

MEMORANDUM

TO: Open Space Board of Trustees

FROM: Michael D. Patton, Director, Open Space and Mountain Parks
Mark Gershman, Environmental Planning Supervisor
Steve Armstead, Environmental Planner

DATE: December 26, 2011

SUBJECT: Additional Information on the Voice and Sight Tag Program Monitoring Results

During the discussion on the Voice and Sight Tag (Tag) program monitoring results at the December 14 meeting, there was interest by the Board in knowing more about the dog-related conflictive behaviors included in the monitoring study. There was also interest in knowing more about the most commonly observed conflictive behaviors. The purpose of this memo is to provide additional detail on the dog-related conflictive behaviors, how they were measured and several study design constraints that limit how the behavior results can be analyzed.

In 2006, OSMP sponsored a study which included an on-site survey of OSMP visitors to identify dog-related conflictive behaviors as perceived or experienced by OSMP visitors. The purpose of the study was to develop a list of behaviors that could consistently be used to measure dog-related behaviors that cause conflict—in other words a definitive list of conflictive behaviors. This study was commissioned based on contradictory views about which behaviors were the source of conflict for OSMP visitors. The study was completed by two Colorado State University researchers with experience investigating conflict in outdoor recreation. The reports by Vaske et al. 2007 are available on the OSMP Website: [OSMP - Dog Management Reports](#). Staff used the results from this study as the basis for behaviors ([Attachment A](#)) considered conflictive for monitoring the effectiveness of the Tag and Trailhead Leash programs.

The Board also had interest in knowing which of the conflictive behaviors were more commonly observed during the monitoring. Staff designed the Tag program monitoring to answer the question: Was there a change in the level of dog-related conflict following implementation of the Tag program? Therefore field staff recorded whether a visitor party and their dog(s) engaged in at least one conflictive behavior while in the observation zone. In essence, the field staff was observing visitor parties to answer a “yes” or “no” question (i.e. did the visitor party engage in at least one conflictive behavior?). If the visitor party in the observation zone engaged in a conflictive behavior, the field staff recorded the type of behavior. However, if the same visitor party engaged in the same conflictive behavior repeatedly while in the observation zone (e.g. dog jumped on one visitor and then jumped on another visitor), no additional information was recorded for each conflictive event. While this method of data collection allowed OSMP to efficiently answer the study question of whether there was a change in the level of dog-related conflict following implementation of the Tag program, it does not allow OSMP to answer the

question of how many times was a given behavior observed? Considering the Board's interest in this, staff did look at the data to identify by year, the relative order in which OSMP visitors were observed engaging in at least one of the conflictive behaviors listed in Attachment A. This information is provided in Attachment B. While knowing how many times a given behavior occurs on OSMP (or within a specific observation zone) might be valuable and interesting, staff did not collect the Voice and Sight Tag monitoring data in a manner that can be used for this purpose. It is something future studies could be designed to measure.

If there is further interest, staff welcomes the opportunity to meet with any Board member to discuss in detail how conflictive behaviors were measured in the Tag program monitoring effort.

ATTACHMENT A: List of Dog Related Conflictive Behaviors

Behaviors that violate Voice and Sight regulations and/or were identified by Vaske et al. 2007 as causing conflict for OSMP visitors **and** could be observed by staff

- Dog flushing wildlife or causing wildlife to flee—leashing status (leashed or unleashed) and location (within or more than 10 feet from the trail) of the dog was noted
- Dog on dog chasing—whether the guardian did or did not intervene or if guardian reaction was ambiguous was noted
- Dog chasing wildlife
- Dog chasing livestock
- Dog chasing person—whether the person did not intervene or the person tried to stop chasing or get away from the dog was noted
- Repeated barking— notes described why the dog was barking if known
- Dog jumping on a visitor
- Dog licking a visitor
- Dog pawing a visitor
- Dog making contact while sniffing a visitor
- Dog making contact with a visitor other than jumping on, pawing, licking or sniffing
- Dog making contact with and injuring a person
- Dog making contact with and injuring another dog
- Dog making contact with and injuring wildlife
- Dog making contact with and injuring livestock
- Repeatedly calling a dog
- Yelling/verbal confrontation by dog guardians or other visitors
- Kicking, hitting, or “macing” a dog by a human
- Other (Notes should describe the interaction/situation)

ATTACHMENT B: Relative Order of Dog-Related Conflictive Behaviors by Year

Behaviors observed at least once in a visitor party in 2006 in relative order

- Dog on dog chasing; guardian did not intervene
- Dog chasing wildlife
- Repeated barking
- Flushing wildlife or causing wildlife to flee
- Other
- Dog jumping on a visitor
- Dog chasing person; person did not intervene
- Dog making contact while sniffing a visitor
- Repeatedly calling a dog
- Dog on dog chasing; guardian tried to stop chasing
- Dog making contact with a visitor other than jumping on, pawing, licking or sniffing
- Dog on dog chasing; guardian response ambiguous
- Dog licking a visitor
- Dog chasing livestock
- Dog pawing a visitor
- Dog injuring another dog
- Kicking, hitting, or macing a dog by a human

Other categories included dogs fighting without injury (guardians attempted to break up the fight), dog growling at/charging/attacking human but no injury, dog growling at/charging another dog, dog mounted another dog (guardian tried to break up), and wet dog walking over person's papers getting them muddy. Some of these behaviors occurred multiple times.

Behaviors observed at least once in a visitor party in 2007 in relative order

- Dog on dog chasing; guardian did not intervene
- Dog making contact while sniffing a visitor
- Repeated barking
- Other
- Flushing wildlife or causing wildlife to flee
- Repeatedly calling a dog
- Dog licking a visitor
- Dog chasing wildlife
- Dog jumping on a visitor
- Dog making contact with a visitor other than jumping on, pawing, licking or sniffing
- Dog chasing person; person response ambiguous

Other categories included dog lunging at but not making contact with a human, dog repeatedly jumping on a non-receptive visitor, dog taking a visitor's glove and carrying it away, and dog approaching (slowly not charging) calf causing cow to charge the dog - however dog repeatedly tried to approach calf until finally giving up. Some of these behaviors occurred multiple times.

Behaviors observed *at least once* in a visitor party in 2010 in relative order

- Dog on dog chasing; guardian did not intervene
- Dog making contact while sniffing a visitor
- Repeated barking
- Repeatedly calling a dog
- Other
- Dog chasing wildlife
- Flushing wildlife or causing wildlife to flee
- Dog jumping on a visitor
- Dog making contact with a visitor other than jumping on, pawing, licking or sniffing
- Dog chasing person; person did not intervene
- Dog licking a visitor

Other categories included dog growling at another dog, dog lunging at/growling at/charging a human but no injury, dog stopping abruptly and changed directions running into another visitor almost knocking person over but no injury, constant (non-stop) barking, dogs digging around prairie dog or rabbit holes, wet dogs getting another visitor/visitor's belongings wet by shaking on fur, and dogs digging holes along trail. Some of these behaviors occurred multiple times.