

**Notes on the vocalizations of Australian Logrunner (*Orthonyx temminckii*) and New-Guinean Logrunner (*Orthonyx novaeguineae*)**

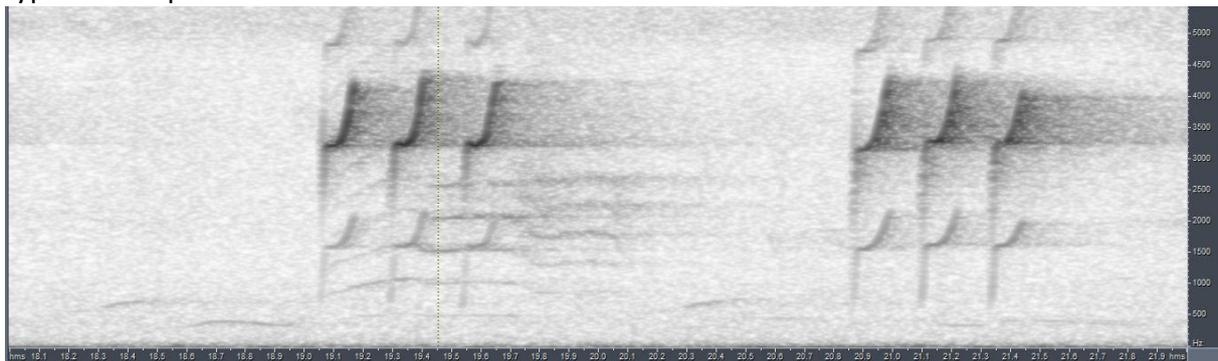
Peter Boesman

In the following we briefly analyze and compare voice of the different races of Australian Logrunner (*Orthonyx temminckii*) and New-Guinean Logrunner (*Orthonyx novaeguineae*). We also try to quantify the extent of any vocal differences using the criteria proposed by Tobias *et al.* (2010), as a support for taxonomic review. We have made use of sound recordings available on-line from Xeno Canto (XC) and Macaulay Library (ML).

*temminckii*

Song and call are rather similar: a penetrating short, usually sharply upslurred note repeated several times, either in long series or in short bursts. Presumed song has notes slightly longer, less strident, and slightly more complex in shape, e.g. "kweek-kweek-kweek".

Typical example:



Out of the 15 recordings, we have picked the ones which most resemble 'song'.

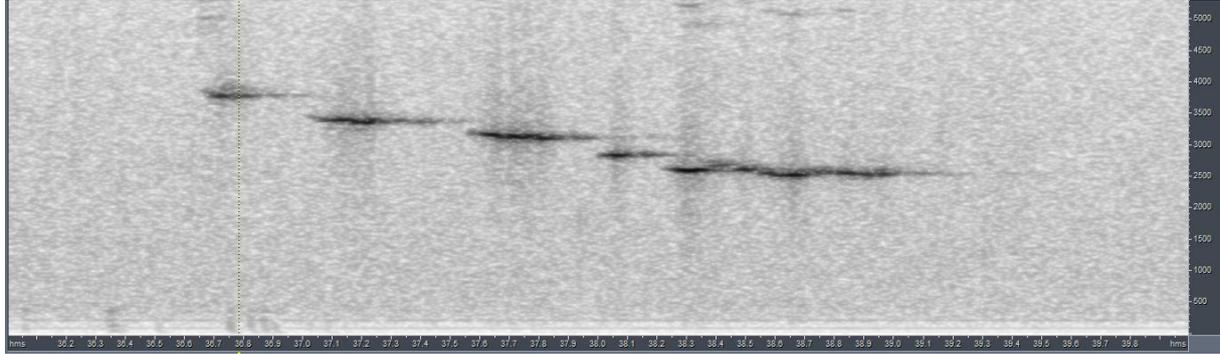
Measurements:

min. freq. (1st harmonic)	480 - 600Hz
max. freq. (1st harmonic)	2200-2800Hz
min. note length	0.09-0.21s
max. note length	0.14 - 0.22s
pace	0.2 - 0.38s (expressed as period, duration between 2 consecutive notes)
notes repeated	1 (repetitions always are of a single note = simplest phrase)

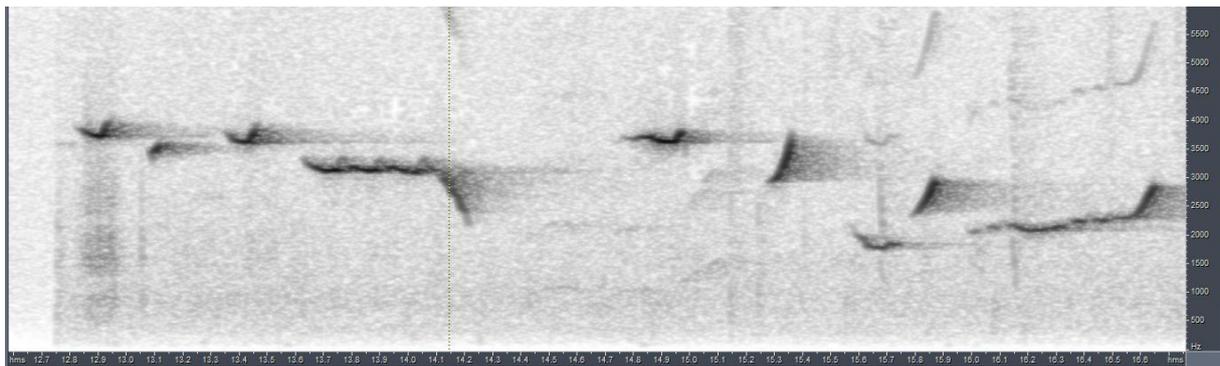
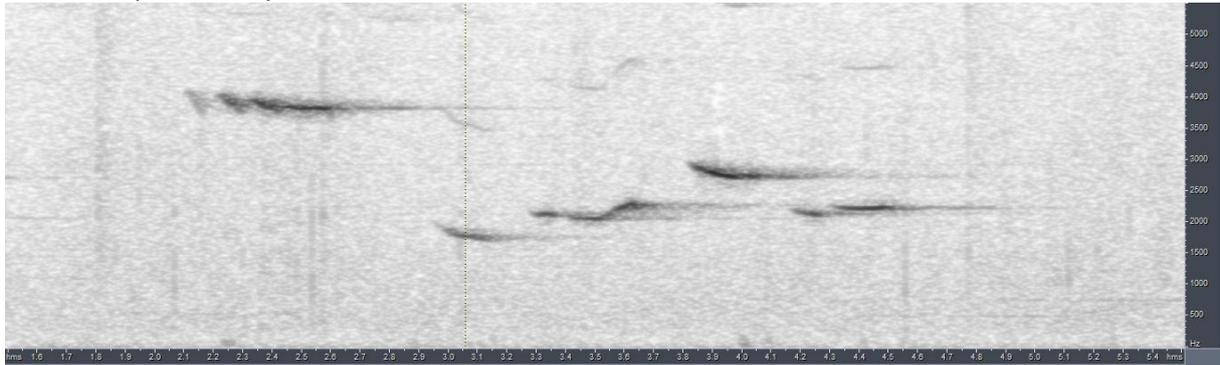
*victorinus/dorsalis*

Song very different from Australian Logrunner: a repeated phrase of several pure melodious whistles. In its simplest form, a descending series of whistles, but also phrases consisting of more complex alternations in pitch.

simple example:



more complex examples:



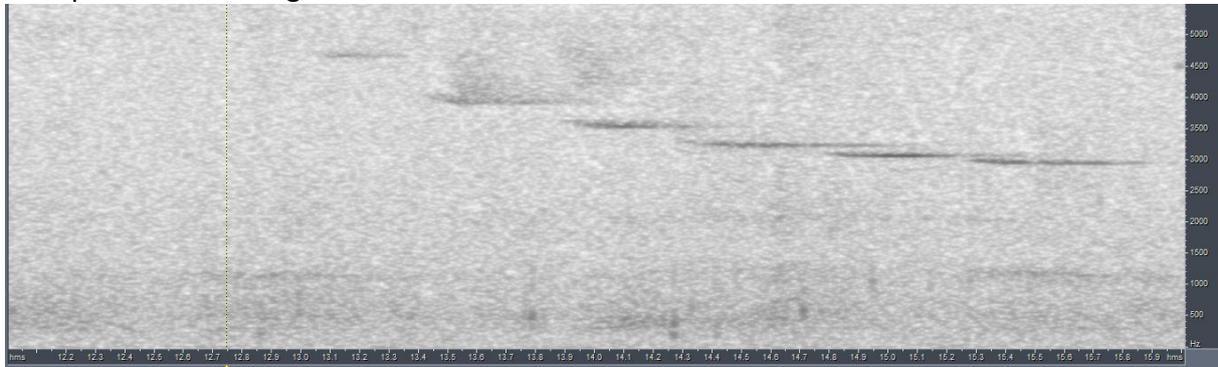
(n=16)

min. freq. (1st harmonic)	1670 - 3100Hz
max. freq. (1st harmonic)	3700 - 4240Hz
min. note length	0.06 - 0.12s
max. note length	0.21- 0.60s
pace	0.3 - 0.4s (average)
notes repeated	6 - 9 (# notes in simplest phrase)

*novaeguineae*

We only located 2 recordings of this taxon. It seems to be quite similar to *victorianus/dorsalis*

Example of descending series:



min. freq. (1st harmonic) 2250 - 3600Hz  
 max. freq. (1st harmonic) 4500 - 4650Hz  
 min. note length  
 max. note length  
 pace c. 0.4s  
 notes repeated 6-7 (also short phrase of 3 notes?)

Conclusion

The dramatic difference in song between Australian and New Guinean Logrunner is reflected e.g. by *temminckii* having much lower-pitched notes (1st harmonic) (score 4), and having phrases of basically 1 note repeated (score 4). When applying Tobias criteria, this would lead to a total vocal score of 8.

*novaeguineae* is similar to *victorianus/dorsalis*, but the few examples we have indicate a slightly higher max. frequency in the former.

This note was finalized on 7th August 2015, using sound recordings available on-line at that moment. We would like to thank in particular the sound recordists who placed their recordings for these species on XC and ML: Marc Anderson, Nick Athanas, Chris Benesh, Eleanor Brown, Scott Connop, Fernand Deroussen, Phil Gregory, Nigel Jackett, Niels Krabbe, Frank Lambert, Greg McLacklan and Mark Robbins.

**References**

Tobias, J.A., Seddon, N., Spottiswoode, C.N., Pilgrim, J.D., Fishpool, L.D.C. & Collar, N.J. (2010). Quantitative criteria for species delimitation. *Ibis* 152(4): 724–746.

**Recommended citation**

Boesman, P. (2016). Notes on the vocalizations of Australian Logrunner (*Orthonyx temminckii*) and New-Guinean Logrunner (*Orthonyx novaeguineae*). *HBW Alive Ornithological Note* 155. In: *Handbook of the Birds of the World Alive*. Lynx Edicions, Barcelona. (retrieved from <http://www.hbw.com/node/932085> on 17 August 2016).