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# Alice Springs Field Naturalists Club 2008

Welcome back! Happy New Year! Hope that summer has not been too hot for you all and that you have all survived the silly season.

Most of you will be receiving this newsletter by email, so I'm hoping that you are able to read it. Ed.

### **MEETINGS**

**7.30 pm** on the second Wednesday of the month. **Venue**: Olive Pink Botanic Garden, Tuncks Road

**Feb 13 Feb.** Speaker Chris Palmer on things entomological.

# TRIPS / ACTIVITIES

**Sat 16 Feb.** Visit to Intertexta Forest at Ilparpa. Meet at car park opposite Old Timers Nursing Home at 6.30 am. Contact Connie Spencer on 8952 4694.

**Sat 1 March.** Visit to Ian Archibald's museum 'Workshop of delights' behind the Aviation Museum, Araluen Precinct. Meet at 9am. Contact Bob Read on 8952 1935

**Sun 2 March.** Bird watching at the Alice Springs Sewage Ponds. Meet at the gate to the ponds at the southern end of the turnoff from Commonage Road. Contact Liz Carpenter 8953 6750.

**Sat 15 March** Trip to Mounds Springs in Ormiston Gorge, Glen Helen and 2 Mile Waterhole. Meet at Flynn's Monument 7am. Contact Bob Read 8952 1935

#### TRIP REPORT

#### ALICE SPRINGS SEWAGE PONDS

Sunday 2<sup>nd</sup> December 2007 By Liz Carpenter

#### **BIRD LIST**

Numbering System as used by BirdsSA

A 1-3

B 4-10

C 11-30

D 31-100

E 101-300

D Hoary-headed Grebe

B Australasian Grebe

A White-faced Heron

B Straw-necked Ibis

A Yellow-billed Spoonbill Pacific Black Duck Grey Teal

D Pink-eared Duck Hardhead

B Australian Wood Duck

A Whistling Kite

B Black Kite

A Black Falcon

C Black-tailed Native Hen

D Eurasian Coot

C Masked Lapwing

C Red-Kneed Dotterel

B Red-capped Plover

C Black-fronted Dotterel

D Black-winged Stilt

D-E Red-necked Avocet

C Wood Sandpiper

A Common Sandpiper

A Sharp-tailed Sandpiper

B Common Greenshank

A Marsh Sandpiper

A Bar-tailed Godwit

A White-winged Black Tern

A Crested Pigeon

B Little Corella

A Long-billed Corella

D Fairy and Tree Martin

B Richard's Pipit

A Willy Wagtail

A Magpie Lark

C Torresian Crow

# **ANNOUNCEMENT**

Eric Tan's website is up and running again with wonderful bird photos. Eric is soon off to Christmas Island so watch out for CI birds.

www.mountainsbeyond.org

Copy deadline for articles for the next newsletter.

Friday 29 February 2008

#### **GRASSHOPPERS AND LOCUSTS**

## Presentation by Bob Read at November 14 2007 Meeting

By Jenny Purdie

# **Grasshoppers** belong to the **Superfamily Acridoidea** which has the following characteristics:

- Large hind legs for jumping
- Adults are usually winged
- · Forewings are narrow and leathery
- Like all of Caelifera are they are plant eaters
- Relatively short antennae distinguish them from the katydids and crickets
- · Sexes are often differently marked. The males are smaller

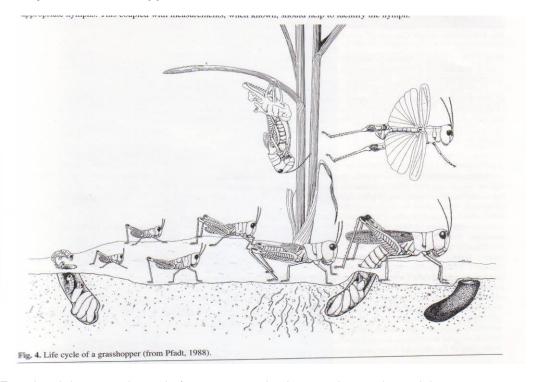
### Family Eumastacidae Matchstick Grasshoppers

- Thin bodies
- Wingless
- Male is far smaller than the female
- There are about 300 species in Australia
- Can only be distinguished by experts using a dissecting microscope

#### Locusts

- Locusts are grasshoppers that have both solitary and gregarious phases.
- They may form dense destructive swarms in the gregarious phase

### Life Cycle of a Grasshopper



Eggs hatch into nymphs and after 5 or 6 moults the nymphs turn into adults

### **Nymphs**

- · Generally softer in appearance
- Small or no wings (adults of some species are flightless)
- May not look much like the adults of the same species
- Nymphal stages have been related to the adults by captive rearing for some species

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#### **Family Pyrgomorphidae**

- A small family
- Monisteria pustulifera, Blistered Pyrgomorph os one of only two species in the Center
- Two forms, short-winged flightless and fully winged
- Feed on Eremophila spp. the toxins of which make the grasshopper unpalatable to birds



Monisteria pustulifera, Blistered Pyrgomorph

### **Family Acrididae**

- A large family that contains most of the world's grasshoppers
- The largest subfamily is Catantopinae (Spur throats) comprises approximately 90% of Acrididae
  - Characterised by spine on the throat
  - About 700 species
  - 2 tribes
  - The larger tribe Catantopini has 22 subtribes
  - No key exists. Identification is a matter of recognising groups by experience
  - One species is *Austracis guttulosa*, Spur-throated Plague Locust, a large, common and conspicuous grasshopper, sometimes in near plague proportions around Alice and one of the
  - four most economically damaging species



Austracis guttulosa, Spur-throated Plague Locust.



Urnisa guttulosa, Common Urnisa

- Other Australian subfamilies are
  - o Acridinae not many species, but they can be quite numerous eg *Acrida conica*, Giant Green Slantface, which is common in grassy areas, especially if disturbed with European grasses
  - Oedipodini not many species but is important eg Chortoicetes terminifera, Australian Plague Locust, Australia's most economically damaging species
  - o Oxyinae moisture loving grasshoppers, none known from central Australia



Acrida conica



Chortoicetes terminifera, Australian Plague Locust

# Why Study Grasshoppers?

- Reasonable guide available
- Identification possible for an amateur
- Reasonable numbers in the Centre, 100 to 200 species? (c.f. butterflies, not so many species in the Centre).
- Less well known than some other groups
- Grasshoppers are a group where amateurs can make a useful contribution.
- There is a lot to learn about species distribution in time and space.
- For a lot of species food plants are unknown.
- New species are still to be found.

# Comparison between Birds, Vascular Plants and Grasshoppers

	Birds	Vascular Plants	Grasshoppers
No. Australian species	800	15 650	~700
No. not formally described	None	A few	About half
Chance of new species	Only by splitting known species, or vagrants from outside Australia	Many still to be found, but mostly in remote areas	Many still to be found, could be on your doorstep.
Knowledge of distribution	Good, thanks to two Bird Atlasses and numerous observers, a few mysteries	Fairly good	Fuzzy. Relatively few observers, hard to identify. Rentz et al. show some distribution maps that seem quite unlikely