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# Journal of Veterinary Behavior

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## Editorial

### The intersection of welfare and behavior



This first issue of the year contains a special section courtesy of the International Society of Equitation Science (ISES). This group has as its core tenet improving the welfare and well-being of horses through more humane handling that meets their individual and species typical needs. Drs. [Hayley Randle and Natalie Waran \(2019\)](#) have provided an editorial for this section that is an excellent topical review of research foci in this vibrant field.

There is a lot of discussion about such issues in dogs, but the canine field still lags behind the equine one in similarly focused data papers. The canine papers in this issue are an exception.

In what is sure to be a widely cited paper, [Berteselli et al. \(2019\)](#) use a welfare assessment protocol to evaluate the welfare of hundreds of dogs at 3 Italian shelters. The intent of this paper was to establish a standardized way of evaluating welfare and to ask whether, among a series of ways in which it is commonly done, using the same dogs, is there greater validity for one method? The answer here is the undeniable, twofold conclusion: (1) welfare can only be improved if it is measured and (2) casual observations by well-intentioned shelter staff are not a sufficient replacement for rigorous evaluation. These are the types of data that demonstrate the need for global implementation of standardized techniques with excellent record keeping, and that can help promote policy and legislative initiatives that attend to meeting the needs of these vulnerable dogs.

Odor discrimination in dogs is often asserted, but too seldom measured. [Jeziński et al. \(2019\)](#) show the danger of an approach that relies on assumption. In a laboratory study they assessed discrimination of urine of male dogs, female dogs in estrus, and female dogs in anestrus by 12 male dogs, with the intent of identifying urine compounds acting as female pheromones. Dogs discriminated estrus from anestrus urine better than random, but the distinguishing characteristic was length of time they sniffed, which was not anticipated. Expected sexual behaviors were not witnessed so this test could not be used as a bioassay for pheromones.

Canine assisted interventions/therapy is becoming more common. [Hartwig and Binfet \(2019\)](#) provide a much needed overview of how programs decide that handlers and dogs are acceptable for such work. The most commonly required criteria for teams included team evaluation, canine age, and canine vaccination status. The desired canine characteristics included compliance with basic manners requests, accepting a friendly stranger and no-to-calm reactions to a neutral dog. Requirements for handlers appear to be incompletely formulated. As groups and institutions desire such dogs, some validation and standardization of performance characteristics need to be codified.

Handlers of detection, patrol, and search and rescue dogs all work in environments potentially hazardous to humans and their

canine counterparts. Development of decontamination procedures and equipment for the canine part of the team has lagged behind that for humans. Oddly, good decontamination of canines can be obtained using relatively simple, inexpensive methods, for which kits are now available. The missing link—as always—is education. [Powell et al. \(2019\)](#) graphically show the importance of knowing how to do something correctly and knowing that you need to know such information. The reward is high here since handler error can make dogs sick.

[Oxley et al. \(2019\)](#) address one of the most common problems in veterinary behavior and behavioral medicine—lack of standardized definitions and corruption of those that are standardized by the popular press, popular science and the public—within the specific context of dog bites. What constitutes ‘a bite’ and how to we assay these incidents and reports? It should surprise no one that perception of intent (regardless of whether it was correct) affects people’s interpretations of whether the incident constituted ‘a bite’. There are two additional factors beyond the scope of this paper’s findings that are important to consider in any bite evaluation. First, there are always two participants in any bite or injury circumstance caused by canine teeth and at least one, and usually both are moving. Force will always equal mass  $\times$  acceleration. The commonly accepted ‘bite scales’ are more accurately ‘damage scales’. These scales carry no contextual input about the extent to which the damage is attributable simply to the physics of the situation, were intent benign and the context neutral. Yet the latter is the baseline measure against which determinations may best be made. Second, we have tacitly accepted that dogs should not bite, that bites are not acceptable, and to bite is not normal. Somewhere in these discussions must be a discussion of constraints of phylogeny for a species that uses its teeth as primates use hands, the physics of doing all of this while a quadruped, and the autonomy that all species should have to free themselves from entrapment or distress. Bites can be normal behavior.

[Broom \(2019\)](#) focuses on this latter circumstance—the requirements of autonomy and responses to when one’s needs are not met. When we view behaviors, emotions, and feelings as part of a regulator function of sentient animals—including dogs—it becomes possible to parse the extent to which behaviors are normal v. abnormal, and to evaluate complex consequences.

This issue also contains a call for papers for the 2019 International Working Dog Conference (IWDC) to be held 1–6 September 2019 in Stockholm, Sweden ([www.iwdba.org](http://www.iwdba.org)). This meeting brings together a diverse group of those who do research on or pertaining to working dogs and those who use or manage such dogs. The latter group is, itself, quite variable

ranging from service dogs, to patrol dogs and dogs that detect explosives, weapons, drugs, cancer, endangered species and pretty much any other volatile compound that emanates from a substance that matters to human health, commerce and safety. The meeting has a novel configuration of workshops, roundtable/audience discussions led by experts in the field, and contributed research papers. Because the meeting is in Sweden, a place with a rich working dog ethology tradition, the main focus of the meeting is on temperament and behavioral assessments of working dogs, and the genetics underlying these facets and performance outcomes. See the announcement for more information about this fascinating meeting, and consider attending. This is the rare meeting that stimulates both breadth and depth.

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