Corella Studies

by Graeme Smith C.S.I.R.O.

There are two forms of corella in the south-west of Western Australia; the Long-billed Corella *(Cacatua pastinator pastinator)* **and the Little Corella** *(Cacatua pastinator gymnopis).*

The two forms of sub-species were formerly thought to be separate species, but recent work by the CSIRO Division of Wildlife Research has shown they belong to the same species. In the past they probably formed one continuous population ranging from the south-west corner of the state to the Pilbara. The size of the birds, especially the length of the bill, decreased from south to north. The population was subsequently divided, the present evidence suggests that the Little Corellas found south of the Pilbara are descended from birds that moved south from that region.

There are two populations of the Long-billed Corella, one in the Lake Muir-Boyup Brook area which has a population of about 1000 birds. The other population which has about 5000 birds is in the area bounded by Geraldton, Morawa, Mukinbudin, Northam and Jurien.

In the last century the Little Corella was not found south of the Murchison River, but by the 1950s it was found to be moving south and today its range overlaps that of the Long-billed Corella, the southern limits are Coorow, Burakin and Goodlands.

Corellas are noisy, sociable birds, forming flocks of 20 to 100 birds which are widely dispersed because of the patchy distribution of suitable habitat in most parts of their range. In summer flocks from a number of areas join together in a traditional area to form flocks of up to 2000 birds. For example, the flock at Dalwallinu may have up to 800 birds

▼ A flock of Little Corellas take flight. (Photo copyright A.G.Wells.)

▲ A research officer records technical data of a young Long-billed Corella. (Photo P.Roberts.)

C.S.I.R.O. officers Les Moore ▶ and C.P.de Riberia inspect a Long-billed Corella nest hollow in a large Salmon Gum in the Wheatbelt. (Photo P.Roberts.)

which come from areas as far apart as Goodlands, Burakin and Booralaming. At the end of summer the birds begin to move back to their breeding areas, leaving a mobile flock of immature birds. Here, the birds feed in a flock, with the breeding birds making short visits to their nest hollow. By the start of egg laying the breeding birds are spending all their time in the vicinity of the nest tree, while the immature birds move around the area as a single flock.

The one to four eggs (av. 3) are laid in a hollow branch of a tree in August and September and the chicks are hatched 23 to 26 days later. Both parents share in incubating the eggs and feeding the chicks. Pairs usually feed within a kilometre of their nest, usually with neighbouring pairs. They eat a

▲ Long-billed Corella. (Aviary photograph copyright A.G.Wells.)

variety of seeds, bulbs and insects which they glean from the surface or dig up with their long bills. Wheat (in the wheatbelt) is the main item in their diet, but weeds such as double gee (*Emex australis*), Guilford grass (*Romulea rosea*), and *Erodium* spp are also important items. The young birds leave the nest at about 60 days old - they are competent fliers but their first flight usually ends with them crash landing into the canopy of a tree. It is some months before they have perfected the art of landing. For the first week after leaving the nest the young birds sit quietly in a tree being fed by their parents. After this period they spend an increasing amount of time with their parents, learning to feed. At this stage all the adults and their young, plus the immature birds congregate in one area for two to three weeks prior to leaving for the summer feeding area. During the summer the adults and their young continue to stay together while the parents gradually wean their young. This process is completed when the adults and young go their separate ways at the end of summer.

Young birds stay with the immature flock until they start breeding at three to five years. Pairs usually stay together, but divorce is not uncommon and some pairs may swap partners.

The biology of the Little Corella has not been studied in detail, however it would appear to be similar to that of the Long-billed Corella.

In early days of the colony the Long-billed Corella was a serious pest to farmers and was poisoned in large numbers. The population was reduced to a small flock near Lake Muir and a population between the coast and a line from Mullewa to Moora. The development of large scale farming, with the provision of permanent water and abundant food has allowed the Long-billed Corella to expand its distributin, although the increase in the population has been limited by the large-scale felling of the nest trees such as the Salmon gum and Wandoo.

At the present there is little or no regeneration of Salmon gums or other trees that provide suitable nest sites in the wheatbelt. This fact, together with the apparent increasing mortality of trees in the wheatbelt, presents a serious threat to the corella and all animals that use hollows in trees for shelter and breeding.

Note: The C.S.I.R.O. Corella studies in the wheatbelt have been aided on many occasions by the Wongan Hills District Wildlife Officer, Phil Roberts. W.O. Roberts has liased with the researchers in the field and has assisted in bird observation, counting and tagging. In return, the Department of Fisheries and Wildlife has gained valuable information regarding Corella populations and new research techniques.