#### **B-24 PROTOCOL FOR DOGS AND** INTERACTIONS WITH FOOD, RAWHIDE, BISCUITS, AND BONES

Myths about feeding dogs are almost as numerous as myths about dog behavior. Dogs are omnivorous but have strong carnivorous tendencies. This means that they may prefer meat, given a choice, but will also opportunistically supplement their diet with fruits, berries, and herbs. Dogs will scavenge if given the chance. Although this tendency is a serious public health problem in cities, it is interesting to note that scavenging garbage is a major mode of support for wolves in some areas of Italy. Because of the perception of dogs as obligate carnivores, many people think that their dogs must have bones or rawhides, pigs' ears, pizzle sticks, cows' hooves, and so on. It is not necessary for dogs to have any of these for good nourishment, but most dogs value these treats. The problem arises when dogs protect these items and become aggressive around them. This protocol is designed to help you understand how some of these problems develop and how to avoid incidents of aggression.

#### **New Puppies**

Puppies should learn early in life that they do not have to compete for food. This means that when the pups first experience semisolid food they should be fed from multiple dishes, or ones with central wells that disperse the pups. Frequent feedings are best because puppies learn that there will be enough food when they are hungry. If puppies are given treats or bones, all puppies must be included; they may need to be separated so that they do not fight. No one puppy should be permitted to control access to all the treats or all food or to threaten its littermates' access to those. Experimental work has shown that if puppies are given a bone, they will structure a hierarchy around that bone. The hierarchy can change, but both its maintenance and its shifts are affected by threats and challenges. This is exactly what we do not want to encourage with our pets.

No puppy that is old enough to be adopted is too young to learn to sit (See "Protocol for Deference: Basic Program"). For reasons involving social stability, ease of housebreaking, immunological health, and the pup's ability to handle social change, the earliest a puppy should be adopted into a new home is between  $7\frac{1}{2}$  and  $8\frac{1}{2}$  weeks of age. However, puppies as young as 5 weeks of age can learn to sit for a few seconds for a food treat, and excellent breeders take advantage of this. Breeders should start to request that pups sit for treats and for feedings at this age. Doing so will accomplish several goals: (1) the dogs will start to learn to be calm before eating and when they want anything: the food dish will not be placed on the floor until the dog is quiet and sitting, (2) the dogs will learn that physically contesting each other for food does not work, and, in fact, is associated with not getting the food; and (3) clients will be able to shift hierarchies either by preferentially feeding in a certain order or feeding in a random and changing order. If there are no problem aggressions within the litter, the latter is preferable because, to some extent, it removes the client's influence over food from the social system. If this pattern of activity is enforced by the breeder, the clients' task will be easier when they encourage their dogs to sit and wait when they are ready to put the food dish on the floor.

Once it is in its new home, the puppy should be taught to sit for all food treats (rewards for behavioral protocols, biscuits, and bones). The puppy should also be taught "wait" if

the food is in a dish. Puppies have short attention spans and should not be forced to sit or wait long. As they mature, they can be asked to wait for increasingly longer periods, but starting with a few seconds is reasonable. The easiest way to accomplish this is as follows.

The dog should be asked to sit. As the dish is picked up (and it is best to do this so that the area where the dish is placed is right next to where the dog will sit, which prevents the client from inadvertently encouraging the puppy to get up and make a mistake), the client should say "sit" and gently place a hand in front of the dog's chest, under the chin and say "wait." The pup only has to wait a few seconds. The client can then say "okay" and either put the dish down and allow the dog to eat or hold the dish while the dog eats. The latter is easier if the dog either growls at any movement once the dish is down or if the dog wolfs down its food once the dish is down. Holding the dish allows the client to feed the dog small amounts at first and then add food gradually so that the dog is helped to eat more slowly. If the puppy becomes excited every time the dish is slightly withdrawn, only small amounts of food should be placed in the dish at any one time. Refilling the dish will give the client the opportunity to repeat the "sit, wait, okay" sequence frequently and will help the puppy reinforce its own appropriate behavior to these commands. Such repetition is tedious for the client but invaluable for the pup.

After the dog learns "wait," the client should start teaching the dog to sit while the client is permitted to take the dish, regardless of whether the dog has finished eating. This is important because at some point the client may need to retrieve the dog's dish back with food still in it. The easiest way is to hand-feed the dog the small amounts discussed previously and say "wait" with a slightly restraining hand placed on the chest. Move the dish away for a short while, get the dog to look quickly up at you ("Magda, look!"), and then quickly say "good girl" or "good boy" and reward the dog with the food. If the dog has problems with this sequence, (anything from wiggling and not looking at you to growling), teach the dog to sit and wait for an empty dish. Practice taking the dish away and giving it back frequently with times that vary from a few seconds to 30 seconds. Once the dog's behavior is perfect, start to add food to the dish. At first let the dog lick a small amount of food from your hand while your hand is in the dish, then add the food directly to the dish, always practicing "wait" and taking the food away, finally reaching the point where you can take the dish from the dog using the commands "sit" and "wait" when the dish contains food and is on the ground or floor. Remember, new food items are naturally desirable, and a puppy that has been wonderful for presentation and removal of puppy chow might not be so wonderful for the presentation and removal of boiled chicken. Anticipate such problems and only offer tiny amounts of new food in the manner recommended previously.

#### Older Dogs

Food-related aggression is a problem with some dogs. When a dog has food-related aggression, it will guard its food, treats, rawhides, or real bones from other dogs or from people. This type of aggression can be associated with other problem aggressions but is a valid diagnostic category on its own. If your dog is only aggressive around food but does not challenge you in other contexts, do not assume that you do not have a serious problem. Any inappropriate or undesirable

canine aggression can cause a person to be maimed or killed. The presence of food is ubiquitous in our life and may be a particular problem for small children who either carry food with them or who constantly smell like food. Even if you decide not to actively treat any food-related aggression in your dog, understanding it can help you avoid it and can render your pet safe and loving.

Food-related aggression can be quite variable. Some dogs begin to growl softly from a great distance and increase the intensity of their growling as people approach. Some dogs growl while shaking and gulping their food, and some dogs stare at anyone within their view while they are eating and snarling. The logic supporting the safe resolution of all of these behaviors is similar-if possible, feed the animal where it is undisturbed. Food-related aggression may be tightly coupled to survival skills that have been honed over years of evolutionary time and treating it safely may require more effort than the average person is willing to expend. Not treating the aggression is not the same as ignoring it -a conscious decision to not treat food-related aggression means (1) that the people involved understand that the behavior is abnormal, undesirable, and dangerous, (2) that they do not wish to work with the dog to change the behavior, and (3) that they will avoid eliciting the behavior at all costs so that they are safe and so that they do not help the dog reinforce the undesirable response. These are active, conscious choices. They are not the same as living with a dog that growls when it is fed and tolerating that behavior. In the latter situation the client is actually passively reinforcing or encouraging the inappropriate behavior. Dogs, like people, hone their skills every time they are allowed to exhibit a certain behavior, even if this behavior is inappropriate. Clients who do not wish to actively teach the dog a more suitable behavior than aggression in the presence of food or those who cannot or are too afraid to work with the animal must avoid all circumstances in which the aggression will be apparent

Avoidance includes the following steps:

1. The dog is fed at discrete times from a dish and is either kept sequestered until the dish is placed on the floor, at which point the dog is given access to the food and the people leave the area, or the dog is asked to sit, stay, and wait until the dish is put down. The dog does not approach the dish until released ("Okay!") and the humans leave. Some dogs are fine when people are present but react aggressively when other dogs or cats are present. They, too, must follow this first step.

2. The dog is never fed from the table or fed food scraps

when food is being prepared.

The dog is always behind a barrier (a gate, a door, or in a crate) when people are eating or preparing food (or when other dogs are eating, if the problem is aggression toward other dogs in the presence of food). This means that the dog is banished from family barbecues; however, this is safer than permitting the dog to be present. Also, the anxiety level of the people decreases dramatically if they are not worried that there might be a dog bite. If people are stressed or distressed because of concern about the potential for a dangerous event, they will have little patience for the pet and will be less understanding of the pet's special needs, which can be modified with work. Put the dog in another space and do not feel guilty.

4. Any treats (dog biscuits or table scraps) must be placed in the dog's bowl in a room where the dog is undisturbed and must be of a nature that the dog can finish them in

one session. The latter requirement is particularly important for dogs that guard food. If the client knows that the dog hoards and protects biscuits, even biscuits may need to be deleted from the dog's diet unless they are sufficiently small to be finished within minutes of presentation. This is particularly important advice in the case of dogs that hide their biscuits in sofas or other places because the client will not know where the dog has stashed its treats and could then inadvertently be victimized by the dog when they approach the cached biscuit.

5. Some dogs respond inappropriately only to very highquality treats such as bones, rawhides, pig ears, pizzle sticks, cow hooves, or chew sticks. If these treats cannot be finished in one setting (and most cannot), the most simple, easiest solution is to remove them from the dog's diet forever. This is not cruel, injurious, or deprivational for the dog-it is good common sense. The dog is forbidden to experience something that other dogs have and would find enjoyable; however, this cost is small compared with the guilt any client would feel if a child's skull were crushed because the child came between the dog and a bone. If dogs inappropriately protect food items, people must be responsible for ensuring that they do not help the dog orchestrate a disaster by setting them up to fail. This is a particular risk when small children are involved. Even if the dog is behind a closed door with a rawhide treat, the child could open the door and pay profoundly for that innocent gesture.

Clearly, it is easy to avoid situations that provoke foodrelated aggression, and in most circumstances, this is a far preferable choice to treating the problem. This aggression should only be treated if the clients can guarantee that they can always control the dog's access to food. If they cannot do this (and no household with children can do this), they should not even entertain the notion of treating the aggression. Instead, it is preferable to believe that the aggression will occur when the opportunity is provided and that all

provocational opportunities must be avoided.

Treatment involves the same approaches as mentioned previously: gradual exposure to small amounts of a food that is not highly valued. The amounts and quality of the food are increased only if the dog relaxes and does not respond. The client can start by hand-feeding the dog small amounts of dog food. All food will come only from the client's hand and will be relinquished only when the dog is lying down, is quiet, and is calm. If the client is too fearful to do this, the aggression should not be treated, and instead the client should practice avoidance.

When the dog can accept all food from the client's hand without reacting adversely, the client should start stroking the dog during feeding. This should continue until the client can massage the dog while providing food, and the dog's response is calm and friendly. This process could require sev-

eral months.

After the dog relaxes to the touch when fed, the client should introduce a dish in the manner recommended previously. After giving the dog ever-increasing amounts of massage while holding the dish and having the dog respond favorably, the client is ready to start introducing food in a dish.

At first a small amount of food should be offered. The dog should be taught "sit," "wait," and "okay" and can only get the food when the client says "okay." After the dog has finished the small amount of food, the dog must be taught to sit and stay (or lie down and stay) while the client reaches for the dish, refills it, and replaces it. If the dog growls or

lunges at any point in the sequence, the client should abandon the dog and return to try again when the dog is calm. If the dog gets up, the client must move the food to where the dog cannot see it and repeat the sequence of sit, stay, and wait. The client may have to do this many times before the dog responds appropriately, but repetition is far better than allowing the dog to become aggressive and control the situation. If the client does not have the patience to pursue such a repetitious course, it is better to not treat the aggression and use avoidance to control the problem.

Finally, once the client can fill and offer, reach for, get, and refill the food dish, the client can start practicing leaving the dog and returning while the dog is eating. At first the client should only move a few centimeters from the dog and then return. The dog should never react inappropriately. If the dog does react, the client must repeat that sequence until the dog is calm. Ultimately the client should be able to put the dish down, leave the room, return, request that the dog sit (with food still in the dish), take the dish, and have the dog relax throughout. This can take months to accomplish and may never be wholly successful. If not wholly successful, the client will have at least learned the dog's limits

and then must take great pains to control any potential danger attendant with that limit (i.e., avoid the situation).

The client can repeat the previously listed steps for any food-related substance to which the dog reacts: dog food, rawhides, real bones, or scraps. Clients should note that real bones and rawhides often elicit a much more exaggerated response than any food in a dish. If there is any doubt about the client's ability or desire to work successfully with the dog, the client should avoid all potentially provocative situations, even if this means that the dog is forever deprived of rawhide. The dog will not suffer from the absence of rawhide.

Anyone who works with a dog with food-related aggression may feel more secure if the dog is fitted with a head collar. The Gentle Leader collar is the ideal choice in this situation because the client can quickly, humanely, and safely close the dog's mouth, thus avoiding any untoward events.

It is perfectly all right and sensible for anyone to decide to not work with a dog with food-related aggression, instead choosing avoidance. No one should feel guilty for this decision.

#### **B-25 PROTOCOL FOR HANDLING AND** SURVIVING AGGRESSIVE EVENTS

No one wishes to be victimized by an aggressive cat or dog, but it is a sad commentary on the frequency of this event that more than 50% of all children in the United States 11 years of age and younger have been bitten by a cat or dog. Understanding which canine and feline behaviors indicate a potentially aggressive response and knowing how not to provoke an aggressive response can help people avoid attacks by animals. If the person behaves cautiously and appropriately, even if the attack cannot be avoided, damage from the attack can be minimized. Most serious bites to people that occur in the United States and Europe involve dogs; therefore this protocol focuses primarily on avoiding dog bites, but the information can also be adapted to avoiding injury

#### The Unknown or Unfamiliar Dog

Dogs that are unknown to individuals pose a different set of problems when considering the potential to be bitten than do familiar dogs. Most dogs that bite people in public places or in their communities are not strays—they are owned by someone and may be a good pet for them, but they are loose and free ranging. Some general information about the behavior of free-ranging dogs can help people avoid being bitten.

1. Dogs in groups may be more confident and more reactive than are single dogs.

- Single dogs may be more wary but may still bite if cornered.
- 3. Dogs become bolder and more confident if close to their home turf. Unfortunately, if the dog is unknown to the person, knowing where the dog's home turf is can be diffi-
- 4. Dogs can view stares as threats.
- 5. Dogs will chase individuals who are running away from them in one of two ways: as they would chase an intruder or as they would chase prey. In both cases four-footed animals with large shearing teeth have all the advantages.

6. Children who shriek are far more liable to elicit active pursuit than those who are quiet.

7. Throwing stones, sticks, or any item or aggressively waving your arms at a dog that is aggressively pursuing you is far more likely to intensify the dog's aggression than it is to mollify the dog.

- 8. Young children and older people are more at risk for serious injury than are young adults. Individuals in both of these age groups are less likely to be able to successfully retreat from and fend off an attack because they may not be able to move in a coordinated manner or because they cannot anticipate the event. In fact, the mortality rate for people in these groups is much higher than for adults.
- 9. Although it is inappropriate and incorrect to say that certain breeds are more aggressive than others, larger breeds do more damage when they attack. The greater the size or person mismatch, the more damage that will be done. If the person attacked is a child, the chance of serious and often fatal injury increases dramatically.

With these points in mind, children should be encouraged to not play with unfamiliar dogs. Under no circumstances should children play with dogs that are not theirs unless they are supervised by a sentient adult. This advice is as much for the dog's protection as it is for the child's. Both

children and dogs can be unpredictable, and the interaction can occasionally be toxic. Many dogs only respond aggressively to a child after an extended period of abuse, but the dog will never get the benefit of the doubt. People should protect their dogs and their children.

If an unfamiliar or at-large dog approaches a child in a public place, the child should tell an adult immediately and the adult should tell someone responsible for the maintenance of the open space. If the dog is clearly friendly and solicitous, the adult may make the decision to take the dog home, but any dog that is exhibiting any wariness or threat should be avoided at all costs. Threat postures in dogs include wide-legged stances with lowered heads, growling and baring of teeth, pupil dilation and staring, and piloerection. Dogs that wag their tails are only indicating their willingness to interact: they are not communicating that they are friendly. People should remember that interactions can be good or bad.

If a person is approached by a worrisome dog, he or she should take the following actions: (1) avoid staring at the dog; instead look at the dog obliquely out of the corner of the eye; (2) back up slowly, ensuring not to trip over anything; (3) keep arms and legs to the side—do not flail arms or make sudden bolting movements; (4) talk calmly and soothingly to the dog in a low voice if this seems to calm the dog; if the dog intensifies its growl, clearly this is not a good idea; (5) hold oneself as tall as possible; (6) move as directly as possible to a safe area—inside a building or car, behind a truck, or so on. This is the same advice that is given in wilderness situations for handling the approach of mountain lions, bears, or wolves. It is good advice.

Do not assume that because the dog stands still that you can start to run. You can only run if you can get inside a building in a few steps. Running triggers a chase response in a dog, and you have to turn your back to run-do not do it.

Once you are away from the dog, call for help and wait until it comes.

Practice the previously mentioned techniques with children. Furthermore, teach children that if the dog is jumping at them, they should fall directly and silently to the ground, curl up in a ball, and cover their head with their hands and arms. Kids should be taught to look like armadillos when threatened by advancing, threatening dogs. This is also good advice for anyone who accidently trips during the process of getting away from a dog.

Finally, if the dog makes contact with you, stay calm, stay silent, and do not get into a tug of war over any of your body parts. This last piece of advice is difficult to enact, but it is important. In situations involving actual bites from dogs, the majority of the damage is done when a person tries to pull an arm or afflicted area from the dog's mouth. The dog's innate response is to tighten its hold with its jaws and to shake the victim. These last two behaviors are the prime culprits in profound attacks that result in debility and death. Be calm; once the dog releases its grip, follow the previously mentioned steps and try to get away.

If children are grabbed by dogs, do not struggle with the dog for the child—the child will be further injured. Instead, look for something to throw over (a blanket) or at (a bucket of water) the dog to stop the behavior. Be calm and quiet. Encourage the child to be quiet and to go limp. Try to distract the dog. If you are successful with this advice the outcome may still be awful, but it will always be much worse if you

get into a physical contest with the dog.

#### **Known Dogs**

Known dogs, in this context, are defined as dogs that are known to have a problem aggression and may pose a risk to the people who live with them. The first step in the treatment of any canine or feline aggression is for the clients to avoid any circumstances that are known to be associated with aggression. This means that clients are responsible for protecting children and unsuspecting friends from their dog. If safety requires that the dog be banished when people come to visit, the dog is banished. Clients will feel more guilty if their dog mauls a child than if the dog spends the day in the bedroom. If the visiting children are going to run free, the bedroom in which the dog is ensconced must be locked. Remember, kids can be unpredictable. In the absence of any other information, clients should assume that if their dog has a problem aggression that they cannot take a chance with that aggression and with people whom the dog does not know. Dogs become more reactive when people are excited, and problem dogs, in particular, become more reactive in unfamiliar, noisy circumstances. A little common sense and discipline can save a lot of heartbreak.

Clients must protect themselves from their pet's aggression by learning to give the pet cues that encourage appropriate behavior and separate cues that tell the pet that it will be ignored by the client rather than being rewarded with interaction. This means that clients must change their own behavior to change the pet's behavior. Although it is true that the clients invariably did not cause the pet's problem, they have the responsibility for fixing it. If clients know that the dog is more aggressive when it is allowed to sleep on their bed, the dog is no longer allowed to sleep on their bed unless the clients can ask the dog to get off the bed and lie down, and the dog complies willingly. If not, the dog cannot be in the bedroom with them because they will always be at risk. If clients know that the dog growls every time clients groom or pet the dog, clients must avoid grooming or petting until the dog can lie down and relax for this. Use of a Gentle Leader head collar can hasten this response and render the dog safe. Under no circumstances must clients ever believe that they have to put their own safety at risk to make progress in changing their pet's behavior. This is absolutely wrong.

Clients should remember that dogs read body language much better than people and will pick up on any uncertainty. Whether they can smell "fear" is unimportant; they will take advantage of any pause or uncertainty in the clients' behavior to take control of the situation and exhibit aggression. If clients cannot be calm, confident, and patient when working with the dog, they have a low probability of changing the dog's behavior. Clients also need to remember that every time that a dog or cat with a problem behavior is allowed to exhibit that behavior, it is reinforced. The pet learns how to do the behavior better with exposure, experience, and repetition. Avoidance is the key.

If clients take all precautions and the dog still threatens them, the clients should back away in the manner described previously for unknown dogs. Clients whose dogs have known aggression problems have an advantage over the situation above-they are able to keep devices like blankets, water pistols, air horns, and spray canisters on their person or in the room where they interact with the dog so that they

can distract the dog or protect themselves should the dog intensify its aggression. If clients give the dog a command to sit, whether part of a behavior modification program or not, and the dog begins to growl or otherwise become aggressive, they should gently try to get the dog to relax using a verbal command. If this does not work, the clients should release the dog (not reward it) and slowly back away. It is far better to ignore the dog than to struggle to "win" or "dominate" the dog. Clients invariably succeed at doing neither but instead teach the dog more about the clients' fears and the extent to which the dog can manipulate them. Even if the clients must repeatedly avoid the dog, this is preferable to physically contesting the dog. If clients are consistent, the dog will ultimately approach and be willing to exhibit deferential behaviors in exchange for the clients' requests. In extreme cases this can take days. It sounds hard-hearted, but the dog will not starve to death. However, in these extreme cases, if clients are overly sympathetic for the dog, the dog will manipulate them and the behavior modification process will backslide. If the dog continues to threaten the clients and avoidance does not elicit deference, the clients should orchestrate the situation so that the dog is behind a closed door or in a safely fenced area. Sometimes just letting the dog into the backyard can interrupt the aggression and the clients can begin the modification process again. Keep the dog behind a barrier for as long as is necessary for the dog to calm down. Clients feel guilty and sympathetic to the dog and try to interact with it before the animal can rationally learn anything from the interaction. Such responses usually intensify the aggression. The longer it takes the dog to calm down, the worse the prognosis (i.e., if the dog was snarling yesterday and 20 hours later still cannot be approached for feeding, clients may wish to question their success in reliably changing this behavior into a safe and loving one).

If the dog bites the client, the client should freeze and not struggle with the dog. Do not get into a struggle over body parts. Go limp, look away, become small and quiet, and

slowly retreat at the first opportunity.

Client anger and a sense of disappointment and betrayal are normal, but dogs with problem aggressions cannot respond rationally to those feelings. Clients should remove themselves from the situation as quickly as possible. Leave the dog alone to be quiet. Clients should not punish the dog physically, no matter how angry or hurt they are—this will only make matters worse. The client should seek any required medical care and then calmly approach the dog using the deference and relaxation measures that the dog has been taught. If the client is either too fearful or too physically or emotionally injured to do this or no longer wants to work with the dog after such an event, the prognosis is poor. Clients should never feel forced to work with a dog that terrifies or endangers them. They may feel sad about their decision to euthanize the dog (or in some cases place it in another home, if this is possible), but there is no reason to feel guilty if the clients behaved as previously mentioned. Clients who feel guilty are the ones who were unable to act in the safe, rational manner discussed here, and who, inadvertently and unintentionally, encouraged their dog's inappropriate behaviors.

# B-26 PROTOCOL FOR TEACHING CHILDREN (AND ADULTS) TO PLAY WITH DOGS AND CATS

One of the reasons that we have pets is so that we can cuddle and play with them. Such interactions should be the source of much joy, but they often lead to injury to the pet or to the person. Rough play can worsen a behavioral problem that is developing. Some basic guidelines for appropriate play with cats and dogs can minimize these problems and may also lead people to more fully appreciate the intricacies of canine and feline communication.

Puppies and kittens, like young children, are energetic, can quickly progress to lack of control and exhaustion in their play, and make mistakes in both the objects and the intensity of their play behaviors. Unlike human children, puppies and kittens do not have hands with opposable thumbs (a purely primate trait). Instead, they have a jaw and tooth structure that allows them to carry and manipulate a variety of objects. Hence, much play between young cats and dogs involves the use of the mouth. Kittens and puppies will also box, rear, and pounce on each other as part of play. Young animals transfer these behaviors to people unchanged.

#### Boxing, Mounting, Rearing, and Pouncing

Boxing, mounting, rearing, and pouncing are normal kitten and puppy behaviors. These behaviors function to allow closeness and energetic play between animals and may help shape adult social behaviors and communication skills. By their second month of life, both puppies and kittens begin to pay more attention to people and use the same behaviors that they use to communicate with other animals to communicate with humans. All social mammals play, so we are able to recognize signals from puppies and kittens that they wish to play and to act on these impulses. Human children do not exhibit exactly the same form of play that puppies and kittens do, in part, because humans can manipulate objects and each other with their hands. The tendency is for puppies and kittens to play with humans exactly as they would play with other puppies and kittens and for humans to mimic these puppy and kitten behaviors using their hands.

When dogs and cats are small and do not weigh much, these wrestling and boxing behaviors tend to be noninjurious. However, as the animal grows the pouncing and boxing can injure a child, or, in the case of a large-breed dog, an adult human. Very exuberant, large-breed dogs can knock a human toddler to the ground and fracture the skull. Tragic deaths and injuries are no less tragic because the animal "didn't mean to do it." In fact, accidental injury to a child caused by an animal that is wonderful will cause more guilt for the humans involved than will injury by a dangerous animal. Puppies and kittens remain youngsters until they are socially mature, which occurs at around 2 years of age. Accordingly, they cannot be expected to show the judgment and restraint that an older dog or cat might. Furthermore, it is impossible to intellectually ascertain whether a dog or cat understands how fragile infants, young children, or aged, frail humans can be. It is absolutely unfair to make the puppy or kitten solely responsible for the decisions about the directions that play will take. Human guidance must be pro-

Tackling, pawing, and mounting by young animals can be acceptable *if and only if* the people involved can do the following: (1) always stop the behavior by saying no or by with-

drawing, (2) redirect the behavior to another focus (a toy), and (3) gently correct the behavior so that it decreases in the future, should the behavior be too rough. If the animal's response to a gentle correction of standing up or withdrawing a leg is to attack it more forcefully, there is already a problem. Either the animal is already displacing some undesirable tendencies related to aggression and control, or the person has already taught the animal to play too roughly. Appropriate correction for forceful tackles or pouncing includes stopping, saying no, startling the animal (blowing in the animal's face may work), and asking the pet to exhibit a more appropriate behavior. More appropriate behavior may involve sitting and waiting for a toy or distracting the pounce to a better focal object (e.g., a feather on a string for the cat that lurks around corners and chases shoelaces).

People should not correct animals by swatting them in the face or by thumping them on the rump. This only stimulates the animals to respond to the body part that has just whacked them and teaches puppies and kittens that rough play stimulates rough play. This is not the message that people wish to send.

People should also refrain from exhibiting what they perceive to be human versions of feline or canine correctional behaviors. These including hanging a kitten by its scruff; rolling a dog over forcefully and lying on it while growling in its face; shaking a dog by the jowls, scruff, or neck; swatting a dog across the ears; slapping a dog under the chin; and so on. First, these behaviors are not mimics of behaviors that adult dogs and cats exhibit toward puppies and kittens. Second, even to the extent that these behaviors do overlap with corrections of dog and cat behaviors, there is a real danger in overdoing them and causing the pet injury. This is particularly true for cats. Cats are tiny, and, although adult cats frequently bite at or carry young cats by the nape of the neck, cats have pressure sensors under their teeth and can use just the right amount of control—people do not have this ability. Finally, these forceful kinds of correctional behaviors exhibited by people toward their pets may encourage physical solutions for problem that are better solved by intellectual solutions. People should not have to manhandle a cat or dog to convince the animal to alter its behavior—they should be smart enough to redirect that behavior in ways that can be mutually satisfying. Through evolutionary history, humans have lived with dogs and, to a lesser extent, cats in a manner that has encouraged them to take their cues from us. We can capitalize on that perception and learn to encourage limits to robust play. The best emotional relationships with pets are founded on a basis that is devoid of fear and injury. We need to protect both our children and our pets so that they can have those relationships.

One final comment on physical discipline and pets is warranted. Not only will physical discipline cause the animal to respond in an escalated and aggressive manner, but it will also send the message to any other individuals watching (i.e., your children, friends, or spouse) that the way you solve conflicts is through physical intervention and violence. Ask yourself if this is the message that you wish to send, especially given that the method does not appear to work as well as kinder, more benevolent methods. The American Humane Association and the Latham Foundation have demonstrated that child abuse and pet abuse are linked. People who are abused as children will hone their abuse skills on their pets before continuing the cycle by abusing their own children. In turn, pets that are abused may act as a flag for child abuse. The concepts of abuse and discipline are changing as

we learn more about ourselves and our pets. Harsh punishment of our pets may act as a guide to other problems that we have not previously understood.

#### Claws and Scratching

Kittens are not able to reliably retract their claws before 4 weeks of age but can learn to do so after that time. If they are allowed to snag at people with their claws, they will continue this behavior as adults. Cat scratch disease is a serious problem for people who have been scratched by cats. Most of the cats that communicate this bacterial disease are young kittens that are infested with fleas, but any cat can potentially be responsible. Cat bites are a very serious problem in human health because cats' teeth are curved, small, and sharp. A cat bite provides the ideal environment for infection.

Kittens that are hand- or bottle-reared play more roughly with their claws and teeth than those who have been naturally weaned by and kept with their mothers. Their mothers and other siblings do not tolerate rough play and correct the cats. Early correction as the cat begins to get bigger is invaluable and involves not only the tendency to modulate or control rough behaviors, but also the ability to use signals that communicate when the play is getting too rough. For this and other reasons, kittens should be kept with their mothers until 9 to 14 weeks of age. The mother will control all the play, partly through her withdrawal from the kittens, and they will never learn to play roughly. Part of the problem with bottle-fed or orphaned kittens is that they never learn to inhibit their aggression using either their claws or their teeth because there is no adult present who can read the early signals that the play is rougher than needed. However, a second part of the problem involves social development and the evolution of cat behavior. Cats that are weaned early exhibit predatory behavior earlier than do cats that are allowed to spend extended amounts of time with their mothers and siblings. Clients who adopt these orphaned kittens must be realistic and learn to read their kitten's signals well: (1) no rough play should be tolerated, (2) toys should always be substituted for swatting at people, (3) corrections should include distractions (like blowing in the cat's face) followed by a substitution, and (4) if the cat pursues aggressive acts, the cat should be unceremoniously dumped from the client's lap (just stand up and let it fall off-do not dangle any body parts in front of an aggressive cat) and ignored until it has calmed down. Once the cat has become calm, play can be reintroduced with a toy. Clients must not encourage the direction of predatory behaviors toward themselves.

Claws are less of a consideration for clients with dogs but can still be problematic for dogs that bat and swat with their feet. These dogs do well with Kong toys or Boomer balls (Kong Co., Lakewood, CO) that redirect the dog's foreleg movements to something that will not be injured. Caution is urged: dogs in hot pursuit of a toy can knock over a child or small human and may not even realize that damage has been done. Appropriate supervision is always necessary.

Finally, keeping any dog's or cat's nails trimmed should be mandatory and part of routine maintenance. Clients can start this as soon as they get their pet. It will get easier with time, render their pet easier to handle, and make it safer and more comfortable for the pet to run and for the person to interact with the pet. If people are afraid to use nail clippers, emery boards can produce well-manicured dog and cat claws.

#### Mouthing and Biting

Mouthing and biting are common complaints of people who have inadvertently played too roughly with their dog or cats. No puppy or kitten should be encouraged to mouth. Puppies and kittens do this naturally because they use their mouths much as humans use hands. It is a simple matter to abort this behavior when it first starts, but it can be very difficult to abort it if it has been ongoing for a long time.

The first thing clients should do when their puppy or kitten mouths them is to say "no" and freeze. If clients pull their hand away from the puppy or kitten, even if doing so to avoid a prick, they encourage the animal to pursue the "game." Say "no," stop, and gently extricate or remove the body part while holding the body of the animal. Then quickly offer the animal something on which it can chew (a stuffed toy or a ball) and tell the dog or cat that it is good. Repeat this as often as necessary. If the animal persists, make a sharp noise, whistle, or blow in the animal's face to startle it. Remember, the only reason to startle the animal is to stop the behavior so that a more appropriate one can be taught. Most people understand that they wish the animal to stop the behavior and can get them to do that; however, it is equally important to reward the cessation of the undesirable behavior with one that is more appropriate (e.g., chewing on a toy). Remember, puppies and kittens are very focused and will exhaust the average person almost instantly. Clients must be vigilant and, if they are not willing to be so, should consider placing the animal in a safe area (its own room, a crate, or a pen) until they feel they have the energy again to face the onslaught of play. (If clients do not feel that they can honestly face this for days, they should reconsider why they have this pet.) Puppies and kittens need energetic, positive attention. If they are not able to get attention through positive means, they will get it through ones clients consider negative. Clients are responsible for shaping the pet's behavior. Young puppies and kittens are just like young childrenif the only interaction they get is negative, they will learn to crave that negative interaction, and, like children, they will intensify the negative behaviors to get ever-increasing amounts of response.

Clients often think that they do not have to correct puppy nipping because it is not injurious and does not hurt. This is absolutely incorrect. These dogs will get bigger; the bigger the dog, the more powerful the jaws, and the more damage that the dog will do if it bites. The time to learn to inhibit activity using the mouth is when the dog is young. If dogs are allowed to mouth, they will form a behavioral habit in which mouthing is acceptable. It is much harder to unlearn a behavior than to teach an appropriate one at the beginning.

People (often adult human males) often believe that they can teach their dogs to be protective by wrestling with them. This is anthropomorphic, wrong, and dangerous. If a dog is going to protect a family when a threat is present, they will do so regardless of whether they play roughly. All such "training" does is to teach the dog to treat the family roughly. This is not what clients want. Clients should use a toy, not their arm! Using a toy for real play helps a dog understand the contextual differences between play and threat. Dogs need this help, which is easy to provide.

Some puppies that are raised with other energetic dogs can play very roughly. Dogs of all ages can learn to distinguish between rough play between dogs and more gentle play with people. One of the first clues that puppies can use is that the clients do not use their mouth to grab the ruff of

their neck. Clients should not tolerate rough play from a puppy or kitten because they assume that this is the way to play with other pets. As long as none of the animals in the house is injured during energetic play, they can play as roughly as they want with each other but must be encouraged through the use of corrections, toy substitution, and withdrawal of attention that this same quality of play will not be tolerated from the clients. Clients can help the dog understand this. If clients' pets vary widely in size or in skills related to judgment about how hard to play with youngsters, the clients are responsible for supervising the pets. Bigger pets can and do kill smaller ones by accident. Some older animals have problems with smaller ones and may exhibit predatory behavior toward them (see "Protocol for the Introduction of a New Pet to Other Household Pets"). It is not necessary that the pet have this problem for the animal to injure a younger or smaller puppy or kitten in play. Only when clients are certain that the animals play well and safely together should they be left alone, and then only for short periods of time. If a new puppy or kitten plays too roughly with people after playing with another pet, consider limiting their time together to short, supervised periods and working with the puppy or kitten on a leash or harness immediately after play with the other pet.

#### **Teaching Tug**

Clients often want to play an energetic game of tug with their pets. Many training manuals state not to do so because it will make the pet aggressive. This is not true. If the goal is to play appropriately, energetically, and interactively, clients can play tug with a pet if the following rules are observed:

- 1. The dog must sit and wait until the client is ready to start the game and until the toy is offered.
- Clients must say "take it," and the dog must wait to take the toy until the request.
- 3. The client and the dog both pull on the toy, and the tugging is gentle and does not swing the dog around the room (which could injure its neck), and the dog is gentle and does not grab any body parts.
- 4. If the dog simply grazes any body parts, the client should act as if mortally wounded, stop the game, ask the dog to sit or, preferably, lie down, and the dog complies.
- 5. Again offer the toy as in Step 1.
- 6. The client decides when the game is over by announcing that it is time to stop ("stop," "enough," "that is it"), the dog sits ("sit"), and drops the toy into the client's waiting hand ("drop it"), and the client always wins.
- 7. The client releases the dog and it goes off to do something else without charging.
- If all of these steps cannot be executed flawlessly, do not play tug. The client and the pet will be safer.
  - Do not forget, similar games can be taught to cats!
- Remember, dogs and cats, like people, make mistakes. Clients must not lose their temper with an animal, particularly one that is a baby. Not only could a young pet be seriously injured by such irresponsibility, but also it sets the tone for future interactions and could teach that dog or cat to be fearful, aggressive, or simply to play too roughly.

#### B-27 PROTOCOL FOR CHOOSING COLLARS, HEAD COLLARS, AND HARNESSES

#### Identification

One of the main objectives that collars accomplish is identification. All cats and dogs should be labeled. There are three main ways to do this, and they are not exclusive: (1) tags on a collar provide information about the client (name, address, and phone number), veterinarian (primarily the phone number), and vaccination status (current rabies vaccine); (2) tattoos in ears or on thighs; or (3) microchipping. Tattoos are usually comprised of the client's Social Security number (in the United States) or some code and require at least sedation to execute. The dog or cat then usually wears another tag on its collar indicating the telephone number to call should the animal be separated from its people and need to find its home. Microchipping is becoming more broadly available, but in Europe and the United Kingdom the systems are less standardized than they are in the United States. Microchips are easy to install but require the widespread availability of microchip readers. Long-term effects of an implanted, digitally coded device have not been fully evaluated, but the risks appear small in preliminary tests. The general principle behind microchips is that a number is displayed when the chip is scanned and ownership data can be obtained by calling a central depot. The animal generally but not always wears a tag that indicates that a chip has been implanted. The chips are radioopaque, meaning that they will be displayed on a radiograph or x-ray film. Whatever method is chosen, two factors should be certain: (1) the tags are current, and (2) they are on a collar that fits comfortably. The latter means that the collar is either a breakaway collar through which one or two fingers can slip comfortably or that the collar is sufficiently snug to stay on the animal if it tilts its head, but should the collar become entangled, the animal can pull its head out of the collar. If clients are not cautious about the fit of collars, animals can strangle or collars can become imbedded in their skin, resulting in morbidity or mortality. Breakaway collars are particularly important for cats, who have elevated squeezing their bodies into small places into an art form.

All animals should be labeled. If they are lost or stolen, it may be their only hope of getting home again. If the township or county in which the pet lives requires a license tag, this could be the only thing that saves the pet from impoundment, quarantine, or destruction.

#### Control

Collars and harnesses are used primarily for control of dogs, but a few words about harnesses and leashes for cats may be helpful.

Cats should be restrained when they go to the veterinarian and, if they are indoor cats, when they are outside. They should also be restrained in a car so that they do not become projectile. Placing them in a crate can accomplish this, but more freedom and exercise can be an excellent idea. All kittens should be fitted with a harness so that they can be encouraged to explore the world. A harness is preferable to a collar because, fitted correctly, it will not injure the cat and the cat cannot slip out of it. The younger the cat is when the client fits it with a harness, the easier it will be to accustom the cat to it. Once the harness is on the cat, it should be taken for trips in cars, on walks, and for visits to the veterinarian. These activities should occur frequently; they will pay off later when the cat needs care that requires

tractability. If the cat can safely be taken outside, the cat's life and the interaction between the cat and client will be enriched.

#### **Buckle Collars**

Buckle collars can be good to accustom young puppies or kittens to leashes but should not be relied on for control of any animal. Any animal that walks calmly and without resistance when on a leash that is attached to a buckle collar is not doing so because of the collar. These animals are exquisitely behaved despite the collar. Any animal that pulls or lunges while on a buckle collar needs another type of restraint or training device. Buckle collars-provided that they break away or can slip off, if caught-should be fitted to all animals so that tags or embroidered identification can always accompany the pet. This means that they are used in addition to, not instead of, other devices.

#### **Choker Collars**

Dogs are routinely fitted with devices such as choker collars as part of a training program. Choker collars are usually either made from chain or a rolled, braided nylon. When used correctly, choker collars are actually one of the best examples of true negative reinforcement: when the dog pulls, the collar tightens and either the sound or the pressure indicates that the dog has engaged in an undesirable behavior; when the dog stops, that pressure is released (and in the case of a chain, the sound of slippage occurs and the dog is unimpeded. It is the release from the negative stimulus (the tightening of the collar that is the reward. Unfortunately, most people do not use choke collars correctly; to do so requires a lot of work and patience. Instead, many dogs "choke" when chokers are used. When they are allowed to pull on the collar and permitted to sustain the pull, these dogs learn to override the choker. In doing so they are also at risk for laryngeal, esophageal, and ocular damage (damage in the blood vessels in the eye). Despite still being the preferred and, in some cases, the required form of restraint in a show ring, choke collars are an idea whose time may have passed. When clients can overcome their own misconceptions about how the collars look or what they mean, they will, with ever-increasing frequency, choose a head collar or a no-pull harness for their dog. When used correctly the devices are safer, easier to use, and help teach the dog better behaviors. They are a winning solution that could and perhaps should eclipse the choker.

#### **Head Collars**

Head collars are very much like horse halters. They act as a basket that holds the dog's cheeks and jaws and stay on the dog by fastening high on the back of the neck. Generally, at least one strap fits over the bridge of the dog's nose and one fits over the back of the neck. The leash is attached in the middle of the halter to the nose strap, but under the chin. This is how a lead is attached to a horse halter but is a major change for many people who are accustomed to attaching a leash directly to something around a dog's neck. The two major versions of the head collar are the Halti (Safari Whitco, Bohemia, NY) and the Gentle Leader/Promise System Canine Head Collar (Premier Pet Products, Richmond, VA). The Halti is intended to be fitted with a second collar because it fits loosely. It also cannot be tightened to prohibit biting by pulling forward, but it fits some very jowly breeds well and snugly. The Gentle Leader/Promise System Canine Head Collar gives most dogs a better fit, requires no second

collar, and can be used with a leash to correct inappropriate

behaviors and prohibit biting.

Head collars are wonderful for most dogs. They spare the dog's larynx and esophagus and thus are an ideal choice for dogs with laryngeal damage, tracheal collapse, or cervical (neck) damage involving disks, bones, nerves, or muscles. Head collars also ride high on the back of the dog's neck so that when the leash is pulled forward or the dog pulls in the direction opposite to that of the leash, this part of the collar tightens a bit and applies a small amount of steady pressure on the area of the upper neck near the head. Not only is this generally very safe, but also this pressure uses the same kind of signal that dogs communicate to other dogs when they wish to control them or stop. Thus when the dog is corrected with a leash, the head collar communicates a "doggy" signal to the dog to stop. No translation is necessary, and the response is quick. For clients who are already working with a behavior modification program, this type of helpful, kind device can be a godsend. If the dog has a mouthing or biting problem, the Gentle Leader/Promise System Canine Head Collar can be gently pulled forward to firmly, safely, securely, and humanely close the dog's mouth. When used correctly the collar cannot injure the dog and will allow the client to control most of the dog's behaviors and stop the dog from biting.

The leverage provided by a head collar allows children and people with arthritis to walk even unruly dogs—and to enjoy it. If dogs get more exercise they are calmer; if people enjoy being with their pets more, they will be more motivated to work with them. Head collars provide a win-win situation and are increasingly becoming the collar of first choice for a puppy. They are certainly appropriate for all life stages and have another advantage over chokers: they encourage humane behavior from people. We can use all the kindness and humanity we can learn.

As is true for any device, injury can occur if these collars are used incorrectly. The most common complaint about head collars involves loose-lipped dogs that chew on their lips because the nose piece of the collar fits too tightly. Hair on the nose can also be damaged if this occurs. A good fit is important, and some practice might be needed to determine the best adjustment of the neck strap and the nose strap. Dogs fitted with head collars should be able to comfortably eat, drink, pant, and even bark and bite, if not corrected. These are not muzzles, they are not rubber bands around the dog's nose, and they are not cruel or inhumane. They are great. Now that these head collars are available in designer colors, people should accept them more readily.

#### **No-pull Harnesses**

No-pull harnesses fit under the dog's front legs and loop over the dog's shoulders so that when the dog pulls, its front legs are pulled back and it slows its pace. The two main versions of these harnesses are the Lupi (Safari Whitco, Bohemia, NY) and the Sporn or No-Pull Harness (Four Paws Products Ltd., Hauppauge, NY). The No-Pull harness has a special collar that is sewn with two different-sized metal tabs. The loose, leashlike part of the harness fits through one of the loops, under and around the legs, and is attached to the other loops, under the neck, with a clasp. The leash is then attached to the loose part of the harness over the dog's back. The back part of the harness can be tightened for a better, more responsive, fit. The Lupi does not use any clasps or tabs but relies on a system of concentric loops that are fitted around the dog's front legs and over its back. The leash is then af-

fixed to the back portion, which slips to tighten if the dog pulls. The Lupi is easier to fit to very hairy dogs or for people whose hands are very arthritic. Both of these fitting patterns sound complex and like topological puzzles. They are not. Once clients have the devices in their hands, the fit becomes self-explanatory.

Such harnesses are wonderful for dogs that pull or lunge. These are not appropriate devices to fit to dogs whose biggest problem is biting because they do not control the dog's mouth or head. Furthermore, reaching around the dog's head and neck to fit these harnesses could be dangerous if the dog is aggressive to people.

When fitted correctly these harnesses easily allow children or people with arthritis to pleasurably and calmly walk their dogs. These harnesses, like head collars, spare the dog's neck so that dogs, even if they have laryngeal, tracheal, esophageal, or spinal problems, can be safely exercised.

Caution is urged against fitting no-pull harnesses too tightly; too tight a fit could impede circulation in the dog's front legs. Fortunately, this is difficult to accomplish.

#### Harnesses

Regular harnesses fit around the dog's chest and avoid any pressure on the neck when the leash is pulled. They are devices used solely to attach the dog to the leash and offer no chance for correction of undesirable behaviors. Many dogs do not pull or lunge when walked and just need to be protected from the world and to comply with leash laws. Regular harnesses are fine for such dogs. They also work well for small dogs that perform undesirable leash behaviors but are too small to cause what the client would consider to be a problem. In fact, some of the harnesses for smaller dogs have built-in "handles" so that the dog can be picked up by the client if the dog must be removed from a situation or placed in a car. These harnesses are not good choices for large dogs that are not absolutely perfectly behaved because they provide the client with little control. In fact, big, highly motivated dogs are able to use the harness to push into the situation from which their people are trying to drag them because their shoulders are unrestrained. Clients often choose harnesses because they want to protect the dog's neck. This is a good idea, but head collars and no-pull harnesses are a better solution.

#### **Prong or Pinch Collars**

Prong collars are subject to all of the same criticisms as are chokers. Furthermore, they can seriously damage the dog's neck because they can become imbedded in the skin if the dog learns to override them. Most dogs learn to override these collars, and people who use them often voluntarily comment that they need to use some degree of pain to control their animals under some circumstances. These collars are intended to use pain to encourage the dog to attend to the person. For aggressive dogs this response can worsen their aggression, and for dominantly aggressive dogs this response may not only worsen their aggression, but may also endanger the client. If people understood more about how dogs communicate and how these collars work, they would appreciate that responses other than pain are more desirable for changing an animal's behavior. These collars are no substitute for early intervention and the treatment of problem behaviors. Every situation that clients claim is controlled by the use of such a collar can be better, more safely, and more humanely treated with a head collar and some time invest-

Some dogs are fitted with prong collars because they make the dog look "tough." The problem here does not lie with the dog.

#### **Shock Collars**

No dog should wear a shock collar to correct an inappropriate behavior except on the qualified recommendation of a specialist in behavioral medicine. This is almost akin to saying no dog should wear a shock collar. Certainly, no client should self-prescribe a shock collar for a dog to control an unruly or aggressive behavior. Given the correct motivational and timing circumstances and the appropriate level of shock, dogs (and humans) can learn from the application of a painful shock. However, the application of shock (and shock collars are intended to be painful) is an absolutely inappro-

priate treatment for aggression and fear. The use of shock collars invariably makes such behaviors worse, renders the dog less predictable, and potentially endangers the client. Most people who use shock collars either want a "quick fix" or need to absolutely control the dog. The former approach does not work for dogs with problem behaviors, and the latter may be problematic in itself. There are some rare exceptions when shock collars can be used rationally to change or shape a dog's behavior. Under these conditions very few (one to three) shocks are usually sufficient to cause the change. If clients who use a shock collar find that they have to, or do, shock the dog more frequently, there is a problem that the collar cannot address. Such clients should seek professional help from a specialist in behavioral medicine immediately.

#### B-28 PROTOCOL FOR CATS WITH PICA OR INAPPROPRIATE INGESTION CONDITIONS, INCLUDING WOOL SUCKING

1. Ensure that the cat is receiving an adequate, complete feline diet (most cats are). Rule out any medical disorders, including intestinal parasitemia, dental disease, small in-

testine or large bowel disease, and so on.

2. If the cat favors plants or soil, consider changing the texture of the cat's diet by adding some roughage (bran, vegetables, or crunchy food) or growing a garden of chives, catnip, or plain grass for the cat. Often, feeding the cat more frequently (the same amount but divided) and in a more interesting setting (dry food around large rocks so that the cat must work to find the food) may help. These benign approaches may enrich the cat's environment, and

if they do not help, no harm is done.

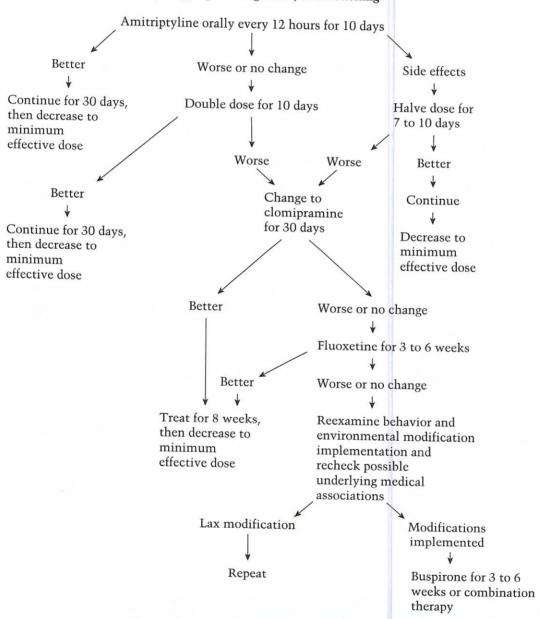
- 3. Prohibit the cat from access to the objects it is inappropriately ingesting. This may mean keeping a spotless house or putting the cat in a large crate with food, litter, and toys during times when direct supervision is not an option. When the cat is not in the crate, it should be continuously monitored. Put a bell on its collar or attach a harness and leash to the cat and monitor its behavior. If the cat begins to show any intention or appetitive behavior toward an object it would suck or ingest, correct the cat by startling it in a manner sufficient to abort the behavior. After the cat has calmed itself, engage it in another activity that the cat enjoys and that is directly competitive with the ingestion behavior. (See steps 4 to 6
- 4. Set expectations for the cat. Set feeding times, play times, and attention times. Make sure the cat gets 10 to 15 minutes of concerted attention (grooming, stroking, and talking to at least twice a day on a regular schedule. Identify any sources of stress (washing machines, noisy children, another cat that is not a favorite of the patient) and minimize contact with them. This may mean giving this cat its own room (or sole access to a favored room) or providing it with company. These are very individual circumstances.
- Enrich the environment with kitty condos and toys if the cat will use them.
- Teach the cat to sit and request, by pawing, a food scrap that is within the dietary regimen chosen. The cat will do this first by accident and needs to be rewarded instantly. Keep practicing on a regular schedule. This helps the cat learn to relax in exchange for a reward.
- 7. Pharmacological intervention can be an important part of therapy and may facilitate the above. Before any drugs are used, a complete chemistry screening profile and blood cell count should be performed by the veterinarian. There are two reasons for this: (1) the cat may have an underlying condition that would preclude the use of drugs that are metabolized through renal and hepatic pathways and (2) if medication is prescribed, the animal's response must be monitored if therapy is long term. To assess the significance of any changes, it is important to know the baseline values.
  - Drugs that have been successful in such cases
- Diazepam (Valium) 1 to 2 mg (or 0.2 to 0.4 mg/kg) orally every 12 to 24 hours
- 2. Amitriptyline (Elavil) 5 mg (or 0.5 to 1.0 mg/kg) orally every 12 to 24 hours
- 3. Clomipramine (Anafranil) 2.5 mg (or 0.5 mg/kg) orally every 24 hours

- 4. Buspirone (BuSpar) 5 to 10 mg (or 0.5 to 1.0 mg/kg) orally every 24 hours or half that every 12 hours Drug side effects
- 1. Diazepam. Diazepam is a humanly abusable drug and is not the appropriate drug for every household. This drug should be carefully monitored and may necessitate frequent reexaminations attendant with refills of the prescription because of the abuse potential. Benzodiazepines are metabolized through renal and hepatic pathways. Any animal with a preexisting renal or hepatic condition must be monitored carefully. The primary side effects are ataxia and stupor. Decreasing the dose often alleviates these effects. Any vomiting, inappetence, or profound change in normal behavior should act as a warning to the practitioner that the dose should be changed or the drug discontinued. There have been isolated reports of sudden death in cats that received relatively small amounts of both brand-name and generic diazepam. Sufficient epidemiological data do not exist to postulate an underlying cause for this, but many individuals have shied away from use of diazepam in cats. There have been relatively few recent cases of sudden death despite two decades of diazepam treatment of cats. More information should be forthcoming in the next few years. If the cat just started to exhibit the condition and the client and practitioner can identify an event associated with the start of this activity, diazepam may be a perfectly acceptable first-choice drug. The intermediate metabolite is the active compound (the half-life of diazepam is on the order of seconds); a gross assay of when the cat achieves effective levels of the intermediate metabolite can be gleaned from its behavior. As the cat metabolizes the drug and the metabolite reaches steady-state levels, the cat usually staggers or acts a little ataxic for a few days. This behavior should spontaneously resolve; if it does not, the cat may be receiving too large a dose of drug. If the cat never exhibits the transient perception changes, the dose may not be high enough.
- 2. Amitriptyline. Amitriptyline is a TCA that acts by inhibiting serotonin reuptake. As a result, more serotonin—one of the neurotransmitters associated with upbeat moods and decreased anxiety—is available. TCAs are metabolized through renal and hepatic pathways. One of the major pathways used is the glucuronic acid route. Cats have less efficient glucuronidation than dogs; hence the half-lives of many drugs are longer in cats. Amitriptyline is no exception. Cats that are able to take this drug and experience none of the common side effects (vomiting, sedation, anorexia, and tachycardia) benefit from its use. About 50% of cats (this is a clinical estimate) experience GI upset when treated with amitriptyline. This upset is usually profound enough to preclude the use of the drug. All side effects appear reversible. Amitriptyline may be the first drug of choice for barbering cats, particularly because the behavioral effects are usually evident within 7 to 10 days.
- 3. Clomipramine. Clomipramine is a more potent TCA than amitriptyline. It has almost no effects on norepinephrine pathways compared with amitriptyline and thus may have fewer global side effects than amitriptyline. Cats may be more sensitive to its arrythmogenic cardiac effects than are dogs or people. Clomipramine acts by inhibiting serotonin reuptake. More serotonin-one of the neurotransmitters associated with upbeat moods and decreased anxiety-is available. TCAs are metabolized

through renal and hepatic pathways. One of the major pathways used is the glucuronic acid route. Cats have less efficient glucuronidation than dogs; hence there are longer half-lives for many drugs in cats. Clomipramine is no exception. Cats that are able to take this drug with none of the common side effects (vomiting, sedation, anorexia, or tachycardia) benefit from its use.

- 4. **Buspirone**. Buspirone is a newer, nonspecific anxiolytic drug that increases brain levels of both dopamine and serotonin. The side effects include the same renal and hepatic ones as for the other drugs, but overall, most animals do not appear to experience side effects in dosage ranges that are considered therapeutic. This is an advantage for cats. Buspirone may be the drug of first or second choice for barbering cats. It *is* expensive, whereas amitriptyline is not. If amitriptyline is ineffective or the
- patient experiences side effects when treated with amitriptyline, buspirone is an excellent replacement drug. Buspirone may not reach therapeutic levels for 3 to 4 weeks in some animals with a minimum of 1 week in most. This is the only reason it is not the drug of first choice.
- 5. There may be some newer, experimental agents that are not readily available. These either alter cholecystokinin (CCK) metabolism or CCK binding. CCK is the hormone that is largely responsible for the feeling of GI fullness. Experimental data published in the Proceedings of the National Academy of Science in 1991 may suggest that feline appetitive movements are associated with abnormal CCK metabolism. This is one active area of research interest, but practical administration of the drugs is not yet an option.

# Sample Pharmacological Decision Algorithm for PICA, Inappropriate Ingestion, Wool Sucking



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### B-29 PROTOCOL FOR CATS WITH BARBERING, LICKING, OR OVERGROOMING CONDITIONS

1. Treat any underlying infectious condition. Assess the potential for atopic or endocrine disease (rare), but consider a biopsy if the condition is long standing. Biopsy may reveal fungi or dermatophytes that cultures fail to reveal.

2. Start a hypoallergenic diet for 8 to 12 weeks. This is very difficult in cats because part of their preference for certain foods or classes of foods is determined by the texture. It may not be possible to get the cats and the clients to cooperate. A second-best option is to remove all treats from the cat's diet and to feed only chicken- or turkeybased foods. These foods are available in kibble or wet forms, and commercial brands are readily available. They tend to contain two proteins (one is optimal), thus if clients can obtain other single-protein specialty diets, the

latter are preferred.

3. Set expectations for the cat. Set feeding times, play times, and attention times. Make sure the cat gets 10 to 15 minutes of concerted attention (grooming, stroking, talking to) at least twice a day on a regular schedule. Identify any sources of stress (washing machines, noisy children, another cat that is not a favorite of the patient's) and minimize contact with them. This may mean giving this cat its own room (or sole access to a favored room) or providing it with company. These are very individual circum-

4. Enrich the environment with kitty condos and toys if the

cat will use them.

5. Teach the cat to sit and request, by pawing, a food scrap that is within the dietary regimen chosen. The cat will do this first by accident and needs to be rewarded instantly. Keep practicing on a regular schedule. This helps the cat

learn to relax in exchange for a reward.

6. Pharmacological intervention is almost always an important part of therapy and may facilitate the above. Before any drugs are used, a complete chemistry screening profile and blood cell count should be performed by the veterinarian. There are two reasons for this: (1) the cat may have an underlying condition that would preclude the use of drugs that are metabolized through renal and hepatic pathways and (2) if medication is prescribed, the animal's response must be monitored if therapy is long term. To assess the importance of any changes, it is important to know the baseline values.

Drugs that have been successful in such cases 1. Diazepam (Valium) 1 to 2 mg (or 0.2 to 0.4 mg/kg) orally every 12 to 24 hours

2. Amitriptyline (Elavil) 5 mg (or 0.5 to 1.0 mg/kg) orally every 12 to 24 hours Clomipramine (Anafranil) 2.5 mg (or 0.5 mg/kg) orally

Buspirone (BuSpar) 5 to 10 mg (or 0.5 to 1.0 mg/kg) orally every 24 hours

every 24 hours, or half that every 12 hours 5. Hydrocodone (Hycodan) 2.5 to 5.0 mg (or 0.25 to 0.5 mg/kg) orally every 12 to 24 hours

Drug side effects

1. Diazepam. Diazepam is a humanly abusable drug and is not the appropriate drug for every household. This drug should be carefully monitored and may necessitate frequent reexaminations attendant with refills of the prescription because of the abuse potential. Benzodiazepines are metabolized through renal and hepatic pathways. Any animal with a preexisting renal or hepatic condition must be monitored carefully. The primary side effects are

ataxia and stupor. Decreasing the dose often alleviates this effect. Any vomiting, inappetence, or profound change in normal behavior should act as a warning to the practitioner that the dose should be changed or the drug discontinued. There have been isolated reports of sudden death in cats that received relatively small amounts of both brand-name and generic diazepam. Sufficient epidemiological data do not exist to postulate an underlying cause for this occurrence, but many individuals have shied away from use of diazepam in cats. There have been relatively few recent cases of sudden death despite two decades of diazepam treatment of cats. More information should be forthcoming in the next few years. If the cat just started to exhibit the condition and the client and practitioner can identify an event associated with the start of this activity, diazepam may be a perfectly acceptable first-choice drug. The intermediate metabolite is the active compound (the half-life of diazepam is on the order of seconds); a gross assay of when the cat achieves effective levels of the intermediate metabolite can be gleaned from its behavior. As the cat metabolizes the drug and the metabolite reaches steady-state levels, the cat usually staggers or acts a little ataxic for a few days. This behavior should spontaneously resolve; if it does not, the cat may be receiving too large a dose of the drug. If the cat never exhibits the transient perception changes, the dose may not be high enough.

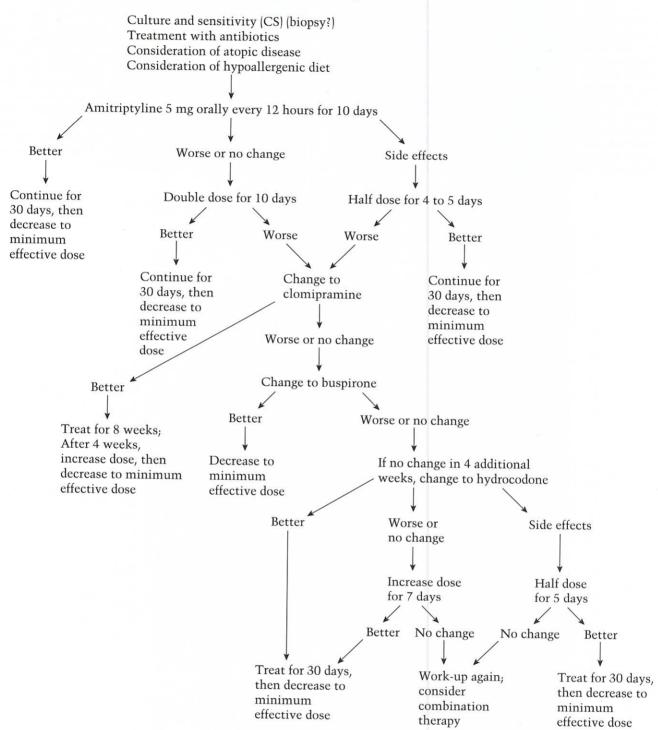
2. Amitriptyline. Amitriptyline is a tricyclic antidepressant (TCA) that acts by inhibiting serotonin reuptake. As a result, more serotonin—one of the neurotransmitters associated with upbeat moods and decreased anxiety—is available. TCAs are metabolized through renal and hepatic pathways. One of the major pathways is the glucuronic acid route. Cats have less efficient glucuronidation than dogs; hence there are longer half-lives for many drugs in cats. Amitriptyline is no exception. Cats that are able to take this drug with none of the common side effects (vomiting, sedation, anorexia, or tachycardia) benefit from its use. About 50% of cats (this is a clinical estimate) experience gastrointestinal (GI) upset when treated with amitriptyline. This upset is usually profound enough to preclude the use of the drug. All side effects appear reversible. Amitriptyline may be the first drug of choice for barbering cats, particularly because the behavioral effects are usually evident within

3. Clomipramine. Clomipramine is a more potent TCA 7 to 10 days. than amitriptyline. It has almost no effects on norepinephrine pathways compared with amitriptyline and thus may produce fewer global side effects than amitriptyline. Cats may be more sensitive to its arrythmogenic cardiac effects than are dogs or people. Clomipramine acts by inhibiting serotonin reuptake. More serotonin—one of the neutrotransmitters associated with upbeat moods and decreased anxiety—is available. TCAs are metabolized through renal and hepatic pathways. One of the major pathways used is the glucuronic acid route. Cats have less efficient glucuronidation than dogs; hence the halflives of many drugs are longer in cats. Clomipramine is no exception. Cats that are able to take this drug with none of the common side effects (vomiting, sedation, anorexia, or tachycardia) benefit from its use. Fluoxetine (Prozac) is another drug that may be useful if the cat cannot tolerate clomipramine; the mode of action is very similar.

- 4. Buspirone. Buspirone is a newer, nonspecific anxiolytic that increases brain levels of both dopamine and serotonin. The side effects include the same renal and hepatic ones as for the other drugs, but overall, most animals do not appear to experience side effects in dosage ranges that are considered therapeutic. This is an advantage for cats. Buspirone may be the drug of first or second choice for barbering cats. It is expensive, whereas amitriptyline is not. If amitriptyline is ineffective or the patient experiences side effects when treated with amitriptyline, buspirone is an excellent replacement drug. Buspirone may not reach therapeutic levels for 3 to 4 weeks in some animals and a minimum of 1 week in most. This is the only reason it is not the drug of first choice.
- 5. Hydrocone. Hydrocone acts by favorably affecting endor-

phin metabolism. It is a humanly abusable drug and may be both physiologically and psychologically addictive in people. Hence it does not belong in every household, even in the minuscule dosages appropriate for a cat. For some cats that mutilate in the course of barbering, this drug can be useful in blocking the cycle. Behavioral effects are noticed within 5 to 10 days. The most common side effects are lethargy (or wakefulness), changes in activity, and anorexia. Decreasing the dosage level may help alleviate these side effects, but it should be noted that cats do not tolerate morphine derivatives as well as dogs do. Frequent monitoring is necessary. These conditions, and the relatively high cost of the drug, make this the last drug of choice for general barbering, however, if mutilation is involved, this drug may be the best choice.

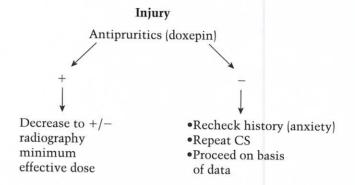
## Sample Decision Algorithm For Feline Licking and Barbering, Without Mutilation



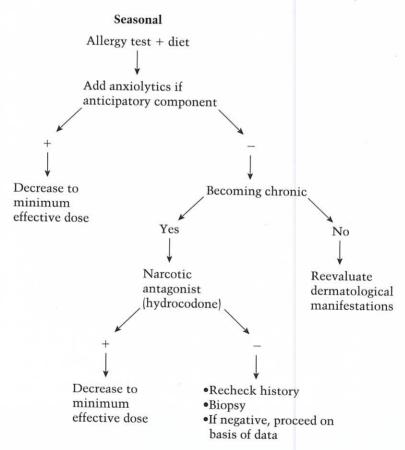
## Sample Decision Algorithm For Feline Licking and Barbering, With Mutilation

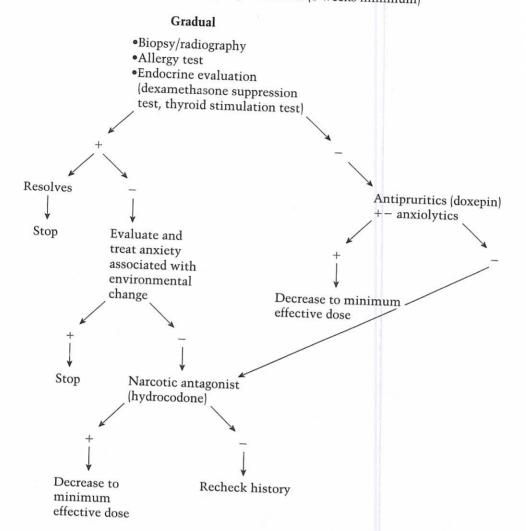
Culture and Sensitivity (Biopsy) Treatment with antibiotics Consideration of atopic disease Consideration of hypoallergenic diet Clomipramine for 30 days unless side effects (or fluoxetine) Better Worse or no change Wean to minimum Buspirone for 30 days; effective dose over use minimum dose 30 to 60 days unless side effects Better Worse or no change Treat for 8 weeks, After 4 weeks, then decrease to increase dose; minimum if no change in 4 effective dose additional weeks, change to hydrocodone Worse or no change Side effects Better Increase dose Half dose for for 7 days 5 days Better No change No change Better Treat for 30 days, Work up again, Treat for 30 days, then decrease to consider then decrease to minimum combination minimum effective effective dose therapy dose

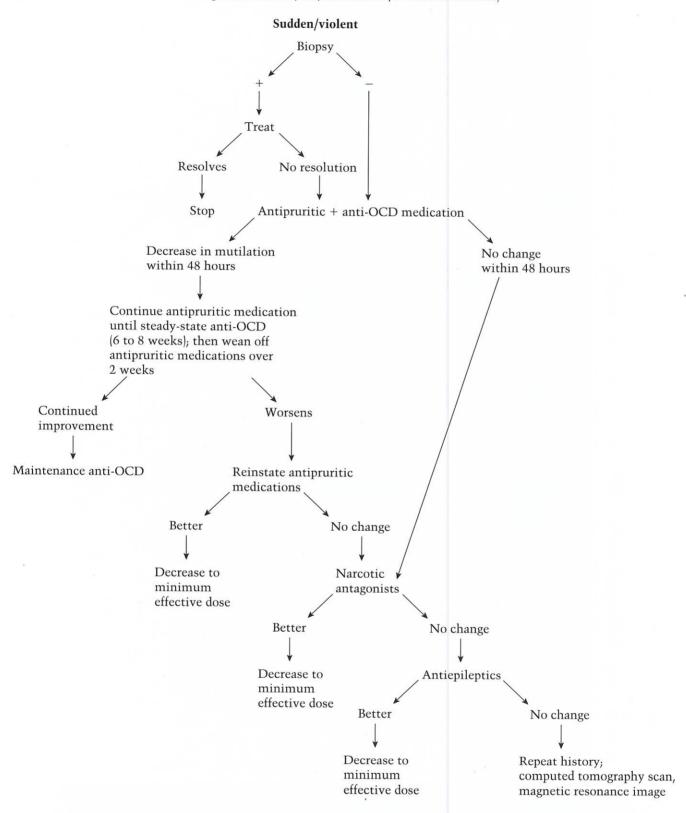
Impression smear; CS; antibiotics (8 weeks minimum)

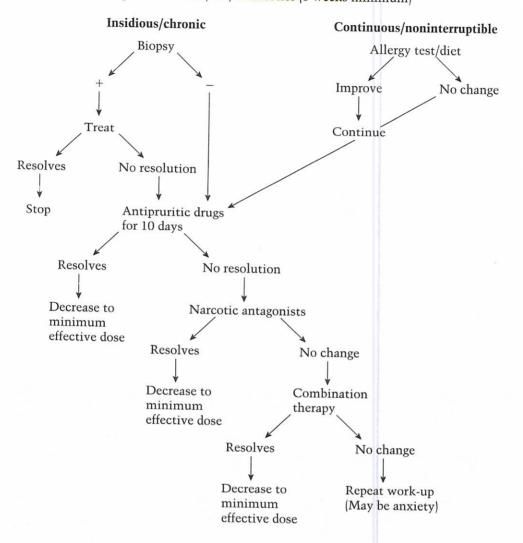


#### Sample Decision Algorithm For Treatment of Behavioral Aspects of Acral Lick Dermatitis All Forms









### Appendix C

### SOURCES OF INFORMATION AND PRODUCTS

### Organizations: Dog Training and Competitive Events

International Network for Ethical Training, Sue Myles, Coordinator, 7338 Milton Ave., Whittier, CA 90602

The Association of Pet Dog Trainers, P.O. Box 954, Benicia, CA 94510; (707) 745-4237; fax (707) 745-8310. They publish a newsletter and have meetings (educational).

The Canadian Association of Pet Dog Trainers, c/o Debbie Amar, 1726 Bayview Ave., Toronto, Ontario, M4G 3C9, Canada. They publish a newsletter and have meetings (educational).

American Temperament Test Society, Inc. Fred McNabb, 13680 Van Nuys Blvd., Paima, CA 91331; (818) 896-1027

American Temperament Test Society (ATTS), P.O. Box 397, Fenton, MO 63026. Temperament Testing dogs, not puppy

North American Flyball Association, 1 Gooch Park Dr., Barrie, Ontario, Canada L4M 4S6

American Dog Packing Association, 2154 Woodlyn Rd., Pasadena, CA 91104

United Schutzhund Clubs of America, 3704 Lemay Ferry Rd., St. Louis, MO 63125

National Association for Search and Rescue, P.O. Box 3709, Fairfax, VA 22308

SAR Dog Alert, P.O. Box 39, Somerset, CA 95684

Friskies Canine Frisbee Disc Championships, 4060 D Peachtree Rd., Suite 326G, Atlanta, GA 30319; (800) 786-9240

U.S. Agility Dog Association, P.O. Box 850955, Richardson, TX 75085-0955

Trans-National Club for Dog Agility, 401 Bluemont Circle, Manhattan, KS 66502-4531

The North American Agility Dog Council (NAADC), HCR 2, Box 277, St. Maries, ID 83861

National Council on Pet Population Study and Policy, c/o American Kennel Club, 51 Madison Ave., New York, NY 10010

### Organizations: Dog Clubs/Humane and Kennel Orga-

American Kennel Club (AKC), 51 Madison Ave., New York, NY 10010; (212) 696-8234 (secretary); (21) 696-8276 (obedience department). Information on shows, field trials, obedience competitions, Breeder Referral Hotline, and Canine Good Citizen Program.

American Boarding Kennels Association, 4575 Galley Rd., Suite 400 A, Colorado Springs, CO 80915; (719) 591-1113. Information on how to choose a boarding kennel, etc.

American Humane Association, 63 Inverness Dr. East, Englewood, CO 80112; (303) 792-9900; fax (303) 793-5333. Source of Report on the Summit on Violence Towards Children and Animals, November 1-3, 1991, and other

educational information about children and pets, pet problems, and neutering pets.

Humane Society of the United States, 2100 L St., Washington DC, 20037 (Department D; 20037-1525 for pamphlet about avoiding bites).

United Kennel Club, 100 East Kilgore Rd., Kalamazoo, MI 49001-5598; (616) 343-9020

#### Organizations: Animal Behavior

American Veterinary Society of Animal Behavior (AVSAB) c/o Dr. Debra Horwitz, Secretary/Treasurer, Veterinary Behavior Consultations, 253 S. Graeser Rd., St. Louis, MO 63141; (314) 567-3864

American College of Veterinary Behavior (Board Certification: President: Dr. Bonnie Beaver, Department of Animal Medicine and Surgery, CVM, Texas A & M University, College Station, TX 77843; (409) 845-2351; fax (409) 845-6978. Secretary: Dr. Kathy Haupt, Department of Physiology, CVM, Cornell University, Ithaca, NY 14853-6401; (607) 253-3450; fax (607) 253-3846.

Animal Behavior Consultant Newsletter, Mercer University, Department of Psychology, 1400 Coleman Ave., Macon,

GA 31207-0001 (Attn. Dr. John Wright).

Companion Animal Behaviour Therapy Study Group, CABTSG Newsletter, c/o Mrs. Sarah Heath, BVSc, MRCVS, 33 Hayman Rd., Brackley, Northants, NN13 6JA,

Animal Behavior Society (ABS), c/o Ira Perelle, c/o Animal Behavior Society, Mercy College, Dobbs Ferry, NY 10522. The ABS publishes a newsletter and scholarly journal, hosts annual research meetings, and certifies individuals as Applied Animal Behaviorists or Associate Applied Animal Behaviorists.

Association of Pet Behavior Counsellors, 257 Royal College St., London, NW1 9LU, England

International Society for Applied Ethology (ISAE), Dr. S.M. Rutter, ISAE Membership Secretary, Institute for Grassland and Environmental Research, North Wyke, Okehamptom, Devon, EX20 2SB, England, or Dr. J.C. Swanson, U.S. Regional Secretary, ISAE, Kansas State University, 134 Eber Hall, Manhattan, KS 66506. The ISAE publishes a scholarly journal and hosts annual research meetings.

#### Organizations: Miscellaneous

American Dog Owners Association, Inc., 1654 Columbia Turnpike, Castleton, NY 12033; (518) 477-8469; fax (518) 477-4034. Source of copies of brochure "1994 Update: Airline Transportation" (contains information on shipping dogs by air [accompanied or not] prepared by Ms. Priscilla Benkin. Ms. Benkin will answer questions from people who are (1) are not soliciting or raising money, (2) willing