

PROCEDURES **For** **COYOTE REHABILITATION**

GENERAL DISCUSSION. Larger and more dangerous than most animals seen by rehabilitators, the coyote is well known to be responsible for significant depredation of small domestic animals and, in heavily urbanized areas, has clearly demonstrated its capability to be a potential threat to public safety. The past two years have seen a sharp increase in incidents of humans being injured by coyotes. Some of these incidents have resulted from humans attempting to protect their small domestic animals from extremely aggressive coyotes while other incidents have involved no domestic animals at all. Rather, coyotes have approached and inflicted serious bites with most victims being children. For these reasons, the rehabilitation of coyotes, particularly the act of raising orphaned pups for release, should be undertaken only by those individuals who can/will perform this work in a responsible and pragmatic manner and who are capable of making some difficult, unpleasant and unpopular decisions.

NATURAL HISTORY. Information regarding the natural history, biology and behavior of coyotes is available on this center's web site at fundwildlife.org along with many other web sites. The easiest access to this data, with any search engine, is by using the key words "canis latrans". You should expect to experience slight variations among the information provided by different sites particularly in the areas of nutritional habits, dispersal behavior and general behavior. This is a direct result of geographical differences along with variances in species population density in the study areas from which the data was gleaned. However, these variations are not particularly germane to the work performed by rehabilitators. It is strongly recommended that anyone considering the rehabilitation of coyotes conduct some research in order to better understand the nature of this species.

DEVELOPMENT OF PROCEDURES. The following procedures were neither derived from books or manuals nor were they written by a bureaucrat sitting behind a desk. Rather, they are the product of many years of dealing with an extraordinarily high number of coyotes. (Average of 140 per year.) Some of these procedures are a result of simple good common sense while others were developed from lessons learned the hard way. These procedures were developed over many years with two goals: (a) To provide the maximum care, in every respect, of coyotes in a rehabilitation status and, (b) To ensure that our actions in no way contribute to these coyotes becoming depredation or public safety problems. Some of these procedures are so essential that they are considered mandatory and are clearly worded as such. Others are more flexible. However, in all cases, it is important that you clearly understand the purpose of these procedures. Use your imagination and ensure that you fulfill their "spirit and intent".

INJURED/SICK ADULT COYOTES

SCREENING CALLS. In addition to calls about "nuisance" coyotes, which are not part of the rehabilitation process, one of the more common calls you will receive will be from citizens reporting an injured or sick coyote that is limping, skinny and usually mangy. Before automatically responding to these types of calls, ask some well thought out questions to help you determine how mobile the animal might be. If the animal runs off as someone begins to approach, don't waste your time responding to this call, as the animal will run off with your approach as well. Explain this to the citizen and ask them to call you immediately if they see the coyote again and it appears down enough to be captured. On the other hand, if the answers to your questions make you believe that the animal can be captured, ask the citizen to keep an eye on the animal in the event it moves prior to your arrival.

RESPONDING. Be prepared! Have an appropriately sized transport carrier, a net or catch pole and a good pair of gloves. (Very few gloves will protect you from the bite of a coyote but they

will reduce some of the damage).

EVALUATION. Upon arrival at the scene, take a moment to assess the coyote and its immediate surroundings. Is there an obvious injury that you may need to "favor" during the capture? What is the animal's demeanor? Is it alert? Will it attempt to move or drag itself away from your approach? Plan your approach from a direction that will keep the coyote from entering any roadway and, if possible, will drive it toward a natural or man made barrier thus slowing its progress and enhancing your chances of quick capture.

CAPTURE/RESTRAINT. Use your net or catch pole to achieve capture of the coyote and then utilize whatever method necessary to maneuver it into your carrier. If you must make direct contact to achieve this, and regardless of the coyote's demeanor, anticipate that it will render a defensive bite and execute your movements accordingly. Do not be a hero! Do not allow yourself to receive a bite!

PHYSICAL EXAMINATION. This must be conducted in a dispassionate manner with one view only! What is the potential for this animal to be repaired, restored to it's original condition and released? Many veterinarians will be focused only on the potential for repairing the animal and will not be thinking about the animal's need to survive in the wild. You must be the more pragmatic one and be willing to make the hard decisions.

- If the injury experienced by the coyote will leave it with even the slightest disability, the coyote shall be immediately euthanized.
- If surgery is indicated and being considered, is the veterinarian "reasonably" confident that it will be successful and will leave no disability? If not, the coyote shall be euthanized.
- If the coyote has a fracture in two or more legs, and regardless of how repairable they may be, the coyote shall be euthanized. (Almost impossible for a leg fracture to heal unless the animal has "three good legs" upon which to maneuver and support it's weight).
- Surgery referred to as an FHO (Femoral Head Osteotomy) should not be conducted due to the extended healing time necessary and the poor potential for proper false joint growth. (Unlike the domestic dog. The coyote will panic when you enter for cleaning, etc. and will place excessive stress on the joint under repair).
- If a fracture will require a KE (external fixation device), surgery shall not be undertaken unless the rehabilitator has the means to house the coyote in a situation which will have neither chain link, welded wire nor any other object upon which the KE might catch and be ripped out.
- If there is a preponderance of evidence, either circumstantial or actual, that an injured coyote you received was responsible for predation of any domestic animal, that coyote shall be euthanized without regard to the extent of injuries.

HOUSING. The minimum caging guidelines established IWRC & NWRA shall be met and preferably exceeded. Following are additional coyote housing requirements:

- Construction must be of 11 gauge, or stronger, chain link or the equivalent gauge welded wire.
- If chain link, the clamps holding tension bars to vertical posts should be bolted from the inside with the nut on the outside. (Reduces possible injury from protruding bolt).
- Enclosures must have fully secure roof of solid material, chain link or a combination of both.

- ☒ Enclosures must have wire under the ground connected to the vertical perimeter wire, or, footing, or either concrete or wire, connected to the perimeter wire and extending a minimum of 12 inches beneath ground level.
- ☒ Enclosure must be equipped so as to provide an area of protection from the direct sun and inclement weather. Enclosures should be properly habituated to provide for the coyote's need to remain from view and hide during enclosure cleaning, etc.
- ☒ Domestic dogs must not be in areas housing coyote enclosures! If neighbors have dogs, there must be a visual barrier between them and coyote enclosures.

NUTRITION. Highly diversified nutritional habits can best be identified from research on appropriate web sites. With this information, an assorted diet can be reasonably achieved. Every effort shall be made to minimize or eliminate the use of dry dog food! Contact the nutritionist at your local zoological facility. There are commercially prepared foods available that fulfill all nutritional requirements, do not resemble dry dog food and are usually far less expensive than a good quality dry dog food.

RELEASES. Upon full recovery from injury/illness, adult coyotes must be released in the area within which they were found! There shall be no exception to this polity! For coyotes, a release point can be up to 2 miles from the point of origin as long as the two points are not fragmented by a major highway or large residential community. If there exists an extremely compelling reason why an adult coyote should not be returned to its original habitat, the coyote shall be euthanized. Under no circumstances will adult coyotes be relocated!

RAISING COYOTE PUPS

NURSING. Coyote pup's eyes open at approximately 14 days old. This is also the age when they cut their upper and lower canine teeth. Upper and lower incisors are cut by 16 days. At 21 days they will begin to eat semi-solid food regurgitated by the mother. Full weaning begins at 28-30 days and is fully achieved by 37-40 days.

- ☒ If nursing an "eyes-open" pup, create some type of a curtain barrier that allows you to see what you are doing without the pup seeing your face.
- ☒ Begin a weaning process, with semi-solid food, as early as possible. The quicker the pup is weaned, the less handling is required.
- ☒ Nursing (bottle feeding) must be done in a dispassionate manner. The pup shall be placed on a clean surface in the same position as if nursing from its mother. Never hold a pup in your arms for nursing. While the pup must be held in the proper nursing position, it must never be stroked or otherwise physically comforted.
- ☒ When completed with nursing and stimulation, as necessary, for waste elimination, immediately place the pup back in its quarters and ignore it until next feeding time.
- ☒ Never talk to, or otherwise attempt to verbally comfort a pup. Do not engage in conversation with others while nursing or in proximity to any pups.

QUARANTINE. Quarantine of individual pups or litters, prior to any commingling, is optional but is recommended. If done, quarantine time should never exceed 14 days.

NUTRITION. Same as "adult coyotes" with emphasis placed upon the need to avoid dry dog food/puppy chow. In addition:

- ☒ Containers used for food should be self-constructed or of a type that would not normally be seen in a yard housing a domestic dog.

HOUSING. Same requirements as "adult coyotes" with the following additions:

- ☒ If coyotes frequent your property, enclosures housing pups must be augmented with a tight mesh welded wire or even "chicken wire" extending from ground level to three feet high around the entire perimeter of your enclosure. (Upon seeing the approaching adult coyote, a pup will see it as its mother and will extend its forearm through the chain link. The adult coyote will see the pup as an intruder and will violently rip the pup's arm off through the wire).
- ☒ Where possible, a "feeding slot" should be built into a selected area of the enclosure perimeter. That area should then be secured from view, without seriously hindering proper ventilation, so that food will "mysteriously" appear through the slot, falling into a feeder, without the pup(s) seeing the approach or presentation of food by a human.

GENERAL.

- ☒ With the exception of quarantine periods, which should not exceed 14 days, under no circumstances will a coyote pup be raised alone!
- ☒ Coyote pups shall not be "wintered over" for release the following spring.
- ☒ Coyote pups with injuries that would require orthopedic surgery shall be euthanized.

RELEASES. This is the final but most dilemma-ridden facet of raising coyote pups. There are options for release but, before selecting one, consider the following:

- ☒ Numerous field studies have documented the "average" dispersal age to be 10 months. The youngest documented dispersal was a male pup who began dispersal behavior at 7 months and achieved complete dispersal 3 week later. (This particular study did not utilize telemetry. No data was available on the survival of the "early disperser"). Since we would loath to release captive raised pups in the "dead of winter", a release earlier than normal dispersal age is the only viable choice. Best advice is to allow the pups to reach maximum possible age while keeping a close eye on your "weather window". Release the pups prior to the development of "repeated" inclement weather.
- ☒ A very strong "bonding" will develop among captive raised pups. While this bonding cannot be discerned with a human in proximity, as the pups "should" be scared and frantic, the use of binoculars to conduct surreptitious observation will make the bonding highly evident. Splitting up pups who have been "friends" for months would be devastating to their psyche and would probably reduce survival potential. Release together, bonded pups will remain together at least until reaching reproductive age. The strengths and adeptness of one will help offset the weaknesses of another. Survival potential will be increased.

RELEASES OPTIONS. While fully considering the above items, following are some options for release:

- ☒ Develop a relatively non-invasive method of marking individual pups upon arrival. At release time, return each pup to the area from which it originated. (While biologically

- sound, this option is not fully conducive to survival potential unless, by slim chance, the pup encountered its mom and siblings, if alive, and scent recognition was achieved before the pup was driven out of the area).
- ☒ Release all pups in the same location at the same time. Release location could be that from which one of the pups originated. If this is done, select that location with minimal human residences. Only downside of this choice would be the number of pups in the group. For example, if you were to release 6 or more pups in an area, that sudden infusion of coyotes might put tremendous pressure on an area that may already be at carrying capacity for the species.
 - ☒ Network with other rehabilitators within the region. Upon completion of quarantine periods, but before pups are commingled and begin bonding, execute transfers to ensure the each coyote rehabilitator, or each coyote enclosure, has at least 2 pups but not more than 4. A release of 4 or less would minimize the impact on the chosen release habitat.

CONCLUSION. The release of a now healthy adult coyote back to his/her original habitat can be an extremely rewarding experience. This coyote was already surviving and had the misfortune of getting injured. Your efforts restored this animal to its original condition and allowed it to continue its life. Your efforts at raising coyote pups will not be quite as rewarding. There will be losses. Learn to cope and get over it. Recognize that not all of your pups will survive after release. Even those raised by their mothers have a relatively high "natural" mortality rate. Recognize that you can in no way compensate these pups for all that they "would" have learned from their mothers. With this in mind, do everything within your power and imagination to ensure that these pups are raised wild and free of human imprinting. These efforts along will significantly increase their survival potential.

Charles Traisi
E-mail: CTraisi@aol.com