

DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

DIVISION OF FISH AND WILDLIFE

Statutory Authority: 7 Delaware Code, Section 1902(a) (7 Del.C. §1902(a))
7 DE Admin. Code 3200

FINAL

3200 Horseshoe Crabs

Secretary's Order No.: 2013-F-0035

RE: Approving Final Regulations to Amend

7 DE Admin. Code 3200: *Horseshoe Crabs*, to include revisions to §3201

(*Definitions*) and to add a new §3216, to wit:

Prohibition on Possession or Use of Asian Horseshoe Crabs

Date of Issuance: September 10, 2013

Effective Date of the Amendment: October 11, 2013

Under the authority vested in the Secretary of the Department of Natural Resources and Environmental Control ("Department" or "DNREC") the following findings, reasons and conclusions are entered as an Order of the Secretary in the above-referenced rulemaking proceeding.

Background and Procedural History

This Order considers proposed regulations to amend 7 DE Admin. Code 3200: *Horseshoe Crabs*, to include revisions to §3201 (*Definitions*), and to add a new §3216, to wit: *Prohibition on Possession or Use of Asian Horseshoe Crabs*. The Department's Division of Fish and Wildlife commenced the regulatory development process with Start Action Notice 2013-06. The Department published its initial proposed regulation Amendments in the July 1, 2013 *Delaware Register of Regulations*, and held a public hearing on July 25, 2013.

The purpose of this action seeks to define and prevent the possession and use of Asian horseshoe crabs (*Carcinoscorpius rotundicauda*, *Tachypleus gigas*, and *Tachypleus tridentatus*) to protect human health and the shellfish resources of the State of Delaware. It should be noted that Delaware's Council on Shell Fisheries has endorsed the Department's development of regulations regarding this important issue.

Atlantic horseshoe crabs (*Limulus polyphemus*) are extensively used as bait in Delaware's American eel and whelk pot fisheries. The demand for horseshoe crabs as bait, as well as for their ecological functions, prompted the development of an extensive coastwide management program. The high demand and reduced availability of horseshoe crabs (particularly female horseshoe crabs) has driven prices very high in recent years, and has motivated seafood dealers in New York to import non-native Asian horseshoe crabs for use as bait in the American eel and whelk fisheries.

There is concern that these non-native Asian horseshoe crabs may host parasites and pathogens that could have severe negative impacts on Delaware's native horseshoe crab population (*Limulus polyphemus*), which is of extreme ecological and economic importance in the Delaware Bay. The Department is also concerned of the potential impacts of these parasites and pathogens upon other native species. In addition, the Department is aware that at least one species of Asian horseshoe crab, *C. rotundicauda*, is known to accumulate the powerful neurotoxin tetrodotoxin (TTX), which does not degrade by freezing or high temperature (cooking). Poisonings from this neurotoxin have been known to result in death in individuals that consume it through eating contaminated fish and shellfish. The potential for TTX accumulation in eel and whelk, as well as subsequent risk to human health, is unknown.

Due to the aforementioned human health concerns, the United States Fish & Wildlife Service is working to add Asian horseshoe crabs to the list of "Injurious Wildlife" under the Lacey Act. This federal action would make it unlawful to import Asian horseshoe crabs, however, such effort is expected to take a year or more to fully accomplish. Unfortunately, prohibiting the importation or use of Asian Horseshoe crabs is beyond the scope of the Atlantic States Marine Fisheries Commission's Federal Management Plan for Horseshoe Crabs. However, the Commission recently approved Resolution 13-01, recommending that member states take any and all action necessary to ban the importation and use of Asian horseshoe crabs as bait as soon as possible.

The Department has the statutory basis and legal authority to act with regard to the proposed amendments to 7 DE Admin. Code 3200, *Horseshoe Crabs*, pursuant to 7 Del.C. §1902(a). It should be noted that no members of the public attended the public hearing held by the Department on July 25, 2013, nor was any public comment received by the Department at any time during the course of this promulgation. Proper notice of the hearing was provided as required by law.

The Department's presiding hearing officer, Lisa A. Vest, prepared a Hearing Officer's Report dated August 28, 2013 (Report). This Report recommends certain findings and the adoption of the proposed Amendments as attached to the

Findings and Discussion

I find that the proposed Amendments are well-supported by the record developed by the Department, and I adopt the Report to the extent it is consistent with this Order. The Department's experts developed the record, and drafted the proposed Amendments. Furthermore, I find that the Department's experts in the Division of Fish and Wildlife fully developed the record to support adoption of these Amendments.

With the adoption of this Order, Delaware will be enabled to protect human health and the shellfish resources of the State by revising its existing Regulations on Horseshoe Crab to add a definition for Asian horseshoe crabs under §3201, and to make it unlawful to possess or use as bait Asian horseshoe crabs, or parts thereof, without written authorization from the DNREC Director of the Division of Fish & Wildlife, through the inclusion of a new §3216.

In conclusion, the following findings and conclusions are entered:

1.) The Department has jurisdiction under its statutory authority to issue an Order adopting these proposed Amendments as final;

2.) The Department provided adequate public notice of the proposed Amendments, and provided the public with an adequate opportunity to comment on the same, including at the public hearing held on July 25, 2013;

3.) The Department held a public hearing on July 25, 2013 in order to consider public comment before making any final decision;

4.) The Department's Hearing Officer's Report, including its recommended record and the recommended Amendments as set forth in Appendix A, are adopted to provide additional reasons and findings for this Order;

5.) The recommended Amendments should be adopted as final regulation Amendments because Delaware will be able to (1) add a definition for Asian horseshoe crabs under §3201; (2) make it unlawful to possess or use as bait Asian horseshoe crabs, or parts thereof, without written authorization from the DNREC Director of the Division of Fish & Wildlife, through the inclusion of a new §3216; (3) better protect human health and the shellfish resources of the State of Delaware against the potential aforementioned hazards associated with the importation of this non-native Asian horseshoe crab; and lastly, because (4) the amendments are well supported by documents in the record;

6.) The Department shall submit this Order approving the final regulation to the *Delaware Register of Regulations* for publication in its next available issue, and provide such other notice as the law and regulation require and the Department determines is appropriate.

Collin P. O'Mara, Secretary

3200 Horseshoe Crabs

3201 Definitions

(Penalty Section 7 Del.C. §2705(b))

1.0 The following definitions shall apply to terms in 7 Del.C. Ch. 27 relative to horseshoe crabs.

1.1 **"Asian Horseshoe Crabs"** shall mean any of the following species *Carcinoscorpius rotundicauda*, *Tachypleus gigas*, and *Tachypleus tridentatus*.

1.12 **"Bait Saving Device"** shall mean any device that when so deployed in or on a pot reduces either the rate at which bait, meaning horseshoe crabs or parts thereof, must be replenished or reduces the number or quantity of horseshoe crabs used as bait.

1.23 **"Collect"** shall mean to take live horseshoe crabs by any means other than by dredge.

1.34 **"Dispose of said Crabs Properly"** shall mean bury on the beach, incorporate into soil as fertilizer or any other method approved by the Department.

1.45 **"Dredge"** shall mean to use any device to gather, scrape, scoop, fish for or otherwise take bottom dwelling horseshoe crabs.

1.56 **"Personal, Non-Commercial Use"** shall mean to be used as food, fertilizer or bait or otherwise properly disposed without trading, bartering, or selling by one individual to another, or without transporting, shipping, or causing to be transported or shipped, out of state.

7 DE Reg. 220 (8/1/03)

10 DE Reg. 1029 (12/01/06)

11 DE Reg. 685 (11/01/07)

3202 Horseshoe Crabs As Bait In Pots; Conch Pots

(Penalty Section 7 Del.C. §2705(b))

- 1.0 It shall be unlawful for any person to place more than one-half of a female horseshoe crab or one male horseshoe crab as bait in any type of pot on any one day in the waters of this State.
- 2.0 It shall be unlawful for any person to fish with a conch pot that is not equipped with a bait saving device, provided that a horseshoe crab or parts thereof are used as bait.

7 DE Reg. 220 (8/1/03)

3203 Seasons And Area Closed To Taking Horseshoe Crabs

(Penalty Section 7 **Del.C.** §2705(b))

- 1.0 It shall be unlawful for any person to dredge or attempt to collect by means of a dredge horseshoe crabs or parts thereof from any state or federal land owned in fee simple or the tidal waters of this state during a period beginning at 12:01 am on January 1 and continuing through midnight, June 30, next ensuing. After June 30 in any given calendar year, it shall be unlawful to dredge or attempt to collect by means of a dredge female horseshoe crabs.
- 2.0 It shall be lawful for persons with valid horseshoe crab collecting permits and eel licensees and their alternates to collect adult male horseshoe crabs on Monday through Friday from state owned lands to the east of state road No. 89 (Port Mahon Road) from 12:01 a.m. on June 8 and continuing through midnight on July 31.
- 3.0 It shall be unlawful for any person to collect or attempt to collect, any horseshoe crabs or parts thereof from any land not owned by the state or federal government during the period beginning at 12:01 a.m. on January 1 and continuing through midnight, June 7, next ensuing. It shall be lawful, during a period beginning at 12:01 a.m. on June 8 and continuing through midnight on July 31, for persons with valid horseshoe crab collecting permits and eel licensees and their alternates to collect male horseshoe crab adults on Mondays through Fridays from such private lands.
- 4.0 It shall be unlawful for any person to collect or attempt to collect any horseshoe crabs from any land not owned by the State or federal government unless said person has on his or her person written permission, signed by the owner of said land with the owner's address and phone number, indicating the individual to whom permission to collect horseshoe crabs is granted.

1 DE Reg 1412 (4/1/98)

7 DE Reg. 220 (8/1/03)

10 DE Reg. 1029 (12/01/06)

11 DE Reg. 685 (11/01/07)

12 DE Reg. 975 (01/01/09)

3204 Requirement For Collecting Horseshoe Crabs For Persons Under 16

(Penalty Section 7 **Del.C.** §2705(b))

- 1.0 It shall be unlawful for any person with a valid horseshoe crab collecting permit to collect any horseshoe crabs as an alternate to a person with a valid commercial eel fishing license.
- 2.0 It shall be unlawful for any person under the age of sixteen (16) years to possess any horseshoe crabs unless accompanied by a person who has been issued a valid horseshoe crab scientific collecting, commercial collecting or dredge permit.

3 DE Reg 1092 (2/1/00)

7 DE Reg. 220 (8/1/03)

10 DE Reg. 1029 (12/01/06)

11 DE Reg. 685 (11/01/07)

3205 Number Of Persons Accompanying A Person With A Valid Horseshoe Crab Collecting Permit

(Penalty Section 7 **Del.C.** §2705(b))

- 1.0 It shall be unlawful for any person with a valid horseshoe crab commercial collecting permit when collecting horseshoe crabs to be assisted by more than three (3) persons under the age of 16 who are not required to have valid horseshoe crab commercial collecting permits.
- 2.0 It shall be unlawful for any person 16 years of age or older who does not have a valid commercial horseshoe crab collecting permit, to assist any person with a valid commercial horseshoe crab collecting permit in the handling, loading or driving a vehicle used to transport horseshoe crabs collected by said horseshoe crab collecting permittee while within 300 feet of the shoreline of the water from which said horseshoe crabs are collected or the point on shore where said horseshoe crabs are landed from a vessel.

3 DE Reg 1092 (2/1/00)

7 DE Reg. 220 (8/1/03)

10 DE Reg. 1029 (12/01/06)

3206 Possession Limit Of Horseshoe Crabs, Exceptions

(Penalty Section 7 **Del.C.** §2705(b))

- 1.0 Unless otherwise authorized, it shall be unlawful for any person to possess a horseshoe crab, except a person with a validated receipt from a person with a valid horseshoe crab commercial collecting or dredge permit for the number of horseshoe crabs in said person's possession. A receipt shall contain the name, address and signature of the supplier, the date and the number of horseshoe crabs obtained.
- 2.0 Any person who has been issued a valid commercial eel fishing license by the Department or said person's alternate while in the presence of the licensee, is exempt from the prohibition on the possession of horseshoe crabs, provided said commercial eel fishing licensee has submitted all required reports of his/her and his/her alternate's previous week's harvest of horseshoe crabs with the Department in accordance with Regulation 3210. Any person who has been issued a commercial eel fishing license and said person's alternate while in the presence of the licensee, may collect horseshoe crabs by hand without a horseshoe crab commercial collecting permit provided all horseshoe crabs taken are for personal, non-commercial use, as bait for the licensee's eel pots fished in this state.
- 3.0 It shall be unlawful for any person with a valid commercial eel fishing license to be assisted in collecting horseshoe crabs by any person who is not listed on his commercial eel fishing license as the alternate.
- 4.0 Any person with both a valid commercial eel fishing license and a valid commercial horseshoe crab collecting permit shall be considered as a commercial horseshoe crab collecting permittee for purposes of enforcing the provisions of 7 **Del.C.** Ch. 27 and/or shellfish regulations pertaining to horseshoe crabs.
- 5.0 It shall be unlawful for any person with a valid commercial eel fishing license to commingle any horseshoe crabs collected either by said commercial eel fishing licensee or by his or her alternate with horseshoe crabs either collected by a person with a valid horseshoe crab dredge permit or by a person with a valid commercial horseshoe crab collecting permit.
- 6.0 It shall be unlawful for any person with a valid horseshoe crab dredge permit or with a valid commercial horseshoe crab collecting permit to commingle any horseshoe crab dredged or collected by said horseshoe crab dredge permittee or horseshoe crab collecting permittee with horseshoe crabs collected by any person with a valid commercial eel fishing license.
- 7.0 It shall be unlawful for any person to possess more than 300 cubic feet of horseshoe crabs except in a stationary cold storage or freezer facility.
- 8.0 It shall be unlawful for any person to collect or attempt to collect more than 300 cubic feet of horseshoe crabs during any 24 hour period beginning at 12:01 AM and continuing through midnight next ensuing.

1 DE Reg. 1412 (4/1/98)

3 DE Reg. 1567 (5/1/00)

3 DE Reg. 1092 (2/1/00)

3 DE Reg. 1567 (5/1/00)

7 DE Reg. 220 (8/1/03)

10 DE Reg. 1029 (12/01/06)

11 DE Reg. 685 (11/01/07)

3207 Horseshoe Crab Dredging Restrictions

(Penalty Section 7 **Del.C.** §2705(b))

- 1.0 It shall be unlawful for any person to dredge horseshoe crabs in the area in Delaware Bay designated as leased shellfish grounds except on one's own leased shellfish grounds or with permission from the owner of leased shellfish grounds. The area in Delaware Bay designated as leased shellfish grounds is within the boundaries that delineate leasable shellfish grounds and is described as follows: Starting at a point on the "East Line" in Delaware at Loran-C coordinates 27314.50/42894.25 and continuing due east to a point at Loran-C coordinates 27294.08/42895.60 and then 27270.80/42852.83 and then continuing southwest to a point at Loran-C coordinates 27281.31/42803.48 and then continuing west to a point at Loran-C coordinates 27280.75/42795.50 and then in a northerly direction on a line 1000' offshore, coterminous with the existing shoreline to the point of beginning on the "East Line."
- 2.0 It shall be unlawful for any person, who operates a vessel and has on board said vessel a dredge of any kind, to have on board or to land more than 1500 horseshoe crabs during any 24 hour period beginning at 12:01 a.m. and continuing through midnight next ensuing.

- 3.0 It shall be unlawful for any person, who operates a vessel and has on board said vessel a dredge of any kind, to have or possess on board said vessel any horseshoe crabs at any time during the period beginning 12:01 a.m. on January 1 and continuing through midnight, June 30, next ensuing.
- 4.0 It shall be unlawful for any person to land horseshoe crabs taken from the Exclusive Economic Zone unless said person has a valid horseshoe crab dredge permit.

1 DE Reg. 354 (10/1/97)

1 DE Reg. 1412 (4/1/98)

3 DE Reg. 1567 (5/1/00)

7 DE Reg. 220 (8/1/03)

10 DE Reg. 1029 (12/01/06)

11 DE Reg. 685 (11/01/07)

3208 Horseshoe Crab Dredge Permit Lottery

(Penalty Section 7 **Del.C.** §2705(b))

- 1.0 The Department of Natural Resources and Environmental Control shall hold an annual lottery to select eligible individuals for the five horseshoe crab dredge permits authorized to be issued each year if more than five applications are received by the Department. Applications for an annual commercial horseshoe crab permit shall be accepted by the Department until 4:30 PM December 31 or 4:30 PM on the Friday preceding if December 31 is a Saturday or Sunday. If an annual lottery is necessary it shall be conducted at 1:00 PM on January 1, or the first work day thereafter, in the Richardson and Robbins Building, 89 Kings Highway, Dover, Delaware.
- 2.0 To be eligible an applicant for a horseshoe crab dredge permit shall be the current holder of an oyster harvesting license issued by the Department.

2 DE Reg. 1055 (1/1/99)

3 DE Reg. 652 (11/1/99)

5 DE Reg. 1128 (11/1/01)

7 DE Reg. 220 (8/1/03)

10 DE Reg. 1029 (12/01/06)

11 DE Reg. 685 (11/01/07)

3209 Horseshoe Crab Sanctuaries

(Penalty Section 7 **Del.C.** §2705(b))

- 1.0 All state and federal lands owned in fee simple are horseshoe crab sanctuaries during the period beginning 12:01 a.m. on May 1 through midnight June 30.
- 2.0 Any land owner(s) may register their land with the Department to be designated as a horseshoe crab sanctuary for a period to be specified by the land owner(s).
- 3.0 It shall be unlawful to collect any horseshoe crabs at any time from a horseshoe crab sanctuary except as provided in Regulation 3203 section 2.0.

1 DE Reg. 354 (10/1/97)

1 DE Reg. 1412 (4/1/98)

7 DE Reg. 220 (8/1/03)

10 DE Reg. 1029 (12/01/06)

11 DE Reg. 685 (11/01/07)

3210 Horseshoe Crab Reporting Requirements

(Penalty Section 7 **Del.C.** §2705(b))

- 1.0 It shall be unlawful for any person who has been issued a horseshoe crab dredge permit, a horseshoe crab commercial collecting permit or a commercial eel pot license to not report his/her harvest of horseshoe crabs to the Department on a daily basis. Said daily reports shall not be required to be submitted to the Department during any month said person indicates previously in writing to the Department that he/she will not be harvesting horseshoe crabs. Any person required to submit a daily report on his/her harvest of horseshoe crabs to the Department shall phone in said report within 24 hours of said harvesting. For purposes of this section, a week shall commence at 12:01AM on Monday and conclude at midnight on Sunday, next ensuing. Said report shall include but not be limited to said person's unique identification number assigned by the Department, the dates and location horseshoe crabs were harvested, the number of horseshoe crabs harvested and the method of harvest of horseshoe crabs. Said report shall be submitted to the Department by

telephone by calling a phone number, dedicated by the Department for the reporting of harvested horseshoe crabs, and entering the required data by code or voice as indicated.

- 2.0 Any person who fails to submit a daily report on his/her harvest of horseshoe crabs to the Department on time shall have his/her permit to dredge or his/her permit or authority to collect horseshoe crabs suspended until all delinquent reports on harvested horseshoe crabs are received by the Department.
- 3.0 In addition to the requirement to phone in daily catch reports, horseshoe crab collectors and harvesters and commercial eel fishermen are required to compile and file monthly log sheets detailing daily landings of horseshoe crabs on forms supplied by the Department. These forms must be submitted by the 10th day of the month next ensuing. Failure to submit these monthly reports on a timely basis may be cause for horseshoe crab collecting or horseshoe crab dredge permit revocation or non-renewal of said permit the following year; or in the case of a commercial eel licensee, forfeiture of permission to possess or use horseshoe crabs as bait for the remainder of the year.

1 DE Reg 1413 (4/1/98)

3 DE Reg 1567 (5/1/00)

7 DE Reg. 220 (8/1/03)

10 DE Reg. 1029 (12/01/06)

11 DE Reg. 685 (11/01/07)

3211 Horseshoe Crab Commercial Collecting Permit Eligibility And Renewal Requirements

(Penalty Section 7 **Del.C.** §2705(b))

- 1.0 The Department may only issue a horseshoe crab commercial collecting permit to a person who makes application for such a permit in calendar year 1998, and who, prior to July 1, 1997, had applied for and secured from the Department at least 2 valid horseshoe crab commercial collecting permits. Any person holding a horseshoe crab commercial collecting permit in 1998 may apply for renewal of their horseshoe crab commercial collecting permit by December 31 each year. If any person holding a horseshoe crab commercial collecting permit from the previous year fails to apply for renewal of their horseshoe crab commercial collecting permit by December 31 in any given calendar year, they forfeit their eligibility to obtain a horseshoe crab commercial collecting permit in subsequent years.

1 DE Reg 1413 (4/1/98)

7 DE Reg. 220 (8/1/03)

10 DE Reg. 1029 (12/01/06)

11 DE Reg. 685 (11/01/07)

3212 Prohibitions; Sale Of Horseshoe Crabs

(Penalty Section 7 **Del.C.** §2705(b))

- 1.0 It shall be unlawful for any person who collects or dredges horseshoe crabs, except a person with a valid horseshoe crab commercial collecting permit or a person with a valid horseshoe crab dredge permit, to sell, trade and/or barter or to attempt to sell, trade and/or barter any horseshoe crab.

1 DE Reg. 1413 (4/1/98)

7 DE Reg. 220 (8/1/03)

10 DE Reg. 1029 (12/01/06)

11 DE Reg. 685 (11/01/07)

3213 Collecting Horseshoe Crabs At Night, Prohibited

(Penalty Section 7 **Del.C.** §2705(b))

- 1.0 It shall be unlawful for any person with a valid commercial eel fishing license to collect horseshoe crabs between sunset and sunrise.

3 DE Reg. 1092 (2/1/00)

7 DE Reg. 220 (8/1/03)

10 DE Reg. 1029 (12/01/06)

11 DE Reg. 685 (11/01/07)

3214 Horseshoe Crab Annual Harvest Limit

(Penalty Section 7 **Del.C.** §2705(b))

- 1.0 The annual harvest limits for horseshoe crabs taken or landed in the State shall be determined in accordance with the annual sex-specific allocations identified in Addendum VII to the Atlantic States Marine Fisheries Commission's Interstate Fishery Management Plan for Horseshoe Crab.

- 2.0 When the Department has determined that 95% of an annual sex-specific horseshoe crab quota allocation has been landed, the Department shall establish, based on recent fishery performance and landings, a date and time to order that component of the horseshoe crab fishery closed. Horseshoe crabs of the component specified may not be taken during the remainder of the calendar year once closed by the Department.
- 3.0 Any overage in the State's annual horseshoe crab quota will be subtracted from the following year's horseshoe crab quota allocation.

7 DE Reg. 220 (8/1/03)

10 DE Reg. 1029 (12/01/06)

11 DE Reg. 685 (11/01/07)

12 DE Reg. 975 (01/01/09)

14 DE Reg. 904 (03/01/11)

16 DE Reg. 1082 (04/01/13)

3215 Horseshoe Crab Harvest Moratorium

Repealed

10 DE Reg. 1029 (12/01/06)

11 DE Reg. 685 (11/01/07)

3216 Prohibition on Possession or Use of Asian Horseshoe Crabs

(Penalty Section 7 Del.C. §2705(b))

- 1.0 It is unlawful to possess or use as bait Asian horseshoe crabs or parts thereof without written authorization from the Director of the Division of Fish and Wildlife.

17 DE Reg. 441 (10/01/13) (Final)