CCBS

Survey: Light Source Chasers

The Center for Canine Behavior Studies (CCBS) was interested in learning about dogs who had a history of paying special attention to light sources like flashlights, lasers and shadows. In the fall of 2022, CCBS generated a short survey that asked questions about the dog's history and behavior. The survey was open to past and present dog owners, of which 152 people responded.

Demographics:
The gender of the dogs were fairly evenly split between females and males, 47% (75) and 53% (84) respectively. 51% (38) of the female dogs were spayed and 82% (69) of the males were neutered.

Curious if there was any relation between hearing impairment and light source reactions, we asked owners about their dogs' hearing ability. 89% (138) of owners reported their dog's hearing was not impaired. 4% reported their dog as partially impaired, and 3% as fully hearing impaired. 4% were unsure.

Participants were asked about the genetic makeup of their dog. 46% (71) were identified as purebred, 19% (30) as hybrids, 25% (38) of the dogs were three or more breeds, and 10% (15) replied they were unsure of their dogs' breed. 36% (37) respondents used AKC/UKC Registration Papers or Pedigree proof to validate their response to the earlier question. 22% (23) said their dog's breed was identified by a professional breeder. 12% (12) used a DNA test, 12% (12) were identified by the shelter/rescue, and 12% (12) selected N/A.

CCBS asked respondents to choose what breed their dog was from the AKC recognized list of 276 dog breeds. The five most popular breeds were Labrador Retrievers at 12% (12), followed by Border Collies at 11% (11), Poodles at 9% (9), German Shepherds at 8% (8), and 5% (5) chose Golden Retrievers and Yorkshire Terriers.

Nearly half (47%, 72) of the dogs were acquired at 12 weeks of age or less. 18% (28) were acquired between three and six months, 10% (15) were between 7-12 months, 16% (25) were between one year and three years, and 9% (14) were over three years of age. As the pet aged, 16% (24) believed their dog's reactions to light sources dissipated, while 44% (67) answered that the behavior remained unchanged. 20% replied N/A and 20% replied they were unsure.

Behavior:
34% (53) played with their dog using a light source. Of those, 22% (13) started playing with their dog before the age of six months, 30% (18) started between the ages of 6 - 12 months, 27% (16) started between one year and three years, and the remainder were over three years.

Reflections triggered the most reactions, with 47% (73) of the responses. Laser pointers followed closely behind with 41% (64). Shadows and flashlights caught the attention of 35% (55) and 33% (52) respectively. 24% (37) replied with a "none of the above" answer. 8% (12) selected "other", where five participants wrote that the television attracted their dogs' attention.

As for the dogs who spontaneously reacted to light, 19% (23) observed their reaction before six months of age, 26%

(31) were between six months and one year, 22% (27) were between one and three years of age, and 7% (8) were over four years of age. 22% replied they did not know what age their dog began reacting to light sources. 3% (4) stated their dog had no reaction.

Participants were asked to choose what reactions their dog has to light sources, and could choose multiple answers. The most popular behavior observed was an intense start, with 65% (79). 56% (68) moved toward the light while 51% (62) chased the light. 39% (45) of dogs barked or vocalized. 37% (45) attempted to catch the light with their mouth and the same amount attempted to catch the light with their paws.

When reporting on duration and frequency, 45% (51) reported their dog was totally absorbed for long periods of time. 37% (42) were moderately interested, and 18% (20) were mildly interested and easily distracted away. 76% (86) only searched for a light source after seeing one was present. 10% (11) searched occasionally and 6% (7) searched multiple times a day. 5% (6) were continuously on the lookout for a light source and 3% (3) replied their dog never searches for a light source. 36% (41) of dogs stopped reacting to the light source after it disappeared. 31% (35) stopped within five minutes, and 7% (8) stopped within 30 minutes. 21% (24) stop paying attention to the light source while it's still present, while alternatively 4% (4) search for a light source when there's no obvious source around.

We listed a number of problematic behaviors and asked owners if they've observed their dog displaying these behaviors. 55% (84) replied no, however 20% (31) reported obsessive chewing or licking, 15% (23) reported obsessive barking, 11% (17) of dogs chase their tails, 8% (13) paced/spun, and 5% (8) air snapped. 8% (13) selected "other", and wrote in observing behaviors including staring, whining/vocalization, trembling, and carrying/sucking on a blanket.

Implications:

69% (78) of owners did not find their dogs reactions to light sources to be problematic. 23% (26) thought the behaviors were disruptive to their dog's life, 6% (7) found it disruptive to themselves or another person in the home, and 2% (2) thought it was disruptive to the well-being of another pet in their home. When asked if their dogs behavior towards light sources ever had serious consequences, 90% answered no. 7% (8) reported home/property damage, 2% (2) of the dogs had injured themselves, and 1 responded that another pet was harmed.

Conclusion:

From clinic days, we thought that light chasing was primarily a condition affecting herding breeds, like Border collies or Old English sheep dogs. It turns out that retrievers of various types were also well represented in this study. It appears that light chasing is not a herder or retriever-specific condition as some poodles and Yorkshire terriers were also found to chase lights and shadows. Another hypothesis was that light chasers might all be conditioned to chase lights and shadows if their owner had played with them using a laser pointer or flashlight when they were young. It turns out that the condition can be triggered by light sources of various kinds, especially reflections, or can just appear out of the blue, so to speak. Another theory we had was that deaf dogs would be more likely to engage in the visual pursuit of light chasing, as several dogs with this condition that we had seen previously were deaf. This study disproved that hearing loss was a major factor as the percentage of light chasers that were deaf was close to the national average prevalence of deafness. Finally, we did and still do regard light and shadow chasing as a canine compulsive disorder, akin to OCD in people. Like OCD, for the most part, the behavior started in early life and, like OCD, occurred in a range of severity ranging from what owners considered non-problematic and unharmful to a minority of dogs whose behavior was regarded as severe and disruptive, causing damage to property or the dog itself.