

DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

DIVISION OF FISH AND WILDLIFE

Statutory Authority: 7 Delaware Code, Sections 2701(d) (7 **Del.C.** §2701(d)
7 **DE Admin. Code** 3215

FINAL

Secretary's Order No. 2006-F-0047

Approving Proposed Regulation 3215, Horseshoe Crab Harvest Moratorium, as a Final Regulation

Date of Issuance: November 20, 2006

Effective Date: December 11, 2006

Under the authority vested in the Secretary of the Department of Natural Resources and Environmental Control ("Department" or "DNREC") under 29 **Del.C.** §§8001 et seq., 29 **Del.C.** §§10111 et seq. and 7 **Del.C.** §6010 (a), the following findings, reasons and conclusions are entered as an Order of the Secretary in this proceeding. This Order approves proposed regulation 3215 as a final regulation, which will, beginning January 1, 2007, impose a two-year moratorium on the harvesting of horseshoe crabs.

The Department's Division of Fish and Wildlife ("DFW") prepared two regulatory options for the Department's consideration as final regulations. The approval of either of these options would allow Delaware to comply with its federal legal responsibilities established by the multi-state Atlantic States Marine Fisheries Commission ("ASMFC"). Option 1 includes proposed amendments to Department Regulations 3203, 3207, 3210, and 3212, which set forth the current Department regulations on horseshoe crabs under the Department's authority in 7 **Del.C.** 103, 1902, 2701, 2703 and Chapters 15 and 60. These regulations establish the seasons and areas, dredging restrictions, reporting requirements, license renewals, and an annual limit of 150,000 horseshoe crabs. Option 1 would make some reporting and other changes, and would reduce Regulation 3214's limit of 150,000 horseshoe crabs annually to a proposed limit of 100,000 male horseshoe crabs over a two-year period beginning January 1, 2007. Option 2 is a new proposed regulation 3215 that would impose a two-year moratorium on any horseshoe crab harvesting in Delaware. Based upon my review of the record, the Department adopts Option 2 as an appropriate and reasonable regulatory step to protect the environment consistent with the Department's statutory purposes. Unlike Option 1, Option 2 ensures that Delaware has undertaken the maximum regulatory effort to protect the horseshoe crab population and the migratory bird population that depends on horseshoe crabs for food. This action will protect Delaware's environment, including horseshoe crabs and the important and at risk migratory bird population. Thus, the Department approves Option 2's proposed regulation as a final regulation, and withdraws Option 1's proposed amendments.

This Order is based on a vast administrative record, including the public hearing record reviewed in the October 20, 2006, Hearing Officer's Report ("Report"), attached hereto as Appendix A. The proposed regulation approved by this Order was published in the September 1, 2006, *Delaware Register of Regulations*, and the final regulation is set forth in Appendix B hereto. The Report provides a thorough review of the record and the technical and scientific support for both options. These proposed regulations generated considerable public debate and comments. The Report reviews and summarizes the massive administrative record, including the public hearing held September 28, 2006, in Dover, Kent County. Both options were opposed by well-presented comments from those who will be harmed by Option 1's considerable decrease in the harvesting or the even greater harm from Option 2's total temporary ban on harvesting. This harm is an economic one based upon the privilege of conducting a business that is extensively regulated. There is no right to conduct such a business, particularly when it may harm the environment.

The Department adopts the Report's review of the record, but rejects its recommendation that Option 1 be adopted, as discussed on page 11 of the Report. The Report recognized that both options were well-supported in the record, and that the selection would be determined on how much protection horseshoe crabs should receive. The Department determines that horseshoe crabs should receive the maximum amount of protection as a temporary measure for two years, as opposed to the less protective measure of reducing the limits on the amount that may be harvested to meet the ASMFC minimum requirements to protect horseshoe crabs, which, in turn, will

enhance the environment for red knots, a migratory bird that is at risk.

The Department's decision is made based upon a record that establishes the important need to protect the horseshoe crabs, which are one of the world's oldest species. The record shows that the horseshoe crab population in the 1990s was the subject of commercial over-fishing in the Delaware Bay, which is the epicenter for horseshoe crabs. This means that Delaware and New Jersey together need to act to preserve and foster the environment for horseshoe crabs. The regulatory action in Option 1 would result in a significant decrease in the number of horseshoe crabs harvested, but Option 2 will provide the most protection. New Jersey regulators opted for a moratorium, and the Department determines that Delaware should also impose a moratorium to allow consistent protection of the entire Delaware Bay.

The horseshoe crab provides an invaluable source of food for birds, particularly migratory birds. The record focuses on the significant decline in the red knot, which is a bird species that arrives in Delaware annually to feed upon horseshoe crabs. The record shows a reasonable basis to protect the red knots by protecting their food supply in Delaware. Thus, this Order will allow the complete protection of horseshoe crabs in Delaware Bay for two years, which also will enhance the food supply available to the red knot and other migratory birds now and in the future.

The record shows in 2005 that Option 2 will result in a Delaware economic impact of \$111,970 to the 34 horseshoe crab license holders, and indirect impact to the eel and conch pot industries. Option 1 also will have a considerable impact based upon the reduction imposed on the harvesting. The indirect impact is from using horseshoe crabs as bait for eel and conch. The record also includes requests for Department action to provide some economic relief to the persons impacted. The Department supports such a mitigation effort, but the Department unfortunately does not have the authority to grant economic relief. The Department also takes this action based upon recent scientific developments, namely, a possible artificial substitute for horseshoe crabs' primary economic use as bait for eel and conch fishing. Thus, until such a promising scientific development fully is implemented, the Department takes this regulatory action because the record contains expert technical and scientific support that the long-term survival of the horseshoe crabs requires a short-term moratorium on their harvesting.

The Department finds that Option 2 is appropriate to adopt consistent with protecting the horseshoe crab from the threat from excessive fishing, recognizing that it may have occurred years ago when there was no regulation on the fishing. This action is consistent with the Department's duty to protect the environment not only today, but for the future. The Department is concerned that the protection of the horseshoe crab cannot wait, and that the Option 1's reductions may not provide sufficient protection. The environmental impact of continued harvesting will not be known for eight to ten years. Thus, this temporary action is appropriate to preserve the future economic viability of the Delaware fishing industry most impacted by this Order.

The Department finds that the proposed regulation 3215 is well supported by technical expertise and sound judgment, is consistent with the law and regulations, and has a reasonable basis. It is not arbitrary or capricious, but is appropriate as consistent with the Department's statutory purposes. Regulation 3215 will result in protecting an important natural resource from a known harm. The moratorium will allow the horseshoe crab time to recover from fishing prior to the Department's current regulations. The moratorium will protect 300,000 male horseshoe crabs and provide more food for the red knot in the Department's maximum effort to protect this migratory bird from environmental harm from a lack of food supply. The Department chooses to have the horseshoe crab eggs eaten by the migratory birds, as opposed to utilizing spawning horseshoe crabs as bait for eels and conch and this is a valid environmentally sound policy determination, albeit a temporary one. The two-year time period is reasonable and appropriate in order that the horseshoe crab population to increase to support an ongoing, vibrant fishing industry and allow the red knot more food supply and thereby protect this species.

In conclusion, the following findings and conclusions are entered:

1. The Department, acting through this Order of the Secretary, adopts Regulation No. 3215, as published as a proposed regulation in the September 1, 2006 *Delaware Register of Regulations* and as set forth in the Appendix B hereto, as a final regulation under 29 **Del.C.** §6010 (a) and withdraws the pending amendments;

2. The proposed regulation approved by this Order was developed consistent with the applicable law and regulatory standards, is supported by expert technical analysis and scientific studies, and has a reasoned basis for regulating the environment from the potential harm;

3. The Department provided adequate public notice of the proceeding and the public hearing in a manner required by the law and regulations, held a public hearing in a manner required by the law and regulations, and considered all timely and relevant public comments in making its determination;

4. Approval of the final regulation is consistent with the Department's statutory duty to protect the environment in Delaware;

5. This Order and the final approved regulation shall go into effect ten days after publication in the next available issue of the *Delaware Register of Regulations*; and that

6. The Department shall provide written notice to the persons affected by the Order, as determined by those who participated in these Department proceedings at the public hearing, or through participation by the submission of timely and relevant written comments.

John A. Hughes
Secretary

3200 Horseshoe Crabs (Option 1: 3203, 3207, 3210, 3211 and 3214; Option 2: 3215)

Option 1

3203 Seasons and Area Closed to taking Horseshoe Crabs (Formerly S-51 & HC-3)
(Penalty Section 7 Del.C. §1912)

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 ~~May 1~~ **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 Tuesday and Thursday 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 June 30.

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 ~~May 1~~ **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 June 30, for persons with valid horseshoe crab collecting permits and eel licensees and their alternates to collect ~~male~~ horseshoe crab adults on Mondays, Wednesdays and 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.

[5.0 It shall be unlawful for any person to collect or dredge or to attempt to collect or dredge horseshoe crabs at any time prior to May 1 in any given year after the date the Department determines 35% of the annual quota of horseshoe crabs, approved for Delaware by the Atlantic States Marine Fisheries Commission, is landed.]

1 DE Reg 1412 (4/1/98)

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

3207 Horseshoe Crab Dredging Restrictions (Formerly S-55 & HC-7)
(Penalty Section 7 Del.C. §1912)

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.

1 DE Reg 354 (10/1/97)

3 DE Reg 1567 (5/1/00)

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 **[May 1 January 1]** and continuing through midnight, June 30, next ensuing.

1 DE Reg 1412 (4/1/98)

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."

3 DE Reg 1567 (5/1/00)

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

3210 Horseshoe Crab Reporting Requirements (Formerly S-57 & HC-10)

(Penalty Section 7 Del.C. §1912)

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 **[weekly daily]** basis. Said **[weekly 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 **[weekly daily]** report on his/her harvest of horseshoe crabs to the Department shall submit said report on or before 4:30PM on the Monday following the week covered by said report. **[If Monday is a legal State holiday, said report shall be submitted on or before 4:30PM on Tuesday, next ensuing. For purposes of this section, a week shall commence at 12:01AM on Monday and conclude at midnight on Sunday, next ensuing. ~~phone in said report within 24 hours of said harvesting.~~** 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 and sex 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 **[weekly 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 **[weekly 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)

3211 Horseshoe Crab Commercial Collecting Permit Eligibility and Renewal Requirements (Formerly S-59 and HC-11)

(Penalty Section 7 Del.C. §1912)

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 ~~[April 1 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 ~~[April 1 December 31 in any given calendar year,]~~ they forfeit their eligibility to obtain a horseshoe crab commercial collecting permit in ~~[the future subsequent years.]~~

1 DE Reg 1413 (4/1/98)

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

3214 Horseshoe Crab Annual Harvest Limit (Formerly S-62 and HC-14)

(Penalty Section 7 Del.C. §1912)

1.0 The annual harvest limit for horseshoe crabs taken and/or landed in the State shall be **[150,000 ~~100,000 male horseshoe crabs for a period of two years beginning January 1, 2007]~~** or whatever the Atlantic States Marine Fisheries Commission has approved as Delaware's current annual quota, whichever number is less.

2.0 When the Department has determined that the annual horseshoe crab quota has been met, the Department shall order the horseshoe crab fishery closed and no further horseshoe crabs may be taken during the remainder of the calendar year.

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

Option 2

3215 Horseshoe Crab Harvest Moratorium

1.0 Under the Department's authority granted in §2701(a) of 7 Del.C. to administer a program for the conservation and management of horseshoe crabs, it shall be unlawful for anyone, except as specified in §2702 and §2704(b) of 7 Del.C., to collect by means of a dredge or to collect or attempt to collect by any means any horseshoe crab or parts thereof from Delaware lands or waters for a period of two consecutive years beginning January 1, 2007. It shall further be unlawful to land from a vessel in Delaware any horseshoe crabs taken from outside of Delaware's jurisdiction for a period of two years beginning January 1, 2007. For the two-year term of this harvest moratorium, all other horseshoe crab regulations are suspended, except for Horseshoe Crab Regulation 3202. Those persons holding horseshoe crab collecting permits in 2006 shall retain their eligibility to apply for a commercial horseshoe crab collecting permit once the fishery is re-opened and must do so by December 31 of each year once the fishery is re-opened, or forfeit their eligibility to obtain a horseshoe crab commercial collecting permit in subsequent years.

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