

MICHIGAN DEPARTMENT OF NATURAL RESOURCES – <u>www.michigan.gov/dnr</u> Wildlife Division

## FGDC Geospatial Metadata for <u>2019 Deer Management Unit (or area or zone)</u> <u>polygons "current" (rev. 2019 Aug. 28)</u>

#### By M. Strong, DNR Wildlife Division, Lansing, MI.

*Description:* This file is a shorter summary of longer FGDC geospatial data metadata with important comments, constraints, and qualifiers to accompany geographic information system files (ESRI format shapefile or layer). See the longer more-complete documentation of this data set's metadata, approximates and follows the FGDC and NBII Metadata Standards at primary required levels, where applicable and appropriate; additional details added if needed. However, these metadata below should include all the mandatory FGDC compliant elements for this data set (a single layer). Some text may be duplicated, but will be improved with next update of these metadata.

#### Data summary/abstract for "deer\_management\_unit\_polygons\_current":

Description summary: This is the most current white-tailed deer (species Odocoileus virgininus) related management unit, area, or zone polygons; these deer management units (DMUs), special management areas or zones, and other specifically defined polygons are tools DNR staff, particularly DNR Wildlife Division staff, use to manage, represent and depict the extent of deer populations, hunting quotas, open/closed DMUs for applying for drawings or hunting licenses, and other related geospatial activities regarding white-tailed deer. It is your responsibility as a user of these data, to ensure, if you are using these data to determine, plan or do recreational activities, that you personally investigate all regulations or rules related to those activities (acts, place, etc.) before doing those activities or face legal repercussions; if questions, contact DNR offices (http:///www.michigan.gov/dnr).

This layer "deer\_management\_unit\_polygons\_current" will be served with a companion layer(s) containing previous deer management unit polygons "deer\_management\_unit\_polygons\_historical" (or "deer\_management\_unit\_polygons\_historical\_YYYY-YYYY (where YYYY-YYYY represents a range of years, for when a single historical set layer gets too large a file). When there is a transition to a new year of deer related management unit, area or zone polygons, then the most recent year which was in the "current" layer will be added to the "historical" and the newest updated polygons will be in the "current" layer (with appropriate update in year/dates of applicability). To confirm year of dates if data applicability, read the provided metadata (link below) and see the feature-based metadata included with each polygon, such as "year", "year\_feature\_developed", or "year\_feature\_applies" (i.e. identify the "current" version to set based on year, and use these fields to identify if these data have been updated for a new year). In the past a given year's deer units/area/zones (call "DMUs" even if not all are officially DMUs) were stored in and provided as a set of DMU layers because in reality there are situations where defined DMUs overlap other defined DMUs (and this is correct; see official/legal source documents); this one layer does include overlapping polygons so use appropriate review, care, and investigation when review or attempting to use these data.

These data should be usable and applicable at local to county scales or larger, be similar in use and spatial overlay with other data sets as USGS 1:24,000 scale data (or even 1:12,000 scale data) which is related data used in development of either these polygons or in data used to help develop these polygons. Note that currently regarding representation of polygon versus official/legally defined DMUs: any county or unit which, as defined in official sources (see below) runs along a great Lakes shoreline then the polygon ends at that shoreline; officially every portion of each Great Lake of State of Michigan territory is part of one county in Michigan; small offshore islands may not be evident in these data yet are officially/legally in a unit (every portion of Michigan is in some defined unit and covered by appropriate

laws, regulations and rules), and polygon lines may not be congruent with other base data you may compare to these data on a small-scale; hence the official legal representation is the Michigan Wildlife Conservation Order (WCO) or in Land-Use Orders of the DNR Director (LUOoD), etc. and these should be consulted for fine-scale or small-scale details. These data are in a State specific geographic projection: the Michigan Geographic projection (MGR) type, and use of these data may require special setting changes, define of projection details, re-projection data or other data manipulations by you on your side, in order to use with your data as you wish; details on MGR are in the provided metadata.

Significant efforts have been made to ensure the same layer used for various DNR viewers or tools, is the same GIS layer served to cooperators and public requestors, and that the attribute fields are strategically constructed, named and described in provided metadata. Some data fields may appear duplicates but they are not; some data fields are internal or related to a specific DNR use (like a specific viewer or tool) and either may not make sense to non-DNR or general public users or only make sense when used in the appropriate viewer or tool; read metadata for explanations which make these data facets clear. New for 2019-2020 is development of attribute fields supporting a deer management unit (DMU) viewer tool and deer regulations interactive map viewer tool, and therefore several fields have been added to facilitate that functionality; every effort is made to ensure the best, clear and official legal information is included in both those attribute fields attached to each polygon and the polygon outlines. There may be critically important contextual, legal and other important information are found online off the DNR website http://www.michigan.gov/dnr , current or matching (match date of polygons) Hunting and Trapping Digest, Antlerless Digest, Michigan WCO or in LUOOD, Michigan Compiled Laws, and other supporting resources; directions to each and every one of these resources are not always provided.

Official representation of any Michigan Department of Natural Resources game or nongame management units, areas, zones, polygons, boundaries, lines, etc. are the official and legal text language in WCO or in LUOoD, as appropriate; to find these official language source documents, see <a href="http://www.michigan.gov/dnrlaws">http://www.michigan.gov/dnrlaws</a> . If you use these data, you agree these data are as-is, provided as-id with no guarantees or warrantees. Any provided maps or GIS data are simply a tool and not any official data product. Ensure as a user of these data, that you read any provided metadata and understand those needed contextual and background pieces appropriate to your use. The DNR is not responsible for any incorrect use of these data, fitness-for-use issues, or other problems; every effort has been made to create the best appropriate version of the deer management unit information for DNR needs, and then those spatial data are shared as a convience with the public. These data are not for resale and not able to be trademarked by others as considered trademarked, copyright and property of the Michigan DNR for the public trust of citizens of the State of Michigan. FGDC compliant geospatial metadata is available and may not be attached or included with this layer, but is also provided as a linked Adobe format PDF document at

<u>http://www.michigandnr.com/ftp/wildlife/wildlife\_requested\_geospatial/DNR\_2019\_deer\_managment\_unit</u> <u>s\_polygon\_metadata.pdf</u>; plans are that our metadata will be updated to newer FGDC approved ISO formats when such can be done, yet the file name and link will stay the same; if unaware of FGDC format metadata, see <u>http:///www.fgdc.gov</u>.

## **BECAUSE OF CORRUPT FGDC METDATA FILE**, this is a partially complete but best as-is information (rather complete FGDC content in most sections of FGCD standard).

The official and legal representation of all units or boundaries from the DNR are as defined in text in the Michigan WCO (WCO; online off <u>www.mi.gov/dnrlaws</u>); if any differences (which can occur at small scales) in GIS polygons, lines or points which are for-convivence tools, then the correct official representation is the official legal text in the Mi. WCO. Best efforts and reasonable due-diligence are used to create our data

Michigan DMUs, particularly or exclusively for lower the peninsula units, can be overlapping units where official and defined units may exist but not have any quota or used for any hunting (public or private land) in a year yet those units are retained in the data layer because they are units defined in the Michigan WCO(online off <u>www.mi.gov/dnrlaws</u>). As one example: DMU 011 for Berrien County (in southwest lower peninsula) is defined Page 2 of 17 and so is DMU 311 (which is 3 counties including Berrien County) as well as DMU 486 (much of the southern lower peninsula counties including Berrien County DMU011 and the 3-county DMU 311); not all of these are open units with quota set for public, private or both hunting options or seasons. A user needs to use these data with other DNR online deer season information, to completely understand the applicably of these defined units (for example in browse-graphic PDF of all State units, DMU486 is not shown because although was defined it had no quota and wasn't open in any season \* condition combination; likewise for DMU011 and some other units).

Data layer is in meters units and area measures in square meters.

Data projection/datum is WGS84 and Michigan Georeference Projection; see <u>http://www.michigan.gov/maps</u> and <u>http://www.michigan.gov/dnrmaps</u> (<u>http://gis-midnr.opendata.arcgis.com</u>) for more information on MGR projection, etc.

For subject-specific questions on this GIS data layer, contact: **Marshall Strong**, Wildlife Mapping & Geotechnology Program Specialist, (<u>strongm@michigan.gov</u>; <u>517-256-5397</u>); Wildlife Division - Planning and Adaptation Section - Management Information Unit; State of Michigan - Department of Natural Resources (DNR; <u>www.mi.gov/dnr</u>; <u>DNR-Wildlife@michigan.gov</u>; <u>517-284-WILD(9453)</u>), Constitution Hall (N tower, 4<sup>th</sup> floor, NW), 525 West Allegan Street, PO Box 30444, Lansing, MI 48909-7944 USA. ... plus later FGDC content sections have more completed contact information.

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# <sections 1.1 to 1.6+ will be updated later, including any missing sections from complete metadata below>

#### (1.7) Access\_Constraints:

#### Warnings, Disclaimers, and Notifications for Access to these metadata and data:

This portion of the documentation is to provide legal statements, restrictions, and prerequisites for accessing the data set, including those to assure protection of privacy, assure protection intellectual property, assure protection of those involved (data developers, provider and potential end users), provide and explain any special restrictions or limitations on obtaining the data set, or provide other reasonably-expected information needed by potential end users when considering accessing these metadata and described data.

There are several important notices, warnings, access, and use statements for any potential user of these data. These constraints and warnings are to assure protection of data, State property (including physical, digital and intellectual property), and protect both the developers and potential end users by appropriately discussing these data and data development factors. Some of these same warnings may be duplicated in sections of longer documentation (if exists); however, use care in reading the entire metadata even if it looks similar in case detail within the statements is indeed different.

It is assumed any users of these data have read all metadata or summary files provided with these matching data resources. These stated constraints and warnings are a combination of official MDNR policy statements at the time this metadata was last updated, State of Michigan statements, conventional or metadata-format required technical statements, and added explanatory and geospatial-related qualifiers provided for users of any geospatial data included with this file. These data comments are not specific to just geospatial (location) details, but also relate to attributes and other data factors of these data, documented by these metadata comments. These warnings and statements have been carefully gathered, and significant attempts made to present and explain them for potential users. If you disagree with any of these warning comments, then do not use these data or those data resources packaged with this metadata.

A general data liability disclaimer applies: Data is considered as-is at the time this metadata was written or last updated. These data are not for cadastral or legal use, even after considered published. Users should be aware that in comparison with other data sets for the same area, inaccuracies and inconsistencies may be identified due to (i.) previous data creation methods, (ii.) changes mapping conventions over time, (iii.) changes in technology, (iv.) changes in understandings of what details need to be documented, and (v.) other such factors

impacting data creation, documentation, and packaging product data and documentation.

**Best efforts have been made** with both the details in this metadata documentation, with the matching data described in this metadata, with the packaging, and with access and download preparations for both these metadata and the companion data, including other documents or digital files packaged with the project data.

**Regarding downloading:** Downloading and/or use of these data signifies a user's agreement to comprehension and compliance with all stated constraints and warnings in this metadata/summary file. Make certain all portions of any metadata are read and clearly understood before using these data in order to protect both user and data-developer interests. Review of this metadata information doesn't limit a potential user's access to consider the warnings and restrictions; any downloading or use of the data partnered with these metadata details means you as a user agree to all terms and conditions stated within these metadata and with accessory files included with those data referred to by these metadata.

**Regarding updates or changes**: These data resources may be updated and the related data layer(s) could be updated or changed without notice. If interested in using these data over time, it is strongly recommended that users repeatedly investigate for any possible updates of these data, and that newer data are directly acquired from MDNR Wildlife staff, not

indirectly through other sources which may have modified the data in some way. It is also strongly recommended that careful attention be paid to the contents of metadata and any other files associated or provided with these data.

Be aware, as is possible in all government situations, other constraints may have been required and added since the compilation and completion of this metadata summary file. Every effort has been made to provide users the best information, including in these metadata details; however, updated data and metadata information may have changes. Look for possible changes to ensure you can gain the best possible use of these data and metadata.

#### (1.8) Use\_Constraints:

#### Warnings, Disclaimers, and Notifications for Use of these metadata and data:

This portion of the documentation is to provide legal statements, restrictions, and prerequisites for using the data set, including those to assure protection of privacy, assure protection intellectual property, assure protection of those involved (data developers, provider and potential end users), provide and explain any special restrictions or limitations on using the data set, or provide other reasonably-expected information needed by potential end users when considering using these metadata and described data.

There is no expressed warrantee; the State of Michigan, the Department of Natural Resources (MDNR) nor any employees shall be held liable for any portions of these metadata or companion data, or for improper or incorrect use of any information provided, data described and/or contained herein. Although these data have been processed successfully on computer systems at the MDNR and the MDNR Wildlife Division (WLD), no warranty expressed or implied is made regarding the accuracy or utility of the data on any other system or for general, scientific, or legal purposes, nor shall the act of distribution constitute any such warranty. This disclaimer applies both to individual use of the data and aggregate use with other data. These data are provided "as is" and without any express or implied warranties, including, without limitation, the implied warranties of merchantability and fitness for a particular purpose. If other files are provided with these data, see those associated files for more information including some details which may not be summarized in these metadata.

The companion data are not legal information or documents and are not to be used as such. These data involve geographic and attributed representations which might be related to property representations, jurisdictional ranges, or enforcement-related regulations and rules. Because these issues are critical for both data developers and potential end users, these are carefully explained here.

The information presented or in these data may represent some details which might be relevant to geographic areas, land, land use, rules and regulations, or other natural resources. However, be aware and avoid making incorrect assumptions or misunderstandings of applicability of these data, using these data beyond intended purposes or scales, etc. These documentation and data products are a tool issued to assist or for convenience on this specific subject with specific applicable conditions.

**Regarding representations**, implied official geographic representations which might be seen in these data, or such information which might be possibly misunderstood by potential end users: The boundary outline information contained in these data are for identification of regional areas on larger scales, and is not a legally or notarized survey system nor judicially recognized property line system. The boundary outline information contained in these data are based on the best available Public Land Survey System (PLSS) data for town, range and section level land ownership frameworks for the State of Michigan (at the time these data were developed); however, newer information may be provided since these data were developed and, if so, may be available on the Department of Technology, Budget and Management (DTMB), at the Michigan Geographic Data Library (MGDL) website at <a href="http://www.mcgi.state.mi.us/MGDL">http://www.mcgi.state.mi.us/MGDL</a> and this internet location includes links to other State governmental archives for data beyond the MDNR and DTMB.

These data do include polygons and attribute information which are similar or related to representations of PLSS, property boundaries, county or State boundaries, etc. However the context of these data are not intended to represent those possible property or jurisdictional related factors, but are instead a frame for observational data collected within those boundaries. Beware re-purposing these data incorrectly, beyond intended purposes of data collection or use.

**Regarding jurisdictions**, implied jurisdictions which might be seen in these data, or such information which might be possibly misunderstood by potential end users: There is not any attempt, in either these data, metadata, data design, products or documentation of these data, to define the limits of the proprietary jurisdiction of any Federal, State, or local government, or to establish the geographical scope of the regulatory programs of such government agencies. Governmental agencies means any Federal or adjoining Nation, State (including adjoining States), local government or municipality (meaning a county, township, city, village), governing body (meaning the board, council, commission, or body in which the policymaking powers of the local government are vested), public agency (meaning a single- or multipurpose public body, etc.), authority (meaning an authority formed by according to the Michigan Municipal Partnership act or other official State recognized authority), Michigan Indian tribe (meaning a Federally recognized Indian tribe, band, nation, or other organized group or community of Indians that is recognized as eligible for services by the United States Secretary of the Interior because of their status as Indians, and that has trust lands located within this State); all defined as per (a.) the Michigan Compiled Laws, Municipal Partnership Act (Michigan Compiled Laws, Municipal Partnership Act, Act 258 of 2011, Section 124.112 Definitions, Sec. 2, Item J., Eff. Dec. 14, 2011 ; accessed online at " http://legislature.mi.gov/doc.aspx?mcl-28-602 "); (b.) the Michigan Compiled Laws, Commission on Law Enforcement Standards Act (Michigan Compiled Laws, Commission on Law Enforcement Standards Act, Act 203 of 1965; Section 28.602 Definitions; Sec. 2, Item J; Eff. Oct. 12, 2004; accessed online at "http://legislature.mi.gov/doc.aspx?mcl-28-602"); and (c.) the Michigan Compiled Laws, Municipal Sewage and Water Supply Systems Act (Michigan Compiled Laws, Municipal Sewage and Water Supply Systems Act, Act 233 of 1955; Section 124.281 Definitions; Sec. 1, Item C and D; Eff. Dec. 14,2009; accessed online at "http://legislature.mi.gov/doc.aspx?mcl-124-281 ").

Potential users must consult other more appropriate information resources if need to relate these data or the represented geographic extents to legal representation of properties, formal boundaries, or other depictions of any official extents (i.e. relate these data to an official county extent). Property ownerships may have changed since these data were created and updated. All potential users should be aware that there could be instances where the represented boundaries or ownership (as may be seen in these data) may be quite different than actual ownership (for the real-world, current situation). Specific geographic areas could be out-of-date due to changes in the real-world since these data were developed and packaged.

**Regarding apparent or implied regulations**, rules, enforcement-related information which might be seen in these data, or such information which might be possibly misunderstood by potential end users: These documentation details and these companion data are not a set of rules and regulations (either in excerpt or complete), and may not be as immediately updated as current legislation and rules relevant to these data. These documentations or data products are neither legal notice nor a collection (either in excerpt or complete) of possible rules, regulations and laws which might be valid and applicable for the represented geographic areas, subjects or context.

Regulatory rules and management authority has been conferred on the MDNR by section 504 of 1994 Public Act 451, Michigan Compiled Laws 324.504; the official Michigan Compiled Laws are accessible online at "<u>http://legislature.mi.gov/doc.aspx?mcl-324-504</u>." The official and full legal representations of any enforcement-related information is those official text documentations such as Public Laws, Acts of government, amendments to the Michigan Wildlife

Conservation Orders, Director's Orders, or other appropriate legal code. It is possible that these data contain lines or polygons which could be considered direct representations of enforcement-related areas (townships, State extent, etc.); however, these polygons are data tools to assist. A complete listing of regulations and legal descriptions are available on the MDNR website at <u>http://www.michigan.gov/dnrlaws</u> and this internet location includes links to other State governmental archives for data beyond the MDNR.

**Regarding plans or activities of potential users**, based on these metadata and companion data: Potential users intending to engage in activities involved within or adjacent to lands controlled by private landowners or properties controlled by any government agencies (as defined earlier in these warnings) should seek appropriate permissions and additional information before planning any activities. These data do not provide sufficient details to define land extents, land use or access issues, extents concerning specific regulations, specified agency regulatory programs, proprietary jurisdictions that may affect activities, etc. Do not misunderstand the existence of observational data within a specific geographic area, within these data, as permission for potential end users to go into portions of that geographic area.

Potential users of these data should contact appropriate agency staff and should discuss the current ownership, rules and regulations, and other situations with local knowledgeable contacts before engaging in any activities which could be unlawful, illegal, violations or cause various possible repercussions, penalties, civil or criminal infractions, fees or fines, and/or jailtime for potential end users.

It is the responsibility of each individual, as a user of public lands, to ensure they are informed of all current rules and regulations relevant to planned activities before doing those planned activities. <u>Contact the MDNR offices</u> if you have questions or to verify regulations relating to possible activities before engaging in those activities. A complete listing of regulations and legal descriptions are on the MDNR website <u>www.michigan.gov/hunting</u> under "Laws & Legislation" or provided within the Michigan Wildlife Conservation Order, which is available online at <u>www.michigan.gov/dnrlaws</u>.

**Regarding rights, copyrights, etc.:** The MDNR retains all rights to these metadata, data, physical and conceptual materials, and related information products. These data are not to be repackaged or sold by other parties, as owned by the MDNR. The MDNR, in public trust for the citizens of Michigan, retains the Rights, Copyrights, and all other expressed or implied legal rights over these data, these information resources or tools, etc.

**Use of trade names or commercial product names** are solely for the purpose of providing specific information, reporting data development environments and methods, and does not imply blanket recommendation or endorsement by the Michigan State Government, the MDNR, the Wildlife Division, or any associated staff.

Assistance and development of these metadata and/or companion data: The MDNR and the MDNR Wildlife Division do consider possible project cooperation opportunities. The MDNR does work with many agencies and cooperators on projects using MDNR information resources, ideas, etc. as part of continued mission and goals. However, any cooperative project idea or relationship would require more consideration, discussions, a data use agreement procedure, and other details to be developed and finalized. If interested, discuss the situation with the data contact on this metadata document.

**Lastly**, if you are uncomfortable with these Access and Use Constraints, then do not use these data.

(1.9) Point\_of\_Contact = Contact\_Information in Section 10:

(1.9.1) Contact\_Person\_Primary:

(1.9.1.1) Contact\_Person: Mapping and Geotechnology Program Specialist, currently M. Strong

- (1.9.1.2) Contact\_Organization: State of Michigan, Department of Natural Resources (MDNR), Wildlife Division
- (1.9.2) Contact\_Organization\_Primary: State of Michigan, Department of Natural Resources (MDNR), Wildlife Division
- (1.9.3) Contact\_Position: Mapping and Geotechnology Program Specialist, currently M. Strong
- (1.9.4) Contact\_Address:
  - (1.9.4.1) Address\_Type: mailing address
  - (1.9.4.2) Address: PO Box 30444
  - (1.9.4.3) City: Lansing
  - (1.9.4.4) State\_or\_Province: MI
  - (1.9.4.5) Postal\_Code: 48909-7944
  - (1.9.4.6) Country: United States of America
- (1.9.5) Contact\_Voice\_Telephone: 1-517-284-WILD (1-517-284-9453)
- (1.9.5b) Contact\_Voice\_Telephone (alternate/direct line): 1-517-256-5397
- (1.9.6) Contact\_TDD/TTY\_Telephone: 711 (Michigan Relay Center)
- (1.9.7) Contact\_Facsimile\_Telephone: 1-517-241-0015
- (1.9.8) Contact\_Electronic\_Mail\_Address: DNR-Wildlife@michigan.gov Those interested can also see the MDNR website online at <u>http://www.michigan.gov/dnr</u> for more information, and to contact the Division using additional, current electronic methods.
- (1.9.9) Hours\_of\_Service: recommended: Universal/GMT 12noon to 8pm or United States' Eastern Standard Time 8am to 5pm
- (1.9.10) Contact\_Instructions: No significant instructions, other than:
   (i.) please have patience as may take a couple days to reply back to questions, depending on those methods used (email, etc.) to contact our organization; and
   (ii.) please refer to this data set by its proper title or by a more descriptive data set description along with any other relevant details (like publication date), in any message or with questions.
- (1.10) Browse\_Graphic: A graphic may be found within the online version or within hardcopy of the 2019 Deer Antlerless Digest or 2019 Michigan Hunting and Trapping Digest, and annual aid for hunters, which includes simplified text definition and a simple map showing line. Online version of the digest might be found of a link off webpage at <a href="http://www.michigan.gov/hunting">http://www.michigan.gov/hunting</a> or <a href="http://www.michigan.gov/hunting">http://www.michigan.gov/hunting</a> or <a href="http://www.michigan.gov/hunting">http://www.michigan.gov/hunting</a> or <a href="http://www.michigan.gov/hunting">http://www.michigan.gov/hunting</a> or
- (1.11) Data\_Set\_Credit: Michigan Department of Natural Resources, Wildlife Division, held for the public trust of the citizens of Michigan. The layer is the product of many staff working in an official public sector capacity.
- (1.12) Security\_Information: (not applicable)

Not applicable as there are no access, use or handling restrictions imposed on the data set because of national security, privacy, or other concerns appropriate to limit data set access/use, or to define in this portion of the metadata.

(1.13) Native\_Data\_Set\_Environment:

The data set was developed on and is compatible with (i.) IBM-format compatible computer; (ii.) operating system for Microsoft Windows version XP Professional and version 2000 for servers (from 1993-2006; see company details on the internet at http://www.microsoft.com for more information) and Microsoft Windows XP Version 5.1 (Build 2600) Service Pack 3, then Microsoft Windows 8.x; (iii.) database management software Microsoft Access 2003 program, build 11.8321.8341, service pack 3 (from 1992-2003; see company details on the internet at http://www.microsoft.com for more information) and Microsoft Access 2010 version 14.0.6123.5001; (iv.) geographic information system software ESRI ArcGIS9.3.1 service pack 2b and ESRI ArcGIS10.1.0.3035 (see company details on the internet at http://www.esri.com for more information was generated using software Microsoft Word 2003

program, build 11.8348.8341, service pack 3 (from 1992-2003; see company details on the internet at http:// www.microsoft.com for more information) or later and the documentation may have been converted to be compatible with Adobe PDF format (see company details on the internet at http://www.adobe.com for more information). Any other provided files with the compiled data set are compatible with plain ASCII text viewer formats or internet browser formats (i.e. txt, HTML, JPG image formats). Note that Adobe Reader for Adobe PDF files is a freeware software tool which loads on almost every computer type and operating system current at the time of this documentation, and is downloadable off the company web site at http://www.adobe.com. Version numbers change as software is developed over time but the software company Adobe has a long history of backward compatibility with their own older software's data formats. Original geographic information system work uses software versions compatible with changes in ESRI software up through newer software ESRI ArcGIS9.3.1 service pack 2b and ESRI ArcGIS10.1 or 10.2x (see company details on the internet at http://www.esri.com for more information). Note that software developer company ESRI does provide freeware software tools called ESRI ArcGIS Online and ESRI ArcGIS Explorer, which load on almost every computer type and operating system current at the time of this documentation, and are downloadable off the company web site at http://www.esri.com. Version numbers change as software is developed over time but the software company ESRI has a long history of backward compatibility with their own older software's data formats.

(1.14) Cross\_Reference: (not applicable)

Information about other related data sets may be available on the Department of Technology, Budget and Management (DTMB), at the Michigan Geographic Data Library (MGDL) website at <u>http://www.mcgi.state.mi.us/MGDL</u> and this internet location includes links to other State governmental archives for data beyond the MDNR and DTMB.

### Section 2: Data Quality Information

(2.) Data\_Quality\_Information:

#### (2.1) Attribute\_Accuracy:

#### (2.1.1) Attribute\_Accuracy\_Report:

The data consists of a single continuous multipoint polyline; there are no attributes other than those automatically generated by the ESRI ArcMap software for object ID, object type, and overall length. This dataset is derived as a review and update of its predecessor, the "2017 Deer Management Units" shapefile or set of files. The line-work runs along (follows) the approximate center of roads or other appropriate features as named in the specific legal text-definitions for the appropriate management units in the WCO (updated 11/2019). Using ESRI Best and the Michigan DOQQ 1998 leaf off imagery plus other small-scale data resources as reference basemaps, including the best at the time State County boundary layer, corrections to the 2017 data were made as per any changes for 2019 units and boundary lines were made to more closely follow the centerline of the roads or features present in the legal description. Screen digitization was done at display scale of 1:1,000. Attributes are tied to positional information in many situations (i.e. county road in a county extent) so such errors might be expected to be seen, noticed and corrected when base data corrected by DTMB and DNR during regular data management processes. Odd or anomaly values should have been noticed; best efforts were employed to create a usable and accurate data set, however there is possibility that some errors might exist. Checks for road or other feature names from the WCO text were done with Microsoft BING imagery or ESRI imagery, a cooperating data provider with the State of Michigan. Several informal tests, checks, and review steps were done on various parts of these data; however no specific tests were done on attribution data. Be aware, as is possible in all government

situations, other constraints may have been required and added since the compilation and completion of this metadata summary file.

(2.1.2) Quantitative\_Attribute\_Accuracy\_Assessment:

(2.1.2.1) Attribute\_Accuracy\_Value: unknown

(2.1.2.2) Attribute\_Accuracy\_Explanation:

No specific and exhaustive quantitative tests were done on all tabular data for tests of valid values, general tests for tabular data, general tests for geographic data, specific topological tests, or other rigorous testing for quality check and assurance measures. Every effort has been made to provide users the best information, including in these metadata details; however, updated data and metadata information may have changes.

Due to the many internal staff involved in the data development of the 2019 layer, it's expected that the attribute confidence is rather high and data accurate.

#### (2.2) Logical\_Consistency\_Report:

Logical consistency follows best efforts for these as-is data. These data are intended for geographic display and analysis at or above qualitatively a city block level (~500 feet wide), county and state level, and should be compatible and consistent with 1:24,000 scale digital GIS datasets. These data used and/or were derived from multiple layers which should be National Mapping Accuracy Standard (NMAS; see USGS online at <a href="http://www.usgs.gov">http://www.usgs.gov</a> ) for 1:24,000 scale at +/- 40 feet with USGS sited photo check points +/-16.6 feet or combination +/- 56.6 feet; therefore anticipation is common usage data should be within at worst case +/- 113.2 feet per set or a 226.4 foot bubble. So the estimate of qualitative reliance on a 500 foot bubble representing a "city block" (or +/- 250 feet) should be a reasonable approximation.

These data are a combination of multi-generational projects which may have been done with slightly different methodology details for the collected observational data (see the rest of these metadata comments for additional relevant details). No responsibility is assumed by the Michigan Department of Natural Resources (MDNR) in the use of these data. Deductive estimates based on experience with these data, professional expertise and more, suggest these data are reasonably useful for the scale described (above) in geospatial comparison at similar levels and while taking all user notices, warnings and caveats into consideration. Professional expert source for this estimate should be M. Strong, cited as distribution contact for this data set.

Several informal tests, check queries, and review steps were done on various parts of these data; however no specific and exhaustive quantitative tests were done on all attribution or tabular data for tests of valid values, general tests for tabular data, general tests for geographic data, specific topological tests, or other rigorous testing for quality check and assurance measures. Attributes are tied to positional information in many situations (i.e. county road in a county extent) so such errors might be expected to be seen, noticed and corrected. Odd or anomaly values should have been noticed; best efforts were employed to create a usable and accurate data set, however there is possibility that some errors might be in the attribution.

#### (2.3) Completeness\_Report:

Completeness was not tested; however, best efforts were employed to create a usable and accurate data set. Data appears, upon working comparison with other layers, to geographically associate well, be positionally close or accurate, and because these data do not exist in other formats (this is the only layer) it is the best data we have for use.

Data were visually compared to high-resolution small-scale detailed aerial imagery while doing data creation, checking and later use with other data. Because the final data very closely matches various detailed aerial image data resources, it's expected that these data are qualitatively accurate even if no quantitative testing or assessments were done.

These data are intended for geographic display and analysis at or above qualitatively a city block level (~500 feet wide), county and state level, and should be compatible and

consistent with 1:24,000 scale digital GIS datasets. These data used and/or were derived from multiple layers which should be National Mapping Accuracy Standard (NMAS; see USGS online at <u>http://www.usgs.gov</u>) for 1:24,000 scale at +/- 40 feet with USGS sited photo check points +/- 16.6 feet or combination +/- 56.6 feet; therefore anticipation is common usage data should be within at worst case +/- 113.2 feet per set or a 226.4 foot bubble, so our estimate of qualitative reliance on a 500 foot bubble representing a "city block" (or +/- 250 feet) should be a reasonable approximation.

These data are a combination of multi-generational projects which may have been done with slightly different methodology details for the collected observational data (see the rest of these metadata comments for additional relevant details). No responsibility is assumed by the MDNR in the use of these data. Deductive estimates based on experience with these data, professional expertise and more, suggest these data are reasonably useful for the scale described (above) in geospatial comparison at similar levels and while taking all user notices, warnings and caveats into consideration. Professional expert source for this estimate should be M. Strong, cited as distribution contact for this data set.

#### (2.4.) Positional\_Accuracy:

#### (2.4.1) Horizontal\_Positional\_Accuracy:

#### (2.4.1.1) Horizontal\_Positional\_Accuracy\_Report:

Horizontal positional accuracy was not actually tested, but deductive estimates can be made based on experience with these data, professional expertise and more, suggest these data are reasonably useful for the scale described (above) in geospatial comparison at similar levels and while taking all user notices, warnings and caveats into consideration. Professional expert source for this estimate should be M. Strong, cited as distribution contact for this data set. Horizontal positional accuracy is based on the accuracy of the digital Public Land Survey System (township/range) and USGS (online at http://www.usgs.gov) 1:24,000 coverages of data wherein USGS cites National Mapping Accuracy Standard compliance (NMAS; see USGS online at http://www.usgs.gov ) for 1:24,000 scale at +/- 40 feet with USGS sited photo check points +/-16.6 feet or combination +/- 56.6 feet, or a bubble of 113.2 feet wide. These data are intended for geographic display and analysis at or above qualitatively a city block level (~500 feet wide), county and state level, and should be compatible and consistent with 1:24,000 scale digital GIS datasets. These data used and/or were derived from multiple layers which should be National Mapping Accuracy Standard (NMAS; see USGS online at http://www.usgs.gov ) for 1:24,000 scale at +/- 40 feet with USGS sited photo check points +/-16.6 feet or combination +/-56.6 feet; therefore anticipation is common usage data should be within at worst case +/- 113.2 feet per set or a 226.4 foot bubble. So the estimate of qualitative reliance on a 500 foot bubble representing a "city block" (or +/- 250 feet) should be a reasonable approximation.

(2.4.1.2) Quantitative\_Horizontal\_Positional\_Accuracy\_Assessment:

(2.4.1.2.1) Horizontal\_Positional\_Accuracy\_Value: plus or minus 76.2 meters (or +/-250 feet)

#### (2.4.1.2.2) Horizontal\_Positional\_Accuracy\_Explanation:

The horizontal position accuracy value estimate for this project was calculated using National Mapping Accuracy Standards (NMAS) and compliance statement information for geosptatial data used within this project, with the FGDC guidelines for calculating accuracy based on NMAS; using 1:24,000 scale data this results in an estimate of positional accuracy estimates of within plus or minus 21.95 meters (or +/- 72 feet). However, concerns of over-representing the positional accuracies of

these data cause recommendation to handle these as more like 1:100,000 scale data, which results in calculated estimate (same FGDC calculation methods) of positional accuracy estimates of within plus or minus 109.7 meters (or +/- 360 feet). This revision is because ultimately the observational data collected on the ground by volunteers is of untested scale, and although observers may think they are close, recommendation at the next higher level of standard map products does provide a more conservative representation of accuracies for position.

### (2.4.2) Vertical\_Positional\_Accuracy:

(2.4.2.1) Vertical\_Positional\_Accuracy\_Report: (not applicable)

Vertical accuracy was not tested as there is no interpreted vertical component (altitude) to this data set.

(2.4.2.2) Quantitative\_Vertical\_Positional\_Accuracy\_Assessment: (not applicable)

#### (2.5) Lineage: (not applicable)

Lineage, methodology, and sources are complicated; and not described in great detail within this basic summary for these as-is data. The official and legal management unit boundaries are text definitions (and not any GIS data) provided within the Michigan Wildlife Conservation Order (updated 09/16/2015), which is available online at <u>www.michigan.gov/dnrlaws</u> or contact the nearest MDNR Customer Service Center. Data Lineage and Process Contact is the Data Distribution Contact listed in Section 6.1.

(2.6) Cloud\_Cover: (not applicable)

## Section 3. Spatial Data Organization Information

#### (3.) Spatial\_Data\_Organization\_Information:

- (3.1) Indirect\_Spatial\_Reference: Michigan Department of Natural Resources (MDNR) wildlife management unit data
- (3.2) Direct\_Spatial\_Reference\_Method: vector
- (3.3) Point\_and\_Vector\_Object\_Information:
  - (3.3.1) SDTS\_Terms\_Description:

(3.3.1.1) SDTS\_Point\_and\_Vector\_Object\_Type: complete chain

- (3.3.1.2) SDTS\_Point\_and\_Vector\_Object\_Count: one
- (3.3.2) VPF\_Terms\_Description:

(3.3.2.1) VPF\_Topology\_Level: 2 (see MIL-STD-2407, p37)

(3.3.2.2) VPF\_Point\_and\_Vector\_Object\_Information:

(3.3.2.2.1) VPF\_Point\_and\_Vector\_Object\_Type: edge

#### Spatial\_Data\_Organization\_Comment:

Data is in vector-based system for lines and polygon coverage, using ESRI's ArcInfo software or ArcView software compatible format (as exported shapefile). Information details about ESRI software can be found on the internet at <a href="http://www.esri.com">http://www.esri.com</a>, where a GIS file reader (ArcReader software) can be downloaded for free to allow you/users to view this data set.

(3.4) Raster\_Object\_Information: (not applicable for vector data)

## Section 4. Spatial Reference Information

(4.) Spatial\_Reference\_Information:
(4.1) Horizontal\_Coordinate\_System\_Definition:
(4.1.1) Geographic: (not applicable)
(4.1.2) Planar:
(4.1.2.1) Map\_Projection:
(4.1.2.1.1) Map\_Projection\_Name: Oblique Mercator

(also know as Hotine Oblique Mercator Azimuth Natural Origin or NAD 1983 Hotine Oblique Mercator Azimuth Natural Origin) (4.1.2.1.13) Oblique Mercator: (4.1.2.1.23) Map Projection Parameters: (assembled in FDGC order) (4.1.2.1.23.10) Scale Factor at Center Line: 0.9996 (4.1.2.1.23.11) Oblique Line Azimuth: (4.1.2.1.23.11.1) Azimuthal Angle: 337.25556 (4.1.2.1.23.11.2) Azimuth Measure Point Longitude: -86.00000000 (4.1.2.1.23.3) Latitude of Projection Origin: 45.30916667 (4.1.2.1.23.4) False Easting: 2546731.496 (4.1.2.1.23.5) False Northing: -4354009.816 Map\_Projection\_Comments: These data use the Michigan Geographic Reference Projection (MGR). Additional detailed specifications, graphics, and discussion of this projection are available online from the Michigan Geographic Data Library, under the "Map Projections" link at http://www.mcgi.state.mi.us/mgdl/. (4.1.2.2) Grid\_Coordinate\_System: (not applicable) (4.1.2.3) Local Planar: (not applicable) (4.1.2.4) Planar Coordinate Information: (4.1.2.4.1) Planar Coordinate Encoding Method: coordinate pair (4.1.2.4.2) Coordinate Representation: (4.1.2.4.2.1) Abscissa Resolution: 0.002048 (4.1.2.4.2.2) Ordinate Resolution: 0.002048

(4.1.2.4.3) Distance and Bearing Representation: (not applicable)

- (4.1.2.4.4) Planar\_Distance\_Units: meters
- (4.1.3) Local: (not applicable)
- (4.1.4) Geodetic\_Model:

(4.1.4.1) Horizontal\_Datum\_Name: North American Datum of 1983 (NAD83);

Geographic Coordinate System: GCS North American 1983;

Prime Meridian: Greenwich (0.0);

Angular Unit: Degree (0.0174532925199433).

- (4.1.4.2) *Ellipsoid\_Name:* spheroid: Geodetic Reference System 80 (GRS\_1980)
- (4.1.4.3) Semi-major\_Axis: 6378137.000000

Semi-minor\_Axis: 6356752.314140356

(4.1.4.4) Denominator\_of\_Flattening\_Ratio: Inverse Flattening: 298.257222 Geodetic\_Model\_Comments:

These data use the Michigan Geographic Reference Projection (MGR). Additional detailed specifications, graphics, and discussion of this projection, are available from the Michigan Geographic Data Library, online at

http://www.mcgi.state.mi.us/mgdl/ under the "Map Projections" link.

(4.2) Vertical\_Coordinate\_System\_Definition: (not applicable; no vertical component to the data set)

## Section 5. Entity and Attribute Information

- (5.) Entity\_and\_Attribute\_Information:
- (5.1) Detailed\_Descriptiton:
  - (5.1.1) Entity\_Type:

(5.1.1.1) Entity\_Type\_Label: Michigan Department of Natural Resources (MDNR) management unit data

- (5.1.1.2) Entity\_Type\_Definition: The official and legal MDNR wildlife management unit zones and the lines separating these zones are text definitions (and not any GIS data) provided within the Michigan Wildlife Conservation Order (updated 11/2019), which is available online at www.michigan.gov/dnrlaws.
- (5.1.1.3) Entity\_Type\_Definition\_Source: MDNR Wildlife Division WCO (updated 11/2019)
- (5.1.2) Attribute:

(5.1.2.1) Attribute\_Label: OBJECTID

- (5.1.2.2) Attribute\_Definition: numeric field containing a unique integer that identifies each object in the data set; field generated by default and maintained by ArcGIS
- (5.1.2.3) Attribute\_Definition\_Source: ESRI, ArcGIS Desktop

(5.1.2.4) Attribute\_Domain\_Values:

(5.1.2.4.2) Range\_Domain:

(5.1.2.4.2.1) Range\_Domain\_Minimum: integer >0

(5.1.2.4.2.2) Range\_Domain\_Maximum: none

(5.1.2.5) *Attribute\_Units\_of\_Measure:* (not applicable)

(5.1.2.6) Attribute\_Measurement\_Resolution: (not applicable)

(5.1.2.7) Beginning\_Date\_of\_Attribute\_Values: publication date

(5.1.2.8) Ending\_Date\_of\_Attribute\_Values: last update of the dataset

(5.1.2.9) Attribute\_Value\_Accuracy\_Information: (see Sec. 2.3 Completeness\_Report)

(5.1.2.10) Attribute\_Measurement\_Frequency: none planned

(5.1.3) Attribute:

(5.1.3.1) Attribute\_Label: Shape

(5.1.3.2) Attribute\_Definition: text field containing the geometry type of vector data for the ArcGIS feature class; field generated by default and maintained by ArcGIS

(5.1.3.3) Attribute\_Definition\_Source: ESRI, ArcGIS Desktop

(5.1.3.4) Attribute\_Domain\_Values:

- (5.1.3.4.1) Enumerated\_Domain:
  - (5.1.3.4.1.1) Enumerated\_Domain\_Value: "Polyline"
  - (5.1.3.4.1.2) Enumerated\_Domain\_Value\_Definition: a shape defined by an ordered collection of one or more paths, in which the path is a series of connected segments; it optionally has measure, height and ID attributes
  - (5.1.3.4.1.3) Enumerated\_Domain\_Value\_Definition\_Source: ESRI,

#### ArcGIS Desktop

(5.1.3.5) Attribute\_Units\_of\_Measure: (not applicable)

(5.1.3.6) Attribute\_Measurement\_Resolution: (not applicable)

(5.1.3.7) Beginning\_Date\_of\_Attribute\_Values: publication date

(5.1.3.8) Ending\_Date\_of\_Attribute\_Values: last update of the dataset

(5.1.3.9) Attribute\_Value\_Accuracy\_Information: (see Sec. 2.3 Completeness\_Report)

(5.1.3.10) Attribute\_Measurement\_Frequency: none planned

(5.1.4) Attribute:

(5.1.4.1) Attribute\_Label: Shape\_Length

(5.1.4.2) Attribute\_Definition: numeric field containing the length of the polyline; field generated by default and maintained by ArcGIS

These data are not user-editable or user-managed data but set and controlled by the software with any changes as the result of edits completing the x,y coordinate pairs within the software.

(5.1.4.3) Attribute\_Definition\_Source: ESRI, ArcGIS Desktop

(5.1.4.4) Attribute\_Domain\_Values:

(5.1.5.4.2) Range\_Domain:

(5.1.5.4.2.1) Range\_Domain\_Minimum: >0 (5.1.5.4.2.2) Range\_Domain\_Maximum: none (5.1.4.5) Attribute\_Units\_of\_Measure: meters (5.1.4.6) Attribute\_Measurement\_Resolution: (not applicable) (5.1.4.7) Beginning\_Date\_of\_Attribute\_Values: publication date (5.1.4.8) Ending\_Date\_of\_Attribute\_Values: last update of the dataset (5.1.4.9) Attribute\_Value\_Accuracy\_Information: (see Sec. 2.3 Completeness\_Report) (5.1.4.10) Attribute\_Measurement\_Frequency: none planned

... plus includes other fields, which should be obvious based on field name and contents ...

## Updated ATTRIBUTE FIELD INFORMATION FOR 2019-2020 MAJOR IMPROVEMENTS IN DATA ARE PASTED IN BELOW, before Section 6 of FGDC metadata:

Overall important contextual notes:

"A DMU can be defined and apply to a specific year, yet have no quota set for one or more seasons and therefore be closed for those specific one or more seasons."

"Antlered: a deer having at least one antler that extends 3 inches or more above the skull." "Antlerless: a deer without antlers, or antlers extending less than 3 inches above the skull." "Antler Point Restriction (APR) is a tool used to protect an age class of bucks from being harvested in order to graduate them to the next age class by only allowing hunters to harvest bucks with a certain number of antler points on a side."

"Deer license (versus any part of a "Deer Combo License"): A deer license may be used to harvest an antlered deer. This tag is not valid for the early/late antlerless firearm seasons unless used on private lands in the CWD Management Zone, Core CWD Area, DMU 452, and DMU 487 to take an antlerless deer. Those who purchase a single deer license may not purchase a second single deer license or the deer combo license. More information is provided in the current Hunting and Trapping Digest."

"Deer Combo License (versus a "Deer License"): Residents and nonresidents can purchase only one deer license with two kill tags (regular and restricted) for use during the firearm, muzzleloading, and archery seasons. These tags are not valid for the early/late antlerless firearm seasons unless used on private lands in CWD Management Zone, Core CWD Area, DMU 452, and DMU 487 to take an antlerless deer. A hunter can use both kill tags in the firearm seasons, both in the archery season, or one in each season. More information is provided in the current Hunting and Trapping Digest."

"Antlerless Deer Hunting License (versus a "Deer License" or any part of a "Deer Combo License") - An antlerless deer license entitles residents and nonresidents, to take an antlerless deer within the deer management unit (DMU) specified on the license. Hunters of any age may apply for or purchase antlerless deer licenses, including young hunters licensed under the mentored youth program. License availability is limited by antlerless deer license quotas established for each DMU. Hunters may apply for one license through the drawing (July 15 – Aug. 15), or wait to purchase leftover licenses after the drawing, if available. Quotas are available at Michigan.gov/Deer (specifically " https://www.michigan.gov/dnr/0,4570,7-350-79119\_79147\_81438-501419--,00.html "). More information is provided in the current Hunting and Trapping Digest."

Format notes:

Note1: the field listing uses metadata listing format for element blocks of: <field name:> "???" (if a field alias, then in parens field alias: "???") ; <field type/format:>

character/text ??-wide (ESRI type =t??) ;<field content description:> contains ... ESRI primary field name size limitation in characters is 31 characters, versus it asking to create a field alias option; this was important as some software will not see the field aliases unless you specifically look for them, so preference was to create obvious, logical field names within the 31character limit, if at all possible and appropriate.

Note2: any text between "<<<" and ">>>" are my notes listed within ordered element blocks, and are not in themselves correctly ordered parts of any element blocks ... but pieces for me to return to and reconsider, etc.

Note3: as these metadata are under development right now, there may be "???" within the following field information blocks, to "placehold" and allow later search and complete-info as part of steps to ensure any field specifications have been replaced in these working notes, before consider done. "???" is used when I am not yet sure of the database field attribute sizes needed.

<field name:> "feature\_type" ; <field type/format:> character/text up-to-100-wide (ESRI type =t100) ;<field content description:> contains internal-code or simplified text line for the category the specific polygon belongs (and each category name should be self-descriptive). Categories include "carto/map purpose only", "official polygon (land only, no Great Lakes water included)", etc.

<field name:> "feature\_label\_short" ; <field type/format:> character/text 50-wide (ESRI type =t50) ;<field content description:> contains a short text-string to use as a polygon label in GIS. Within the combined historical layer, there may be multiple fields where different overlapping polygons have the same "feature\_label\_short" or "feature\_label\_long" but the values for "feature\_label\_short\_w\_yr" or "feature\_label\_long\_w\_yr" will be different.

<field name:> "feature\_label\_long" ; <field type/format:> character/text 256-wide (ESRI type =t256) ;<field content description:> contains a longer text-string to use as a polygon label in GIS, and may be a combination of couple other fields. Within the combined historical layer, there may be multiple fields where different overlapping polygons have the same "feature\_label\_short" or "feature\_label\_long" but the values for "feature\_label\_short\_w\_yr" or "feature\_label\_long\_w\_yr" will be different.

<field name:> "feature\_label\_short\_w\_yr" ; <field type/format:> character/text 100-wide (ESRI type =t100) ;<field content description:> contains a short text-string WITH APPLICABIE YEAR, to use as a polygon label in GIS. Within the combined historical layer, there may be multiple fields where different overlapping polygons have the same "feature\_label\_short" or "feature\_label\_long" but the values for "feature\_label\_short\_w\_yr" or "feature\_label\_long\_w\_yr" will be different.

<field name:> "feature\_label\_long\_w\_yr" ; <field type/format:> character/text 256-wide (ESRI type =t256) ;<field content description:> contains a longer text-string WITH APPLICABIE YEAR, to use as a polygon label in GIS, and may be a combination of couple other fields. Within the combined historical layer, there may be multiple fields where different overlapping polygons have the same "feature\_label\_short" or "feature\_label\_long" but the values for "feature\_label\_short\_w\_yr" or "feature\_label\_long\_w\_yr" will be different.

<field name:> "species\_common\_name" ; <field type/format:> character/text 75-wide (ESRI type =t75) ;<field content description:> contains the feature species-name in common-name format (which can vary regionally, so for clearly specific identifification use species\_scientific\_name field), ... (varies by species/year/model instance) ;<example content:> "copperbelly water snake". For most activities the common name (i.e. "deer") might be fine, but there are several instances where Michigan species have several species with similar common names or a simple common name is not correct to clearly identify the exact species for scientific purposes (i.e. "deer" versus "whitetailed deer" or "deer (whitetailed)"; hence, the exact species scientific name is provided to ensure complainace with metadata requirements and good clear scientific documentation.

<field name:> "species\_scientific\_name"; <field type/format:> character/text 150-wide (ESRI type =t150); <field content description:> contains the currently official species scientific name or genera name and species name (Linnaeus binomial nomencvlature system; for more information see https://en.wikipedia.org/wiki/Binomial\_nomenclature), ... (varies by species instance) - note normally these are shown in italics but font type cannot be specified in attribute field settings or distributable data content - when print please use italics font type ;<example content:> "Nerodia erythrogaster neglecta". For most activities the common name (i.e. "deer") might be fine, but there are several instances where Michigan species have several species with similar common names or a simple common name is not correct to clearly identify the exact species for scientific purposes (i.e. "deer" versus "whitetailed deer" or "deer (whitetailed)"; hence, the exact species scientific name is provided to ensure complainace with metadata requirements and good clear scientific documentation. Also there may be sub-species differentiaton in GIS data in same layer ... if needed/applicable (i.e. think watefowl units with spome specific sub-variant unit/regs).

<field name:> "mu\_as\_text"; <field type/format:> character/text 25-wide (ESRI type =t25);<field content description:> contains the management unit number as a text value, because some join/relate functions may be done and they must have the exact same field type (text versus number); in reality the management unit numbers are text strings of 3-digit-values with zeros as placeholders (i.e. DMU 1 is really DMU 001). This field allows showing combination units, up to 12 wide - i.e. "123,124,125,126,127", "122 subunit (for map only)", etc. if a very short polygon label field is needed, then "mu\_as\_text" is better than "mu\_as\_number" (read comments under that field specifications for why).

<field name:> "mu\_as\_number"; <field type/format:> number/interger 4-wide (ESRI type =i4);<field content description:> contains the management unit number as a numeric value, because some join/relate functions may be done and they must have the exact same field type (text versus number); in reality the management unit numbers are text strings of 3-digit-values with zeros as placeholders (i.e. DMU 1 is really DMU 001). Note that unit as a number doesn't work for some units which officially and technically (according to how legally defined in the Michigan Wildlife Conservation Order (WCO) there are units where the name is not able to be represented as a number) are not a number, and cannopt be represented as a number so are shown as a zero (which implies incorrectly that zero might be a valid value, which it is not).

<field name:> "yr" (field alias: "year\_set\_for\_when\_combined\_historical\_polygons") ; <field type/format:> character/text 10-wide (ESRI type =t10) ;<field content description:> contains 4-digit year for the polygon or deer management unit, and is particularly meant for those units/polygons only applicable for one year - and to keep "year sets" organized" or meaning for example that a value of "2016" in this field means the polygon is grouped with all others with a value of "2016" in this field and creates the 2016 year set of polygons.

<field name:> "year" ; <field type/format:> character/text 10-wide (ESRI type =t10) ;<field content description:> contains 4-digit year for the polygon or deer management unit, and is particularly meant for those units/polygons only applicable for one year (when the field of same name was t4 and t5 size); this field may be being replaced by "year\_poly\_applies" in multi-year data layers. Current this data field leaves room for range of years, like "1998-2099" or "2003-14" (which is not clear so don't use); if more specific date range needed, see field "year\_polygon\_applies".

<field name:> "year\_feature\_developed" ; <field type/format:> character/text 25-wide (ESRI type =t25) ;<field content description:> contains the 4-digit year with any date in parentheses, for

when the polygon was created. If no value is provided, such as no year (or date) supplied, see the "year" field.

<field name:> "year\_feature\_applies" ; <field type/format:> character/text 256-wide (ESRI type =t256) ;<field content description:> ONLY IF APPLIES, contains multiple years or dates over which the polygon or management unit legally applies for use and may be followed by short comment or clause clairifying the application of the polygon/MU. If no value is provided, such as no year (or date) supplied, see the "year" field.

<field name:> "unit\_type" ; <field type/format:> character/text 50-wide (ESRI type =t50) ;<field content description:> contains the management unit or polygon type as a simple named category which should be self explanitory. The contents of this field may appear similar to the contents of the field "feature\_type" for a specific polygon (particularly for anything "official; ..." type) but differ for those "unofficial..." types in the field "feature\_type" where should have an explanation in this field "unit\_type".

<field name:> "unit\_name" ; <field type/format:> character/text 256-wide (ESRI type =t256) ;<field content description:> contains the management unit or polygon unit name - - and this may be similar to the layer attribute field "feature\_label\_long\_" or "feature\_label\_long\_with\_year" but really have format differences.

<field name:> "subunit\_type" ; <field type/format:> character/text 50-wide (ESRI type =t50) ;<field content description:> ONLY IF APPLIES, contains the management unit or polygon sub-unit type, if applicable, as a simple named category which should be self explanitory.

<field name:> "subunit\_name" ; <field type/format:> character/text 256-wide (ESRI type =t256) ;<field content description:> ONLY IF APPLIES, contains the management unit or polygon subunit name, if applicable.

<field name:> "unit\_includes\_counties\_of" ; <field type/format:> character/text 256-wide (ESRI type =t256) ;<field content description:> contains a comma-separated list of text string of what counties are included in the unit or subunit.

<field name:> "feature\_has\_regs\_info" ; <field type/format:> character/text 12-wide (ESRI type =t12) ;<field content description:> contains "yes", "no" or a short comment ("pending" etc.) if the later fields for this feature purposefully have regulations related information (or not).

<field name:> "general\_urgent\_warning\_comment" ; <field type/format:> character/text 150-wide (ESRI type =t150) ;<field content description:> contains space for a urgent warning text string for deer regulations viewer tool pop-up information, to immediately highlight new or changed regulations for species or spannign more than just a single unit, such as new info which might not have been in digests available at license agents - including (examples): if sudden disease impact or hunter requirements, season or species spanning warning like a hypothetical all-deer-huntingcancelled or additional seasons offered, etc. and is planned displayed in bold red-text yet attribute field info has not font type or color.

<field name:> "unit\_urgent\_warning\_comment"; <field type/format:> character/text 150-wide (ESRI type =t150);<field content description:> contains space for a urgent warning text string for deer regulations viewer tool pop-up information, to immediately highlight new or changed regulations for the specific unit, such as new info which might not have been in digests available at license agents - including (examples): if sudden disease impact or hunter requirements, season or species spanning warning like a hypothetical all-deer-hunting-cancelled or additional seasons offered, etc. and is planned displayed in bold red-text yet attribute field info has not font type or color. <field name:> "unit\_has\_baiting\_banned" ; <field type/format:> character/text 75-wide (ESRI type =t75) ;<field content description:> contains "yes", "no" and possibly with a short comment, like "no; see Hunting Digest for directions" or "yes; see Hunting Digest for exceptions", etc.

<field name:> "unit\_is\_in\_bovine\_tb\_area" ; <field type/format:> character/text 75-wide (ESRI type =t75) ;<field content description:> contains "yes", "no" and possibly with with a short comment, like "no" or "yes; see Hunting Digest for more information", etc.

<field name:> "unit\_is\_in\_cwd\_zone\_area" ; <field type/format:> character/text 75-wide (ESRI type =t75) ;<field content description:> contains "yes", "no" and possibly with with a short comment, like "no" or "yes; see notes below and current Hunting Digest for more information", etc.

<field name:> "unit\_quotas\_from\_wco3\_105"; <field type/format:> character/text 50-wide (ESRI type =t??); <field content description:> contains an appropriate or lead-in comment for three lines following it of information from deer hunt quotas from the Michigan Wildlife Conservation Order section 3, 3.105 and table 3 - i.e. "" ... or just hte total and continuation i.e. "total-### ..." so to lead reader into the pub/pvt splits and any clause qualifiers used in WCO 3.105 and table 3.

<field name:> "unit quota total lic anterless" ; <field type/format:> character/text 150-wide (ESRI type =t150) :< field content description:> contains a text string of a number and then may be followed by a comment like "License quota for this individual unit are reflected as part of multicounty units." or "Public land license quotas for this individual unit are issued locally as permits for special deer hunts." or "License quota for this unit located in the CWD Management Area are unlimited due to active disease surveillance protocols." or another such comment as appropriate. Information populating this attribute field comes from the Michigan Wildlife Conservation Order (WCO; http:///www.michigan.gov/dnrlaws) chapter 3 section 3.105a table 3 which has other notes associated with the section and table 3. Additional notes regarding licences and why multiple fields: (I.) Licenses can be different per seasons, hence seasons being differentiated. Licenses also differ for antlered ("bucks") and antlerless; ensure understand these terms: (I.a.) Antlered: a deer having at least one antler that extends 3 inches or more above the skull. (I.b.) Antlerless: a deer without antlers, or antlers extending less than 3 inches above the skull. (I.c.) Antler Point Restriction (APR) is a tool used to protect an age class of bucks from being harvested in order to graduate them to the next age class by only allowing hunters to harvest bucks with a certain number of antler points on a side. (II.) Licenses are different: (II.a.) Licenses: Hunters must choose at the time of purchase if they want the opportunity to harvest one or two antlered deer (except DMU 117). Hunters wishing to harvest only one antiered deer can purchase a single deer license (one kill tag). Hunters wishing to harvest two antlered deer must purchase a deer combo license (two kill tags). There is a statewide limit of two antlered deer (exception: limit of ONE in DMU 117). When harvesting two antlered deer, one antlered deer must have at least four or more points on one side. (II.b.) Deer license (versus any part of a "Deer Combo License"): A deer license may be used to harvest an antlered deer. This tag is not valid for the early/late antlerless firearm seasons unless used on private lands in the CWD Management Zone, Core CWD Area, DMU 452, and DMU 487 to take an antierless deer. Those who purchase a single deer license may not purchase a second single deer license or the deer combo license. More information is provided in the current Hunting and Trapping Digest. (II.c.) Deer Combo License (versus a "Deer License"): Residents and nonresidents can purchase only one deer license with two kill tags (regular and restricted) for use during the firearm, muzzleloading, and archery seasons. These tags are not valid for the early/late antlerless firearm seasons unless used on private lands in CWD Management Zone, Core CWD Area, DMU 452, and DMU 487 to take an antlerless deer. A hunter can use both kill tags in the firearm seasons, both in the archery season, or one in each season. More information is provided in the current Hunting and Trapping Digest. (III.d.) Antlerless Deer Hunting License (versus a "Deer License" or any part of a "Deer

Combo License") - An antlerless deer license entitles residents and nonresidents, to take an antlerless deer within the deer management unit (DMU) specified on the license. Hunters of any age may apply for or purchase antlerless deer licenses, including young hunters licensed under the mentored youth program. License availability is limited by antlerless deer license quotas established for each DMU. Hunters may apply for one license through the drawing (July 15 – Aug. 15), or wait to purchase leftover licenses after the drawing, if available. Quotas are available at Michigan.gov/Deer (specifically " https://www.michigan.gov/dnr/0,4570,7-350-79119\_79147\_81438-501419--,00.html "). More information is provided in the current Hunting and Trapping Digest. See other notes under attribute fields "unit\_quota\_total\_lic\_anterless", "unit\_quota\_lic\_publand\_anterless" (field alias: "unit\_quota\_lic\_publicland\_anterless") and "unit\_quota\_lic\_pvtland\_anterless" (field alias: "unit\_quota\_lic\_privateland\_anterless") for related information to understand data in this attribute field.

<field name:> "unit\_quota\_lic\_publand\_anterless" (field alias:

"unit\_quota\_lic\_publicland\_anterless")"; <field type/format:> character/text 150-wide (ESRI type =t150); <field content description:> contains the total (public and private land quotas) from the Michigane Wildlife Conservation Order section 3, 3.105 and table 3, in format of a number and then may be followed by a comment like "License quota for this individual unit are reflected as part of multi-county units." or "Public land license quotas for this individual unit are issued locally as permits for special deer hunts." or "License quota for this unit located in the CWD Management Area are unlimited due to active disease surveillance protocols." or another such comment as appropriate.<<< a copy of earlier DMU data field ... anterless\_lic\_pub\_land ... t12>>>. Information populating this attribute field comes from the Michigan Wildlife Conservation Order (WCO; http:///www.michigan.gov/dnrlaws) chapter 3 section 3.105a table 3 which has other notes associated with the section and table 3. See other notes under attribute fields "unit\_quota\_total\_lic\_anterless") and "unit\_quota\_lic\_pvtland\_anterless" (field alias: "unit\_quota\_lic\_publicland\_anterless") for related information to understand data in this attribute field.

<field name:> "unit\_quota\_lic\_pvtland\_anterles" (field alias:

"unit\_quota\_lic\_privateland\_anterless") ; <field type/format:> character/text 150-wide (ESRI type =t150) ;<field content description:> contains the total (public and private land quotas) from the Michigane Wildlife Conservation Order section 3, 3.105 and table 3, in format of a number and then may be followed by a comment like "License quota for this individual unit are reflected as part of multi-county units." or "Public land license quotas for this individual unit are issued locally as permits for special deer hunts." or "License quota for this unit located in the CWD Management Area are unlimited due to active disease surveillance protocols." or another such comment as appropriate.<<< a copy of earlier DMU data field ... anterless\_lic\_pvt\_land ... t12>>>. Information populating this attribute field comes from the Michigan Wildlife Conservation Order (WCO; http:///www.michigan.gov/dnrlaws) chapter 3 section 3.105a table 3 which has other notes associated with the section and table 3. See other notes under attribute fields "unit\_quota\_total\_lic\_anterless", "unit\_quota\_lic\_pvtland\_anterless" (field alias: "unit\_quota\_lic\_publicland\_anterless") for related information to understand data in this attribute field.

<field name:> "unit\_earlyantlerless\_season\_inf" (field alias:

"unit\_earlyantlerless\_season\_information")" ;<field type/format:> character/text 75-wide (ESRI type =t75) ;<field content description:> contains "yes", "no" and possibly with with a short comment, like "no" or "yes; see notes below and current Hunting Digest for more information", etc. Additional notes:

Early and Late Antlerless Firearm Season: Hunters must possess a private-land antlerless deer license issued for the DMU upon which they are hunting, or a Deer Management Assistance

(DMA) permit valid for that DMU. A deer kill tag issued under the mentored youth license must be used to harvest an antlerless deer during the antlerless-only seasons. All hunters are required to wear hunter orange and must have permission from the landowner or leaseholder before hunting on private land. The telephone number of the private landowner is required to acquire a private-land antlerless deer license. Early Antlerless Firearm Season: Sept 21-22: (a) Open on private lands only; (b) All of the Upper Peninsula is closed to the early antlerless firearm season. Late Antlerless Firearm Season: Dec. 23, 2019 – Jan. 1, 2020: (a) Open on private lands only; (b) All of the Upper Peninsula is closed to the late antlerless firearm season. More information is provided in the current Hunting and Trapping Digest.

<field name:> "unit\_lateantlerless\_season\_info" (field alias:

"unit\_lateantlerless\_season\_information")" ;<field type/format:> character/text 75-wide (ESRI type =t75) ;<field content description:> contains "yes", "no" and possibly with with a short comment, like "no" or "yes; see notes below and current Hunting Digest for more information", etc. Additional notes:

Early and Late Antlerless Firearm Season: Hunters must possess a private-land antlerless deer license issued for the DMU upon which they are hunting, or a Deer Management Assistance (DMA) permit valid for that DMU. A deer kill tag issued under the mentored youth license must be used to harvest an antlerless deer during the antlerless-only seasons. All hunters are required to wear hunter orange and must have permission from the landowner or leaseholder before hunting on private land. The telephone number of the private landowner is required to acquire a private-land antlerless deer license. Early Antlerless Firearm Season: Sept 21-22: (a) Open on private lands only; (b) All of the Upper Peninsula is closed to the early antlerless firearm season. Late Antlerless Firearm Season: Dec. 23, 2019 – Jan. 1, 2020: (a) Open on private lands only; (b) All of the Upper Peninsula is closed to the late antlerless firearm season. More information is provided in the current Hunting and Trapping Digest.

<field name:> "unit\_APR\_info\_header\_comment" ; <field type/format:> character/text 150-wide (ESRI type =t150) ;<field content description:> contains clairifying text string such as "A legal antler point must be at least 1 inch as measured from its tip to the nearest edge of the antler beam." = 109 characters.

<field name:> "unit\_archery\_season\_info" (field alias:

"unit\_archery\_season\_information\_header") ; <field type/format:> character/text 50-wide (ESRI type =t50) ;<field content description:> contains deer archery\_firearm season info, as appropriate or needed, like dates. Additional notes regarding licences and why multiple fields: (I.) Licenses can be different per seasons, hence seasons being differentiated.

(II.) Licenses are different: (A.) Deer license (versus any part of a "Deer Combo License"): A deer license may be used to harvest an antlered deer. This tag is not valid for the early/late antlerless firearm seasons unless used on private lands in the CWD Management Zone, Core CWD Area, DMU 452, and DMU 487 to take an antierless deer. Those who purchase a single deer license may not purchase a second single deer license or the deer combo license. More information is provided in the current Hunting and Trapping Digest. (B.) Deer Combo License (versus a "Deer License"): Residents and nonresidents can purchase only one deer license with two kill tags (regular and restricted) for use during the firearm, muzzleloading, and archery seasons. These tags are not valid for the early/late antlerless firearm seasons unless used on private lands in CWD Management Zone, Core CWD Area, DMU 452, and DMU 487 to take an antierless deer. A hunter can use both kill tags in the firearm seasons, both in the archery season, or one in each season. More information is provided in the current Hunting and Trapping Digest. (C.) Antlerless Deer Hunting License (versus a "Deer License" or any part of a "Deer Combo License") - An antlerless deer license entitles residents and nonresidents, to take an antlerless deer within the deer management unit (DMU) specified on the license. Hunters of any age may apply for or purchase antlerless deer licenses, including young hunters licensed under the mentored youth program. License availability is limited by antlerless deer license quotas established for each

DMU. Hunters may apply for one license through the drawing (July 15 – Aug. 15), or wait to purchase leftover licenses after the drawing, if available. Quotas are available at Michigan.gov/Deer (specifically " https://www.michigan.gov/dnr/0,4570,7-350-79119\_79147\_81438-501419--,00.html "). More information is provided in the current Hunting and Trapping Digest.

<field name:> "unit\_archery\_deer\_lic\_info" (field alias: "unit\_archery\_deer\_lic\_information"); <field type/format:> character/text 256-wide (ESRI type =t256);<field content description:> contains deer archery\_firearm season info for std Deer license, as appropriate or needed, like antlerless or antlered info, if antlerled deer allowed on license then includes antler point restrictions, etc.

<field name:> "unit\_archery\_combo\_regular" (field alias:

"unit\_archery\_combination\_lic\_regular\_tag\_information") ; <field type/format:> character/text 256-wide (ESRI type =t256) ;<field content description:> contains deer archery\_firearm season info Deer Combo license Regular tag, as appropriate or needed, like antierless or antiered info, if antierled deer allowed on license then includes antier point restrictions, etc.

<field name:> "unit\_archery\_combo\_restricted" (field alias:

"unit\_archery\_combination\_lic\_restricted\_tag\_information") ; <field type/format:> character/text 256-wide (ESRI type =t256) ;<field content description:> contains deer archery\_firearm season info for Deer Combo license Restricted tag, as appropriate or needed, like antlerless or antlered info, if antlerled deer allowed on license then includes antler point restrictions, etc.

<field name:> "unit\_regular\_firearm\_season\_info" (field alias:

"unit\_regularfirearm\_season\_information\_header"); <field type/format:> character/text 50-wide (ESRI type =t50);<field content description:> contains deer regular\_firearm season info, as appropriate or needed, like dates.

<field name:> "unit\_regfirearm\_deer\_lic\_info" (field alias:

"unit\_regularfirearm\_deer\_licenese\_information") ; <field type/format:> character/text 256-wide (ESRI type =t256) ;<field content description:> contains deer regular\_firearm season info for std Deer license, as appropriate or needed, like antlerless or antlered info, if antlerled deer allowed on license then includes antler point restrictions, etc.

<field name:> "unit\_regfirearm\_combo\_regular" (field alias:

"unit\_regularfirearm\_combination\_lic\_regular\_tag\_information") ; <field type/format:> character/text 256-wide (ESRI type =t256) ;<field content description:> contains deer regular\_firearm season info Deer Combo license Regular tag, as appropriate or needed, like antlerless or antlered info, if antlerled deer allowed on license then includes antler point restrictions, etc.

<field name:> "unit\_regfirearm\_combo\_restrcted" (field alias:

"unit\_regularfirearm\_combination\_lic\_restricted\_tag\_information") ; <field type/format:> character/text 256-wide (ESRI type =t256) ;<field content description:> contains deer regular\_firearm season info for Deer Combo license Restricted tag, as appropriate or needed, like antlerless or antlered info, if antlerled deer allowed on license then includes antler point restrictions, etc.

<field name:> "unit\_muzzleload\_season\_info" (field alias:

"unit\_muzzleloader\_season\_information\_header") ; <field type/format:> character/text 50-wide (ESRI type =t50) ;<field content description:> contains deer muzzleloader season info, as appropriate or needed, like dates.

<field name:> "unit\_muzzleload\_deer\_lic\_info" (field alias:

"unit\_muzzleloader\_deer\_licenese\_information") ; <field type/format:> character/text 256-wide (ESRI type =t256) ;<field content description:> contains deer muzzleloader season info for std Deer license, as appropriate or needed, like antlerless or antlered info, if antlerled deer allowed on license then includes antler point restrictions, etc.

<field name:> "unit\_muzzleload\_combo\_regular" (field alias:

"unit\_muzzleloader\_combination\_lic\_regular\_tag\_information") ; <field type/format:> character/text 256-wide (ESRI type =t256) ;<field content description:> contains deer muzzleloader season info Deer Combo license Regular tag, as appropriate or needed, like antlerless or antlered info, if antlerled deer allowed on license then includes antler point restrictions, etc.

<field name:> "unit\_muzzleload\_combo\_restrcted" (field alias: "") ; <field type/format:> character/text 256-wide (ESRI type =t256) ;<field content description:> contains deer muzzleloader season info for Deer Combo license Restricted tag, as appropriate or needed, like antlerless or antlered info, if antlerled deer allowed on license then includes antler point restrictions, etc.

<field name:> "unit\_important\_info\_notes" ; <field type/format:> character/text 1536-wide (ESRI type =t1536) ;<field content description:> contains longer-format text for several specific specialcondition things like cwd detail information for those units where cwd regulations apply. Decision is to include cwd info ... include carcass transport, etc. all comments section from current Hunting and Trapping Digest as it's that important: "For those portions of this DMU affected by CWD regulations, please see the Hunting Digest for details on where the divider line occurs, etc. The Core CWD Area includes Ionia, Kent, Mecosta, Montcalm, and Newaygo counties. In the Core CWD Area: (1) There is a 40% discounted private land antierless license for purchase in the CWD Management Zone; however, this license will expire on November 3, 2019. (2) There is a purchase limit of 10 private-land antlerless licenses per hunter in the Core CWD Area. (3) Muzzleloader season is open to all legal firearms, regular firearm equipment rules apply. Note for Carcass Transportation: (1) A harvested deer cannot be possessed or transported outside of this area unless: (1a) It is deboned meat, guarters or other parts of a cervid that do not have any part of the spinal column or head attached, antlers, antlers attached to a skull or skull cap cleaned of all brain and muscle tissue, hides, upper canine teeth, or a finished taxidermist mount, OR (1b) The hunter has presented the head at a designated drop off location within 24 hours after killing the deer. (2) A hunter in the Core CWD Area may not take a deer into the CWD Management Zone unless it fulfills one of the two items above. (3) A hunter outside the Core CWD Area can bring an entire carcass into the Core CWD Area with no restrictions." = 1354 characters. ... For liberty and independance hunt info: "Liberty and Independance hunts allow take anterledless deer or antlered deer; see current Hunt Digest for dates and details. ... sample of DMU122 comment data: "Portions of this DMU, located west or northwest of highway M-95, are inside the UP Core CWD Surveilance Area where CWD regulations apply -and- this DMU portion has different deer license APRs with less restrictions: Archery Deer license, + Combo regular and restricted: Antlerless deer, or Antlered deer with at least 1 antler 3 inches or longer; Regular-Firearm Deer license, + Combo regular and restricted: Antlerless deer, or Antlered deer with at least 1 antler 3 inches or longer; Muzzleloader license, + Combo regular and restricted: Antlerless deer, or Antlered deer with at least 1 antler 3 inches or longer. // For those portions of this DMU affected by CWD regulations, please see the Hunting Digest for details, on where the divider line occurs, etc. In the Core CWD Area: (1) There is a 40% discounted private land antlerless license for purchase in the CWD Management Zone; however, this license will expire on November 3, 2019. (2) There is a purchase limit of 10 private-land antlerless licenses per hunter in the Core CWD Area. (3) Muzzleloader season is open to all legal firearms, regular firearm equipment rules apply. Note for Carcass Transportation: (1) A harvested deer cannot be possessed or transported outside of this area unless: (1a) It is deboned meat, quarters or other

parts of a cervid that do not have any part of the spinal column or head attached, antlers, antlers attached to a skull or skull cap cleaned of all brain and muscle tissue, hides, upper canine teeth, or a finished taxidermist mount, OR (1b) The hunter has presented the head at a designated drop off location within 24 hours after killing the deer. (2) A hunter in the Core CWD Area may not take a deer into the CWD Management Zone unless it fulfills one of the two items above. (3) A hunter outside the Core CWD Area can bring an entire carcass into the Core CWD Area with no restrictions. // Liberty and Independance hunts allow take anterledless deer or antlered deer; see current Hunt Digest for dates and details."

<field name:> "regulations\_reference\_URL" ;<field type/format:> character/text 256-wide (ESRI type =t256) ;<field content description:> contains a Uniform Resource Locator (URL) or colloquially termed as an internet address text-string (for more information see https://en.wikipedia.org/wiki/URL) for a re-direct to reputable source for more information on the specific regulations for this specific species for this specific indicated individual feature -- if no URL possible then read the provided information describing a lead for more information (may be a document citation which can be used at a library or university reference section) - note the date of the valid URL will be the date of the last edit (field data\_lastupdated\_date), ... (varies by each feature species/year/model instance). example of content: "http://www.mi.gov/dnrdigests".

<field name:> "use\_data\_sync\_to\_public" ; <field type/format:> character/text 3-wide (ESRI type =t3) ;<field content description:> contains a queriable field to select if the given polygon should be used for public tools (like within the deer management unit viewer tool) - otherwise the polygon should not, should be considered draft and internal only, can be hidden and internal only with respect to dmu viewer, etc.

<field name:> "use\_data\_in\_dmu\_viewer\_tool" ; <field type/format:> character/text 3-wide (ESRI type =t3) ;<field content description:> contains a queriable field to select if the given polygon should be used within the deer management unit viewer tool - i.e. if field value is "yes" - otherwise polygon can be hidden and internal only. This field may or may not end up being uised, but being added now as easier to add and later delete versus add later after setup and working in viewer tool.

<field name:> "use\_data\_as\_urgent\_flag\_polygon" ; <field type/format:> character/text 3-wide (ESRI type =t3) ;<field content description:> contains a queriable field to select if the given polygon should be used as a highlighted urgent situation, critical regulations or other similar important flagged polygon - such as special regulations, disease units, etc. This field may or may not end up being uised, but being added now as easier to add and later delete versus add later after setup and working in viewer tool.

<field name:> "species\_reference\_URL" ;<field type/format:> character/text 256-wide (ESRI type =t256) ;<field content description:> contains a Uniform Resource Locator (URL) or colloquially termed as an internet address text-string (for more information see

https://en.wikipedia.org/wiki/URL ) for a reputable source for more information on the specific species for this specific indicated individual feature -- if no URL possible then read the provided information describing a lead for more information (may be a document citation which can be used at a library or university reference section) - note the date of the valid URL will be the date of the last edit (field data\_lastupdated\_date), ... (varies by each feature species/year/model instance) ;<example content:> "

https://mnfi.anr.msu.edu/species/description/11509/Nerodia-erythrogaster-neglecta ".

<field name:> "species\_reference2\_URL" ;<field type/format:> character/text 256-wide (ESRI type =t256) ;<field content description:> contains a Uniform Resource Locator (URL) or colloquially termed as an internet address text-string (for more information see https://en.wikipedia.org/wiki/URL ) for a second reputable source for more information on the

specific species for this specific indicated individual feature -- if no URL possible then read the provided information describing a lead for more information (may be a document citation which can be used at a library or university reference section) - note the date of the valid URL will be the date of the last edit (field data\_lastupdated\_date), ... (varies by each feature species/year/model instance) ;<example content:> ;<example content:> " https://mnfi.anr.msu.edu/species/description/11509/Nerodia-erythrogaster-neglecta ".

<field name:> "species\_DNR\_reference\_URL" ;<field type/format:> character/text 256-wide
(ESRI type =t256) ;<field content description:> contains a Uniform Resource Locator (URL) or
colloquially termed as an internet address text-string (for more information see
https://en.wikipedia.org/wiki/URL ) for a Michigan DNR source for more information on the
specific species for this specific indicated individual feature -- if no URL possible then read the
provided information describing a lead for more information (may be a document citation which
can be used at a library or university reference section) - note the date of the valid URL will be
the date of the last edit (field data\_lastupdated\_date), ... (varies by each feature
species/year/model instance) ;<example content:> ;<example content:> "
https://www.michigan.gov/wildlife ".

<field name:> "data\_metadata\_reference\_URL" ;<field type/format:> character/text 256-wide (ESRI type =t256) ;<field content description:> contains a Uniform Resource Locator (URL) or colloquially termed as an internet address text-string (for more information see https://en.wikipedia.org/wiki/URL ) for a reputable source for more information on the specific species for this specific indicated individual feature -- if no URL possible then read the provided information describing a lead for more information (may be a document citation which can be used at a library or univeristy reference section) - note the date of the valid URL will be the date of the last edit (field data\_lastupdated\_date), ... (varies by each feature species/year/model instance) ;<example content:> ;<example content:> "

https://mnfi.anr.msu.edu/species/description/11509/Nerodia-erythrogaster-neglecta ".

<field name:> "data\_source\_label" ;<field type/format:> character/text 256-wide (ESRI type =t256) ;<field content description:> contains a text-string representing a simplified data source identifier for the data source (allowing sort or display by data source) with date (year) added, ... (varies by each feature species/year/model instance) ;<example content:>;<example content:> "DNR-2019". ... or a longer formal publication citation text string.

<field name:> "data\_warning\_info" ;<field type/format:> character/text 50-wide (ESRI type =t50) ;<field content description:> serves as a yes/no check field about if the specific indicated individual feature has any IMPORTANT data warning or other data comments information (i.e. "<null>" = ;

"yes" = there are some IMPORTANT data warnings which may limit public distribution; "no" = there are no IMPORTANT data warnings to limit public distribution; etc.), ... (varies by each feature species/year/model instance) ;<example content:> "yes" or "no". If any warning text provided, please ensure you reference and review the information provided at the "data\_metadata\_ref\_URL" field link. Note that we will NOT provide any PI/PII data, protected content, confidential info, etc. from unrestricted data files.

<field name:> "data\_internal\_check\_temp\_value" ;<field type/format:> character/text 12-wide (ESRI type =t12) ;<field content description:> contains an internal data check field during data prep, editing or maintenance where contents are internal abbreviated layername source for feature, ... (varies by each feature species/year/model instance) ;<example content:> <internal abbreviated layername source for feature> "copperbelly-5000m-mnfi2016". Note that to nondata-developers or those not internal to the DNR who are managing these data, this field and it's contents may not make sense and should be ignored. <field name:> "data\_lastupdated\_date" ;<field type/format:> character/text 12-wide (ESRI type =t12 ;<field content description:> contains a date used for identifying the date which the last person made an edit to the feature during data prep, editing or maintenance where contents is date in format YYY-MONTH-DD (YYY is the y4 digit year, MONTH is the 3 character abbreviation for month without capital letters, and DD is the 2 digitl day number) used internal DNR, ... (varies by each feature species/year/model instance) ;<example content:> "2019-feb-06".

<field name:> "data\_updated\_by\_who\_userid" ;<field type/format:> character/text 25-wide (ESRI type =t25 ;<field content description:> contains an alpha-numeric text-string identifying last person to edit the feature during data prep, editing or maintenance where contents is internal DNR userid, ... (varies by each feature species/year/model instance) ;<example content:> "StrongM".

<field name:> "data\_comment" ;<field type/format:> character/text 256-wide (ESRI type =t256 ;<field content description:> contains a text field for free-form comments which are not included in other data fields; contents and comment may be temporary, could only make sense to internal data manager contacts, but might be self-explanatory if this field is being used as a strategic approach for content we've not anticipated but which we find must be included before the feature layer can be restructured.

## **Section 6. Distribution Information**

- (6.) Distribution\_Information:
- (6.1) Distributor = Contact\_Information in Section 10:
  - (6.1.1) Contact\_Person\_Primary:
    - (6.1.1.1) Contact\_Person: Mapping and Geotechnology Program Specialist, currently filled by M. Strong (however, recommend checking the contact position and contact organization, listed below in Sec. 6.1.3, in case details are different)
    - (6.1.1.2) Contact\_Organization: State of Michigan, Department of Natural Resources (MDNR), Wildlife Division
    - (6.1.2) Contact\_Organization\_Primary: State of Michigan, Department of Natural Resources (MDNR), Wildlife Division
    - (6.1.3) Contact\_Position: Mapping and Geotechnology Program Specialist, currently filled by M. Strong
    - (6.1.4) Contact\_Address:
      - (6.1.4.1) Address\_Type: mailing address
      - (6.1.4.2) Address: PO Box 30444
      - (6.1.4.3) City: Lansing
      - (6.1.4.4) State\_or\_Province: MI
      - (6.1.4.5) Postal\_Code: 48909-7944
      - (6.1.4.6) Country: United States of America
    - (6.1.5) Contact\_Voice\_Telephone: 1-517-284-WILD (1-517-284-9453)
    - (6.1.5b) Contact\_Voice\_Telephone (direct line): 1-517-256-5397
    - (6.1.6) Contact\_TDD/TTY\_Telephone: 711 (Michigan Relay Center)
    - (6.1.7) Contact\_Facsimile\_Telephone: 1-517-241-0015
    - (6.1.8) Contact\_Electronic\_Mail\_Address: DNR-Wildlife@michigan,gov Those interested can also see the MDNR website online at <u>http://www.michigan.gov/dnr</u> for more information and to contact Division using additional, current electronic methods.
    - (6.1.8b) Contact\_Electronic\_Mail\_Address (person direct): strongm@michigan,gov
    - (6.1.9) Contact\_Hours\_of\_Service: recommended: GMT 12noon to 8pm
      - or United States' Eastern Standard Time 8am to 5pm
    - (6.1.10) Contact\_Instructions: No significant instructions, other than:

(i.) please have patience as may take a couple days to reply back to questions,

depending on those methods used (email, etc.) to contact our organization;

(ii.) please refer to this data set by its proper title if you can or a complete description,

along with any other relevant details (like publication date), in any message or with questions.

(6.2) Resource\_Description: (recommend using the information from Section 1 to identify these data) (6.3) Distribution\_Liability:

The user is responsible for reading and comprehending all portions of these metadata before using any of the companion data. Any use of these data signifies a user's: (a.) understanding of all stated warnings, disclaimers, and notices; and (b.) agreement to comply with all stated constraints in these metadata/data. The Michigan Department of Natural Resources (MDNR) provides these metadata and companion data without any express or implied warranties, including, without limitation, the implied warranties of merchantability and fitness for a particular purpose. The State of Michigan, the MDNR nor any employees shall not be held liable for improper or incorrect use of these data, and these data are not intended for legal use. The MDNR reserves all rights, copyrights, as appropriate as the steward for these data for the public trust; these data may not be repackaged or sold. The information contained in these data may have changed since the dataset was last updated. Newer versions of these data may be available on an irregular schedule and the dataset may be updated without notice; however that statement does not mean these metadata or data will ever be changed again (rather that the possibility is always reserved). For more information, communicate with the contact person listed in this metadata file for these data. Do not pass these data to other users; instead, direct other users seeking these metadata or companion data to the contact person listed in this metadata file or the provided data access and download location.

There are other warnings, disclaimers and notifications prepared for possible end users of these metadata and companion data – make sure you read all the provided information, to avoid causing yourself problems related to these data. Some statements may be repeated, as they are appropriate content for blocks in a specific metadata format being used to document the project information and the companion data set. Metadata formats help create similar notice blocks for communicating information to potential end users, and these metadata have been written for both those inexperienced with technical documentation and those familiar with the standard format used for these metadata or data packaging. Make sure you read Section 1.7 Access Constraints and Section 1.8 Use Constraints for directly relevant details impacting users.

#### (6.4) Standard\_Order\_Process:

(6.4.1) Non-Digital\_Form: (not applicable, this is only a digital data set) (6.4.2) Digital Form:

(6.4.2.1) Digital Transfer Information:

- (6.4.2.1.1) Format\_Name: ZIP (WinZIP)
- (6.4.2.1.2) Format\_Version\_Number: 10.0 (10.0.6685)
- (6.4.2.1.3) Format\_Version\_Date: 2005
- (6.4.2.1.4) Format Specification:

Details on the format and WinZIP utility are online at the manufacturer's website on the internet at <a href="http://www.winzip.com">http://www.winzip.com</a>, email <a href="support@winzip.com">support@winzip.com</a>, WinZIP International LLC, at postal address PO Box 540, Mansfield, CT 06268 USA. Every effort is made to use a common and quality data packing product; in this case, WinZIP and the ZIP file format are very common and should be able to be unpacked or decompressed by several possible utilities including free software available online. WinZIP International LLC also provides a for free, evaluation copy of the latest software (newer than the version used to back these data), which installs on a wide variety of computers and operating systems.

(6.4.2.1.5) Format\_Information\_Content: various project files in standard

formats, and explained in a "readme" text file compressed with those files (6.4.2.1.6) Format\_File\_Decompression\_Technique: Use WinZIP or compatible

software utility. See the comments under Section 6.4.2.1.4 Format

Specifications for more information and lead to reach the WinZIP company.

(6.4.2.1.7) Transfer\_Size: <unknown at this time, 11/20/2019 -M.Strong>

However if the file is converted or exported for a special request, the file size can change; expect it to be "small" compared to the average GIS data layer size.

(6.4.2.2) Digital\_Transfer\_Option:

(6.4.2.2.1) Online\_Option:

(6.4.2.2.1.1) Computer\_Contact\_Information:

(6.4.2.2.1.1.1) Network\_Address: Data layer can be requested; however plans are for it to be moved to and accessible via the Michigan DNR Open Data Portal (an ESRI compatible data server system) at <u>http://www.michigan.gov/dnrmaps</u> or <u>http://gis/midnr/opendata.argis.com</u>, then look for the layer in the provided data, it may be listed under "hunting" or "wildlife" related data.

(6.4.2.2.1.1.1) Network\_Resource\_Name: <unspecified at this moment 11/20/2019 -M.Strong>

Network\_Resource\_Instructions: Plans are for the data to be moved to and accessible via the Michigan DNR Open Data Portal (an ESRI compatible data server system) at http://www.michigan.gov/dnrmaps or http://gis/midnr/opendata.argis.com, then look for the layer in the provided data, it may be listed under "hunting" or "wildlife" related data. Using an internet browser to connect to location, access as read-only data via the online computer options discussed above, then click on file or listing for the layer (which may provide a shapefile as .shp, or other file formats), then download it when asked; otherwise right-click on the file and say download. The DNR Open Data Portal also has a listing for a help contact, if needed.

(6.4.2.2.1.1.2) *Dial-up\_Instructions:* (not applicable)

(6.4.2.2.1.2) Access\_Instructions: Use own internet browser to connect as read-only to the online computer options discussed above.

(6.4.2.2.1.3) Online\_Computer\_and\_Operating\_System: Computer details will not be provided here for network security concerns; however, those details should not be needed because the online system is a dedicated internet server which is maintained for backward compatibility with HTTP communication protocols, and should be flexible to both older and newer connection versions plus various browser software and various operating systems.

(6.4.2.2.2) Offline\_Option: Offline options are limited and will have to be

discussed as a custom order process (see Section 6.5) with contacts.

- (6.4.3) Fees: see Custom Order Process in Section 6.5
- (6.4.4) Ordering\_Instructions: see Custom Order Process in Section 6.5
- (6.4.5) Turnaround: no set timeframe has been established or can be anticipated

Please have patience as may take a couple days to reply back to questions, depending on those methods used (email, etc.) to contact our organization.

(6.5) Custom\_Order\_Porcess: Custom order options are very limited. Anyone interested in such should first try using the online method. After that, if online method is not possible, contact the following Contact Person and discuss possible offline request options. Note that there may be a fee or requestor may be required to provide media for any offline option.

(6.5.1) Contact\_Person\_Primary = Contact\_Information in Section 10:

- (6.5.1.1) Contact\_Person: Mapping and Geotechnology Program Specialist, currently M. Strong (however, recommend using the contact position and contact organization, listed below in Section 6.5.3)
- (6.5.1.2) Contact\_Organization: State of Michigan, Department of Natural Resources (MDNR), Wildlife Division
- (6.5.2) Contact\_Organization\_Primary: State of Michigan, Department of Natural Resources (MDNR), Wildlife Division
- (6.5.3) Contact\_Position: MDNR Wildlife Division's Mapping and Geotechnology Program Specialist, currently filled by M. Strong
- (6.5.4) Contact\_Address:
  - (6.5.4.1) Address\_Type: mailing address
  - (6.5.4.2) Address: PO Box 30444
  - (6.5.4.3) City: Lansing
  - (6.5.4.4) State\_or\_Province: MI
  - (6.5.4.5) Postal\_Code: 48909-7944
  - (6.5.4.6) Country: United State of America
- (6.5.5) Contact\_Voice\_Telephone: 1-517-284-WILD (9453)
- (6.5.5b) Contact\_Voice\_Telephone (direct line): 1-517-256-5397
- (6.5.6) Contact\_TDD/TTY\_Telephone: 711 (Michigan Relay Center)
- (6.5.7) Contact\_Facsimile\_Telephone: 1-517-241-0015
- (6.5.8) Contact\_Electronic\_Mail\_Address: DNR-Wildlife@michigan,gov Those interested can also see the MDNR website online at <u>http://www.michigan.gov/dnr</u> for more information and to contact Division using additional, current electronic methods.
- (6.5.8b) Contact Electronic Mail Address (person direct): strongm@michigan.gov
- (6.5.9) Contact Hours of Service: recommended: GMT 12noon to 8pm
- or United States' Eastern Standard Time 8am to 5pm
- (6.5.10) Contact\_Instructions: No significant instructions, other than:

(i.) please have patience as may take a couple days to reply back to questions,

depending on those methods used (email, etc.) to contact our organization;

(ii.) please refer to this data set by its proper title or by more complete description of the data set along with any other relevant details (like publication date), in any message or with questions.

#### (6.6) Technical\_Prerequisites:

Technical prerequisites are multifold, as this is a complex data set with several resources. The packaged data includes both tabular and GIS data. A prepared user should have the available software as discussed below, and should have enough skill and experience to use the software and compatible data packaged and described within this documentation/metadata.

The final data set developed on and compatible with (i.) IBM-format compatible computer; (ii.) operating system for Microsoft Windows version XP Professional and version 2000 for servers (from 1993-2006; see company details on the internet at <a href="http://www.microsoft.com">http://www.microsoft.com</a> for more information) and Microsoft Windows XP Version 5.1 (Build 2600) Service Pack 3; Esri ArcGIS 10.1.0.3035; (iii.) database management software Microsoft Windows Office 2003 Access program, build 11.8321.8341, service pack 3 (from 1992-2003; see company details on the internet at <a href="http://www.microsoft.com">http://www.microsoft.com</a> for more and should be compatible with newer database management software Microsoft Windows Office 2003 Access program, build 11.8321.8341, service pack 3 (from 1992-2003; see company details on the internet at <a href="http://www.microsoft.com">http://www.microsoft.com</a> for more information) and should be compatible with newer database management software Microsoft Windows Office 2003 Access program, build 11.8321.8341, service pack 3 (from 1992-2003; see company details on the internet at <a href="http://www.microsoft.com">http://www.microsoft.com</a> for more information) and should be compatible with newer database management software Microsoft Windows Office

2010 Access program; (iv.) geographic information system software ESRI ArcGIS9.3.1 service pack 2b and ESRI ArcGIS10.1 (see company details on the internet at <a href="http://www.esri.com">http://www.esri.com</a> for more information); (v.) documentation was done using software Microsoft Windows Office 2003 Access program, build 11.8321.8341, service pack 3 (from 1992-2003; see company details on the internet at <a href="http://www.microsoft.com">http://www.esri.com</a> for more information) and the documentation was converted to be compatible with Adobe PDF format (see company details on the internet at <a href="http://www.adobe.com">http://www.adobe.com</a> for more information); with (vi.) any other provided files with the compiled data set being compatible with plain ASCII text viewer formats or internet browser formats (i.e. txt, HTML, JPG image formats). Note that Adobe Reader for Adobe PDF files is a for-free software tool which loads on almost every computer type and operating current at time of this documentation, and is downloadable off the company details on the internet at <a href="http://www.adobe.com">http://www.adobe.com</a>; version numbers change as software developed over time but software company Adobe has long history of backward compatibility with their own older software's data formats.

(6.7) Available\_Time\_Period: publication date

## Section 7. Metadata Reference Information

- (7.) Metadata\_Reference\_Information
  - Metadata\_Reference\_Information\_Comment:

Additional information about metadata standards used can be found online at the Michigan Department of Technology, Management and Budget (DTMB) Center for Shared Solutions Geographic Information Standards web page http://www.michigan.gov/cgi/ under the "Geographic Metadata" link or at the new DTMB

<u>http://www.michigan.gov/cgi/</u> under the "Geographic Metadata" link or at the new DTI State-wide site <u>http://www.michigan.gov/maps</u> .

- (7.1) Metadata\_Date: <full pending; this information is 11/20/2019>
- (7.2) Metadata\_Review\_Date: none scheduled; will be reviewed if the data is updated
- (7.3) Metadata\_Future\_Review\_Date: none scheduled
- (7.4) *Metadata\_Contact:* (recommend using the contact position and contact organization, listed in Secion 6.1.3)
- (7.5) *Metadate\_Standard\_Name:* FGDC Content Standard for Digital Geospatial Metadata with National Biological Information Initiative (NBII) Part 1 Biological Data Profile (when applicable)
- (7.6) *Metadata\_Standard\_Version:* FGDC-STD-001-1998, Version 2.0. NBII Part 1 Biological Data Profile, FGDC-STD-001.1-1999
- (7.7) *Metadata\_Time\_Convention:* recommended: Greenwich Mean Time (GMT), or United States' Eastern Standard Time
- (7.8) Metadata\_Access\_Constraints: refer to Section 1.7 Access Constraints
- (7.9) *Metadata\_Use\_Constraints:* refer to Section 1.8 Use Constraints
- (7.10) *Metadata\_Security\_Information:* (not applicable)

Not applicable as there are no access, use, or handling restrictions imposed on the metadata because of national security, privacy, or other concerns appropriate to limit metadata access/use, or to define in this portion of the metadata.

(7.11) *Metadata\_Extensions:* (not applicable)

## **Supplemental Information**

None, yet, except excerpts of WCO official/legal text language blocks as cited, are provided below to help understand the exact extent of polygons:

Michigan Wildlife Conservation Order (WCO), Chapter XII, Management Areas Defined [except of WCO sections 12.1 to 12.499, and sections 12.900 to 12.903, re: all deer management units (DMUs) defined):

12.1 "Deer management unit 001 (Alcona county)" defined. Sec.[section] 12.1 "Deer management unit 001 (Alcona county)" means all of Alcona county, excluding that part defined in section 12.452 as deer management unit 452. History[of section legal definition]: Am.[amendment] 3, 1992, Eff.[effective] Sep 1, 1992; Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001; Am.[amendment] 14, 2001, Eff.[effective] Sep 15, 2001.

12.2 Repealed. Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 2.

12.3 "Deer management unit 003 (Allegan county)" defined. Sec.[section] 12.3 "Deer management unit 003 (Allegan county)" means all of Allegan county. History[of section legal definition]: Eff.[effective] Sep 1, 1995; Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001.

12.4 "Deer management unit 004 (Alpena county)" defined. Sec.[section] 12.4 "Deer management unit 004 (Alpena county)" means all of Alpena county, excluding that part defined in section 12.452 as deer management unit 452. History[of section legal definition]: Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001; Am.[amendment] 14, 2001, Eff.[effective] Sep 15, 2001.

12.5 "Deer management unit 005 (Antrim county)" defined. Sec.[section] 12.5 "Deer management unit 005 (Antrim county)" means all of Antrim county. History[of section legal definition]: Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001.

12.6 "Deer management unit 006 (Arenac county)" defined. Sec.[section] 12.6 "Deer management unit 006 (Arenac county)" means all of Arenac county. History[of section legal definition]: Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001; Am.[amendment] 14, 2001, Eff.[effective] Sep 15, 2001.

12.7 "Deer management unit 007 (Big Bay unit)" defined. Sec.[section] 12.7 "Deer management unit 007 (Big Bay unit)" means that area of Alger, Marquette, and Baraga counties bounded by a line beginning at the mouth of the Anna river (section 2, T46N R19W) near the city of Munising in Alger county, then upstream along the Anna river to highway M-28 (section 11, T46N R19W), southerly on highway M-28 to highway M-94 (section 11, T46N R19W), westerly on highway M-94 to the junction of highway M-94 and highway M-67 near the city of Chatham, southerly on highway M-67 to county road H-01 (Eben-Trenary road), northerly on county road H-01 to county road H-44 (Traunik-Kiva road), westerly on county road H-44 to King road, northwesterly on King road to highway US-41, northwesterly on highway US-41 into Marquette county to county road 456, westerly on county road 456 to highway M-35, westerly on highway M-35 to the middle branch of the Escanaba river, northwesterly along the middle branch of the Escanaba river to county road 478, westerly on county road 478 to county road 601, southwesterly on county road 601 to highway M-95, northerly on highway M-95 to highway US-41/M-28, westerly on highway US-41/M-28 into Baraga county to highway US-141/M-28 (section 6, T48N R33W), northerly on highway US-41 to highway M-38 in the city of Baraga, due east into the center of Keweenaw bay, easterly across Keweenaw bay, northerly and easterly along the Lake Superior shoreline of Baraga, Marquette, and Alger counties, including Grand island and offshore islands between eastern Keweenaw bay and Grand island, to the point of beginning. History[of section legal definition]: Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001; Am.[amendment] 14, 2001, Eff.[effective] Sep 15, 2001; Am.[amendment] 8, 2002, Eff.[effective] Jun 8, 2002.

12.8 "Deer management unit 008 (Barry county)" defined. Sec.[section] 12.8 "Deer management unit 008 (Barry county)" means all of Barry county. History[of section legal definition]: Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001.

12.8a Repealed. Am.[amendment] 7, 2016. Eff.[effective] May 12, 2016. Publishers note: The repealed section pertained to "Deer management unit 308 (Bellevue Unit; Barry – Calhoun – Eaton)" defined.

12.9 "Deer management unit 009 (Bay county)" defined. Sec.[section] 12.9 "Deer management unit 009 (Bay county)" means all of Bay county. History[of section legal definition]: Am.[amendment] 4, 1990, Eff.[effective] Sep 1, 1990; Am.[amendment] 3, 1992, Eff.[effective] Sep 1, 1992; Am.[amendment] 6, 1995, Eff.[effective] Sep 1, 1995; Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001.

12.10 "Deer management unit 010 (Benzie county)" defined. Sec.[section] 12.10 "Deer management unit 010 (Benzie county)" means all of Benzie county. History[of section legal definition]: Am.[amendment] 4, 1990, Eff.[effective] Sep 1, 1990; Am.[amendment] 6, 1999, Eff.[effective] Sep 1, 1999; Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001.

12.11 "Deer management unit 011 (Berrien county)" defined. Sec.[section] 12.11 "Deer management unit 011 (Berrien county)" means all of Berrien county. History[of section legal definition]: Eff.[effective] Mar 31, 1989; Am.[amendment] 13, 1989, Eff.[effective] Sep 1, 1989; Am.[amendment] 6, 1991, Eff.[effective] Sep 1, 1999; Am.[amendment] 6, 1990, Eff.[effective] Sep 1, 1999; Am.[amendment] 7, 2000, Eff.[effective] Sep 1, 2000; Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001.

12.11a "Deer management unit 311 (Keeler Unit; Berrien - Cass - Van Buren)" defined. Sec.[section] 12.11a "Deer management unit 311 (Keeler Unit; Berrien - Cass - Van Buren)" means all of Berrien, Cass, and Van Buren

counties. History[of section legal definition]: Am.[amendment] 8, 2013, Eff.[effective] June 14, 2013.

12.12 "Deer management unit 012 (Branch county)" defined. Sec.[section] 12.12 "Deer management unit 012 (Branch county)" means all of Branch county. History[of section legal definition]: Am.[amendment] 4, 1990, Eff.[effective] Sep 1, 1990; Am.[amendment] 6, 1995, Eff.[effective] Sep 1, 1995; Am.[amendment] 7, 2000, Eff.[effective] Sep 1, 2000; Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001.

12.12a "Deer management unit 312 (Sherwood Unit; Branch - Kalamazoo - St. Joseph)" defined. Sec.[section] 12.12a "Deer management unit 312 (Sherwood Unit; Branch - Kalamazoo - St. Joseph)" means all of Branch, Kalamazoo, and St. Joseph counties. History[of section legal definition]: Am.[amendment] 6, 2014, Eff.[effective] June 13, 2014.

12.13 "Deer management unit 013 (Calhoun county)" defined. Sec.[section] 12.13 "Deer management unit 013 (Calhoun county)" means all of Calhoun county. History[of section legal definition]: Eff.[effective] Sep 1, 1995; Am.[amendment] 6, 1999, Eff.[effective] Sep 1, 1999; Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001.

12.14 "Deer management unit 014 (Cass county)" defined. Sec.[section] 12.14 "Deer management unit 014 (Cass county)" means all of Cass county. History[of section legal definition]: Am.[amendment] 7, 2000, Eff.[effective] Sep 1, 2000; Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001.

12.15 "Deer management unit 015 (Charlevoix county)" defined. Sec.[section] 12.15 "Deer management unit 015 (Charlevoix county)" means all of Charlevoix county, excluding that part defined in section 12.15a as deer management unit 115. History[of section legal definition]: Eff.[effective] Mar 31, 1989; Am.[amendment] 13, 1989, Eff.[effective] Sep 1, 1989; Am.[amendment] 4, 1993, Eff.[effective] Sep 1, 1993; Am.[amendment] 4, 1994, Eff.[effective] Sep 1, 1994; Am.[amendment] 3, 1997, Eff.[effective] Jun 1, 1997; Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001.

12.15a "Deer management unit 115 (Beaver Island unit)" defined. Sec.[section] 12.15a "Deer management unit 115 (Beaver Island unit)" means Beaver island and Garden island in Lake Michigan, Charlevoix county. History[of section legal definition]: Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001.

12.16 "Deer management unit 016 (Cheboygan county)" defined. Sec.[section] 12.16 "Deer management unit 016 (Cheboygan county)" means all of Cheboygan county. History[of section legal definition]: Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001.

12.17 "Deer management unit 017 (Sault Ste. Marie unit)" defined. Sec.[section] 12.17 "Deer management unit 017 (Sault Ste. Marie unit)" means that area of Chippewa and Mackinac counties bounded by a line beginning at the Lake Huron shoreline at the mouth of the Pine river (section 10, T42N R03W), then northerly upstream along the Pine River to highway M-134, westerly on highway M-134 to highway I-75, northerly on highway I-75 to highway M-48, easterly on highway M-48 to where it combines with Mackinac trail, northerly on highway M-48/Mackinac trail towards the city of Rudyard to Tilson road (no turn, road name change), northerly on Tilson road to highway M-28, easterly on highway M-28 to highway M-221, northerly on highway M-28 to highway M-28 to highway M-221, northerly on highway M-221 through the city of Brimley to Lakeshore drive, easterly on Lakeshore drive to the Waiska river, northerly downstream along the Waiska river to Lake Superior due north to the international boundary, southeasterly along the international boundary to the De Tour passage waterway, southerly through the De Tour passage waterway and westerly along the Lake Huron shoreline, including Sugar island, Neebish island, and the Les Cheneaux islands, to the point of beginning, excluding that part defined in section 12.17a as deer management unit 117 and that part defined in section 12.49a as deer management unit 149. History[of section legal definition]: Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001.

12.17a Deer management unit 117 (Drummond island unit)" defined. Sec.[section] 12.17a "Deer management unit 117 (Drummond island unit)" means that area of Chippewa county east of the De Tour passage waterway, identified as the Drummond island group (areas east of R04E, which includes Drummond island, islands in Potagannissing bay including those eastward of Little Cass island, and islands east and south of Drummond island) in Lake Huron, bounded by the international boundary on the north and east. History[of section legal definition]: Eff.[effective] Mar 31, 1989; Am.[amendment] 13, 1989, Eff.[effective] Sep 1, 1989; Am.[amendment] 3, 1997, Eff.[effective] Jun 1, 1997; Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001.

12.18 "Deer management unit 018 (Clare county)" defined. Sec.[section] 12.18 "Deer management unit 018 (Clare county)" means all of Clare county. History[of section legal definition]: Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001; Am.[amendment] 14, 2001, Eff.[effective] Sep 15, 2001; Am.[amendment] 5, 2004, Eff.[effective] May 8, 2004.

12.18a Repealed. Am.[amendment] 5, 2004, Eff.[effective] May 8, 2004. Publisher's note: The repealed section pertained to "Deer management unit 118 (Dover Unit)" defined.

12.19 "Deer management unit 019 (Clinton county)" defined. Sec.[section] 12.19 "Deer management unit 019 (Clinton county)" means all of Clinton county except those lands defined in section 12.33a. History[of section legal definition]: Am.[amendment] 9, 2013, Eff.[effective] June 14, 2013; Am.[amendment] 9, 2015, Eff.[effective] Aug. 14, 2015; Am.[amendment] 7, 2016, Eff.[effective] May 13, 2016.

12.19a Repealed. Am.[amendment] 7, 2016. Eff.[effective] May 12, 2016. Publishers note: The repealed section pertained to "Deer management unit 319 (Laingsburg Unit; Clinton – Gratiot – Ingham – Shiawassee)" defined.

12.19b "Deer Management unit 419 (CWD Management Zone)" defined. Sec.[section] 12.19b "Deer management unit 419 (CWD Management Zone)" means all of Clinton, Eaton Ingham, Ionia, and Shiawassee counties except those lands defined in section 12.33a. History[of section legal definition]: Am.[amendment] 7, 2016, Eff.[effective] May 13, 2016.

12.20 "Deer management unit 020 (Crawford county)" defined. Sec.[section] 12.20 "Deer management unit 020 (Crawford county)" means all of Crawford county. History[of section legal definition]: Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001.

12.21 "Deer management unit 021 (Manistique unit)" defined. Sec.[section] 12.21 "Deer management unit 021 (Manistique unit)" means that area of Delta, Alger, and Schoolcraft counties bounded by a line beginning at the mouth of the Rapid river near the city of Rapid River in Delta county, then northerly upstream to highway US-2, westerly towards Rapid River on highway US-2 to highway US-41, northerly on highway US-41 into Alger county to highway US-41 and highway M-67 at the city of Trenary, northerly on highway M-67 to highway M-94 near the city of Chatham, easterly on highway M-94 to highway M-28 located south of the city of Munising in Alger county, easterly on highway M-28 past the city of Shingleton into Schoolcraft county to highway M-28 and highway M-77 at the city of Seney, southerly on highway M-77 to highway US-2, southwesterly on highway US-2 to county road 432 near the city of Gulliver, southeasterly on county road 432 to county road 431, southerly on county road 431 to the Lake Michigan shoreline at Seul Choix point, westerly along the Lake Michigan shoreline, including Summer and Little Summer islands, Poverty and St. Martin's islands, to the point of beginning. History[of section legal definition]: Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001; Am.[amendment] 5, 2003, Eff.[effective] May 10, 2003.

12.21a "Deer management unit 121 (Bay de Noc)" defined. Sec.[section] 12.21a "Deer management unit 121 (Bay de Noc)" means that area of Delta and Schoolcraft counties bounded by a line beginning at the mouth of the Rapid river near the city of Rapid River in Delta county, then northerly upstream along the Rapid river to highway US-2, easterly on highway US-2 into Schoolcraft county to Thompson creek in the city of Thompson, southeasterly downstream along Thompson creek to the Lake Michigan shoreline, westerly along the Lake Michigan shoreline, including Summer and Little Summer islands, Poverty and St. Martin's islands, to the point of beginning. History[of section legal definition]: Am.[amendment] 5, 2003, Eff.[effective] May 10, 2003.

12.22 "Deer management unit 022 (Crystal Falls unit)" defined. Sec.[section] 12.22 "Deer management unit 022 (Crystal Falls unit)" means that area of Iron and Dickinson counties bounded by a line beginning in Iron county at the junction of the Michigan-Wisconsin state line (about 51/2 miles northwest of the end of the Brule river, near center of section 33, T43N R37W) and USFS highway 16 (section 33, T43N R37W, also known as Iron county road 436 or federal forest highway 16), then northerly, crossing highway US-2, to USFS road 3270 (also known as USFS road 149, section 14, T44N R37W), easterly on USFS road 3270 to county road 657 (section 8, T44N R35W, also known as Gibbs city road when near Gibbs city), southeasterly on county road 657 through Gibbs city to Ponozzo road (also known as USFS road 137), northerly on Ponozzo road to the Paint river (just north of Gibbs city, in northwest corner of section 9, T44N R35W), easterly/downstream along the center of the Paint river to the confluence of the Hemlock river (section 8, T44N R34W), easterly/downstream along the center of the Hemlock river to the Chicago, Milwaukee, St. Paul, and Pacific railroad line in the center of the village of Amasa, southeasterly on said railroad line into Dickinson county to highway M-95 near the city of Channing (west side of section 8, T43N R30W), southerly on highway M-95 to county road 426 (also known as the Turner truck trail, in section 8, T43N R30W), easterly on county road 426 past the city of Ralph to the city of Alfred (junction of county road 426 and Northland truck trail, in section 35, T43N R27W), southwesterly on Northland truck trail (through section 26, T42N R27W, also known as Camp 3 road) to Swan Peterson road (section 32, T42N R27W), southerly on Swan Peterson road to highway M-69 (west side of section 8, T41N R27W), westerly on highway M-69 into the city of Foster city to county road 569 (also known as Waucedah road, in Foster city, or county road G-69, east side section 12, T41N R28W), southerly on county road 569 to highway US-2 at the city of Waucedah (south side of section 15, T39N R28W), westerly on highway US-2 to county road 573 near the city of Loretto (section 18, T39N R28W), northwesterly on county road 573 to Pine creek (section 3, T39N R29W), northwesterly along Pine creek

to the Wisconsin electric highline (northeast quarter of section 13, T40N R30W), northerly along the Wisconsin electric highline to Carney lake road (east side of section 32, T41N R29W), westerly on Carney lake road to Merriman truck trail (east side of section 25, T41N R30W), westerly on Merriman truck trail to highway M-95 (section 27, T41N R30W), northerly on highway M-95 to Johnson road (north side of section 22, T41N R30W), westerly on Johnson road to county road 607 (near southeast corner of section 16, T41N R30W), northwesterly on county road 607 to Peavy falls road (section 16, T41N R30W), westerly on Peavy falls road in Dickinson county to Michigamme falls road in Iron county (west side of section 7, T41N R30W, no turn, road name change only), westerly and southerly on Michigamme falls road to the Menominee river (northwest corner of section16, T41N R31W), westerly/upstream and northwesterly/upstream along the Menominee river to the confluence of the Menominee and Brule rivers

(section 16, T41N R31W), northwesterly/upstream along the Brule river (state line) into Iron county to the Michigan-Wisconsin state line in section 18, T42N R36W, northwesterly on the Michigan-Wisconsin state line to the point of beginning. History[of section legal definition]: Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001; Am.[amendment] 12, 2001, Eff.[effective] Sep 1, 2001; Am.[amendment] 5, 2003, Eff.[effective] May 10, 2003; Am.[amendment] 7, 2004, Eff.[effective] Jun 5, 2004; Am.[amendment] 19, 2005, Eff.[effective] Feb 10, 2006.

12.22a "Deer management unit 122 (Norway unit)" defined. Sec.[section] 12.22a "Deer management unit 122 (Norway unit)" means that area of Menominee, Dickinson, and Iron counties bounded by a line beginning in Menominee county at the junction of highway US-2 and the Soo Line railroad (southeast quarter of section 2, T38N R27W), then southwesterly to the Menominee river (northeast quarter of section 20, T38N R28W), upstream northwesterly along the Menominee river near the Dickinson county line into Iron county to the confluence of the Menominee and Brule rivers (section 16, T41N R31W), northwesterly and westerly on Michigamme Falls road in Iron county to Peavy Falls road in Dickinson county (west side of section 7, T41N R30W, no turn, road name change only), easterly on Peavy Falls road to county road 607 (section 16, T41N R30W), southeasterly on county road 607 to Johnson road (near southeast corner of section 16, T41N R30W), westerly on Johnson road to highway M-95 (north side of section 22, T41N R30W), southerly on highway M-95 to Merriman truck trail (section 27, T41N R30W), easterly on Merriman truck trail to Carney Lake road (east side of section 25, T41N R30W), southeasterly on Carney Lake road to the Wisconsin Electric highline (east side of section 32, T41N R29W), southerly on the Wisconsin Electric highline to Pine creek (northeast quarter of section 13, T40N R30W), southeasterly along Pine creek to county road 573 (section 3, T39N R29W), southeasterly on county road 573 to highway US-2 near the city of Loretto (section 18, T39N R28W), easterly on highway US-2 through the city of Waucedah (south side of section 15, T39N R28W) continuing easterly on highway US-2 to Beaver Pete's road (northeast corner of section 22, T39N R28W, which runs on the north edge of sections 23 and 24, T39N R28W), easterly on Beaver Pete's road into Menominee county to the R3 road (also known as Johnson road, the northsouth road in center of section 19, T39N R27W), southerly on R3 road to highway US- 2 (center of north edge of section 30, T39N R27W), easterly on highway US-2 to the point of beginning. History[of section legal definition]: Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001; Am.[amendment] 7, 2004, Eff.[effective] Jun 5, 2004.

12.23 "Deer management unit 023 (Eaton county)" defined. Sec.[section] 12.23 "Deer management unit 023 (Eaton county)" means all of Eaton county except those lands defined in section 12.33a. History[of section legal definition]: Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001; Am.[amendment] 7, 2016, Eff.[effective] May 13, 2016.

12.24 "Deer management unit 024 (Emmet county)" defined. Sec.[section] 12.24 "Deer management unit 024 (Emmet county)" means all of Emmet county. History[of section legal definition]: Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001.

12.25 "Deer management unit 025 (Genesee county)" defined. Sec.[section] 12.25 "Deer management unit 025 (Genesee county)" means all of Genesee county. History[of section legal definition]: Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001.

12.26 "Deer management unit 026 (Gladwin county)" defined. Sec.[section] 12.26 "Deer management unit 026 (Gladwin county)" means all of Gladwin county. History[of section legal definition]: Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001.

12.27 "Deer management unit 027 (Watersmeet unit)" defined. Sec.[section] 12.27 "Deer management unit 027 (Watersmeet unit)" means that area of Iron, Baraga, Houghton, Ontonagon, and Gogebic counties bounded by a line beginning in Iron county at the junction of the Michigan- Wisconsin state line (about 5½ miles northwest of the end of the Brule river, near center of section 33, T43N R37W) and USFS highway 16 (section 33, T43N R37W, also known as Iron county road 436 or federal forest highway 16), then northerly, crossing highway US-2, to USFS road 3270 (also known as USFS road 149, section 14, T44N R37W), easterly on USFS road 3270 to county road 657 (section 8, T44N R35W, also known as Gibbs city road when near Gibbs city), southeasterly on county road 657 through Gibbs city to Ponozzo road (center western side of section 9, T44N R35W, also known as USFS

2130, or the stretch of USFS road 137 to USFS road 144 to USFS road 145), northerly on Ponozzo road to the Perch river (section 23, T46N R35W), northerly along the Perch river into Baraga county to highway M-28 (section 34, T48N R35W), westerly on highway M-28 through Houghton county into Ontonagon county to highway M-64 (near Merriweather, section 11, T48N R43W), southerly on highway M-64 past the western shore of lake Gogebic into Gogebic county to highway US-2, westerly on highway US-2 into the city of Wakefield to the Sunday lake street (section 16, T47N R45W), southerly on Sunday lake street to county road 519 (also known as Chaney lake road south of Wakefield, section 28, T47N R45W), southerly on county road 519 to the Michigan-Wisconsin state line (Sec 15, T45N R45W, Gogebic county), southeasterly along the Michigan-Wisconsin state line into Iron county to the point of beginning. History[of section legal definition]: Am.[amendment] 5, 2003, Eff.[effective] May 10, 2003; Am.[amendment] 19, 2005, Eff.[effective] Feb 10, 2006.

12.27a "Deer management unit 127 (Ironwood unit)" defined. Sec.[section] 12.27a "Deer management unit 127 (Ironwood unit)" means that area of Gogebic county bounded by a line beginning at the junction of the Michigan-Wisconsin state line (county line) and county road 519 (also known as Chaney lake road, section 15, T45N R45W), then northerly along county road 519 to Sunday lake street (south of the city of Wakefield, section 28, T47N R45W), northerly along Sunday lake street to highway M-28 in Wakefield, northeasterly on highway M-28 to county road 519, northerly on county road 519 to south boundary road near the Lake Superior shoreline, easterly on south boundary road to the Presque Isle river, northerly/downstream along the center of the Presque Isle river to its mouth on the Lake Superior shoreline, northwesterly into Lake Superior to the county/state line (Michigan-Wisconsin), southwesterly then southeasterly along the county/state line to the point of beginning. History[of section legal definition]: Am.[amendment] 19, 2005, Eff.[effective] Feb 10, 2006.

12.28 "Deer management unit 028 (Grand Traverse county)" defined. Sec.[section] 12.28 "Deer management unit 028 (Grand Traverse county)" means all of Grand Traverse county. History[of section legal definition]: Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001.

12.29 "Deer management Unit 029 (Gratiot county)" defined. Sec.[section] 12.29 "Deer management unit 029 (Gratiot county)" means all of Gratiot county. History[of section legal definition]: Am.[amendment] 8, 2001, Eff.[effective] Jun. 1, 2001.

12.29a Repealed. Am.[amendment] 7, 2016. Eff.[effective] May 12, 2016. Publishers note: The repealed section pertained to "Deer management unit 329 (Stanton Unit; Gratiot – Mecosta – Montcalm)" defined.

12.30 "Deer management unit 030 (Hillsdale county)" defined. Sec.[section] 12.30 "Deer management unit 030 (Hillsdale county)" means all of Hillsdale county. History[of section legal definition]: Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001.

12.31"Deer management unit 031 (Nissula unit)" defined. Sec.[section] 12.31 "Deer management unit 131 (Nissula unit)" means that area of Ontonagon, Houghton, and Baraga counties bounded by a line beginning in Baraga county in the center of L'Anse bay (southern Keweenaw bay of Lake Superior), due west to the junction of highway US-41 and highway M-38 in the city of Baraga, south on

US-41 to highway US-141/M-28 (section 6, T48N R33W), southwesterly and westerly on US-141/M-28 into Houghton county to highway M-45 in Ontonagon county near the city of Bruce Crossing, northerly on M-45 to highway M-26, northeasterly on M-26 to highway M-38, southeasterly and easterly on M-38 into Houghton county to Pike lake road in the village of Nisula, north on Pike lake road to the west branch of the Otter river (Sec 19, T51N R36W, Houghton county), easterly/downstream along the west branch of the Otter river to the confluence of the west branch and the north branch of the Otter river (section 1, T51N R35W), northeasterly/upstream on the north branch of the Otter river to Tapiola road (section 16, T53N R34W, may be signed as Otter lake road on the curve), north on Tapiola road to Chassell-Painesdale road (section 33, T54N R34W), north then west on Chassell-Painesdale road to highway M-26 near village of Painesdale, northeasterly on M-26 into city of Houghton to the Portage canal (at the Houghton-Hancock lift bridge), easterly then southerly along the center of the Portage canal into center of Portage lake, southerly down center of Portage lake to the Portage river, southeasterly/downstream along the center of Portage river to Lake Superior, southerly along the Lake Superior shoreline into Baraga county to the Keweenaw bay, southerly along the center of Keweenaw bay into L'Anse bay (southern Keweenaw bay), including all offshore islands along the Lake Superior, Keweenaw bay and L'Anse bay shorelines, to the point of beginning. History[of section legal definition]: Am.[amendment] 19, 2005, Eff.[effective] Feb 10, 2006.

12.31a "Deer management unit 131 (Twin lakes unit)" defined. Sec.[section] 12.31a "Deer management unit 131 (Twin lakes unit)" means that area of Ontonagon and Houghton counties bounded by a line beginning in Ontonagon county at the mouth of the Ontonagon river in the city of Ontonagon, then southeasterly/upstream along the center of the Ontonagon river to highway M-64 in city of

Ontonagon, northeasterly on M-64 to highway M-38 in city of Ontonagon, southeasterly then easterly on M-38 into

Houghton county to Pike lake road in the village of Nisula, north on Pike lake road to the west branch of the Otter river (Sec 19, T51N R36W, Houghton county), easterly/downstream along the west branch of the Otter river to the confluence of the west branch and the north branch of the Otter river (section 1, T51N R35W), northeasterly/upstream on the north branch of the Otter river to Tapiola road (section 16, T53N R34W, may be signed as Otter lake road on the curve), north on Tapiola road to Chassell-Painesdale road (section 33, T54N R34W), north then west on Chassell-Painesdale road to highway M-26 near village of Painesdale, northeasterly on M-26 into city of Houghton to the Portage canal (at the Houghton-Hancock lift bridge), westerly then northerly along center of Portage canal to outlet into Lake Superior, southwesterly along the Lake Superior shoreline, including all offshore islands along the Lake Superior shoreline, into Ontonagon county to the point of beginning. History[of section legal definition]: Am.[amendment] 19, 2005, Eff.[effective] Feb 10, 2006.

12.32 "Deer management unit 032 (Huron county)" defined. Sec.[section] 12.32 "Deer management unit 032 (Huron county)" means all of Huron county. History[of section legal definition]: Eff.[effective] Mar 31, 1989; Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001.

12.32a "Deer management unit 332 (Greenleaf Unit; Huron - Sanilac - Tuscola)" defined. Sec.[section] 12.32a "Deer management unit 332 (Greenleaf Unit; Huron - Sanilac - Tuscola)" means all of Huron, Sanilac and Tuscola counties. History[of section legal definition]: Am.[amendment] 8, 2013, Eff.[effective] June 14, 2013.

12.33 "Deer management unit 033 (Ingham county)" defined. Sec.[section] 12.33 "Deer management unit 033 (Ingham county)" means all of Ingham county except those lands defined in section 12.33a. History[of section legal definition]: Eff.[effective] Mar 31, 1989; Am.[amendment] 13, 1989, Eff.[effective] Sep 1, 1989; Am.[amendment] 3 1997, Eff.[effective] Jun 1, 1997; Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001; Am.[amendment] Interim Order 1, 2015, Eff.[effective] May 26, 2015; Am.[amendment] 9, 2015, Eff.[effective] Aug. 14, 2015; Am.[amendment] 7, 2016, Eff.[effective] May 13, 2016.

12.33a "Deer management unit 333 (Core CWD area)" defined. Sec.[section] 12.33a "Deer management unit 333 (Core CWD area)" means those portions of Clinton, Eaton, Ingham, Ionia, and Shiawassee counties included in all of: Bath, Dewitt, Eagle, Olive, Riley, Watertown, Westphalia, and Victor townships in Clinton county; Delta, Oneida, and Roxand townships in Eaton county; Alaiedon, Delhi, Lansing, Meridian, Wheatfield and Williamstown townships in Ingham county; Danby and Portland townships in Ionia county; and Woodhull township in Shiawassee county. History[of section legal definition]: Am.[amendment] Interim Order 1, 2015, Eff.[effective] May 26, 2015; Am.[amendment] 9, 2015, Eff.[effective] Aug. 14, 2015; Am.[amendment] 7, 2016, Eff.[effective] May 13, 2016; Am.[amendment] 4, 2017, Eff.[effective] June 9, 2017.

12.34 "Deer management unit 034 (Ionia county)" defined. Sec.[section] 12.34 "Deer management unit 034 (Ionia county)" means all area of Ionia county except those lands defined in section 12.33a. History[of section legal definition]: Am.[amendment] 8 Eff.[effective] Jun 1, 2001; Am.[amendment] 14, 2001, Eff.[effective] Sep 15, 2001.

12.35 "Deer management unit 035 (losco county)" defined. Sec.[section] 12.35 "Deer management unit 035 (losco county)" means all of losco county. History[of section legal definition]: Am.[amendment] 8 Eff.[effective] June, 1, 2001:Am.[amendment] 14, 2001, Eff.[effective] Sept. 15, 2001; Am.[amendment] 4, 2017, Eff.[effective] June 9, 2017.

12.35a Repealed; Am.[amendment] 4, 2017, Eff.[effective] June 9, 2017. Publishers note: The repealed section pertained to "deer management unit 135 (Tawas unit) defined."

12.36 "Deer management unit 036 (Amasa-Michigamme unit)" defined. Sec.[section] 12.36 "Deer management unit 036 (Amasa-Michigamme unit)" means that area of Iron, Baraga, Marquette, and Dickinson counties bounded by a line beginning in Iron county in the village of Amasa, at the intersection of the Hemlock river to the Chicago, Milwaukee, St. Paul, and Pacific railroad line, southwesterly/upstream then westerly/upstream along the center of the Hemlock river to the confluence of the Paint river (section 8, T44N R34W), westerly/upstream along the center of the Paint river to Ponozzo road (center western side of section 9, T44N R35W, also known as USFS 2130, or the stretch of USFS road 137 to USFS road 144 to USFS road 145), northerly on Ponozzo road to the Perch river (section 23, T46N R35W), northerly along the Perch river into Baraga county to highway M-28 (section 34, T48N R35W), easterly on highway M-28 to highway US-41 (section 6, T48N R33W), easterly on highway US-41/M-28 into Marquette county to highway M-95 near the city of Champion (section 3, T47N R29W), southerly on highway M-95 into Dickinson county to Floodwood road (section 1, T44N R30W, near the Marquette-Dickinson county line), easterly on Floodwood road to Schwartz creek road (also known as McGregor creek road, section 31, T45N R28W, just over the Marquette-Dickinson county line into Marquette county), southeasterly on Schwartz creek road to Cleveland Homestead road (also known as Aimone road, section 10, T44N R28W), easterly on Cleveland Homestead road to county road 581 (section 25, T44N R27W), easterly on county road 581 to county road 438 in Marquette county, easterly on county road 438 to Ross grade road (section 28, T44N R26W), southerly on Ross

grade road to county road SH near the city of Ross, southwesterly on county road SH to county road SG, southerly on county road SG to county road 426 near the city of Northland, westerly on county road 426 into Dickinson county past the city of Ralph to highway M-95 near the city of Channing, northerly on highway M-95 to the Chicago, Milwaukee, St. Paul, and Pacific railroad line (section 8, T43N R30W), easterly on said railroad line into the village of Amasa to the point of beginning. History[of section legal definition]: Am.[amendment] 8 Eff.[effective] Jun 1, 2001; Am.[amendment] 8, 2002, Eff.[effective] Jun 8, 2002; Am.[amendment] 5, 2003, Eff.[effective] May 10, 2003; Am.[amendment] 19, 2005, Eff.[effective] Feb 10, 2006.

12.37 "Deer management unit 037 (Isabella county)" defined. Sec.[section] 12.37 "Deer management unit 037 (Isabella county)" means all of Isabella county. History[of section legal definition]: Am.[amendment] 8 Eff.[effective] Jun 1, 2001.

12.38 "Deer management unit 038 (Jackson county)" defined. Sec.[section] 12.38 "Deer management unit 038 (Jackson county)" means all of Jackson county. History[of section legal definition]: Am.[amendment] 8 Eff.[effective] Jun 1, 2001.

12.39 "Deer management unit 039 (Kalamazoo county)" defined. Sec.[section] 12.39 "Deer management unit 039 (Kalamazoo county)" means all of Kalamazoo county. History[of section legal definition]: Am.[amendment] 8 Eff.[effective] Jun 1, 2001.

12.39a Repealed. Am.[amendment] 6, 2014, Eff.[effective] June 13, 2014. History[of section legal definition]: Am.[amendment] 9, 2013, Eff.[effective] June 14, 2013; Am.[amendment] 6, 2014, Eff.[effective] June 13, 2014.

12.40 "Deer management unit 040 (Kalkaska county)" defined. Sec.[section] 12.40 "Deer management unit 040 (Kalkaska county)" means all of Kalkaska county. History[of section legal definition]: Eff.[effective] Mar 31, 1989; Am.[amendment] 13, 1989, Eff.[effective] Sep 1, 1989; Am.[amendment] 3, 1997, Eff.[effective] Jun 1, 1997; Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001.

12.41 "Deer management unit 041 (Kent county)" defined. Sec.[section] 12.41 "Deer management unit 041 (Kent county)" means all of Kent county. History[of section legal definition]: Am.[amendment] 3, 1997, Eff.[effective] Jun 1, 1997; Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001; Am.[amendment] Interim Order 2, 2008, Eff.[effective] Aug 29, 2008; Am.[amendment] Interim Order 5, 2008, Eff.[effective] Sep 15,2008.

12.41a "Deer management unit 341 (Sparta Unit; Kent - Muskegon south - Ottawa)" defined. Sec.[section] 12.41a "Deer management unit 341 (Sparta Unit; Kent - Muskegon south - Ottawa)" means all of Kent and Ottawa counties, and those portions of Muskegon county within Zone 3 (south of the Zone 2-3 divider line, defined in Section 1.4). History[of section legal definition]: Am.[amendment] 8, 2013, Eff.[effective] June 14, 2013.

12.42 "Deer management unit 042 (Keweenaw unit)" defined. Sec.[section] 12.42 "Deer management unit 042 (Keweenaw unit)" means that area of Houghton and Keweenaw counties (known as the Keweenaw peninsula) that lies north and east of the Keweenaw waterway, also known as the Portage Canal, in northern Houghton county. History[of section legal definition]: Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001.

12.43 "Deer management unit 043 (Lake county)" defined. Sec.[section] 12.43 "Deer management unit 043 (Lake county)" means all of Lake county. History[of section legal definition]: Eff.[effective] Mar 31, 1989; Am.[amendment] 13, 1989, Eff.[effective] Sep 1, 1989; Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001.

12.44 "Deer management unit 044 (Lapeer county)" defined. Sec.[section] 12.44 "Deer management unit 044 (Lapeer county)" means all of Lapeer county. History[of section legal definition]: Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001.

12.45 "Deer management unit 045 (Leelanau county)" defined. Sec.[section] 12.45 "Deer management unit 045 (Leelanau county)" means all of Leelanau county, excluding that part defined in section 12.45a as deer management unit 145 and section 12.45b as deer management unit 245 in Lake Michigan. History[of section legal definition]: Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001.

12.45a "Deer management unit 145 (north Manitou island unit)" defined. Sec.[section] 12.45a "Deer management unit 145 (north Manitou island unit)" means all of north Manitou island in Lake Michigan, Leelanau county. History[of section legal definition]: Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001.

12.45b "Deer management unit 245 (south Fox island unit)" defined. Sec.[section] 12.45b "Deer management unit 245 (south Fox island unit)" means all of south Fox island in Lake Michigan, Leelanau county. History[of section legal definition]: Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001.

12.46 "Deer management unit 046 (Lenawee county)" defined. Sec.[section] 12.46 "Deer management unit 046 (Lenawee county)" means all of Lenawee county. History[of section legal definition]: Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001.

12.47 "Deer management unit 047 (Livingston county)" defined. Sec.[section] 12.47 "Deer management unit 047 (Livingston county)" means all of Livingston county. History[of section legal definition]: Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001.

12.48 "Deer management unit 048 (Newberry unit)" defined. Sec.[section] 12.48 "Deer management unit 048 (Newberry unit)" means that area of Chippewa, Luce, Schoolcraft, and Alger counties bounded by a line beginning at the international boundary due north of the mouth of the Waiska river in Lake Superior, near the city of Brimley in Chippewa county, then southerly upstream along the Waiska river to Lakeshore drive, westerly on Lakeshore drive to highway M-221, southerly on highway M-221 to highway M-28, westerly on highway M-28 into Luce county and passing south of the city of Newberry to highway M-117, southerly on highway M-117 into Mackinac county to Sandtown road, westerly on Sandtown road to Curtis road in the city of Curtis, westerly on Curtis road (also known as H-42) into Schoolcraft county, westerly on county road 436 (no turn, road name change) to highway M-77, northerly on highway M-28, westerly on M- 28 into Alger county to the Anna river (section 11, T46N R19W) in the city of Munising, northerly downstream along the Anna river into Lake Superior, northeasterly to the international boundary, easterly to the point of beginning. History[of section legal definition]: Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001; Am.[amendment] 5, 2003, Eff.[effective] May 10, 2003.

12.49 "Deer management unit 349 (Engadine unit)" defined. Sec.[section] 12.49 "Deer management unit 349 (Engadine unit)" means that area of Schoolcraft, Luce, Chippewa, and Mackinac counties bounded by a line beginning in Lake Michigan due south of the Lake Michigan shoreline at Seul Choix point in Schoolcraft county, then northerly from said shoreline to county road 431, northerly on county road 431 to county road 432, northwesterly on county road 432 to highway US-2 near the city of Gulliver, northeasterly on highway US-2 to highway M-77, northerly on highway M-77 to county road 436 (also known as H-42 or Curtis road), easterly on county road 436 into Mackinac county, easterly on Curtis road to Sandtown road in the town of Curtis, easterly on Sandtown road to highway M-117, northerly on M-117 to highway M-28, easterly on M-28 through Luce county to Borgstrom road into Mackinac county and passing the west side of town of Garnet, continuing southerly on Borgstrom road to highway US-2, continue due south from intersection of Borgstrom road and US-2 to the lakeshore of Lake Michigan (short distance along the east-side line of section 29, T43N R8W), due south into Lake Michigan then running along the Lake

Michigan shoreline including all offshore islands in those counties to the point of beginning. History[of section legal definition]: Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001; Am.[amendment] 5, 2003, Eff.[effective] May 10, 2003; Am.[amendment] 6, 2009, Eff.[effective] May 7, 2009.

12.49a "Deer management unit 149 (Bois Blanc unit)" defined. Sec.[section] 12.49a "Deer management unit 149 (Bois Blanc unit)" means all of Bois Blanc island and Round island in Lake Huron, Mackinac county. History[of section legal definition]: Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001.

12.49b "Deer management unit 249 (Trout lake unit)" defined. Sec.[section] 12.49b "Deer management unit 249 (Trout lake unit)" means that area of Luce, Chippewa, and Mackinac counties bounded by a line beginning in Lake Michigan due south from intersection of Borgstrom road and US-2 just north of the Lake Michigan shoreline, then due north (short distance along the east-side line of section 29, T43N R8W) to said intersection northerly along Borgstrom road to highway M-28 in Luce county, easterly on M-28 into Chippewa county to Tilson road (east side of section 19, T46N R02W) located southwest of town of Brimley, southerly on Tilson road to the combined highway M-48/Mackinac trail (no turn, road name change) at the town of Rudyard, southerly on highway M-48/Mackinac trail to the split of highway M-48 and Mackinac trail, easterly on highway M-48 to highway I-75, southerly on I-75 into Mackinac county to highway M-134, easterly on M-134 to the Pine river, downstream along the center of the Pine river to its mouth in Lake Huron (section 10, T42N R03W), due south into Lake Huron then southerly in Lake Huron along the shore, including any offshore islands in those counties south of the defined shoreline, to the center of the straits of Mackinac into Lake Michigan, then northerly and easterly along the shore, including any offshore islands south of the defined shoreline, to the point of beginning while excluding those portions defined in section 12.49a as deer management unit 149. History[of section legal definition]: Am.[amendment] 6, 2009, Eff.[effective] May 7, 2009.

12.50 "Deer management unit 050 (Macomb county)" defined. Sec.[section] 12.50 "Deer management unit 050 (Macomb county)" means all of Macomb county. History[of section legal definition]: Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001; Am.[amendment] 14, 2001, Eff.[effective] Sep 15, 2001.

12.51 "Deer management unit 051 (Manistee county)" defined. Sec.[section] 12.51 "Deer management unit 051

(Manistee county)" means all of Manistee county. History[of section legal definition]: Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001.

12.52 Repealed. Am.[amendment] 8, 2002, Eff.[effective] Jun 8, 2002. Publisher's note: The repealed sections pertained to Deer Management Unit 052 (Ishpeming unit).

12.52a "Deer management unit 152 (Gwinn unit)" defined. Sec.[section] 12.52a "Deer management unit 152 (Gwinn unit)" means that area of Marquette and Dickinson counties bounded by a line beginning at the junction of county road 426 and county road SI in Watson (Marquette county), then northeasterly on county road SI to the northwest corner of section 6, T42N R24W, easterly on the north section lines of sections 6 and 5, T42N R24W, to the Escanaba river, northwesterly along the Escanaba river to the middle branch of the Escanaba river, northwesterly on county road 601 through the city of Republic to highway M-95, southerly on highway M-95 into Dickinson county to Floodwood road, easterly on Floodwood road to McGregor creek road (section 10, T44N R28W), southeasterly on McGregor creek road to Cleveland homestead road (section 25, T44N R28W), easterly on Cleveland homestead road to county road 581, northerly and easterly on county road 581 to county road 438 in Marquette county, easterly on county road 581 to county road 438 in Marquette county, easterly on county road SH to county road SG, southerly on Ross grade road to county road SH, southwesterly on county road 426 to the point of beginning. History[of section legal definition]: Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001; Am.[amendment] 8, 2002, Eff.[effective] Jun 8, 2002.

12.52b "Deer management unit 252 (Rock unit)" defined. Sec.[section] 12.52b "Deer management unit 252 (Rock unit)" means that area of Marquette, Delta, and Alger counties bounded by a line beginning at the junction of highway US-41 and county road 432, then southwesterly on county road 432 to county road 529, westerly on county road 529 to county road H-59, westerly on county road H-59 to county road DA in Marquette county, westerly on county road DA to the north line of section 5, T42N R24W, to the Escanaba river, northerly along the Escanaba river to highway M-35, easterly on highway M-35 to county road 456, easterly on county road 456 to highway US-41, southeasterly on highway US-41 to King road, southeasterly on King road to county road H-44 (Traunik-Kiva road), easterly on county road H-44 to county road H-01 (Eben-Trenary road), southerly on county road H-01 to highway M-67, westerly on highway M-67 to highway US-41, southerly on highway US-41 to the point of beginning. History[of section legal definition]: Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001.

12.53 "Deer management unit 053 (Mason county)" defined. Sec.[section] 12.53 "Deer management unit 053 (Mason county)" means all of Mason county. History[of section legal definition]: Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001.

12.54 "Deer management unit 054 (Mecosta county)" defined. Sec.[section] 12.54 "Deer management unit 054 (Mecosta county)" means all of Mecosta county. History[of section legal definition]: Eff.[effective] Mar 31, 1989; Am.[amendment] 4, 1990, Eff.[effective] Sep 1, 1990; Am.[amendment] 6, 1998, Eff.[effective] May 15, 1998; Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001.

12.54a "Deer management unit 354 (Lakeview unit; Mecosta - Montcalm)" defined. Sec.[section] 12.54a "Deer management unit 354 (Lakeview unit; Mecosta - Montcalm)" means all of Mecosta and Montcalm counties except those lands defined in section 12.54b. History[of section legal definition]: Am.[amendment] 8, 2013, Eff.[effective] June 14, 2013; Am.[amendment] 4, 2017, Eff.[effective] June 9, 2017.

12.54b "Deer management unit 359 (Core CWD area)" defined. Sec.[section] 12.54b "Core CWD Area" means those portions of Mecosta and Montcalm counties included in all of: Austin, Aetna, Deerfield, Hinton, Mecosta, and Morton townships in Mecosta county and Cato, Reynolds, and Winfield townships in Montcalm county. History[of section legal definition]: Am.[amendment] 4, 2017, Eff.[effective] June 9, 2017.

12.55 "Deer management unit 055 (Menominee unit)" defined. Sec.[section] 12.55 "Deer management unit 055 (Menominee unit)" means that area of Menominee and Delta counties bounded by a line beginning near the city of Faithorn in Menominee county on the Michigan-Wisconsin state line at the junction of the Menominee river and the Wisconsin Central LTD railroad (previously known as the Soo Line railroad, in section 20, T38N R28W), easterly on the railroad past highway US-2 near the city of Hermansville into Delta county to county road 535 (northeast corner of section 30, T39N R24W) near the city of Schaffer, northerly on county road 535 to county road 414 in the city of Schaffer, northerly and easterly on county road 414 to county road 525, northerly on county road 525 to county road 416 in the city of Flatrock (northeast corner of section 31, T40N R23W, no direction change), northerly on county road 416 to county road 426 near the city of Cornell, southeasterly on county road 426 to highway US-2/US-41, northerly on highway US-2/US-41 to the Escanaba river, southeasterly along the Escanaba river to the Little Bay de Noc shoreline, southerly along the Little Bay de Noc shoreline which becomes the Green bay shoreline of Lake Michigan, southwesterly along the Green bay shoreline to the mouth of the Menominee river

south of the city of Menominee, including any islands adjacent to the shoreline between the Escanaba and Menominee rivers, upstream along the Menominee river, which constitutes the Michigan-Wisconsin state line, to the point of beginning. History[of section legal definition]: Eff.[effective] Mar 31, 1989; Am.[amendment] 13, 1989, Eff.[effective] Sep 1, 1989; Am.[amendment] 12, 1996, Eff.[effective] Sep 1, 1996; Am.[amendment] 3, 1997, Eff.[effective] Jun 1, 1997; Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001; Am.[amendment] 12, 2001, Eff.[effective] Sep 1, 2001; Am.[amendment] 8, 2002, Eff.[effective] Jun 8, 2002; Am.[amendment] 5, 2003, Eff.[effective] May 10, 2003

12.55a "Deer management unit 155 (Gladstone unit)" defined. Sec.[section] 12.55a "Deer management unit 155 (Gladstone unit)" means that area of Delta and Marquette counties bounded by a line beginning at the mouth of the Rapid river near the city of Rapid River in Delta county, then northerly upstream to highway US-2, westerly on highway US-2 toward the city of Rapid River to highway US-41, northerly on highway US-41 to county road 432, westerly on county road 432 to county road 529 at the city of Rock, westerly on county road 529 (H-59) into Marquette county to west Maple Ridge road (also known as county road DA), westerly on west Maple Ridge road to the north section line of sections 5 and 6, T42N R24W, westerly on the north section line of sections 5 and 6, T42N R24W, to county road SI, southwesterly on county road SI to county road 426, southeasterly on county road 426 into Delta county to highway US-2/US-41, northerly on highway US-2/US-41 to the Escanaba river, southeasterly down the center of the Escanaba river into Lake Michigan, northeasterly along the Lake Michigan shoreline, including any Delta county islands between the Escanaba and Rapid river mouths, to the point of beginning. History[of section legal definition]: Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001; Am.[amendment] 8, 2002, Eff.[effective] Jun 8, 2002.

12.55b "Deer management unit 255 (LaBranche unit)" defined. Sec.[section] 12.55b "Deer management unit 255 (LaBranche unit)" means that area of Menominee, Delta, Marquette, and Dickinson counties bounded by a line beginning near the city of Hermansville in Menominee county at the junction of highway US-2 and the Wisconsin Central LTD railroad (previously known as the Soo Line railroad), then easterly along the railroad into Delta county to county road 535 (northeast corner of section 30, T39N R24W) near the city of Schaffer, northerly on county road 535 to county road 414 in the city of Schaffer, northerly and easterly on county road 414 to county road 525, northerly on county road 525 to county road 416 in the city of Flatrock (northeast corner of section 31, T40N R23W, no direction change), northerly on county road 416 to county road 426 near the city of Cornell, northwesterly on county road 426 into Marquette county through the city of Arnold, continue westerly on county road 426 into Dickinson county to Northland truck trail in the city of Alfred (section 35, T43N R27W), southwesterly on Northland truck trail (through section 28, T42N R27W, also known as Camp 3 road) to Swan Peterson road (section 32, T42N R27W), southerly on Swan Peterson road to highway M-69, westerly on highway M-69 into the city of Foster city to county road 569 (also known as Waucedah road, in Foster city, or county road G-69), southerly on county road 569 to Beaver Pete's road whichruns on the north edge of sections 23 and 24, T39N R28W, easterly on Beaver Pete's road into Menominee county to the north-south road in section 19, T39N R27W, southerly on that road to highway US-2, southeasterly on highway US-2 to the point of beginning. History[of section legal definition]: Am.[amendment] 5, 2003, Eff.[effective] May 10, 2003

12.56 "Deer management unit 056 (Midland county)" defined. Sec.[section] 12.56 "Deer management unit 056 (Midland county)" means all of Midland county. History[of section legal definition]: Eff.[effective] Mar 31, 1989; Am.[amendment] 3, 1997, Eff.[effective] Jun 1, 1997; Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001.

12.57 "Deer management unit 057 (Missaukee county)" defined. Sec.[section] 12.57 "Deer management unit 057 (Missaukee county)" means all of Missaukee county. History[of section legal definition]: Eff.[effective] Mar 31, 1989; Am.[amendment] 13, 1989, Eff.[effective] Sep 1, 1989; Am.[amendment] 3, 1992, Eff.[effective] Sep 1, 1992; Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001.

12.58 "Deer management unit 058 (Monroe county)" defined. Sec.[section] 12.58 "Deer management unit 058 (Monroe county)" means all of Monroe county. History[of section legal definition]: Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001.

12.59 "Deer management unit 059 (Montcalm county)" defined. Sec.[section] 12.59 "Deer management unit 059 (Montcalm county)" means all of Montcalm county. History[of section legal definition]: Eff.[effective] Mar 31, 1989; Am.[amendment] 13, 1989, Eff.[effective] Sep 1, 1989; Am.[amendment] 6, 1991, Eff.[effective] Sep 1, 1991; Am.[amendment] 3, 1992, Eff.[effective] Sep 1, 1992; Am.[amendment] 4, 1993, Eff.[effective] Sep 1, 1993; Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001.

12.60 "Deer management unit 060 (Montmorency county)" defined. Sec.[section] 12.60 "Deer management unit 060 (Montmorency county)" means all of Montmorency county, excluding that part defined in section 12.452 as deer management unit 452. History[of section legal definition]: Eff.[effective] Mar 31, 1989; Am.[amendment] 13, 1989, Eff.[effective] Sep 1, 1989; Am.[amendment] 6, 1991, Eff.[effective] Sep 1, 1991; Am.[amendment] 3, 1992,

Eff.[effective] Sep 1, 1992; Am.[amendment] 4, 1993, Eff.[effective] Sep 1, 1993; Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001; Am.[amendment] 14, 2001, Eff.[effective] Sep 15, 2001.

12.61 "Deer management unit 061 (Muskegon county)" defined. Sec.[section] 12.61 "Deer management unit 061 (Muskegon county)" means all of Muskegon county. History[of section legal definition]: Eff.[effective] Mar 31, 1989; Am.[amendment] 13, 1989, Eff.[effective] Sep 1, 1989; Am.[amendment] 4, 1993, Eff.[effective] Sep 1, 1996; Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001.

12.61a "Deer management unit 361 (Fremont Unit; Muskegon north - Newaygo - Oceana)" defined. Sec.[section] 12.61a "Deer management unit 361 (Fremont Unit; Muskegon north - Newaygo - Oceana)" means all of Oceana and Newaygo counties, and those portions of Muskegon county within Zone 2 (north of the Zone 2-3 divider line, defined in Section 1.4). History[of section legal definition]: Am.[amendment] 8, 2013, Eff.[effective] Jun 14, 2013.

12.62 "Deer management unit 162 (south Newaygo county)" defined. Sec.[section] 12.62 "Deer management unit 162 (south Newaygo county)" means all of Newaygo county south of highway M-20. History[of section legal definition]: Am.[amendment] 13, 1989, Eff.[effective] Sep 1, 1989; Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001; Am.[amendment] 6, 2009, Eff.[effective] May 7, 2009.

12.62a "Deer management unit 262 (north Newaygo county)" defined. Sec.[section] 12.62a "Deer management unit 262 (north Newaygo county)" means all of Newaygo county north of highway M-20. History[of section legal definition]: Am.[amendment] 6, 2009, Eff.[effective] May 7, 2009.

12.62b "Deer management unit 062 (Newaygo county)" defined. Sec.[section] 12.62b. "Deer management unit 062 (Newaygo county)" means all of Newaygo county. History[of section legal definition]: Am.[amendment] 9, 2018, Eff.[effective] June 15, 2018.

12.63 "Deer management unit 063 (Oakland county)" defined. Sec.[section] 12.63 "Deer management unit 063 (Oakland county)" means all of Oakland county. History[of section legal definition]: Eff.[effective] Mar 31, 1989; Am.[amendment] 13, 1989, Eff.[effective] Sep 1, 1989; Am.[amendment] 12, 1996, Eff.[effective] Sep 1, 1996; Am, 3, 1997, Eff.[effective] Jun 1, 1997; Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001.

12.64 "Deer management unit 064 (Oceana county)" defined. Sec.[section] 12.64 "Deer management unit 064 (Oceana county)" means all of Oceana county. History[of section legal definition]: Eff.[effective] Mar 31, 1989; Am.[amendment] 4, 1990, Eff.[effective] Sep 1, 1990; Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001.

12.65 "Deer management unit 065 (Ogemaw county)" defined. Sec.[section] 12.65 "Deer management unit 065 (Ogemaw county)" means all of Ogemaw county. History[of section legal definition]: Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001.

12.66 "Deer management unit 066 (Ontonagon unit)" defined. Sec.[section] 12.66 "Deer management unit 066 (Ontonagon unit)" means that area of Ontonagon and Gogebic counties bounded by a line beginning in Ontonagon county at the mouth of the Ontonagon river in the city of Ontonagon, then southeasterly/upstream along the center of the Ontonagon river to highway M-64 in city of Ontonagon, northeasterly on M-64 to highway M-38 in city of Ontonagon, southeasterly on M-38 to highway M-26 near village of Greenland, southwesterly on M-26 to highway M-45, southerly on highway M-45 to highway M-28 near the city of Bruce Crossing, westerly on highway M-28 to highway M-64 (near Merriweather, section 11, T48N R43W), southerly on highway M-64 into Gogebic county past the western shore of lake Gogebic to highway US-2, westerly on highway US-2 into city of Wakefield to county road 519, northerly on county road 519 to South boundary road near the Lake Superior shoreline, easterly on South boundary road to the Presque Isle river, northerly/ downstream along the center of the Presque Isle river to its mouth on the Lake Superior shoreline, into Ontonagon county to the point of beginning. History[of section legal definition]: Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001; Am.[amendment] 19, 2005, Eff.[effective] Feb 10, 2006.

12.67 "Deer management unit 067 (Osceola county)" defined. Sec.[section] 12.67 "Deer management unit 067 (Osceola county)" means all of Osceola county. History[of section legal definition]: Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001.

12.68 "Deer management unit 068 (Oscoda county)" defined. Sec.[section] 12.68 "Deer management unit 068 (Oscoda county)" means all of Oscoda county, excluding that part defined in section 12.452 as deer management unit 452. History[of section legal definition]: Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001; Am.[amendment] 14, 2001, Eff.[effective] Sep 15, 2001.

12.69 "Deer management unit 069 (Otsego county)" defined. Sec.[section] 12.69 "Deer management unit 069 (Otsego county)" means all of Otsego county. History[of section legal definition]: Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001.

12.70 "Deer management unit 070 (Ottawa county)" defined. Sec.[section] 12.70 "Deer management unit 070 (Ottawa county)" means all of Ottawa county. History[of section legal definition]: Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001.

12.71 "Deer management unit 071 (Presque Isle county)" defined. Sec.[section] 12.71 "Deer management unit 071 (Presque Isle county)" means all of Presque county. History[of section legal definition]: Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001.

12.72 "Deer management unit 072 (Roscommon county)" defined. Sec.[section] 12.72 "Deer management unit 072 (Roscommon county)" means all of Roscommon county. History[of section legal definition]: Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001.

12.73 "Deer management unit 073 (Saginaw county)" defined. Sec.[section] 12.73 "Deer management unit 073 (Saginaw county)" means all of Saginaw county, excluding that part defined in section 12.73b as deer management unit 273. History[of section legal definition]: Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001; Am.[amendment] 8, 2013, Eff.[effective] Jun 14, 2013.

12.73a Repealed. Am.[amendment] 8, 2013, Eff.[effective] June 14, 2013. Publisher's note: The repealed section pertained to deer management unit 173. History[of section legal definition]: Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001; Am.[amendment] 8, 2013, Eff.[effective] Jun 14, 2013.

12.73b "Deer management unit 273 (Shiawassee deer management)" defined. Sec.[section] 12.73b "Deer management unit 273 (Shiawassee deer management)" means the posted lands of the Shiawassee river state game area and the Shiawassee national wildlife refuge. History[of section legal definition]: Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001.

12.74 "Deer management unit 074 (St. Clair county)" defined. Sec.[section] 12.74 "Deer management unit 074 (St. Clair county)" means all of St. Clair county bounded by a line beginning at the split of the north and south channels of the St. Clair river, then south-southwesterly along the south channel of the St. Clair river to Lake St. Clair, northwesterly to the end of the middle channel of the St. Clair river,

northwesterly to the southwest end of Strawberry island, north-northeasterly along the far west points of Strawberry, Middle, and North islands to the north channel of the St. Clair river, easterly along the north channel of the St. Clair river to the point of beginning, excluding that part defined in section 12.74a as deer management unit 174. History[of section legal definition]: Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001.

12.74a "Deer management unit 174 (St. Clair flats)" defined. Sec.[section] 12.74a "Deer management unit 174 (St. Clair flats)" means that area of St Clair county bounded by a line beginning at the split of the north and south channels of the St. Clair river, then south-southwesterly along the south channel of the St. Clair river to Lake St. Clair, northwesterly to the end of the middle channel of the St. Clair river,

northwesterly to the southwest end of Strawberry island, north-northeasterly along the far west points of Strawberry, Middle, and North islands to the north channel of the St. Clair river, easterly along the north channel of the St. Clair river to the point of beginning. History[of section legal definition]: Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001.

12.75 "Deer management unit 075 (St. Joseph county)" defined. Sec.[section] 12.75 "Deer management unit 075 (St. Joseph county)" means all of St. Joseph county. History[of section legal definition]: Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001.

12.76 "Deer management unit 076 (Sanilac county)" defined. Sec.[section] 12.76 "Deer management unit 076 (Sanilac county)" means all of Sanilac county. History[of section legal definition]: Eff.[effective] Mar 31, 1989; Am.[amendment] 4, 1993, Eff.[effective] Sep 1, 1993; Am.[amendment] 6, 1998, Eff.[effective] May 15, 1998; Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001.

12.77 Repealed. Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001. Publisher's note: The repealed section pertained to simplifying deer management unit boundaries.

12.78 "Deer management unit 078 (Shiawassee county)" defined. Sec.[section] 12.78 "Deer management unit 078 (Shiawassee county)" means all of Shiawassee county except those lands defined in section 12.33a. History[of section legal definition]: Eff.[effective] Mar 31, 1989; Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001;

Am.[amendment] Interim Order 1, 2015, Eff.[effective] May 26, 2015; Am.[amendment] 9, 2015, Eff.[effective] Aug. 14, 2015; Am.[amendment] 7, 2016, Eff.[effective] May 13, 2016.

12.79 "Deer management unit 079 (Tuscola county)" defined. Sec.[section] 12.79 "Deer management unit 079 (Tuscola county)" means all of Tuscola county. History[of section legal definition]: Eff.[effective] Mar 31, 1989; Am.[amendment] 13, 1989, Eff.[effective] Sep 1, 1989; Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001.

12.80 "Deer management unit 080 (Van Buren county)" defined. Sec.[section] 12.80 "Deer management unit 080 (Van Buren county)" means all of Van Buren county. History[of section legal definition]: Eff.[effective] Mar 31, 1989; Am.[amendment] 13, 1989, Eff.[effective] Sep 1, 1989; Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001.

12.81 "Deer management unit 081 (Washtenaw county)" defined. Sec.[section] 12.81 "Deer management unit 081 (Washtenaw county)" means all of Washtenaw county. History[of section legal definition]: Eff.[effective] Mar 31, 1989; Am.[amendment] 13, 1989, Eff.[effective] Sep 1, 1989; Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001.

12.82 "Deer management unit 082 (Wayne county)" defined. Sec.[section] 12.82 "Deer management unit 082 (Wayne county)" means all of Wayne county. History[of section legal definition]: Eff.[effective] Mar 31, 1989; Am.[amendment] 13, 1989, Eff.[effective] Sep 1, 1989; Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001.

12.83 "Deer management unit 083 (Wexford county)" defined. Sec.[section] 12.83 "Deer management unit 083 (Wexford county)" means all of Wexford county. History[of section legal definition]: Eff.[effective] Mar 31, 1989; Am.[amendment] 13, 1989, Eff.[effective] Sep 1, 1989; Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001.

12.84 Repealed. Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 84.

12.85 Repealed. Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 85.

12.86 Repealed. Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 86.

12.87 Repealed. Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 87.

12.88 Repealed. Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 88.

12.89 Repealed. Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 89.

12.90 Repealed. Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 90.

12.91 Repealed. Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 91.

12.92 Repealed. Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 92.

12.93 Repealed. Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 93.

12.94 Repealed. Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 94.

12.95 Repealed. Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 95.

12.96 Repealed. Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 96.

12.97 Repealed. Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001. Publisher's note: The repealed section

pertained to deer management unit 97.

12.98 Repealed. Am.[amendment] 6, 1998, Eff.[effective] May 15, 1998. Publisher's note: The repealed section pertained to deer management unit 98.

12.99 Repealed. Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 99.

12.100 Repealed. Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 100.

12.101 Repealed. Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 101.

12.102 Repealed. Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 102.

12.103 Repealed. Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 103.

12.104 Repealed. Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 104.

12.105 Repealed. Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 105.

12.106 Repealed. Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 106.

12.107 Repealed. Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 107.

12.108 Repealed. Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 108.

12.109 Repealed. Am.[amendment] 4, 1990, Eff.[effective] Sep 1, 1990. Publisher's note: The repealed section pertained to deer management unit 109.

12.110 Repealed. Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 110.

12.111 Repealed. Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 111.

12.112 Repealed. Am.[amendment] 6, 1995, Eff.[effective] Sep 1, 1995. Publisher's note: The repealed section pertained to deer management unit 112.

12.113 Repealed. Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 113.

12.114 Repealed. Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 114.

12.115 Repealed. Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 115.

12.116 Repealed. Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 116.

12.117 Repealed. Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 117.

12.118 Repealed. Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001. Publisher's note: The repealed section

pertained to deer management unit 118.

12.119 Repealed. Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 119.

12.120 Repealed. Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 120.

12.121 Repealed. Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 121.

12.122 Repealed. Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 122.

12.123 Repealed. Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 123.

12.124 Repealed. Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 124.

12.125 Repealed. Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 125.

12.126 Repealed. Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 126.

12.127 Repealed. Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 127.

12.128 Repealed. Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 128.

12.129 Repealed. Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 129.

12.130 Repealed. Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 130.

12.131 Repealed. Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 131.

12.132 Repealed. Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 132.

12.133 Repealed. Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 133.

12.134 Repealed. Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 134.

12.135 Repealed. Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 135.

12.136 Repealed. Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 136.

12.137 Repealed. Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 137.

12.138 Repealed. Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 138.

12.139 Repealed. Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001. Publisher's note: The repealed section

pertained to deer management unit 139.

12.140 Repealed. Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 140.

12.141 Repealed. Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 141.

12.142 Repealed. Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 142.

12.143 Repealed. Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 143.

12.144 Repealed. Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 144.

12.145 Repealed. Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 145.

12.146 Repealed. Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 146.

12.147 Repealed. Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 147.

12.148 Repealed. Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 148.

12.149 Repealed. Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 149.

12.150 Repealed. Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 150.

12.151 Repealed. Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 151.

12.152 Repealed. Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 152.

12.153 Repealed. Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 153.

12.154 Repealed. Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 154.

12.155 Repealed. Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 155.

12.156 Repealed. Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 156.

(12.157 - 12.160 not used.)

12.161 Repealed. Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 161.

(12.162 - 12.187 not used.)

12.188 Repealed. Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 188.

12.189 Repealed. Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 189.

(12.190 - 12.196 not used.)

12.197 Repealed. Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 197.

12.199 Repealed. Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 199.

(12.200 - 12.202 not used.)

12.203 Repealed. Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 203.

12.204 Repealed. Am.[amendment] 4, 1990, Eff.[effective] Sep 1, 1990. Publisher's note: The repealed section pertained to deer management unit 204.

12.205 Repealed. Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001. History[of section legal definition]: Eff.[effective] Mar 31, 1989; Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001.

12.207 Repealed. Am.[amendment] 4, 1990, Eff.[effective] Sep 1, 1990. Publisher's note: The repealed section pertained to deer management unit 207.

12.208 Repealed. Am.[amendment] 7, 2000, Eff.[effective] Sep 1, 2000. Publisher's note: The repealed section pertained to deer management unit 208.

(12.209 - 12.213 not used.)

12.214 Repealed. Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 214.

12.215 Repealed. Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 215.

(12.216 - 12.218 not used.)

12.219 Repealed. Am.[amendment] 6, 1999, Eff.[effective] Sep 1, 1999. Publisher's note: The repealed section pertained to deer management unit 219.

12.220 Repealed. Am.[amendment] 6, 1998, Eff.[effective] May 15, 1998. Publisher's note: The repealed section pertained to deer management unit 220.

12.221 Repealed. Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 221.

12.229 Repealed. Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 229.

12.230 Repealed. Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 230.

(12.231 - 12.234 not used.)

12.235 Repealed. Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 235.

12.236 Repealed. Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 236.

12.237 Repealed. Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 237.

(12.238 not used.)

12.239 Repealed. Am.[amendment] 3, 1997, Eff.[effective] Jun 1, 1997. Publisher's note: The repealed section pertained to deer management unit 239.

12.240 Repealed. Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 240.

(12.241 not used.)

12.242 Repealed. Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 242.

(12.243 - 12.244 not used.)

12.245 Repealed. Am.[amendment] 4, 1990, Eff.[effective] Sep 1, 1990. Publisher's note: The repealed section pertained to deer management unit 245.

(12.246 - 12.248 not used.)

12.249 Repealed. Am.[amendment] 6, 1995, Eff.[effective] Sep 1, 1995. Publisher's Note: The repealed section pertained to deer management unit 249.

12.250 Repealed. Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 250.

12.251 Repealed. Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 251.

12.252 Repealed. Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 252.

(12.253 not used.)

12.254 Repealed. Am.[amendment] 6, 1998, Eff.[effective] May 15, 1998. Publisher's note: The repealed section pertained to deer management unit 254.

(12.255 - 12.256 not used.)

12.257 Repealed. Am.[amendment] 3, 1992, Eff.[effective] Sep 1, 1992. Publisher's Note: The repealed section pertained to deer management unit 257.

(12.258 - 12.262 not used.)

12.263 Repealed. Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 263.

(12.264 - 12.282 not used.)

12.283 Repealed. Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 283.

(12.284 - 12.287 not used.)

12.288 Repealed. Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 288.

(12.289 - 12.290 not used.)

12.291 Repealed. Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 291.

(12.292 - 12.312 not used.)

12.313 Repealed. Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 313.

(12.314 - 12.316 not used.)

12.317 Repealed. Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 317.

12.318 Repealed. Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 318.

12.319 Repealed. Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 319.

12.320 Repealed. Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 320.

12.321 Repealed. Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 321.

12.322 Repealed. Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 322.

12.323 Repealed. Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 323.

12.324 Repealed. Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 324.

(12.325 not used.)

12.326 Repealed. Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 326.

12.327 Repealed. Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 327.

(12.328 not used.)

12.329 Repealed. Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 329.

12.330 Repealed. Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 330.

12.331 Repealed. Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 331.

12.332 Repealed. Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 332.

(12.333 - 12.336 not used.)

12.337 Repealed. Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 337.

(12.338 - 12.341 not used.)

12.342 Repealed. Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 342.

## (12.343 - 12.387 not used.)

12.388 Repealed. Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 388.

(12.389 - 12.413 not used.)

12.414 Repealed. Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 414.

12.415 Repealed. Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 415.

(12.416 - 12.441 not used.)

12.442 Repealed. Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 442.

## (12.443 - 12.451 not used.)

12.452 "Deer management unit 452 (TB core area)" defined. Sec.[section] 12.452 "Deer management unit 452 (TB core area)" means all of Montmorency, Alpena, Alcona, and Oscoda counties bounded by a line beginning at the junction of highway M-32 and highway M-33 in eastern Montmorency county, then easterly on highway M-32 past the city of Hillman and crossing the Montmorency-Alpena county line to King Settlement road near the city of Paxton, southerly on King Settlement road to Henry road, continue southerly on King Settlement road to Werth road, easterly on Werth road to Hubbard Lake road, southerly on Hubbard Lake road to Hubbert road at the Alpena-Alcona county line, easterly on Hubbert road to the continuation of Hubbard Lake road (also known as Scout road), southerly on Hubbard Lake road to Spruce road, continue southerly on Hubbard Lake road to highway M-72, westerly on highway M-72 past the city of Curran and crossing the Alcona-Oscoda county line to highway M-72 and highway M-33 near the city of Fairview, northerly on highway M-33 crossing the Oscoda-Montmorency county line to the point of beginning. History[of section legal definition]: Am.[amendment] 12, 1996, Eff.[effective] Sep 1, 1996; Am.[amendment] 3, 1997, Eff.[effective] Jun 1, 1997; Am.[amendment] 6, 1998, Eff.[effective] May 15, 1998; Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001; Am.[amendment] 14, 2001, Eff.[effective] Sep 15, 2001; Am.[amendment] 7, 2016, Eff.[effective] May 13, 2016.

(12.453 - 12.479 not used.)

12.480 Repealed. Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 480.

12.481 Repealed. Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 481.

12.482 Repealed. Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 482.

(12.483 - 12.485 not used.)

12.486 "Deer management unit 486 (southern Lower Peninsula multi-county)" defined. Sec.[section] 12.486 "Deer management unit 486 (southern Lower Peninsula multi-county)" means all of Allegan, Barry, Bay, Berrien, Branch, Calhoun, Cass, Clinton, Eaton, Genesee, Gratiot, Hillsdale, Huron, Ingham, Ionia, Isabella, Jackson, Kalamazoo, Kent, Lapeer, Lenawee, Livingston, Mecosta, Midland, Montcalm, Muskegon, Oakland, Ottawa, Saginaw, St. Joseph, Sanilac, Shiawassee, Tuscola, Van Buren, and Washtenaw counties, plus deer management unit 162 (south Newaygo county). History[of section legal definition]: Am.[amendment] 6, 2009, Eff.[effective] May 7, 2009; Am.[amendment] 7, 2011, Eff.[effective] Jun 10, 2011.

12.487 "Deer management unit 487 (northeast Lower Peninsula multi-county)" defined. Sec.[section] 12.487 "Deer management unit 487 (northeast Lower Peninsula multi-county) means all of Alcona, Alpena, losco, Montmorency, Oscoda, and Presque Isle counties. History[of section legal definition]: Am.[amendment] 6, 2009, Eff.[effective] May 7, 2009.

12.488 Repealed. Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 488.

12.489 Repealed. Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 489.

12.490 Repealed. Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 490.

(12.491 not used.)

12.492 Repealed. Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 492.

12.493 Repealed. Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 493.

12.494 Repealed. Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 494.

12.495 Repealed. Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 495.

12.496 Repealed. Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 496.

12.497 Repealed. Am.[amendment] 8, 2001, Eff.[effective] Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 497.

12.498 "Core CWD Area" defined. Sec.[section] 12.498 "Core CWD Area" means the following: (1) All of Ionia, Kent, Mecosta, Montcalm, and Newaygo counties. History[of section legal definition]: Am.[amendment] 4, 2017, Eff.[effective] June 9, 2017; Am.[amendment] Interim Order 1 of 2017, Eff.[effective] Oct. 4, 2017; Am.[amendment] 12, 2018, Eff.[effective] Aug. 10, 2018.

12.499 "Urban deer management zone (Macomb, Oakland, and Wayne counties)" defined. Sec.[section] 12.499 "Urban deer management zone" means all of Macomb, Oakland, and Wayne counties. History[of section legal definition]: Am.[amendment] 4, 2017, Eff.[effective] June 9, 2017.

... plus later in WCO Chapter 12 ...

12.900 Repealed. Am.[ammendment] 7, 2011, Eff.{effective] June 9, 2011. Publisher's note: The repealed section pertained to a CWD surveillance zone in Kent County.

## 12.901 "CWD management zone" defined.

Sec. 12.901 "CWD management zone" means all of Barry, Calhoun, Clinton, Eaton, Gratiot, Hillsdale, Ingham, Ionia, Isabella, Jackson, Kent, Lenawee, Mecosta, Midland, Montcalm, Muskegon, Newaygo, Ottawa, and Shiawassee counties. History: Am.[ammendment] Interim Order 1, 2015, Eff.[effective] May 26, 2015, Am.[ammendment] 9, 2015, Eff.[effective] Aug. 14, 2015; Am.[ammendment] 7, 2016, Eff.[effective] May 13, 2016; Am.[ammendment] 12, 2018, Eff.[effective] Aug. 10, 2018; Am.[ammendment] 7, 2019, Eff.[effective] July 12, 2019.

12.902 "Core CWD Surveillance Area" defined. Sec. 12.902 "Core CWD Surveillance Area" means that area of Delta, Dickinson, and Menominee counties bounded by a line beginning in Dickinson county at the junction of the centerline of highway US-141 and highway US-2 (shared road segment) with the centerline of the Menominee river (a coincident line with the county boundary and the state boundary with Wisconsin) located northwest of the city of Iron Mountain, then westerly (about 1 mile) along the centerline on US-141/US-2 to the intersection with state highway M-95, northerly on M-95 to highway M-69 near the town of Randville, southeasterly on M-69 into Delta county to highway US-41 and highway US-2 (shared road segment) located west of the town of Bark River, southwesterly and westerly on US-41/US-2 into Menominee county where US-41 and US-2 diverge (US-41 heads southerly and US-2 heads westerly) near the town of G-18 with the centerline of the Menominee river and the county/state boundary, northerly and northwesterly upstream along the Menominee river and county/state boundary, northerly and northwesterly upstream along the Menominee river and county/state boundary, into Dickinson county along that river-centerline/county/state boundary to the point of beginning. History: Am.[ammendment] 7, 2019, Eff.[effective] July 12, 2019.