



FROM
THE FIELD...

Why are Glossy Black Cockatoos So Rare?

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Not Enough Food

Though there seems to be a lot of Sheoaks (trees) on Kangaroo Island, the cockatoos are picky about which trees they will feed in and even which cones they will eat from a tree. When the research is complete, it should be possible to estimate how much food each cockatoo needs per year and the number of cockatoos that can currently be supported by the habitat available.

There is no doubt there are fewer Sheoaks on Kangaroo Island today than there were 200 years ago. Some have been cleared, others burnt. But there has also been much regeneration where fires and sheep have been excluded. From aerial photos, we can see some good stands now existing where only scattered trees stood in 1945. The former limits of Sheoak distribution can also be determined from the extent of suitable soils and other landscape features.

Food Not Good Enough

Tamra Chapman has found that while the cockatoos have plenty of

time for courtship and midday siestas in the summer, they spend virtually all day feeding once they have young in the nest. At times, the quality of the food may be important. As with any food crop, the key to quality is often in the soil, so we are currently looking for links between soil fertility and seed quality. We are particularly interested in the nitrogen-fixing nodules on the roots of Sheoaks, made by the fungus *Frankia*, and how they are affected by levels of phosphorous or salinity. Analysis are being done by Yanco Agricultural Institute.

Too Few Hollows

The cockatoos need big hollows for nesting and there has long been a fear that many pairs would like to breed but cannot find a suitable vacant hollow or a site that is not already occupied. Hollows may be occupied by feral bees or be in use by one of the other cockatoos. Even those that do find hollows may be having to settle for hollows that point straight into the south-westerly weather or are so shallow that predatory birds can reach in and steal the egg. To alleviate a possible shortage of high quality vacant hollows, over 60 nest boxes have been erected. Two nest boxes are in use in one area, but elsewhere natural hollows may be more abundant than previously thought. However, it may simply be that the birds have not found them, particularly in areas like the Dudley Peninsula where there is no recorded tradition of nesting.

Too Many Possums

The whole world now seems to know about the surfeit of koalas on

the island but, as anyone living here knows, Brush-tailed Possums are far more common. Neither species has a significant predator on the island. Possums, however, are a significant predator themselves and include in their diet the young and eggs of Glossy Black Cockatoos. If possum numbers are higher than in the past, then the cockatoo nest failure rate may have increased. Glossy Cockatoos may be more vulnerable than other hollow users because they nest in winter. It has been suggested that, when the weather turns cold, possums may move from summer shelters beneath the yaccas to warm dry hollows in the trees. This year some nests, and all nest boxes, have been protected against possums by collaring trees with tin and by judicious pruning where nest trees touch other trees.

Other Possible Reasons

Cats, people, inbreeding and disease have all been suggested as possible threats to the cockatoo. Cats are blamed for the decline of most rare birds but seem to prefer rare mammals to birds. Nevertheless, they do take a substantial number of the larger Red-tailed Black Cockatoos from their low nest hollows in Western Australia and there are certainly plenty of cats on Kangaroo Island. While it would be a clever cat that could reach a Glossy Cockatoo's nest, we are hoping the tin collars will also ensure against cat predation. Egg collectors and people trapping birds for aviaries could have a serious impact. However, the results of genetic research that are to be part of this project, would mean it will take only one feather or a scraping from inside an egg to tell whether it came from Kangaroo Island. As there are presently no Kangaroo Island birds in captivity, birds with Kangaroo Island genes must have been taken illegally.

With fewer than 180 individuals in the population, close relatives are likely to breed with each other, possibly causing problems with infertility. If inbreeding is a major problem then the focus of the program will have to shift to captive breeding.

Finally, while always mindful of the possibilities of disease, we have no evidence to suggest it is a problem.

Climbing Course

During 1995 numerous assistants watched Lynn Pedler erecting nest boxes or checking hollows and a few have braved the wire ladder. Now, thanks to Dean Overton and the State Emergency Service crew in Kingscote, a whole troupe of islanders ranging in age from 5 to 50 are learning how to climb tall trees. So far they have only reached the roof of the fire station and learned the difference between a figure-of-eight knot on the take and a double fisherman's knot, but it is hoped that this trained corps will be able to care for the cockatoo nests long into the future.

Nest Boxes

Those of you who helped build nest boxes will be pleased to know that the cockatoos have appreciated your efforts. Lynn erected the last of the nest boxes by mid January (1996) and already there are two Glossy Cockatoo nests in them. The first one is in a plastic pipe, carefully camouflaged with a blow torch to look like a burnt-out hot water heater. The second nest, in the neighboring tree, is in a wooden barrel. Sadly, though the nest entrances face each other, the two females, Claudia and Bluesky, don't get on very well. Though their males are obviously good buddies and happily feed side by side all day, poor Bluesky cops a thrashing from Claudia if she happens to return at the same time from her evening feed. Nevertheless, all is going well inside the boxes. Claudia's chick hatched on 14 March 1996 and Bluesky's was due any day.

Blond Cockatoos

A male Yellow-tailed Black Cockatoo at Russell and Shirley Ross's Parndana Wildlife Park has once again been volunteered to prototype the latest scheme designed to make cockatoos easier to identify in the field. Last year this bird had blue glue on the beak. This year he has blond patches on the belly. Hair dye from Richard Ley's salon in Kingscote appears to have harmed neither the bird nor its feathers and, if we use it on wild birds, should make identification much easier until these feathers are molted.

Breeding, 1996

The 1996 breeding season has begun brilliantly with as many nests found in February (15) as in all of last year. Things have since slowed but the season still has a long way to go. So far we know of 19 nest sites, including two in nest boxes. At least seven pairs now have fluffy yellow chicks.

On the downside, two eggs have been eaten by possums, one was probably taken by a currawong and one egg perished in a fire. We suspect that in nests not protected against possums, the birds have not been very successful.

Several of the flocks that we have come to know well contained only males during February and early March, with females being seen only briefly in the evening. Females are now reappearing and we suspect that they have tried to nest but have failed. However, as nests are found and protected, or as the females are persuaded to use nest boxes, there is every chance the productivity in later years will be higher.

Fire at Flinders Chase

During the night of the 26th March, lightning hit a ridge near the Ravine de Casoars. By midday the next day a plume of smoke was rising from the northern end of Flinders Chase and by 6:00 P.M. the fire was beyond the control of bombers and machinery. The decision had to be taken to back-burn from the Cape Borda road to prevent the fire crossing to the north coast in the event of a wind change. Alas, a pair of Glossy Black Cockatoos had nested a hundred meters from where the control fire was due to be lit.

Anthony McGuire, who was supervising the back-burn, was good enough to delay operations while a firebreak was cleared by hand around the base of the nest tree, but it was always a vain hope. So heavy was the fuel load that no leaf remained unscorched in the canopy and, as the smoke cleared in the twilight, the nest tree could be discerned from the glow of flames in its upper branches. The nesting cockatoos, who had left before the fire began, did not return that night.

Remarkably, they did come back

the next day. Julie Hincks, who had been so delighted to find the nest a week earlier, watched the female climb down into the nest even while her mate was calling in alarm at the smoke still wafting around him. But she didn't stay. When Lynn climbed to the nest three days later, there was no sign of the birds and the egg was cold. Hopefully it is early enough in the season that the female will lay again.

Observation Sheets


Over the next few months all the observations on the database are going to be pulled together into a report so we can let people know how their observations fit in.

Donations

Donations to the Glossy Black Cockatoo project are tax-deductible if sent to the:

Glossy Black Rescue Fund
C/O National Park Foundation of
South Australia
Suite 7, 2nd Floor, 100 Currie Street
Adelaide, South Australia 5000

Rescue Fund money is being used for habitat rehabilitation in many parts of the island, increasingly so, as primary responsibility for conservation of the cockatoos moves from the government to the people of Kangaroo Island.

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