Individual identity in mother and young contact calls of the endangered saiga antelope

Saiga tatarica

Sibiryakova Olga\textsuperscript{1}, Volodin Ilya\textsuperscript{1,2}, Frey Roland\textsuperscript{3}, Zuther Steffen\textsuperscript{4}, Kisebaev Talga\textsuperscript{5}, Salemgareyev Albert\textsuperscript{4}, Volodina Elena\textsuperscript{2}

\textsuperscript{1}Lomonosov Moscow State University, Russia
\textsuperscript{2}Moscow Zoo, Russia
\textsuperscript{3}IZW-Berlin, Germany
\textsuperscript{4}Association for the Conservation of Biodiversity of Kazakhstan (ACBK), Kazakhstan

Saiga antelope is the rare ungulate species that live in open steppes and give birth in huge groups.

Young saigas hide only 48 hours after birth, then they follow the herd.

In the herd mother and her offspring constantly maintain contact by acoustic signals.

How do mothers and young recognize each other among thousands conspecifics?

Materials and Methods

- Northern Kazakhstan, natural breeding grounds, May 2014
- Automated recording systems SongMeter SM2+
- Contact calls emitted before the re-union of mother and young
- 235 hours of recordings
- 192 oral calls from 21 adult female, 168 nasal calls from 18 adult female; 197 oral calls from 22 juvenal

Results

Saiga mothers and young produced two type of calls: oral and nasal
Mothers vocalised more often than the young (62.6% vs 33.2% sound files).
Both mothers and young produced oral contact calls more often than nasal contact calls.

In comparison with Red deer:

(Sibiryakova et al., 2015)

Young hide during first 7-10 days

Individuality of mother and young contact calls

Key variables:
- Fundamental frequency
- 2nd and 3rd formants

Discriminant function analysis (DFA); \(\chi^2\) test

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