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Posters



B43. Individual identity in mother and young contact calls of the endangered saiga antelope Saiga tatarica

<u>Olga Sibiryakova</u> Lab. of Animal Behaviour, Dept. of Vertebrate Zoology, Faculty of Biology, Lomonosov Moscow State University, Moscow, Russia

- I. Volodin Lomonosov Moscow State University, Russia; Moscow Zoo, Russia
- R. Frey Leibniz Institute for Zoo and Wildlife Research, Berlin, Germany
- S. Zuther Association for the Conservation of Biodiversity of Kazakhstan, Kazakhstan
- T. Kisebaev Association for the Conservation of Biodiversity of Kazakhstan, Kazakhstan
- A. Salemgareyev Association for the Conservation of Biodiversity of Kazakhstan, Kazakhstan
- E. Volodina Moscow Zoo, Russia

For 48h after birth, saiga offspring are hiders that are visited by their mothers only for nursing. Later, the young follow the herd. Calls of newborn and mother saigas were collected on their natural breeding grounds in Northern Kazakhstan during census of a 30.000-individuals herd in May 2014. Calls were collected in the absence of humans using automated recording systems SongMeter SM2+ placed near the young. This enabled the recording of contact calls emitted before the re-union of mother and young. In total, we analysed 235 hours of recordings. Saiga mothers vocalised more often than the young (62.6% vs 33.2% sound files). Both mother and young produced oral contact calls more often than nasal contact calls. Vocal identity was well expressed in both call types of mother and young: discriminant analysis based on 10 acoustic variables accurately classified individual identity in 97.9% oral calls of 21 mothers, 93.5% nasal calls of 18 mothers and 93.4% oral calls of 22 young. Variables contributing most to vocal individuality (fundamental frequency, 2nd and 3rd formants) were the same in mother and young and in nasal and oral calls. In saiga mother and young, vocal individuality exceeded that in contact calls of Iberian red deer mothers (77.0% oral and 61.8% nasal calls of 22 mothers) and young (61.1% oral and 64.2% nasal calls of 17 young), which are hiders during the first 7-10 days of life. Vocal tract lengths calculated by call formants in mothers (210 mm oral and 301 mm nasal) and young (111 mm oral) did not differ from respective values obtained from saigas of a captive Russian population (199 mm, 304 mm and 110 mm respectively). The role of individuality in relation to behavioural strategies of the young is discussed. Supported by RFBR, grant 16-34-01230.