



6th Canine Science Forum

Abstract Book



Behavior, Oral presentation

Vocalization of Belyaev's silver foxes (*Vulpes vulpes*) differing in tolerance to humans

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Introduction

We systematize and generalize a cycle of experimental studies on vocal behaviour of silver foxes that differ in their tolerance to humans.

Questions

Main research question was whether 50-year selection for tame or aggressive behaviour toward humans will change vocalization of silver foxes toward people and conspecifics. Particular questions included 1) describing call structure; 2) differences in vocal reactions toward humans in tame, aggressive and unselected foxes; 3) differences in vocal reactions toward humans in tame-aggressive hybrids; 4) differences in vocal reactions on conspecifics in tame, aggressive and unselected foxes; 5) indicators of emotional arousal in vocalizations of unselected foxes; 6) effects of valence and strength of emotional arousal on vocalization of tame and aggressive foxes; 7) fading vocal activity toward humans in tame, aggressive and unselected foxes; 8) playbacks of high-and low-arousal whines of tame, aggressive and unselected foxes to humans.

Methods

Methods included different variation of human approach test, pairing of conspecifics on neutral territory, acoustic and video recording and analysis. Total samples were 471 foxes (411 females, 60 males) and 100702 analysed calls.

Results

The 50-year selection for friendliness toward people resulted in a selective use toward humans of two call types, pant and cackle. Alternately, selection for aggression or absence of any selection for behaviour toward people resulted in the selective use toward humans cough and snort. All fox strains did not differ by their vocal behaviour toward same-strain conspecifics. Relationship has been investigated between vocal behaviour and degree of tolerance toward people for hybrids between Tame and Aggressive foxes and for backcrosses to Tame and Aggressive foxes. Effect was estimated between fox sex and the degree of human impact on focal fox for variables of fox vocal behaviour. People could easily recognize between high and low-arousal calls of aggressive and unselected for behaviour foxes but not of tame foxes.

Discussion/Conclusion

Call types representing vocal indicators of friendly and aggressive behaviour of foxes toward humans have been revealed by the research. Selection for behaviour did not change vocalization of foxes toward conspecifics. Distinguishing the degree of aggressive arousal preceded recognizing degrees of positive arousal that probably started only after animal domestication.

Support: RSF grant 14-14-00237

Behavior, Pecha Kucha talk

Behavioural correlations of the domestication syndrome are present in ancient, but weak in modern, dog breeds

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Domestication has dramatically altered animal evolution, causing distinct changes in morphological, physiological and behavioural traits. While diverse, many of these phenotypes are repeatedly observed