

## FOOD OF THE GLOSSY BLACK COCKATOO

By J. B. CLELAND and E. B. SIMS

The Glossy Black Cockatoo (*Calyptorhynchus lathami*) occurs on the north coast of Kangaroo Island and extends into the northern part of Flinders Chase where there are extensive groves of sheoaks (*Casuarina stricta*). Both North (1912) and Cayley (1938) record their feeding on the seeds of sheoaks but presumably they do eat seeds of other trees as well. North (speaking of the bird then known as *Calyptorhynchus viridis*) said, "Seeds of the different species of *Casuarina* obtained by the birds biting through the cones, constitute its favourite food." This does not deny the possibility of their eating other seeds, but Cayley said, "I never saw the Glossy feeding upon anything but the seeds of the Casuarinas. . . . It is astonishing how speedily it cracks open the seed-cone and extracts the kernel, soon stripping a tree of its seed and littering the ground underneath with cracked seed-cones, leaves, and twigs." The Yellow-tailed Black Cockatoo (*C. funereus*) in the Encounter Bay district, besides opening the cones of *Pinus sp.* in State Forests, opens the hard woody seed-vessels of *Hakea rostrata*. However, if the chief food of the Glossy Black Cockatoo is the seeds of sheoaks, one can quite see why they have disappeared from our Adelaide foothills, the Reedbeds, and Black Swamp near Currency Creek, as reported by Captain S. A. White. White (cited by Cayley) said: "This bird was quite numerous in the seventies of the last century in the southern portion of the Mount Lofty Ranges, for my father, the late Samuel White, had many skins in his collection, taken in the Mount Lofty Ranges. I saw it myself at the Black Swamp in 1885. Many of the old settlers have told me that the Red-tailed Black Cockatoos were plentiful in the Ranges south of Adelaide in the early days of the Colony. I feel sure there are none left today. There are very few on Kangaroo Island and those that are left are right at the Western End." In the early days, *C. stricta* (Syn. *C. quadrialvis*) was abundant on our foothills and along the coast. As the wood is good for burning, as well as being ornamental, the trees have been extensively destroyed, thus depriving the Glossy Black Cockatoo of much chance of survival except in areas such as Kangaroo

Island where sheoaks as trees are still reasonably abundant. We have no record of whether the shrubby *Casuarinas* of Encounter Bay and Kangaroo Island were also a source of food.

The little winged seeds of the sheoak are normally set free only when the cones dry and the valves open. The number of seeds liberated in this way in experiments we have done have varied from 53 to 83 per cone. Two hundred of these weighed 870 mg., i.e. just over 4 mg. per seed. Presumably these constitute a concentrated food.

However, it seems obvious that the cockatoo (although his bill and tongue are probably capable of much delicate feeding) cannot really afford to wait for the cones to open as this would be both unpredictable and wasteful. We were therefore interested to see five Glossy Black Cockatoos feeding on attached *Casuarina* cones at American River (at the Eastern end of Kangaroo Island) on October 25, 1967. They attacked the cones without any apparent finesse, biting right through them effortlessly and littering the "needle"-covered ground beneath with fragments of cones still containing many seeds. It appeared to us that the wood of the cone was being chewed and the seed probably being selected by the tongue from the resulting mouthful of debris, but much potential food was still being wasted. We have been informed by Dr. Alan Lendon that Glossy Black Cockatoos in Sir Edward Hallstrom's aviary also have been observed to "rip the cones to pieces" and to scatter the remains all over the cage floor. Under these circumstances it would not be surprising if the remaining *Casuarinas* on Kangaroo Island can continue to support only a very limited population of *Calyptorhynchus lathami*, although our observations at American River suggest that the species is rather more widely distributed on the Island than H. T. Condon (1967) recently suggested (and as previously suggested by White).

### REFERENCES

- CAYLEY, N. W. (1938) *Australian Parrots*, Angus & Robertson (Sydney) p. 73.  
 CONDON, H. T. (1967) "Kangaroo Island and Its Vertebrate Land Fauna," *Australian Natural*

(Continued page 52.)

**GLOSSY BLACK COCKATOO**

*(Continued from page 47)*

*History*, Volume 15 (December) Australian Museum, Sydney, pages 409-412.

NORTH, Alfred J. (1912) *Nests & Eggs of Birds Found Breeding in Australia and Tasmania*, Volume III Australian Museum, Sydney, page 71.

WHITE, S. A., cited by Cayley, page 75.