Ant Trails – a guide to native ant nests commonly seen in Alice Springs backyards

(based on ant nests found along the paths to the south-east of the visitor centre at the Olive Pink Botanic Gardens, Tuncks Rd, Alice Springs.)

1) *Campanotus* species (sugar ant) nest
(on path heading south-east from visitor centre in clump of Sennas near southern wall)

This species of sugar ants build relatively large (~20 – 40 cm diameter) tidy nests with a raised mound with a straight or vee-shaped slit entrance in the middle of the mound. This is one of the largest and most diverse groups of ants, with 128 species or subspecies present in Australia. Species in this genus (a group of related species) can vary greatly in size - some honey ants are also in this genus. *Campanotus* are general scavengers or predators and can also feed on plant nectar or honeydew from aphids that they farm. Some species are daytime foragers while others are nocturnal.

2) *Drepanotermes* species mound
Nb this is a termite nest. Despite the common name of white ant, termites are not closely related to ants
(on same path past turnoff to waterhole, opposite large hop-bush shrub)

These harvester termites come out on humid mornings and cut sections of grass to carry back down into their nest larders. This is a typical *Drypanotermes* mound, and these are long-lasting structures that are constantly being repaired and built on to by termites. There are many different species of *Drypanotermes* in Central Australia, each living in slightly different habitats.

3) *Iridomyrmex* species (common black ant, or meat ant group) nest
(on same path below deadfinish shrub opposite *Acacia cowleana*)

This species of *Iridomyrmex* builds nests that have a small (~ 3-5 cm diameter) barely raised mound with a small central round entrance hole. The nests are typically clustered with another nest 1m away, and there are generally a number of ant highways radiating out from each nest. This is another large group of ants with around 63 species or subspecies in Australia, most have a similar body shape and vary mainly in size. This genus of ants can be quite aggressive and reduce the diversity of other ant species in an area. They are general scavengers, but are also important seed foragers – collecting many seeds for the oily elaiosome structure plants make as a reward to insect harvesters who aid seed dispersal and germination. Ants in this genus also farm aphids for their sugary secretions collected from plant sap. You may notice a lot of these ants in the deadfinish bush where they are probably feeding on nectar secreted from the nectaries found at the base of the leaf like structures (phyllodes) in wattles. *Iridomyrmex* species are common in disturbed areas.

4) Ant lion traps – Ant lions belong to the family Myrmeleontidae
(on same path near native grass sign)

These small (3 cm diameter) funnel shaped holes are the hunting traps of ant lions – larval stages of lacewings. Ant lions hide just below the surface in the centre of the pit and wait until an insect falls into the trap, then grab the victim in their large jaws and devour them. Ants are the most common prey item for ant lions.

5) *Melophorus* species (desert ant) nest
(on same path in small creek on south side of the first bridge)

This species of desert ants builds asymmetrical nests with a raised mound and relatively large entrance hole/s offset to one side of the mound. *Melophorus* are hot temperature specialists, and are the most diverse group of ants in arid Australia. Typically these ants are orange coloured at least on part of their body, and they are fast moving, often darting in and out of their nests bringing out small stones as they enlarge their underground living areas. They are omnivorous and include seeds and nectar in their diet.

6) *Polyrachis* species (many-spined ant)
(about 20 m past bridge, just beyond the Undoolya wattle grove amongst rocks)

This distinctive species has a furry golden gaster (last segment of the body in ants) and is one of 115 species or subspecies of *Polyrachis* in Australia. Many of the desert species are nocturnal, and their nests are fairly indistinct and often occur under rocks or logs. The exception is the mulga ant, which builds a very beautiful mound which it decorates with seed pods and petals. The ants in this genus are omnivorous, and also collect nectar.

7) *Melophorus* species (desert ant) nest
(just beyond 7, on the path itself)

This is a different species to 5), and has two different sized workers. Watch for the classic behaviour of this genus – darting in and out of the nest entrance.

[Turn into riverbed track just beyond the rock jutting out in the bend in the path]

8) Old *Campanotus* nest by *Eucalyptus lucens*
See how this nest has been taken over by a central netted dragon, which can be seen basking outside its burrow entrance on warm days

[at the red laterite patch turn right over the bridge heading back to the gazebo]

9) *Rhytidoponera* species (armoured ant) nest
(on left-hand side of path about 8m past bridge)

The messy nest with multiple entrances, and often with grass growing on the mound is typical of this group of ants. This is one of the stinging ants, and is a general predator or scavenger, though some species also feed on honeydew. There are generally no queens in this group of ants, instead fertilized workers produce eggs. Several of the 76 Australian species are abundant in urban areas.

10) *Myrmecia* species (inch ant) nest
(on southeastern side of the gazebo by the mulga woodland sign)

The nest of this species is typically quite large with multiple entrances and a large mound. The nests are generally found in shady moist places. There are two species in Central Australia, and 89 species or subspecies Australia-wide. These ants have a very painful sting – usually used to immobilize prey which they hunt using their strong jaws.