

28

Spatial patterns of domestic cats in an outdoor enclosureB. RACT-MADOUX^{1,*}, H.G. RÖDEL², T. BEDOSSA¹, B.L. DEPUTTE³¹Association Aide aux Vieux Animaux (AVA shelter), Ferme du Quesnoy, 76220 Cuy Saint Fiacre, France²Laboratoire d'Ethologie Expérimentale et Comparée - EA 4443 Université Paris 13, Sorbonne Paris Cité, 99 av. J.-B. Clément, F-93430 Villetaneuse, France³ReCCC (Research Group on the Behavior of Dogs and Cats), ENVA, 7 avenue du Général de Gaulle, 94704 Maisons-Alfort Cedex, France*Corresponding author: b.ractmadoux@gmail.com

Though domestic cats are solitary animals, gatherings of feral cats can be observed around clumped food resources. Abundance and distribution resources may influence cat densities, which can range from 1 to more than 2,000 individuals per km². In such cases, home ranges overlap considerably, implying an increased tolerance to conspecifics. Captivity constrains cats to live in close proximity with each other. In a situation of abundant resources and high density, is a well designed environment sufficient to provide a high quality of life in a colony of captive cats living in an animal shelter? This study investigated (1) the use of space by 39 cats living in a 2100 m² enclosure, which had a large number of sheltering areas, feeding sites and trees, and (2) the contact behavior and inter-individual proximities of the cats during a year. Individual home ranges varied between 46 m² and 1,656 m² and so overlapped considerably. A seasonal effect has been noted on home ranges size. Interactions, both positive and negative, were represented in less than 1% of the data collected, though close contacts between 2 or 3 individuals were frequently observed during feeding and resting. In addition, some cats remained in close proximity with the same partner. Our results indicate a large inter-individual tolerance and seasonal differences in the spacing behavior of cats. As the spatial requirements seem to differ during the year, we propose that adjustments in care should be taking into account to improve cat welfare in captivity.

Key words: *Felis catus*; resources; home range; captivity

29

Extraverts make new friends: Multiple indicators reflect successful interactions among unfamiliar dogsJULIE POSLUNS^{1,*}, RITA E. ANDERSON², CAROLYN J. WALSH²¹Cognitive and Behavioral Ecology Program, Memorial University of Newfoundland, St. John's, NL, Canada²Canine Research Unit, Department of Psychology, Memorial University of Newfoundland, St. John's, NL, Canada*Corresponding author: julie@roverachiever.com

Contexts such as dog parks and “doggie daycares” expose dogs to a variety of novel and potentially potent stimuli such as unfamiliar conspecifics. There is little empirical data on how individual dogs respond to initial contact with unfamiliar dogs. This study examined the relationships between dogs' behavioral characteristics (based on direct observation during interactions between pairs of unfamiliar conspecifics), personality assessments and cortisol. Thirty pairs of unfamiliar companion dogs, 20 same-sexed (10 male and 10 female) and 10 mixed-sex pairs, experienced two 5-minute off-leash interactions (one week apart) in a fenced yard with three humans present. Humans were instructed not to interact with dogs. Saliva samples were obtained in the dogs' homes prior to (baseline) and 15 minutes following interactions. Owners (n=60) and the dog walkers (n=48) completed two personality assessments: the Monash Canine Personality Questionnaire-Revised (MCPQ-R) (Ley et al., 2009) and the Dog Personality Questionnaire (DPQ) (Jones, 2008). Appropriate correlations between the dimensions of the MCPQ-R (Extraversion, Neuroticism, Training Focus, Motivation, Amicability) and the factors of the DPQ (Fearfulness, Aggression

towards People, Aggression towards Animals, Activity/Excitability, Responsiveness to Training) were observed. Fearfulness (DPQ) and Neuroticism (MCPQ-R), Activity/Excitability (DPQ) and Extraversion (MCPQ-R), Responsiveness to Training (DPQ) and Training Focus (MCPQ-R), Aggression towards People (DPQ) and Amicability (MCPQ-R), Aggression towards Animals (DPQ) and Amicability (MCPQ-R) were all correlated. Notably, only one dimension, Motivation (MCPQ-R), did not correlate with any DPQ factor. To examine how the MCPQ-R and DPQ map onto one another statistically, data from both instruments were analyzed via principle component analysis (PCA) for owner and dog walker assessments separately. PCA analyzes converged on four overarching personality dimensions: Extraversion, Amicability, Fearfulness, and Training Focus. Extraversion scores (PCA) were inversely related to time spent in close proximity (i.e., within one body length) alone with a human. Dogs that spent more time in close proximity to both a conspecific and a human had lower post-greeting cortisol levels. The pattern of cortisol and behavioral responses raises the hypothesis that dogs may use humans to moderate or facilitate the interactions between unfamiliar conspecifics.

Key words: domestic dog; familiarity; personality; social interaction; cortisol

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30

Validity of early behavioral assessments in dogs – A longitudinal studySTEFANIE RIEMER^{1,2,3,*}, CORSIN MÜLLER^{1,2}, ZSÓFIA VIRÁNYI¹, LUDWIG HUBER¹, FRIEDERIKE RANGE¹¹Clever Dog Lab, Messerli Research Institute, University of Veterinary Medicine Vienna, Medical University of Vienna and University of Vienna, Veterinärplatz 1, 1210 Vienna, Austria²Department of Cognitive Biology, University of Vienna, Althanstr. 14, 1090 Vienna, Austria³School of Life Sciences, University of Lincoln, Riseholme Park, Lincoln LN2 2LG, UK*Corresponding author: riemer.stefanie@gmail.com

An understanding of behavioral development in domestic dogs is vital for matching puppies with the right families, identifying predispositions for behavioral problems at an early stage, or identifying puppies suitable for service dog work, police or military service. Studies on the predictive value of puppy tests conducted at 6–12 weeks have yielded inconsistent results. While some trainers of guide or police dogs perform tests with neonate dog puppies to complement selection tests during the socialisation period, to our knowledge, there are no published accounts of the validity of such tests. Here, we tested the validity of early behavioral tests for predicting behavioral tendencies in domestic dogs by following up a cohort of 50 Border collies from neonate age to adulthood. The dogs were tested in a neonate test (determining activity and vocalisations during a brief isolation period) at 2–10 days, in a puppy test at 40–50 days and in an adult test at 1.5–2 years. The puppy test and the adult test both included subtests for 1) exploration in a novel environment, 2) interaction with an unfamiliar experimenter, 3) play, 4) a novel object, and 5) social conflict situations (restraint tests in the puppy test and a threatening approach by the experimenter in the adult test). Mixed models yielded no significant associations between behavior in the neonate test and behavior in either the puppy or the adult test. Furthermore, only one of 10 predicted correlations for behaviors in the puppy test and the adult