

**COMMENTS ON THE HOLLYWOOD PARK DEER MANAGEMENT PLAN,
WITH PARTICULARLY REGARD TO FEEDING**

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I have reviewed with interest the Hollywood Park Deer Management Plan, developed 5 October, 2006. I have been familiar with the deer herd problems for a number of years, and have used your situation in several of my lectures. The protective fences and damage to landscapes, plus the frequent appearance of deer carcasses from unfortunately encounters with resident vehicles, clearly illustrate the problems created when wild land meets urban development. My experience with similar situations is residents of the community quickly polarize into two groups—those who want to keep the deer at all costs and those who want to see them disappear! Rarely is a compromise reached in these situations; yet, there is indeed a compromise to be had. In this short report, I will deal with the feeding situation at the end, but am compelled to make the following points.

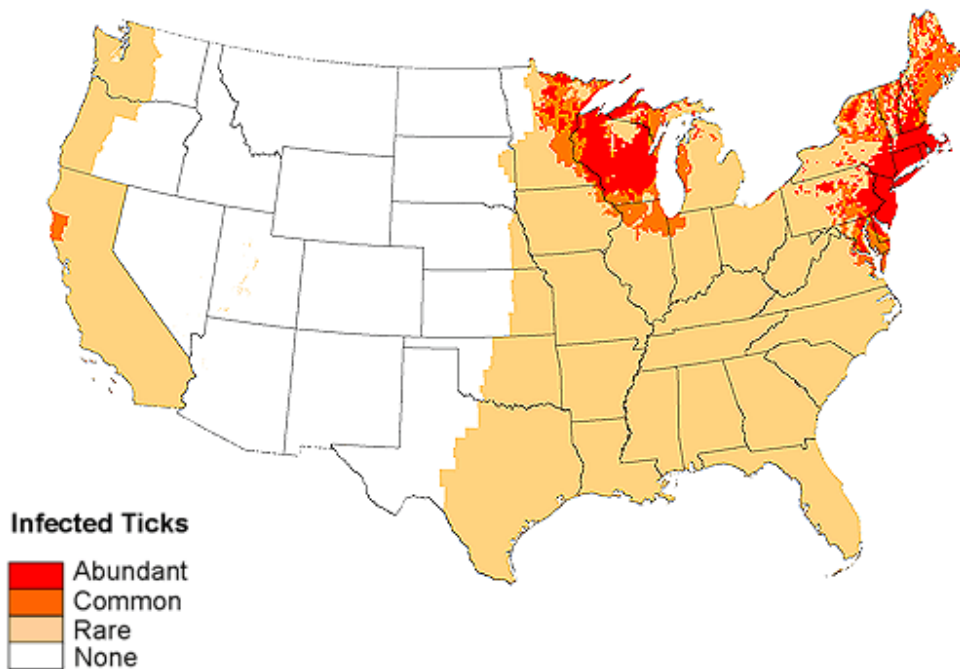
Although I have never seen a Hill Country deer herd at the level proposed by TPWD staff, I concur the population should be much below the current estimate. With 525 acres of potential habitat, and more than 200 deer, whatever native plant communities present prior to development has suffered significantly. I applaud your adoption of the plan and the general willingness to do something about the problem. There are things in the plan, however, which concern me. The goal, first and foremost, should be to develop a herd which has a high quality of life. The white-tailed deer has many values, among which is the intrinsic beauty and nature of the species. By allowing a “ghetto” situation to develop, these values are seriously degraded. It is meant for the sighting of a deer to be a surprising event. “Oh, look there is a deer!” should be the comment; not, “It is just a deer.” When deer populations reach the proportions leading to development of the plan, a host of problems already are at play. Among these are native plant community degradation, landscape damage, human safety and reduced quality of life for the deer. I would rank human safety and quality of life first, followed by ecological damage.

There is no argument the HP deer herd represents a significant factor in human safety, primarily due to automobile accidents. The carcasses I have seen and photographed on numerous occasions are testimony to that. It has been troubling to me to see mothers drive by dead deer, with a dozen or more black vultures in attendance, without even noticing the situation!



Photograph taken by Dr. Kroll in Hollywood Park a number of years ago.

Disease transmission is a reasonable concern for the HP deer herd human population interface. However, a great deal of emphasis was placed on Lyme disease in the plan. It has been my considerable experience this is not a disease common to Texas. In fact, the American Lyme Disease Foundation lists Texas as having a rare occurrence.



Source: www.aldf.com

This is not to say there are not potentially troublesome diseases which could be transmitted to humans from deer. Most notable are Ehrlichia and Rocky Mountain spotted fever. A number of years ago, I monitored these diseases in eastern Texas and found prevalences in some areas as high as 20%. I would be much more concerned about Ehrlichia than Lyme disease, because it is a canine disease, as well. The testing for para-tuberculosis Although these diseases are of importance, I cannot forget about the diseases that deer face which cannot be transmitted to humans. All of these are density-dependent, in that the prevalence is directly related to the number of deer per unit area. When deer populations are spread over the landscape and in healthy condition, there is much less need for disease concerns.

That is why I fully support the goal of the plan to bring the herd down to a smaller level. What that level would be is arguable, but I would suggest a target population of no more than 50. This would provide both aesthetic appeal and protect the habitat and quality of life for your deer. The question remains how best to do this? You are locked into a sustained harvest of animals from your property. Since the deer no doubt are exposed to a host of contaminants—exhaust fumes, ornamental chemicals, etc.—I do not think Trap, Transport and Process is a good idea. Further, the number of potential release sites are decreasing annually, especially as TPWD scrutiny of potential release sites increases. Hence, Trap and Dispatch probably is the most humane and effective method to use.

My suggestion is you manage for a very young deer herd from the doe perspective. Young doe age structure tends to produce more males and fewer fawns. Since it is a somewhat open system, the buck:doe ratio should be 1:2. That means there should be about 30 does on the property. The plan discusses fawn crops, but does not deal with recruitment (the number of animals reaching one year of age). If you manage for 30 does, recruitment should be no more than 80%, meaning you will have to remove no more than 12 females per year. Leaving the bucks might seem to increase the sex ratio, but at least half the yearling bucks will leave the property. Some males can be removed, if needed. It is my opinion this will create a manageable situation, once achieved.

There is a great deal covered in the plan about timelines, goals and implied record-keeping and study. Have any of these things been done or completed? You cannot manage a herd without adequate records. Are health checks conducted annually? If these data are not available, I am concerned about the efficacy of the approved plan.

Can You Feed Deer?

Feeding deer is a controversial practice among wildlife biologists. The Wildlife Management Institute even produced a cartoon book, entitled "Feeding Deer,

Just Say No!" The arguments put forward in this publication contained little factual information, in spite of being produced by a professional organization.

Dogma generally has focused on the potential ecological and disease impacts of feeding. Early studies suggested supplementally fed deer herds tended to deplete the more rare plant species, since they generally are more digestible (which probably is why they became endangered in the first place). A number of recent studies, however have tended to find something quite different. A recent publication in the Journal of Wildlife Management (Timmons, et al. 2009) reported, "Supplemented deer continued to eat poor-quality, chemically defended forage, perhaps to alleviate ruminal acidosis induced by the supplement or because nutrients in the supplement increased the deer's ability to detoxify chemically defended browses." My own experience with food plots and supplemental feeding in the 1980s supported this finding. Supplementally feed deer tend to feed more on second and third choice plants.

Is there a place for feeding deer at Hollywood Park? I think there can be, provided the following occurs:

1. The deer herd is maintained at the 50 deer or so level.
2. Deer are fed a commercial diet at designated feeding stations, using the Tube-type feeders.
3. Feeding by residents is incidental and limited to normal plant materials produced on site, such as trimmings and garden produce.

The designated feeding stations would be very useful as a mechanism to "inject" medications and wormers into the herd to improve quality of life. These same stations would aid in capture of animals for population control. The areas also could serve as "wildlife viewing" areas. Since the tube feeders limit use of feed by non-target mammals, they would not have a substantial impact on nuisance animals such as raccoons, opossums, squirrels, etc.

I would suggest four such feeding stations on the property. I must disclose here I do endorse a specific brand of feeder, but in no way am recommended its use or purchase. There are several of these type feeders, most of which are effective.

There should be someone appointed to maintain feeders, which would include addition of new feed and periodic sanitation with a solution to prevent transmission of disease. I would suggest a resident or group of residents be responsible for this. My prediction is, once the herd is reduced to the productive capacity given above, no more than 2 pounds of feed will be used by your deer per day. That would mean a total average daily consumption of 100 pounds, costing approximately \$20 per day or \$600 per month. This is an annualized cost of \$7,200, excluding labor. The feeders have a very long life expectancy and would cost less than \$1,500 to purchase. I would predict they would be donated by a manufacturer.



Because this is a departure from the established prohibition on feeding, I want to also suggest a significant penalty for feeding other than I have suggested. Incidental feeding means simply that! There should be no permanent feeders or creating a daily feeding time for the deer by a resident. Removal of the older age class animals will reduce habituation to being fed. When coupled with a healthy herd and a nutritious supplement at feeding stations, I doubt if deer will become “feed addicts.”

Literature Cited

Timmons, G. R., D. G. Hewitt, C. A. DeYoung, T. E. Fulbright, and D. A. Draeger. 2009. Does Supplemental feed increase selective foraging in a browsing ungulate? *J. Wildlife Manage.* 74(5):995-1002.