

Ron Johnstone – Ornithologist WA Museum
At Peel Preservation Group Annual General Meeting 12th November 2011-11-14

Ron Johnstone opened his address by explaining that he has worked at the museum for almost 40 years (he doesn't really look old enough!) and as well as being Curator of Ornithology he also covers Terrestrial Zoology so he works with birds, snakes and frogs.

Today he spoke about the Black Cockatoos, remarking that Australia is known as the "Land of Cockatoos". Baudin's and Carnaby's Cockatoos are classified as "Endangered" and Forest Red-tailed Black cockatoos are "Vulnerable" – though Ron feels the latter are scarcer in the South West than that classification infers. The southwest is one of 20 Biodiversity Hotspots in the world. Although forest expand and contract, there has been huge areas of clearing especially inland in Mallee woodlands, but nowhere is unaffected. Habitat loss is one of the major threats to our cockatoos.

Ron explained the main differences between the two white-tailed species. Carnaby's have a short thick bill and Bawdin's longer and narrower. The calls also vary.

Carnaby's cockatoos breed more in the inland areas and then migrate to the coast, covering a range of up to 160 km, as proven by tagging and tracking. Their food sources include native trees, Banksia and pine cones. With a shortage of suitable nesting trees, they will use Jarrah, Marri or Tuarts with suitable hollows. Whilst breeding and the first week after the single chick hatches (when they are most vulnerable) the female stays in the nest and the male forages for her. He needs a reliable food source no more than 7-12 km away to be able to keep himself, the female and then the chick fed. After a week both parents will leave for the day to feed and return at dusk to feed the chick.

As a matter of interest, all cockatoos are left handed – or should we say left footed – holding food with the left foot. Each chick also recognises its own parent's call. Cockatoos breed from about 4 years of age.

Bawdin's cockatoos range over different areas though there is some overlapping. They spend winter on the Darling Scarp and breed in the southwest, including some coastal areas eg in our region. There have been sightings of up to a thousand roosting birds but numbers are greatly reduced this year.

The forest Red-tailed cockatoos are distributed over a smaller area, though some are now foraging in coastal areas and finding new food sources such as Cape Lilac berries. [This behaviour has been noted here in Mandurah by PPG members]. They are searching for water further afield eg towards the east around Brookton.

Cockatoo nests can be over 30m high and almost 2m deep into a hollow, which makes it very difficult for the team to extract and monitor chicks. Apparently the method used involves a long pole a lasso lots of dexterity and patience. Approximately 600 nest trees are monitored.

Ancient Marris are favoured nest trees. 95 of 128 trees in one block being monitored are Marri. Good nesting trees are becoming scarce, many being over 200 years old to become "stag" trees with suitable hollows. In many areas there is only one suitable tree in about 6ha of area. It is a serious problem when fire destroys these trees. Some cockatoos will use nests used by others.

Some food sources are suitable to all cockatoos but species do have favourites. Banksia trees are important to Baudin's who feed on the nut and search for grubs in the trunks. They also favour Marri (using their long bill to extract the seeds from within the nuts), Dryanda, grubs and nectar. They also like apples and other fruit, often leaving deep scores in the fruit and making themselves unpopular with orchardists. Red-tails mainly feed on Jarrah and Marri (they chew the end of gum nuts) but are also choosing Cape Lilac. Barnaby's favour Hakea, Grevillia, pines and will eat grubs and nectar.

The main threats to the cockatoo species include destruction of habitat; competition from "super abundant" species (Galahs can "kick out" a cockatoo chick to take over the nest) and feral bees; fire; climate change producing water shortages; being struck by vehicles and poachers.

Marris are in decline especially in the east because of a canker disease and increasing salinity. It is really vital to preserve veteran and stag trees which are upward of 200 to 230 years old. Dead trees provide good hollows and it also of interest to note that dead trees are an important habitat for geckoes.

The "Cockatoo Care" Program was instigated by Water Corporation and continued by the Museum. There is lots of information on the website <http://www.museum.wa.gov.au/explore/online-exhibitions/cockatoo-care>, including information sheets in several languages for overseas visitors. You can also download a "Frequent Sighting Form" from the site.

Among newer innovations are the artificial "Cockatubes" made of 30cm diameter, 800cm to 1m long PVC placed vertically with top entry, a ladder and a piece of timber for the bird to chew. Some are being used and may prove vital in the wheatbelt where trees are being lost at an alarming rate. They can cost upward of \$450 each.

To help protect the cockatoo species we need more surveys; studies of food sources; better land use planning; funding to monitor hollows and document suitable trees. It is very important that bird friendly trees are planted in public and private gardens as well as public open spaces.

Ron ended his presentation by answering questions and asking people to keep records of cockatoo sightings in our area to help build up the data base about these important and endangered birds.