Keys to identifying Little Curlew

Little Curlew in winter quarters at Cairns, Queensland, Australia, November 1975. Photo/Tom and Pam Gardner

This new species for North America can be readily identified in flight and produces a variety of vocal and instrumental sounds

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and

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The Little Curlew (*Numenius minutus*) is a species held by some authors to be conspecific with the Eskimo Curlew (*N. borealis*). It breeds in northeastern Siberia (Labutin and others, 1982) and winters in Australasia. This species is regarded as "rare, little-studied and threatened," rather than "endangered," in the U.S.S.R. (Bannikov, 1978). Brett A. Lane, the wader studies coordinator for the Royal Australasian Ornithologists' Union (*pers. comm.*, December 1982), says the species "possibly numbers many thousands (10,000+?)."

The Little Curlew was recently observed for the first time in North America. The species' closest breeding ground to North America is only about 1250 miles west of the nearest point of mainland Alaska.

Not surprisingly, no ornithologist has seen both the Little and Eskimo curlews in the field. The only detailed published comparison is that based by Farrand (1977) on the skins of both. He concluded that the two forms are separable in the field under ideal conditions, and writes: "The Eskimo Curlew is a more boldly and coarsely marked bird, with heavier streaking on the sides of the face and neck, and dark chevrons on the breast and flanks; the Little Curlew has a relatively more finely streaked face and neck, and the breast is streaked rather than marked with chevrons, the chevrons being few in number and confined to the flanks. In both species the under wing coverts and axillaries are barred with dark brown, but in the Eskimo Curlew these feathers are a rich cinnamon, while in the Little Curlew they are a much paler buff or sandy color.

Photos/Richard G. Smith

Finally, the pale pinkish area at the base of the lower mandible is more extensive in the Little Curlew, reaching to or beyond the middle of the bill, whereas in the Eskimo Curlew this light area occupies less than half the length of the bill."

Feare's description (1973) of the Little Curlew from his field notes is worth quoting. "*In flight*, this bird was immediately distinguishable from all palearctic shorebirds by its resemblance to a small, sandy-colored Whimbrel (*N. phaeopus*), but completely lacking white on the rump and back."

Regarding the call of the Little Curlew, Feare observes: "When flushed, the bird uttered a fairly faint but harsh croak, sometimes di-or-tri syllabic, in which case it resembled the beginning of a Whimbrel's call. The only other call heard was a trill, which was given while Raines was stalking the bird in order to obtain photographs."

The voice is better described by Condon and McGill (1967) in their excellent little book on wader identification as "a soft musical *te-te-te* when feeding; a rather harsh *tchew tchew tchew* when alarmed." The only really detailed description of the vocabulary of the Little Curlew, based on experience away from the breeding grounds, is that of Hemmingsen and Guildal (1968) from China and is well worth quoting in full: "*N. minutus* may call similarly to *N. phaeopus variegatus* [Whimbrel] but the call (call I) is usually softer and usually only

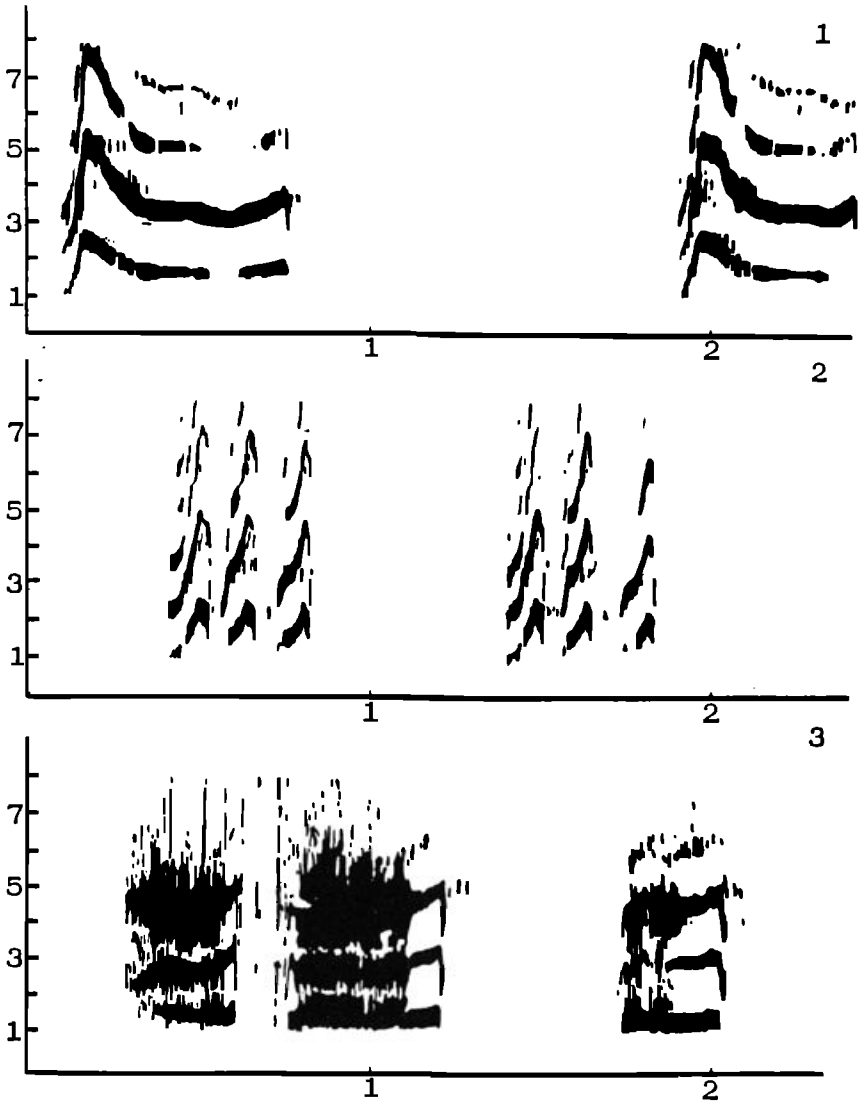

Figure 1. Sonagrams of the calls of the Little Curlew: 1. Mewing call of bird on nest used to summon mate, who comes in closer (sound referred to in second paragraph of Labutin and others [1982]). 2. Anxiety call uttered twice (no. 1 in Labutin and others [1982]). 3. Fright call of bird flushed from nest (no. 3 in Labutin and others [1982]). Horizontal scale: seconds; vertical scale: kHz. From Veprintsev and Zablotskaya (1982).

Little Curlews presumably on migration in November 1979, Bougainville Island, Papua, New Guinea. Photo/Don Hadden

3-6 syllables, though I have heard up to 9 (or more?) syllables, as against 7-11 or perhaps sometimes more syllables, yet most often 7, in *N. p. variegatus*. And the rate is slower, usually 4-5 sec., though I have counted as few as 3-4, and as many as 6-7 per sec., whereas *N. p. variegatus* emits about 10 syllables per sec. The pitch may go slightly up and down during the call.

"Quite different from any call of *N. p. variegatus* is, however, another call (call II), which may on the one hand, be considered a version of call I, but which on the other hand, is so characteristic that I believe it is distinctive. Most often it consists of 4 tones rising in pitch very much like the *do mi sol do* in a musical scale; or if not exactly like such a scale, there is at least a jump of 2-3 tone intervals between each of the successive rising syllables (heard May 14, 21, 22, and August 22, and September 5). Once I have noted up to 7 syllables in such a rising scale (August 21, 1944), but I cannot say whether the intervals in pitch then were less than in the 4 syllable call II. The rise even in a 4 syllable call may be more irregular, and it is possible that there are all sorts of gradual transitions to the plain, more *N. p. variegatus*-like call I. A third kind of call (call III) *vee-u vee-u* was noted in flight (August 13, 1944)."

Recordings of the species' voice on the breeding grounds appear as spectograms in the papers by Labutin and others (1982) and by Veprintsev and Zablotskaya (1982); also as recordings on one of three phonograph records by Veprintsev (1982). It is worth remarking that this species produces not only vocal, but also instrumental "drumming" sounds while in flight. Labutin and others (1982) suggested that the instrumental sound was "apparently created with pri-

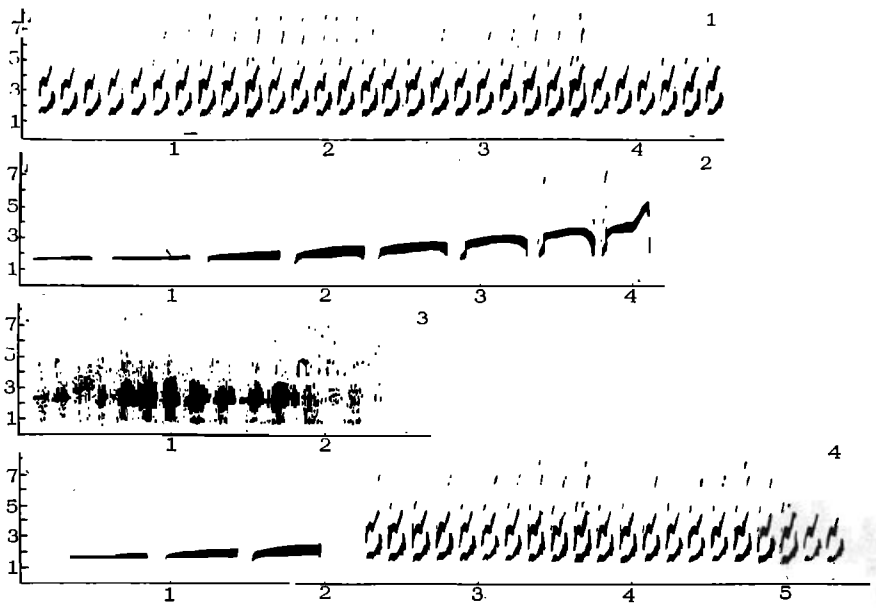

Figure 2. Sonagrams of advertising sounds of Little Curlew: 1. Bubbling curlew-type song (no. 4 in Labutin and others [1982]). 2. Display flight song (also called the fluting trill) (first part of no. 6 of Labutin and others [1982]). 3. Instrumental "drum" (second part of no. 6 of Labutin and others [1982]). 4. Display flight song with flute and trill, i.e., *part of 2 & 1 together (first part of no. 6 and no. 4 of Labutin and others [1982]). From Veprintsev and Zablotskaya (1982).*

manes and tail feathers " It is most unlikely that the feathers of both wings and tail would be used or adapted for sound production by any one species. In the case of the Little Curlew, neither flight feathers nor rectrices appear to have been modified for sound production. John Farrand kindly examined 18 male, 17 female and one unsexed *N. minutus* and five male and two female and 13 unsexed *N. borealis* from the American Museum of Natural History. None of the wings and tail feathers showed adaptation for sound production; the feathers were similar in shape to those of a typical Whimbrel. The tail feathers of Common Snipe (*Gallinago gallinago*), and Pin-tailed Snipe (*G. stenura*), examined at the same time showed clear adaptation to sound production. How the Little Curlew makes its jetplane sound apparently cannot be determined morphologically. This is also the case with the instrumental drumming of the Dunlin (*Calidris alpina*) and the instrumental "booming" of the Common Nighthawk (*Chordeiles minor*) (Stettenheim, 1976). However, since the sound is similar to that produced by the tail feathers of the Pin-tailed Snipe, it would seem likely that the Little Curlew also uses its tail feathers.

Copies of an English translation by M. G. Wilson of the sleeve notes of the Veprintsev discs may be obtained from Jeffery Boswall, as may an English translation of Veprintsev and Zablotskaya (1982). Also, a 16mm color film of the bird in northeastern Siberia is deposited along with first generation copies of a wide range of Little Curlew tape recordings at the British Library of Wildlife Sounds, NSA, 29 Exhibition Road, London SW7 2AS, U.K. Feare has an 8mm film of the Seychelles bird. The color reversal master of the 16mm film and a print from a color intermediate negative along with all the original tape recordings are held at the Library of Wildlife Sounds at Puschino.

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