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SONG DOG

By

Ellen Ditzler

B.A., Goucher College, 1969

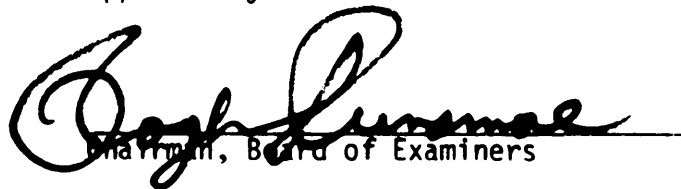
Presented in partial fulfillment of the
requirements for the degree of

Master of Science

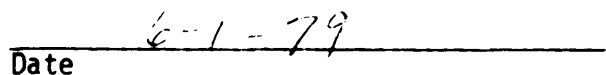
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1979

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FOREWORD

When looking at one animal such as the coyote, there is a tendency to draw exclusively upon scientific methodology for a rational understanding of that animal and its relation to its environment. The scientific view is indispensable. However, it is often unimaginative. For one, it can assume that the animal is a finite, static specimen whose remaining mystery will ultimately be revealed by the steady application of increasingly sophisticated and refined study techniques. It also can assume that once there are rational elucidations of coyote ecology, traditional climates of superstition and misunderstanding will be dispelled.

Both assumptions are vital--and most welcome after a century of nonacceptance of the coyote. Largely because of the work of wildlife biologists and an increasing appreciation of the diverse values of non-human life forms, people are beginning to see the coyote as a strikingly intelligent and beautiful mammal with a significant role in a holistic environment.

There is, however, a greater awareness that cannot come solely from the view of the coyote that wildlife biologists give us. Barry Holstun Lopez has touched on this idea when he wrote of wolves: "An appreciation of wolves, it seems to me, lies in the wider awareness that comes when answers to some questions are for the moment simply suspended."

It might be said that leaving a margin for mystery invites speculations which can in themselves be destructive; witness, for example,

the century of coyote slaughter inspired by a view of the coyote as a malignant creature--a view which was narrow, incomplete and exaggerated to serve certain needs. Those needs arose primarily from the speculation that wild predators and domestic livestock were unconditionally incompatible and that if land was to support livestock, those predators must be destroyed. The coyote can be, under certain conditions, a livestock killer and a pest. But it is much, much more. The open spaces of what we do not know about the coyote needn't be filled with speculation at all. An imaginative receptivity to coyote possibilities cannot help but give the unanswered questions a constructive role in enlightened appreciation.

Largely because modern, civilized man has cut himself off from the animal kingdom, he has been preoccupied with the differences rather than the similarities between himself and the coyote. This preoccupation works against a deeper awareness that lies in the reflection the coyote gives us of ourselves. Historically, this reflection is not very pleasant. Looking back over the last 100 years of coyote-man relations, it is difficult to erase an image of death epitomized, perhaps, by old photographs of bounty hunters or government trappers standing in front of a fence strung with three or four dozen coyotes hanging by their feet or necks. This image is indeed impressive, but by itself too easily polarizes emotions into black and white, good and evil, innocence and guilt. Such an image should be seen in perspective--a perspective that gives us a broader vision of the dynamic and changing qualities of both man and coyote.

I learned this lesson of perspective while writing this paper.

The more I saw photographs of grinning trappers and stone-cold dead coyotes, or coyote pups burned alive in their dens, and the more I read voices of hate for coyotes, the angrier I became. As my anger grew stronger, someone brought to my attention a very curious thing: I hated coyote-haters nearly as much as they hated coyotes--not a very effective sentiment for one seeking to demonstrate the irrationality of coyote hatred or reach a plane of benevolent awareness. But I think my anger was necessary. First, it emanated from a look at years of harassment and killing operating on the premise that man has the privilege--if not the right--to destroy a species that serves no useful purpose to him. This is not only presumptuous, it is foolish. It is wrong. Secondly, although the object of hatred is different, my emotion and that of the coyote enemy are similar. This similarity suggests neither agreement nor sympathy with coyote enemies, but helped me to understand that in dealing with an animal as controversial as the coyote, another person is equally as capable of reactionary feelings as I am. Recognizing this, I think, is a crucial first step leading to a wider perspective of the coyote.

Emerging from this writing is a theme of relentless persecution against the coyote which is both significant and factual. However, a persecution piece in itself is of little value without a greater awareness brought by fact, mystery and reflection as described above. These elements are the centers of this paper.

The paper is intended to be a small book of ideas which can be read by the general reader. It is a collection of diverse perceptions of the coyote presented in the form of voices. There is a narrative

voice which speaks of the coyote as a wildlife biologist might in presenting information from research on coyote ecology and behavior. This material is taken from a review of current literature and from personal observations as a neighbor of a coyote den in California. There is a voice of anger against coyote persecution. There are voices of native Americans who have seen the coyote in particular ways. And because the coyote has a prominent place in the folklore of both native American and Western cultures, I have included poems, songs and tales from those cultures. In the spirit of coyote storytelling, I created a few tales of my own.

There is also a voice of the coyote enemy--actually many different voices expressing a common feeling. The coyote enemies in this paper are quoted directly from newspapers, books and magazines covering a period of 100 years. Stanley Young, in *The Clever Coyote*, has brought together a wealth of scattered literature on the coyote and many sources are taken from his book, as their original printing has in many cases been impossible to find.

I have tried to weave the voices into a collection that gives, in the end, a vision of the coyote in both past and present. I have let the voices speak for themselves with little qualifying judgment to tone the impact of what they have to say. In this way, the reader of this paper is a listener.

The paper is more of a literary effort than a scientific dissertation. This, however, does not imply that the two are mutually exclusive. Separating the communication of fact from creative communication is perhaps the worst possible pitfall for the student of environmental

studies. It is my firm belief that outward advocacy and action backed by research and fact are ineffective without inner visions, convictions and creative thinking.

I might note here that I envision the paper in a form which cannot be realized within the present requirements. If the reader can imagine a small book with a commercial typeface, accurately reproduced illustrations and a fine, artistic appearance, then my intended design and format will make more sense.

For the support and patience they gave me in writing this paper, I would like to thank Roger Dunsmore, Dexter Roberts and Bob Ream--three men with remarkable visions.



SONG DOG

This book is about the coyote. The coyote is one of a very few animals known to have ventriloquist powers; when two or three coyotes sing, they harmonize, making their voices sound like those of many coyotes, from different directions and from places where they aren't actually standing. No one knows how they do this--multiply their voice and put it in different places. It is a mystery.

More has been said, written and thought about the coyote than any other animal in North America. Some see the coyote as a wildlife specimen. Others see it as a divine being, a creator or a trickster, or as an enemy, a killer, a pest or a fur coat. From one animal--and diverse human perceptions of it--comes many voices. This book is a collection of voices.

PROLOGUE

She awoke from a deep sleep and sat up with a suddenness that was one motion in the blue-white light of the moon flooding the room. There had been no sound but a sense of infiltration, an arrival.

She crosses the room silently and puts her face and fingertips against the cold window glass. Beneath her, made silver with moon and snow light, is a coyote. Eyes raised, shining, watching her. Their gaze locks. She would stand there forever.

(The dividing line between the illuminated and unilluminated part of the moon is called the terminator. It is always moving. It is the best place to look at the moon to see how sharp everything is without water.)

We, the coyote and I, practice muteness.

I

BEING

When a coyote stands in a field of wild oats against the late afternoon sun, the edge of his body makes a gold light of its own. As he stands there, he takes the sun and wild oat light inside and radiates it out again.

Both the coyote and wild oats are considered pests.

1

The coyote belongs to the Canidae family which includes dogs, wolves, jackals and foxes. Members of the Canidae family are carnivorous and social; they may hunt alone, in pairs or in packs, running down their prey by sheer speed and endurance, seizing it with their mouths. Their body temperature is regulated by panting, as moisture passes off the tongue. Along with bears and racoons, the coyote and other Canidae evolved from the Miacidae, a family of small, tree-climbing, carnivorous animals that lived 50 million years ago.

The coyote is actually a small wolf--the smallest in North America--about one-third the size of the now-rare timber wolf. On the average, a coyote stands about two feet high at the shoulders; its body, including tail, is about four feet long. A coyote weighs between 20 and 50 pounds at maturity. Males are slightly heavier than females, and there is some indication that mountain coyotes are heavier in weight than those of the lowlands.

If left unharassed by traps, poisons, guns, clubs, hounds, snowmobiles, helicopters, airplanes and motorcycles, the coyote lives to be about 10 to 12 years old.

The coyote has a long, narrow muzzle and pointed, erect ears which can be directed to catch minute sound vibrations. The coyote's sense of hearing is thought to be ultrasonic, enabling it to hear the movements of prey even under a heavy snowpack. Coyote eyes are outlined by dark, slightly slanted rims which accentuate black pupils and a yellow-gold iris. A normally unseen green grows visible in its eyes when the coyote is cornered or threatened.

Look at those eyes. They look positively diabolical. No wonder people hate coyotes.

The glaring green in them is the gleam of demon's laughter.

The mature coyote is a light buff-gray to a brownish, tawny color, with some yellow coloration on its flanks and neck. Most of the upper portion of the coyote's pelage is sprinkled with black-tipped hairs, with a full black on its forefeet and at the base of the tail and tail's tip. Its muzzle and ears are rust and fulvous; the underside of its neck and chest is light gray to white in color. The shading of a coyote's coat is patterned for communication purposes; for example, the head is marked in such a way as to emphasize facial features and expressions. The white coloring of the cheek serves to orient ritualized motions between two animals as they establish a relationship of dominance between them. The whiteness of the hair around the mouth contrasts sharply with the coyote's black lip, enhancing the expression of lips and teeth as they are exposed in a display of aggression.

It is interesting to note that among the 1,792,915 coyotes taken by hunters of the Fish and Wildlife Service in a 30-year period, only six were albinos.

1,792,915 dead coyotes. 3,585,830 yellow-gold eyes. Twelve milk-white eyes.

2

How Coyote Got His Name (Okanogan)

The Spirit Chief announced that on the next day he would give names to all the Animal People. Whoever came to the Spirit Chief first would have his choice of a name, and so on down to the last arrival who would be given the least desirable name. Coyote was ecstatic, for he did not like his name. He decided on a plan: He would stay up all night and be the first to appear to the Spirit Chief in the morning. He would ask to be named Grizzly Bear, the name of the ruler of all the four-footeds. Eagle, the ruler of the birds, would be his second name choice, and Salmon, the good swimmer, his third.

Half the night passed and Coyote began to get sleepy. So he braced his eyes open with two small sticks. Although his eyes were wide open, he soon fell asleep. When he awoke the sun was making shadows, and thinking it was dawn, Coyote ran to the lodge of the Spirit Chief. None of the other Animal People were there. Aha! thought Coyote, smiling at his cunning. I am the first!

He asked the Spirit Chief for the name of Grizzly Bear.

That name has been taken. It was taken early today, said the Spirit Chief.

Coyote could not believe that anyone could have come earlier than he. He then asked for the name Eagle.

That name too is taken. Eagle will be chief of the Birds, said the Spirit Chief.

Then I will be Salmon, said Coyote.

That name too is taken, said the Spirit Chief. There is only one name left: Coyote.

Coyote's gay spirits fell when he found that all the names but Coyote had been taken. No one had wanted that name.

That is the only name left and you must take it, said the Spirit Chief. But I shall give you a special power which will make you the most cunning of all Animal People.

So Coyote is called Coyote and he is indeed very cunning. And forever after the naming of the Animal People, Coyote's eyes were different. They grew slanted from being propped open all night by the fire waiting for the dawn and his name.

. . .

The word "coyote" is Aztec in origin, coming from the Nahuatl word *coyotl* which may be a corruption of *cocoyoetla*, from *cocoyoetic* which means hole or hollow thing, and *tla*, meaning abundance; thus *cocoyoetla*, "where there are many holes," the animal being so named because of its habit of burrowing its den. In another version the name is said to be derived from the word *coyohuacca*, composed of *coyotl* and *huaqui*, which means "lean." This interpretation is verified by an Aztec hieroglyphic of a coyote with bristling hair and tongue hanging out, indicating a lean and hungry animal. Some variants of the hieroglyphic

show a hole at the center of the coyote's body, possibly a reference to the word's derivation from *cocoyoctic*, or hole. In Aztec mythology Coyolxauhqui was the moon goddess, named appropriately for the animal who often sings his songs to the moon.

North American Indian names for coyote: Skintoots, Mes-cha-chagas-is, Huk-sa-ra, Mista-chagoris, Micaksica, Eja-ah, Mee-yah-stay-chalah, Hatelwe, Cin-au-va, Song-toke-cha, Too-whay-deh.

Sin-ke-lip: The Imitator (Okanogan)

"The Animal People were here first--before there were any real people. Coyote was the most important because, after he was put to work by the Spirit Chief, he did more than any of the others to make the world a good place in which to live. There were times, however, when Coyote was not busy for the Spirit Chief. Then he amused himself by getting into mischief and stirring up trouble.

"My people call Coyote Sin-ke-lip, which means Imitator. He delighted in mocking and imitating others, or trying to, and as he was a great one to play tricks, sometimes he is spoken of as Trick Person."

White man's names for coyote: Kiyi, Kote, Gray Dusk, Bareribs, Tito, Skee-zix, Kip, Senor Yip-Yap, Ishmaelite (social outcast), Mr. Slick, Desert Serenader, Scavenger of the Sagebrush Land, Hobo of the Hills, God's Dog, The Medicine Dog, Vagabond of the Desert, Mugwump of the Plains, Voice of the Night, Pariah of the Skyline, Shaggy Fellow, the Charlie Chaplin of the Desert, Furry Gangster of the Desert, A Wanderer O'Nights and a Lier-by-Day, Desert Troubador, Esau Among the Tribes of the Desert, Don Coyote, Patti of the Plains . . .

. . . the American jackal, prairie wolf, brush wolf, heul wolf, steppen wolf, cased wolf.

When applied to a person, the appellation coyote, like that of rat or skunk, has about it an ill-fame or loathing disgrace that follows from behavior considered grossly wrong or even vicious. The resented epithet may come from the coyote's legendary reputation as a cowardly beggar or may refer to factual traits such as his liking for carrion.

Man doesn't like being called a dog either.

To "out-coyote:" to outsmart.

"Coyoting around:" a derogatory reference to mooching or begging.

"Coyote mean" or "coyote smart:" extremely clever or cunning; after you have been tricked, these terms may be applied to the one who has successfully tricked you.

The coyote is said to be: crafty, sneaky, dirty, cunning, sly, a marauder, a villain, a killer. He is characterized by: pernacity, zeal, trickery, impudence, piracy, thievery, and an unmannerly deportment (the latter being a possible reference to either its love for poultry and livestock or its habit of urinating on posts).

(These are human attributes, she said, which, if you want to get scientific and objective about it, do not correctly apply to animals. The *other* most successful predator on earth is man. Who calls *him* a vile, ruthless murderer, ferocious killer, flesh-loving, beady-eyed, bloodthirsty chicken, pig or cow eater when he knocks that poor little cow over the head with a sledge hammer, strips its skin right off its body, cuts it up into neat bloody bits, puts them over a grill glowing with little charcoal briquettes and eats them? What man feels about the

coyote reveals much about his whole perception of his role on earth. The coyote is an opportunist. He is also hungry. People say: Those worthless welfare coyotes we've got today are too lazy to hunt their natural prey and they sink their fangs into any fuzzy little lamb that saunters casually by and what they are really saying is those goddam welfare food stamping no good lazy bums standing in line at the supermarket, their carts crammed with Wonder Bread, they don't even know what work is.)

" . . . a mean, sneaking, cowardly, low-down chicken stealer."

Horace Greeley--remembered more for his profound treatises than for his bout with saddle sores after touring Yosemite National Park--describes the coyote as "a sneaky, cowardly little wretch of dull or dirty white color."

" . . . *muy astuto, muy diablo* . . . "

3

Of all the indictments against the coyote, cowardice seems the most common and the least justified by all the facts. It is not cowardice, but judgment that causes the coyote to avoid making a target of himself. Why is it cowardice to run from a larger creature carrying a gun when you're not carrying one?

4

Ironically those who malign the character of the coyote at the same time insist that without the coyote, the West would not be the West--that it is this animal which epitomizes the spirit and essence of life

and land beyond the 100th meridian. For the coyote is a true Westerner, typifying the independence, unrestrained gaiety, rough individualism, physical freedom, brisk zeal and adventurous romance which is reputedly found in the hearts of all Westerners. Despite the sharing of such attributes between human and canid, the Western spirit may be called upon for coyote extermination. Notes Stanley Young: "Farmers and young men from ranches often develop a special aptitude for coyote control, due to their love of life on the broad open ranges. Numerous graduates of colleges, some from the east, have been attracted by the adventurous romance of coyote control work."

Sensitive to the scale, force and persistence of the armada of persecution directed towards wiping the coyote off the face of the earth, some claim that the coyote's demise would be a eulogy to the American West. Ernest Thompson Seton laments, "If ever the day should come when one may camp in the West and hear not a note of the coyote's joyous, stirring evening song, I hope that I shall long before have passed away, gone over the Great Divide, where there are neither barbwire fences, nor tin cans, nor hooch houses, nor improvement companies, nor sheep-herds, nor flies, but where there is peace and the coyote sings and is unafraid."

5

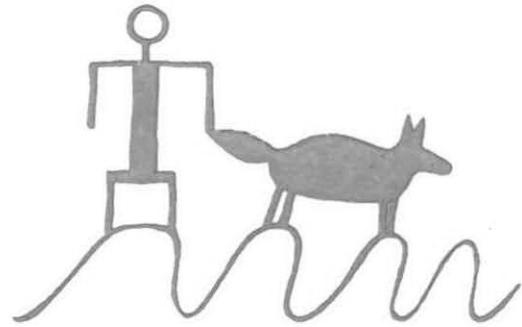
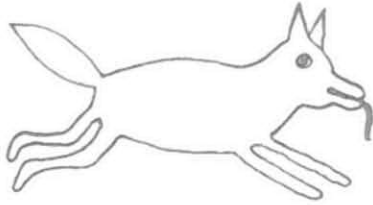
The Coyotes That Beat the Rancher

There was once a rancher in Montana who raised sheep. His flock was considerably large and grazed over some 2,000 acres of open grassland. The flock was often pastured in a part of the ranch which was several miles from the ranch buildings. No one watched the flocks when

they were this far away. Occasionally the rancher would drive his pick-up out to the far pasture to inspect the flock. Time after time he found that some of his sheep had been killed by coyotes. He killed a few coyotes. Specialists from the local university came out to the ranch to study the situation. They concluded: "Coyotes are killing some of your sheep." The coyotes killed more sheep. The rancher killed more coyotes. "I give up," the rancher finally said and sold his sheep and his ranch and moved to Florida.

The Improvement Company That Beat the Coyotes

There was once a ranch which belonged to a man who raised sheep. He sold his ranch because, he claimed, the coyotes killed so much of his stock, he couldn't stay in business. One day several land speculators drove out and looked over the ranch. On their map they divided the land into a grid of little one-acre squares. People bought the squares and built houses on them. There were over 2,000 houses. No one knew what happened to the coyotes that once lived there.



6

In Hopi migration legends it was a function of the Coyote Clan to search for appropriate places to settle. Records of the Hopi people's wanderings, found in pictographs and petroglyphs throughout the Southwest, show a symbol of a coyote with its tongue hanging out, indicating that it had been running ahead of the Clan to find a place to settle and had turned back. In another petroglyph a man is shown holding the tail of a running coyote; here the coyote is called a *poko* or "animal that does things for you."

During the Hopi migrations the Coyote Clan was assigned to come last and "close the door." When the clans settled at one place, a *Qaletaqqa*, or guardian, from the Coyote Clan always acted as sentry or brought up the rear of every ceremonial procession as a guard against evil. With special powers enabling them to cross great rivers and lakes, the members of the Water Coyote Clan went ahead of the people to inspect the route of migration and know the nature of the country the clans were to traverse.

. . .

The coyote is an exclusively North American animal. Its original habitat extended from central Mexico to Manitoba, Canada, and from the Pacific to the Mississippi. One of the few animals which has been able to extend its range within historic times, the coyote and various subspecies are now found from Costa Rica in Central America north to the Bering Sea in Alaska, a distance of 7,500 miles, and from the Pacific eastward to the north-central United States and eastern Canada. For reasons which are uncertain, the coyote began to extend its range in the last 300 years. The migration may have been partly caused by constant pressures from man; the coyote merely sought new territory in order to survive. It is also believed that the coyote extended its original range because of man's introduction of new sources of food. The clearing of land for timber and livestock opened more habitat to game and rodents on which coyotes feed. Use of these areas by livestock also offered a new food source for the coyote: livestock. The coyote's movement south, north and eastward may be attributed to its trailing of livestock into those areas. The coyote's successful migration is a tribute to its remarkable ability to survive despite eradication efforts by man, disease or competition for food in places where food is not abundant, particularly in high, timbered country during the winter season.

The movement of the coyote into the northeastern United States occurred both naturally and by artificial means. Information from early game department reports indicates that coyotes migrated into the northeast by a natural extension of their original range as they took advantage of new food sources. It is thought that easterners touring the

West purchased coyote pups for pets and brought them east where they were eventually freed or escaped. There is evidence that several eastern sportsmen imported coyotes from the western states for hunting purposes, thinking all the while that they were buying large foxes.

Survival of the coyote in areas beyond its original distribution nurtured fear and perpetuated ignorance of coyote ecology. From Kentucky comes this "coyote scare:" "There was a coyote scare in Anderson and Woodford Counties along the Kentucky River . . . This department spent quite a bit of money in conjunction with the U.S. Fish and Wildlife Service in an effort to exterminate these animals. Several were trapped and taken to the University of Kentucky and Dr. Funkhouser . . . declared all of them wild dogs. That was along about 1949 or 1950 and we haven't heard anything about coyotes since."

The spread of the coyote in the last three centuries is a feat which few other mammals have been able to accomplish in the face of advancing civilization. While the habitat requirements of other species place limits on where they can survive, the coyote has responded to food supply and opportunity rather than to restrictions of climate and suitable range.

. . .

There are approximately 2,800 coyotes living within the city limits of Los Angeles. They howl in the Hollywood Hills, sip water from chlorinated swimming pools and mate with domestic dogs.

. . .

The people of Millinocket, Maine, had their first look at a coyote in 1974 when a 55-pound male was shot and hung in public view.

A national magazine reported that the "townspeople gathered around like primitive villagers. They cursed, reviled and spat on the dead coyote."

. . .

All coyotes are Communists.

"The animal's ways are devious, his wiles many. With a persistency that has defied all efforts to permanently control him, he perpetuates his atrocities and perpetuates his kind. A parasite on civilization, he lives a life of baseness, snooping about in search of plunder, or skulking away from his victims with his ofttime mangy tail between his thin legs. When at last Nemesis overtakes him, he snarls at his captor with an evil leer which arouses a loathing disgust in place of pity."

Unidentified rangeman quoted in Stanley Young,
The Clever Coyote

"One must be really quite blind or totally chloroformed . . . not to recognize that the essential or principal thing in the animal and man is the same"

Arthur Schopenhauer, *On the Basis of Morality*

. . .

Man's unreasonable hatred for coyotes may have had its genesis in an unreasonable hatred for wolves. The cultural dislike for the wolf has its origins in eastern Europe where wolves were said to grab babies from their cribs and take them off to eat them, or run around sucking human blood with their vampire friends. This fear then carried over into New World settlement. The coyote's similarity in appearance to the

Man's unreasonable hatred for coyotes may have had its genesis in an unreasonable hatred for wolves.



wolf has made the transfer of wolf attributes--and man's terror of them--to the coyote all the more advantageous in reinforcing its reputation as a ferocious killer.

Man does not fear coyotes for reasons of threat to his own physical person, but does so for economic reasons: coyotes may prey on domestic livestock, a source of man's food and livelihood. Selection of domestic livestock to serve human needs has eliminated those traits which once permitted them to survive in the wild, traits which are now considered antagonistic to the efficient production of meat and fiber.

. . .

In 1973 in South Dakota, 300 sheep died from eating moldy corn. The ranchers did not bank together to go out and shoot mold. "That's just one of those things," commented one rancher. "But let the ranchers lose one sheep to a coyote and they damn near have a cardiac arrest."

. . .

She explained: People don't like coyotes. Many base their hatred on personal experiences of economic loss to coyote predation on their livestock or poultry. Others base their hatred on the things they hear about other people's personal experiences of economic loss to coyote predation. You don't even have to have cows, sheep, goats or chickens to hate coyotes.

Hatred of coyotes is inextricably bound to a cultural hatred of cowards. Calling the coyote a coward is a convenient fiction: It justifies killing it, it alleviates guilt for killing so many, it acknowledges human superiority.

When I hold up "cowardice" before me, I see a mirror, not a coyote. There are no cowards in the animal world. Cowardice is a human, moral judgment and the coyote is neither human nor does it have morals, only the instinct to take recourse in its refined physical abilities of speed and endurance. The coyote runs from gun-carrying man or packs of dogs because running is its best defense. When a person calls a coyote a coward because it runs from danger, I am tempted to ask what the coyote is expected to do to absolve his cowardice: stand up and fight like a man? carry bazookas and hand grenades? line its meadows with land mines?

The word coward comes from the Latin *cauda*, or tail. Among canine species the tail held between the legs is body language for recognizing a dominant animal or, in some cases, is a means of protecting the vulnerable stomach or genitals during displays of aggression. Once submissive behavior is shown, aggression takes no further course; usually a dominant animal will not purposefully attack a pack member which has acknowledged its physical inferiority by the appropriate gestures. Man, however, has other means of sustaining the illusion of his superiority over the coward. If the coward is human, he mocks him. If the coward is a dog, he kicks it. By keeping the coward alive, he can at any time re-establish his position of dominance.

Cowards are found in battlefields and bars. Cowardice is an entirely human notion; cowardice is man's own lack of courage in his need to confront the coyote with hardware and insurmountable odds.

. . .

. . .

" . . . Belmonte could still handle fierce bulls. His imitators, however, were not as skilled. To look good, they needed bulls that were less dangerous. Ranchers began breeding bulls to fill the new need

" . . . Sometimes the sharp horns of a bull were blunted by cutting and filing . . . ranchers bred smaller and more docile bulls for the fights

"The bulls have very little quality, courage and fierceness now because they are bred for the bullfighters,' said Victorino Martin, one of the few ranchers who still tries to breed fierce bulls."

Washington Post, June 13, 1978

A Few Words About Domestication

Only two animals have entered the household of man other than as prisoners: the dog and the cat. Both serve man in their capacity as hunters. Both are carnivorous. Their common ground, however, ends there; there is no domestic animal which has so modified its entire way of life and has become domestic in the true sense as the dog. And there is no animal which, despite its centuries of association with human beings, has altered so little as the cat. The cat, with uncompromising independence, has taken up residence in the household of man simply because there are usually more mice there than elsewhere. The cat, with eye-teeth spaced the exact width of the neck vertebrae of a mouse, is a perfect little murderer.

No one is certain how the dog was first domesticated. Animal behaviorist Konrad Lorenz believes that the association between man and dog began nearly 50,000 years ago when packs of jackals followed bands of primitive hunters. The jackals cleaned the bones of the animals the hunters had slaughtered and announced the appearance of beasts of prey by setting up a noisy clamor of howls and barks as its approach. The neolithic hunter discovered that if he fed the jackals which scavenged near him, they would follow him; the jackals would have food and the hunters would be warned of imminent danger. A mutualism of survival grew from this yet tenuous and wild association. The hunter later found that the jackals were not only valuable as a warning system, but could assist the hunter in procuring food. The jackals' keen sense of smell was an advantage for the hunter; the jackals followed the scent of prey,

man followed the jackals. Certain scraps of animals given to the jackals acquired special meanings. In the sedentary dwellings of primitive man, the warning-hunting-feeding relationship between human and half-tamed jackal continued. In-breeding favored the hereditary transmission of domestic characteristics.

. . .

"The coyote cannot be tamed to any useful purpose; he has not the faintest idea of gratitude and affection; cunning and cowardice are the main features of his character."

Coyotes may have been semi-domesticated by Indians for use as pack animals. Coyote-like hybrids are believed to be descendents of a tamed coyote of the Indians of Mexico. If not partially domesticated, put to work or eaten, the Indians "used" coyotes in the wild, interpreting their calls and howls to determine if friend or foe was approaching.

Pet coyotes are not uncommon in the United States. When captured young--usually after their dam and litter mates are killed--they readily adapt to domestic surroundings. As they grow older they show the wariness and caution of their wild origins. The life of a domesticated coyote almost always ends in tragedy. For the coyote.

One coyote pup was raised by a family in Oregon. It romped, bounced, played and did cute little puppy things to the delight of its keepers. Later, because it was too much trouble, it was turned loose to fend for itself. In the meantime, it had lost its fear of people. Sitting a few yards away from a passing rancher who noted the coyote's "rather friendly-like" manner, it was shot.

9

She was telling me: This is how my dog and a coyote exchanged a gaze of millennia. For several summers I lived in a cabin on a small creek that fed into the Kaweah River in the southern Sierra Nevada. I was the only human for a 15-mile radius of mountains, ridges, canyons, creeks and a tiny lake that was slowly becoming a meadow as I watched it. About a half mile downstream from the cabin was a clearing of grasses, low-growing manzanita and deerbrush. In this clearing several coyotes made their dens. I would hear the coyotes more often than I would see them; they yipped and howled and called from the ridges at dusk and greeted the dawn with their songs as I arose and began my day. Several times, although I could not see it, a coyote's presence and route along the creek would be traced by the raucous sounds of stellar jays gathered in numbers to vocalize around their unusual subject, scolding and squawking from tree to tree as the coyote went its way. On one occasion a coyote, possibly a young one, joined its yips with the squawks of the jays, creating an uproarious cacophony below me. Later, when I went down to the creek for water, I found fresh bear tracks; the coyotes and the jays together had announced the passage of the larger creature. From then on I used both jay and coyote voices in establishing a respectful distance from bears.

One evening I sat outside the cabin to watch the mountains around me lose the day's sun and take on the deep, rich colors of the Sierra dusk. My dog lay at my feet. It was very quiet. I suddenly looked over to my right and there, not two yards from me, was a large coyote which had frozen mid-stride in the trail. In slow motion, my dog rose

to sit on her haunches, her muscles tense but still. The coyote and the dog stared at one another across the short space that separated them, the space of thousands and thousands of years of evolution. The dog: what I have been; the coyote: what became of me. I was invisible in the presence of the gaze of millenia. Both animals remained unmoving in stillness, silence. There was no fear.

The coyote lowered its head, sniffed the dirt and trotted up the trail. The dog lay down again, her head resting on my feet.

*They come sneaking up through the black glades, noiseless,
silent, and they squat on their haunches and their eyes shine like stars.
They wait and watch and will not be driven off. They sit like ghosts,
like pale devils, round your fire, never stirring, never taking their
shining eyes from your face.*

II

HUNTING

"Now just what is that coyote worth to me, I mean his carcass? On a coat basis that coyote has done \$500 worth of killing and that is not an estimate, it is cold fact from the count of lambs. Figure that fellow on a cost basis and the bounty men have you whipped, but I hope I have three celebrations coming--when we whip Hitler and Hirohito and when we kill that damn coyote."

Wyoming sheepman

1

The main object of the coyote's life seems to be the satisfying of hunger; to this all its instincts and skill are directed. Still, the coyote incites emotional fervor, political furor and perpetual controversy simply by being itself, an animal with four legs and 42 teeth trying to get something to eat, raise its young and live. As innocent as this may appear, the problem is that when a coyote is hungry, at times it will include in its diet animals which man also finds useful.

In search of food, the coyote follows its own individual runway or hunting route, a combination of game trails, arroyos or ditch banks from which it will deviate only if areas beyond it are more productive or if severe weather or human pressure force the coyote to abandon familiar territory. The runway usually covers about ten miles and is often

within a short distance of the spot where the coyote was born and will raise its own young. If there is sufficient food, the coyote will use the same runway throughout its lifetime. The runways are marked by "scent posts"--bushes, stubbles of grass, trees or other locations--where the coyote will urinate, releasing its scent as a message for the next coyote. Scent posts provide an olfactory map of coyote range. By reading scent posts, a coyote receives information on hunting and can determine where it is in relation to certain places or goals, how to get there, who has traveled by and when. While scent posts are primarily for the benefit of other coyotes, they have the secondary function of establishing individual territory.

(The area around a scent post is a potentially successful site for a trap or other coyote-extminating device. A trapper may make an artificial scent post by using a certain formula which presumably attracts a passing coyote; on exploring it, the coyote gets a shot of cyanide in its mouth or its leg caught by the steel grip of a trap. Here is how the U.S. Government does it: "Put into a bottle the urine and gall of a coyote and also the anal glands. To every three ounces of the mixture add one ounce of glycerin, to give it body and to prevent too rapid evaporation, and one grain of corrosive sublimate to keep it from spoiling." Many coyotes have become wise to these methods; several have been sighted rolling with unabashed laughter around the site of an artificial scent post.)

As the coyote searches for mice and other small rodents, it moves slowly about its hunting grounds until it has sighted, heard or scented its quarry. When the coyote has sighted a potential victim, it freezes,

remaining totally immobile for as long as eleven minutes. The freezing position is rather mysterious and incredibly stunning. Perhaps it is a means of looking like the grass or a rock, or is an anticipation and gathering of forces and faculties for an ultimate and certain capture. Then it leaps. In mid-air the forepaws come together and, aimed with remarkable accuracy, land directly on the prey, pinning it to the ground where it is restrained until the coyote can seize the animal in its mouth. It is then eaten, carried off to a more secluded spot or "played with."

The latter behavior, considered by man to be an unrefined and impolite form of diabolical sadism, as if the smaller creature is maimed and mangled in a slow, excruciating death, cannot be interpreted as play behavior in a strict sense. Insofar as play is a ritualized form of prey-stalking, prey-killing and a display of ownership, the handling of the victim in a "playful" manner is a kind of ecstasy, a re-enactment of the actual kill as well as an exquisite choreography of motions. Head-shaking, for example, prevents the prey from biting the predator's face, and through the sheer momentum of twisting and swinging, coupled with the strong grip of the coyote's jaws, the prey is impaled by the canines and crushed. Animal behaviorists believe the "play" sequence following the hunt is a means of delaying ingestion until blood sensitizes the predator and triggers eating. The hunting actions of the coyote are directed towards an inimitable perfection of motions which, because of their precision and accuracy, allow no superfluties to jeopardize the narrow margin for success.

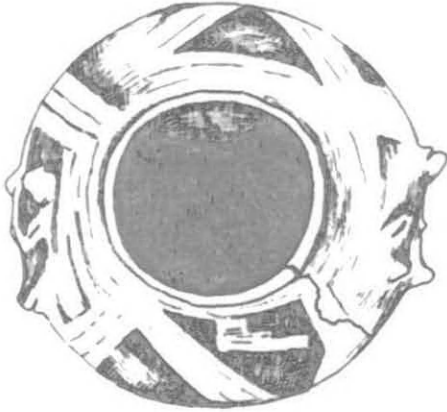
Coyotes hunt alone or in pairs. When hunting in pairs, a cooperative effort assures success in situations where one coyote might fail or when particular hunting strategies are needed. One coyote may dig into a rodent burrow while another quietly awaits for the prey to exit from another hole. On occasion a single coyote will act "crazy"--jumping, whirling and leaping about with apparent senselessness--in order to distract and transfix the prey while it is being stalked by a second coyote.

When looking at a specific animal, our attention is inevitably drawn to that animal's relationships to others of its kind and to its prey. But animals relate to creatures they do not hunt in ways which are not clearly understood by human observers. Most of these relationships are necessary physical dependencies; a few, however, seem purely social and pleasurable.

The coyote and the badger have developed a social attachment recognized by native Americans as being a sign of the sacred kinship among animals who, in the end, are all brothers even in an eat/get-eaten world. An example of this perception is seen in a pre-Columbian pot from Casas Grandes, Mexico: one handle of the pot is a head of a coyote, the other handle is a head of a badger--the eternal balance of pot-roundness between them.

It is interesting to note that the Mexican name for badger is *tlacoyote*, which comes from the Aztec *tlal-coyotl*, *tlalli* meaning "earth"--thus "earth coyote" or badger.

Coyotes and badgers have often been seen traveling together in what can only be interpreted as friendly company. Coyotes usually do not attack an adult badger, fully aware of the badger's capabilities and



Pre-Columbian pot with coyote and badger head handles. Found in Casas Grandes, Mexico, dated 1250-1300 A.D.

ferocity as a hunter and fighter; perhaps the badger senses the coyote's peaceful intentions and thus tolerates its company. The partnership serves an obvious purpose in the cooperation of obtaining food. While a badger digs for ground squirrels or mice, the coyote waits patiently behind its friend, pouncing on and eating the escapees. What the coyote contributes to this activity other than its appetite is not certain. Even without fully understanding this partnership, it can be assumed that the animals are in some way rewarded by each other's company and form social bonds which are beneficial to both. One biologist watched a coyote and badger, noting the following behavior: "The coyote would go in front of the badger, lay its head on the latter's neck, lick it, jump into the air and give other expressions of unmistakable joy. The badger seemed equally pleased."

Special friendships with non-prey animals are not unique to the coyote. Another canid, the wolf, appears to take great pleasure from the company of ravens. Not only do ravens scavenge on the remains of wolf kills, their constant company with a pack gives opportunities for play-stalking, pestering, chasing and teasing on the part of both wolf and raven. As wolf biologist L. David Mech has observed, because both species are extremely social, they must possess the psychological mechanisms necessary to form social attachments with certain other species. The special bonds between wolf and raven or coyote and badger are one of many fascinating aspects of canid character--one subtle reflection of the thousands of threads that tie an animal to the life processes and patterns of its environment.

Coyotes will occasionally attack deer, antelope and elk, particularly in the winter when they are more vulnerable to predation. When pursuing a larger, heavier animal, the coyote will wait until one separates from the herd, run alongside it and rush in from the front, grabbing the animal's neck with its jaws. The grip blocks air passages to the lungs so that the prey dies from suffocation rather than blood loss. The gripping effect of the coyote's teeth and jaws is assisted by the weight and direction of movement of the prey; the dead weight of the coyote pulls against the running animal, producing a downward tearing action which fatally wounds it and brings it to the ground.

Live big game animals--if available--will comprise a very small portion of coyote prey. Most game is eaten in the form of carrion whose death resulted from some other cause than a coyote's attack. In quantity and preference, the coyote is essentially a scavenger and rodent eater.

It will also eat birds, eggs, reptiles, amphibians, fish, insects, fruit and vegetables if found within its range.

Coyotes also prey on watermelons. Although watermelon-stalking behavior has not been studied in depth, it is known that coyotes will select the ripest specimens, take a few bites and move on, sometimes causing considerable damage to crops.

2

Coyote and the Watermelons

Coyote crawled on his belly to the top of the ridge. There below him gleaming in the moon light were watermelons, sleek and fat, their scarlet pulp pudging against tight green skins. Coyote salivated. He sniffed the wind and trotted down to the watermelon patch. When he started to sink his teeth into the first ripe watermelon he found, he heard a low giggle followed by a squirt. Two shiny black seeds hit him in the eyes. Coyote sat back. The watermelon shook with laughter, spurting seeds into the air. Coyote resumed his gnawing, going slurp slurp gulp. The watermelon giggled louder, more seeds flew. You're tickling me! You're tickling me! said the watermelon and showered Coyote's head with seeds. Coyote was very puzzled by this chuckling fruit. He let out a little giggle himself. All the other fat watermelons in the patch started to laugh. Soon Coyote was rolling on the ground, clutching his belly, tears streaming down his face. Shiny seeds filled the air and hit the ground with pings. Finally Coyote recovered his senses and the seeds slowly stopped pinging, like the final raindrops from a passing cloud. The watermelons let out an occasional titter.

Coyote looked at the place in the watermelon where he had taken a few bites. Still chuckling, he went his way.

3

She tells me: Growing up on stories of pestered piglets and wolves harassing little girls in red hoods, the dripping fangs and fiery eyeballs of wanton canine killers floated across my dreams like phantoms, while timorous fluffy rabbits, demure chirping songbirds and doeful wide-eyed bambis innocently shuddered with the constant dread of being eaten alive. Predation--true predation--is something that if the average person--a city person--witnessed, he or she would probably throw up. Meanwhile there is the myth of New Yorkers walking over bodies of heart attack victims lying prostrate on the sidewalk during rush hour. The way most people view predation in "the wild" is a combination of ignorance and inurement, cultivated by Hollywood fantasies and the reality that we ourselves do not stalk our food in the wild but instead stalk it in metal carts in the aisles of Safeways. Human reactions to predation vary considerably depending on who the predator is and who the prey, the relative sizes of prey and predator, and the equipment and means used by a predator to secure food. The lower man rates an animal on the evolutionary scale--one rated by the human measure of intelligence--the less affected we seem by its death. Big fish eats little bug, we hardly notice. As one person put it, we are "taxonomic snobs" enthroned in majesty atop the pyramid of life, the slime of the lowest orders far in the mists below us.

As an evolutionary force, she continues, predation has been a prime mover in natural selection, while in the meantime the bulldozer doesn't give natural selection the option of miracles; old Charles Darwin, he never had to deal with the Army Corps of Engineers, the Bureau of Reclamation or the proliferation of subdivisions.

We like our killings clean, merciful, sanitary, painless, humane, devoid of violence. We like other people to kill for us. Plastic wrappings and unidentifiable features disguise the death modes of animals that are now food, the blood is washed away, the life juices are "sauce." The hunting methods of the coyote or wolf seem cruel and violent because of our infinite distance from their methods. But predation has beneficial, positive, even aesthetic aspects. Much of what we find intriguing, surprising, stirring and even beautiful in the animal world is directly related to the ubiquitous influence of predation.

. . .

A South Dakota sheepman disputes the White Hat-Black Hat Theory of prey and predators: "There is no such thing as good predators and bad predators. All of them are predators. Either you have a blanket program or you have no program. The best tool we ever had was poison and the best poison was 1080. These misguided people had the gall to deprive us of one of our best tools of management. We're not telling people in the east how to control their riots and run welfare, and we don't think they should tell us how to run our business These people that want to save the coyotes want to preserve a bunch of bastards that don't do us any good at all. Balance of nature? To hell with that."

4

A Field Guide to Man as a Predator

Coyotes are chased in open country by airplanes or helicopters until they begin to stagger with exhaustion and finally roll over to expose their underparts in the canine expression of submission. They are then blasted with gunshot.

. . .

Following a recent motocross race across a seven-mile stretch of the Mojave Desert in southern California, many small rodents were found in a severe state of shock, bleeding from the nostrils, eyes, ears, anus and other orifices--a state not resulting from physical encounters with motorcycles but from the magnitude of decibels created by the motorcycles, a sound level which the rodents could not withstand.

. . .

While the government urges its trappers to exercise humane methods of coyote control, stockmen and other private individuals are free to use their own ingenuity. This is a common method: Several coyotes are captured alive and tied up. Their mouths are wired shut. While trying to free themselves, adrenalin pours through their systems, creating strong-scented bladders and anal glands which, when cut out of the often still-living animals, provide "scent" bait for other coyote traps.

5

Coyotes eat sheep. So do eagles, bobcats, wolves, dogs, people and bugs. The accurate assessment of sheep loss to coyote predation is

made difficult by the abundance and complexity of myths, misconceptions, unreliable data and emotions of a century of controversy. Recent, increasingly accurate studies of sheep loss to coyote predation indicate that under some conditions, coyotes can do serious damage to sheep herds despite traditional predator control measures.

For over 50 years the wool-growing industry has been faltering. Despite massive subsidies in the form of predator control, low grazing fees on public lands and price supports on wool, the decline continues. Where shepherds once tended flocks, the sheep now roam alone because of a changing work ethic and high labor costs. Changing patterns of food preferences shift emphasis to beef as a major source of protein. More than they wear wool, people wear clothes of synthetic fibers made from petrochemicals. Sheepmen have come to expect losses from an economically betroubled industry--losses from market declines and costly labor, as well as stock losses to disease, accidents and predators. Often, no matter how carefully and objectively sheep losses are studied, it is virtually impossible to account for all the animals that die; thus some biologists have classified sheep losses into three categories: natural, predator and "thin air." While sheepmen often feel powerless to contend with the frustrations of labor, markets and thin air, predators seem a problem about which something can be done. As one of many identified sources of economic loss, the coyote earns some of the blame.

(In a 1976 study of predation on sheep in a western Montana ranch, it was found that coyotes were responsible for a significant percentage of sheep mortality. Various methods of predator control were implemented; some methods were more effective than others, while often

the coyotes would change habits in response to the mode of control. Other methods were selective for coyotes that did not kill sheep, leaving the sheep-killers untouched. Of all methods tested, it was determined that the use of guard dogs was the most effective in eliminating sheep loss to coyotes. Damage by coyotes, however, was replaced by harassment of the sheep by guard dogs.)

Over millions of years, predator-prey relationships have evolved in ways which balance and benefit both--a relationship seen, for example, between coyotes and jackrabbits; in the process of natural selection, it is the coyote's intelligence and need that have given the jackrabbit its speed and endurance. However, the match between a coyote and a domestic animal is quite different. A coyote does not need a fraction of its predatory ability to kill a sheep. Despite popular belief, there is no evidence that coyotes select weak, sickly sheep in a culling effect; usually sick and weak animals stay in the center of the flock, while healthier animals on the fringe become more vulnerable to attack. Although fleeing sheep are nearly always pursued by coyotes, animals that do not run are rarely preyed upon. Defensive behavior by sheep--butting, stamping of the feet--often stops coyote attacks as does the presence of a ram among ewes. Fences surrounding a flock will often induce defensive behavior in sheep, preventing them from fleeing as they would on an open range.

In many efforts striving laboriously to unveil the "real" picture of coyote-sheep relationships, a profusion of ironies surface. As predator control devices become more complex, the coyote gets smarter. A peg-leg coyote (one which has lost a limb in a trap) becomes trap-wise

and consumes up to 50 percent more livestock than a normal coyote, its physical ability to catch and kill wild species having been impaired. Sheep are bred for characteristics which counteract any natural resistance to predators and must be artificially protected, creating an economic trade-off between the cost of predation losses and the cost of protective pens or feedlots. From poisoning, trapping, shooting and other control programs, the coyote's resistance and resilience have been phenomenal; man has created a race of "super coyotes" whose dens are harder to find, who avoid man, who increase their numbers when control pressures are intense and learn to shun the control devices which have taken the lives of other coyotes.

The "super coyote" is the ultimate irony. Those who malign the coyote as a livestock predator should observe that their actions against it have been directly responsible for much of what the coyote is today. Man has inadvertently manipulated the coyote gene pool in a way which has benefited the selection of characteristics more resistant to predator control measures and more compatible with civilization. Biologist H. T. Gier writes: "The slow and crippled [coyotes] fall readily to hunting dogs. The dull of wit are caught in traps, hit by cars, or run down by antelope, deer or jeeps. The unwary are shot by the rancher or sportsman. We, with our persecution of the coyote, have added another parameter to natural selection, with the result that coyotes are now larger, smarter, more adaptable, faster, and more cunning than when white men first entered the coyote's territory."

A review of the history of predator control in relation to coyote populations reveals that only the most intensive hunting and

poisoning campaigns have made serious inroads on local coyote populations. In many cases, the removal of one or a few coyotes has resulted in a cessation of deprivations. Sheepmen, long-time advocates of the idiom "the only good coyote is a dead coyote," are beginning to acknowledge the findings of wildlife research. A survey of articles and letters from sheepman in the *National Woolgrower* over the past 40 years shows discernible changes in tone and a willingness to deal with specific circumstances and individual offenders. At the same time, they are reluctant to accept the recent restrictions on the more intensive predatory control agents such as the poison 1080.

Recent trends in predator management policy increasingly favor the option of making sheep less appetizing to coyotes and destroying only the "problem" animals which consistently incur substantial losses to sheepmen. The use of olfactory, gustatory and acoustical repellents, commercial dog repellent, oil of citronella and cayenne pepper has proven to be surprisingly effective in "teaching" coyotes to dislike sheep. Alternatives in sheep management and rearing are also being developed as a means of excluding any opportunity for predators to come into contact with livestock. These still experimental methods reflect a new attitude toward the coyote, one which accepts its existence rather than advocates its annihilation.

6

Mr. Coyote and the Two Sheep

Two sheep, one thin and one very fat, were traveling through the country. When they rounded a turn in the trail, who should step out

from behind a joshua tree and stand facing them but Mr. Coyote--grinning, with his hands on his hips, there in the middle of the road.

"Good day, Friend Sheep," said the Coyote, glancing up at the sun. "I have not yet had breakfast this morning."

"Do not eat me," said the Fat Sheep. "I am too fat. You might choke."

"Oh, do not eat me," said the Thin Sheep. "I am too thin. See how the bones are trying to come out of my hide."

"I am going to eat both of you, of course," said the Coyote. "Only I cannot decide which of you to eat first."

"Don't eat me first," spoke up the Fat Sheep. "Save me for afterwards."

"Do not eat me first," cried the Thin Sheep. "There is not enough of me to get started on."

"In order to decide this question," said the Coyote, "we will play a game."

He was going to divert himself with these two foolish creatures. Looking to the left and the right of the road, he saw that the land was level. Then with his toe he began drawing a line lengthwise of the road down the middle in the sand.

"Now, Fat Sheep," he said, "you take fifty steps straight out from this line to the left and you, Thin Sheep, you take fifty steps straight out from this line to the right. I will stand here with one foot on either side of the line, and when I give you the signal with my sombrero, both of you start running as fast as you can to see which one of you can cross the line first right here in front of me. The winner will be eaten second and the loser first."

When the Coyote had finished giving his orders, the two Sheep began taking their steps very carefully out from the line, counting aloud: one-two-three, while the Coyote was drawing the line deeper in the sand with his toe there in the middle of the road.

When the two Sheep had finished taking their fifty steps and stood at equal distances in opposite directions from the road, the Coyote shouted final instructions for the race.

"When the sombrero comes down over the line, that is the signal to start running. Cross the line right close in front of me so that I can judge the winner and shout his name as soon as he crosses the line. If Fat Sheep comes first, I will shout *Gordo!* If Thin Sheep crosses first, I will shout *Flaco!* So get ready to run your best, boys, for the first over the line will be the second dish for dinner."

Mr. Coyote raised his big sombrero at arm's length over his head. "Ready, Sheep! Watch the sombrero"

Swoosh! And the sombrero came swinging down and the two sheep jumped, running furiously toward the line in front of Coyote, who stood there straddling it, holding his sombrero behind him with both hands, grinning so that the ends of his Coyote moustache were up to his ears. Villain that he was, he was expecting to laugh loudly when the two Sheep in their blind haste would run into each other in their headlong rush to the line and crack their skulls open. This was to be his diversion. So he had not told the truth when he said that he would shout the winner's name. He was going to mention neither of their names, for he cared not who won the race.

Closer, closer came the hoof-beats of the two Sheep, running from opposite directions very evenly, and bigger became the Coyote's devil grin as he looked down at the line he was straddling. The Sheep were close now, and the Coyote was opening his mouth not with intention of judging the race but with the idea of laughing. The Sheep were almost about to cross the line now. Then, just one jump from the line, they swerved out of their course one step and both together came flying right at Mr. Coyote.

Before he could move out of his tracks, they rammed their heads against his ribs from both sides at exactly the same moment, making him judge the race against his will, for their simultaneous charge at his ribs knocked him off the ground and forced a loud and truthful word squawking out of his mouth with all his air, "It's a tie."

By the time Don Coyote was able to regain his breath and get up off the line he had drawn in the middle of the road, the two Sheep were such small specks on the landscape that it was impossible to tell which was Lean and which was Fat.

Dan Storm, *The Little Animals of Mexico*

7

Sheep are among the oldest of domesticated animal species. The ancestors of the domestic sheep were probably related to the urial, argali and mouflon types of wild sheep found today in parts of Europe and Asia. These wild sheep are gregarious, active mountain animals living in herds varying from a few individuals to many. They are agile climbers. The argali, for example, is larger and heavier than its

domestic counterpart. It has a light brown coat, a keen sense of sight and smell and very sharp hooves. Rams bear massive horns which are used for defense--butting or striking sideways while running.

Over centuries of domestication, man has manipulated sheep genetics to favor market requirements for meat and fiber over natural characteristics such as resistance to predators. Domestic sheep have neither the protective coloration, senses, agility, nor the defensive responses of their wild ancestors. Thus effective protection from predators must be artificially implemented. In a metaphorical sense, the coyote trap is the sheep's horns, the gun its escape to inaccessible ground. Man has chosen to deal with the predator rather than with the deficiencies of his sheep.

Wild predator-prey relationships operate on a principle of balance. The coyote preying on a wild sheep would have to use all its skill for success; its speed, endurance and hunting strategies would be met by defensive and aggressive resistance from the sheep. However, under the influence of domestication, various animal species undergo physical and behavioral changes which alter that balance. Having lost most of the characteristics needed for its own defense, the domestic sheep is easy prey for the coyote. The same imbalance incurred by domestication and selective breeding can be seen in the other direction: imagine a wild sheep confronted with a poodle or cocker spaniel. Without specific training by man, the match between a domestic dog and a wild sheep hardly exemplifies a balanced opposition. Domestication implies a dependency of animal on man: just as the domestic sheep is dependent

on man for protection from predators, the dog relies on man to remind it of what was at one time instinctual.

8

One day, she is saying, I decided to conduct a personal investigation of the prevalent myth that sheep are the dumbest creatures on foot--an investigation, I felt, worthy of illuminating the possible biases of impossibly good shepherds. We hear things like: Sheep will starve to death when they roll over on their backs because they are unable to figure out how to right themselves; sheep follow you and if you walk straight into a pond or lake, they will walk right in after you and drown; sheep make easy targets for predators because they just love to die; unless ewes are told they have just borne lambs, they will forget and abandon them following parturition; sheep will eat so much of a certain weed, their stomachs will bloat into hard little ballons and they can no longer walk. Etcetera. All this dumb-sheep mystery undoubtedly merited a semi-scientific exploration of the very objects of an ancient and venerable vocation of nomads, of creatures whose innocence is apparently worth the cost of feed and care.

So I went out to take a look at the nearest flock of sheep. From a distance they looked innocent enough, spread over the pasture like huge woolly bugs, eating, defecating, resting or wandering aimlessly in search of an unknown sheep hallucination. They spooked easily at my rather unthreatening approach; as they ran, they made a rattling sound which I discovered to be the clatter of sheep shit caked in small balls on their hairy rear ends. This sound became quite

familiar as I closed in for a more thorough examination of the faces of these fleecy ovine creatures.

On hands and knees I crawled sheep-like towards a specimen, a large ewe of an age I considered likely to discount any assignation of dull-brainedness to the folly of youth. I stared into her eyes, steeled for the revelation of an infinite sheep wisdom and the instantaneous dissolution of myths and anthropomorphic absurdities.

Looking intently into those eyes, I beheld a veritable pool of optic nothingness, an unspeakable non-intelligence, an immaculate void, a blank. It was a mere primitive radar, a cold, bloodless faculty for determining the locations of meaningless objects.

I sat back in shock.

Sheep, I had discovered, were bleating machines. Shit-encrusted zombies. Organic blanks. A woolly no-man's land of cerebral zeros with two anatomical attributes: hunger and stupidity. No wonder coyotes eat them.

III

RUNNING

There was no room in this man's world for coyote or bobcat or eagle or hawk or owl. He found no beauty in their beings, no usefulness in their lives, no respect for their freedom from man. They were killers.

1

Bounty: A bonus decreed by law for the killing of noxious pests. Although individual bounty systems vary, the essential idea is that when a person kills an animal designated as vermin or a pest, on presenting a portion of that animal's body (ears, scalp, skin, head), a public agency will compensate that person's efforts with an established sum.

When man first began the practice of providing gratuities for the killing of so-called noxious mammals and birds is not known. Some estimate that the bounty system, in various forms, is over 2,700 years old. The practice came to America with European settlers and appears in colonial records of the 17th century. A Massachusetts law of 1648, for example, offered any Englishman a reward of 30 shillings for the head of a wolf. Indians were offered 20 shillings.

In the 18th century, bounties were not exclusively confined to wild predators but for a time included human "savages" considered to be in a similar class. In 1703 Massachusetts offered a bounty of 12 pounds for every Indian scalp turned in to the colonial government. Nineteen

years later this bounty was augmented to 100 pounds--a sum sufficient to purchase a considerable extent of American land. In 1745 other colonies joined Massachusetts as the colonial legislature passed "An Act for giving a reward for Indian scalps." Under the economic and racial imperative of New World settlement, there was little discrimination between wolf and Indian other than the higher bounty on the latter. Both were dispensable--and both could be treated by similar methods. Following the French and Indian war, the commander of British forces in America suggested that all Indians, like wolves, be hunted down with dogs.

The bounty system on coyotes is over a century old, its origins coinciding with the settlement of lands from the Great Plains to the Pacific. It was a popular belief among Western settlers that if the coyote was destroyed, game would be produced in limitless numbers and domestic livestock would be free from depredation. The bounty system seemed to be the answer to effective and complete predator control.

With the expenditure of thousands of dollars in bounty payments and the deaths of thousands of coyotes during some relatively bountiful years, the bounty system neither exterminated the coyote (the coyote responded to intensive bounty hunting by increasing its numbers) nor was there evidence that livestock or game conditions had improved. The bounty system was not only ineffective and expensive, by design it offered a prime opportunity for fraud. When the objective--the killing of coyotes--was made a source of income by the payment of a bounty, the prevalent idea (and an economically rational one) was one of propagating the coyote rather than eradicating it. Taking advantage of this rather simple logic, bounty hunters and stockmen raised their own coyotes and

killed them for bounties, or presented the scalps of domestic dogs as coyote scalps, turned in the same skins over and over to different (or the same) bounty offices, shipped skins or scalps to places where bounties were higher, or deliberately freed captured female coyotes so that they could reproduce and provide more revenue when the whelps were later taken for bounty payment. A Montana "coyote farmer" writes this letter to his local game department: "When will it [the bounty] be on, or if you have any idea when it will be payed, I have 20 to 30 [coyotes] in a pen and would like to get some idea how long I have to keep them alive. Answer soon as you can so I will now what to due."

Bounty systems not only encourage fraud, they were unsupervised, erratic and indiscriminant. Areas where coyotes were a viable menace to game or livestock were neglected for areas where they were more abundant but not necessarily a problem. Coyote bounties sapped the coffers of game and wildlife departments as exorbitant sums were spent on this largely unsuccessful method of predator control, leaving more productive phases of game management with little funding. In summary, the bounty system was a haphazard, unscientific and ineffective means of coyote control. However, many bounty advocates disagreed: "If a reasonable bounty were offered . . . for the scalps of those destructive wild animals, they [the coyotes] would be disposed of in less time than was required to get rid of the buffalo."

By 1916 much of the Western range country was divided into predator control districts, each assigned with federal trappers and supervisors. Trapping by trained professionals eventually replaced the bounty system in most states, and the bounty hunter became an anachronism. By

standardizing programs and techniques, it was hoped that predator control would be more scientific and regulated. Along with professional agents, any stockman was permitted to trap, poison, shoot or otherwise dispose of coyotes considered a threat to his livestock. The implementation of scientific methods of coyote trapping often revealed interesting conclusions, such as this one from a 1938 predator control program report out of Wyoming: "Of all the stomach contents analyzed, it was found that none of the 75 coyotes trapped had eaten livestock."

2

"The trapping of coyotes is a popular and often profitable form of recreation for many farm boys, private professional trappers, or those seeking a short respite in the out-of-doors."

. . .

Coyote trappers often do not kill their catch but will cut off the animal's lower jaw, then free it. Sometimes they will wire the jaws shut. Sometimes they will break all four legs of a trapped coyote and leave it. One Colorado sheepman scalped a coyote from skull to nose, then turned it loose.

. . .

"We trapped a rather large and healthy female coyote near the river last week. We discovered four pups in her den, all in prime physical condition, about three weeks old. Sometime, long before we killed her, she had been shot in both eyes. She was blind."

. . .

"The trap may be left unanchored or anchored. Either draghooks may be attached to a chain (preferably six feet long), fastened by a swivel to the trap base or to a spring, and all buried underneath; or a steel stake pin may be used, attached by a swivel to a six-foot chain fastened to the base of a spring of the trap."

. . .

Following a seven-mile chase, the young farmer rode down a coyote with a saddle horse. He then attempted to make his horse step on the coyote in hopes of trampling it to death. However, this only resulted in the horse's legs becoming badly mutilated from coyote bites. So the rider dismounted and killed the coyote with a pair of fence pliers.

3

"Mammal Control Agents"

Thallium Sulfate: Tl_2SO_4

Form: Colorless crystals
 Hazard: Toxic
 Derivation: From thallium derived from flue dusts of lead and zinc smelting; thallium forms toxic compounds on contact with moisture.
 Use: Predator control

Thallium as a predator control agent kills only six out of ten of its victims. Survivors go blind and all their hair and toenails fall out.

Cyanide (or Cyanogen): C_2N_2

Form: A compound of a colorless, flammable, poisonous gas soluble in water
 Hazard: Highly toxic (tolerance: 10 ppm air)
 Derivation: From potassium cyanide solution
 Uses: Welding, cutting of metals, fumigant, rocket propellant; "Cyanogas"--trademark for pesticide with calcium cyanide.

Strychnine: $C_{21}H_{22}N_2O_2$

Form: Alkaloid
 Hazard: Highly toxic by ingestion and inhalation (tolerance: 0.15 mg/m³ air)
 Derivation: Extracted from the seeds of *Nux vomica* and related plants (genus *Strychna*). *Nux vomica* is a tree native to India and Ceylon and cultivated in the tropics. It has globular white fruits about the size of an orange. The green seeds embedded in the fruit are the principal source of strychnine.
 Use: An economic poison; used medicinally as a tonic and stimulant for the central nervous system.

Strychnine came to the West in the mid-1800's under rather bizarre circumstances: Bound for South America, a boat carrying strychnine changed course when its crew learned of the gold strike in California.

Compound 1080 or Sodium Fluoroacetate: FCH_2COONa

Form: Fine, white, odorless powder soluble in water; highly stable
 Hazard: Highly toxic by ingestion, inhalation and skin absorption (tolerance: 0.05 mg/m³ air)
 Derivation: Ethyl chloroacetate
 Use: Rodenticide

1080 or Compound 1080 is very poisonous to man, beast or bird. Its effects may carry through several hosts with lethal results. There is no known antidote.

1080 is a master poison, an assassin's elixir. Of all the lethal agents known to man, it is difficult to imagine anything more insidiously homicidal than this compound. 1080 is lethal in infinitesimal amounts; a single ounce could kill 200 adult humans, 20,000 coyotes or dogs, or 70,000 domestic cats. When ingested by a single victim, 1080 remains unchanged, stable; anything feeding on its carcass will die, and so on down the food chain. 1080 does not degrade biologically or physically, although it is believed that by burning it or diluting it in solution--tremendous quantities of water--1080 will eventually break down over a

long period of time. Accurate data on the properties of 1080 is, to say the least, sketchy.

There have been human fatalities resulting from 1080 poisoning, but there is no way to determine the number of deaths caused by this highly toxic compound. In known cases, the lethal agent has been identified only by clear and present evidence. However, the symptoms of 1080 poisoning are nearly identical with the symptoms of a heart attack; cardiac failure may even be the terminal event of 1080's effects on the central nervous system. The properties of 1080 are so unknown and difficult to detect even by autopsy, death by 1080 could easily be diagnosed as death by cardiac arrest and no one would ever know the difference. In the hands of a madman, 1080 could be the perfect weapon.

Even before its ban in 1972, the sale of 1080 was restricted to licensed pest control operators--restricted not by law but by the requirements of private manufacturers of the poison. Apparently even these controls were insufficient to preclude misuse of 1080. In 1967 agents of the Wyoming Game and Fish Department discovered seven game carcasses baited liberally with 1080 and distributed near a popular fishing stream and public campground. Laboratory analysis revealed that there was sufficient poison in any one of the seven carcasses to kill people for a mile down the stream; it was the highest concentration of 1080 the Department had ever seen. The suspected poisoner was ultimately found and brought to trial. He pleaded guilty and was fined \$164 for killing game--the game used as bait--out of season. It was never discovered where he had obtained the 1080.

A government trapper tells about the numerous dogs he had seen poisoned by 1080: "They get nervous, start chasing around. Then they start yelping and screaming and running back and forth; they'll run into a tree or a fence or a wall, bounce back, and run into 'em again. A lot of times you never find 'em. Once when I was in a sheep camp, a 1080 dog came into the tent, mussed all over it, vomited, peed all over, tore the tent ropes down when she got tangled in 'em, then took off and went down over a cliff and through some oak brush. We could hear her howling far away. Later I asked the herder if he ever found her, and he said no."

Because of public concern for nontarget birds and mammals becoming victims of 1080 and other poisons passing along the food chain, in 1972 strychnine, cyanide, thallium sulfate and 1080 were banned from use on public lands; 1080 is tightly restricted anywhere. After the ban, stockmen claimed that coyote populations skyrocketed and losses to livestock were catastrophic. Biologists noted that coyote populations had been on the rise long before the ban on poisons; their studies also revealed that a secondary population increase occurred largely in response to intensive poisoning programs. The coyote had responded to a higher mortality rate by producing larger litters.

. . .

How to Get the Getter

"Called 'getters' locally, the cyanide guns are the predator hunter's favorite tool. These are cylindrical devices about six inches long, loaded with potassium cyanide powder and a spring or firing charge; they are half-buried, upright, in the ground. Baited cotton on the exposed end attracts the coyote, fox, bobcat, or maybe somebody's pet

dog; when the animal pulls on the bait he gets a jet of cyanide in the mouth. Death is certain, but not necessarily quick--the victim may endure ten, twenty, even thirty minutes of what appears to be extreme pain before the end. According to wildlife agency regulations (not always followed), the cyanide gun wherever planted must be marked with 'conspicuously placed' warning stakes and eight-inch by twelve-inch warning signs 'posted and plainly visible on all roads leading to station area.'

"Look for these signs. When you find the station--usually a group of four or five cyanide guns set close together--you can disarm the devices in any of several ways. Urinate on them--that will warn the wildlife away. Or pour kerosene on them--that will destroy the bait. Or shoot them up with a gun. Or drop a large flat rock on each one. But don't touch them with your hands; they are dangerous."

Edward Abbey, *The Journey Home*

4

In 1971 the Department of Interior's Division of Wildlife Services--devoted to wildlife enhancement, pesticide surveillance and monitoring, and predator control--spent \$8.1 million on predator control, \$8.1 million for 75,661 coyotes, 6,608 bobcats, 234 bears, 80 mountain lions and 15 additional species including gray wolves and weasels.

5

Advertisement in *New Yorker*, October, 1978, showing a hard-jawed stud of a man in a fur jacket, a nubile nymph hanging on his arm:

"Yippee-ay-o coyote. \$450. Hip length jacket of natural coyote sides. Wool knit trim. Also available in natural raccoon sides. Same price. S-M-L-XL sizes. (Most likely she wears a small. Why not a pair.) Neiman Marcus Furs, New York."

. . .

In 1860, when beaver population declined, North American fur traders turned their attention to other mammals whose populations had not yet suffered from years of intensive trapping. From 1860 until 1885, one of the most extensive coyote and wolf trapping campaigns in history took animals from Canada to Texas; thousands of animals were trapped and skinned, their pelts shipped to the east and Europe.

Coyote and wolf furs were primarily used for trimming coat collars and sleeves. Full coyote coats were popular when marketed as "coon-skin" coats in the 1920's. However, most coyote fur was dyed black and sold as imitation black fox; wearing a fur that was recognizably canide was not particularly fashionable at the time. By World War II the annual raw fur value of coyote pelts was \$1 million.

Today coyote pelts sell for an average of \$60 to \$70, with high-quality pelts selling for \$120 to \$200. In vogue is the "natural Montana" or "Montana type" coyote pelt or "silk" which is usually shipped to European markets where the demand for fur remains high and stable. An increase in the issue of aerial hunting permits in many Western states has been related to an increase in fur prices in the last decade. While most states prohibit the aerial sport shooting of coyotes, permits may be given to private individuals who, under state license, may kill

predators in order to protect their livestock. It is believed that many ranchers are becoming fur seekers, using livestock protection as a legal cover for their true activity: the killing of non-menace coyotes for fur. In 1977 approximately 50,000 coyotes were taken for fur in Montana alone. The actual figure may be considerably higher, as many aerial gunners do not report their true takes in order to avoid paying taxes on them.

. . .

"Finally. Equal Rights for men. A coat to howl in! This bleached American coyote is just one of the furs available in a broad range of prices"

Full page ad in *New York Times Magazine*,
November 26, 1978

. . .

One Western fur dealer will pay \$65 to \$70 for well-groomed and properly tanned coyote pelts. However, he warns that poorly-handled pelts--such as ones with bullet holes in them--are worthless.

. . .

Very curious, this image in my mind of a tough, leather-faced fur cowboy stalking the open range for the wild coyote, blasting it with bullets and selling its skin to the city men of fashion.

In pre-polyester dark ages, she continues, animals were necessary sources of clothing. Often the person who wore a particular animal's skin took on the special powers of that animal, powers such as courage, cunning or swiftness in hunting. The modern fur wearer also takes on special powers--but not those of animal nature. Instead the animal--in

coat form--is a symbol of fashion and socio-economic status; seeing the animal in this way, the wearer places values on the animal which are entirely human.

Civilized people wearing fur coats do not relate the sequence of hunt, chase, death, blood and guts to the warmth and elegance that wearing fur gives them. To them fur is wealth--not the hide which once enclosed a being with a heartbeat, a being whose death is necessary for an illusion of pleasure. As for myself, I prefer the beauty and elegance of an animal whose flesh is intact, animated and in motion beneath that fur. The separation of fur and flesh is a cessation of motion.

6

In Which Machismo is Found to Be an Arrested Form of Maturation

For a time, "coursing" or hunting coyotes with hounds was a popular sport. In the 1950's, a typical case of the success of this sport is seen in the accomplishments of a Great Falls, Montana, hunter who, with 11 hounds and a specially-equipped automobile, killed 162 coyotes in 60 days. The sport is not as popular as it once was because of barbed wire fences and settlement of the country.

"Wolf hunts" in Oklahoma were popular in the early 20th century, as the day of the hunt provided an occasion for a picnic and a gathering of families. As the women and children watched, the men roped, shot or dragged coyotes to death on the end of the rope. "Such hunts," reported one witness, "afford an agreeable break in the monotony of frontier life."

Elk City, Oklahoma, 1945: "Watched by a crowd of 1,000 curious onlookers, British Ambassador Lord Halifax today rode the hounds in a

coyote hunt staged for his benefit. The English diplomat, a devotee of the chase in his own country, termed the American show 'all very jolly.' Because the aim was to kill predatory animals, he said he considered the sport 'an appropriate pastime in wartime.' Ten airplanes equipped with two-way radios raced above the hunting field throughout the chase to give the hunters and dilettantes 'spotter' information about the quarry."

In the early 1970's in the Dodge City area of Kansas, coyote hunts on motorcycles became extremely popular. A line of motorcycles forms on a ridge, and as a coyote is flushed out by other hunters, the motorcycles rush forward in formation, chasing the animal until it is exhausted. It is then shot with a handgun. After a round of beer and congratulations, the motorcycle line re-forms and the sport continues.

There is nothing sportsmanlike or manly or virile about a full-grown man stumbling around the bushes, blowing the guts out of little bunny rabbits and coyotes, she said. If he wants to prove his sportsmanship, virility or manliness, let him go after the little bunny rabbits and coyotes with his own bare hands.

On January 1, 1974, a coyote hunt was held in Wheaton, Kansas. Proceeds from the hunt went to the Heart Fund.

"Hard on the heels of the dashing animal rode the excited ranchers, revelling in the full pleasure and thrill of the chase."

"With his brush whipped straight back in the breeze, his ears flat against his hard skull, his tough toes pushing the ground behind him as he raced from the gaping jaws of the lean hounds hot on his trail, the coyote offered his pursuers a sporting race seldom equalled in the annals of hunting."

The pile blocked a road leading to a gas well in Sublette County, Wyoming. There, in a mass that filled the plains air with a smell of rotting flesh, the skinned carcasses were all that remained of 78 coyotes and 4 bobcats. Aerial gunners had left them there after removing their furs and piling them bodiless into their vehicles. Completely skinned of their coats except for a sock-like covering of hair on the lower legs, legs which protruded here and there from the heap, thin, stiff, pads, claws and paws pointing upward to the sky, their exposed flesh dried and cracked in the hot sun, the eyesockets round and eyeless deep, the lipless jaws and teeth in a grimace of death. The gas company employees who found them had to clear the carcasses from the road so that they could get to work.



IV

CREATING

The First Eclipse (Navajo)

In the second of fur worlds upward, First Man placed a white shell in the East, a piece of turquoise in the South, abalone in the West, and jet in the North. Rays from the white shell and abalone would rise and cause daylight; when the rays met, it was midday. Then they

would slowly recede and rays from the turquoise and jet would rise and cause the darkness of night. Coyote sneaked over to the East and West and tied down the light rays, leaving the world in darkness. Coyote kept the rays tied until First Man and First Woman made a proper sacrifice to him.

1

A Weaving of Voices with Death Cries While Den Hunters Burn Coyote Pups Alive

While not strictly monogamous during the breeding season, male and female coyotes usually hunt, mate, raise litters and remain together until one of them dies. In contrast to wolves whose cooperative behavior is of great importance in hunting large game animals, pack affiliation has little survival value among coyotes who feed primarily on rodents and carrion. Thus, while coyotes do exhibit allegiance to a few pack members, pair bonding is the primary social unit.

The coyote shows marked mate preferences which can be influenced by bonds of social behavior between male and female long before they are ready to mate; these bonds intensify at the onset of the first breeding season which does not occur until both sexes are two years old. At that time, and during subsequent annual breeding seasons, territorial defense and aggression increase as the pair exhibits a greater intolerance for the intrusion of other coyotes.

Coyotes breed in midwinter when the female enters the oestrus cycle--a period of preparation, or pro-oestrus, during which the generative organs are increasingly active, and oestrus, the four to five day

period of sexual heat during which the female is willing and able to mate. Coition is fruitful only during oestrus.

The gestation period for coyotes is 60 to 63 days. During the last few weeks of pregnancy, the female prepares a den by digging and clearing a secluded hole in the ground, among rocks, in an excavated cave or wherever else there is suitable cover. Often instead of digging entirely new dens, the coyote will enlarge a hole abandoned by small rodents and burrowing animals. She may prepare several dens within close proximity of one another; when it is time for the young to be born, she selects one den and bears her pups in it. There seems to be no particular rationale for the selection of den sites, although dens are usually within easy reach of water, as the female's range is more restricted while she rears her young. If undisturbed, the same den will be used year after year; if one of the pair dies, the surviving coyote will bring his or her new mate to the same denning area.

(Den hunting or "denning out:" A method of predator control in which coyote young are destroyed before leaving the den. According to the Wildlife Management Institute, "the most essential qualification of a den hunter is keen observation and familiarity with the habits of coyotes. He can probably become more skilled in den hunting than in any other phase of coyote control")

During partrition, or delivery, the female coyote remains in her den. At the onset of labor, she will pant, turn and dig at the ground until uterine contractions move the first pup from the womb to the vaginal canal and finally out through the vulva. Each pup is enclosed in a clear fetal membrane called the amniotic sac; as the last contractions

push the pup out of the birth canal, the coyote turns and nips the sac, pulling it away from the pup's face immediately. The pup begins to move, its small feet pawing at the sac to assist its exit into the air. She cleans its face and nostrils first, then licks its belly and chest somewhat roughly to stimulate its first breaths in a non-liquid environment. She then severs the umbilical cord and eats the afterbirth which follows each pup. After all the pups are born and suckling at her teats, she rests. Her mate will usually bring food to her at this time.

(" . . . To be successful, den hunters must have the fundamental virtues of reliability and energy. With this is needed a pleasing personality")

On the average, coyotes will bear four to five young. The size of litters fluctuates with environmental and external factors; when food is scarce, litters will be smaller, while during periods of intensive pressure from predator control, litters will be larger. At times two females will share a den and raise their litters together. This not only serves as a convenient arrangement, the grouping of litters appears to occur particularly when predator control pressures are great; thus if one female dies before her young are weaned, another female can care for them. If a female dies after her pups are weaned, her mate cares for the young.

(" . . . Successful den hunters in the Federal service are virile, hardworking men, some possessing the best characteristics of the early pioneer hunters and trappers. They are called upon continually to exercise all their resourcefulness and hardihood in the great expanses of wild Western country in which they operate")

Until the pups are two to three days old, the female coyote stays in the den, eating food her mate brings to her. After the pups pass this critical age, she will continue to hunt with her mate during late evening and morning hours but will remain close to the den most of the day and night. While she feeds her young, her mate stations himself nearby, changing positions according to the direction of the wind. In some cases the pair will move the entire litter to another den if danger is sensed.

(" . . . One of the best methods of keeping down the increase of coyotes is to destroy the newly-born whelps before they leave the den. Den hunting should be both systematic and thorough")

Coyote pups are born blind and helpless. Their woolly coats are dark gray on their backs and upper parts, with pale fur on the belly, chest and head. This coloration changes rapidly; by the time the pups have their eyes open at 9 to 14 days, their coats are cinnamon brown in color. For the first few weeks of life, the pups do little but eat and sleep until they discover that by putting their awkward legs beneath them, they can walk about between falls on their bellies and backs. During this time--as if sensing the necessity--the pups are very quiet.

(" . . . Much work can be avoided by running a shovel handle or long stick as far as possible into the hole to ascertain its direction and then digging a pit down into the den instead of following the burrow. Where digging is extremely difficult, the animals can be destroyed by the use of calcium cyanide gas. If the pups can be seen back in the den but cannot be reached by digging, a forked stick or a wire so twisted with a rosette of sharpened wire threads 1/2 inch long at one end as to

be forced and twisted into their fur has been employed to save labor; but if the den or burrow branches and turns, such an instrument is never wholly satisfactory, as some of the whelps are likely to be missed. This method, however, saves the trapper the trouble of having to dig")

The pups suckle milk for three to eight weeks, with meat added to their diet at about five weeks. Their first meat is usually predigested and regurgitated by either parent. As their teeth develop, their meat is brought to them uneaten; the parent animals eat all they can hold from their kills and then carry large pieces back to the den in their mouths. Once the pups are weaned, they require a large quantity of food.

(" . . . Smoking the young out of the den is not satisfactory as a rule, but is sometimes successful. Throwing a handful of calcium cyanide into a den and stopping the hole with dirt is an effective method of fumigation")

The pups may emerge from the den for brief ventures as early as three weeks after they are born. If weather permits, the female may take them to an area a short distance from the den. After the pups have sunned awhile, they are returned to the den.

(" . . . Pups are wobbly on their legs when only two to three weeks old so if a pit 18 inches deep is dug outside the mouth of the den, they will fall into it when they attempt to crawl out of the den and can easily be captured")

As the pups grow stronger and more active, they widen their travels from the den. Stalking insects and leaping on them seems to be a means of practicing the hunting techniques and instincts which must become more refined and accurate when the pups begin to hunt mice.

The role of the male parent--who up until this time participates in pup-rearing as a food-getter and sentry--becomes more important as he begins to teach the pups to capture small prey; the pups are taught by example--they watch as their parents stalk, freeze and pounce on rodents. As their education continues, they spend more time outside the den, hunting, playing or hiding in response to real or imagined danger signals. In the early summer, the coyote family leaves their den and will hunt together until fall comes and the family gradually breaks up.

(" . . . A 12-gauge pump shotgun loaded with BB shot is good for hunting pups that have left the dens but are still together. They may be found lying under the sagebrush or among the rocks and are more easily hit with a shotgun than a rifle when they start to scatter")

. . .

From the Congressional testimony of George Bent, cited in
Dee Brown, *Bury My Heart at Wounded Knee*:

November 28, 1864--Sand Creek, Colorado

"I saw the American flag waving and heard Black Kettle tell the Indians to stand around the flag and there they were huddled--men, women and children. I also saw a white flag raised. These flags were in so conspicuous a position that they must have been seen After the firing, the warriors put the squaws and children together, and surrounded them to protect them. I saw five squaws under a bank for shelter. When the troop came up to them they ran out and showed their persons to let the soldiers know they were squaws and begged for mercy, but the soldiers shot them all. I saw one squaw lying on the bank whose leg had been

broken by a shell; a soldier came up to her with a drawn saber; she raised her arm to protect herself, when he struck, breaking her arm; she rolled over and raised her other arm, when he struck, breaking it, and then left her without killing her . . . they sent out a little girl about 6 years old with a white flag on a stick; she had not proceeded but a few steps when she was shot and killed . . . the squaws offered no resistance. Everyone I saw dead was scalped. I saw one squaw cut open with an unborn child, as I thought, lying by her side. Captain Soule afterwards told me it was a fact I saw a little girl about 5 years of age who had been hid in the sand; two soldiers discovered her, drew their pistols and shot her, and then pulled her out of the sand by the arm. I saw quite a number of infants in arms killed with their mothers."

Nothing lives long

Only the earth and mountains.

V

SINGING

"Hear a telling of the song the Coyote gave to Cinoave and took away again, in the day when every man had his own song, and no one might sing a man's own song without his permission. Thus it was among our fathers' fathers. When his son was born, when he had killed his enemy or first made a woman to know him as a man, out of his great moment he made a song and sang it on his own occasions. Sometimes it was a song for the people, which he left as a legacy when he died. There were also songs to be sung while he was dying, by himself if he were able, or the friends who stood around him; or it might be the song was so secret that it passed only between the singer and his God.

"But Cinoave had no song. When the tribe came together for the dance of the Marriageable Maidens, or for the feast of the Piñon Harvest, Cinoave would busy himself gathering brushwood for the fire. Or he would sit apart from the others pretending to mend a pipe or sharpen an arrow, hoping not to hear the tribesmen whisper to one another, 'There is Cinoave, the man without a song.'

"This to Cinoave was sadness. For without a proper song, how can a man win favor of the gods or women? Thus say the fathers. Then, one day when he was digging tule roots by the river, the Coyote came by and said, 'What will you take for your sweet roots, Cinoave?'

"Said Cinoave, 'I will take a song.' For is not the Coyote the father of song-making?

"'What kind of song?' asked Coyote, for though he meant to strike a bargain, he wished to hold out as long as possible.

"Cinoave considered within. 'A song that will warm the hearts of the tribe and stir their thoughts within them,' said Cinoave.

"This was a good asking. When the heart is warm and the thoughts deeply stirred, one ascends without difficulty to the Friends-of-the-Soul-of-Man and all things accord with our interests. 'I wish a song so pleasing,' said Cinoave, 'that all men hearing it will say, "Surely this is a Coyote Song." This was said in flattery, for he knew, having thrown him a tule root to taste, that Coyote would not go away without his belly full. Also he wished to make sure that it would not prove a Coyote giving. That is a saying to our fathers for a gift that is taken back again when the giver is so minded.

"Cinoave threw him a fat, sweet root and when it was eaten, he said, 'Swear to me it will not be a Coyote giving.'

"Coyote swore by the pelt of his mother, 'So long as the song is used for what it is given, to warm the hearts of the tribe and stir up their thoughts within them, it will not be taken away.'

"The Cinoave threw him the bag of roots and they were well pleased with the bargain.

"That year at the feast of the Piñon Harvest when the tribes came together, Cinoave sang his song and the people were astonished, saying, 'Surely this is a Coyote song?' In every camp there was talk of it, and the pride of Cinoave swelled like a young gourd in the rain. Everywhere he went singing it, their hearts were warmed and their thoughts stirred up within them. So it went until the feast of the

Grass-on-the-Mountain. Then the tribes and the sub-tribes came together at the place called Corn Water and there was no one who could sing equal to Cinoave. They had him sing his Coyote Song over and over, and as he listened to the talk and the hand-clapping he changed the words of the song so that those who heard it should say, 'This is the Song of Cinoave.'

"It was now some months since he had bought the song of Coyote, and the song and praise of it had entered into his bones. He thought of nothing but being praised and remembered for the power of his singing. So he sang it until he and the people were all wearied, and fell into the deep sleep of exhaustion. But because he had forgotten that the song could only be sung for the purpose for which it was given, Coyote came in the night and stole the song away. When the people awoke, it was discovered that not one of them could remember a word of it.

"Thus it has become a custom among the Paiutes, when it is remarked that a man warms the hearts of the tribe by his singing and stirs up their thoughts within them, we do not praise him much. For who knows but it may turn out to be a Coyote Song? And when a song is used for other than the purpose of the giving, may not the giver of it take it away?"

Mary Austin, *One Smoke Stories*

2

The resilience and resistance of the coyote in the face of a century of stress from humans is astounding. Predator control campaigns have been directed with a force and intensity aimed at wiping the coyote out of existence, at exterminating the coyote species entirely. These efforts have failed.

Campaigns against other predator species have been more successful, particularly when control programs are coupled with habitat loss incurred by the advance of civilization and the human alteration of natural ecosystems. The wolf, less able to expand its range or adapt to new and different habitats, has not demonstrated the resilience of the coyote, a situation which has resulted in a drastic reduction of wolf populations in North America. The organization of wolves into distinct social groups or packs is a survival factor beneficial in hunting but one which has little value when food supplies are reduced or pressures are extreme. As larger animals, wolves must band together to kill animals sufficiently large to provide them with adequate nourishment. A wolf may weigh five times as much as a coyote and is thus unable to subsist entirely on a diet of small rodents. The coyote long ago abandoned a close-knit pack organization in order to adapt to changing environmental conditions. While pack affiliation exists among coyotes, the pair bond and family ties during pup-rearing are the primary units of social organization; scavenging and the hunting of small prey eliminated the necessity of group hunting, and the coyote survives more readily as a lone hunter.

Amputating its own limbs to free itself from traps, avoiding carrion altogether when fellow coyotes have succumbed to poisoned bait, hiding its dens in undiscoverable places when den hunters penetrate its territory, the coyote responds to man's more vigorous coyote-extminating programs and ingenious technological devices by using its wits and will to survive. That the coyote is classified as one of the most intelligent species on the North American continent is testimony to its incredible ability to cope with the efforts leveled against its existence.

3

Coyote and the Bureaucrat

Coyote was bored. So he put on a fancy shirt and a rakish hat and walked down to the local bar for some social interaction and other forms of entertainment. He sat down at a table, ordered a drink and watched the crowd.

Next to Coyote sat a man in a red-and-white checked leisure suit. Turning to Coyote, this man began to converse in a friendly but obviously frustrated manner.

"My friend," he began, "in our underlying and integrated corporate infrastructure, the essential maximization of positive local input is indirectly tantamount to the nondefensive feedback loop on the rotating interface of governance issues accompanying the conflict utilization of rotating facilitatorship."

Coyote was puzzled but gave an attentive ear as the man continued:

"What we all need is an implementation of a terratectonic imperative which takes a faith stance on the demands of wildernessisms aggre-

gated with baseline data on a societal resource utilization free from interpersonal restraints of the paradigms of interfacilitated and non-integral modes of demanding the cogent designs of functionality."

The man's voice was getting louder. He was beating the table with clenched fists. Coyote drew back with brows raised as the man's reddened face edged closer to his. With a sudden, almost pleading sincerity, the man whimpered,

"It's the role model of behavioral dissemination and auxillary augmentation of eventuated minimized aptitudes that gets us."

He was almost crying. Coyote waited silently for the man to recover himself.

"I can't help it," he finally continued. "I'm faced with an ongoing and subtactical supra-manipulation of intrinsic manual and multidiffusional collusion of ambiguity. It's awful."

The man wiped away his tears and brought a shiny brown naugahyde briefcase up to the table with a loud bang. He opened it, saying,

"Here, take a minimal baseline perusal of this." He handed Coyote a sheaf of papers about eight inches thick. "This, my friend," he said emphatically, "is the preliminary ORS-EIS on the second draft of the subpreliminary DOCNAT known as Project CRAPS--the Cogitative Reversal Advancement of Polyester Sheep."

Coyote was getting nervous.

"Now, you are a coyote," the man observed. "You should be fundamentally conscious of the integral computational base assessment of one essential ovine associate, commonly known as the sheep. In our multi-facilitated, vertically intradivisional resource potential, we have

developed the internally eventuated model of modernity known as Ultra Synthetic Control 4600-X[®]--or, the polyester sheep. It's absolutely amazing. These supranatural and cynergetically pro-organic heterodoxical proto-specimens not only feed exclusively on astroturf, but produce--not wool, it's far too exhausting on intercorporational nonresolution-orientated assets--but produce hyper-resilient, condensation minimizing, contiguously filamented, synthetic super-fibers which, by unit product, not only offer the average baseline proto-consumer the superior instrumentality of intercorporeal faculties, but . . ." Coyote was getting up from the table and walking towards the door, " . . . also resist a supra-functional predator factor hidden in the pseudo-stereotypical epidemiological disguise of a coyote . . . !"

4

Amidst the more boisterous allegations that the coyote is a ruthless and marauding livestock killer, come faint voices of respect and praise. Compared with its value in rodent control, the cost of the coyote's livestock predation may be significantly minimal. Although a coyote will occasionally take a calf, cattlemen do not bear as deep a hatred for the coyote as do sheepmen; cattle ranchers often favor the coyote because of its predation on rodents and rabbits which feed on grass that cattle need. One rancher estimated that a single coyote saved him \$88 worth of grass--a figure more than double the price of lamb at the time (1973). With characteristic disdain for the human occupation with sheep, one cattleman commented: "We know coyotes kill sheep, but not fast enough."

As a scavenger, the coyote is a beneficial protector of watersheds. It will retrieve carcasses for food that would otherwise decay and contaminate domestic water supplies or lure insects which carry decay organisms to man's food. The coyote is also a seed carrier; seeds cling to the coyote's fur and will be carried until they are shaken or scratched off into the ground to germinate. In this way, plants use mammals to revegetate new areas.

In rodent control and watershed protection, the coyote visibly benefits man. Less visible to many people--coyote haters in particular--is the coyote's role in a wider vision of ecological relationships. The coyote is a predator; along with hawks, eagles, owls, weasels, foxes and other animals, it has a cumulative effect on the suppression of animals whose populations might otherwise proliferate with disastrous consequences. Because coyotes in some areas and under certain conditions prey on livestock, the natural function and necessity of predators in keeping animal populations within the limits of their food supplies is easily clouded by an attitude of disfavor. This attitude may be understandable, for one kill or an apparent kill makes a striking impression; attention is held by an individual instance rather than the effect of predation on an entire population. When an observed kill involves a domestic animal, a wider perspective of natural balance narrows into a single vision of atrocity: The coyote is responsible and must be destroyed.

Coyote hatred seems to be a long-standing Western tradition with some earned merit and a larger quantity of exaggeration and fallacy. Coyote enemies see the predator in terms of social and economic values;

these values blind them to facts about coyote behavior: "I have been reared to hate coyotes all my life . . . coyotes, as you know are cowards. As soon as they have made a few kills, they become familiar with sheep and they start killing just for fun."

"Have you ever seen a coyote take one of your sheep?"

"No, but I'll shoot any one of those sneakin' dirty, worthless four-flushin' bastards I see near my land."

While trappers and den hunters carefully study those coyote habits important to predator control, other traits are left to myth and myopia. For example, when a sheepman finds lambs killed but not eaten by coyotes, he will rage against the wanton wastefulness of a killer who kills "for pleasure of it." Because his loss is vivid and frustrating, he does not accept the fact that coyotes will leave their prey and seek cover if the least sign of danger is sensed; where domestic livestock are found, so too are found many danger signals which impel the coyote to avoid its worst enemy--man--before it will consume its prey.

(The Enemy voices pity and shed tears: "When you find a lamb partly eaten, another with the side torn open and only the stomach gone [that is a special tidbit for the real killers--the warm milk which the lamb suckled from his mother] and then maybe five or six more, bitten through the head and not killed, maybe just able to give a mournful little bleat, you rather lose control and express yourself much more forcefully than politely.

"As we have all learned, the coyote is not always satisfied in killing one lamb and eating its fill, but will often kill a dozen or more for mere pastime. I dread to recall the picture that many of us

have gazed upon--a strayed bunch with their throats slashed or their entrails dragging on the ground. Many of us range men have come to the conclusion that the coyote is rated with the almost exterminated gray wolf as a ferocious killer.")

At the same time a person will feel twinges of emotion at the sight of slain lambs, he will be able to destroy coyote pups--often not very humanely--without feeling, as there is a total separation of compassion for the young of one animal (lambs) from another (coyote pups). "Nits make lice" seem apt words to describe an insensitivity to beings whose existence is considered offensive, although the words were originally intended to justify the slaughter of Indian women and children, not coyotes.

. . .

The coyote has an extraordinary influence on the human imagination, and there is no greater catalyst of feelings than the stare of a coyote. If eye contact is the first moment of encounter, it is an overpowering one; humans engaged in the stare of a coyote may find the experience unnerving, one that incites a mixture of fear, respect, hatred or curiosity. While the stare may sensitize dark, silent chords of understanding and affinity between man and beast, we usually read the message incorrectly and bear our own gaze within a medium of human reason encouraged by centuries of misconception and alienation from animal nature.

Animals have much to tell each other through visual communication, and eye contact is highly significant. An intense stare is frequently used by coyotes and other canids to communicate certain messages; what transpires in the gaze is an exchange of information. For example,

subordinate animals will avoid eye contact with a dominant; the looking away is an acknowledgement of that dominance and may be accompanied by other gestures of submissive behavior. It is also believed that a canid will engage its prey in an intense stare at the moment of encounter. What transpires between prey and predator at this moment is known only to them--its meaning is beyond human speculation. One writer has called it a "conversation of death."

Some say that the coyote or wolf takes your own stare and turns it back on you. What the eyes of the beast reflect is insupportable to "civilized" man. Years of attempts to annihilate the coyote reflect the reading of that gaze: the coyote is made a scapegoat for man's own bestiality.

5

Navajo ceremonialism accentuates man's relationship to the animal world. The great ceremony Coyote Way symbolically emphasizes the coyote. In the Mountain Way, held within a dark circle of boughs, the mythical hero embodies the bear. All rituals interlock in Life Way, the single supreme way of life itself which rises from unconscious to conscious. If these halves of man's being are not reconciled, illness results from the imbalance. Each Navajo ceremony and ritual is conducted as a healing or the restoration of the psychical harmony between conscious and unconscious.

. . .

The coyote survives more by wits than by brawn, and tales of its ingenuity and antics in native American legends are understandable,

considering the nature of the animal itself. An integration of humor and sacredness permeates the coyote-Indian relationship; as a creator or as a clever and foolish trickster figure, the coyote is perceived not with ridicule or a sense of human superiority, but with an understanding of coyote nature, human-animal kinship and a common source of being. Coyote stories are not only entertaining but also a vehicle for an endless reiteration of the origins of life--of man, animals, plants, earth and a thousand physical factors of the observable universe which together form a whole system of religion and philosophy. The role of the coyote as a folk character and divine being is as diverse as the peoples who have included him in an inexhaustible repertoire of stories and legends. In nearly every native American language and dialect, a different cycle of coyote stories is found. In one respect, they bear a remarkable similarity: a perception of the coyote's extraordinary intelligence--a trait both resourceful and foolish.

In some of the yarns of trappers, cowboys and stockmen, there is an admiration of the coyote's cleverness--a cleverness usually manifested by its ability to escape the plans and devices designed to take its life. Despite the inevitable ending in these accounts--the death or near-death of the coyote--there is an underlying awe of the fact that although captured, the coyote has put up a tremendous opposition; although it dies, the coyote comes back again and again. Man's own triumph is made hollow by the pervasive character and resilience of the coyote.

6

Well, one night a coyote got through a hole in the chicken yard. In the morning we went out to find the yard covered with feathers, chickens without heads and heads without chickens. It was a barbarity. And there over in the corner of the yard was the assassin, bloated and swelled like the heated bladder of a hog. His legs were sticking out, his mouth open and all else was in the manner of an animal well dead. I thought, "This coyote has filled his stomach so full, he could not pass through the little hole in the wall and died from all the chickens in his system."

I started to drag the creature away. I gave it some kicks and tied a rope to his hind legs and went dragging it over rocks and gullies and through thorny bushes. I stopped, then decided to take it farther still. Finally, I took the rope off his legs, gave him some more kicks and headed back to the house.

When I was halfway back, I turned around and I saw the coyote raise his ears and then his head. When he thought all was safe, he leaped up and ran off into the brush.

Adapted from J. Frank Dobie, *Tongues of the Monte*

7

The ladies of Guatemala do not hesitate to carry the testicles of the coyote against the skin of their stomach as a preventative against mother diseases.

8

Old Three Toes Super Coyote of Caddo County, Oklahoma

"Old Three Toes and his co-killers were a hard-boiled lot, whelped in a region where the length of a coyote's life depended on the length of his legs and the same dimension in his head. They belonged to a superior breed, developed by the very methods that had been designed for their undoing. Old Three Toes and his bunch outwitted the packs of expensive dogs that killed off his slower and weaker relatives. Only the fittest survived.

We did not weigh him when we brought him in from the trap but waited until we took him into town to give the people a chance to see him. There has been a crowd ever since, some coming in from as far as 25 miles.

"His feet measured 3-3/4 inches long and 2-1/4 inches wide. He weighed exactly 39 pounds, which means he weighed at least 45 pounds when alive. One toe was missing from his right hind foot."

9

One For Coyote (Skagit)

One day when Coyote
was walking through Snoqualmie Pass,
he met a young woman.

What do you have in your pack?
she said.

Fish eggs.

Can I have some?

If you close your eyes
and hold up your dress.

The woman did as she was told.

Higher.

Hold your dress over your head.

Then Coyote stepped out of his trousers
and walked up to the woman.

Stand still

So I can reach the place.

I can't.

There's something crawling between my legs.

Keep your dress up.

It's a bumble bee. I'll get it.

The woman dropped her dress.

You weren't fast enough.

It stung me.

The man-coyote relationship is an intricate fusion of traditions, values, facts and myths which together reflect a cultural perception of nature. In the two North American cultures which have lived with the coyote, there are clear differences in the way man "sees" the coyote and sees himself in the coyote. But these views are not nearly as intriguing as the nature of the coyote itself. Or perhaps it is all one, inseparable vision.

"Life was a glorious thing, for great contentment comes with the feeling of friendship and kinship with the living things about you. The white man seems to look upon all animal life as enemies, while we look upon them as friends and benefactors. They were one with the great mystery. And so were we."

Standing Bear, Sioux

11

. . . he threw back his head in ecstasy and gave his voice to the wind . . .

I have made the moon!

I have made the moon!

Hurling it high

In the four directions.

To the east I threw it

To run its appointed course.

I have made the stars!

I have made the stars!

Above the earth I threw them

All things above I've made

And placed them to illumine.

Pima Song of Coyote, moon and star creator

. . . Unseen coyotes have been on the ridges high above the canyon as I walked or rode my horse along the river below, they have been near my camps at night and once I felt the soft fur of a coyote brush my cheek when it stepped over me as I lay still like a stone. But when I hear coyote songs--mountain laughter--I feel as if I had no existence other than the minutes of life I breathe while they are singing . . .

(Ilex Percé)

" . . . Coyote said to Coon When you go crabbing watch out, black beings at the river shoot people. You can know them they say Spitspam Spitspam. Coyote charcoaled himself all up and went to the river and shot an arrow into Coon. Saying Spitspam Spitspam. Coon came home in pain. I told you said Coyote, let me take care of you. And Coyote bit his fatty places, he bit them out. O Coon screamed You hurt me. No Coyote said I cure you, and Coyote ate him. Coyote had a lot of food"

The coyote's song begins with a long, high-pitched howl and ends in a series of yips. To some the sound is mournful, lonesome. To others the sound epitomizes all that remains wild in a world of submission to the reign of man.

It is believed that while the coyote may often sing for the sheer pleasure of singing, there is a great deal of purposeful communication in its song, as one coyote vocalizes information to other coyotes. Some songs may bring a group of coyotes together or ask for assistance; some are warnings or information on feeding opportunities; other songs reinforce group cohesion and integrity while coyotes are at a great distance from one another. A coyote singing on a ridge broadcasts a message that will be picked up and relayed so that within a few minutes, the latest signal will reach all coyotes within a radius of many miles. Because coyotes often scatter far afield for hunting forays, auditory communication over a wide range of territory is extremely important. The coyote is the only animal known to have the ability to make its

voice multiply, sounding like several animals in very different places; a single coyote's song is sent to the air, others join in a chorus of overlapping howls and yips, and the echoes of their songs through the rocks and canyons make a half a dozen coyotes seem like a hundred. No one knows how they do this--multiply their voices and put them in different places. It is a mystery.

(Nez Percé)

" . . . well Coyote was blind now. He heard Bird-Boy and called to him and he put flowers in his own eye-sockets. Coyote said Why don't you shoot that pheasant over there? your eyes are bad, let's trade. And each took the other's eyes. The boy ran here and there and he could see far but his eyes that were flowers wilted and dried and he was blind



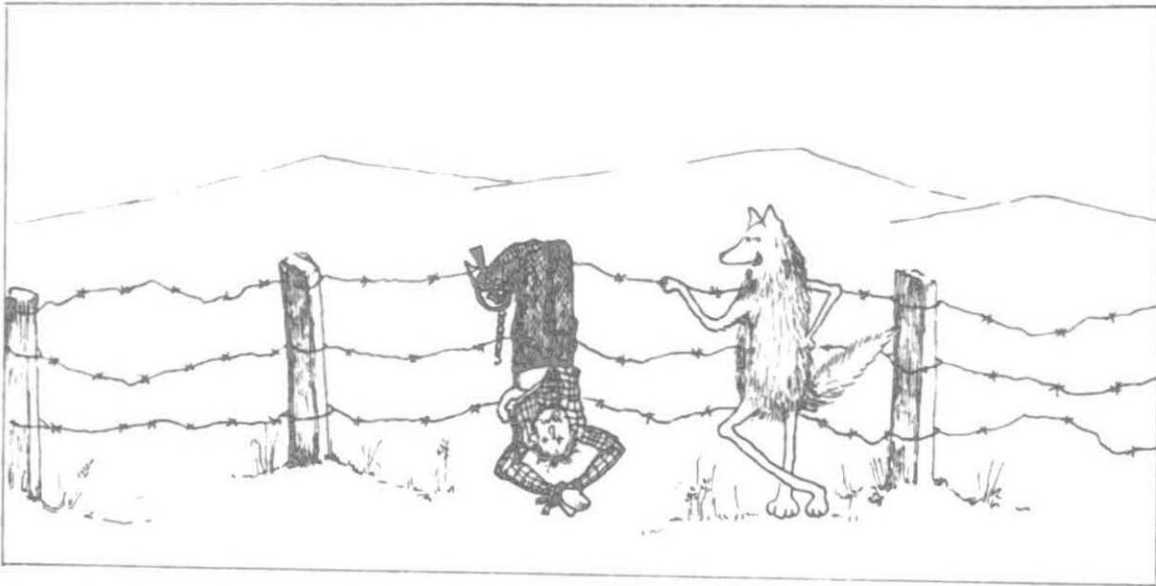
EPILOGUE

Her Elegy (Papago)

I'd run about
on the desert
me a young girl fierce to see
whatever I could. My heart
was not cool.

When there was no Coyote
I saw Coyote

. . . .



BIBLIOGRAPHY

- Abbey, Edward. *The Journey Home: Some Words in Defense of the American West*. New York: E. P. Dutton, 1977.
- Austin, Mary. *One Smoke Stories*. Boston: Houghton Mifflin, 1934.
- Brown, Dee. *Bury My Heart at Wounded Knee*. New York: Bantam Books, 1971.
- Clark, Ella, ed. *Indian Legends of the Pacific Northwest*. Berkeley: University of California Press, 1971.
- Davidson, Roy P. "The Coyote Menace," *National Wool Grower*, 28:42-43, 1938.
- Dobie, J. Frank, ed. *Coyote Wisdom*. Dallas: Southern Methodist University Press and Texas Folklore Society, 1938.
- Dobie, J. Frank. *Tongues of the Monte*. New York: Doubleday, 1935.
- Dobie, J. Frank. *The Voice of the Coyote*. Boston: Little, Brown, 1949.
- Fischer, Hank. "Montana's Coyotes Fuel the Fur Boom," *Defenders Magazine of Defenders of Wildlife*, 53:254-256, 1978.

- Fox, Michael W. *Behavior of Wolves, Dogs and Related Canids*. New York: Harper and Row, 1971.
- Fox, Michael W., ed. *The Wild Canids: Their Systematics, Behavioral Ecology and Evolution*. New York: Van Nostrand Reinhold, 1975.
- Goetz, Delia, and Sylvanus G. Morley, eds. *Popul Vuh: The Sacred Book of the Ancient Quiché Maya*. Norman, Oklahoma: University of Oklahoma Press, 1950.
- H. H. *A Century of Dishonor: A Sketch of the U.S. Government's Dealings with Some of the Indian Tribes*. Williamstown, Massachusetts: Corner House Publishers, 1973 printing of original 1881 document.
- Hultz, Fred S., and John A. Hill. *Range Sheep and Wool*. New York: John Wiley and Sons, 1931.
- Jonkel, Charles, and Robert Philips, eds. *Proceedings of the 1975 Predator Symposium*. Missoula, Montana: University of Montana Press, 1975.
- Kammlade, William. *Sheep Science*. New York: J. B. Lippincott, 1947.
- Laycock, George. "Travels and Travails of the Song Dog," *Audubon*, 76: 16-31, 1974.
- Leydet, Francois. *The Coyote: Defiant Songdog of the West*. San Francisco: Chronicle Books, 1977.
- Lopez, Barry Holstun. *Of Wolves and Men*. New York: Charles Scribner's Sons, 1978.
- Lorenz, Konrad. *Man Meets Dog*. Harmondsworth, England: Penguin Books, 1964.
- Matthews, Washington. *Navajo Legends*. Boston: Houghton Mifflin and the American Folklore Society, 1969.
- Meisler, Stanley. "Bullfighting Has Lost Its Former Glory," *The Washington Post*, June 13, 1978, p. A13.
- Murie, Adolph. *Ecology of the Coyote in Yellowstone*. U.S. Department of the Interior, National Park Service Fauna Service, Vol. 4, 1940. 206 pp.
- Murie, Olaus. "Notes on Coyote Food Habits in Montana and British Columbia," *Journal of Mammalogy*, 26:33-40, 1945.
- Olsen, Jack. *Slaughter the Animals, Poison the Earth*. New York: Simon and Schuster, 1971.

- Peckham, Howard, and Charles Gibson, eds. *Attitudes of Colonial Powers Toward the American Indian*. Salt Lake City: University of Utah Press, 1969.
- Radin, Paul. *The Trickster: A Study in American Indian Mythology*. New York: Schocken Books, 1956.
- Rothenberg, Jerome, ed. *Shaking the Pumpkin: Traditional Poetry of the Indian North Americas*. New York: Doubleday, 1972.
- Ryden, Hope. *God's Dog*. New York: Coward, McCann, and Geoghegan, 1975.
- Seton, Ernest Thompson. *Wild Animals I have Known*. New York: Charles Scribner's Sons, 1924.
- Seton, Ernest Thompson. *Lives of Game Animals*. Garden City: Doubleday, 1929.
- Shelton, Maurice. "Some Myths Concerning the Coyote as a Livestock Predator," *Bioscience*, 23:719-720, 1973.
- Standing Bear, Luther. *My People, The Sioux*. Boston: Houghton Mifflin, 1928.
- Storm, Dan. "The Little Animals of Mexico," *Coyote Wisdom*, ed. J. Frank Dobie. Dallas: Southern Methodist University and Texas Folklore Society, 1938.
- Tracy, Jim. "Montana Cats, Coyotes Adorn 'Beautiful People' as Fur Trappers Look to Continued Boom," *Borrowed Times*, 7:10-11, January, 1979.
- Van Wormer, Joe. *The World of the Coyote*. Philadelphia: J. B. Lippincott, 1964.
- Waters, Frank. *The Book of the Hopi*. New York: Ballantine Books, 1963.
- Young, Stanley. *The Clever Coyote*. Harrisburg, Pennsylvania: The Stackpole Company and the Wildlife Management Institute, 1951.
- Young, Stanley, and Harold W. Dobryns. *Den Hunting as a Means of Coyote Control*. U.S. Department of Agriculture, Leaflet 132, 1938.