# STATE OF CONNECTICUT DEPARTMENT OF ENERGY AND ENVIRONMENTAL PROTECTION BUREAU OF NATURAL RESOURCES

# SUMMARY OF PUBLIC COMMENTS, AGENCY RESPONSE AND EXPLANATORY STATEMENT FOR FINAL REGULATIONS

# SUBJECT MATTER OF THE REGULATION: COMMERCIAL AND SPORTFISHING IN THE MARINE DISTRICT

Proposed amendments to sections 26-142a-3a, 26-142a-6, 26-142a-8a, 26-157c-1, 26-157c-2, 26-159a-2 and 26-159a-17 of the Regulations of Connecticut State Agencies (RCSA).

**Introduction:** These proposed amendments to RCSA, as authorized under the authority of Sections 26-142a, 26-157c and 26-159a of Connecticut General Statutes, will amend regulations concerning whelks, American lobsters, striped bass, and horseshoe crabs. Below is a summary of the proposed changes and statements of purpose.

<u>Section 1</u>. In Section 26-142a-3a of RCSA, adds whelk pots to the list of fixed commercial gears that may not be set in navigational channels or mooring fields. The setting and tending of fixed commercial fishing gear in navigational channels and mooring fields can be hazardous to boaters and commercial shipping.

<u>Section 2</u>. In Section 26-142a-6 of RCSA, adds a subsection to define dimensions, structural configuration, and marking requirements for whelk pots, prohibit the setting of whelk pots on leased shellfish beds without the lease holder's authorization, require use of bait bags in whelk pots, and prohibit the hauling and setting of whelk pots from one half hour after sunset to one half hour before sunrise. These are standard stipulations and requirements for commercial pot fishing gear in Connecticut, except for the requirement for use of bait bags, which is intended to minimize the amount of horseshoe crab used as bait in whelk pots.

With the adoption of the proposed changes in this section, whelk pots will become a defined commercial gear type. In conjunction with the regulatory changes proposed in Section 5 (see below), the definition of whelk pots will result in a change to permissible fishing practices during the fall lobster fishing closure. The annual Department of Energy and Environmental Protection (DEEP) Commissioner's Declaration that has implemented the fall lobster closure since 2013 has allowed an exception under which commercial fishermen could leave lobster pots in the water if those pot were being used to "actively fish for whelk." DEEP Environmental Conservation (EnCon) Police have indicated that this exception allowing lobster pots to stay in the water during the fall lobster closure for purposes of whelk fishing creates difficulties in

effectively enforcing the fall lobster closure, as well as inadvertent bycatch and mortality of marine organisms in lobster pots that remain in the water but are not actively hauled and tended. Under the new regulatory regime proposed here in Sections 2 and 5, commercial fishermen would still be allowed to fish for whelk with pots during the fall closure. However, they would need to fish for whelk using pots that fit the definition of a "whelk pot" (i.e., the regulatory language proposed in Section 5 for formal implementation of the fall lobster closure does not include the language from the Commissioner's Declaration which previously created the exemption for use of lobster pots to actively fish for whelk). The definition proposed here in Section 2 for whelk pots would allow fishermen to easily convert a lobster pot to a whelk pot by removing or fastening open the top door of the lobster pot. Fishing a lobster pot in this manner would allow for effective capture of whelk (whelk are commonly targeted with open-topped pots in commercial whelk fisheries) while preventing capture of lobster and other marine organisms and would also facilitate more effective enforcement of the fall lobster closure.

Section 3. In Section 26-142a-8a of RCSA, adds channeled whelks and knobbed whelks, the two species of whelks commonly found in Connecticut waters, to the list of species managed by minimum size limits, and specifies the minimum size limit. Public Act 15-52 transferred commercial licensing and management responsibility for whelk from the Department of Agriculture to DEEP. Available data suggests that whelk populations in Long Island Sound are depleted, likely due in part to unregulated harvest which has reduced overall abundance and limited reproductive capacity. Limiting harvest of whelk via a minimum size limit will allow populations to begin rebuilding; this management strategy has been successful in maintaining viable whelk fisheries in other Atlantic coastal states. DEEP has worked closely with the New York Department of Environmental Conservation to craft a consistent regulatory proposal for Long Island Sound. The proposed minimum length limit is consistent with limits in place in other regional states. The commercial harvest of channeled or knobbed whelk less than 3 inches in shell width or 5.5 inches in shell length would be prohibited.

Section 4. In Section 26-157c-1 of RCSA, formally implements a minimum carapace length limit of 3-3/8 inches for American lobster. Addendum XI to Amendment 3 of the Atlantic States Marine Fisheries Commission (ASMFC) American Lobster Interstate Fishery Management Plan (FMP), approved in 2007, required that states implement a 3-3/8-inch minimum carapace length limit for lobster harvested from Lobster Management Area 6 (LMA 6), which includes Long Island Sound. The Atlantic Coastal Fisheries Cooperative Management Act of 1993 mandates that Atlantic coastal states implement the provisions of ASMFC FMPs or face a federally imposed fishery moratorium. Connecticut received a temporary deferral of the 3-3/8-inch carapace length requirement, but ultimately implemented the requirement in 2009 via Commissioner's Declaration and has maintained the requirement since then via periodic renewal of the Declaration. Given the ongoing depleted state of the Southern New England lobster stock, most recently re-confirmed via a 2020 ASMFC stock assessment, there is no prospect of relaxing this minimum carapace length requirement. This action will codify the

minimum carapace length limit in Section 26-157c-1 of RCSA and negate the need for ongoing periodic renewal of the Commissioner's Declaration.

Section 5. In Section 26-157c-2 of RCSA, implements a requirement for larger escape vents in lobster pots and formally implements a fall lobster fishing closure. Addendum IV to Amendment 3 of the ASMFC American Lobster FMP, approved in 2004, created lobster pot escape vent size requirements for corresponding minimum carapace length limits. When Connecticut implemented an increased minimum carapace length limit in 2009 (see Section 4 above), Connecticut was also required by Addendum IV to implement a corresponding increase in lobster pot escape vent size, which DEEP has yet to implement (DEEP does not have declaration authority to implement gear requirements; the increased escape vent size has been included in previous regulatory proposals that were not brought to completion). Addendum XVII to Amendment 3 to the ASMFC American Lobster FMP, approved in 2012, required a 10% reduction in exploitation (fraction of population harvested annually) of lobster in LMA 6. To achieve the required reduction in exploitation, Connecticut and New York implemented a fall closed season in 2013 (Sept. 8 - Nov. 28). Connecticut implemented this closure in 2013 via Commissioner's Declaration and has since maintained the closure via annual renewal of the Declaration. To-date, ASMFC has taken no actions to amend the FMP such that the LMA 6 fall closed season could be eliminated. The Atlantic Coastal Fisheries Cooperative Management Act of 1993 mandates that Atlantic coastal states implement the provisions of ASMFC FMPs or face a federally imposed fishery moratorium. Formal implementation of the fall closure in RCSA will negate the need for ongoing annual renewal of the Commissioner's Declaration. In addition to the changes described above, minor changes to Section 26-157c-2 are also proposed, including: obsolete language in subsection (c) is being removed to improve clarity, the text of subsection (b) is being rearranged for clarity, and subsection (e) is being amended for gender neutrality.

Section 6. In Section 26-159a-2 of RCSA, creates a new requirement for use of circle hooks by recreational anglers fishing for striped bass with bait (as opposed to artificial lures). Atlantic striped bass populations are currently overfished and in need of conservation. Post-release or "discard" mortality of striped bass released by recreational anglers is a major contributing factor to the depleted state of striped bass populations. Use of circle hooks is a scientifically proven method of minimizing hooking injury and thus increasing odds of post-release survival. To reduce discard mortality, the ASMFC has added a provision to the Atlantic Striped Bass FMP requiring Atlantic coastal states to implement rules by January 1, 2021, mandating use of circle hooks when fishing for striped bass with bait. The Atlantic Coastal Fisheries Cooperative Management Act of 1993 mandates that Atlantic coastal states implement the provisions of ASMFC FMPs or face a federally imposed fishery moratorium. The proposed regulation will therefore provide conservation of economically important striped bass populations and ensure compliance with the ASMFC striped bass FMP. Recreational fishermen will be required to use inline (non-offset) circle hooks while fishing for striped bass with bait, except for bait added to artificial lures. In addition, recreational fishermen will be required to immediately release

without avoidable injury any striped bass caught with bait on a non-circle hook (exempting artificial lures), regardless of the species they are targeting.

Section 7. In Section 26-159a-17 of RCSA, implements more conservative fishing rules to address the depleted state of horseshoe crabs in Long Island Sound. The 2019 ASMFC horseshoe crab stock assessment concluded that the Long Island Sound horseshoe crab stock is in poor condition. In response to the stock assessment, the ASMFC Horseshoe Crab Management Board requested that Connecticut and New York take regulatory action to reduce the commercial harvest of horseshoe crabs. Horseshoe crabs spawn on coastal beaches during the spring, and spawning activity and associated commercial hand harvest is most intense during the periods around the new and full moon. Public comment to DEEP Marine Fisheries gathered during an public informational meeting and associated public input period in 2020 favored "lunar closures" (periodic harvest closures centered on the new/full moon phase) as an effective means of reducing commercial harvest and improving horseshoe crab spawning success, as well as establishing regulatory consistency with New York. New York has implemented regulatory restrictions (lunar closures during first two spring moon phases, daily possession limit reduction to 150 crabs) like those proposed here. The opening of the horseshoe crab commercial season will move from May 22 to the calendar date three days after the last full or new moon in May, and there will also be a new 5-day closure centered on the first moon phase in June. The daily possession limit for commercial hand-harvest will also be reduced from 500 to 150 crabs. In addition, obsolete language in subsection (b) related to issuance of license endorsements is being removed.

This document provides an explanatory statement for the final regulations concerning commercial and sportfishing in the marine district. It includes a summary of the public comments submitted: 1) via the eRegulations system, 2) emailed or mailed directly to the Department of Energy and Environmental Protection (DEEP) as provided in the Notice of Intent, or 3) presented during a public hearing held at the Clinton Town Hall Auditorium, 50 East Main Street, Clinton CT on December 6, 2021, and the Department's response to the comments, including any revisions to the proposed regulations. The Notice of Intent, the full text of the proposed regulations and statement of purpose, a fiscal note and a regulatory flexibility analysis were posted to the eRegulations system on November 16, 2021. The public comment period was open until 5:00 pm, December 19, 2021.

A notice concerning the proposed regulations including a link directly to the eRegulations system (including the Notice of Intent) was distributed electronically to the Fisheries Division's Marine Fisheries News e-mail listserv, which reaches approximately 1,000 subscribers. As required by Section 26-113 of Connecticut General Statutes, notice of the public hearing was also published in several newspapers: the Hartford Courant, The New London Day, The Connecticut Post and the New Haven Register. A total of 15 people provided verbal comment at the public hearing and 527 provided comments in writing, either by submitting through the

eRegulations system or directly to the Department. A total of 508 of the written comments were an identical "form" email in support of proposed regulatory changes concerning horseshoe crabs.

General note on comments submitted. Of the 527 written comments submitted, 508 appeared to be the result of an organized email campaign in support of the proposed horseshoe crab regulations. Several comments were received that were not directly relevant to the regulations proposed, including: a) DEEP should close the whelk fishery to new entrants, b) previous DEEP restrictions on the lobster fishery caused the decline of that fishery, c) there is not an adequate number of DEEP Environmental Conservation Police to enforce fisheries regulations, d) DEEP should consider closing public access to beaches used by horseshoe crabs during the spawning season, e) an adequate replacement for horseshoe crab as bait for the whelk fishery should be developed, and f) to reduce the number of striped bass released by recreational anglers DEEP should limit the total number of striped bass that can be caught at two.

# **Specific comments and agency responses:**

## Section 1. RCSA Sec. 26-142a-3a.

No comments received.

## <u>Section 2</u>. RCSA Sec. 26-142a-6.

One individual commented that the proposed configuration for whelk pots, specifically the specification that whelk pots must have an unobstructed opening on the top side of no less than 196 square inches with each side of the opening to be no less than 10 inches, would be problematic for commercial fishers. The commenter stated that the proposed configuration would make the process of converting a lobster pot to a whelk pot too costly and time consuming. The commenter suggested that commercial fishers should instead be required to place smaller escape events, such as 4" by 4" square vents, on the top side of lobster pots when fishing such pots for whelk during the fall lobster closure. The commenter also suggested that whelk could fall out of a lobster pot with the top removed or fastened open when the pot is hauled to the surface.

#### Agency Response:

The proposed open-topped configuration for whelk pots reflects industry standards for commercial pots designed for whelk fishing and will allow for the easy conversion of a lobster pot to a whelk pot by simply removing or fastening open the top door. The proposed dimensions of the top opening correspond to typical dimensions of top doors on lobster pots. While the agency does not wish to impose requirements on commercial fishers that will create undo inefficiencies in fishing operations, it is not clear how installation of escape events will be less costly or time-intensive than simply fastening open the top door on a lobster pot. The agency also feels that smaller square escape events of the size proposed by the commenter

would not adequately address one of the primary motivations for this proposed rule: ensuring ready escape of any marine organisms other than whelk that enter a lobster pot fished during the fall lobster closure. The agency acknowledges there is potential for some whelk to be lost from a trap through the open top during hauling but given that lobster pots are typically bottom weighted with bricks, such loss should be minimal as it is unlikely the pot will invert during hauling. DEEP Environmental Conservation Police feel strongly that this proposed rule will greatly enhance their ability to effectively enforce the fall fishery closure for the severely depleted lobster population in Long Island Sound. It should also be noted that commercial fishers will only be required to fasten open or remove top doors on lobster pots to fish for and take whelk during the fall lobster closure (Sept. 8 – Nov. 28); appropriately-licensed fishermen may continue to take whelk from unaltered lobster pots during all other times of the year.

One individual commented that bait bags will increase the amount of horseshoe crabs used as bait in whelk pots.

## Agency Response:

The use of bait bags in whelk pots is intended to decrease the amount of horseshoe crab used as bait by minimizing the rate at which organisms in the pot can consume the bait. Bait bags have been implemented as a successful strategy in other states to minimize the amount of horseshoe crab bait used. It is not clear how containing horseshoe crab bait within a mesh bag and slowing the rate at which it can be consumed will ultimately lead to use of more bait, unless fishers make a conscious decision to use more bait than they did prior to implementation of the bait bag requirement.

#### Section 3. RCSA Sec. 26-142a-8a.

Two individuals commented in favor of DEEP's proposal to implement a 5.5-inch minimum shell length / 3-inch minimum shell width for channeled and knobbed whelks.

A total of 13 individuals commented that they were not in favor of the proposed minimum shell size limit for whelk. All 13 commenters stated that contrary to DEEP's rationale for proposing a whelk minimum size limit, there has been no decline in abundance of whelk in Long Island Sound in recent decades. Six of those commenters provided additional rationale/context for their position, including a) DEEP Long Island Sound Trawl Survey (LISTS) uses a type of sampling gear (trawl net) that does not effectively capture whelk, b) DEEP LISTS does not sample in the areas of Long Island Sound where whelks are most abundant and where most whelk fishing occurs, and c) DEEP does not have a scientific sampling program that collects data either directly from the whelk fishery or using the same collection gear (pots) as the whelk fishery.

#### Agency Response:

DEEP acknowledges that the LISTS, the scientific survey which the agency uses to assess abundance of fish and invertebrate species in Long Island Sound, uses a sampling gear (trawl

net) which is not ideal for capturing whelk. However, the trawl survey does capture whelk, is conducted in a rigorous and standardized manner according to a statistical survey design and caught whelk at higher rates in the past than in current years. The non-ideal nature of a trawl net for whelk fishing is not a suitable explanation for the general decline in whelk catches noted over time in the trawl survey.

The agency also acknowledges that whelk abundance may vary among different habitats within Long Island Sound, and that LISTS does not sample all available habitats within the Sound. However, some commenters gave conflicting remarks concerning the issue of whether LISTS operates in areas of Long Island Sound preferred by whelk. At the public hearing, commenters stated recent poor catches of whelk in LISTS are attributable to the fact that LISTS operates in deeper areas of Long Island Sound, and not in nearshore shallow waters preferred by whelk. Some of those same commenters later stated that they often fish for whelk in deeper waters of Long Island Sound, because whelk have become more abundant in those areas in recent years since the lobster population crashed. Notwithstanding this apparent contradiction, as noted above in response to the assertion that the non-ideal nature of a trawl net explains recent declines in LISTS whelk catches, the assertion that LISTS may not sample some habitats that are preferred by whelk is not a suitable explanation for why LISTS used to catch whelk but now generally doesn't.

DEEP agrees that a fishery survey utilizing pot gear could provide additional insights into whelk abundance in Long Island Sound. The agency notes that such a long-term survey does exist, although it is limited in geographical scope. The Dominion (Millstone) Environmental Lab has conducted an annual survey using lobster pots in the vicinity of Niantic Bay in eastern Long Island Sound. The survey is intended to measure changes in lobster abundance over time, but Dominion Lab staff quantify all other species captured in the survey. Annual whelk catches in this survey have varied over time, but in general have been low in recent years, particularly within the last four years. This survey provides further corroboration of the trend noted in the Long Island Sound Trawl Survey and demonstrates the potential value of a larger pot survey conducted throughout Long Island Sound.

In general, the agency acknowledges that whelk in Long Island Sound are relatively "data poor" species, and that additional information on whelk abundance, population structure, and movement patterns could provide a basis for a more comprehensive and rigorous management program. However, faced with available information that suggests whelk populations have declined, coupled with the completely unregulated condition of the fishery, DEEP feels the most appropriate and responsible precautionary course of action is to adopt regulations that minimize the probability of over-exploitation of the resource. The proposed size limit is within the range of size limits adopted in other states and would achieve regulatory consistency with New York within the shared waters of Long Island Sound.

Two individuals commented that the research done by New York Department of Environmental Conservation (DEC) determining that female whelk in Long Island Sound do not mature at sizes smaller than 5.5 inches shell length is inaccurate, and whelk in Long Island Sound mature at smaller sizes.

# Agency Response:

The New York Department of Environmental Conservation (DEC), in collaboration with DEEP, completed a ten-year study in which approximately 900 female whelk were collected from a variety of areas and locations in Long Island Sound and assessed for sexual maturity using established scientific methods. This study provided a clear result that very few female whelk in Long Island Sound show evidence of sexual maturity at sizes smaller than 5.5 inches shell length. This study represents the best available science on whelk maturity in Long Island Sound and is the most appropriate basis for formulating regulations that will protect immature whelk from harvest.

Two individuals commented that whelk in western Long Island Sound have always been and remain generally smaller than whelk in eastern Long Island Sound, and therefore the proposed whelk size limit is particularly inappropriate for western Long Island Sound.

# Agency Response:

In response to this comment, DEEP analyzed shell size (width) of whelk collected during 2012-21 by the Long Island Sound Trawl Survey in eastern vs. western Long Island Sound, using New Haven as the east vs. west dividing line (an appropriate division point based on comments made during the public hearing). The analysis included a total of 337 individual whelk (200 from sites in eastern Long Island Sound and 137 from sites in western Long Island Sound). This analysis found no significant difference in whelk shell width in eastern vs. western Long Island, with both average and median shell width differing by only approximately 2 millimeters or 0.08 inches (eastern Sound average shell width = 74.15 millimeters (mm), median shell width = 75 mm; western Sound average shell width = 72.13 mm, median shell width = 73 mm). DEEP acknowledges that this analysis is based on relatively small sample sizes due to low whelk catches in the trawl survey in recent years, and only provides insights into potential regional differences in whelk size (or lack thereof) during the recent timeframe. It is possible that in the past whelk were larger in the eastern Sound due to inherent regional differences in growth rates or maximum attainable size, but excessive fishing pressure and resulting truncation of population size structure has obscured these inherent regional differences.

A total of 12 individuals suggested alternative whelk minimum shell length limits that they felt would be more appropriate for Long Island Sound, including 4 inches or 4.5 inches (10 commenters), 4.75 inches (one commenter), and 5.25 inches (one commenter).

#### Agency Response:

#### See below

Two individuals commented that instead of implementing a minimum shell length or shell width for whelk, DEEP should instead implement a minimum shell height, like the 2.25-inch minimum shell height limit implemented by Rhode Island in 2020 to replace their previous 5-3/8-inch minimum shell length / 3-inch minimum shell width requirements. Commenters stated that implementation of a minimum shell height would make on-deck measurement/processing of whelk more efficient and would facilitate enforcement.

# Agency Response:

See below

One individual commented that commercial shellfishers need the ability to temporarily possess whelk less than the proposed minimum size so they can relocate those whelks away from commercial shellfish beds. The commenter indicated that such relocation practices for whelks captured during routine dredging of shellfish beds or during whelk fishing in the immediate area of shellfish beds is commonplace and is important to minimize whelk predation on cultured shellfish.

# Agency response:

DEEP recognizes the validity of the concerns raised by all three categories of comments above (desire for a less restrictive size limit, advantages of using shell height as a metric for length limit, and need for provision allowing temporary possession and relocation of undersized whelk away from commercial shellfish beds) and accordingly has modified the proposed regulatory language for Section 26-142a-8a to a) replace the proposal for a minimum shell width limit with a minimum shell height limit (retaining the proposed minimum shell length limit; shell heights for corresponding shell lengths obtained from a shell length vs. shell height relationship provided by NY DEC; language defining shell height taken from Rhode Island regulations), b) incorporate a "phase-in" approach to implementation of minimum shell size requirements, in which the minimum shell length/height will be 4.75 inches / 1-15/16 inches effective August 1, 2022, and then will gradually increase in a stepped fashion every two years, until reaching 5.5 inches / 2-¼ inches on January 1, 2028, and c) incorporate a provision that allows whelk fishers fishing within a designated shellfish area to temporarily possess and relocate undersized whelk. The agency feels these revisions are substantively responsive to the comments received during the public comment period and will ameliorate the impact of the proposed regulatory changes to the commercial fishing and shellfishing industries.

The modified regulatory language is as follows:

(16) Channeled whelk (Busycotypus caneliculatus) – Effective August 1, 2022, 4.75 inches in shell length or 1 15/16 inches in shell height and effective January 1, 2024, 5 inches in shell length or 2 inches

in shell height and effective January 1, 2026, 5 ¼ inches in shell length or 2 1/8 inches in shell height and effective January 1, 2028, 5 ½ inches in shell length or 2 ¼ inches in shell height.

(17) Knobbed whelk (Busycon carica) - Effective August 1, 2022, 4.75 inches in shell length or 1 15/16 inches in shell height and effective January 1, 2024, 5 inches in shell length or 2 inches in shell height and effective January 1, 2026, 5 ½ inches in shell length or 2 1/8 inches in shell height and effective January 1, 2028, 5 ½ inches in shell length or 2 ¼ inches in shell height.

For whelk species, shell length shall be defined as the longest length of the shell from the spire apex to the siphonal canal and shell height shall be the distance along a straight perpendicular line from a point on the opercular side of the shell to the farthest point of the top of the shell. Shell height is measured with the whelk retracted, and shell placed with the operculum stably positioned against a flat surface. To properly measure shell height using a gauge: minimum legal shell height shall be the shell height specified in section 26-142a-8a(b) between opposing parallel surfaces, measured with the whelk retracted and shell placed with the operculum stably positioned against one of the parallel surfaces. The whelk is legal-sized if it does not fit between the opposing parallel surfaces.

Any of said species less than the minimum legal length taken by any commercial fishing gear shall, without avoidable injury, be returned immediately to the water from which taken. No person on board any vessel engaged in commercial fishing or landing species taken by commercial fishing gear shall possess any summer flounder fillet less than the minimum total length for the species unless the carcass of the fish from which the fillet was removed has been retained and meets the minimum length. This subsection shall not be construed to prevent filleting of fish on shore or at the dockside. Whelk measuring less than the minimum shell length or shell height shall not comprise by number more than three percent of whelk in possession by any person, except holders of a commercial whelk fishing license may possess whelk measuring less than the minimum size provided: they are actively fishing in a designated shellfishing area with written permission of the shellfish lease holder, whelk measuring less than the minimum size are stored in a container separate from all other catch, such whelk are kept covered with a fabric wetted with sea water, and such whelk are released, without avoidable injury, to the waters of Long Island Sound on the same day that they were taken and prior to landing or offloading, and provided that no such whelk may be released onto any shellfishing ground leased by another shellfisherman under section 26-149 of the Connecticut General Statutes and designated under the provisions of section 26-227 of the Connecticut General Statues.

Five individuals commented that whelks are predators on shellfish and that the proposed minimum size limit for whelk would negatively impact shellfish populations as more whelk that would otherwise be harvested by commercial fishers would now be released back into Long Island Sound. The commenters suggested that whelk populations in Long Island Sound need to be controlled not protected.

# Agency response:

DEEP acknowledges that whelk are predators on shellfish and that whelk predation is a concern for the commercial shellfish industry. This concern is the primary motivation for incorporation of the provision allowing temporary possession/relocation of undersized whelk away from shellfish beds (see above). This provision should allow for similar outcomes as under current

status quo practices of commercial shellfishers and cooperating whelk fishers, with the only shift being the ratio of whelk brought to market vs. relocated away from beds. The agency acknowledges that the intent of its proposal is in part to increase whelk abundance in Long Island Sound; however, DEEP is not seeking to enhance whelk populations to abundances outside of historic norms. DEEP feels that the potential impacts of whelk predation on the commercial shellfish industry must be balanced against the value of ensuring the long-term sustainability of the commercial whelk fishery, which has become an important component of the overall commercial fishing industry in Connecticut.

#### Section 4. RCSA Sec. 26-157c-1.

One individual commented that the lobster minimum carapace length in Long Island Sound should be the same as in the Gulf of Maine: 3-1/4 inches instead of 3-3/8 inches.

# Agency response:

Minimum carapace lengths for various Lobster Management Areas (LMAs) are set by the Atlantic States Marine Fisheries Commission (ASMFC) American Lobster Fishery Management Plan (FMP). The ASMFC FMP specifies a minimum carapace length of 3-3/8 inches for LMA 6, which includes Long Island Sound. Connecticut is bound by federal law to implement the provisions of ASMFC FMPS and therefore does not have the latitude to adopt a different minimum carapace length than that specified for LMA 6 within the Lobster FMP.

#### Section 5. RCSA Sec. 26-157c-2.

One individual commented that the lobster pot escape vent size for Long Island Sound should be 1-15/16 inches x 5 inches instead of 2 inches by 5 inches as proposed.

#### Agency response:

Lobster pot escape vent sizes for various Lobster Management Areas (LMAs) are set by the Atlantic States Marine Fisheries Commission (ASMFC) American Lobster Fishery Management Plan (FMP). The ASMFC FMP specifies the lobster pot escape vent sizes for various types of lobster pots within LMA 6, which includes Long Island Sound. Connecticut is bound by federal law to implement the provisions of ASMFC FMPS and therefore does not have the latitude to adopt different lobster pot escape vent sizes than those specified within the Lobster FMP.

#### Section 6. RCSA Sec. 26-159a-2.

Two individuals commented that they were in favor of the proposed requirement for recreational anglers to use circle hooks whenever fishing for striped bass with bait. An additional two individuals commented that they were in favor of the proposed circle hook requirement for striped bass and felt that a similar requirement should be extended to all species when fishing with bait.

One individual commented that circle hooks "lack nuance" and that they can't be used effectively for all types of bait fishing for striped bass, such as the "snag and drop" method of fishing live menhaden as bait. The commenter thought a better approach than the proposed circle hook requirement would be to train all fishermen to use better fishing techniques that would minimize hooking injuries and post-release mortality.

# Agency response:

DEEP agrees that in some instances it is possible that the circle hook requirement could hamper traditional striped bass fishing practices and/or angler success rates but feels that this potential drawback is far outweighed by the conservation benefit of the circle hook requirement to overfished striped bass populations. The agency also agrees that angler outreach/education around best fishing practices should be an important component of the strategy to rebuild striped bass stocks. DEEP has been engaging in such outreach/education efforts around recreational fishing in general and specifically with respect to striped bass through multiple venues in recent years. However, it is not feasible, nor would it be efficient/effective to implement mandatory angler education programs in place of the proposed circle hook requirement. Finally, it should be noted that ASMFC has mandated the circle hook requirement as a provision within the Interstate Striped Bass Fishery Management Plan, and Connecticut is therefore bound by federal law to implement this requirement.

## **Section 7. RCSA Sec. 26-159a-17.**

The overwhelming majority of written comments submitted to the Department for this regulation package were comments in support of the proposed regulatory changes concerning horseshoe crabs.

Commentors expressed support for the concept of lunar closures, stating that these closures would protect horseshoe crabs during the time they are spawning and commented that the eggs of horseshoe crabs are an important food source for migratory shore birds including the threatened red knot and the semipalmated sandpiper. A total of 508 of the 520 written comments received concerning the proposed horseshoe crab regulation changes were an identical "form" e-mail which contained the following text (one example of this form e-mail has been uploaded into the eRegs system as written comment):

"As a supporter of the Connecticut Audubon Society, I'm writing to urge the CT DEEP to approve new regulations on the taking of horseshoe crabs.

The new regulations are likely to help not only the declining population of horseshoe crab but also benefit birds such as the Red Knot and Semipalmated Sandpiper that eat horseshoe crab eggs during migration.

As CT Audubon reported in its Connecticut State of the Birds report earlier this month, Red Knots are now listed as threatened under the U.S. Endangered Species Act, and Semipalmated Sandpiper populations have fallen by 80%."

A total of 5 individuals commented that the proposed regulations for horseshoe crabs are not restrictive enough and that a complete ban on the harvest of horseshoe crabs should be implemented.

# Agency response:

DEEP understands the urgent need for conservation of Long Island Sound horseshoe crab populations. Currently, the agency feels that the most appropriate action is regulatory restrictions that will substantially curtail harvest within the commercial fishery and enhance horseshoe crab reproductive success by protecting protect crabs from disturbance during key spawning periods. At this time, the agency does not feel that there is sufficient rationale to impose a complete ban on harvest, which would cause substantial economic hardship on fishers participating in the horseshoe crab and whelk fisheries (horseshoe crab are the primary bait used in the whelk fishery). However, the agency will continue to closely monitor horseshoe crab abundance as well as harvest within the commercial fishery, and if the proposed regulations do not produce the desired effects of substantially curtailing commercial harvest and producing signs of horseshoe crab population recovery, the agency will consider further conservation action up to and including a full closure of the fishery.

Two individuals commented that horseshoe crabs should be conserved due to their value to the bio-medical field.

# Agency response:

The agency recognizes the high value that horseshoe crab have to the biomedical industry as their blood is a key ingredient in limulus amebocyte lysate or LAL, a reagent with multiple important biomedical applications, and agrees that this is an additional rationale for taking action to conserve horseshoe crab populations (although, it should be noted that there is currently no "biomedical take" of horseshoe crabs in Connecticut). DEEP believes that the proposed regulatory changes are an appropriate step towards providing effective conservation of horseshoe crab populations in Connecticut.

One commenter thought that because the current quota allocated by the Atlantic States Marine Fisheries Commission is not being harvested, no further restrictions are warranted.

#### Agency response:

DEEP acknowledges that since establishment of annual state quotas on horseshoe crab harvest by ASMFC in 2001, Connecticut has never exceeded its annual quota of 48,689 crabs, and in most years has not harvested anywhere near the quota (harvest has generally varied between

15,000 and 30,000 crabs per year). However, it is important to note that this annual quota is not based on scientific modeling/advice about what level of horseshoe crab harvest is sustainable given prevailing crab population status; it is a relatively arbitrary number that at time of quota establishment in 2001 was based on approximations of historic annual horseshoe crab landings in Connecticut. The ASMFC horseshoe crab stock assessment process does not include the type of detailed statistical model used for many other ASMFC-managed species that can provide estimates of sustainable levels of fishing mortality and harvest. The ASMFC horseshoe crab stock assessment is an "index-based" assessment typical of the type used for relatively "data poor" species, and only provides insights on whether overall horseshoe crab abundance is stable, declining, or increasing. The stock assessment does not inform annual quota setting for horseshoe crab. It is therefore not reasonable to assume that because harvest has always been below the annual quota in Connecticut, current levels of harvest are sustainable.

Two individuals commented that the proposed reduction in possession limit from 500 to 150 crabs was too restrictive, and that a reduction to a possession limit of 250 crabs would be more appropriate.

## Agency response:

The reduction in crab possession limit from 500 crabs to 150 crabs establishes regulatory consistency with New York and is appropriate given desire to significantly curtail harvest and prevent removal of substantial number of horseshoe crabs from a given spawning beach on any given night. A 250-crab possession limit would place Connecticut in regulatory inconsistency with New York within the shared waters of Long Island Sound.