

Species Differences in Aggressiveness and Training Methods

Our topics for this week are:

- Species differences in aggression and avoidance
- Training methods for animals

SPECIES DIFFERENCES IN AGGRESSION AND AVOIDANCE

Dogs

Dogs' dominance posture is head up, tail up, front end is held high, rear end may be slightly crouched, teeth may be bared, and stare is fixed. Submissive posture is front end lowered, eyes do not make direct contact with handler's eyes, tail is between legs, submissive urination or defecation may occur, and the dog may roll on its back to expose abdomen. Some dogs are aggressive in presence of their owner; others, especially dogs strongly bonded to one person, may be more aggressive away from their owner.

Cats

Cats have uncanny speed over short distances that allow them to stalk prey and then move for a rapid kill before they can move.

A common sign of irritability or anxiousness is flicking the end of the tail. Most cats will attempt to escape rather than fight with a handler. They are escape artists, so all exits from a handling room must be closed before handling cats. They can be highly aggressive if they feel endangered and trapped.

Small Mammals

Most aggression and efforts to dominate are within a small mammal's own species and related to breeding behaviors.

Companion Birds

Companion birds seek higher perches to establish dominance. Handlers should not permit companion birds to sit on their head or shoulders since this encourages dominance behavior toward the handler.

Reptiles

All reptiles regularly shed their skin by a process called ecdysis. Snakes typically shed their skin in its entirety at one shedding, which can impair their sight and make them less tolerant of handling. Shedding begins as roughing of the skin while the belly turns a pink color. The skin around and over the eyes, called the spectacle scales, become opaque or blue colored. The shedding skin breaks at the mouth, and the skin is usually shed as one piece. Rough surfaces need to be provided in their containment enclosure to facilitate shedding. Young snakes shed

every two to three months. Adult snakes shed just a couple times per year.

Lizards indigenous to arid lands are more docile than iguanas which come from tropical forests, but bearded lizards which are from deserts, will puff out its throat like a spiny beard if threatened.

Horses

Horses kept in stalls and those maintained without direct interaction with other horses are most likely to be aggressive. Stallions and horses that are handled in small confinements, or with training techniques that restrict natural movement, are more likely to be aggressive. Mares with foals can be very protective even if they are docile in other situations. Snappy swishing the tail to each side can be a sign of frustration and irritation.

Cattle

Dairy bulls are the most dangerous of all domestic animals. They are unpredictable and extremely strong. They will inflict injury by crushing, goring, pinning on ground, and smashing the victim. Dairy bulls are typically hand (bottle)-raised and lose their flight zone and natural respect for humans. Beef bulls, although also dangerous, are more predictable and respectful of human space. Being raised with other bulls and cows, beef bulls concentrate more on establishing their dominance on cattle, not people. Dairy cows are usually handled frequently and become docile, if handled well. Beef cows vary depending on frequency and quality of handling. Nursing cows are more likely to be aggressive whether they are beef breeds or dairy breeds.

Small Ruminants

Sheep defend themselves by tightly flocking together and moving as a unit. Rams may attempt to butt handlers and can be dangerous particularly during breeding season.

Dominance in goats depends on their age, gender, body size, and whether they have horns, and if they do, the size of their horns directly increases the goat's social status.

Swine

If not socialized properly or deprived of social interactions, boars can be very aggressive. Nursing sows are always aggressive if they hear pigs squeal. Young pigs should be penned in small groups since they huddle, climb, and shove each other. Introducing one new pig or hog into an established group will often initiate life-threatening aggression by the dominant members of the group; a group of new pigs or hogs can be more safely introduced to another group.

Poultry

Chicken pullets and turkey poults, in extreme confinement, have their beaks trimmed because of territorial aggression and risk of feather picking and cannibalism. Turkeys, and some chicken hens, can become aggressive toward handlers who are timid in their body language when handling a flock.

TRAINING METHODS FOR HANDLING ANIMALS

Training animals to be handled should be the major part of preparing young animals to become socialized with humans.

The most effective means of training depend on species and what is to be learned. Success at training is dependent on animal genetics, observational learning from its mother, and the quality of handling it receives prior to puberty.

The foundation for success at training animals involves:

- The selection of a young animal that is an offspring of parents that have been willingly receptive to their own training
- A mother that has been properly socialized to humans and is quietly handled in the offspring's presence (observational training of offspring)
- Gentle repeated handling of the young animal during its critical socialization period.

Either **positive reinforcement** (adding a reward such as food treats) or **negative reinforcement** (removal of a noxious stimulus) are used to instill trained behaviors. The timing of either reinforcement is critical, i.e., within three seconds of the behavior to be reinforced with a treat or discouraged with a reprimand. Late negative reinforcement becomes simply punishment which can lead to the animal becoming aggressively defensive or developing a helplessness attitude that inhibits further learning.

Small predatory companion animals (dogs and cats) can be trained effectively with positive reinforcement. Their natural behavior is to investigate (hunt) sources of food and be rewarded by food when the hunt is successful. Misbehavior within their social group is corrected by immediate warning (growl or hiss) followed, if needed, by a sharp, brief vocal or physical reprimand by a more socially dominant member of the group. The reprimands must not be injurious and proper timing is essential. Most effective handlers emulate this with food treats for desired behavior and sharp, brief reprimands, vocal or physical, such as a tug on a training collar when needed for inattention or misbehavior.

Treats for positive reinforcement of dogs should be the size of a pea to a grape and able to be eaten quickly. It should be a treat that the dog does not get at any other time. Food treats should be gradually supplanted with tactile and voice rewards, particularly if a dog is to become a working dog, guardian, or support companion.

Negative reinforcement should never be harsh enough to lead to avoidance behaviors, such as the dog avoiding collars or being unwilling to engage the handler visually. Aversive behaviors are commonly associated with shock collar training.

Large prey animals (horses, cattle) can also be effectively trained to do tricks with positive reinforcement (food treats). However, this method can teach them to be a nuisance and dangerous since it can eliminate the animal's respect for human personal space that is needed for safer handling of large species. Food rewards are impractical for training horses for work or performance since carrying and providing treats is not possible when the work or performance is

in progress.

Herd animals are also rewarded by being left alone by more dominant member of the herd. Work and performance horses are trained by providing a stimulus to elicit an action. The reward is an opportunity to rest.

Behaviorists term this negative reinforcement carrying an erroneous connotation that punishment is involved. Trainers refer to this as **pressure and release**, a more descriptive phrase than negative reinforcement. For horses, the most desirable reward that is safe for a human to easily provide within three seconds is an opportunity for the horse to rest undisturbed.

It should be remembered that excessive handling can be harmful by exhausting young animals physically and mentally and may break down respect for the handler and his personal space. Advanced training of maturing or mature domestic animals involves **shaping**, breaking a task to be learned into small pieces, which are gradually refined. The refined small pieces of trained activity are then performed in sequence, a process referred to as **chaining**.

Aversive training methods should be avoided, but sometimes what is aversive is conditional. For example, spurs are used to train horses for lateral movement and choke or prong collars are used in dogs to regain a distracted dog's attention. Spurs, choke collars, and prong collars can be aversive, but they are not, if used with the correct timing and with the minimum effort to elicit an intended response.

Counterconditioning is rewarding no response. Counterconditioning is useful in training animals to accept something that might cause a fearful reaction. Counterconditioning is beneficial in training dogs and cats to accept veterinary hospitals, veterinary examinations, nail trims, blood collection, injections, and transport crates. Rewards are typically highly desired food treats, such as chicken or turkey baby food, peanut butter, braunschweiger, or squeeze cheese.

Habituation and **desensitization** are similar training methods. Habituation is providing a steady stimulus that causes an undesired response until no response occurs. Desensitization is using a repeated stimulus with increasing intensity until no response occurs. Habituation and desensitization are often used to eliminate a flight reaction to a fearful stimulus in prey animals, particularly horses.

Another technique called **flooding** is used to habituate or desensitize an animal by rapidly presenting several stimuli until mental exhaustion and no response occurs. Flooding is used in colt-starting contests to demonstrate rapid results for entertainment purposes, but flooding is a poor training technique with short-lived results. Good training is slower in shorter periods over weeks or months.

Now, let's recap the key points to remember from today's episode:

- Aggression and avoidance varies among different species of animals
- Small animal training is best done with positive reinforcement
- Horses and livestock respond best to negative reinforcement training
- The timing of reinforcements is critical for success in any type of training

More information on animal handling is available in my book, *Animal Handling and Physical*

Restraint published by CRC Press. It is also available on Amazon and from many other fine book supply sources.

Additional information is available at www.betteranimalhandling.com

Don't forget serious injury or death can result from handling and restraining some animals. Safe and effective handling and restraint requires experience and continual practice. Acquisition of the needed skills should be under the supervision of an experienced animal handler.