

STATE OF COLORADO

Bill Ritter, Jr., Governor
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF WILDLIFE

AN EQUAL OPPORTUNITY EMPLOYER

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*For Wildlife-
For People*

December 6, 2010

The Honorable Don Jones, Mayor of Craig
Craig City Council
300 W 4th Street,
Craig, CO 81625

Dear Mayor Jones:

Thank you for your letter of November 23. I'm pleased to hear that the deer committee is moving so quickly to come up with recommendations about acceptable deer numbers. I also appreciate this opportunity to provide additional information on the Division of Wildlife's approach to the urban deer issue in Craig. An open and informed dialog with Colorado's communities and citizens is the foundation of responsive and effective wildlife management.

First and foremost, the Division of Wildlife appreciates the City Council's quick action to draft a local ordinance that bans the deliberate feeding of deer. We fully support that effort and hope the citizens of Craig do as well. Regardless of their intentions, people who intentionally feed deer are raising the risks to people and pets by training deer to not fear humans and giving them a reason to be in close proximity to people and pets. Well-designed community wildlife ordinances that are consistently enforced and reinforced with education and outreach can be especially effective precisely because they are generated locally and reflect the common interests of the community.

In this regard, I would be very pleased to assign DOW staff to help your community develop educational workshops and other outreach strategies to build a common, science-based understanding of the cause of urban deer conflicts and potential solutions. The Northwest Region's education coordinator, public information officer, watchable wildlife coordinator and district wildlife managers would all be willing to work with the City Council or deer committee to develop workshops or create outreach materials to assist in this effort. While we have already provided an educational resource handout (attached) through the Chamber of Commerce and our officers in the area, presenting similar information in person might help better distribute the information. Colorado State University Cooperative Extension could also be a valuable resource in terms of providing landscaping tips at those workshops.

As the City Council discusses the feeding ordinance, we would suggest it would be constructive to review any City codes, ordinances or other barriers which might prevent homeowners from building fences to exclude wildlife from their yards. The ability of property owners to manage their property in this way is very much in keeping with the western philosophy of "fence them out." While the Division of Wildlife can't provide fencing materials or financial support to non-agricultural property owners who are experiencing damage, we do encourage communities to consider barriers to landowner's ability to do so. We are also happy to provide additional information or guidance on appropriate exclusionary fencing as requested.

I also want to reiterate that the Division of Wildlife remains willing to respond to sick, injured and aggressive wildlife. Our officers are trained to take quick, effective action to protect public health and safety. This has been part of our wildlife officers' core responsibilities for many years and will continue to be in the future. We encourage Craig citizens who encounter a sick, injured or aggressive deer (or any other kind of sick, injured or aggressive wildlife) to contact the Colorado State Patrol dispatch center in Craig through the non-emergency number, which is 970-824-6501. The on-call officer for the DOW will be dispatched to respond as soon as possible. I will communicate with field personnel that responding to these calls is a high priority; however limited budgets and resources mean our officers are stretched thin and responses could take a little time during busy periods. Responding DOW officers will put down aggressive animals and assess the appropriate action for dealing with sick or injured animals on a case-by-case basis. When a DOW officer is unavailable or the circumstances require immediate action, officers with other law enforcement agencies, such as the Craig Police Department and the Moffat County Sheriff's Department, have the authority to put down animals that are threatening public safety.

I'm also happy to provide additional insight on the Division of Wildlife's policy with regard to aggressive deer. Let me be clear: The Division of Wildlife does NOT relocate ANY aggressive wildlife. Any wild animal that behaves aggressively presents a risk to public safety and will be put down by our officers. The Division of Wildlife's two-strike policy allows us to relocate only *nuisance* bears – and only once. Bears that repeat these behaviors are deemed to be a risk to public safety and are removed from the population. In contrast, a bear that enters a human dwelling is not given a second chance. It is deemed to be a public safety threat and removed from the population. Likewise, wildlife officers encountering moose that come into residential areas have the discretion to relocate the moose to reduce the potential for conflict with people or injury to the animal. But if the moose behave aggressively, the animal is put down. Coyotes and mountain lion that act aggressively towards people are put down. Our policy on deer is consistent: aggressive animals will be removed from the population.

As we have previously explained, mass trapping and relocation of deer is not an option that the Division of Wildlife will pursue. All of the animals that would be translocated under this scenario are habituated to humans and to human environments to some degree, which means they represent some risk to people when moved to novel habitats, and we know from previous research they will have very high mortality rates. I've attached a copy of the research review by Chad Bishop regarding problem deer relocation from urban areas. As the research demonstrates, relocating deer in this manner is likely to result in high mortality and the potential spread of disease to wild-roaming deer populations. Ultimately, trapping and relocating the deer will result in the same outcome as sharpshooting: the majority of deer will still perish, but will do so in a different location. Given that the outcome is likely to be the same, we do not believe relocating deer is a humane or cost-effective approach for dealing with individual animals.

Generally when the Division of Wildlife traps and transplants large numbers of wildlife, it is to establish populations in unoccupied areas or occasionally to augment very low populations or enhance genetic diversity of desired species in appropriate parts of a species' range. For example, the Division of Wildlife has been very successful in establishing new populations of bighorn sheep, desert bighorn, wild turkey and moose. Colorado has a world-class population of elk, but we do not trap and transplant elk that create urban conflicts. Similarly, while we consider many mule deer herds on the West Slope to be marginally under objective, mule deer are common throughout the region and probably at the carrying capacity of the habitat.

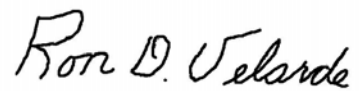
We respect the city's decision to not explore sharpshooting to reduce the population of deer within city limits. We do not believe that an archery-only hunting season would be effective in reducing the city's deer population. The hunt around the periphery of town was originally proposed to augment in a minor way the reduction of deer populations within town via sharpshooting. In addition, putting a buffer around town where there would be no hunting would negate the reason for the season in the first place - to reduce the number of deer on the fringe of the city. The Division of Wildlife sees no benefit in pursuing the additional limited season given the stated opposition of several landowners and the lack of any significant population reduction in town.

We understand and appreciate the delicate situation that the Craig Council finds itself in with this urban deer issue. We have seen many communities struggle to find the right answer and we understand that a community is comprised of citizens whose perspectives are informed by diverse sets of values and individual experiences. We also appreciate that you face a difficult challenge in balancing these conflicting desires to arrive at a solution that

best addresses your community's needs. The biological aspects of managing wildlife are rarely as difficult as managing the social aspects of these decisions.

Let me summarize my perspective of the best path forward given all the hard work by the City Council and the deer committee, and the extensive public comment on this issue. It appears that while there are some individuals who would very much like to see deer removed or greatly reduced from within the City of Craig, the majority of residents enjoy having (most of) the deer around and are opposed to removing them, particularly lethally unless they pose a significant public safety risk. The City Council will not support sharpshooters for removal of deer, so that option is off the table. DOW proposed an archery season outside City limits to augment lethal removals inside, but will no longer pursue this because it will not be effective in reducing deer conflicts within the City on its own, particularly given landowner opposition. The City will enact and enforce a feeding ordinance to prevent feeding of deer, which greatly habituates them to people and increases the risk to both pets and humans from deer. We suggest that also taking a look at ordinances that prevent residents from fencing deer out to protect their property might be useful as well, as those citizens most concerned about deer would then have the opportunity to in effect solve their own problem. The Division of Wildlife will make responding to complaints of aggressive or sick deer quickly a priority, and will lethally remove sick or aggressive individual deer. The Division of Wildlife will also research and, cooperatively with the City, communicate strategies to live with deer in urban environments.

Sincerely,

A handwritten signature in cursive script that reads "Ron D. Velarde".

Ron D. Velarde
NW Regional Manager

cc Bill de Vergie, AWM Meeker
Nancy Warren, Asst. Dir. Field Operations, DOW
Thomas Remington, Director, DOW
Craig City Council
Representative Randy Baumgardner
Senator Al White

APPENDIX A - Deer Translocation
Prepared by Chad Bishop, DOW Ungulate Research

A number of studies have reported survival rates and movements of translocated deer. In most cases, whether decades ago or recently, the purpose of translocation was to remove overabundant deer from urban or suburban settings. Studies indicate that controlled hunting and/or professional culling is more effective and economical than translocating deer. However, deer translocations have been used periodically over time when publics in the impacted areas are strongly opposed to lethal control techniques.

All of the available literature I could find indicates that survival of translocated deer is significantly lower than survival of indigenous deer at the release location. In a recent example, Beringer et al. (2002) reported on the translocation of 80 radio-collared white-tailed deer in Missouri. The deer were translocated approximately 160 km in response to an urban deer problem. Estimated survival was 0.30 (SE = 0.05) for translocated deer and 0.69 (SE = 0.05) for resident deer in the release location. They concluded it was not a viable strategy given costs and low survival upon relocation. Jones et al. (1997) evaluated translocation of white-tailed deer social groups to determine if survival increased when social structure remained intact. They found no benefit of translocating deer in social groups and found that translocated deer had lower survival than resident deer at the release location. Jones and Witham (1990) evaluated translocation of white-tailed deer from Chicago to rural areas. The effort was prompted by public opposition to lethal control. Survival rates of translocated adults and fawns during December-March were 0.56 and 0.58, respectively, compared to 0.9 of residents. Annual survival rates of adults were 0.34 for translocated deer and 0.73 for resident deer. Similarly, yet decades earlier, Hawkins and Montgomery (1969) found that translocated white-tailed deer had lower survival than indigenous deer.

The examples I have listed to this point have all pertained to white-tailed deer. However, the available information on mule and black-tailed deer is consistent with the white-tailed deer literature. O'Bryan and McCullough (1985) evaluated survival of black-tailed deer following relocation in California. More than 200 deer were translocated ~150 km in response to an overabundant deer problem where the public was opposed to culling. The release/translocation site was selected because the deer population was considered to be below carrying capacity and local landowners were supportive. Survival of translocated deer was 0.15. Previously, others estimated annual survival at 0.72 for indigenous deer in the release area. In their Discussion, O'Bryan and McCullough (1985) describe a translocation of desert mule deer in New Mexico where survival of translocated deer was 0.45 whereas survival of indigenous deer at the release site was 0.85 (L. J. Temple and W. Evans, unpublished report, New Mexico Fish and Game, Sante Fe, 1981).

Collectively, the set of articles documenting translocations indicate deer rarely attempt to go back to their original home ranges and those that do have low survival. Many translocations occur over a large distance, and thus, it is not surprising deer rarely return or they die attempting to do so. It seems safe to assume that those in charge of these various translocations intentionally moved deer well beyond their current home ranges to prevent likely return. In one example, however, 9 white-tailed deer were translocated a shorter distance than typically reported (i.e., 10-22 km) (Nelson 1994). Four of the deer attempted a return and two made it.

I found only one study that documented a successful translocation effort, which pertained to the endangered Florida key deer (Parker et al. 2008). Here, the objective was species conservation and the authors held the deer in pens for 3-6 months at the new location to allow for acclimation (i.e., soft release). Of note, managers had previously tried to translocate key deer in the 1980s and 2000s with hard releases (i.e., no waiting period in pens) and had little success.

Literature Cited

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- Jones, J. M., and J. H. Witham. 1990. Post-translocation survival and movements of metropolitan white-tailed deer. *Wildlife Society Bulletin* 18:434-441.
- Jones, M. L., N. E. Mathews, and W. F. Porter. 1997. Influence of social organization on dispersal and survival of translocated female white-tailed deer. *Wildlife Society Bulletin* 25:272-278.
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- O'Bryan, M. K., and D. R. McCullough. 1985. Survival of black-tailed deer following relocation in California. *Journal of Wildlife Management* 49:115-119.
- Parker, I. D., D. E. Watts, R. R. Lopez, N. J. Silvy, D. S. Davis, R. A. McCleery, and P. A. Frank. 2008. Evaluation of the efficacy of Florida key deer translocations. *Journal of Wildlife Management* 72:1069-1075.

Urban Deer

Protecting home, pets and property



Seeing deer in the wild or an occasional deer in town can be an enjoyable experience, but when too many deer decide to call a community their year-round home, it can lead to auto accidents, conflict with people and pets and property damage. As a resident in an urban area, you can help make a difference.

Why are Deer in Town?

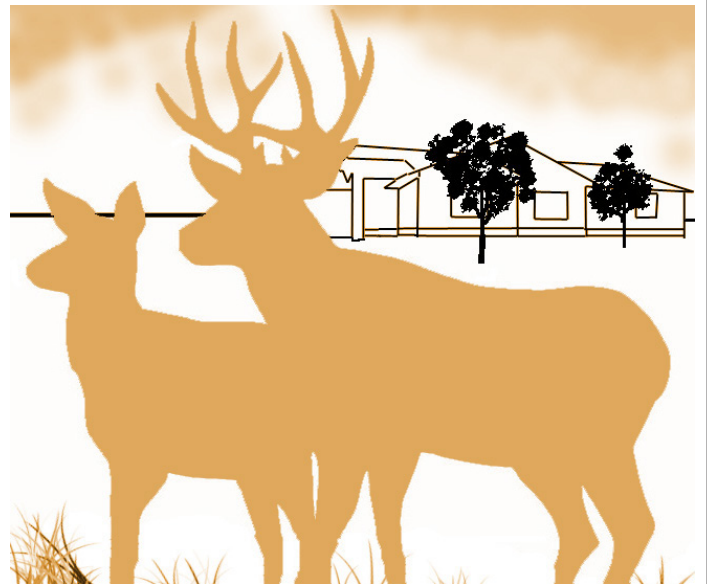
- Migratory deer populations may pass through towns as they move back and forth between winter and summer ranges. If deer find food, water and protection from danger, they may choose to stay closer to communities and become 'resident' deer populations. Resident populations lead to many of the deer complaints that come to the Division of Wildlife.
- Feeding big game, including deer, is illegal in Colorado and leads to urban wildlife problems. Artificial feeding generally provides poor nutrition, attracts predators and can spread disease.

Keep Deer Away at Home

- Fencing is the easiest option to keep deer out of your yard and provide a safe space for you, your family and your pets. Tall privacy fencing (6' or higher) works well, if your neighborhood allows it. Eight-foot high wire mesh fencing is best in areas with deep snow. For tips, see the Resources section of this flyer.
- Electric fencing is very effective in keeping deer off your property. Choose this option in locations where the fence won't be accessible to children or pets. If using thin wiring, mark the top wire with cloth strips or reflective tape so the deer can see it.
- Choose landscaping plants that discourage deer from feeding in your yard. Wrapping trees and shrubs can prevent damage. Local greenhouses can offer advice and so can the local Colorado State University Cooperative Extension agent.
- Repellents can be effective. You can find commercial repellents or even use common household items such as hot sauce, chicken eggs or habanero peppers. See the Resource section of this flyer for more information on effective repellent options.

When You Meet Deer

- Watch for deer on roadways, especially in the early morning and late afternoon. Slow down. Use high-beam headlights when you can and scan the roadsides ahead. Watch for shining eyes. If you see one deer - there are probably more. Brake - don't swerve.
- If you see deer while walking or hiking, never approach them. Even urban deer that become accustomed to the presence of people are wild animals and they can be dangerous. Female deer are very protective of their young, especially in the spring and early summer. Male deer (bucks) can be very aggressive during the fall breeding season. Give deer plenty of space.
- Keep your dogs leashed when you take them away from home. Dogs instinctively chase wildlife. Encounters between dogs and wildlife often result in injuries or death for the dogs or the deer. In Colorado, dog owners can be ticketed if their dogs are chasing wildlife.
- Deer and other animals will show aggression towards pets, even if your dog or cat is in your yard. The Division of Wildlife has heard from pet owners whose pets have been injured or killed by deer, elk, coyotes, bears, mountain lions and other wild animals. Protect your pets by feeding them indoors, keeping them inside at night and providing a fully-enclosed kennel area or adequately fenced yard when they must be outside.



COLORADO DIVISION OF WILDLIFE

Urban Deer Resources

You Can Encourage Your Community to:

Allow Hunting

While wild populations of animals can be maintained at healthy levels through the use of managed hunting, close proximity to people raises safety concerns that make it hard to use hunting to thin urban deer. Some cities do utilize special bow hunting seasons to control urban deer but cities must work closely with the Colorado Division of Wildlife to develop appropriate hunting solutions.

Pass or Enforce Feeding Ordinances

Residents of areas with urban deer can encourage their communities to pass and enforce ordinances that prohibit the feeding of deer and other wildlife. While feeding big game is a violation of state law, local ordinances can increase penalties and raise awareness of the risks of feeding.

Develop Wildlife-Friendly Fencing Regulations

Communities should examine fencing and building regulations and encourage developers and Home Owners Associations to consider fencing rules to curb urban deer conflicts.

Contract for Professional Culling of Deer

Many large cities contract with wildlife control agents to eliminate urban deer, coyote and goose populations. Studies indicate that culling is the most effective and affordable method for dealing with urban wildlife issues, but it can raise concerns from some people. Culling is generally accomplished by professional sharpshooters utilizing suppressed firearms. Meat from culled deer can be utilized by community food banks or other organizations. The Colorado Division of Wildlife has authority to issue permits and set rules for culling operations.

Explore Fertility Control Options

Fertility control has had limited success in the past but new methods are showing improvement. It is possible to dart resident female deer and prevent them from conceiving. This option does not eliminate existing deer, but could prevent population expansion. Fertility control is extremely expensive and must be repeated regularly. Many communities are unwilling or unable to spend the money necessary for an effective fertility control option. Cities must work with the Colorado Wildlife Commission as the Commission has statutory authority to regulate fertility control.

Understand Why Relocation of Deer is Not An Option

While relocation of nuisance animals such as black bears is a common practice in urban areas in Colorado, it is generally ineffective for dealing with urban deer. Studies show that deer translocated to other areas suffer high mortality. While the general public may believe that relocation is a humane option because they imagine deer going to 'live happily ever after' in the woods, the perception is not reality. Translocated deer survival is low, so the Division of Wildlife generally believes other options are more humane and cost-effective.

Division of Wildlife Can Help

<http://www.wildlife.state.co.us>

Regional Offices and Service Centers

Division offices are open Mon. - Fri., 8 a.m. to 5 p.m. For after-hours emergencies, contact the Colorado State Patrol or local Sheriff's Dept.

Headquarters

6060 Broadway, Denver 80216 (303) 297-1192

Northwest Region

Grand Junction (970) 255-6100

Meeker (970) 878-6090

Glenwood Springs (970) 947-2920

Hot Sulphur Springs (970) 725-6200

Steamboat Springs (970) 870-2197

Northeast Region

Denver (303) 291-7227

Brush (970) 842-6300

Ft. Collins (970) 472-4300

Southeast Region

Colorado Springs (719) 227-5200

Lamar (719) 336-6600

Pueblo (719) 561-5300

Salida (719) 530-5520

Southwest Region

Durango (970) 247-0855

Gunnison (970) 641-7060

Monte Vista (719) 587-6900

Montrose (970) 252-6000



Other Resources

Repellents

The CSU Cooperative Extension is a good source of info for agricultural and gardening information. The CSU Cooperative Extension site includes information on repellents and on plants that deer tend to avoid:

<http://www.ext.colostate.edu/pubs/natres/06520.html>

Fencing

The Colorado Division of Wildlife Habitat Partnership Program (HPP) has an extensive fencing guide available that covers all kinds of exclusionary fencing. You can get the guide at a DOW office or find it on-line. The publication provides information and resources for agricultural fencing, residential fencing, electric fencing and more:

<http://wildlife.state.co.us/LandWater/PrivateLandProgram/HPP/>

(Click on "Fencing with Wildlife in Mind" link under Landowner Resources)

Driving

The Rocky Mountain Insurance Information Association has some good tips on their web site:

http://www.rmiia.org/auto/traffic_safety/Wildlife_on_the_road.asp

Other Information

The Internet Center for Wildlife Damage Management is a cooperative effort of several major universities. They provide a comprehensive guide to preventing deer damage:

<http://icwdm.org/handbook/mammals/Deer.asp>