Wildlife Division



Policy & Procedure

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	White-Tailed	Deer and	urnan	Conflict

Authority

MCL 324.40114

Responsible Region/Section/Unit

Date	Drafted:
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itle		Number
	Urban White-Tailed Deer Conflict Management Policy and Procedures	

DEFINITIONS

Urban/Suburban – The U.S. Census Bureau considers urban and suburban areas as a densely developed territory, and encompass residential, commercial, and other non-residential urban land uses. Often, hunting cannot take place in an effective and efficient traditional manner due to the layout and structure of the land and the proximity to human inhabitants on most or all of the public land.

Damage – One type of urban conflict where a group of animals is engaging in destructive, depredating behavior that results in a loss of public resources or commercial value.

Hunting Seasons – These include the firearm season, muzzleloading season, archery season, early antlerless firearm season, late antlerless firearm season, Liberty Hunt, and Independence Hunt.

Lethal Management – Methods used to remove deer where the final disposition of the animal is mortality, including: hunting, trap and euthanasia, and sharpshooting.

Non-Lethal Management – Tools used to discourage the presence of deer, including: fencing, repellents, scare tactics, habitat alterations, etc.

Nuisance – One type of urban conflict where a group of animals is engaging in undesirable or impeding behaviors.

Hazardous Situations – Areas where the presence of any deer, regardless of number, create potentially dangerous or life-threatening situations.

POLICY

While white-tailed deer are highly valued by Michigan residents, conflicts between deer and humans occur at various levels of intensity across the State. Suppressed forest regeneration, high rates of deer-vehicle collisions, and destruction of landscaping and other property by deer can exceed social tolerances in urban/suburban areas where deer populations are abundant. Many individuals experiencing these conflicts frequently request assistance from their local elected officials, who often lack experience or expertise in solving such problems. These officials often turn to the Department of Natural Resources (DNR) to resolve these conflicts, which in many cases are polarizing and become highly politicized. While the DNR attempts to minimize deer-human conflicts by managing deer at appropriate levels through hunting, development and implementation of new strategies will be necessary to successfully manage deer in areas where hunting may be limited or restricted. The role of the DNR is to provide technical assistance and flexibility in the management options available, within reason. The final decision on which management approach should be pursued is the decision of the municipal/community representative or landowner, pending DNR approval.

One of the primary objectives of Michigan's Deer Management Plan is to increase the effectiveness at managing deer impacts in urban and suburban areas where conflicts with deer can be impactful and potentially hazardous to humans. The Urban White-Tailed Deer Conflict Management Policy and Procedures of the Michigan DNR will:

- 1. Emphasize the harvest of white-tailed deer during existing deer hunting seasons using legal methods, where applicable.
- 2. Provide assistance and information in the use of lethal and non-lethal methods of reducing human conflict with white-tailed deer where hunting is not applicable or its impact can be limited.
- 3. Maintain a permitting system that allows for the expeditious response to potentially hazardous situations.

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 Provide guidance to landowners and municipalities to resolve conflicts with urban deer through a clearly defined process.

PROCEDURES:

I. Urban Deer Conflicts on Municipal Land and Certain Private Lands

As deer have lost their inhibitions of humans and densely populated areas, they have taken advantage of an environment that provides sufficient cover, abundant food, and freedom from natural and human predators (recreational hunters). Increasing numbers of urban deer-vehicle accidents and excessive damage to plants (landscaping or natural vegetation) are the most common conflicts with deer in these settings. In addition, concerns of disease associated with an abundant deer population living so closely with humans (e.g. bovine tuberculosis, Lyme disease) also arise.

Perhaps the most challenging aspect of deer management is the issue of how to deal with deer in urban and suburban areas where use of lethal control as a management tool has been unavailable. In most cases, municipal/community leaders must work together with stakeholders to gain acceptance of these highly effective, lethal techniques and utilize them in conjunction with a variety of non-lethal techniques to successfully reduce human-deer conflicts in these urban-suburban areas.

A variety of deer management tools, both lethal and non-lethal are available for municipal lands as well as certain privately owned lands. Lethal tools are more effective than others but may be unacceptable in areas where social or safety concerns are an issue. Applying a combination of several techniques specifically tailored for each situation should prove to be more successful than utilizing a single tool.

Municipal/community Representative or Landowner	Acknowledge there is concern amongst their constituency that urban deer may pose a problem. Contact the local wildlife biologist or deer specialist/biologist with supporting documents.
Wildlife Biologist, and/or Deer Specialist/Biologist, Field Operations Manager, Regional Supervisor or appointed Conservation Officer	1. Provide the appropriate municipal representative or landowner with information on urban deer management options once the Michigan DNR has been contacted. a. Provide options for non-lethal management, including fencing, repellents, baiting/feeding bans, etc. If the situation <i>can be resolved</i> through non-lethal management or hunting seasons, no further reporting or action is necessary. b. If the situation <i>cannot be resolved</i> through use of non-lethal means or hunting seasons, the biologist may conduct a site visit and advise the municipal representative of the Damage and Nuisance Animal Control Permit . The prospective applicant should also be informed of the Prohibited Methods of Deer-Human Conflict Resolution (Appendix A)
Wildlife Biologist	2. The Wildlife Biologist may inform the municipal representative of the options available for deer conflict resolution. The community is strongly encouraged to hold public meetings or determine the support for options that they are willing to consider. If damage due to overabundant deer is being claimed, documentation or proof of damage should be provided to the biologist.
Municipal Representative	Conduct public meetings, issue communications, discuss options with citizens and municipality leaders. Engage DNR experts to address questions and concerns.
Municipal Representative	Submit a <u>Damage and Nuisance Animal Control Permit</u> request to the Wildlife Biologist and a conflict resolution plan.

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Wildlife Biologist	3. The Wildlife Biologist will attach a short report accompanying the request that includes a brief history of urban deer management discussions he or she has had with the municipality and whether or not the biologist supports the conflict resolution plan outlined by the request. The Wildlife Biologist will send a copy of the report to the Regional Supervisor, Deer Specialist and/o Program Biologist, and District Law Enforcement Supervisor.	
Regional Supervisor and/or Deer Specialist/Biologist	4. In considering the request, the Regional Supervisor and/or Deer Specialist/Biologist will give major consideration to public health and safety considerations outlined in the application, as well as the use of non-lethal and the use of lethal methods. If the request has merit, issue a Damage and Nuisance Animal Control Permit.	
Municipal Representative/Permittee	5. The permittee must keep record of all animals taken during the valid	
Municipal Representative/Permittee	Within 30 days after the permit expiration date, the permittee will submit a	
Wildlife Biologist	Send the report to the Wildlife Permit Specialist.	

II. Urban Deer Conflicts Resulting in Hazardous Situations

Hazardous areas are meant to be free of deer due to the activities that take place on the grounds. These areas are typically airports and automobile proving grounds where collisions with deer at a very high rate of speed could result in serious human injury or fatality.

Wildlife Biologist and/or authorized representative	Any complaint involving a hazardous situation or a public safety issue must be addressed immediately. Under various circumstances, an onsite
	inspection is not required in order to authorize lethal management. Follow the <i>Instructions for Deer Conflict Permits and Exceptions</i> (IC2018-4) section
	on Public Safety Issues Regarding Deer.

III. Permit Not Issued

The following procedure should be followed by the Wildlife Biologist when a permit is not issued:

Wildlife Biologist	 Send a letter to the requestor within 10 business days specifying the exact reasons why the permit was not issued. The format for the
	Letter is as follows:
	a. Use official Michigan DNR Letterhead (R1026e).
	 b. Include the applicant's name, address, and date of the letter.
	c. The first paragraph should include:
	i. Personnel involved in overseeing the conflict
	mitigation and review period of the application.
	ii. A statement advising the complainant that a permit will not be issued.
	d. The second paragraph should state the reasons the permit is not being issued and briefly summarize measures that can be used to improve the application status in the future.
	e. Include the Wildlife Biologist's signature, address, and telephone number in the closing of the letter.

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	f. g.	Send a copy of the letter to the Region Enforcement District Office. The Wildlife Biologist may refer a con appropriate Regional Supervisor.	

REFERENCES

Natural Resources and Environmental Protection Act, Act 451 of 1994.

Julan 12-15-2011 Dr. Russ Mason, Chief Date

APPENDIX A. PROHIBITED METHODS OF DEER-HUMAN CONFLICT RESOLUTION

1. Translocation of Deer

The live-capture, translocation and release of deer into a free-ranging situation will not be authorized by this permitting process. Deer will not be translocated and released back into wild populations for the following reasons:

- The State of Michigan will not facilitate the potential spread of any disease or parasite that may be harbored by a deer to another part of the state.
- Translocating deer into a different area is likely to cause stress to and provide competition for resources with resident deer (Scillitani et al 2013).
- Research shows the survival of translocated deer is low largely due to traumatic side effects such as capture myopathy and deer vehicle accidents resulting from unfamiliarity with the new terrain (Jones and Witham 1990).
- Research also shows that translocated animals disperse over greater distances once at release sites than resident populations (Whisson et al 2012).

2. Contraception or Sterilization of Deer

The use of contraception or sterilization of free-ranging white-tailed deer shall not be endorsed as a conflict resolution method authorized by this permitting process. Contraceptive and sterilization research could potentially be approved as a research project given proper funding, research personnel with extensive background and experience, identification of objectives and appropriate methodology, and location of need. Currently, the MDNR is not providing or soliciting funding or research for these techniques. These methods will not be permitted through this process for the following reasons:

- Contracepting or sterilizing deer does not immediately remove deer from a conflict situation.
- Current research has shown that fertility control can limit deer population growth in fenced areas and islands (Merrill et al 2006, Rutberg and Naugle 2008), but has been ineffective at controlling free-ranging deer herds.
- Research by Kirkpatrick et al (2011), indicate the challenges in the development and application of
 vaccine-based wildlife contraceptives are diverse and include differences in efficacy across species, safety
 of vaccines during pregnancy, the development of novel delivery systems for wild and wary free-ranging
 animals, and the constraints of certain non-contraceptive effects, such as effects on behavior.
- Kirkpatrick et. al (2011) also indicated that even when used successfully, challenges remain to improve
 delivery systems, modify vaccine components to enhance the duration of effectiveness, assure
 comprehensive safety, develop a sustainable funding base for research, and achieve general social
 acceptance.
- A study by Gilman et al (2010) show changes in maternal status imposed by sterilization may act to
 increase movement and mortality rates among sterilized females, resulting in an increase in deer-vehicle
 collisions.

APPENDIX B: APPROVED LETHAL METHODS OF CONFLICT RESOLUTION

1. Public Hunting

Public hunting, either with selected or state licensed hunters is the most preferred, economical and practical method of removing deer, even in urban areas. Even if firearms cannot be used, or are not feasible, archery hunting can typically be safely used to remove deer in urban areas. Local governments are encouraged to use hunting for deer population management, which may involve reviewing and changing local ordinances if currently prohibited.

2. Sharp Shooting

This technique is sometimes used near human-populated areas to safely, humanely, and efficiently remove deer. Sharp shooting is an intensive method of deer removal by competent marksmen and should not be considered or mistaken for a form of hunting.

- a. The landowner, homeowner's association, or government entity must submit a detailed plan for sharp shooting to the Wildlife Biologist for approval, which reasonably attempts to resolve the problem on a localized scale (per MDNR's discretion) for an extended period of time. The plan must include:
 - i. Introduction brief history of the conflict and a description of the area, including its location (political township, township, range, and section) or address and size. Describe in detail the extent of damage or conflict caused by the deer, attaching any supporting documentation as an appendix. Any additional problems/issues associated with the deer should be described as well.
 - 1. Authority –specifically cite your legal authority to act on behalf of those being affected and to conduct such activities on the lands where the sharp shooting will occur.
 - 2. Goal describe the long term objectives of the sharp shooting plan
 - 3. Alternatives a review of other alternatives (lethal and nonlethal) to sharp shooting including the reasons that these are not viable.
 - 4. Logistics describe in detail the following:
 - a. Number of deer to be culled discuss the number of deer to be removed by sharpshooting and supporting information for the recommendation. (Note: Deer density estimates or counts are not required. Discussion with potential contracted sharpshooters and community involvement will best aid estimated number of deer to remove. Any discussion of age and sex restrictions of the deer to be removed would occur in this section.)
 - b. Timing when sharpshooting will be conducted
 - c. Personnel who will be conducting the cull and how/why the individuals were selected.
 - d. Methods what methods, equipment (ex. type of firearm), and aids or special exceptions will be used to perform the sharp shooting.
 - e. Safety Issues discuss all safety issues and how these issues will be specifically addressed during sharp shooting operations.
 - f. Utilization plan describe how the culled deer will be utilized/disposed.
 - g. Long Term Management Plan proposed management techniques to be employed once sharp shooting has been completed to meet the long term objectives of the sharp shooting plan.
 - h. Public Information Plan List all efforts that have been undertaken to discuss the problem with affected individuals. List all efforts that will be undertaken to inform affected individuals as the plan is implemented.
 - i. Lead Contact list the contact information for the designated individual, including a phone number and email address who affected individuals can contact immediately about any concerns during the sharp shooting operation. The Wildlife Biologist will forward the plan to the Deer Specialist/Biologist, Regional Supervisor, and District Lieutenant for review. Upon consensus agreement, a Damage and Nuisance Animal Control Permit will be issued by the Permit Specialist.

3. Trap and Euthanasia

This method is seldom used, but is an option in areas where lethal techniques have been approved but hunting or sharpshooting are not possible due to safety concerns. It is an inefficient, expensive, and controversial method that should only be considered as a last resort.

Deer may be humanely euthanized according to the acceptable methods applicable to free-ranging wildlife as described by the American Veterinary Medical Association. These include:

- Noninhaled agents: Overdoses of injectable anesthetic agents (including barbiturates) and T-61.
 Other agents may be used that are acceptable for domestic or captive wildlife. Premedication with an injectable or inhaled agent may reduce animal distress and/or human safety risks, under some circumstances. Inhaled agents are less preferred due to the necessity of restraint and proximity to humans. The use of pharmacologic agents often prevents the option for venison to be donated, which is a desirable outcome of any lethal management program.
- Physical methods: Gunshot to the head is acceptable provided the bullet placement can be assured.
 Gunshot targeted to the heart (chest) or to the neck (vertebrae, with the intent of severing the spinal cord) may also be used for free-ranging or other settings where close approach is not possible or where the head must be preserved for disease testing (rabies, Chronic Wasting, or other suspected neurologic diseases).

REFERENCES

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