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GOVERNOR

STATE OF MICHIGAN
DEPARTMENT OF NATURAL RESOURCES
LANSING



DANIEL EICHINGER
DIRECTOR

SUBMITTED: March 24, 2020
RESUBMITTED: April 20, 2020

MEMORANDUM TO THE DIRECTOR

Information: Natural Resources Commission
Subject: Prohibited and Restricted Aquatic Invasive Species
Invasive Species Order Amendment No. 1 of 2020

Authority:

The Natural Resources and Environmental Protection Act, 1994 PA 451, as amended, MCL 324.41302 and Executive Orders 2009-45, 2009-54, 2011-1, and 2011-2 and in consultation with the Department of Agriculture and Rural Development, authorizes the Department of Natural Resources to add or delete from the list of prohibited species or restricted species as defined by MCL 324.41301.

Discussion and Background:

An invasive species is defined as a species that is not native and whose introduction causes, or is likely to cause, economic or environmental harm or harm to human health. Michigan's aquatic ecosystems are experiencing significant consequences from aquatic invasive species (AIS) that are already present, and the state's waters are continually threatened by new invasions. The introduction of AIS into Michigan's Great Lakes and inland waters is a source of biological pollution that negatively impact natural resources, human health, recreational opportunities, and various other human values throughout the region. AIS compete with native species for food and habitat and can directly or indirectly harm or displace native species, degrade habitat, and alter food webs and energy flow. AIS have significant economic effects on waterfront property values, tourism, utilities, and other industries to an estimated sum exceeding \$100 million annually in Michigan.

Part 413 of the Natural Resources Environmental Protection Act, 1994 PA 451, regulates (1) the possession of live specimens of prohibited or restricted species, and (2) the introduction of organisms that are prohibited, restricted, genetically engineered, or non-native. Public Act 52 of 2009 authorizes the Natural Resources Commission (NRC) to amend the list for all organisms other than plants and insects as needed. The Michigan Commission of Agriculture and Rural Development have similar authorities for plants and insects. This Act directs the NRC to consult with the Commission of Agriculture and Rural Development before adding or deleting to the lists of prohibited or restricted species.

Pursuant to Executive Orders 45 and 54 of 2009 and Executive Orders 1 and 2 of 2011 the authority for administering this section of law has been transferred from the NRC to the Department.

Section 41302 requires that the Department shall list a species as prohibited if all of the following conditions are met; the organism is not native to the state, the organism is not naturalized, or if naturalized, not widely distributed. Additionally, one of the following must apply; A) the organism has the potential to harm human health or to severely harm agricultural, natural, or silvicultural resources or B) effective management controls for the organism are not available.

In 2013, Governor Rick Snyder convened a meeting with Governors from each of the Great Lakes States (NY, PA, OH, IN, IL, IN, WI, MI and MN) and the Premiers from Ontario and Québec. One outcome from this meeting was a commitment from each state and province to take action to block the spread of sixteen “least wanted” AIS through prohibitions or restrictions. The least wanted species were identified as presenting an imminent threat to the Great Lakes-St. Lawrence River region. To address discrepancies between Michigan’s prohibited and restricted species list and the “least wanted” AIS list at that time, the Department issued Invasive Species Order Amendment No. 1 of 2014.

Since the creation of the initial Great Lakes Governors and Premiers “least wanted” AIS list that included sixteen species, the Governors and Premiers identified additional AIS and updated the “least wanted” AIS list in 2018. As such, the Department recommends adding the Marbled Crayfish (commonly referred to as Marmorkrebs), which would result in once again having consistency between the Governors’ and Premiers’ “least wanted” AIS list and the Michigan prohibited and restricted species list. The listing of Marbled Crayfish would also reduce threats of negative impacts posed by this species to Michigan’s natural resources and economy.

Marbled Crayfish (commonly referred to as Marmorkrebs)

Marbled Crayfish is an invasive species threat that currently threatens Michigan’s natural resources and economy. Marbled Crayfish, *Procambarus virginalis*, is a unique species that has the ability to self-replicate and that has aggressive behavioral traits. These two characteristics allows for rapid colonization when introduced into the natural habitats. Marbled Crayfish can quickly dominate lakes, ponds, rivers and wetlands. They feed heavily on plants, snails, and amphibians, aggressively competing with native species for food and habitat. In addition, they have the ability to dig burrows, which causes instability of riparian soils and increases the potential for shoreline erosion. Marbled Crayfish is readily available in the aquarium trade, and therefore there is a high risk of introduction and spread through the release of live- unwanted pets. Eradicating Marbled Crayfish is very difficult and costly because they can dig deep burrows into the sediment banks of lakes, rivers, streams, and wetlands. In addition, the self-replicating or cloning abilities of this species means a single individual can result in the establishment and spread of a population. The Department recommends the Marbled Crayfish be added to Michigan’s prohibited species list to reduce the risk of this species being introduced and harming Michigan’s natural resources.

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In accordance with Section 41302, representatives from the Department of Agriculture and Rural Development and the Department of Natural Resources met in February 2020, to consult upon listing Marbled Crayfish as a prohibited species. The Departments agreed to move forward with their respective Commission processes to properly list this species.

Recommendation:

Relevant Divisions have contributed to the preparation of this order. This order is being submitted for information and consideration. This item appeared on the Department's April calendar and may be eligible for approval on May 14, 2020.



Daniel Kennedy, Acting Chief
Wildlife Division



Gary Hagler, Chief
Law Enforcement Division



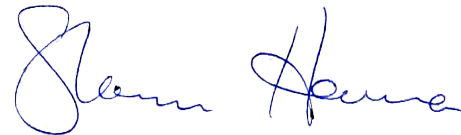
Deb Begalle, Chief
Forest Resources Division



Ronald A. Olson, Chief
Parks and Recreation Division



James Dexter, Chief
Fisheries Division



Shannon Hanna
Natural Resources Deputy

I have analyzed and discussed these recommendations with staff and concur as to matters over which the Director has authority.

Daniel Eichinger, Director

Date

INVASIVE SPECIES ORDER

Amendment No. 1 of 2020

By authority conferred on the Department of Natural Resources by section 41302 of the Natural Resources Environmental Protection Act, 1994 PA 451, as amended, MCL 324.41302 and Executive Orders 2009-45, 2009-54, 2011-1, and 2011-2, and in consultation with the Department of Agriculture, it is ordered that effective May 14, 2020, the following section(s) of the Invasive Species Order shall be amended as follows:

40.4 Additional prohibited species.

Sec. 40.4 (1) Possession of the following live species, including a hybrid or genetic variant of the species, an egg or offspring of the species or of a hybrid or genetically engineered variant, is prohibited:

- (a) New Zealand mud snail (*potamopyrgus antipodarum*).
- (b) Wild boar, wild hog, wild swine, feral pig, feral hog, feral swine, Old world swine, razorback, eurasian wild boar, Russian wild boar (*Sus scrofa* Linnaeus). This subsection does not and is not intended to affect sus domestica involved in domestic hog production.
- (c) The department shall consult with staff from the Michigan department of agriculture and rural development on the development of a phased compliance protocol for the implementation of subsection b.
- (d) Stone moroko (*Pseudorasbora parva*)
- (e) Zander (*Sander lucioperca*)
- (f) Wels Catfish (*Silurus glanis*)
- (g) Killer Shrimp (*Dikerogammarus villosus*)
- (h) Yabby (*Cherax destructor*)
- (i) Golden mussel (*Limnoperna fortunei*)
- (j) Red swamp crayfish (*Procambarus clarkii*)
- (k) Marbled crayfish, also commonly referred to as Marmorkrebs (*Procambarus virginalis*)

40.5 Restricted Species List

Sec. 40.5 (1) Restricted species are listed in part 413, transgenic and nonnative organisms, of the natural resources and environmental protection act, 1994 PA 451, as amended, MCL 324.41301 to 324.41323.

Sec. 40.6 (1) Possession of the following live species, including a hybrid or genetic variant of the species, an egg or offspring of the species or of a hybrid or genetically engineered variant, is restricted:

- (a) Rusty crayfish (*Faxonius rusticus*, formerly *Orconectes rusticus*)

This amended order shall be posted on or after the 15th day of May, 2020.

Issued on this 14th day of May, 2020.

Daniel Eichinger, Director