

# 2023 DEER MANAGEMENT PLAN PERE MARQUETTE CHARTER TOWNSHIP

# **Prologue to the Management Plan**

The purpose of this plan is to provide both the Pere Marquette Charter Township Board and the Michigan Department of Natural Resources information, justification, and an outline for conducting a deer management program in Pere Marquette Charter Township. The plan was developed in response to numerous complaints from residents regarding deer damage to personal property; an increase in car/deer collisions; and damage to the natural ecosystems in Pere Marquette Charter Township's newly acquired Conservation Park and Buttersville Campground.

This plan was developed based on information collected from a resident petition; expert advice from the Michigan Department of Natural Resources (MDNR); township staff; and a decade old deer management plan in Michigan's Meridian Township. The mission of the DNR is to maintain a healthy white-tailed deer population; using sound scientific management; maximizing recreational opportunities while minimizing negative impacts on ecosystems and other wildlife species and without creating undue hardship to private interests.

# TABLE OF CONTENTS

- I. INTRODUCTION
- II. PURPOSE
- III. GOALS OF DEER MANAGEMENT PROGRAM
- IV. ALTERNATIVES TO HUNTING
- V. DEER POPULATION INFORMATION
- VI. DEER CULLING INFORMATION
- VII. COSTS AND BENEFITS
- VIII. SUMMARY

# I. INTRODUCTION

#### A. Description & Location

The Pere Marquette Charter Township Parks are located along the shores of Pere Marquette Lake, Pere Marquette River, Lake Michigan and Lincoln River. An area encompassing approximately 362.73 acres.

# B. General Description of Potential Deer Management Areas

1. Government Owned Property: Township Parks
Potential deer management areas may include select parks, or
other township-owned properties that are specifically
designated as a park. This includes Buttersville Campground,
Buttersville Beach, Pere Marquette Conservation Park,

Lakeshore Drive Boat Launch, Suttons Landing and Memorial Tree Park.

# 2. Private Property

In addition to utilizing select Township parks, the Township will mail letters to select private property landowners to gain consent for participation in the Management Plan.

#### II. PURPOSE

#### A. Reasons for the Development of a Deer Management Plan

- **1.** The Township has documented numerous complaints of white-tailed deer (*Odocoileus virginianus*) damage from township residents.
- **2.** Response to abundant complaints of damage to personal property (landscaping).
- **3.** Increased deer/vehicle accidents within the area.
- **4.** Alarming amount of deer/human contact.
- **5.** Nuisance deer roaming into densely populated residential neighborhoods.
  - In urbanized areas, remnant natural areas exist as fragmented landscape.
  - Deer are concentrated in remaining habitat islands.
- **6.** There is evidence of damage to the park's ecosystems by deer over-browsing.
  - Recognizing that the parks support ecosystem services; protect water quality; and provide wildlife habitat.
  - Recognizing that preferred native forage plants (oak, cedar, trillium, bloodroot, and trout lily) can require up to 10 years to regenerate.
  - Recognizing that deer may facilitate the introduction and spread of invasive species through preferential forage on certain plant species and serving as dispersal

- conduits along game trails.
- There is a high density of game trails throughout the parks.
- The parks serve as a protected area for plants and animal species.
- Impacts on native plant communities have cascading effects on associated wildlife species.

#### III. GOALS OF DEER MANAGEMENT PROGRAM

**A.** Developed in response to continued complaints from residents to reduce deer-related incidents, as well as support biological diversity in natural areas.

#### B. Natural Resources Management Philosophy

Land management includes an ecosystem approach to ensuring the health and function of the park's natural communities. Management methods may include the control of deer densities, removal of invasive species, application of prescribed burns, and reintroduction of native plants.

# C. Michigan Department of Natural Resources (MDNR) Deer Management Philosophy

The MDNR supports deer management in urban areas to help address:

- **1.** Damage to ecosystems.
- **2.** High vehicle-deer crash incidence rate.
- **3.** Damage to residential landscaping and gardens.
- 4. Public Act 451 of 1994: The Wildlife and their habitats of the state are valuable public natural resources held in trust by the state, and the state has a duty as trustee to manage its wildlife and their habitats effectively for the use and enjoyment of present and future residents and for the protection of the environment.
- **5.** Natural Resources Commission Policy #2007: The Department's goal is to manage the deer herd using management practices based on scientific research to:
  - **a.** Maintain healthy animals and keep the deer population within limits dictated by the carrying capacity of the range.
  - **b.** Limit effects on native plant communities, horticultural, and silvicultural crops and public safety.

#### IV. ALTERNATIVES

#### A. Fencing

**1.** Prohibits landscape connectivity, wildlife movement. Needs to be at least 10' high.

#### B. Translocation or trapping

- **1.** Wildlife Division of MDNR will not allow removal of live deer. Deer may not be converted to private ownership.
- **2.** Deer may be trapped and euthanized. Affordability depends upon source of labor, extent of local involvement.

# C. Deer Immunocontraception (Birth Control)

- **1.** Wildlife Division allows treatment under a special permit.
- **2.** Feasibility and affordability are limited.
- **3.** Efficacy and side effects vary by treatment method.
- **4.** Annual applications are generally required to maximize effectiveness.

# D. Surgical Sterilization of Deer

- **1.** Wildlife Division allows sterilization under a special permit.
- **2.** Feasibility and affordability are limited. Capture and nearby facilities or mobile surgical procedures are required.

#### E. Landscape Alternatives

- **1.** <u>Guide to Deer-Resistant Landscaping Lawn Care Blog | Lawn Love</u> deer-resistant plants
- **2.** <a href="https://www.rockwaterfarm.com/blog/20-best-deer-resistant-shrubs-and-trees-landscape-design-northern-virginia">https://www.rockwaterfarm.com/blog/20-best-deer-resistant-shrubs-and-trees-landscape-design-northern-virginia</a>
- 3. Managing roadside vegetation to improve visibility

  <u>Chapter 3 | 3.11 Developing a Vegetation Management Strategy</u>

  during Project Design (nativerevegetation.org)
- **4.** Modify driver behavior signs and reflectors, education for young drivers

# F. Roadside Management Options

- **1.** Increase distance back from road edge that would be cleared of vegetation.
- **2.** Increase signage at deer crossings.
- **3.** Install reflectors at deer crossings.

#### V. DEER POPULATION INFORMATION

# A. Michigan Deer Population - Statewide Trends

According to the MDNR, in the absence of predators, unmanaged herds readily increase to abundant levels which can result in:

- **1.** Increased propensity for disease.
- **2.** Poor individual health of deer.

**3.** High incidence of roadside mortality (vehicle-deer collisions).

# **B.** Deer Population Goal

Michigan Department of Natural Resources (MDNR) and Michigan Natural Features Inventory (MNFI) suggest that minimizing impacts to natural communities and associated wildlife may require managing herds at less than 20 deer per square mile.

# C. Deer Productivity

According to the MDNR, it is likely that deer productivity will increase as population is reduced. Moving forward, proposals will be made to make deer management a multi-year effort.

# **D.** Deer Population Evaluation

It is difficult to obtain exact numbers of the deer herd population. Options for establishing population includes:

- **1.** Utilization of helicopter surveys to attempt to develop base line population information. The downside to utilizing helicopters is that it can be costly.
- 2. MDNR biologist Vern Richardson stated that it is unnecessary to take the measure of conducting a helicopter survey, and that the damage to vegetation, incidents of deer/vehicle accidents, and simple observations provide direct evidence and measures of the impacts of deer populations intended to be managed.

#### VI. DEER CULLING INFORMATION

#### A. Deer Culling

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

This deer management plan provides the details for culling for the Wildlife Biologist's approval. This management plan strives to reasonably attempt to resolve the problem on a localized scale (per MDNR's discretion) for an extended period of time. The plan includes:

#### B. Goal

The long-term objectives of the deer culling plan is to reduce the nuisance deer within a localized area identified by the Pere Marquette Charter Township Supervisor. With Township Board approval, the MDNR issues the Mason County Sheriff's Department and/or the Michigan State Police a Damage and Nuisance Animal Control Permit to implement the cull. The permit allows for a controlled cull outside

of the regular hunting season and has exceptions to hunting rules.

# C. Logistics

- 1. Number of deer to be culled: The goal is to harvest 150 deer through targeted culling. The deer could be male or female of any age. The Mason County Sheriff's Department or Michigan State police department plans to have shooters out five times per month from January 1, to February 28.
- **2. Timing** Culling will be conducted within the hours of 6 pm and midnight.
- 3. **Personnel** Culling will be conducted by select Sheriff's Department and/or Michigan State Police Troopers. The selections are made at the discretion of the Sheriff and or Commander, respectively.
- **Methods. Equipment and Locations -** The officers selected to 4. cull the deer will be equipped with suppressed firearms of various calibers. They will be permitted to use other specialized equipment including: night vision optics; thermal imaging equipment; rifle scopes; and other useful items. There will be two officers per cull (a spotter and a shooter), along with a Department of Public Works and or Township Parks staff members who will drag out the deer. The officers will have trail cams on each bait pile that will notify the officers of the deer's presence. The officers would work over 4-5 bait piles in 4-5 various locations. The officers will either be in a set location or will be standing in a vehicle. The plan includes permission to secure a minimum of four contiguous private properties that agree to allow the managed cull. The area under this proposal is residential area with fragmented natural areas. The deer go back and forth between the yards and the natural areas. Their range is very small and they are essentially, "nuisance deer."
- 5. Safety Issues The officers involved in the deer culling program will be assigned as teams of two. One officer will check the backdrop of the site using thermal imaging equipment to determine that it is clear of people. Officers will pay particular attention to the angel of the shot taken, what their backdrop is, certainty of a well-placed shot. If there is any uncertainty of the safety of the shot either team member has the authority and responsibility to call off the shot.
- **6. Utilization plan** The culled deer will be field dressed by Township Department of Public Works and or Parks staff and will be brought to a processor and the venison will be donated to local food banks.
- 7. Long Term Management Plan It is recognized that deer management techniques will likely need to be employed on a long-term basis. The plan will be assessed each year utilizing

information on deer/car collisions along with anecdotal evidence regarding nuisance deer on private property.

#### 8. Public notification

- a. Press releases
- b. Direct mailing to all property owners
- c. Residents will receive notification cards at least 14 days prior to the first scheduled managed hunt date
- d. Park entrances and major trail heads will be posted, notifying park users of deer management program
- e. The deer management program is discussed at public meetings including the Pere Marquette Charter Township Board.
- **9. Lead Contact -** A lead law enforcement contact will be identified.

# 10. Process for Approval from the MDNR:

The Wildlife Biologist will forward this 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.

#### VII. MANAGED HARVEST PROCEDURE & PROCESSING

- **A.** All hunting will be per state laws and regulations and per Township regulations according to the deer management hunt guidelines.
- **B.** Top priority of a managed hunt will be to protect the safety of hunters, neighboring residences, and the general public.
- **C.** A managed harvest will be held during regular hunting seasons.
  - a. Dates of Archery hunts, last two weeks of October and select dates in December.
  - b. An application and selection process will be created and implemented by the parks department.
- **D.** All hunting is archery only, with the exception of a special harvest conducted by the Police Department
  - **1.** Generally speaking, there is greater public acceptance for bow hunting because of the noise and the concern for errant shots.
- **E.** Firearm hunting
  - **1.** Firearms may only be utilized by Mason County Sheriff's Department or State of Michigan Police
- **F.** Establishment of deer blinds and routes, tracking
  - **1.** MDNR safety zone regulations will be observed

- **a.** One hunter is housed per blind/stand per hunt date.
- **b.** Blind/elevated tree stand locations must be reported to the Township.
- **c.** Hunters must remain within 50 feet of the blind at all times, unless they are tracking.
- **d.** Hunters must report to Township staff each time they enter and leave public property.
- **e.** Hunters are not to shoot unless they have a deer within close range.
- **f.** Tracking may not be done on private property without permission.
- **g.** Map of blind/tree stand locations will be indicated on aerial photos
  - **a.** Park boundary
  - **b.** Blind locations
  - **c.** Park trails

#### VIII. COSTS AND BENEFITS

#### A. COSTS

- **1.** Printing/postage/park signage
- **2.** Supporting equipment trail cameras and bait
- **3.** Staff time
- **4.** Processing costs

#### B. BENEFITS

- **1.** Donated venison
- **2.** Restore ecological diversity
- **3.** Reduce private property damage
- **4.** Reduce human/deer interactions
- **5.** Reduce potential for disease spread within the herd
- **6.** Improve herd health
- **7.** Habitat improvement
- **8.** Reduce car/vehicle incidents

#### IX. SUMMARY

Pere Marquette Charter Township's Deer Management Plan strives to focus on an ecosystems approach by creating co-existence among wildlife, citizens, and our suburban/natural communities in a safe and efficient manner.

This deer management plan recognizes that the use and enjoyment of deer by residents is highly variable. Selection of deer management methods requires consideration of general concepts and location-specific deer dynamics.

According to the Michigan Department of Natural Resources, nearly one million Michiganders go to the woods and fields every fall to hunt and otherwise experience wildlife and open lands. Michigan has a proud and vibrant hunting tradition and a well-deserved reputation for responsible and innovative conservation. Hunting and hunter-conservationists are leading advocates for Michigan's strong natural resource economy, and at the center of their interests and enthusiasm is the management of white-tailed deer.

Pere Marquette Charter Township takes their role as an environmental steward seriously and as such, recognizes the need to implement science-based management of our fragile natural resources so that they may remain in perpetuity for future generations.