

SHORT NOTE

The return of the Australasian crested grebe (*Podiceps cristatus australis*) to the Wakatipu region, South Island, New Zealand

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In 1865 Walter Buller published his "Essay on the Ornithology of New Zealand". In this pioneer work Buller wrote about 'a large crested grebe hitherto undescribed and inhabiting the lakes of the South Island' (Buller 1865). This dark-breasted specimen on which he based his original description '*Podiceps hectori*' was found by James Hector on the 'Wakatipu Lake' accompanied by young (Buller 1873). The precise locality is unknown. What is known, however, is that in April 1863, before setting out on his major expedition to Fiordland in the *Matilda Hayes*, Hector journeyed to Lake Wakatipu where he got in touch with a local runholder, Nicholas Von Tunzelmann. Hector and Von Tunzelmann crossed the lake to the western shore at Whites Bay, from where they tramped up the bed of the Von River to the Mararoa and beyond, returning the same way. Westerskov (1977) speculated that 'it is possible that Hector collected adult crested grebe specimens at Lake Wakatipu on this trip, either crossing or recrossing the lake or staying at it'.

Another reference to the occurrence of Wakatipu area grebe is found on the plate prepared from the watercolour of the crested grebe by George Edward Lodge which is labeled, 'L. Wakatipu, Otago, New Zealand'; the specimen from which the painting was made was further labeled "Otago, originally from Anatole von Hugel Collection, via Matthews" and referred to as a female from Lake Wakatipu, December 1874 (Fleming 1982).

This historical evidence may not be substantial but is sufficient to prove that Lake Wakatipu and perhaps the smaller lakes and lagoons in the area (Fig.1) were suitable habitat for what is now known as the Australasian crested

grebe, *Podiceps cristatus australis*, more than a century ago. In recent years, however, ornithologists have been unaware of the presence of crested grebes in the Wakatipu area. In fact a national census of grebes conducted in 1980 recorded a zero count in Otago and Southland (Sagar 1981).

My first knowledge of grebes being in the Wakatipu area came at the end of 1995, when Dawn Palmer of the Department of Conservation, Queenstown, reported that "a pair of southern crested grebe have successfully bred in the reeds at the southern end of Lake Hayes while another pair have been sharing water space" (Anon. 1995).

More was to follow in a letter received by Peter Schweigman from Don Haddon who had observed a pair of grebe on Moke Lake, a small mountain lake just west of Queenstown, on 23 January 1996. After careful searching he found their nest with three eggs. I found the birds on 9 February but, as they did not return to a nest all day, I presumed that their nesting attempt had failed. On 25 February there was no sign of the grebes. Later I also checked nearby Lake Dispute for sign of them without success.

In late January of 1997 a pair of grebe returned to Moke Lake and I observed them building a nest on 3 February 1997. As time passed the lower foundation of the nest moved forward into the lake and repairs were made with weed and raupo, the latter gathered some distance from the nest. Unfortunately the whole structure and the eggs it contained was swamped by a southerly storm on 23 February 1997. When I returned to Moke Lake on 18 March 1997 they had left the area. These breeding attempts on Moke Lake were preceded by the sighting of a single adult in the spring of 1991 (Derek Onley, pers. comm.).

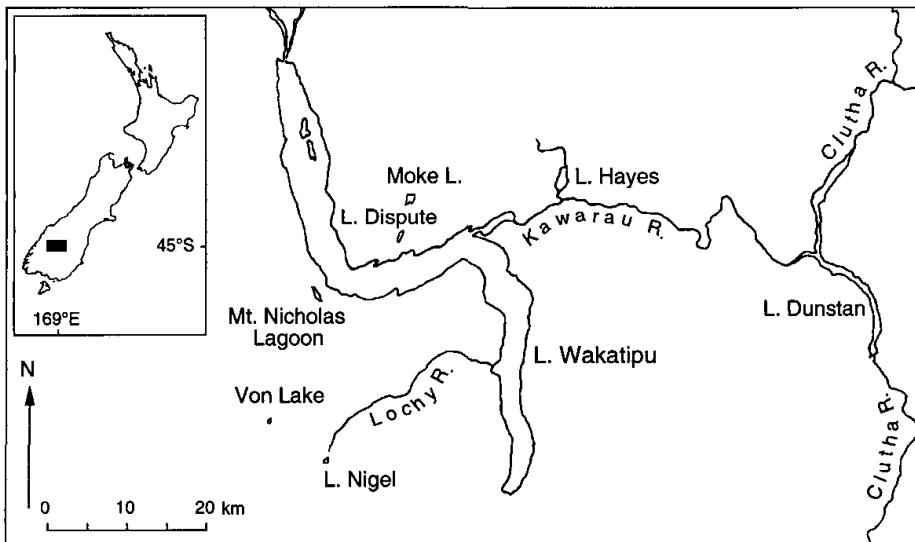


Fig. 1 Map of the Wakatipu region of the South Island, New Zealand, showing the location of the various lakes mentioned in the text.

On 11 February 1996 I also located an adult grebe and three juveniles on Lake Hayes and later three adults with the juveniles. Further checks of various parts of the lake up to early March eventually revealed a total of four breeding pairs, which had produced seven young.

Following this breeding success I decided to survey this area on a regular basis during the 1996-97 season (Fig. 2). The first visit made on 20 September 1996 disclosed that four pairs were holding territory. There was no sign of any immature birds. The number of breeding birds increased slowly to nine pairs by 10 March 1997. At that time one pair, which had been displaying, had built in an exposed position, attached to a submerged willow, a structure of lake weed and raupo, possibly for use as a platform for copulation. Two days later this site was abandoned. On an earlier occasion (4 February 1997) another pair built a similar structure, which they later left to build a nest closer to the edge of the lake. The nest was much more difficult to see from the water than their platform had been. Their efforts were rewarded as they eventually produced two chicks.

The first chicks were hatched about 1 December 1996 and the last on 22 March 1997. All eight original pairs were eventually successful and produced twelve young. On 17 May 1997 I was able to observe all twelve juveniles, three of which were in immature plumage. The number of adult birds, however, had reduced to thirteen indicating that the presence of both adults is not essential when the young reach the immature stage.

Dawn Palmer and Brian Ahern of the Department of Conservation made an independent survey of Lake Hayes on 29 July 1997 and found eighteen adults and seven

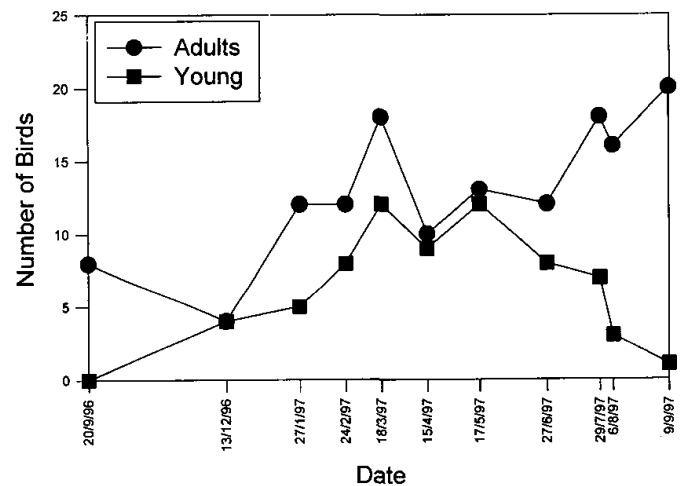


Fig. 2 Numbers of Australasian crested grebe on Lake Hayes, September 1996 to September 1997.

immatures. By 8 August 1997 the numbers appeared reduced, to eleven adults and five immatures. The young birds formed a cluster at the inflow area and two took flight, flying without effort to the outlet.

A survey I made on Lake Hayes 9 September 1997 completed a year's observations made on a monthly basis (Fig. 2). At this time ten pairs were involved in courtship display (Fig. 3). One of the courting pairs was accompanied by an immature.

By the age of six months immatures start to disappear from the lake. I have never found any evidence of the demise of these birds, so they presumably depart for elsewhere. There is a constant presence of birds, however, since by the time the immatures reduce in numbers in July, adult birds are already displaying. The drop in

Fig. 3 An adult pair of Australasian crested grebe on Lake Hayes at the end of a head-shaking ceremony, 20 January 1999. Most females are smaller than the males. (Photo: George R. Chance)

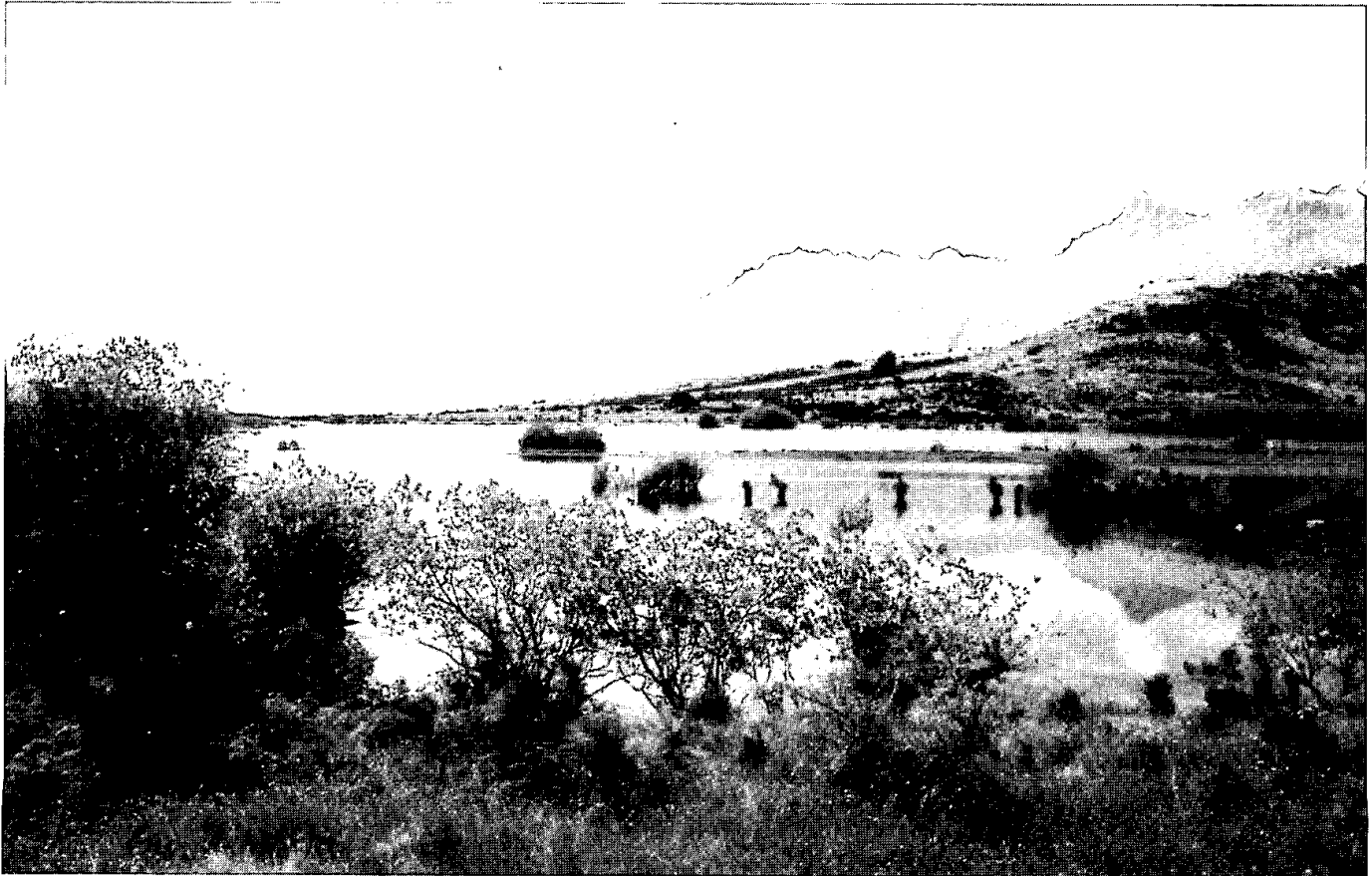


Fig. 4 Mount Nicholas Lagoon, with the Remarkables Range, and Cecil and Walter Peaks in the background. (Photo: George R. Chance).

numbers of immatures may explain the arrival of grebes on nearby Lake Dunstan. With their known attraction to newly filled waters (Simmons 1989), an eventual linking of the southern birds with the grebes on Lake Benmore is a distinct possibility.

Lake Hayes could well have been colonised from the grebe population on Mt Nicholas Lagoon which is situated 100 m above Lake Wakatipu, on the far side from Queenstown, and not far distant from Mt Nicholas homestead (Fig. 4). Robert Butson, the owner of Mt Nicholas Station on Whites Bay, has known of their presence since he purchased the property in 1977. Phil Hunt, the previous owner, first became aware of them when he observed two pair of grebes on the lagoon in 1970. Tom Kroos of Fish and Game, Queenstown, has also known of grebes on this lagoon for some time and observed five grebes there on 2 January 1996. The hill above Mt Nicholas Lagoon is in a direct line of sight to Queenstown. In a harsh winter the lagoon has been known to freeze over completely.

I made two summer surveys of Mt Nicholas Lagoon, the first on 8 March 1996 when I found seven adult grebes and three juveniles. On 31 January 1997, with Dawn Palmer, I made a circuit of the lake, which took about three hours. In all, thirteen adults and four juveniles were counted. Returning by road to Mossburn, we checked Von Lake (also known as Gorge Hill Lagoon). In spite of Tom Kroos's assurance, 'Always a pair on Von Lake,' no grebes were seen on this occasion. Ken Hood of Queenstown told me of the historical presence of grebes in this same area. His father, George Hood, who hunted and trapped south of Lake Wakatipu, had seen grebes on Lake Nigel, at the head of the Lochy River, in the 1930s.

On 7 August 1997 I accompanied Dawn Palmer and

Brian Ahern and we crossed Lake Wakatipu to make a winter survey of Mt Nicholas Lagoon where we found four adult pairs and no immatures. Our day had already been made by the sight of a pair of adult grebe displaying not far from the wharf in Whites Bay on Lake Wakatipu. The crested grebe had returned to Lake Wakatipu!

ACKNOWLEDGEMENTS

I thank Hamish G. Spencer (Department of Zoology, University of Otago) for advice on writing this article, and Ken Miller (Department of Zoology, University of Otago) for drawing Fig. 1. This note has also benefited from the comments made by Ron Moorhouse and an anonymous reviewer.

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