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BILL



ANALYSIS

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Senate Bill 280 (Substitute S-1 as reported)
Sponsor: Senator Gerald Van Woerkom
Committee: Natural Resources and Environmental Affairs

Date Completed: 3-23-09

RATIONALE

In an effort to control invasive species in Michigan, legislation was enacted in 2005 to prohibit a person from possessing certain plant, fish, and insect species, establish civil and criminal penalties for violating the ban, and establish the Invasive Species Advisory Council, whose duties include recommending additions to or deletions from the lists of prohibited and restricted species. The list of prohibited plant species includes yellow flag iris, a plant brought to the U.S. and Canada originally as an ornamental, as well as any of its fragments or seeds or a hybrid or genetically engineered variant. Since the list was created, this particular species has been shown not to present a nuisance threat in Michigan, and it has been suggested that yellow flag iris be removed from the list. Also, it has been suggested that recommendations to add new species to the prohibited and restricted plant lists be adopted.

In a related matter, Governor Jennifer Granholm abolished the Council and transferred its duties to the Department of Natural Resources (DNR) under Executive Reorganization Order 2007-10. It has been suggested that statutory language be revised to reflect the transfer.

CONTENT

The bill would amend Part 413 (Transgenic and Nonnative Species) of the Natural Resources and Environmental Protection Act to do the following:

-- Remove yellow flag iris (*Iris pseudacorus*) and a hybrid or

genetically engineered variant of yellow flag iris from the definition of "prohibited species".

- Expand the definition to include particular bird, crustacean, mammal, and mollusk species, in addition to fish, insect, and aquatic plant species.**
- Add certain fish species to the definition.**
- Include in the definition of "restricted species" particular mollusk species.**

The bill would take effect 90 days after it was enacted.

Prohibited & Restricted Species

Part 413 prohibits a person from possessing a prohibited or restricted species, except under one or more of the following circumstances:

- The person intends to present a specimen, for identification or similar purposes, to a certified or registered pesticide applicator, to a public or private institution of higher education, or to the DNR or any other State, local, or Federal agency with responsibility for the environment or natural resources.
- The person has been presented with a specimen for identification purposes in accordance with Part 413.
- The person possesses the prohibited species in conjunction with otherwise lawful activity to eradicate or control it.
- The possession is pursuant to a permit issued by the DNR for education or research purposes.

The bill would revise the definitions of "prohibited species" and "restricted species" as described below.

Prohibited Aquatic Plants. The definition of "prohibited species" includes certain aquatic plant species and their hybrids or genetically engineered variants, or fragments or seeds of the species or hybrids and genetically engineered variants. The bill would delete yellow flag iris from the definition.

Prohibited Birds, Crustaceans, & Mollusks. The bill would add to the definition of "prohibited species" all of the following, including a hybrid or genetically engineered variant or an egg of the species or of a hybrid or genetically engineered variant:

- Bird: Eurasian collared dove (*Streptopelia decaocto*).
- Crustacean: rusty crayfish (*Orconectes rusticus*).
- Mollusk: *Xerolenta obvia*, brown garden snail (*Helix aspersa*), carthusian snail (*Monacha cartusiana*), giant African snail (*Achatina fulica*), girdled snail (*Hygromia cinctella*), and wrinkled dune snail (*Candidula intersepta*).

Prohibited Fish & Insects. The definition of "prohibited species" includes certain fish and insect species, as well as their hybrids or genetically engineered variants. Under the bill, the definition also would include eggs of those species or of their hybrids or genetically engineered variants. Additionally, the bill would add the Eurasian ruffe (*Gymnocephalus cernuus*), the round goby (*Neogobius melanostomus*), and the tubenose goby (*Proterorhinus marmoratus*) to the list of prohibited fish species.

Prohibited Mammals. The bill would add the nutria (*Myocastor coypus*) to the definition of "prohibited species".

Restricted Species. The bill would add to the definition of "restricted species" any of the following restricted mollusk species, including a hybrid or genetically engineered variant of the species or an egg of the species or of a hybrid or genetically engineered variant: quagga mussel (*Dreissena bugensis*) and zebra mussel (*Dreissena polymorpha*).

Legislative Intention

The bill states, "It is the intention of the legislature to list an organism as a prohibited species if the organism meets 1 or more of the following criteria:"

- The organism is not found in Michigan or is found in Michigan in only limited locations.
- The organism has the potential to cause severe harm to the State's economy, harm to animals, and/or harm to human health or safety.
- Effective management or control techniques for the organism are not available.

The bill also states, "It is the intention of the legislature to list an organism as a restricted species if the organism meets 1 or more of the following:"

- The organism is commonly found in Michigan.
- The organism has the potential to cause harm to the State's economy, animals, and/or human health or safety.
- Effective management or control techniques for the organism are available.

Introduction of Species

Part 413 prohibits a person from introducing a prohibited species, a restricted species, or a genetically engineered or nonnative fish or aquatic plant, unless the introduction is authorized by a permit issued by the DNR or the Michigan Department of Agriculture (MDA), as applicable. Under the bill, this provision also would apply to a genetically engineered or nonnative bird, crustacean, mammal, or mollusk.

Enforcement of Part 413

The bill would require the DNR to enforce Part 413, except with respect to insect species. The MDA would have to enforce Part 413 with respect to insect species.

Penalties

Under Part 413, a person who violates the prohibition against possession of a prohibited or restricted species is subject to a maximum civil fine of \$10,000 or \$5,000, respectively. If a violator knows that the

possession is unlawful, the offense is a felony punishable by imprisonment for up to two years and a mandatory fine of at least \$2,000 but not more than \$20,000 for a prohibited species, or a misdemeanor punishable by imprisonment for up to one year and a mandatory fine of at least \$1,000 but not more than \$10,000 for a restricted species. Part 413 prescribes additional criminal penalties for the introduction of prohibited and restricted species.

The penalties also apply to violations involving nonnative and genetically engineered fish, insects, and aquatic plants. Under the bill, the penalties also would apply to violations involving nonnative and genetically engineered birds, crustaceans, mammals, and mollusks.

Invasive Species Fund

Under Part 413, the DNR may spend money from the Fund, upon appropriation, only for specified purposes, including public education about preventing the introduction of, controlling, or eradicating prohibited species, restricted species, and other nonnative species and genetically engineered fish, insects, and aquatic plants. Under the bill, the money also could be spent on public education regarding nonnative and genetically engineered birds, crustaceans, mammals, and mollusks.

Invasive Species Advisory Council

The bill would repeal Section 41321, which established the Council and prescribes its membership. The bill would replace references to the Council with references to the DNR in provisions prescribing the Council's duties. Part 413 requires the Council to submit to the Governor and the Legislature an annual report that makes recommendations on, among other things, additions to or deletions from the lists of prohibited and restricted species. Additionally, the report must make recommendations on the adoption of lists for classes of prohibited and restricted organisms other than fish, insects, and aquatic plants. Under the bill, instead, the DNR would have to submit the report, which would have to contain recommendations on the classes of organisms covered by Part 413 based on criteria set forth in the bill's statements of legislative intent.

Part 413 also requires the annual report to make recommendations on preventing the introduction of and controlling or eradicating invasive or genetically engineered fish, insects, and aquatic plants; and educating citizens about their responsibilities and their role in preventing the introduction of and controlling or eradicating prohibited and restricted species, and invasive or genetically engineered fish, insects, or aquatic plants. Under the bill, these provisions would include recommendations pertaining to birds, crustaceans, mammals, and mollusks.

The bill would eliminate a July 19, 2010, sunset on the provisions regarding the annual reports and requiring the prescribed duties to be carried out in cooperation with the Aquatic Nuisance Species Council.

MCL 324.41301 et al.

ARGUMENTS

(Please note: The arguments contained in this analysis originate from sources outside the Senate Fiscal Agency. The Senate Fiscal Agency neither supports nor opposes legislation.)

Supporting Argument

When the initial prohibited plant species list was established, yellow flag iris was included due to experience in other locations indicating that it can proliferate unchecked and result in the destructive impacts associated with nuisance species. In some other states, the species has spread primarily from gardens to wetlands and formed dense thickets, stifling other species (including those comprising waterfowl food). Yellow flag iris has not grown this way in Michigan, however, and the Invasive Species Advisory Council recommended that it be removed from the list of prohibited plants.

Eliminating yellow flag iris could be beneficial to the State's economy, since its vibrant color and ability to remove metals from wastewater make it an attractive option for rain gardens. When the species was included in the prohibited list, nurseries evidently experienced thousands of dollars in lost sales.

Supporting Argument

Recommendations from the annual reports to add new species, such as the zebra mussel, round goby, and nutria, to the

prohibited and restricted lists should be adopted.

The zebra mussel is of particular concern in the Great Lakes region. In Great Lakes Basin states, the cost to address problems caused by zebra mussels was \$3.0 billion from 1993 to 2003. Adult zebra mussels can anchor themselves to various firm surfaces, such as lakebeds, rocks, native mussel colonies, boat hulls, buoys, and facilities of municipal water systems, utilities, and manufacturing operations. Zebra mussels also are thought to be responsible for the dramatic decline of the *Diporeia* population (a species of tiny shrimp-like creatures) and other species significant to the Great Lakes food web. In turn, native fish populations, such as lake trout, walleye, yellow perch, and whitefish, are threatened.

The round goby is another prevalent aquatic nuisance species. In addition to competing with native species for food and habitat, round gobies are believed to prey directly on some of those species. Round gobies actually consume large quantities of zebra mussels; any positive effect, however, is negated by the fact that zebra mussels, as filter feeders, consume toxins that are transferred through the food chain and ultimately affect several sportfish species. The recreational fishing industry is further affected by the aggressive nature of round gobies, which frequently take the bait anglers use to catch other species.

Nutria (large, semi-aquatic rodents indigenous to South America) were imported into Louisiana in the 1930s for the fur farming industry. They subsequently were released, either intentionally or accidentally, into the coastal marshes and began to cause extensive damage through their feeding and burrowing habits. The rodents were transported to different locales for use in controlling aquatic weeds; as their population increased, however, they caused significant damage to marshes, rice and sugarcane fields, and levee systems, completely denuding some natural levees at the mouth of the Mississippi River. Over the years, several hurricanes pushed the nutria population further inland and spurred the spread of the species to other states. With the decline of the international fur market, nutria harvests waned while reports of nutria damage increased. Reportedly, feral nutria

populations have been found in 40 states, and are stable or growing in about one-third of those states.

In light of the environmental and economic damage such species can cause, they should be included among those banned in Michigan.

Supporting Argument

The Invasive Species Advisory Council was abolished and its responsibilities were transferred to the DNR under Executive Reorganization Order 2007-10, which stated that the action "will contribute to a smaller and more efficient state government". The statute should be updated to reflect current practice.

Legislative Analyst: Julie Cassidy

FISCAL IMPACT

The bill would have an indeterminate fiscal impact on State and local government. There are no data to indicate how many offenders would be convicted of the offenses involving restricted, nonnative, or genetically engineered species. Local governments would incur the costs of misdemeanor probation and incarceration in local facilities, which vary by county. The State would incur the cost of felony probation at an annual average cost of \$2,000, as well as the cost of incarceration in a State facility at an average annual cost of \$32,000. Additional penal fine revenue would benefit public libraries.

Additional monitoring and enforcement duties of the Departments of Natural Resources and Agriculture would be covered by existing resources.

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This analysis was prepared by nonpartisan Senate staff for use by the Senate in its deliberations and does not constitute an official statement of legislative intent.