Coyotes

The coyote, considered by many as a symbol of the Old West, now resides throughout the continental USA. The eerie sounding howl of this reclusive predator is a welcomed sound to tourists, but to ranchers, deer hunters and presently urbanites, it is often considered a genuine concern.

Persecuted for years, the coyote has adapted to its surroundings and has expanded its range and continues to increase in number in areas that its distinct howl has never been heard in the past, generating alarm to those sportsmen investing much of their time and money to develop quality deer herds.

More importantly, these adaptable creatures have taken up residence in the urban areas of our largest cities.

Ohio State University extension specialist Stanley Gehrt, has investigated the behavior of these new inhabitants in the urban areas of Chicago for six years. By employing radio telemetry, Gehrt and his colleagues have discovered that coyote populations in urban areas are much higher than expected. They have also found these urban dwellers live longer and are more active at night than their relatives in the wild.

The researchers also recognized the urban coyotes' beneficial traits as they help control the rapidly mushrooming Canadian goose population throughout North America by their habit of consuming if not burying goose eggs. Chicago's goose population, which had been expanding at 10% to 20% per year, has decreased to 1% to 2%, due to coyote predation. The coyote also helps control invasive species, such as rats and mice.

They also recognized coyotes as a major predator of white-tailed deer. When deer become numerous, they over-browse the foliage, fawns become more visible, and predation rates rise until the deer population drops and their cover is restored.

Since the introduction of domestic stock on the North American continent, individuals dependent on the land have shot, trapped, and poisoned this predator.

Other than the rattlesnake, I can't think of another creature that has been despised and persecuted for as long as the coyote. This fact alone demonstrates the exceptional ability this animal has at adapting to its environment.

At one time throughout central Texas, heralded as the Mohair Capital of the world, coyotes were virtually eliminated by extreme eradication procedures. But today, following a decline in value of mohair, landowners have relaxed their eradication efforts and the predator once again occurs in the region.

The highest recorded density of coyotes to date is in South Texas. These denizens of the brush country will take the occasional calf, but their diets actually depend on climatic conditions. The coyotes' choice of nourishment depends on availability.

I investigated the coyotes' feeding behavior in Dimmit County, Texas back in the early 80s. By collecting and analyzing the contents of coyote scat, often located on the ranch roads, I discovered periods in early spring when only vegetable matter such as persimmon berries and the fruit of prickly pear cactus were in the material, while in late spring grasshoppers predominated their diets. But by mid July, the peak fawning period, tiny hooves of fawns appeared. The same could be said for examinations during late winter when the presence of deer hair become evident. In other words, this opportunistic omnivore survived on what was most available.

Historically, coyote research by Sperry dictated that 76% of the coyotes' diet in the western United States, including Texas, was composed primarily of rabbits, rodents, and carrion. Insects and vegetable matter represented a minor 4% part of their diet. But 20% of their diet included domestic livestock, poultry, game animals, and wild birds.

Obviously, for individuals dependent on making a living raising livestock, mortality of any kind is unacceptable, but when it comes to managing free ranging deer, the coyote could serve as a natural population control device, at least to some degree.

Analyzing 3,200 coyote scats and 265 stomachs on the Welder Wildlife Refuge near Sinton, Texas, Fred Knowlton found that rodents and rabbits represented 10 to 70% of the coyotes' diet, but averaged 25%. Approximately 15% of the diet was composed of deer in late winter and early spring when rodents were plentiful. The presence of deer in the coyote's diet rose to 75% or more in early June, primarily a result of the abundance of fawns (vulnerable prey) at the time.

Knowltons' research on the refuge more importantly revealed that a potential fawn crop of 163%, or 163 fawns per 100 does, was only 34%, and that predation was the principal cause of loss (80%), with coyote the principal predator.

Coyote research conducted by Texas Parks and Wildlife in Robertson and Freestone Counties revealed deer hair in 57% of the coyote scats examined during the summer period, again, the most vulnerable period for fawns.

During the first two years of a fawn study in Gonzales and Lavaca Counties, Texas, only eight of 40 radio-equipped fawns survived. Predators were determined responsible for 21 (60%) of the deaths. The first two years of this project were characterized as severe drought years. However, during the third and fourth years of the

project, when rainfall was above average, ideal range conditions developed, and an 80% fawn survival occurred.

These studies demonstrate the fact that during ideal climatic conditions, fewer fawns fall prey to predators simply because other items such as fruit, rodents, etc. are easy to obtain and are readily available. It is also important to emphasize that precipitation augments vegetative growth, grass, weeds, etc., representing ideal places for fawns to hide and avoid predators. The same can be said for the application of appropriate habitat management practices that provide fawns ample protective cover. Based on years of research in Mississippi, Dr. Bruce Leopold stated that "the best investment you could make toward limiting the impact of coyotes on deer is not to trap or shoot coyotes, but to manipulate the habitat so that deer have many areas for fawning that are scattered across the landscape".

The major concern wildlife managers have with the coyote is the indiscriminate manner in which the animal kills deer. It kills bucks as well as does. The quality-oriented wildlife manager attempts to alleviate harvest pressure on the males in order to increase both their number and age. Such management strategies require a constant reduction of doe numbers in order to provide additional bucks the opportunity to reach their older, maximum antler-growing years. Indiscriminate killing of deer on intensively managed lands is unaccepted, but on large open range, predation may play a vital in attaining some semblance of population balance.

The fact is, coyotes will kill deer. But at present, one of the greatest challenges biologists face is mushrooming deer populations. In their attempt to address this problem, they have promoted the importance of harvesting doe. The problem is this

strategy has only recently gained acceptance by hunters and landowners. For years, sportsmen refused to harvest doe simply because they considered them the nucleus for more deer in years to come. Some sportsmen even considered killing a doe as less than a macho thing to do and would much rather shoot a yearling buck with small antlers. The end result is an excessive population favoring females with few, if any, mature bucks.

Well, hunting philosophies are changing, and doe hunting and its benefits are becoming more recognizable and in turn popular. Based on data compiled in the 2011 QDMA Whitetail Report, a total of 3,253,167 antlerless deer were harvested by hunters in 2009 from states in the Midwest, Northeast and Southeast. Twelve of 13 Midwest states, seven of 13 Northeastern states and half of the 11 Southeastern states shot more antlerless deer than antlered males. It was also reported that 12 of 35 states (33%) shot more antlered bucks than antlerless deer, and 11 of the 12 states were in the Northeast or Southeast.

Although the harvest of antlerless deer is increasing, the concern is that the number of does removed by legal hunter harvest has yet to hold escalating deer populations at bay. Even with liberal limits and special seasons established, hunters still don't harvest enough antlerless deer. It's even possible that the overabundance of deer removes the challenge deer once represented and hunters simply tire of shooting not hunting deer.

Today, we are witnessing overcrowded deer populations, forcing deer into our urban areas, causing millions of dollars of damage as a result of vehicle collisions, not to mention loss of life and destruction of the urban landscape. The investigation of altruistic

techniques such as infertility drugs has proved ineffective in deer population control with thousands of dollars depleted on capture and transfer programs.

The end result is man must replace the once abundant predators and perform the same function by means of legal hunting.

Hunter harvest can control deer populations, but only when applied adequately enough. The coyote could possibly be part of the answer to one of the many problems wildlife biologists face today. Unless landowners and hunters are willing to harvest surplus animals by means of legal hunting, there is no real need to eliminate the coyote.

The whitetail is the most abundant big-game animal in North America. Its number is increasing at an alarming rate but deer hunter numbers are not. Controlling the deer population will require more assistance in the future, and hunting may not suffice. If and when this time comes, man may be quite grateful to hear the eerie howls of the coyote, for the combination of legal hunting and the coyote may become the most efficient way deer populations will be controlled.