

**Vocalization reflects type of social encounter in the dhole (*Cuon alpinus*)**I.V. ISAEVA<sup>1,2</sup>, I.A. VOLODIN<sup>1</sup> & E.V. VOLODINA<sup>1</sup><sup>1</sup>Scientific Research Dept., Moscow Zoo, B. Gruzinskaya, 1, 123242, Russia; popovsv@orc.ru<sup>2</sup>Dept. of Biology, Moscow State Univ., Vorobiovi Gori, 119899, Russia

The dhole is a rare endangered species with a restricted distribution. The behaviour of the species is poorly known. An extremely high vocal activity both in the wild and in captivity represents one of the most prominent behavioural features of dholes. Vocalizations represent a good indicator of emotions, motivations, intentions, social relations and physiological states, and may serve as a convenient tool for monitoring different aspects of the species life for conservation or research purposes. Now a library of dhole vocalizations is being prepared by some specialists working with zoo and wild animals.

We have registered the vocal behaviour of dholes using simultaneous audio and videorecording throughout the period from March 1998 to January 1999 in Moscow Zoo (Russia). Three pairs and one trio of captive adult dholes, separated by a wire mesh from each other, were studied concerning the probability of producing 11 different call types in six situations. The probability of occurrence of a certain sound type was counted for the data pool of 943 vocalizations.

Both tonal sounds of 70-500 ms duration with a fundamental frequency under 1 kHz and high-pitched whistles of 6-9 kHz occurred significantly more often spontaneously, during pacing, or during peaceful intrapair interactions. Tonal sounds with a fundamental frequency over 1 kHz occurred significantly more often in more expressive situations, such as sexual interactions and aggressive intrapair interactions where a caller was a recipient of the aggressive demonstrations. The broadband pulsed staccato calls and tonal calls of duration under 70 and over 500 ms with a fundamental frequency under 1 kHz occurred significantly more often during interpair aggression between neighboring pairs, separated by the wire mesh. The data suggest that most of the dhole sound types may serve as situative indicators. The results may be applied for observational tasks in the wild and for behavioural monitoring in captivity.