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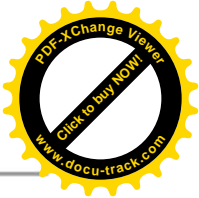
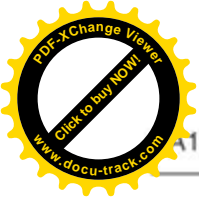


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Does the Chinese Grey Shrike *Lanius sphenocercus* possess an alarm vocalization unique within the *Lanius excubitor* complex?

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In his definitive monograph on shrikes (Laniidae) of the world, Panov (2011) used comparative ethological analysis to demonstrate the primary behavioral differences between two assemblages within the *Lanius* genus: those he called the “grey shrike group” and “all others”. One of the most important distinctions was the fundamental dissimilarity in alarm calls: birds of the grey shrike group emit a single or repetitions of noise-like sounds, whereas all others generate a rhythmical rattle. Here, we used video cameras to study the breeding biology of Chinese Grey Shrike (*Lanius sphenocercus*) in Primorye, Russia, in which we documented not only the expected alarm call, but also the rattle thought to be exclusive to the non-grey shrike group. Video playback and computer analysis confirmed that the origin of these noises was vocal, rather than mechanical (e.g., bill-clicking), and consisted of a series of rhythmically-organized alarm notes uttered by both sexes, exclusively as response to an imminent, high-risk threat of nest predation by Eurasian Magpie (*Pica pica*). With regards to motivational content, these sounds might indicate warning behavior, by which adults demonstrate their impending readiness to attack an intruder. It is accompanied by a crouch posture typical of many *Lanius* shrikes. This newly-discovered vocalization by Chinese Grey Shrike is similar in note configuration and frequency to those of the non-grey shrike group, including the regionally co-breeding Brown Shrike (*Lanius cristatus*). Series duration varies depending on level of excitement. Length of each call notes ranges from 0.01-0.06 s., frequency range is 0.05-18 kHz (basal frequency is 3-5.8 kHz), and inter-note interval varies from 0.02-2.4 s. (n=202, sexes combined). We suspect that Chinese Grey Shrike is not the only species among the grey shrike group that emits this type of alarm call, but it has likely been overlooked in the past due to its extreme rareness and specific use.

