

Observations on the Great Crested Grebe

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The Great Crested Grebe (*Podiceps cristatus*) is the largest and probably the most striking bird of the genus in Australia. It inhabits salt-water bays, open spaces of water such as reservoirs, backwaters, rivers, reed-surrounded lakes and dams, and is found throughout Australia and Tasmania.

On August 26, 1951, at Laverton on Port Phillip Bay, 12 miles from the city, I observed a flock of over 50 of these birds close to the shore. Nine birds were in full plumage complete with "ears" and collar, and each of these birds appeared to have charge of a separate party. They were noted to dive and attack one another under the water. There was a continuous low buzzing call throughout these proceedings.

Most of the following observations were made at Albert Park Lake, a 90-acre stretch of water situated about one and a half miles from the G.P.O. Melbourne.

For the past six years I have made daily visits to this lake. Crested Grebes were recorded about twice during each year occurring only in the winter months until November 26, 1957, when 32 birds made their appearance. They were practically all in breeding plumage, complete with "ears" and ruffs. By December 4, 1957, the number had increased to a total of 46 which was the largest number recorded.

The ruff, which is most pronounced in the male, disappears during the eclipse period, but the ear-tufts are retained throughout the year.

A total of approximately 60 hours was spent in watching these birds. They were generally seen feeding near the edges of the lake, but when I approached they would dive and swim under the water and would not come to the surface again until they were near the centre of the lake. When diving they usually slid under the water with little disturbance of its surface, but sometimes they would give a forward spring before making the dive.

The colouring of one bird was most unusual. It was a female that was practically an albino, the only colour that could be seen was the pale brown marking on the "ears" and collar. The upper wings appeared to be completely white but closer observation revealed that they also were pale brown.

The birds feed on the bottom of the lake and 12 normal feeding dives were timed. They varied in duration from 10 to 25 seconds, the average dive being 17 seconds.

The flock seemed to be pairing off and each pair to be taking up its territory. Low flights over the water were now not infrequent. When rising the birds appear to run along the surface of the water but when alighting they hit the water with their body and then skid to a stop.

In flight the neck is extended forward but below the contour of the body and the feet are stretched out at the rear. The wings are narrow with a white stripe and the wing beat is very rapid. The birds swim with their body kept low in the water, which will often wash over the lower part of the neck, and the white markings below the wings can seldom be seen.

Though the bird frequently rests its head well back on the shoulders, gracefully curving the neck, the usual position of the slim neck is stiffly erect and it appears unduly slender beneath the large frill. Often a bird will raise a leg above its back and, as it preens its feathers, the satiny underparts will flash in the sun. When resting, the head is sunk on to the shoulders and the bill hidden in the feathers on the side of the neck, often with the beak pointed downward but occasionally with it pointed towards the back.

On January 3, 1958, a Brown Hawk, which was circling overhead, appeared to pass unnoticed by the Coots, Swans and Ducks on the lake, but all the Grebes and the Cormorants were alert and kept a constant watch on this predator.

A loud discordant note was always uttered by a male when, threshing the water with its wings, it chased a rival. The method of attack appeared to be mostly by a stab with the beak from under the water, but on several occasions I have observed two males leap at one another but, although they locked their bills together, they usually separated very quickly.

Many of the birds were now displaying. Two birds would face each other with their necks straight up and rigid, the "ears" held erect and the collars extended, and then commence to wave their heads from side to side. In an attitude of either hostility towards another bird or possibly looking for a mate, a number of females were observed swimming with their necks arched forward, their bills nearly touching the water and with the ruffs extended while they uttered a rattle-like call towards the other sex. Occasionally the male would then dive and come up alongside the female and the head waving display would commence. Subsequently I observed male birds carrying out this remarkable performance.

On December 6, 1957, I selected an observation post beneath a willow-tree growing on the southern shore of the lake, and noticed that a male bird, who was about 20 yards out on the water, was agitated by my presence. The call of a Reed Warbler caused me to watch a willow-tree that was growing further along the bank, and I was suddenly intrigued to see a female Crested Grebe resting on the drifting herbage that was on the water beneath the tree. I did not realise for almost an hour that this bird could possibly be on a nest. A movement which I made caused the bird to stand up and, with sideways strokes of her bill, she pulled some green water-weed about her feet and then dived into the water to reappear about 25 yards out on the lake. I moved away and then made a detour back to my vantage point. After another 45 minutes the female returned and resumed the original upright position on the

debris. As I could not determine how this structure could withstand the weight of the bird I flushed her once again and watched closely for her return. The bird, after diving from about 15 yards away, suddenly bobbed up beside the debris with an impetus that enabled her to land on the platform. Shortly afterwards I observed a male bird swimming towards the tree with some waterweeds in his beak. When he was about ten yards away he also dived under the water and reappeared beside the platform, and landed on it in the same manner as the female. He made an attempt to arrange the new material near the female, and then dived into the water to reappear about ten yards away and then swam off.

I decided to investigate what I felt certain was a nest. Anchored to a submerged branch of a willow-tree, within ten feet of the bank, in about four feet of water, was a floating platform about four feet six inches across, composed of willow-leaves and very small stems of willows with a heavier patch near the centre composed mainly of curly pondweed and some other water plants. Pulling these weeds apart revealed one egg which was thickly coated with lime but showed a pale bluish colour underneath. The egg, instead of being the usual elongated oval shape, proved to be of an oval shape pointed at both ends and measured 54.2 x 34.8 mm. After waiting another hour for the bird to return to the nest, I decided to leave these birds alone and to keep a daily watch on them. Next morning, to my dismay, I found that the nest had been turned inside out, and every other heap of weeds around the lake that could be reached with a stick was treated in a similar manner. This was probably done by some fisherman in his search for bait.

On January 3, 1958, I was watching a pair of birds swimming near the rushes on the edge of the island in the lake and noticed two smaller birds with them. Observations through the field glasses showed them to be young birds that were heavily marked with stripes that ran lengthways from the beak to the tail. It would appear that they had been reared in a nest at the island. When one of the adults dived for food the young birds immediately swam to the other parent. For most of their time the young rode on the backs of their parents. On one occasion the parent sheltered the young birds with its wing.

I was unable to visit the lake again until May 24, 1958, when, during very blustery weather, I found the feathered population sheltering in one particular locality. A check of this enormous flock, which included about 5,000 Coots, revealed only two Crested Grebes. One bird appeared to be in a semi-eclipse phase with inconspicuous "ears" and collar but the other bird, which was of adult size, had the brownish wing colour and the white underparts of the mature bird, but the head and neck were still showing traces of the stripes and also some down.

Unfortunately the lake has recently been cleared and all the debris and the rushes around the foreshore and the island have been removed, so that it would appear that the Great Crested Grebes will not breed there again for some years.