

ANPSA WILDLIFE & NATIVE PLANTS

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STUDY GROUP

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Issue No. 67

Dear Members,

A variety of articles on flora and fauna are presented for your enjoyment and information. Happy Reading!

REGENT PARROT

from *Mallee Update Spring 2010 Vol.12 Iss.3*

Regent parrot surveys in the Murray mallee have just been undertaken, and form part of the recovery team effort to help save this from extinction. The surveys were completed by volunteers and the area was searched by means of canoe, boat and foot, recording all the nesting sites of these birds along the River Murray from the South Australian border all the way downstream to Swan Reach. At last count some 300 nesting sites were located.

One of the main problems these birds face is the loss of their breeding and feeding habitat. Illegal destruction, increased salinity and changes to water management practices are each having an effect on the River red gums where they breed. The loss of these trees means that there are less nesting hollows, which increases competition from other birds, such as the galah, rosella and sulphur crested cockatoo.

Past clearance of native mallee vegetation is another problem. Regent Parrots require sufficient areas of native vegetation to form and flight corridors, that connect their breeding sites to areas in which they feed.

Landholders can assist the return of native species such as the Regent Parrot, by revegetating some of their land or raceways between paddocks by planting corridors of native vegetation. Campers or boaties along the river should take extra care near any bird colonies, as these birds are quite timid and are easily frightened off by any disturbances.

DESERT PLANTS

from : *Hiddens,L. (2004). The Living Desert*

Wherever plants thrive, they are said to have adapted to the conditions present. Plants in the desert have adapted to the long, dry spells present. Some grasses and flowering plants only last one season, and have seeds with a tough coating, which then lie on top of the soil for many years, waiting until there is sufficient moisture for germination. When the rains come, the plants spring to life. The seed shoots, flowers bloom, and then die with new seeds being left behind. This cycle is what occurs with Sturt's desert pea and Sturt's desert rose. Both sprout after heavy rains. Sturt's desert rose seeds may survive for up to 10 years in drought, although the plant itself dies off until heavy rains fall.

Some desert plants simply stop growing if there is a drought. Others drop their leaves to reduce the amount of water needed. Some plants have shallow roots near the surface to catch rain, but they also have roots that reach down to the water table. Plants that seemingly look dead, often reshoot within hours of rain. Mulga trees have adapted to drought, with their narrow leaves which tend to point upwards. The

desert oak a case in point where the tap roots reach down many metres in search of water. The tree grows very slowly until the roots reach water. The leaves are tiny scales so that moisture is retained for as long as possible.

Spiky spinifex survives in arid country, growing in tough clumps in deep sand or rocky outcrop. The long strap-like leaves are flat at first. After the first dry season, the blades fold over to conserve moisture. They curl in and become quite spiky.

After rains, you may see flowers such as the bright purple Parakeelya which hugs the ground soaking up as much moisture as possible from the soil, to store in its leaves. The leaves become quite plump, however the flower usually only opens for a single day. The plant quickly produces seeds and then dies off.

NATURE'S STRANGE COMPANIONS

From: Earle, O.L. (1966) Strange Companions in Nature.

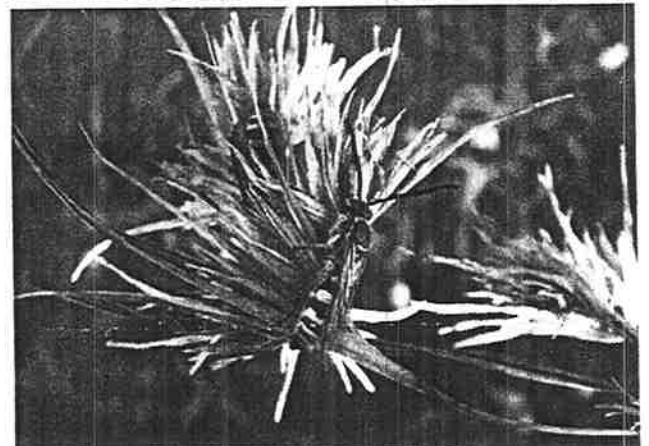
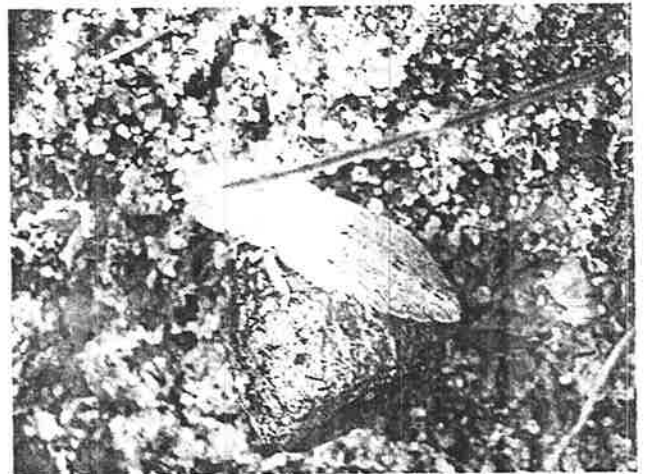
In the animal kingdom individuals frequently live together in a group comprised of their own kind. But some animals pair up with strange companions that often belong to a different division of either fauna or flora. As an example the mistletoe bird and the many different plant species which support them eg. Eucalypts and Amyema. These partnerships are termed symbiotic – and living things that are associated in this unusual way are called symbionts. If these partners share food, they are commensals, however not all relationships are positive to both partners. This often happens with nesting waterbirds who utilise an existing animal's home or burrow. The shelduck builds a nest lined with grass and downy feathers at the bottom of a burrow, and is often

unperturbed if the burrow is already being used.

'Another long known association is that which exists between two different kinds of insects- the ants and the aphids. These plant aphids feed by puncturing a tender growing tip of a plant and sucking sap. A horde of the feeding insects crowded tightly together, can injure the tip and cause it to wilt. The sap is not completely digested by the aphid and is excreted in a form of a sweet substance. The ants are attracted to this sweet 'honeydew' and collect it as well as the aphids, moving onto other plants spreading the sap sucking pests, ultimately injuring more plants. The ants are helpful though to the plants when they remove the sticky honeydew when leaf pores are clogged.' (Earle, 1966, pp. 59-60)

Mike Gemmell replied 'The first one is a Leaf Hopper (*Ledromorphs sp.*). They are reasonably common, usually found beneath loose bark during the day. They are a sap sucking bug.

The wasps are Hairy Flower Wasps (*Campsomeris sp.*) They may be resting in the Kangaroo grass, some wasps and native bees do this.



AUSTRALIAN NATIVE PLANTS
SOCIETY [AUSTRALIA] INC.

**WILDLIFE &
NATIVE PLANTS
STUDY GROUP**

ITEMS OF INTEREST FROM
ANPS PUBLICATIONS

FLYING FOX PROBLEMS

From an article in *Australian Plants* March 2009.

David Bidwell, Senior Arborist at The Royal Botanic Gardens in Sydney has attributed the loss of certain plant species in the gardens by the activities of flying foxes. The species identified are: *Agatha laurifolia*, *Agonis flexuosa*, *Aphananthe philippensis*, *Archontophoenix cunninghamiana*, *Arenga pinnata*, *Butia capitata*, *Cayota urens*, *Cedrela Mexicana*, *Chionanthus retusus*, *Diospyros digyna*, *Elaeocarpus kirtonii*, *Erythroxylum argentinum*, *Eucalyptus robusta*, *Hovenia dulcis*, *Howea forsteriana*, *Laurus nobilis*, *Livistonia australis*, *Magnolia liliiflora*, *Magnolia x soulangeana*, *Myrceugenia lanceolata*, *Myrrhinum atropurpureum*, *Planchonella australis*, *Polyscias elegans*, *Pyrus calleryana*, *Syrargrus romanzoffianum*, *Trithrinax*.

He also suggests that some plants are unlikely to recover if relocated. These are: *Agathis macrophylla*, *Davidsonia pruriens*, *Metasequoia glyptostroboides*, *Phoebe weinanmu*, *Podocarpus totara*, *Syzygium paniculatum*, *Tripterodendron filicifolia*, *Waterhousea floribunda*

Australian Native Plants Society

Visit the web at <http://asgap.org.au>

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DROUGHT SURVIVORS IN S.A. GARDENS

From an article by B. Bansemer in *APS S.A. Region Journal* Vol.20 No.7 August 2009

Species unaffected by the drought and hot weather, (several days of 40+ degrees C), and receiving approx. 2 litres of water per week include the following:

Acacia glaucoptera, *Acacia iteaphylla*, *Acacia victoriae*, *Banksia media*, *Callistemon 'King's Park Special'*, *Callistemon 'Little John'*, *Callistemon viminalis*, *Calothamnus species*, *Enchylaena tomentosa*, *Eremophila glabra*, *Eremophila maculata*, *Hakea petiolaris*, *Maireana brevifolia*, *Melaleuca armillaris dwarf*, *Melaleuca lanceolata*, *Rhagodia spinescens ssp. deltophylla*, *Senna artemisioides*, *Spyridium globulosom*, *Templetonia retusa*.

ED.NOTE – Plants that we found survived in the mallee in lengthy, hot, dry conditions on non wetting sands included the saltbushes – *Atriplex*, *Maireana* and *Enchylaena*, and a number of other natives such as the emu-bushes including *Eremophila* and *Myoporum* species, *Acacias rupicola*, *anceps*, *spinescens*, *macrocarpa* and *pycnantha*, *Grevillea lavandulacae* and *olivacea*, *Hakea muelleriana*, *Melaleuca acuminata* and *lanceolata*, *Senna artemisioides*, and *Bursaria spinosa*.

Understanding *Hibiscus Furcaria* In Australia

From Australian Plants Vol.24, No 197 pp.368-373.
article by G. Harvey, *Hibiscus & Related Genera* SG.

In Australia there are 28 named indigenous species of *Hibiscus Furcaria*, whilst there are more than 100 distributed around the world in many tropical and subtropical localities. The *Hibiscus section Furcaria* growing in the Australian eastern localities seawards of the Great Divide, exhibit all the desirable characteristics, which if combined could result in spectacular small plants for modern gardens. All endemic Australian species (54) have been studied.

Endemic to NSW and Queensland are:
Hibiscus heterophyllus, *H. splendens*, *H. divaricatus*, *H. saponarius*, *H. forsteri*

Hibiscus section Furcaria species occurring in Qld. And other Australian states and/or countries are:- *H. meraukensis*, *H. zonatus*, *H. diversifolius*, *H. radiatus*, *H. acetosella*, *H. sabdariffa*, *H. cannabinus*

Endemic *Hibiscus section Furcaria* species that occur in WA and NT include: *H. stewartii*, *H. reflexus*, *H. squarulosus*, *H. minutibracteolus*, *H. fryzellii* var. *fryzelli*, *H. superbus*, *H. aphelus*, *H. zonatus*, *H. kenneallyi*, *H. brynessii*, *H. marenitensis*, *H. inimicus*, *H. aneutha*, *H. symonii*, *H. riceae*, *H. petherickii*, *H. fallax*, *H. bacalusius*, *H. arnhemensis*, *H. thegaleus*, *H. menzeliae*.

Hibiscus section Furcaria species that occur in WA and/or NT as well as other Australian states and/or countries include *H. meraukensis*, *H. zonatus*, *H. sabdariffa*, *H. cannabinus*.

Hibiscus furcaria species from Tropical north Qld. include *H. heterophyllus*, *H. splendens*, *H. forsteri*, *H. splendens*, *H. divaricatus*, *H. meraukensis* (found off-shore islands of Qld, and the Gulf), *H. forsteri*, *H. zonatus*, *H. radiatus*, (often turns up in landfill, cultivation and disturbed sites); *H. diversifolius*, *H. acetosella* (considered African in origin).

Hibiscus section Furcaria from sub-tropical and temperate climates of Queensland and NSW includes: *Hibiscus heterophyllus*, *H. splendens*, *H. divaricatus*, *H. diversifolius*, *H. acetosella*, *H. radiatus*.

Conclusion: As can be seen the *Hibiscus Furcaria section* is well represented in Australia with a wealth of variation amongst the species. *Hibiscus heterophyllus*, *H. splendens*, and *H. divaricatus* will grow and reward gardeners in Sydney and Adelaide as well as protected sites in Melbourne.

Some *Malvaceae* Species Worth Cultivating

From Australian Plants Vol 24 pp.374-377 by G. Harvey, *Hibiscus & Related Genera* SG.

In the arid centre of Australia or near the high rainfall coastal localities, *Gossypium sturtianum* (Sturt's Desert Rose) may be worth growing. There are *Hibiscus* species that grow in the tropical evergreen vine and rain forests of far north Queensland. Until 2004 they were recognised as being representatives of *Macrostelia*, which were transferred to *Hibiscus* due to similarities in molecular structure. These are *Hibiscus macilwraithensis*, *H. propulsator* and *H. tozerensis*.

The so-called 'Bush Hibiscus' *Radyera farragei*, is represented in Australia by one species in the genus *Radyera*. Our Australian species extends from the semi-arid central Australia southwards into WA, SA, and Vic. As well as NSW. It forms a handsome bush with large floppy leaves and is a long lived perennial that makes an excellent garden plant. The flowers are a large trumpet-shape of deep lilac with a dark purple basal spot. These appear to adapt to southeast Qld. Conditions of high humidity and rainfall, flowering over a long period.

NEW PERSPECTIVES ON THE BIOLOGY OF SOUTHERN BELL FROGS

(ack. From a meeting of the FNSSA April 2010, guest speaker Prof. S. Donnellan, South Australian Museum.)

The Southern Bell frog, *Litoria raniformis* is threatened by a chytrid fungus and its effects. The frogs' distribution "occurs in New Zealand and in south-eastern Australia, where the largest numbers are in Victoria, Tasmania and in South Australia, where they are present in the South East, the Murray Valley and formerly on the Fleurieu Peninsula. Two separate genetic populations have been distinguished, one coastal and the other in the Murray Darling Basin. These differing forms may have developed when earlier climate variations changed vegetation patterns and water availability.

The chytrid fungus has two life stages – an intra-cellular sporangium and a free-swimming zoospore living in fresh flowing water. It infects the keratin tissue of amphibians such as the skin of adults and the mouthparts of tadpoles, but some species do not become infected and sensitivity to the fungus seems to vary with species. The proportion of deaths in an infected population can range from a few per cent to total eradication; there is no known treatment. It is possible that the fungus releases a toxin, as changes to the amphibian's skin occur; its respiration is affected and the ionic balance and thus the water uptake altered.

A 2008-9 survey for chytrid in the South East and the Murray Valley showed it to be present at a low incidence in both regions."



Many Australian frogs, this turtle frog for instance, can store water against drought

THE ECOLOGY OF THE GREATER BILBY

(ack. From a meeting of the FNSSA September 2010, guest speaker post graduate researcher K.Trengove.)

The Greater Bilby, *Macrotis lagotis* are now found in the northwest of inland Australia, with a few isolated populations elsewhere. Reintroductions have been attempted with varying success, including some in South Australia - Roxby Downs,(9), Venus Bay (Eyre Peninsula)(122) and Thistle Island (254).

One area of study focuses on the breeding system and whether genetic diversity is being maintained. This involves studying the mating pattern to discover the number of partners of males and females. Currently it appears that a particular female mates with only one male. Breeding, litter size, weights, and survival rates are part of the research.

A second area of study is the use and arrangement of burrows; including spacing and position, number of animals using the burrow and ratios of males to females and other facts need to be discovered.

COUNTRY WISDOM concerning weather

Home-style weather prognosticators use signs and adages handed down from one generation to another. (anon.)

- If Flowers stay open all night, the weather will be wet the next day.
- If cows lie down early in the morning, it will rain before night.
- Thunderstorms that come before seven in the morning in April and May foretell a wet summer.
- If the sun comes out while it is raining, it will rain the next day.
- When the needles of pine trees turn west there will be heavy snow.
- "The moon with a circle brings water in her back."

BIRD ID FOR BEGINNERS

Parrots, Cockatoos and Lorikeets – an overview

This is a group of birds that is often large - like cockatoos or galahs, often colourful - like parrots or galahs, and very often noisy - like lorikeets and, let's face it, galahs. (Certainly the galahs on our property won't let me walk in the vicinity of their trees without they have to tell the whole world about it.)

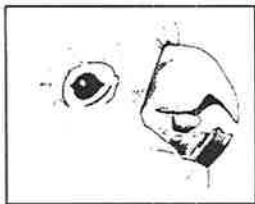
Some, however, are small, for example budgerigars and some of the lorikeets, and some of the parrots are quiet and elusive and subdued in colouring, as opposed to some of their rowdy and raucous and more obvious and well-known cousins.

Sometimes the word parrot is used as a general term to describe all of this group, which includes cockatoos, corellas, cockatiels, lorikeets, rosellas, budgerigars, and did I mention galahs? More commonly though, it is used to cover just a subset of the group, most of them fortunately called something-something parrot, but with rosellas included.

For identification purposes, it is easier to divide all of this group of birds into three sub-groups:

- Cockatoos - which includes anything called a cockatoo, plus the various corellas, galahs and cockatiels
- Lorikeets - all of which are helpfully called lorikeets
- Parrots – as mentioned, most of them are called parrots, but rosellas are also included here, as is the budgerigar

All of this group have a typical stubby, curved bill, with the upper part being larger and closing down over the lower part. It is designed for cracking nuts or hard-shelled fruit, although flowers, berries and insects are also eaten, and lorikeets eat pollen and nectar.



In this issue we will take an overview of Cockatoos, and cover Lorikeets and Parrots in later issues.

Cockatoos

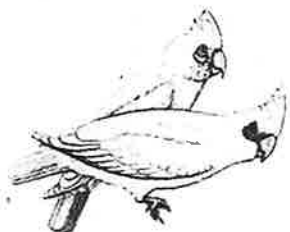
Cockatoos are generally galah size or larger. The ones you are most likely to see (apart from the galah of course) are:

- **Sulphur-crested Cockatoo**, which is becoming more and more common in urban areas. It is large and white, with a large yellow crest and yellow wash under the wings. Its bill and feet are black, and it emits an ear-splitting screech.



- **Corella** – a smaller white cockatoo with a small white crest and pale grey bill and feet. Generally it will be a Little Corella, except in the lower South-East where you might see a Long-billed Corella; but they are now uncommon there after significant loss of habitat. Little Corellas also have a

yellow underwing tint.



- **Yellow-tailed Black-Cockatoo** – the name says it all. Large and black with yellow patches in the tail and a yellow cheek patch. Can be seen in the eastern parts of Adelaide, and for some reason getting more common. We now see them often at Fullarton, with their slow, majestic wing-beats making their way towards the city in the morning, and towards the hills at night. Maybe they have joined the daily commute, but I understand that they feed on pines around the city.



On Kangaroo Island you might be lucky to see a Glossy Black-Cockatoo instead. These are getting quite uncommon due to loss of casuarina habitat. They have red in the tail instead of yellow, and no coloured ear patch.

As well as the more common species shown above, you may be lucky and see some of the less common ones:

- **Gang-gang Cockatoo**, generally only seen down in the Lower South East. They are dark grey and the males have a striking red head and wispy, fine-plumed crest. The females and immature birds have grey and red bars on the chest. Unlike most cockatoos, they are quiet birds and can be hard to spot when feeding in trees.



- **Cockatiel**, which looks like a parrot but is in fact a small, long tailed cockatoo. In fact, until recently they were classed with the parrots, but studies of anatomical, biochemical and behavioural similarities have led them to be classed with the cockatoos. They have a fine pointed crest which is



often erect. The male has a yellow face and crest which is greyer in the female. Both have the orange ear spot. When they fly, they show distinctive white wing panels. They are nomadic and follow the rains. If it is dry inland, they move towards the coast, and if it rains inland they will move there. I have only seen one in the wild once, on our mallee property.

- **Pink Cockatoo** – one of the most beautiful birds in the known universe, at least in my opinion. The plumage is delicate tints of pink and white, with a display of bright crimson and yellow when the crest is raised. When in flight or on landing, shows a deeper pink underwing. Never far from water. Also known as the Major Mitchell's Cockatoo.



Images and reference: *Field guide to birds of Australia*, by Michael Morcombe, published by Steve Parish, 2000. (A great field guide.) Illustration of bill from: *Bird watching in Australia*, by Ted Schurmann, Rigby, 1977.

THE DESERT COUNTRY

(ack. Hiddens, L. (2000) *The Living Desert*)

Much of Australia is classed as desert country. What do we understand about deserts?

We all know that Australia is the second driest continent in the world, with the land being either arid or semi-arid. A desert is an area that receives very low or erratic, unreliable rainfall with a high rate of evaporation.

Many people think 'sand' when 'deserts' are mentioned, but this is not the case. The sandy deserts are often ochre in colour, and contain some native plants, which prevents sand drift. Some of the sandy desert may be red where the earth contains iron oxide, and yet other deserts there is little plant life and the wind blows sand to create dunes. There are also rocky and stony deserts and mountain deserts.

Deserts experience extreme temperatures. In summer the average scorching temperature may be 37-39 degrees C, but parts can reach 50 degrees C or more in the daytime. Night temperatures can drop below zero.

Deserts weren't always that way. Scientists have determined that many areas were once rainforest. A desert oasis like Palm Valley in the heart of the Red Centre is testament to this. A sheltered area where there is water and signs of lush vegetation – a very special refuge containing 3000 rare red cabbage palms that don't grow anywhere else in the world, and where the nearest related palms are 1000 km. north near Mataranka.

The whole of inland Australia could be classed as a desert of one type or another.

Large areas of Outback Australia are covered by spinifex which has deep roots, and can survive tremendous heat and drought. Its prickliness is an adaptation for survival in an otherwise hostile land.

Another type of desert is the 'gibber' desert - an Aboriginal word meaning 'stones'. Beneath the small stones are hard, compacted clay which supports a few plants and animals.

Plants and animals have adapted to these conditions in order to survive.

SEED HUNTERS AND BACKYARD BOTANIC BRILLIANCE (ack. DENR, *Landscapes*, 2011)

2010 was a fabulous season for rare and native seed collection, thanks to heavy rains in the Cooper Basin; a geological site stretching from the State's north east to Queensland. The Botanic Gardens of Adelaide staff report the collection of some seeds not recorded since the 1950s. Rare outback plants including the Ackaringa daisy [endangered] and a 'hairy pussytail' which had never before been recorded in the region. The season also provided an opportunity to survey many species of flora that would otherwise have been undetectable and to collect useful data about species diversity and abundance. In the past eight years more than 175 million seeds from more than 1,400 South Australian native plants have been collected and stored at the Botanic Gardens, including 50% of the State's threatened plant species. Promoting Australian native plants and projects such as this has led to the Adelaide Botanic Gardens gaining accreditation by the American Association of Museums – the first Gardens outside of the United States to achieve this. The Adelaide Botanic Gardens prized gardens

BIRD ID FOR BEGINNERS

joined the ranks of the most famous institutions in the US including the New York Botanic Gardens, Los Angeles Zoo and Botanic Gardens, and the Harvard Art Museum. The accreditation recognises the Gardens as an internationally-reputable scientific, conservation, education, and collections-based institution.

From our gardens to yours

Another way the Gardens have been working is through the Native Garden Initiative. Launched late 2009 this initiative has promoted the benefits of native plants for South Australian parks and gardens. Today there is an increased awareness in the community about the benefits of resilient, water-efficient and non-invasive plants.

The opening of the Australian Native Garden in the Adelaide Botanic Gardens and a number of events, like the spectacular Native Garden Trail, and the 'Birds, Bugs and Banksias' family fun day, have promoted and celebrated our landscapes, plants and animals; and in caring for our precious resources and the web of life.

ANPSA CONFERENCE 2011

"Australian Plants in a Wondrous Web"

Planning is well underway for this event which is to be held from 2 to 7 October, 2011 in South Australia.

Brown Falcon, Kestrel and Black-shouldered Kite
Even after nearly 30 years of bird watching, I still struggle with raptors, that is hawks, eagles, falcons, kites, harriers and such like birds of prey. However, these three are the smallest birds of prey you are likely see, and for some reason, possibly because they are commonly seen, or because you tend to see them more closely, I have found them easy to identify. I suspect, however, that it's just because they are small enough to be obviously not one of the bigger ones. From there, having said to yourself "one of the three small ones" they are then relatively easy to tell apart.

Black-shouldered Kite 33-37cm.

This handsome little bird looks very neat in the field in black and white, and as such is easy to distinguish from the other two. They are often seen along roadsides, either perched in trees or hovering over paddocks. I often see them when I look out of the car window as a passenger. They have a close cousin, the Letter-winged Kite, very similar in appearance except for a black pattern under the wings, where the Black-shouldered Kite has only dark patches at the wingtips. The Black-shouldered is far more common, and the Letter-winged Kite is rarely seen in southern SA.



Nankeen Kestrel 30-35cm.

This is the smallest of the Australian raptors. It is slightly smaller than the Black-shouldered Kite and has narrower wings and a long, rounded tail. It has distinctive rufous upper parts and pale underparts, black wing-tips and a band near the tip of the tail. A distinguishing feature through binoculars is the single black teardrop under its eye. A Brown Falcon has two teardrops.



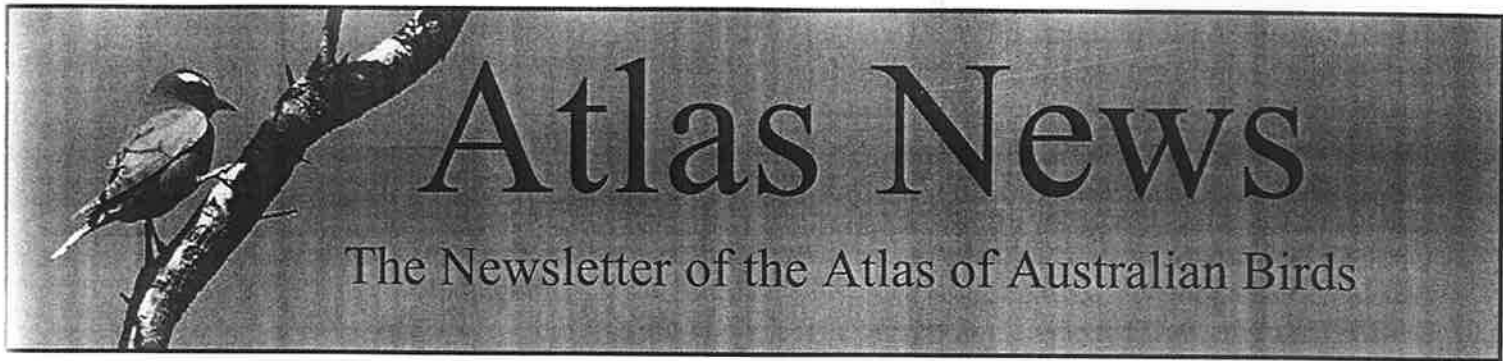
The Kestrel is a common sight along roadways, perched on fences or power poles, or hovering in one spot over paddocks. It is perhaps the most commonly seen raptor. The name Nankeen is a reference to its colour. They hunt by hovering over their prey flapping their wings, then dive down to snatch it.

Brown Falcon 40-50cm

This bird, which is one of Australia's most common birds of prey, is a little larger than the previous two. Its colour varies from rufous to near black. For me, its distinguishing feature is the two teardrops on its face with the pale area in between, but you usually need binoculars to see this. In flight, it shows a heavily barred underwing pattern. It feeds mostly on the ground, and likes roadside perches which give it a good view of any prey scuttling across the road. Its voice is a loud, raucous cackling, somewhat like a laying hen but louder and harsher.



Reference and images from *Field guide to birds of Australia*, by Michael Morcombe, published by Steve Parish, 2000



Atlas News

The Newsletter of the Atlas of Australian Birds



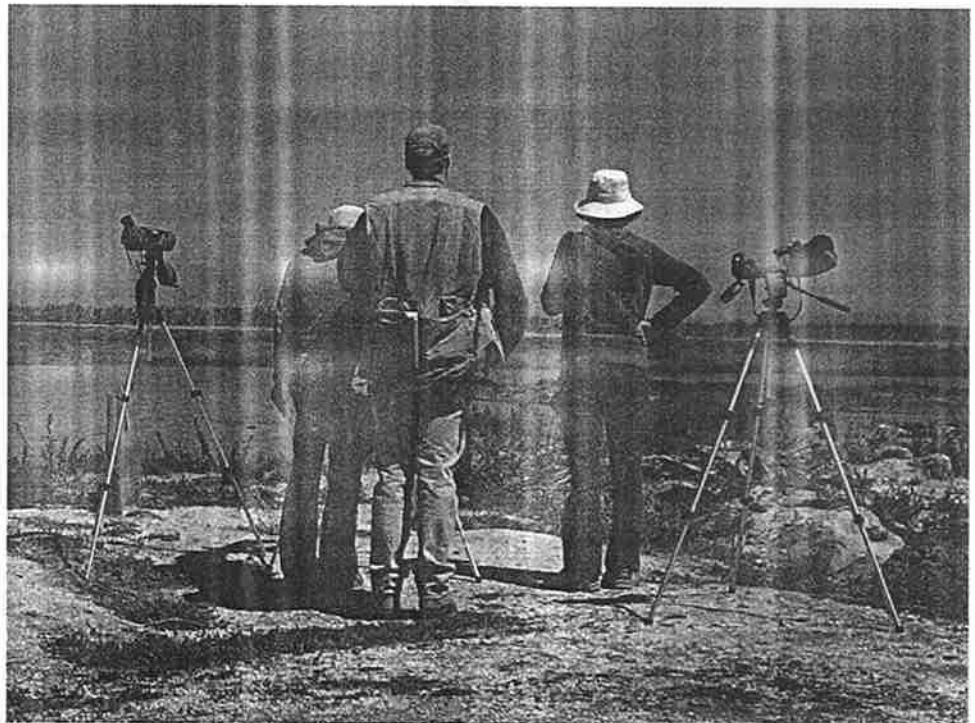
Issue 14

December 2010

WHERE HAVE THEY GONE?

Many of the Atlassers wandering around the countryside in eastern Australia are wondering what has happened to all the birds. The answer is that, for many, the long and crippling drought has ended and birds have reacted in different ways.

For instance, it is difficult to find many waterbirds in some parts of Australia at the moment. When it began to rain in eastern and central Australia earlier in the year, filling rivers, lakes and swamps from Alice Springs to Zeerust, many waterbirds vacated the few wetlands which had served as drought refuges, and took up residence in the many (now inundated) ephemeral wetlands which are spread over an extensive area, including the inland.



As an example, at a wetland where hundreds of Eurasian Coots were counted in June 2009, only 18 were recorded in a recent survey. They have presumably dispersed after the wetlands filled. The same story is true of many waterbirds. Spare a thought for those people trying to pin-point the whereabouts of the Australian Painted Snipe this year — potential habitat seems to be almost everywhere. (Continued overleaf...)

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(From page 1) As if to illustrate that Australia is truly a land “of drought and flooding rains”, the situation is entirely different in Western Australia, where drought has dried so many of the lakes and swamps that waterbirds have been forced to congregate in large numbers at the few wetlands where some water remains. To complicate matters, unusual dry-season rains have filled the Kimberley’s wetlands at a time when they are usually parched, which may have given some of the more mobile waterbirds from the South West somewhere to go for a little relief. Hopefully the drought in the South West will not persist for as long as the one in the east did.



What about the bush birds? During the drought in eastern Australia, some birds more readily associated with northern climes became regular fixtures in southern Australia. A great example of this was the Scarlet Honeyeater. During the summer months the range of this species usually extends throughout the forests of the east coast as far south as East Gippsland, in the eastern corner of Victoria, with a brave few venturing further west to the hills east and north of Melbourne. However, the species was recorded at many sites around suburban Melbourne throughout much of 2010, with birds being recorded well into winter. Nevertheless, since the recent rains, sightings of the species have become as rare as hen’s teeth again.



Similarly, all sorts of unusual birds that normally inhabit the inland were turning up much nearer the coast. At this time last year, the crisp grasslands were full of displaying Brown Songlarks; this year the grasslands are lush, and the Songlarks are few and far between.

In many places, some of the smaller resident species (which, unlike the Scarlet Honeyeater, have been unable to flee the drought conditions) have become far less common, and at some sites, they have become locally extinct, with little prospect of recolonisation from other areas. In places where they have been able to hang on, it will probably take years for their populations to recover to pre-drought levels, despite the replenishing rains.



In the west, the smaller species will probably continue to decline until after the drought breaks. At least Western Australian birdwatchers can look forward to being treated to the arrival of some unusual vagrant species, displaced by the big dry. In the past, a number of species have been able to expand their ranges during periods of drought, only to stay there after the drought broke. Crested Pigeons are a classic example of this: formerly confined to the inland, they colonised Adelaide during a drought in the 1920s, and are now resident there; similarly, Galahs ventured into coastal south-eastern Australia during a drought in the 1950s, where they astounded local birdwatchers, but now they are a common feature of urban and suburban birdlife in Sydney and Melbourne.



Thank goodness for the Atlas. By compiling the data from the many thousands of surveys conducted in recent years, researchers will soon be able to understand many species’ responses to changing climatic conditions, helping us to understand their movements and strategies for survival. Every survey adds to the overall picture.