

なぜオオカミは目が目立つのか？：視線によるコミュニケーションの可能性

Why are the eyes of gray wolves (*Canis Lupus*) so impressive? : Possibility of using gaze in their communication

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Facial color pattern around the eyes that enhances gaze signal could be an adaptation for gaze communication. We noticed that gray wolves (*Canis lupus*) have facial color pattern in which the gaze direction was easily identified, though it is often difficult in other canid species. To estimate the function of their facial color pattern, we compared the facial color pattern of 25 canid species. We also compared the gazing behavior between gray wolves and bush dogs, the species with gaze-camouflaging facial color pattern. Facial color pattern of the studied species could be categorized into the following 3 types: A-type (pupil position in the eye outline and eye position in the face are clear), B-type (only the eye position is clear) and C-type (both the pupil and eye position are unclear). Most of wolves had A-type face with light-colored iris. Canid species living in a family group all year round tended to have A-type, while the species living solo/pair lives tended to have B-type face. Variation, frequency and duration time of gazing behavior of wolves were larger than those of bush dogs with C-type face. The results suggest that gray wolves use gaze signal in their communication among group members.