding when food availability is high. Well known nesting sites are Lake Eyre and Lake Callabonna in W.A.The nest is an inverted cone-shaped scrape on the ground, and 3-4 eggs are usually laid. When chicks hatch they are shuffled off to 'crèches' (chicks are clustered together on the water and supervised by 10-15 adults), while the remaining adults focus on making another round of bubs! This



will invariably happen until the water in the salt lakes dries up and food runs out, often resulting in hundreds of perishing chicks. However not much is known about their breeding habits. It is known that they breed once every 7 – 10 years when conditions are appropriate, and when this occurs the breeding colonies are closely monitored. The reason for this is Silver Gulls (Seagulls) predate on young Banded Stilts and eggs, and can wipe out the entire juvenile population. If this is allowed to happen, and one breeding event fails, it may be another decade until the next event – and by then many Banded Stilts will

be very old birds. If the second breeding event fails, the species could face extinction! So while this bird is listed as 'Least Concern' on the IUCN Red List with fluctuating populations of thousands in the country, you can see how vulnerable they could instantly become if Seagulls were not monitored and managed and allowed to feast during these extraordinary breeding events!





Ground Cuckoo Shrikes have been spotted on a new Land for Wildlife member's property. A pair was seen during the property assessment delivering food to a nest with chicks. These birds are



separate to populations found earlier in the year (reported in the January 2010 edition GfW Newsletter), and as predicted the rain has spurred Ground cuckoo-Shrikes into breeding activity (along with many other animals).



Fungi: Keep your eyes out for this spectacular little fungus about 1 or 2 cm in diameter and height. The "Earth Star" fungus, *Geastrum* species (similar to *pectinatum*), has hyphae (roots) which absorb nutrients in the soil litter and detritus around the base of trees. The little bellows (endoperidium) which is propped up on the star shaped rays (exoperidium) releases spores via the hole in the centre when rain drops or wind blown litter strikes the bellows and puffs out the spores. If you touch them, spores will squirt out in a dark cloud!

Masked Woodswallows

Masked Woodswallows are arriving in town! They are migrating north and have stopped in Alice Springs to feed, along with the permanent resident Black-Faced Woodswallows, on all the grasshoppers and other insects. Masked Woodswallows are also capable of feeding on the wing high in the sky. You will see them easily along the Ross River Highway as they are feeding on grasshopper road kill on the road. Please be mindful of them if you are planning a trip out that way.

Masked Woodswallows can be easily mistaken for Black-Faced Woodswallows (which can be seen year-round in Alice). The names can make things confusing, however Masked Woodswallows have an entirely dark face extending below the bill and up to the forehead (pictured below <u>left</u> is a female with grey 'mask', the male has an almost black 'mask'), whereas Black-Faced Woodswallows have a 'Zoro'-style eye-mask, with the black only present directly around the bill and eyes (the bird's little face, as opposed to a large portion of the head). The Masked Woodswallows are steel grey in body colour while Black-Faced are dark grey-brown. Pictured below <u>right</u>: Black-Faced Woodswallows argue over a grasshopper.



Garden for Wildlife/Land for Wildlife News

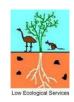
Hi everyone,

After another good dose of rain I trust everyone's gardens are looking lush with lots of new seedlings popping up – and hopefully not too much Buffel!







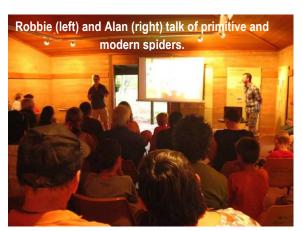


I have some good news to report. The Alice Springs LfW program is being used as a model on which to base a similar program in Darwin and the top end of the NT. Both programs will assist in achieving the aims of the NT Government's *Territory Eco-link* project, which plans to create a conservation corridor of national and global significance from the desert centre to the north tropical savannahs. More than 2000km of protected area will be linked by coordinating public and private conservation efforts. *Territory Eco-link* aims to link with South Australian initiatives, creating a cross-continent conservation corridor all the way from Arnhem Land to Port Augusta, the Trans-Australia Eco-Link. All your significant work towards habitat restoration is now nationally recognised, and your property is now contributing to this national conservation corridor and landscape scale conservation initiative! Some of you may have read an article in the Centralian Advocate on March 9 about Land for Wildlife/Garden for Wildlife's involvement in the initiative and if you would like more information on *Territory Eco-link* please contact us on Ifw@lowecol.com.au/8955 5222 or visit http://www.nt.gov.au/nreta/parks/ecolink/pdf/ecoLink_prospectus.pdf.

I would like to congratulate the following households for their fantastic efforts and participation in the **feral Spotted Turtle-dove program**:

- Julie Taylor caught 3 Spotted-Turtle Doves in February with her trap that she constructed during our June 2009 Workshop
- Sarah White caught 2 ST Doves with a trap on loan from Land for Wildlife
- Katya Verbunt and her family caught 4 ST Doves from her chook yard with a trap on loan from Land for Wildlife
- Jayne McAlistar reported to us recently that her family has caught **24** ST Doves between August and October last year with her backyard trap!
- Mark Russel reported on the 3rd of March that he has trapped and disposed of a phenomenal **32** ST Doves since our trap-making workshop on the 5th of February 2010!
- Wendy in Gillen caught **30** in *one week* with a home-made trap. She has a big job ahead of her with an incredible amount of Turtle-doves stealing her chook food I counted 35 Turtle-doves within 5minutes of arriving!

Well done everyone! Thank you for all those trapping efforts. For all those of you out there trapping don't forget to report your catch numbers to Land for Wildlife so we can monitor Spotted-Turtle Dove populations. If anyone would like to go on the waiting list for a trap loan please send me an email: Ifw@lowecol.com.au.



Recent Workshop:
Spiders! Hunting the Hunters!

On Thursday February 18, Garden/Land for Wildlife made room at Olive Pink Botanic Gardens in anticipation of a rather large turn-out for this very popular workshop. Expectations were surpassed when over 85 people showed up to hear brothers Robbie Henderson (former invertebrate keeper from Desert Park and bug enthusiast) and Alan Henderson (Manager "Bugs Alive", Melbourne Museum) talk about primitive spiders, modern spiders, their webweaving habits, thier hunting styles,



thier reproductive behaviour and much much more! The presentation consisted of beautifully detailed photographs of Australian and locally native spiders and very humorous brotherly banter! Robbie talked of ways to protect and look after our native spiders, including encouraging native biodiversity, letting spiders live alongside us, being water wise and monitoring our household power usage to minimise the effects of climate change. Thankyou to all that attended, to Olive Pink Botanic Gardens for squeezing us all in, and to Bean Tree Cafe for the loan of their chairs! Huntsmans, Orbweavers,



and Wolf spiders were seen during a spotlighting session at the close of the presentation - the gardens were lit up like a fun fair with so many head torches!

Letters to the Editor

G'day Bill,
Can you tell me anything about these please? 10 - 12mm long, lots of holes in ground.
I've only ever seen them before, Nov 08, after the rains.
Thanks & cheers
Rod Cramer



Ed – This one had us stumped so we consulted Invertebrate Specialist, Patrick Honan of Melbourne Zoo. "This is definitely a native wasp. Wasps have thin waists", whereas bees have a thick waist where thorax and abdomen meet, "it is hairless and has wasp-like markings, and in the top right of the photo there is an individual hovering like wasp. However, the wasps are completely yellow and unstriped which is unusual, and they have green eyes which is also unusual. You can see the ocelli, the three little dots on the top of the head, clearly in this photograph. These are light sensitive organs which are normally not as distinctive as this in wasps".

As yet the photographed wasps are unidentified. But Patrick went on to talk of Sand Wasps that hover over sand. They hunt their prey (usually spiders), and sting to paralyse it. They lay an egg on their prey before burying it, covering the holes. The adult wasp will hover over the site in order to take in land marks of the location, and will then disperse. Wasp larvae needs a certain amount of prey to eat to get through its larval stage, and interestingly this amount is measured by weight. Larvae may consume a few large prey items or many smaller prey items, but ultimately the collective weight will always measure the same.









Thanks Ilse.

Any info on the clumping/balling/wrestling behaviour? Rod

Hi Rod,

Patrick pointed out the wasps on their side to the right of the photograph, and mentioned it may possible that they were fighting, over prey or over a female, accounting for the clumping/wrestling behaviour. "Nyssoninae generally prey on flying insects, particularly flies and bees, but I not sure as to why they would be clumping on any particularly prey item." However, both possibilities are conducive with the recent rainfall we have had, as prey availability has increased which spurs breeding behaviour. But the presence of many adult wasps in one place will be due to burrows occurring in close proximity. For further information Bill Low has suggested this paper:

The Nyssoninae. (Book Reviews: The Comparative Ethology and Evolution of the Sand Wasps)

Evans, Howard E.; Cazier, Mont A. 1966

Science, Volume 154, Issue 3755, pp. 1440-1441

An interesting aside: Patrick said the photographed congregation reminded him of 'Bee Balls', even though the photographed insects are definitely wasps, not bees. "When a bee hive is invaded say for example by a hornet whose outer covering is too thick for a bee's sting to penetrate,



social bees will cluster around the invader and vibrate their wings for half an hour. When they stop and leave, the hornet is dead". Patrick said that this puzzled entomologists for some time, but it is now realised that bees can tolerate upper temperatures of 0.2°C higher than what a hornet can. By vibrating their wings in a tight cluster, enough heat is generated to 'cook' the hornet. The bees suffer very high temperatures by doing this, which is why they immediately disperse once the hornet is dead. This behaviour is only observed in bees, in situations of hive invasion, and Patrick is unsure if it has been observed in native Australian bees.

Hi Bill, What about this? (See photograph below.) Rod



Hi Rod,

This is a male Red headed Mouse Spider Missulena insignis. It is one of the Mygalomorph tube, funnelweb or trap door spiders. This one lives in a mouse-like hole in the ground. The male has bright coloured carapace and pincers. Males wander to look for mates particularly after rains. The female is brown to blackish but with a tinged red carapace, and is secretive. The South Australian Redheaded Mouse spider, Missulena occatoria, may get up this far and there appears to be confusion in the popular spider literature about the two species. Missulena insignis may be included in occatoria now.

Some web sites.

http://www.ento.csiro.au/aicn/name_s/b_2597.htm http://www.xs4all.nl/~ednieuw/australian/Mygalomorphae/Mygalomorphae.htm http://australianmuseum.net.au/Mouse-Spider

Cheers

Bill

Land for Wildlife/Garden for Wildlife Director



Ed – Even though in photographs the Mouse Spider appears huge, it is a medium sized spider. Its body size ranges from 1cm to 3.5cm.

Garden for Wildlife Eastside members Sue and Ellie Ripley sent this photograph to us.

"We have spotted this Juvenile Perentie (I think that's what it is?) in our yard 3 times over the last month. It drinks from our pond and hides out in the yard".

Hi Sue & Ellie,

That's great news! Thanks for the photos. It is indeed a juvenile Perentie (Sue reported it was about 40-45cm long), Varanus giganteus. That's a great indicator that you have suitable habitat for reptiles - and with all the bugs around after the rains I'm sure it's fattening up! Bill & Ilse

Ed- Young Perenties will eat lizards, insects and small mammals, adults will feed on snakes, rabbits, birds, eggs and small marsupials such as wallabies. Perenties overpower their prey, catching it in open pursuit, bringing it down and then shaking it to death. Once the winter cold kicks in these giant lizards will take take to their burrows, so enjoy them while they are visible!



Announcements

New Growth – new photos – what is it?

With all the plant and insect growth from the good rains early in January there are many photo opportunities around. Send us your best shots of your best plant growth or animal life and we'll publish them in coming newsletters. If you have trouble identifying plants or animals in your yard, take a digital photo and email us it to us and we'll try to identify it for you. Photos also provide a good record of what your place looked like and putting them into an album (digital or paper) to record changes over time is a very useful tool to help assess how your wildlife gardening is going.

Buffel Grass is running rampant after all that rain. Most Buffel has sprouted seed heads and is beginning to brown. If spraying is your control method of choice make sure you do it while the grass is green and lush! Putting in the effort now saves a load more effort later.

Remember to remove any **Spotted Turtle-dove nests** you see on your property. The rain has spurred them in to breeding, and you may notice nests in palms, trees or on ledges in and around buildings. Please discourage them.

The Power and Water Corporation Melaleuca Awards for Environmental Excellence are now open for nominations in 2010. The Awards recognise and reward Territorians doing the right thing by the environment. Visit the website for more information:

"The Northern Territory Government through the Department of Natural Resources, Environment, the Arts and Sport is pleased to

http://www.powerwater.com.au/environment/melaleuca awards/









Rainwater Tank Rebate NT

The Territory Government is encouraging households to become water conscious with the introduction of the Territory-wide Rainwater Tank Rebate. All Territorians now have an incentive to purchase and connect a rainwater tank to their homes and help take the strain off the Territory's natural water resources. The rebate will reduce up front costs for the purchase and installation of the rainwater tank and associated guttering, which can save the average household water and money. Community groups and not-for-profit organisations are also eligible to apply for the rebate after purchasing and installing a rainwater tank to their dwellings. Utilising a rainwater tank is good for the environment and encourages households to take responsibility for their own non essential use of water. For more information visit http://www.greeningnt.nt.gov.au.

Gardening Workshops

Geof Miers Garden Solutions Nursery are conducting some fantastic **Gardening Workshops** over the next few months. See 'Dates to remember' for more details.

Milkwood Permaculture Course

Interested in arid permaculture? The Milkwood Permaculture Course will be held in Alice Springs in April. See the below links for information. More info:

http://www.facebook.com/home.php?ref=logo#/event.php?eid=261209086444&ref=mf http://milkwoodpermaculture.com.au/courses/details/11-alice-autumn-pdc

DesertSMART COOLmob & Waterwise Rebates

DesertSMART COOLmob is a network of sustainable households in Alice Springs supported by the Arid Lands Environment Centre.

You maybe aware that due to the overwhelming success of the NRETAS Waterwise rebate scheme, the program had run out of funds. This was mainly due to many people taking advantage of the rebate on water efficient washing machines and toilets. COOLmob has been informed that "NRETAS have received approved additional budget to continue the rebate scheme made affective immediately."

Customers who have made purchases since the middle of January can directly contact Tanya Howard at NRETAS (tanya.howard@nt.gov.au or 89519209), as they may be able to honour the rebate on a case-by-case basis.

UPCOMING CHANGES TO THE SCHEME

To keep you informed, the Scheme is currently under review for 2010/11. There are some changes that are likely to come into effect by 1st July 2010, this includes:

- Remove tap timers and hose trigger nozzles from the scheme
- Increase eligible washing machines to 4.5 star or higher WELS rating
- Addition of a rebate for specialist garden consultations on how to water gardens more efficiently

DesertSMART COOLmob have been actively encouraging the Minister for Environment (Karl Hampton) and NRETAS to put additional funding into this program for 2010. We are really pleased to see that our requests have been heard. The rebate scheme has a positive and direct impact on water efficiency and savings for the Alice Springs community. We encourage COOLmob members to make the most of it!

Regards

Roger Chapman and Robbie Henderson Project Managers, Desert Smart COOLmob Ph: (08) 8952 0299 Fax: (08) 8953 2988

http://dka.coolmob.org <http://dka.coolmob.org/>



Exhibition at Olive pink Botanic Gardens

Perceptions an exhibition by Ivan Kobiolke











Tuncks rd Alice Springs (p)08 8952 2154 (w)opbg.com.au (e)curator@opbg.com.au

opening friday march 19th Olive Pink Botanic Garden

Can you help the 'Kangaroo Sanctuary' Alice Springs

The 'baby kangaroo rescue centre' is currently building a wildlife park, with the goal of establishing a kangaroo education centre and hospital for Central Australia. The centre requires about 50 rolls of chainmesh valued at \$150 per 20metre roll. The centre is seeking sponsors (donations) of a roll of chainmesh for \$150, or spare fencing anyone wants to get rid of. All sponsors will get acknowledgment of their contribution in the visitor centre and receive 2years free entry for 2 people. Please donate to Chris 'Brolga' Barnes on 0407 718 409/brolga72@hotmail.com/PO Box 4921, Alice Springs NT 0871.

Calendar of Events

Sunday 4th April - Gardening Workshop with Geoff Miers: 'Planting Citrus with Confidence', 2pm – 3pm, \$10. To register call 8953 7477 (limited 20 places)

April 4 -17 - Milkwood Permaculture Course. Bookings/Info phone Kirsten (02) 6373 7763.

Friday 9th April - <u>EnvironmeNT Grants</u> – Expressions of Interest due. More info at <u>www.environmentgrants.nt.gov.au</u>

Wednesday 14th April – 'Waders, Flyways & Flagging'. Desert Park Zookeeper Peter Collins delivers a talk on migratory shorebirds. Filed Naturalist Club, Olive Pink Botanic Gardens, 7:30pm

Wednesday 12th May – 'Landscape Ecology in Antarctic Dry Valleys'. A talk by Ashley Sparrow of CSIRO. Field naturalists Club, Olive Pink Botanic Gardens, 7:30pm.

Take care Ilse & Bill



Garden for Wildlife Coordinators

Don't forget to check out the LfW & GfW website at www.lowecol.com.au, you can download membership application forms, newsletters, vegetation type species lists, and find out about upcoming workshops!

Low Ecological Services P/L
P.O. Box 3130, Alice Springs, N.T. 0871, Australia
ph (08) 89 555 222, Fax 08-89 555 722

Email: LFW@lowecol.com.au







