

## Handling Chinchillas, Degus, and Sugar Gliders

Our topics for this week are:

- The behavior and handling of chinchillas
- Degus behavior and how to handle them
- Handling sugar gliders and their natural behavior

### CHINCHILLAS

Chinchillas (*Chinchilla lanigera*) are soft, odorless rodents and rarely bite. They are indigenous to the Andes Mountains of South America at 10,000 to 15,000 ft, living in groups of up to 100 individuals. Their native environment is high-altitude, dry, rocky slopes; cold but not frigid weather; and low humidity.

From at least the 16<sup>th</sup> century, their skins were used to decorate ceremonial dress of the Chíncha Indians from whom their name was derived. Europeans later hunted chinchillas to near extinction for their pelts. They were exported in the 1930s to be farm-raised for their pelts or kept as companion pets. Chinchillas have large ears with a similar structure and range of hearing of humans. Because of this, they have been used as an animal model for human ear research.

Chinchillas are sexed using the AG distance. A female has a urethral cone that resembles a penis but it sits directly in front of the anus. In the male, there is bare skin between the anus and the urethral opening.

Chinchilla genders are simply referred to a male and female. Young chinchillas are *kits*.

### Natural Behavior of Chinchillas

Chinchillas are nocturnal relatives of guinea pigs and have extremely dense, soft fur. Their fur has about 50 to 60 hair shafts per follicle compared to 10 to 15 in most dogs and one per follicle in humans. Their hair coat is virtually impenetrable with water. Chinchillas clean themselves by fine dust bathing. *Fur slip*, tufts of hair that are pulled from their follicles, is their primary means of defense after hiding. Other means of defense are bluffing by standing on their hindlegs, chattering, barking, spitting, and urinating directly at their perceived threat. Their dense coat provides good protection against cold even below freezing, but temperatures above 80°F (27°C) can cause heat stroke. Their broad ear flaps aid in dissipating heat.

Chinchillas have strong back legs and are very good at leaping. Young ones can jump over six feet high and have no fear of heights, but this characteristic puts them at high risk for falling injuries.

Chinchillas sit on their rump and eat using their forepaws. They eat primarily at night and pass most of their feces at night. Like rabbits and some other rodents, they eat cecotropes (special nutrient feces) in the mornings to supplement their nutrition.

### Approaching and Catching

Chinchillas have a rounded body, large mouse-like ears, a long furry squirrel-like tail, and short legs. They are curious animals that with patience can often lead them to be easily captured, although they are quick and can jump distances several times their body length. If feeling

threatened, they will try to urinate on a handler. Care must be taken not to startle them since they may leap hazardously and fracture their back. They usually like to be petted, but even well-tamed chinchillas do not relax when being held. Chinchillas love raisins which can be used as a lure to catch them. However, more than two raisins in a day may cause diarrhea.

Previously handled chinchillas can be cupped with both hands and swept toward the handler's body. Grabbing their hair coat will cause fur slip. Fur slip requires at least six to eight weeks to regrow and may come back a different color. Holding the base of the tail to prevent jumping while supporting the body is acceptable. They should never be lifted by tail or ears or scruffed. For greater restraint, the handler should grasp the shoulders with one hand and hold the hind legs with the other hand in the same manner as holding a guinea pig.

### **Handling for Routine Care and Management**

The handler can hold the base of the tail to prevent jumping and support the body with the other hand. Examination table surfaces should be covered by a towel or other non-slip material. Further restraint can be achieved by wrapping in a small towel.

### **DEGUS**

The degus (DAY-goo; *Octodon degus*) is from semiarid regions of north central Chile. Their ears are large to aid in heat dissipation. They are also called "Chilean squirrels" and "brush-tailed rats." They hold food with their forepaws similar to North American squirrels. Degus are related to guinea pigs and chinchillas, have long-haired tails, and look like large gerbils. They have been used as a research model for development and aging. Degus cannot be kept legally as pets in California, Georgia, and Alaska. Pet shops that carry degus for sale and breeders of degus must be licensed by the USDA.

Female degus do not have a gap between the anus and urinary cone while in males there is a gap. The urinary cone is not the penis.

There is no special name for degus genders. A male degus is a male, and a female is a female. Young degus are *pups*.

### **Natural Behavior of Degus**

Degus are social, diurnal (active during daytime) rodents that are coprophagic. They are good jumpers. They like to live in groups in burrows and clean themselves with dust bathes as do chinchillas.

### **Approaching and Catching**

Although active, curious, and willing to approach humans, degus do not like a lot of handling. When possible, they should be picked up with one hand supporting the hindquarters and the other supporting the thorax just behind the forelegs. They should never be picked up by their tail due to risk of degloving injury.

### **Handling for Routine Care and Management**

If socialized as juveniles, degus can be handled in the same manner as guinea pigs. Restraint by wrapping with a towel may be used, if necessary.

## **SUGAR GLIDERS**

Sugar gliders (*Petaurus breviceps*) are small (5 to 7 inches long) tree-living (arboreal), nocturnal marsupials from Tasmania, Indonesia, New Guinea, and eastern Australia. They became a popular pet in the U.S. in the 1980s. Export of sugar gliders from Australia has been banned since 1959. They are illegal in California, Pennsylvania, Hawaii, and Alaska to prevent biopollution.

There are no special gender names for sugar gliders. They are called male and female sugar gliders. Young sugar gliders are *joeys*.

### **Natural Behavior of Sugar Gliders**

Sugar gliders are nocturnal, all their activity occurs at night. Females have pouches on their abdomens. Males have a bald spot, which is a scent gland, on their heads. Males use their head glands and similar scent glands on their sternum and near their cloaca to mark other gliders and their territory. If frightened, male and female gliders will express their paracloacal scent glands. The secretion has a spoiled fruit odor. They also mark their territory with their urine. They are very protective of their territory and new sugar gliders, not marked by the colony's dominant male, will be attacked.

Sugar gliders have 40 to 46 teeth. Two incisors are large and point forward which are used to penetrate the bark of trees. They are able to glide over 100 feet between tree limbs by a spreading their legs and using a fold of skin, the *patagium*, between their front and rear legs like a parachute and using their tail as a rudder. They have five digits on each foot. The inner digit on the hind feet is bulbous, without a claw and opposing to the others like a human thumb, and allows them to easily grasp limbs. The second and third digits on the hind feet are fused together and aids the glider in grooming its hair coat.

In the wild, sugar gliders live in colonies of 10 to 15 individuals in trees, nest in hollows of trees, and feed on insects and plant nectars. Their principal predator in the wild is the owl. As a result, sugar gliders become very stressed when in the presence or sound of birds.

Vocalizations include chattering for attention, yapping like a small dog when alarmed, and high-pitched crabbing when startled.

### **Approaching and Catching**

Sugar gliders should not be awakened to be caught, as this causes them significant stress. When awake, those that have been socialized to humans as juveniles may stay in a handler's open hand. If they must be caught, they can vocalize many different sounds when disturbed, and they can inflict a bite or gouge with their incisors.

The neck can be grasped with the handler's thumb and middle finger and the index finger on top of the head. Cloth bags can be everted over the handler's hand. After grasping a glider, the cloth is folded back over the glider, leaving its head exposed. Towels can be useful aids in capturing gliders, but looped cloth should not be used, nor cloths or towels with loose threads. Sugar gliders' feet can easily be caught in loops or loose threads causing serious injuries. Increasing the light in the capture room or using a flashlight may cause them to freeze long enough to use a towel for capture.

### **Handling for Routine Care and Management**

Safe physical restraint of sugar gliders is difficult. Scruffing the loose skin of the back can be

done for restraint, although this will elicit loud crabbing from the glider. Most procedures require chemical restraint. Care should be taken to prevent their claws from getting caught in the handler's clothing fabric. If a toe is caught, freeing their toe may inadvertently injure their toe, wrist, or ankle. Their toenails may need to be trimmed periodically.

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

- NEVER grasp a chinchilla by its fur or the tip of the tail, either may slip off.
- Degus should be handled with two hands
- Care is needed to prevent sugar gliders' toenails from getting caught in restraint towels or handler's clothing

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.

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.