Hello All,

I have returned from the Simpson Desert to lights, cameras, action! I have fantastic news: the Garden for Wildlife program has won a Power & Water 2010 Melaleuca Community Award AND Land for Wildlife has been awarded a Melaleuca Environment Grant to support the Feral Spotted Turtle-dove Eradication program!! A big thankyou to Power and Water for recognising environmental excellence by hosting the Melaleuca Awards and for supporting the program over the years. Congratulations to all our GFW (and LFW members) for your conservation efforts and looking after your private little piece of Alice Springs. For more information on the Melaleuca Awards and winners go to: http://www.powerwater.com.au/environment/melaleuca_awards/previous_winners/.


Help show the rest of the country that big conservation efforts are being made in the NT!

Even more good news: Territory Eco-link, an NT Government initiative, has extended its support to the Land for Wildlife and Garden for Wildlife programs. As our programs (and your property!) contribute to the cross-continental conservation corridor planned by the initiative, Territory Eco-link...
has dedicated $30,000 a year to the program over a three-year period! For more information on Territory Eco-link see

Are strange things popping up in your yard with all this rain?! If you would like anything identified and explained send us a photo or give us a ring! We are always happy to help shed some light: ifw@lowecol.com.au/8955 5222.

Let me know if you would like to borrow a feral Spotted Turtle-dove trap and participate in some backyard trapping. With some recent trap construction, we now have five traps in circulation and the wait is not too long! 8955 5222/ifw@lowecol.com.au.

Pest Profile: Big-Headed Ants

Alternative Names: Coastal Brown Ant
Species: Pheidole megacephala
Origin: South Africa
Status: Big-Headed Ants are an invasive ant species in Alice Springs, and their activity may be on the increase after the recent rainfall. If you have a Big-Headed Ant infestation and would like more information on eradication techniques, please contact us.

Natural History: Big-Headed Ants like humidity, but will not tolerate heavy rainfall or waterlogged soils. When it rains ants will come indoors or nest up in trees. The Big-Headed Ant has four castes or body forms. The queen form is the egg-layer, and there may be many queens in a
nest. Grub-like larvae emerge from the eggs and are fed by the workers (the queen larvae are fed a special diet to ensure development). Once fully grown, larvae metamorphose, emerging as adults. Unfertilised eggs produce males and fertilised eggs produce females. Males are the second largest form to the queen and are elongated in shape. But the most numerous forms are the ‘workers’. Workers are sterile females and they care for the young, collect food, and build and defend the nest. There are two types of workers; the most numerous type has a small head, the less numerous type has a large head (hence the name Big-Headed Ant). Large headed forms defend the colony and are sometimes known as the ‘soldier caste’. Queens and males are rarely seen outside nest unless walking to a new nest site, not far from the original site.

**Impacts:** The Big-Headed Ant is spread mainly by human activity, for example transported in infested pot plants. Originally from South Africa, the Big-Headed Ant has spread to many tropical and temperate environments world-wide. A threat to biodiversity, the invasive ant dominates habitat, eliminating all native ant species from the area, as well as other insect species, spiders and centipedes, and changes vegetation. Big-Headed Ants impact on the ecological services that native ants supply such as soil aeration and seed dispersal. They are also a domestic nuisance, invading kitchens and bathrooms to feed on food scraps and fine layers of grease. Big-Headed Ant trails can cause cracks in brickwork and tiles, and once the ant is inside a house it can nest in light switches, computers and household appliances. Outside, the ant will nest at the base of trees and shrubs, disturbing the root system which can result in the plant’s death.

**Eradication:** Amdro® is the most effective ant bait against Big-Headed Ants and contains the slow-acting insecticide hydramethylnon. The ants carry the bait into the nest to feed the brood, which results in exterminating a large proportion of the colony. However, several treatments may be needed to eradicate the entire nest, with aim of killing the queen ants. Hydramethylnon breaks down in sunlight and is best applied in the afternoon or twilight. It is safe to use in gardens and around buildings, but must be used in accordance with the instructions on the manual.

**Photo left:** Big-headed ants are one of several invasive ant species in Hawaii (Hawaii has no native ants). They eat native plant seeds and kill native insects (for example Mulga seeds are stored in seedbanks of native ants). This photograph demonstrates how Big-Headed Ants can swarm over seabird chicks. They will attack chicks, eggs and webbing of bird’s feet. Photo credit: C. Vanderlip.

**References:** G. Young. 2000 , the coastal Brown or Big-headed Ant, NTgovt
Workshops

Free Land for Wildlife Workshop

SOIL EROSION & CONSERVATION
Come and learn how to identify, rehabilitate, and prevent soil erosion with Soil Conservation Officer Col Stanton.

Saturday 19th June
9:30am – 12

RSVP: Ilse on 8955 5222,
lfw@lowecol.com.au
The workshop will look at two sites. Meet at the cul de sac at the end of Lilliecrapp Rd., Ilparpa.

Letters to the Editor

This creature was dropped in to the Land for Wildlife office for identification. It is actually the moult of a freshwater invertebrate belonging to the Belostomatidae family.

Order: Hemiptera
Suborder: Heteroptera
Superfamily: Nepoidea
Family: Belostomatidae
Species: Lethocerus spp.

Not to be mistaken for a Water Scorpion - which is the common name given to the Nepidae family because of their raptorial forelegs and the presence of a long slender respiratory siphon at the posterior end of the abdomen, simulating a tail - the Belostomatidae, who do not have such a long siphon, are commonly called Giant Water Bugs. In A Field Guide to Insects in Australia by Paul Zborowski & Ross Storey this creature is given the common name of Fishkiller Bug! A popular food in Thailand, it is the largest bug in the Hemiptera order, occurring worldwide in freshwater streams and waterholes. The moult (photographed above) measured 7cm long, so the Giant Water Bug that emerged is now larger! This waterbug is a Lethocerus species, which are known to exceed 12cm.
Fierce predators, the Belostomatids stalk, capture and feed on aquatic crustaceans, fish and amphibians. They hunt by using an ambush or sit-and-wait approach, lying motionless at the bottom of the water, attached to various objects, until prey comes near enough to strike. They inject a powerful digestive saliva into their prey to enable liquefied remains to be sucked out. Their bite is considered to be painful; the longer the bug is allowed to inject its saliva, the worse the resulting bite.

Adults cannot breathe under water, and must surface periodically to stick their tails into the air which is siphoned with two short flat retractable respiratory filaments (as opposed to one long one in Water Scorpions). Adults have wings allowing them to migrate if water dries up or the wet season occurs, and will fly at night like many aquatic insects. They may be attracted to lights during the breeding season.

Interestingly, care of eggs is paternal, and in Lethocerinae sub-families eggs are laid on the male’s wings and he will carry them around on his back to keep them properly oxygenated. The male cannot mate during this period and so invests considerable energy and time in reproduction, whereas the female takes the role of actively finding mates.

There are all sorts of water bugs cruising in Alice Springs water holes. You may notice some in any buckets of water you have in your garden. Water bugs can be used as indicators of freshwater stream or water body health, as a method of biological monitoring. This method can provide a more comprehensive assessment of stream health than physio-chemical measurements alone as water bugs react to all different types of impact. A range of water bugs live in a healthy water body, and presence/absence of species and level of species richness will indicate if a water body is in near natural condition or impacted. For more information on water bugs visit some of the websites below:

Field Guide to Freshwater Invertebrates:
http://www.seanet.com/~leska/Online/Guide.html

Invertebrates in Arid NT Wetlands:

Australian River Assessment System (NRETAS):

Water Bugs & Water Scorpions, QLD Museum Learning:

The grasshoppers are finally abating and your gardens are getting a break from the munching, and hopefully will get some more rain! Young Wildlifer Elkin disturbs the masses from the Buffel grass along the Todd River last month.
Announcements

Garden for Wildlife Competition!
At the Melaleuca Awards Power & Water kindly gave us a free Level 1 Water Audit. We would like to give it to one of our Garden for Wildlife members, and so have designed a competition to win it!

Making Windows Safe for Birds Competition
This is a competition for the best ‘Bird-proofing of Windows’ idea.
Windows are a major contributor to bird deaths globally. Birds see only the tree reflected in a window, or the plant behind the window, not the glass itself. To stop these collisions we need to make glass visible to birds.
What are your tried and tested methods or your ideas? Email us with your favourite technique at lfw@lowecol.com.au to win a Power & Water Level 1 Water Audit.

Some websites for inspiration:
http://www.birdsandbuildings.org/problems.html
http://www.flap.org/new/prevent.htm

Power & Water Level 1 Water Audit is an evaluation of a site’s overall water consumption to determine whether water use is excessive or reasonable. The overview provided encourages water conservation and efficiency, and identifies water use and costs to enable control measures to be implemented and reviewed. Financial and environmental benefits are gained by using water efficiently, and the Water Audit will help to determine ways to reduce consumption and conserve our most important resource in a country suffering shortages.

Volunteers Needed!
Free entry to the Alice Springs Show will be awarded to anyone willing to help us for a couple of hours at this year’s Land for Wildlife/Garden for Wildlife stall at the Show! Our stall is shared with the Australian Plants Society in their gorgeous display garden, conveniently located next to the Alice Springs Pistol Club’s Donut stand! The event is always lots of fun, and great chance to share garden ideas, learn more about our local plants and show off our recent award winnings! We’d love to see you there. Contact Ilse/Bill on 8955 5222/lfw@lowecol.com.au.

Calendar of Events

Sat 19 June: Land for Wildlife EROSION & SOIL CONSERVATION Workshop, 9:30am – 12noon. FREE! Meet at the cul de sac at the end of Lillecrapp Rd. RSVP Ilse: 8955 5222 or lfw@lowecol.com.au

Sat 26 June: Greywater Reuse Workshop 2pm - 5pm. COOLmob present a hands on look at Greywater options for Alice Springs

Fri 2 – Sat 3 July: Alice Springs Show. Volunteers needed to assist manning the Land for Wildlife/Garden for Wildlife stall. Show entry paid in exchange for a couple of hours of stall minding fun! Contact Ilse/Bill on 8955 5222/lfw@lowecol.com.au
Tuesday 6 July: CoolMob Nappy Options and the Environment Workshop for parents interested in reducing the environmental impact of nappies and other baby products – what are the options? 6.30 pm – 8.00pm. RSVP to dka.coolmob@coolmob.org

Sun 11 July: Field Naturalists day walk on the southern side of Mt Gillen Range from Heavitree Gap. Contact Connie Spencer on 8952 4694 for further information.

Wed 14 July: Field Naturalists meeting. Speaker Ashley Sparrow presents “Landscape ecology in Antarctic dry valleys” 7.00pm at the Higher Education Building, CDU.

Sat 17 July: Field Naturalists Bird watching trip with Mark Carter to the vicinity of Kunoth Bore on the Tanami Road. Meet at 6.40 am sharp, at the end of Sargent Street on the North Stuart Highway. Contact Barb Gilfedder 89 555452 for more information.

Sat 11 September: DesertSmart EcoFair at Olive Pink Botanic Gardens.

Take care
Ilse & Bill

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!