



# Brine and Deer Carcass Management

*Mark Christensen*

Manager/Superintendent

Montcalm County Road Commission





## Brine Update





# Deer Memo

## Maintenance Advisory

MA 2023-02  
November 21, 2023

From Kimberly Zimmer, TSMO Division Administrator

**MDOT  
TSMO Division  
6333 Lansing Road  
Lansing, MI 48917**

Questions regarding  
this advisory should  
be directed to:

Tim Croze  
Maintenance and  
Operations Section  
Manager  
Phone 517-243-5977  
[crozet@michigan.gov](mailto:crozet@michigan.gov)

### Disposal of Road Killed Animals

MDOT, DNR, and EGLE met to discuss the disposal of large road killed animals. As a result of these discussions, MDOT has agreed to reissue guidance from the 1993 MDOT Maintenance Memorandum on this topic and include the attached EGLE memo on the subject Recognition of the "Designated Exemption for Road Killed Deer" dated October 13, 2023. It is anticipated that the procedures for MDOT Direct Garages and Contract Agencies, responsible for handling road-killed animals, will not change except as necessary to comply with the disposal provisions. In most cases MDOTs preferred methods of addressing large road killed animals remain:

- Leaving the dead animal within the right-of-way once moved away from the shoulder and travel lanes and where appropriate outside of the 12' mow line, if all conditions from the EGLE's Designated Exemptions for Road Killed Deer (Option 1) can be met; or,
- Removal and disposal of dead animal at a licensed solid waste disposal facility.

Burial of dead animals should be used as a last resort and only if no other options are available. If burial is the only option, it should be done as soon as possible and in accordance with the conditions outlined in EGLE's Designated Exemptions for Road Killed Deer (Options 2 or 3). Be sure to contact MISS DIG 811 before digging. Additionally, the DNR has emphasized that the MDOT and local road agencies are not to dispose of road killed animals on Federal or State lands, other than the nearest adjacent right-of-way that meets the requirements of Option 1.

MDOT is not responsible for removal of road killed animals from private land.

# Deer Memo

FROM: Tracy Kecskemeti, Assistant Director *TKecskemeti*  
Materials Management Division  
Department of Environment, Great Lakes, and Energy

DATE: October 13, 2023

SUBJECT: Recognition of the "Designation of Exemption for Road Killed Deer"

The purpose of this memo is to provide direction and clarification to road agencies engaging in the disposal of large dead animals within the public right-of-way.

At issue is the consideration of road killed animals as solid waste under Part 115, Solid Waste Management, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended, MCL 324.101 *et seq.* The current statute does not exempt road killed animals from the definition of solid waste and this has caused confusion between the agencies regarding proper disposal. While Part 115 does not exempt animal carcasses from the definition of solid waste, nor does it provide for the Department of Environment, Great Lakes, and Energy (EGLE) to issue such an exemption, it does provide a provision to recognize exemptions granted under previous versions of the law (324.11553(9)). On November 18, 1988, the Michigan Department of Natural Resources (MDNR), which was responsible for solid waste management at the time, issued a Designation of Exemption for Road Killed Deer (Designation), which provided an exemption from solid waste regulation for road killed deer handled in accordance with conditions described in the Designation. While the original exemption has not been located, it was reproduced in a Michigan Department of Transportation (MDOT) Maintenance of Memorandum dated August 12, 1993.

In accordance with MCL 324.11553(9), EGLE agrees that road killed deer, and other large animals, that are managed in accordance with the conditions listed in the Designation will be considered exempt from solid waste regulation.

The conditions of the exemption, as reproduced in the 1993 MDOT memo, are:

1. The deer is placed on the surface of the ground, and all of the following conditions are met:
  - a. The deer is placed in a remote area that is at least 1,000 feet from any neighboring resident or at a greater distance as necessary to prevent a



# Deer Memo Continued

SUBJECT: Recognition of the "Designation of Exemption for Road Killed Deer"  
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- nuisance odor condition that may cause an unreasonable interference with the comfortable enjoyment of life and property for neighboring residents.
- b. The deer is not placed within 100 feet of another dead deer.
  - c. The owner of the land has authorized the placement of the deer.
  - d. The deer does not come into contact with surface or groundwater.
2. The deer is buried in an individual grave, and all of the following conditions are met:
    - a. The deer is covered with four feet of soil within 24 hours of burial.
    - b. The deer does not come into contact with surface or groundwater.
    - c. The number of individual graves does not exceed 100 graves per acre.
    - d. The grave is located at least 200 feet from any groundwater well that is used to supply potable drinking water.
  3. The deer is buried in a common grave, and all of the following conditions are met:
    - a. The number of deer in the common grave does not exceed 20.
    - b. Each individual deer is covered with one foot of soil within 24 hours of burial.
    - c. The common grave does not remain open for more than 30 days and receives at least four feet of soil as final cover.
    - d. The number of common graves does not exceed 5 graves per acre.
    - e. The deer does not come into contact with surface or groundwater or is disposed in a 100-year flood plain or wetland area as defined by the Solid Waste Management Act.
    - f. The common grave is located at least 200 feet from any groundwater well that is used to supply potable drinking water.
  4. The deer is taken by the driver or owner of the vehicle involved in the highway accident or by some other person to whom a "highway killed deer permit" is issued by a representative of the Department [of Natural Resources] or the investigating local police officer.
  5. The deer is taken by a dead animal dealer who is licensed pursuant to the Bodies of Dead Animal Act, Public Act 239 of 1982.
  6. The deer is disposed of in accordance with the Solid Waste Management Act [Part 115] at a properly licensed solid waste disposal facility or at an out of state facility in accordance with that state's solid waste disposal regulations.

Failure to comply with the conditions of the Designation may result in the disposed animals being considered as solid waste, and the responsible road agency may be subject to the enforcement provisions of Part 115. The Designation may be amended,

# Deer Statistics



## DEER MANAGEMENT


**STATE OF MICHIGAN**




**2,000,000**  
CURRENT DEER POPULATION  
1940: 1,000,000



**2ND LARGEST**  
DEER POPULATION IN THE COUNTRY



**58,000**  
VEHICLE/DEER CRASHES  
STATEWIDE (2022)

**11**   
FATALITIES

**+ 13% INCREASE**  
VEHICLE/DEER CRASHES STATEWIDE  
(2021 to 2022)


**339,189**  
STATEWIDE DEER HARVEST



**-14% DECREASE**  
DOWN 58,811 from 2021

**KENT COUNTY**

**RANKS #1**  
LEADS STATE IN VEHICLE/DEER CRASHES  
(2022, 2023)



**2251** DEER/VEHICLE CRASHES  
(DVCs) IN 2022\*

**+24% INCREASE**  
VEHICLE/DEER CRASHES (2021 to 2022)

*\*This data does not include crashes involving motorists veering for deer.*

**4,867** DEER HARVESTED  
COUNTYWIDE (2023)




**-12% DECREASE**  
DOWN 658 FROM 2022

**3566** DEER REMOVED FROM COUNTY  
ROW (2022) *KCRC-MAINTAINED ONLY*

**+ 10% INCREASE**   
from 2021

**KENT COUNTY TOWNSHIPS**


**24% OF ALL CRASHES**   
VEHICLE/DEER CRASHES (DCVs)

**COUNTY LAND MASS**

**18% CITIES/VILLAGES | 82% TOWNSHIPS**

2004 Study of Deer Vehicle Collisions in Kent County  
"...neither the warning signs nor wildlife reflectors showed any effect of reducing DVCs"

**KENT COUNTY CITIES & VILLAGES**

**4% OF ALL CRASHES**   
VEHICLE/DEER CRASHES (DVCs)

INCREASING  POPULATION + INCREASING  POPULATION  
MEANS  WILL CONTINUE TO INCREASE.



## Deer Statistics Continued

### Deer Crash Summary (2018-2022)

	Total Deer Involved Crashes	Fatal	Serious Injury	FSI (fatal + serious injury)
GVMC	11,120	0	19	19
Kent County	9,293	0	17	17
MI State	271,300	52	515	567

### Number of Deer Crash from 2018-2022 in the GVMC region

The table and graphs presented below illustrate a notable rise in the number of deer crashes within the GVMC region from 2018 to 2022, with a particularly sharp increase of 30% observed between 2019 and 2022.

Year	Number of Deer Crash
2018	2,192
2019	2,020
2020	2,063
2021	2,199
2022	2,646
Total	11,120



# Questions?

Mark Christensen  
[mark@montcalmroads.com](mailto:mark@montcalmroads.com)

[montcalmroads.com](http://montcalmroads.com)