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A66. Acoustic structure and individual identity in the distress and discomfort calls of neonate goitred gazelles and saiga antelopes

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Degrees of discomfort affect animal vocal responses. We compared acoustic structure and individuality of distress and discomfort calls in neonate goitred gazelles (*Gazella subgutturosa*) and saigas (*Saiga tatarica*). Distress calls were emitted by human-captured neonates during censuses or conservation measures in the wild. Discomfort calls were produced in anticipation of nursing in captivity (gazelles) or in the wild (saigas). In gazelles, distress calls (36 callers, up to 15 calls averaged per caller) were higher in fundamental frequency (f_0) and the 1st and 2nd formants than discomfort calls (24 callers, up to 15 calls averaged per caller). The accuracy of classifying individuals by 6 variables in their distress calls (67% correctly assigned calls, 15 callers, 8-10 calls per caller) was lower than that of the discomfort calls (84% correctly assigned calls, 15 callers, 8-10 calls per caller). In saiga, only the 3rd formant was higher in distress calls (69 callers, up to 15 calls averaged per caller) than in discomfort calls (22 callers, up to 15 calls averaged per caller). The accuracy of classifying individuals by 6 variables in saiga distress calls (82.7% correctly assigned calls, 22 callers, 8-10 calls per caller) did not differ significantly from that of the discomfort calls (87% correctly assigned calls, 22 callers, 8-10 calls per caller). Higher vocal individuality in saiga neonates might result from their "follower" anti-predator strategy, as vocal individuality is crucial for mother-offspring communication in herds, whereas neonate goitred gazelle use a "hider" strategy that involves environmental cues. Support: the Russian Scientific Foundation, grant 14-14-00237.