

LITTLE BITTERN AT MEREMERE

By P. J. HOWARD

My notice was first brought to the possibility that there might be a Little Bittern (*Ixobrychus minutus novaezelandiae*) at Meremere by a query from Mr. G. Whitburn. He saw a bird closely resembling a Brown Bittern (*B. poiciloptilus*) in general conformation, though much smaller in stature, standing on a log on the landward side of a small lagoon, off the eastern side of the Waikato River while shooting in early May, 1963. Two cursory inspections from the Great South Road of the swamp area produced no sighting and the matter was shelved, because of the shooting in the vicinity and the recent occurrence of heavy flooding. Some time later, in mid-June, I had a further enquiry, this time from Mr. T. Clark, also of Meremere, who rather jocularly described an adventure relating to the attempted capture of a "kiwi," which, on being approached, flew away. A subsequent sighting proved this to be a not unreasonable misidentification.

What information was available pointed to its being a Little Bittern. Mr. Whitburn's description of its attitude and environment could have come straight from a text book, in that the Little Bittern is a solitary bird preferring a habitat similar to that in which he saw it and it will remain stationary for long periods in a particular attitude. This was borne out again by Mr. Clark in his observing its kiwi-like stance from a moving vehicle, which had to be brought to a stop so that the occupants could walk back to where the bird was sighted, and climb over a fence and drain before the bird was flushed and its true nature revealed.

In the late afternoon following Mr. Clark's report I sighted the Little Bittern standing "knee"-deep in water in a patch of grazed-off *Poa aquatica*, about six feet out in a small lagoon and barely 15 yards from the Great South Road. On the car's stopping, the bird adopted a somewhat crouched head-up freeze stance. This was the first noticeable feature apart from size. It made a very slow change of attitude, not as vertical or as quickly executed as by a Brown Bittern and no sudden blind panic flush, heedless of obstacles, which I have noted in the latter species in this area at times when approached, often no closer than 70-80 yards. In this attitude it appeared an overall light grey, the result of fine grey barrings over a buff ground colour. A widening dark line extended from the base of the bill to the shoulder and a full set of darker scapulars did not seem evident. After about ten minutes it came out of the crouch into a more relaxed looking position, with the head and neck extending away from the body, though with the bill pointing still above horizontal. This movement produced a change in feather pattern, the continuous line from mouth to shoulder noted in freeze stance becoming broken into a dark shoulder patch and an elongated dumbbell-like face patch. Legs were yellowish green and bill appeared horn coloured and darker towards tip. Three white shoulder stripes of irregular length were visible. As I did not want to disturb the bird and the light was failing, things were left at that.

The next sighting was about fifty yards from the previous one, at 1530 hrs. on 17/9/63. I made a quick trip home and two toll calls brought H. R. McKenzie and J. L. Kendrick to the scene just after 1630 hrs. Their faith in the sedentary habits of the Little Bittern

well justified their respective quick trips from Clevedon and Hamilton. After a few minutes of search H.R.McK. located it a few yards from the 1530 hrs. sighting and for the next hour or so we were treated to a magnificent display of Little Bittern habits, attitudes and general behaviour.

Any movement was conducted with the greatest stealth in a fluid gliding motion of extreme slowness. The movements in turn tended to produce changes in feather pattern and the bird was particularly well camouflaged in its surroundings of *Carex* tussocks and dead sticks, among which it was moving, up to knee-deep in water. It adopted various attitudes, some of which it held for several minutes. These ranged from a crouch with head drawn into shoulders to a more upright freeze stance. One was with body and extended neck at about thirty degrees forward from upright, with neck feathers puffed out, giving the impression that the neck was larger than the body. One was the remarkably kiwi-like stance noted by Mr. Clark. The more common attitude, which was seen with no obstruction whatever, was with the amazingly extendible neck at full length in a gently down-sweeping curve, roughly parallel with the water, with the bill touching, or almost touching the water and sometimes held rigidly half submerged, anywhere from left to right of the body. An attempt was made from this position, with the neck in line ahead, to catch some quarry unseen to us. From the position with the bill an inch or so from the water it made a sudden lunge, both feet coming momentarily clear of the surface and then hung back and tugged spasmodically but quite violently at a bunch of under-water weed stalks. A small silvery fish was wriggling among the little stalks, but whether it escaped or was swallowed was not determined. The bird came into a more upright position and gave the appearance of "whetting" its bill or "licking its lips," obviously to clean the edges of the mandibles with its knitting-needle-like pinkish tomato-coloured tongue. While it was doing this the tongue was once seen to resemble a wriggling worm.

Seen to better advantage than at the June sighting, both for lighting and posture, it provided the following description:— Crown and nape: an egg-shaped patch over the whole crown tending to brown or greenish brown from buff, with a definite small irregular brown patch at nape, side view when crouching. It appeared that this would later join up with the dark crown. Foreneck and upper breast, erect position: strong central chestnut vertical stripe on foreneck, wider towards bottom, tapering at both ends quite sharply, an outer crescent-shaped stripe each side tapering at each end and converging on centre stripe at top and bottom. A brown spot outside of each of these again as if the beginning of another chestnut stripe. Areas between chestnut stripes creamy white with same colour extending to chin and to breast area below vertical stripes. Above the light chin was a dark dumbbell-shaped patch from base of bill through eye with more colour below eye than above. Upper and lower surface: Dorsal surface and sides of neck buff with vestiges of brown smoky streaks radiating upwards from pronounced brown and buff vertically striped "alderman's collar" around breast at shoulder level. Back dark brown; wings buff barred with brown, somewhat resembling hen pheasant. Scapulars buff, barred with grey, the grey being wider than the buff towards the lower end. When it finally unhurriedly flew away over the tops of the swamp growth the back view was practically the same as that of the Brown

Bittern. The ventral area behind breast collar was buff, striped with light brown. Its "baggy pants" were light with very distinct wavy dark lengthwise lines about an eighth of an inch wide. Tail: straggly. Legs: bright green. Bill: horn coloured, with dark culmen; noticeably small.

It is thought that sufficient change of plumage and leg and bill colour from mid-June to Sept. 17 has been observed to merit the assumption that this bird, if the same one, may well be a young female changing into full feather. It must also be noted that every change of position causes a change of plumage pattern and that even the bill and legs can look different according to the light, so that a sighting at any one time may not necessarily appear quite the same as given in text-books. Dr. W. R. B. Oliver, "New Zealand Birds," p. 398, makes generous allowance for its difference from the species or subspecies in other countries.

[The Little Bittern is one of the most unknown birds on the New Zealand list. According to the Checklist (1953) and Oliver (1955), there is only one acceptable record for the North Island, viz. Tauranga 1836; and there seem to be no twentieth century records at all for the whole country.

The big swamps of the lower Waikato, now partly a forest of willow and alder, would seem to be an ideal habitat, seldom penetrated by man. It is of some interest therefore that Mr. R. T. Adams, an assistant game-officer, made the following report, dated 2/11/60, from which we quote with permission, to the Controller of Wildlife. "On 28/10/62 at about 9 a.m. I saw at Steed's Swamp, Kopuku, what I believe was a Little Bittern. . . . It was standing on some exposed mud. I had time for a quick look before the bird turned and stalked into a stand of spiked rush (*Eleocharis*). It appeared to be a little bigger than half the size of the common Brown Bittern; and the only difference I could distinguish was that the top of the head and the back of its neck were a darker colour. Many Brown Bitterns frequent this swamp and it may be that what I saw was an unusually small specimen. However the turning and stalking into the stand of spiked rush are not in my experience in keeping with the ordinary Bittern's habit."

Meremere is only a few miles from Kopuku, and swamps extend all the way. — Ed.]



THE NESTING OF KEAS

By J. R. JACKSON

The nesting of Keas (*Nestor notabilis*) has been described by Potts (1882), Marriner (1908) and more recently McCaskill (1954). McCaskill indicates some of the earlier confusion by his remark that "until recently it has also been assumed that the nest always occurred in rocky country usually well above the bushline." This confusion has arisen through careless reading of the earlier work which exaggerated the difficulty of reaching the nests. In this paper I describe the nesting of Keas about Arthurs Pass as I have found it. During the last seven years I have found 36 Kea nests, have observed a Kaka (*Nestor meridionalis*) nest, Jackson (1936), and have also found a second Kaka nest.