

# Claw removal and its impacts on survivorship and physiological stress in Jonah crab (*Cancer borealis*) in New England waters

*Preliminary data submitted to the Atlantic States Marine Fisheries Commission*



Submission Date: January 25, 2016

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## **Synopsis**

Found in coastal and shelf waters along the Atlantic coast of North America, from Newfoundland to Florida, Jonah crabs (*Cancer borealis*) have been captured as incidental bycatch in the New England lobster industry for over 80 years. In the last 20 years however, Jonah crabs (*Cancer borealis*) have become an alternative fishery target and landings have more than quadrupled. This has necessitated evaluation of the current status and prospective long-term health of the fishery. In addition, the biological implications of harvesting Jonah crabs through the live removal of claws remain mostly unknown. The goal of this ongoing research is to evaluate current harvest practice (claw removal) and its impacts on the health and behavior of Jonah crabs. Preliminary results from laboratory trials (n = 232 total crabs) suggest that double-claw removal incurs markedly more mortality (~74%) compared with single-claw removal (~56%) and control animals (~19%). Physiological stress, assessed through concurrent haemolymph (blood) analyses suggest elevated levels of glucose and lactate in declawed crabs. Continued studies on behavior (feeding) and growth are ongoing in an effort to better understand Jonah crabs and manage this developing fishery in New England waters.

## 1. Introduction

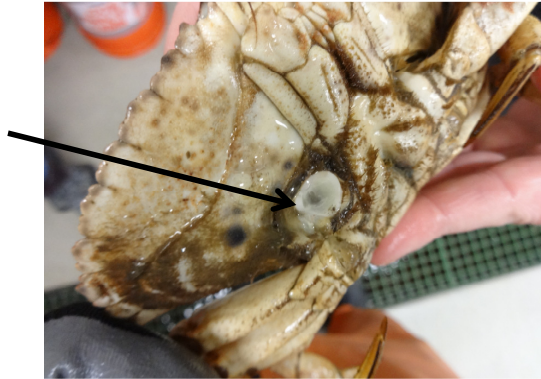
Found in coastal and shelf waters along the Atlantic coast of North America, from Newfoundland to Florida, Jonah crabs (*Cancer borealis*) have been captured as incidental bycatch in the New England lobster industry for over 80 years. More recently, Jonah crab has become an alternative fishery target in Southern New England. The majority of these landings are occurring concomitantly with the decline in lobster populations (Reardon 2006, ASMFC 2014). As a result of the increased targeted fishing pressure on Jonah crab, the long-term health of this fishery is quickly becoming questioned (Seafood Watch 2004, ASMFC 2014). Moreover, the biological implications of harvesting through the live removal of claws (one preferred method) remain mostly unknown. Claw removal (declawing) occurs in other crab fisheries where live animals have their claw(s) removed before they are returned to the sea (e.g., Robinson 2008, Gandy et al. 2015). In addition, claw removal results in markedly dramatic physiological stress responses (claws may be > 40% of crab total weight) in many crustacean species, as noted by changes in blood chemistry (e.g., glucose and lactate, Patterson et al. 2007). Our overall goal in this ongoing study is to evaluate 1) the survivorship of crabs post-claw removal; 2) short- and long-term physiological impacts (stress) can be assessed from claw removal and; 3) how claw removal impacts overall foraging behavior in these crabs?

## 2. Methods

### *Animals and treatments*

Market sized Jonah crabs (average carapace width =  $139 \pm 1.08$  mm) were collected by local fishermen in traps during normal fishing operations off the coast of New Hampshire in both state and federal waters. Crabs were held live in recirculating seawater tanks at the University of New Hampshire (UNH) Coastal Marine Lab (CML) and used to test the hypothesis that crabs that are declawed will be compromised with respect to their overall survival and growth. Crabs were subjected to one of three treatments (one, two, or no claws removed) over five trials from December 2014 through January 2016. Each trial was conducted for a period of four weeks and consisted of 20 crabs for both single and double declawing treatments, with fewer controls as these animals were previously observed to do well in laboratory conditions. The number of control crabs (no claws removed) was increased following trial two due to a higher than anticipated mortality rate.

Claw removal (declawing) techniques were demonstrated to researchers during two instructional sessions by local fishermen with considerable experience in this harvesting practice. Additionally, techniques used to remove claws from stone crabs (a current fishery practice) were investigated to ensure proper breaking and handling methods were incorporated into the experimental design. Also recorded were the size (mm) and location of break (Figure 1) during declawing as well as pre- and post-declawing weight (g), claw weight, and shell condition (old or new shell).



**Figure 1.** Example of a declawed Jonah crab with visible wound (arrow).

### *Laboratory trials*

Upon claw removal, each crab was placed in an individual holding cage within a series of large flow-through seawater trays at ambient conditions. Environmental data (temperature and oxygen, not included in report) were logged over each trial period and downloaded for analysis. Crabs were evaluated approximately every 48-72 hours with respect to survival and activity levels. Additionally, all three treatments were fed both a cooked mussel with shell removed (soft food item) and a live mussel (hard food item) to evaluate foraging effects twice during each trial. The initial feeding was conducted immediately following the declawing and a second feeding was conducted at the two-week mark. Crabs were evaluated as to the type and amount of each food item that was eaten.

### *Field trials*

We conducted two field trials (during lab trials 4 and 5) of crab mortality with the goal of comparing our lab-based mortality rates to crabs that were kept in the field and handled similarly. A total of 48 crabs were measured and declawed as described above. Crabs were placed into individual compartments within standard vinyl-coated lobster traps (1.2 m x 0.6 m x 0.4 m, 3.8 cm square mesh) constructed without vents or entrances and divided into eight sections by the insertion of additional coated mesh wire. Traps were weighted with concrete blocks to minimize excessive movement and were fastened to the UNH CML research pier at a depth of ~5 m. Traps were pulled and all crabs were checked in the same manner and time interval as described for the laboratory work.

### *Stress response*

Physiological stress response in de-clawed crabs was also evaluated using two key assays: glucose and lactate. A subset crabs ( $n = 25/\text{treatment} \times 2 \text{ trials}$ ) from each treatment were examined for stress responses over both short- (5-10 min post-claw removal) and then again ~24-36 hours later (long-term). For each crab, a small blood (haemolymph) sample was withdrawn from the sinus at the base of the fifth walking leg

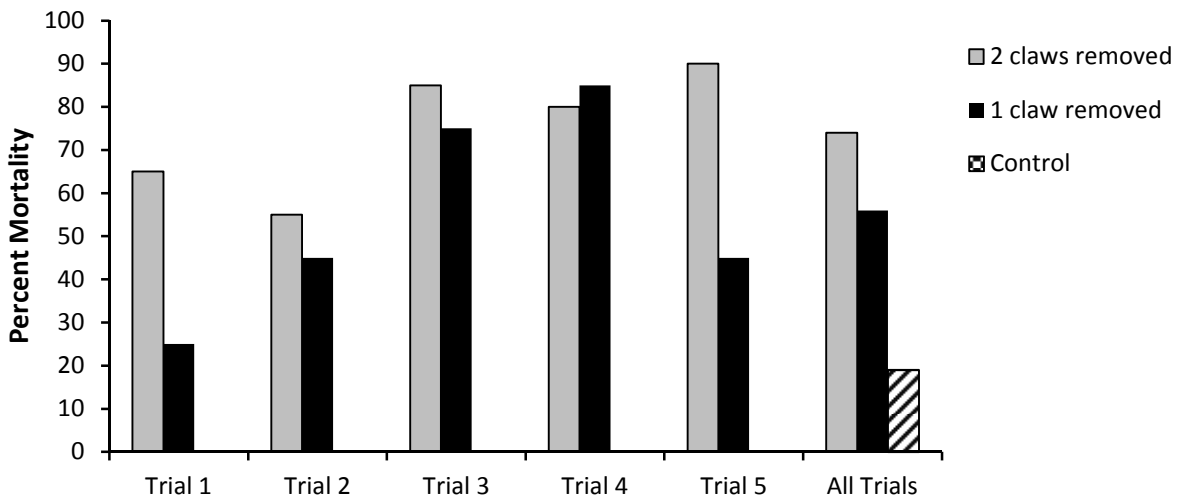
using a 2-ml syringe and a 25-gauge needle. Blood samples were stored in labeled 2-ml microcentrifuge tubes and snap-frozen before being stored at -80°C. Both glucose and lactate (µM/L) were quantified colorimetrically using commercially-available biochemical assay kits (Eton Bioscience, San Diego, CA). All samples were checked against a standard curve and examined with a microplate reader at λ = 490-500 nm.

### 3. Preliminary Findings

To-date, we have carried out a total of five laboratory trials using 232 crabs

#### *Mortality*

Across all trials, 19% of crabs died when no claws were removed (control), 56% when one claw was removed and 74% when both claws were removed. Mortality rates between trials ranged from 30 to 75% when one claw was removed, and from 45 to 95% when two claws were removed (Figure 2). A majority of the mortality for crabs with one or two claws removed occurred within the first 6 days after initial declawing (Table 1).



**Figure 2.** Mortality rates for Jonah crabs subjected to one of three treatments during five laboratory trials from December 2014 through January, 2016.

Time	Control	One Claw Removed	Two Claws Removed
~72 Hours	0.0	33.9	58.7
~144 Hours	0.0	64.3	69.3

**Table 1.** Percentage of total mortality that occurred within the first 72 and 144 hours (6 days) post-declawing for Jonah crabs subjected to one of three treatments, all trials combined.

### *Feeding*

Across all trials during the initial feeding, 63% of control crabs fed on both the hard (shelled) and soft (shucked) food item, and 87% of the crabs foraged on at least one of the food items (Table 2). In contrast, 55% of crabs with one claw removed and 32% of crabs with two claws removed foraged on at least one food item.

<b>Treatment</b>	<b>Ate Nothing</b>	<b>Ate Shucked</b>	<b>Ate Shelled</b>	<b>Ate Both</b>	<b>Ate Something</b>
Control	13	23	0	63	87
One Claw Removed	45	32	3	19	55
Two Claws Removed	68	29	2	0	32

**Table 2.** Percent of Jonah crabs subjected to one of three treatments that foraged during the initial feeding, all trials combined.

Across all trials during the secondary feeding, 96% of control crabs fed on both the hard (shelled) and soft (shucked) food item and 96% of the crabs foraged on at least one of the food items (Table 3). In contrast, 74% of crabs with one claw removed and 47% of crabs with two claws removed foraged on at least one food item.

<b>Treatment</b>	<b>Ate Nothing</b>	<b>Ate Shucked</b>	<b>Ate Shelled</b>	<b>Ate Both</b>	<b>Ate Something</b>
Control	4	0	0	96	96
One Claw Removed	26	29	0	46	74
Two Claws Removed	53	35	0	12	47

**Table 3.** Percent of Jonah crabs subjected to one of three treatments that foraged during the secondary feeding, all trials combined.

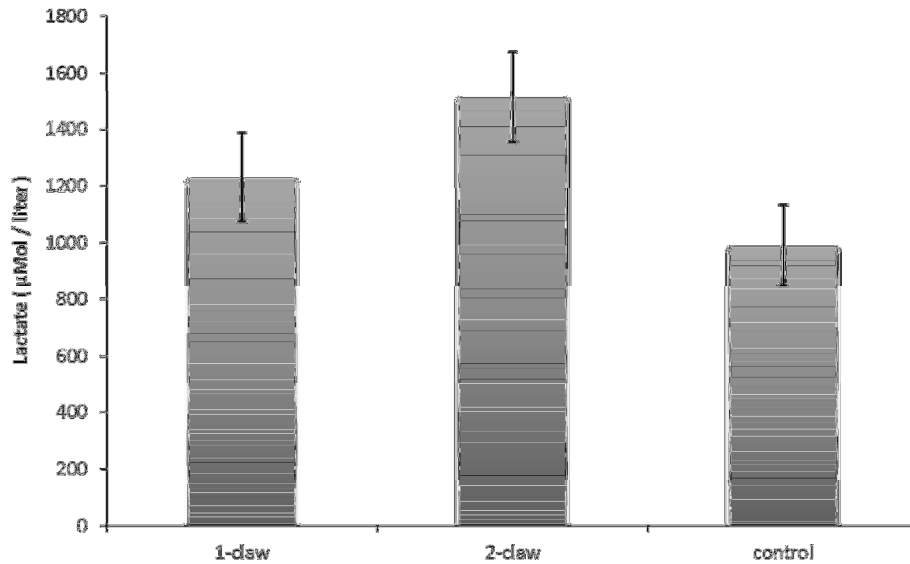
### *Field Trials*

A total of two field trials were conducted concurrently with laboratory trials four and five to compare with lab results. This data still has not been entered or evaluated and is thus not available for presentation. However, preliminary review of this data suggests results comparable to the laboratory trials.

### *Blood Work*

Analyses of our biochemical work are not yet complete, however some of our results suggest a trend of increasing glucose and lactate levels in crabs that have had their claws removed. Both short- and long-term efforts of these parameters are apparent through at least two of our trials. Lactate, for example, is a very good indicator of stress response in crustaceans (Figure 3) and is the major end product of anaerobic metabolism; higher concentrations indicate attempts by

the animal to mediate the effects of a stressor (Albert and Ellington 1985). These effects appear over both short- (minutes) and long-term (> 24 hr.) periods. This has been reported in other crustaceans as well (Patterson et al. 2007). Further analysis of these biochemical markers is ongoing.



**Figure 3.** Lactate levels in crab haemolymph sampled at 24-hours post declawing for a subset crabs ( $n = 25/\text{treatment} \times 2 \text{ trials}$ , control = 8) from each treatment. Total lactate is an indicator of physiological stress.

### Ongoing and future work

Our goal is to complement our existing work with other components that include:

- Complete our analysis of blood parameters (glucose and lactate) for all crabs.
- Evaluate feeding and activity behavior of declawed crabs vs. controls using time-lapse video and accelerometers (some of our preliminary trials that suggest behavior is altered considerably).
- Investigate growth and regeneration in crabs where claws have been removed.
- Consider how temperature may affect mortality for each of our trials.
- Determine how wound size, break location and shell condition affect mortality in crabs that have had claws removed.

#### 4. References

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- Atlantic States Marine Fisheries Commission (ASMFC). 2014. Jonah Crab Fishery: A briefing. Report downloaded from: <http://www.asmfmc.org/>.
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New England Fishery Management Council

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E.F. "Terry" Stockwell III, *Chairman* | Thomas A. Nies, *Executive Director*

January 25, 2016

Mr. Robert E. Beal  
ASMFC Executive Director  
Atlantic States Marine Fisheries Commission  
1050 North Highland St., Suite 200 A-N  
Arlington, VA 22201

Dear Bob:

This letter responds to the Lobster Board's initiation of Draft Addendum I to the Jonah crab FMP. The Council agrees that there is a need to address the health of the Jonah crab resource in response to increased fishing effort in recent years. The Council also supports a management approach for Jonah crab based on three permit categories, to address management of Jonah crab harvested by other trap gear without a lobster trap tag, such as whelk, crab, and fish pots:

1. Lobster trap permit holders;
2. Non-trap permit holders using fixed and mobile gear; and
3. Trap permit holders that do not possess a lobster permit.

At the Lobster Board's meeting in November 2015, Council Chairman Terry Stockwell communicated the Council's position regarding a catch limit for non-trap permit holders that retain incidental catch of Jonah crab:

*Motion to initiate an addendum to remove the non-trap limit from the Jonah crab FMP or increase the trip limit to 1,000 crabs. Motion by Mr. Stockwell, seconded by Mr. Simpson. Motion carried on a show of hands unanimously.*

The Lobster Board voted in favor of the Council's position to allow non-trap permit holders to continue incidental harvest of Jonah crab with catch limits not lower than the existing catch rates (Refer to Table 2), by adding two alternatives in Draft Addendum I that would increase or remove the existing catch limit for non-trap permit holders.

Draft Addendum I to the Jonah crab FMP does not provide any information to support the concern that non-trap permit holders would increase fishing effort in the absence of a catch limit. Dealer reported landings information from the past five years indicate that non-trap permit holders harvest a very small percentage of the total Jonah crab landings (Refer to Table 1), and would likely not jeopardize the health of the Jonah crab resource through incidental harvest of the resource.



Furthermore, anecdotal information on fishing practices by non-trap gear does not support the concern regarding proliferation of effort by non-trap permit holders. The market demand for live Jonah crabs make it operationally unfeasible for non-trap permit holders to successfully target Jonah crabs with landings higher than existing catch rates because: (1) Jonah crabs harvested in large quantities require bait; and (2) Jonah crabs must be landed live and therefore must be kept in a holding tank which would require extensive vessel modifications.

The Council opposes adopting Jonah crab limits for the non-trap fishery in light of the lack of evidence that this effort is increasing and the practical barriers to future increases. Apparently ASMFC is not overly concerned about effort increases, since some states will be allowed to issue new Jonah crab permits to trap fishermen that are not currently in the fishery. The rationale for the different treatment of trap and non-trap fishermen has yet to be offered.

The Council is concerned that proposed measures may not be consistent with the Atlantic Coastal Fisheries Cooperative Management Act, which requires regulations in Federal waters to be consistent with the ten national standards established in the Magnuson-Stevens Fishery Conservation and Management Act. This includes National Standards 6 and 7, which requires that management measures consider impacts to all permit holders that harvest Jonah crab, and minimize cost by avoiding unnecessary regulatory and enforcement burdens, when information provided indicate that these management actions are not necessary.

Please contact me if you have questions regarding the Council's position on this matter.

Sincerely,



Thomas A. Nies  
Executive Director

Attachment



Table 1: Jonah crab landings by non-trap gear based on dealer reporting information (2010-2014)

<b>Fishing Year</b>	<b>Jonah crab landings by non-trap gear (lbs)</b>	<b>Total Jonah crab landings (lbs) trap and non-trap gear</b>	<b>Percentage of Jonah crab landings by non-trap gear</b>	<b>Number of trips landing Jonah crab with non-trap gear</b>	<b>Number of permits landing Jonah crab with non-trap gear</b>
2014	13,306	17,148,496	0.0776%	114	17
2013	6,081	16,252,001	0.0374%	109	22
2012	4,099	12,051,457	0.0340%	53	14
2011	2,986	9,439,984	0.0316%	72	23
2010	10,815	10,115,808	0.1069%	109	20
<b>Average</b>			<b>0.0575%</b>		

Dealer data for Jonah crab landings for 2010-2014 indicates that Jonah crab landings by non-trap gear make up less than 0.1 percent of the total Jonah crab landings.

Table 2: Number of trips affected by the ASMFC crab limit for non-trap gear, based on number of days fished in prior years (2010-2014)<sup>1</sup>

<b>Year</b>	<b>Minimum # of days fished</b>	<b>Maximum Number of days fished</b>	<b>Average Number of days fished</b>	<b>Number of Trips Constrained by Jonah crab FMP trip limit</b>	<b>Percentage of trips constrained by crab limit</b>
2010	0.1	9.54	1.17	7/300	2.33%
2011	0.04	9.56	1.72	2/326	0.61%
2012	0.04	9.4	1.26	6/198	3.03%
2013	0.1	8.83	1.18	4/168	2.38%
2014	0.13	10.48	1.23	4/140	2.86%

<sup>1</sup> This spreadsheet is based on data provided by NOAA Greater Atlantic Regional Fisheries Office. The results in Table 2 are based on the assumption that one crab = 1 pound (same assumption used by the ASMFC).



# Atlantic States Marine Fisheries Commission

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## MEMORANDUM

TO: American Lobster Management Board  
FROM: Jonah Crab Plan Review Team  
DATE: January 25, 2015  
SUBJECT: Jonah Crab State Implementation Plans

State implementation plans for the Jonah Crab Fishery Management Plan (FMP) were due January 1, 2016. Plans were received from all states and reviewed by the Jonah Crab Plan Review Team (PRT). As the Lobster Board considers approval of the implementation plans, the PRT would like to call attention to the following:

- **Maryland's** implementation plan does not include proposed regulatory language and does not cite their legal authority to implement the required regulations. Maryland has indicated that they have every intention of implementing Jonah crab regulations by June 1<sup>st</sup> but have been delayed in drafting language due to staff limitations. Maryland expects to have draft regulatory language by late March for the PRT to review. This is of concern to the PRT because there is limited time to review and approve proposed regulatory language ahead of the required implementation date.
- **Permitting**
  - New York's plan sets a window for eligible proof of participation from January 1, 2008 to June 2, 2015. Additionally, Rhode Island's plan states that, for those without a lobster allocation, proof of prior participation in the Jonah crab fishery includes documentation in RI Harvester Logbooks and/or SAFIS Dealer Reports. Since neither the PDT nor PRT has begun to address this issue, the PRT feels it is premature to include these statements in the regulatory language.
  - Rhode Island's plan describes the specifications of a lobster trap but does not include the requirement for a ghost panel. The PRT recommends that Rhode Island's description of a lobster trap include a ghost panel.
- **Egg-Bearing Females**
  - Several plans (MA, RI, CT, NY) explicitly prohibit the removal of eggs. While this isn't stated in the Jonah Crab FMP, the PRT believes it is consistent with the intent of the plan and recommends that states include this statement in their regulatory language.
- **Incidental Bycatch Limit**
  - Virginia proposes to establish an incidental bycatch limit of 200 crabs per 24 hours, 500 crabs for trips exceeding 24 hours. The PRT's interpretation of the Jonah Crab FMP is that there is a limit of 200 crabs per calendar day such that a 2-day trip would be limited to 400 crabs and trips 3 days or longer would be held to a 500 crab limit. The PRT recommends the Board clarify this regulation.
  - Rhode Island's plan establishes an incidental bycatch limit 200 crabs per day, 500 crabs per trip for trips 5 days or longer for gillnets and otter trawls. The PRT recommends this wording be changed so that the 500 crab trip limit is for trips 3 days or longer. Furthermore, the PRT recommends this bycatch limit be extended to all non-trap gear since data shows federal catch from longlines.

- Connecticut's plan specifies a bycatch limit of 200 crabs per day, 500 crabs for trips longer than five days. Connecticut is aware of this issue and is working to reword their bycatch limit to match the Jonah Crab FMP.
- **Reporting Requirements**
  - The intent of the reporting requirements was to match the data collection requirements of the lobster plan. As noted in Maine and Connecticut implementation plans, not all states collect all data fields in the dealer report, as specified in the Jonah Crab FMP. This is particularly true for 'area fished' and 'hours fished'. The PRT did not feel this is a concern since all states are extending their current lobster reporting to Jonah crabs.
  - Maine's implementation plan reads that, for their dealer reports, they are "unable to report area and hours for this fishery only" (Section 3.4.1, Bullet 3, a, ii). The PRT recommends this language be changed to clarify that the State is not making an exception for the Jonah crab fishery since it currently could be interpreted that Maine collects this data for other species but is unable to report for Jonah crab.
- **Survey Requirements**
  - Virginia's implementation plan does not outline a biological sampling program to conduct port and/or sea sampling.

**TO:** Atlantic States Marine Fisheries Commission

**FROM:** Maine Department of Marine Resources

**DATE:** December 31, 2015

**SUBJECT:** Jonah Crab FMP Implementation Program

Maine DMR is in the process of APA rule-making to address ASMFC Jonah Crab FMP compliance requirements. The proposed rule will be published in January 2016 and reviewed by the DMR Advisory Council at a meeting held in late February. If approved, the additional regulations will be effective by early March 2016.

Below, please find either Maine’s existing regulation, or the section of the proposed rule corresponding to each requirement. In addition, please find the complete proposed rule-making with revisions that will be put into effect (Appendix A, at Page 5).

**1. Commercial Fishery (Section 5.1)**

*a. A regulation which limits participation in the directed trap fishery to only those vessels and permit holders that already hold a lobster permit or can prove prior participation in the crab fishery before the control date of June 2, 2015. Traps used by these fishermen must conform to the specifications of the lobster management plan.*

- The authority to take crab by trap is limited to those individuals who hold a lobster and crab fishing license:

**§6421. Lobster and crab fishing licenses**

**2. Licensed activity.** The holder of a Class I, Class II, Class III, apprentice or student lobster and crab fishing license may fish for, take, possess, ship or transport within the State lobsters or crabs and sell lobsters or crabs the license holder has taken.

- In addition to current lobster and crab license holders, individuals who become eligible to hold a lobster and crab fishing license in the future, through the student or apprenticeship programs, will also be eligible to participate in the crab fishery. However, because of Maine’s limited entry system, the number of licenses will decline over time. Please see the license trend for Class I, II and III lobster and crab fishing license holders over the past 5 years:

<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>
5225	5155	5079	4978	4914

- The traps used to take Jonah crab are the same as those used to take lobster, and therefore conform to the specifications of the lobster management plan.

*b. A regulation which states that all other fishermen who direct fishing effort on Jonah crabs (ie: those who have neither a lobster permit nor a history of landings, or those who do have a history of landings but do not have traps which conform to*

*the lobster management plan), are required to obtain an incidental permit from the state or federal agency for the appropriate jurisdiction in which the vessel is fishing and is subject to landing limits.*

- Under current regulation, an individual who wishes to harvest Jonah crab by drag from the EEZ must obtain a license endorsement on the commercial fishing license:

#### **25.45 Jonah Crab**

##### **1. License Endorsement**

It shall be unlawful to harvest crabs by drag from the EEZ unless the harvester holds a Commercial Fishing – Single license with the Dragged Crab Permit endorsement or a Commercial Fishing – Crew license with the Dragged Crab Permit endorsement. There will be no additional charge for this permit. A lobster and crab fishing license issued pursuant to 12 M.R.S.A. §6421 is not required to obtain this endorsement in accordance with §6421, sub-§4(B).

- c. *A regulation which sets a 4.75” minimum size with zero tolerance. The measurement should be taken at the widest point of the carapace.*
  - With the proposed rule-making, Maine DMR proposes to adopt a minimum size as follows:

##### B. Size Limit

It is unlawful to take or possess a Jonah crab measuring less than 4.75 inches across the shell from tip to tip of the posterior-most, longest spines along the lateral margins of the carapace.

- d. *A regulation that prohibits the retention of egg-bearing females.*
  - With the proposed rule-making, Maine DMR proposes to adopt a prohibition on egg-bearing females as follows:

##### C. Prohibitions on Possession

It is unlawful to take or possess:  
(1) any egg-bearing, female Jonah crab;

- e. *A regulation which specifies that only whole crabs may be retained and sold with the exception of individuals who can prove a history of claw landings before the June 2, 2015 control date in the states of New Jersey, Delaware, Maryland, and Virginia. (Note: this measure may change before the implementation date)*

- With the proposed rule-making, Maine DMR proposes to adopt a prohibition the retention and sale of partial crabs as follows:

##### C. Prohibitions on Possession

It is unlawful to take or possess:  
(2) any Jonah crab parts

- f. *A regulation which establishes an incidental bycatch limit for non-trap gear of 200 crabs per calendar day, 500 crabs per trip. (Note: this measure is currently under consideration and may change before the implementation date.)*
- Under current regulation, individuals taking Jonah crab as bycatch are limited to 200 pounds per day, not to exceed 500 pounds per trip. Maine DMR intends to maintain this limitation, pending resolution of new bycatch limits proposed in Draft Addendum 1 to the Jonah Crab FMP.

2. Limits

A. Possession Limits

(1) For individuals taking dragged crabs as bycatch, it is unlawful to take, possess or land more than 200 pounds (90.7 kg) of crabs per day, not to exceed 500 pounds (226.8 kg) per trip.

**2. Recreational Fishery (Section 5.2)**

a. *A regulation which sets a 50 whole crab possession limit per person per day.*

- With the proposed rule-making, Maine DMR proposes to adopt a possession limit of 50 Jonah crabs per person per day as follows. The prohibition regarding the possession of crab parts referenced above (1.e) would apply to both commercial and recreational fishermen.

2. Limits

A. Possession Limits

(2) For individuals fishing for or taking Jonah crabs recreationally, it is unlawful to fish for, take or possess more than 50 Jonah crabs per person per 24-hour day.

b. *A regulation that prohibits the retention of egg-bearing females.*

- The prohibition regarding the possession of egg bearing females referenced above (1.d) would apply to both commercial and recreational fishermen.

**3. Fishery Monitoring (Section 3.4.1)**

a. *A catch reporting system in which there is 100% harvester reporting and 100% dealer reporting. Jurisdictions that currently require less than 100% harvester reporting in the lobster fishery are required to, at a minimum, maintain their current programs and extend them to Jonah crab. A state's catch reporting plan must contain the following information:*

- i. *A harvester report which includes a unique trip ID, vessel number, trip start date, location (NMFS state area), traps hauled, traps set, quantity (lbs), trip length, soak time in hours and minutes, and target species.*
  - Currently, Maine DMR requires 10% harvester reporting for lobster and crab fishing license holders. Harvester reporting for lobster and crab fishing requires all the data elements identified above.



*ii. A dealer report which includes a unique trip id, species quantity (lbs), state and port of landing, market grade and category, areas fished, hours fished, and price per pound.*

- Currently, Maine DMR dealer reports include a unique trip id, species quantity (lbs), state and port of landing, market grade and category, and price per pound. Current dealer reporting does not capture hours fished or areas fished, however these data elements are reported by harvesters. Maine DMR is unable to collect information on areas fished and hours fished from dealers for this fishery only, so will not comply with this aspect of the ASMFC requirements.

*iii. A biological sampling program in which jurisdictions conduct port and/or sea sampling. The following information should be collected where possible: carapace width, sex, discards, egg-bearing status, cull status, shell harness, and whether landings are whole crabs or part.*

- Currently, there are no sampling trips conducted by Maine DMR specifically for Jonah crab. Jonah crab harvest is as a bycatch, and is opportunistic. After receiving notification of this requirement, DMR has started to work on developing a protocol for measuring and sampling Jonah crab during the course of regular sampling activities for lobster for the upcoming 2016 season. Jonah crab counts are already collected by Maine DMR in settlement surveys and Maine DMR has been collecting Jonah crab data in the ventless trap surveys. In order to meet requirements for collecting biological data on Jonah crabs, Maine DMR will begin collecting this data during the 2016 season.

# Appendix A: Text of Proposed Rule Making

## DEPARTMENT OF MARINE RESOURCES CHAPTER 25 - LOBSTER AND CRAB TITLE INDEX

~~25.45 Draggged Crab as Bycatch~~ Crab Fishing Limitations

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### TEXT OF RULE SHOWING AMENDMENTS

~~25.45 Draggged Crab as Bycatch~~ Crab Fishing Limitations

#### 1. License Endorsement

It shall be unlawful to harvest crabs by drag from the EEZ unless the harvester holds a Commercial Fishing – Single license with the Draggged Crab Permit endorsement or a Commercial Fishing – Crew license with the Draggged Crab Permit endorsement\*. There will be no additional charge for this permit. A lobster and crab fishing license issued pursuant to 12 M.R.S.A. §6421 is not required to obtain this endorsement in accordance with §6421, sub-§4(B). \*DMR License Division telephone (207-624-6550) or for online information select the following link: <http://www.maine.gov/dmr/license/index.htm>.

#### 2. Limits

##### A. Possession Limits

(1) For individuals taking draggged crabs as bycatch, it is unlawful to take, possess or land more than 200 pounds (90.7 kg) of crabs per day, not to exceed 500 pounds (226.8 kg) per trip.

(2) For individuals fishing for or taking Jonah crabs recreationally, it is unlawful to fish for, take or possess more than 50 Jonah crabs per person per 24-hour day.

##### B. Size Limit

It is unlawful to take or possess a Jonah crab measuring less than 4.75 inches across the shell from tip to tip of the posterior-most, longest spines along the lateral margins of the carapace.

##### C. Prohibitions on Possession

It is unlawful to take or possess:

- (1) any egg-bearing, female Jonah crab; or
- (2) any Jonah crab parts

##### D. Closed Seasons

~~25.50~~ (1) Closed Season Regulation on Fishing for Crabs in Sheepscot River

It shall be unlawful to fish for or take crabs, except green crabs from December 1 to April 30, both days inclusive, from the waters inside and upstream of the following lines:

- (a) From the extreme tip of Phipps Point, Woolwich, to the southern tip of Hubbard's Point in Westport;
- (b) From the tip of Kehail Point, Westport, to the most southerly end of Barter's Island in the town of Boothbay;
- (c) Along the length of the Barter's Island Bridge and Knickerbocker Bridge, in the town of Boothbay.

~~25.55~~ (2) Closed Season on Fishing for Crabs in Damariscotta River

It shall be unlawful to fish for or take crabs, except green crabs from December 1 to April 30, both days inclusive, in the Damariscotta River above a straight line drawn across the River from a point on the shore of Back Narrows on the west side of the River in the Town of Boothbay intersecting the southwestern point of Fort Island and the red nun navigational Buoy #10 to a point on the opposite shore in the Town of South Bristol.

~~25.60~~ (3) Closed Season on Fishing for Crabs in Medomak River

It is unlawful to fish for or take crabs, except green crabs from December 1 to April 30, both days inclusive, in the Medomak River, from the waters inside and upstream of a line drawn from the southernmost tip of Jones Neck in Waldoboro northwest to the southernmost tip of Hardy Island then true west to Keene Neck in Bremen, including all waters of Broad Cove, Eastern Branch and Western Branch.

**New Hampshire's Implementation Plan  
For  
Atlantic States Marine Fisheries Commission's  
Jonah crab Interstate Fishery Management Plan**

December 15, 2015

The Atlantic States Marine Fisheries Commission (ASMFC) approved the Interstate Fishery Management Plan (FMP) for Jonah crab in August 2015. The goal of the FMP is to promote conservation, reduce the possibility of recruitment failure, and to allow for the full utilization of the resource by the U.S. industry. In order to stay in compliance with the FMP, states are required to submit implementation plans to ASMFC by January 1, 2016. Below you'll find New Hampshire's implementation plan for the Jonah crab FMP.

1. Commercial Fishery
  - a. Currently, New Hampshire has measures in place that require a lobster and crab license to harvest Jonah crabs both commercially and recreationally by trap (RSA 211:18). There are currently four categories of licenses in NH for lobster/crab: commercial (1200 traps), limited commercial (600 traps), part-time commercial (100 traps) and recreational (5 traps). Commercial and limited commercial licenses in New Hampshire are limited access licenses. In order for a new participant to obtain a license to harvest and sell Jonah crabs in New Hampshire state waters they would have to obtain a commercial or limited commercial license eligibility through a transfer, or purchase an open access, part-time commercial license. All harvesters commercially fishing for Jonah crabs in New Hampshire state waters must either use traps that conform to the specifications of the lobster management plan or have the executive director approve modified trap designs (Fis 602.10).
  - b. It's illegal to commercially harvest Jonah crabs by non-trap methods in New Hampshire (RSA 211:18). Vessels permitted to harvest Jonah crabs by non-trap methods in federal waters are restricted to landing 200 crabs per calendar day and 500 crabs for trips lasting longer than two calendar days in New Hampshire (Fis 607.06(g)).
  - c. A regulation requiring a minimum carapace width of 4  $\frac{3}{4}$  inches for commercially harvested Jonah crabs has been established in New Hampshire. Crabs must be measured in a straight line through the widest part of the shell (Fis 607.06 (f)).
  - d. A regulation which prohibits the take, possession and sale of female Jonah crabs with spawn has been established for commercial harvesters (Fis 607.06(c)).
  - e. A regulation that prohibits the removal of Jonah crab claws has been established. Furthermore, only whole crabs shall be landed in New Hampshire (Fis 607.06(e)).

- f. No person shall land or possess more than the following amounts of Jonah crab taken by non-trap methods from federal waters in New Hampshire (Fis 607.06(g)):
  - (1) 200 crabs per calendar day;
  - (2) 500 crabs for trips lasting longer than two calendar days

2. Recreational Fishery

- a. A regulation which sets a 50 crab possession limit for recreational fishermen has been established (Fis 607.06(d)).
- b. A regulation which prohibits the take, possession and sale of female Jonah crabs with spawn has been established for recreational harvesters (Fis 607.06(c)).

3. Fishery Monitoring

- a. New Hampshire will have regulations in place prior to the June 1 implementation date that require 100% harvester and dealer reporting for Jonah crabs (Fis 608.01 & Fis 608.04).
  - i. Harvester reports will be required to include, at a minimum: a unique trip id, vessel number, trip start date, location (NMFS stat area), traps hauled, traps set, quantity (lbs), trip length, soak time in hours and minutes, and target species.
  - ii. Dealer reports will be required to include at a minimum: a unique trip id, species, quantity (lbs), state and port of landing, market grade and category, areas fishing, hours fished, and price per pound.
- b. New Hampshire is planning to initiate a Jonah crab port sampling program to collect biological data on landed catch. Sampling procedures for this program still need to be finalized with the Jonah Crab Technical Committee, but at a minimum, sampling will take place on a quarterly basis and the following information will be collected: carapace width (mm), sex, cull status and shell hardness. This program will be put into effect prior to the June 1 implementation date.
- c. New Hampshire will also be collecting biological data on Jonah crabs during its ongoing Coastwide Ventless Trap Survey and the American Lobster Settlement Index. Data from both of these fisheries independent surveys will be available to the ASMFC Jonah Crab Technical Committee.



David E. Pierce  
Director

# Commonwealth of Massachusetts

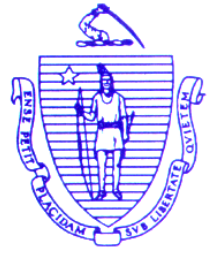
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**To:** Megan Ware, FMP Coordinator

**From:** Dan McKiernan, Deputy Director

**Date:** December 31, 2015

**Subject:** Jonah Crab FMP State Implementation Programs

### 1. Commercial Fishery (*Section 5.1*)

- a. Trap Fishery Requirements- Commercial fishermen are prohibited from setting any trap gear to take or attempt to take Cancer crabs, unless the trap gear complies with the applicable:
  - i. trap gear marking regulations at 322 CMR 4.13;
  - ii. lobster gear restrictions at 322 CMR 6.02(1);
  - iii. lobster trap limits or allocations at 322 CMR 6.13;
  - iv. lobster trap tag requirements at 322 CMR 6.31(a); and
  - v. protected species regulations at 322 CMR 12.00.
- b. Permit Requirements- Under M.G.L. c. 130 § 38, a person shall not fish for or take lobsters or edible crabs in coastal waters or land the same in the Commonwealth without a permit issued by the director.
- c. Size Limit- Commercial fishermen and dealers are prohibited from taking, possessing or landing Cancer crabs that have a carapace width less than 4 ¾ inch. The mutilation of any Cancer crab which affects its measurement shall be prima facie evidence that the Cancer crab was or is less than the required length.
- d. Egg Bearing Females. Commercial and recreational fishermen and dealers are prohibited from taking, possessing or landing female Cancer crabs:
  - i. that are egg bearing;
  - ii. from which eggs have been forcibly removed; or
  - iii. that have come in contact with any substance capable of removing eggs.
- e. Disposition. Commercial and recreational fishermen are prohibited from landing any parts of Cancer crabs other than whole Cancer crabs.

- f. Non-Trap Fishery Requirements- It shall be unlawful for a commercial fisherman using non-trap gear to take, possess or land more than 200 Cancer crabs per calendar day or if on a multi-calendar day trip to take, possess or land more than 500 Cancer crabs per trip.

## **2. Recreational Fishery (*Section 5.2*)**

- a. Catch Limits- It shall be unlawful for a recreational fisherman to take, possess or land more than 50 Cancer crabs per calendar day or possess more than 50 Cancer crabs while fishing.
- b. Egg Bearing Females. Recreational fishermen are prohibited from taking, possessing or landing female Cancer crabs:
  - i. that are egg bearing;
  - ii. from which eggs have been forcibly removed; or
  - iii. that have come in contact with any substance capable of removing eggs.

## **3. Fishery Monitoring (*Section 3.4.1*)**

- a. Massachusetts currently requires 100% harvester reporting and 100% dealer reporting for Jonah crabs which includes the following:
  - i. A harvester report which includes a unique trip ID, vessel number, trip start date, location (NMFS stat area), traps hauled, traps set, quantity (lbs), trip length, soak time in hours and minutes, and target species.
  - ii. A dealer report which includes a unique trip id, species quantity (lbs), state and port of landing, market grade and category, areas fished, hours fished, and price per pound.
- b. Biological sampling
  - i. Fisheries dependent data collection

MADMF staff will conduct at least one Jonah crab port or market sampling trip from each of the following time periods: January-March, April-June, July-September, and October-December. Information collected will include: carapace width (mm), sex, egg bearing status, cull status, shell hardness, landing condition (parts or whole crab), name of landing vessel, and NMFS statistical area of harvest.
  - ii. Fisheries independent data collection

MADMF staff will collect fisheries independent data from the MADMF spring and fall Resource Assessment Bottom Trawl Survey, MADMF Ventless Lobster Trap Survey, and MADMF Early Benthic Phase Juvenile Lobster Survey. Information collected from the MADMF Resource Assessment Bottom Trawl Survey will include: number and collective weight per tow, carapace width (mm), sex, egg bearing status, cull status, and shell hardness. Information collected from the MADMF Ventless Lobster Trap Survey will include: number of crabs per trap, and data from a subsample of traps will include carapace width (mm), sex, egg bearing status, cull status, and shell hardness. Information collected from the MADMF Early Benthic Phase Juvenile Lobster Survey will include the number of crabs caught per station.

State of Rhode Island  
Department of Environmental Management  
Marine Fisheries  
Implementation Plan for the Atlantic States Marine Fisheries Commission  
Interstate Fishery Management Plan for Jonah Crab.



Submitted by:  
Scott D. Olszewski  
RIDEM Marine Fisheries  
Fort Wetherill Marine Lab  
December 23, 2015



The following Jonah Crab FMP State Implementation Plan contains current and proposed regulations which demonstrate that the State of Rhode Island is meeting the requirements of the ASMFC Jonah Crab FMP with implementation of the proposed regulation to take effect no later than June 1, 2016. The following management measures will put the State in full compliance with the Fishery Management Plan for Jonah Crab.

## **1. Commercial Fishery (Section 5.1)**

**a. A regulation which limits participation in the directed trap fishery to only those vessels and permit holders that already hold a lobster permit or can prove prior participation in the crab fishery before the control date of June 2, 2015. Traps used by these fishermen must conform to the specifications of the lobster management plan.**

### 8.1.13 Commercial lobster and Jonah crab trap tags:

(A) No person shall have on board a vessel or set, deploy, place, keep, maintain, lift, or raise; from, in, or upon the waters under the jurisdiction of the State of Rhode Island any pot for taking of American lobster or Jonah crab without the pot having a valid State of Rhode Island lobster trap tag.

(5) No licensees owning/partnered/incorporated in vessel(s) holding a LCMA 2 Federal Lobster Permit shall be permitted to deploy, place, set, tend, haul, lift, raise, supervise, or maintain lobster traps from said LCMA 2 federally-permitted vessel(s), or to catch/take American lobster or Jonah crab within the jurisdiction of the State of RI from said LCMA 2 federally-permitted vessel(s), unless the traps are tagged with federally-designated lobster trap tags that includes a LCMA 2 declaration, issued to said federally-permitted vessel(s).

(7) Any person who does not hold a lobster trap allocation and can prove participation in the Jonah Crab fishery prior to the June 2, 2015 control date shall be eligible for continued participation in the Jonah Crab fishery. Proof of participation shall be documented by RI Harvester Logbooks and or SAFIS dealer reports.

### 8.1.9 Lobster and Jonah Crab pots: **AREA 2**

(A) Maximum size: 22,950 cubic inches.

(B) Escape vents: Each and every lobster and Jonah crab pot, set, kept, or maintained or caused to be set, kept, or maintained in any of the waters in the jurisdiction of this State by any person properly licensed, shall contain an escape vent in accordance with the following specifications: (20-7-11(a))

(1) Minimum escape vent size:

(a) At least one (1) rectangular escape vent with an un-obstructed opening measuring not less than two inches by five and three-quarters ( $2 \times 5\frac{3}{4}$ ) inches (50.8mm X 146mm); or

(b) Two (2) circular escape vents, each with an un-obstructed opening measuring not less than two and five eighths ( $2\text{-}5/8$ ) inches (66.68mm) in diameter

8.3 LCMA 3 (Offshore Waters) regulations:

8.3.4 Maximum trap size: 30,100 cubic inches

8.3.3 Minimum escape vent size: In each parlor section of the lobster trap, at least one (1) rectangular escape vent with an un-obstructed opening measuring not less than two and one sixteenth inches by five and three quarter ( $2\text{-}1/16 \times 5\frac{3}{4}$ ) inches (53.39mm X 146.05mm) or two (2) circular vents, each with an un-obstructed opening measuring not less than two and eleven sixteenths ( $2\text{-}11/16$ ) inches (68.26mm) diameter.

**b. A regulation which states that all other fishermen who direct fishing effort on Jonah crabs (ie: those who have neither a lobster permit nor a history of landings, or those who do have a history of landings but do not have traps which conform to the lobster management plan), are required to obtain an incidental permit from the state or federal agency for the appropriate jurisdiction in which the vessel is fishing and is subject to landing limits.**

9.6 Harvest restrictions:

9.6.1 No Jonah crabs shall be harvested from pots or traps that do not have a valid lobster tag, unless authorized by the Director.

9.6.1-1 – The Director shall authorize vessels qualifying under section 8.1.13 (A) (7) to participate in the Jonah crab fishery by issuance of a Jonah crab permit.

9.6.1-2 – The Jonah crab permit will be renewed annually through DEM Marine Fisheries beginning January 1.

**c. A regulation which sets a 4.75” minimum size with zero tolerance. The measurement should be taken at the widest point of the carapace.**

9.3 Minimum size: The minimum size for Jonah Crab shall be four and three quarters (4.75) inches as measured across the widest point of the carapace.

**d. A regulation that prohibits the retention of egg-bearing females.**

9.6.3 Egg-bearing Jonah crabs: No person shall take, offer for sale, or possess at any time any female Jonah crab bearing eggs visible thereon or from which the egg pouch or bunion shall have been removed.

**e. A regulation which specifies that only whole crabs may be retained and sold with the exception of individuals who can prove a history of claw landings before the June 2, 2015 control date in the states of New Jersey, Delaware, Maryland, and Virginia. (Note: this measure may change before the implementation date)**

9.6.4 Only whole Jonah crab may be retained and sold

**f. A regulation which establishes an incidental bycatch limit for non-trap gear of 200 crabs per calendar day, 500 crabs per trip. (Note: this measure is currently under consideration and may change before the implementation date.)**

9.5 Possession limit:

(A) Commercial possession limit of Jonah Crab taken by gillnet or otter trawl:

Maximum of two hundred (200) Jonah crabs per day (based on a 24-hour period), or five hundred (500) Jonah crabs per trip for trips five (5) days or longer.

## **2. Recreational Fishery (Section 5.2)**

**a. A regulation which sets a 50 whole crab possession limit per person per day.**

9.5 Possession limit:

(b) Recreational possession limit: Maximum of 50 whole Jonah crabs per person per day

(c) Minimum size: The minimum size for Jonah Crab shall be four and three quarters (4.75) inches as measured across the widest point of the carapace.

**b. A regulation that prohibits the retention of egg-bearing females.**

9.6.3 Egg-bearing Jonah crabs: No person shall take, offer for sale, or possess at any time any female Jonah crab bearing eggs visible thereon or from which the egg pouch or bunion shall have been removed.

### **3. Fishery Monitoring (Section 3.4.1)**

(6.6) Data Reporting

(6.6-1) Required

(a) The holder of any type of commercial fishing license, dealer license, or landing permit shall be deemed to have consented to providing such fishery-related information as the Department may require, including but not limited to, catch, effort, and areas fished.

**a. Harvester Catch Reports and Dealer Reports are mandatory**

1. Rhode Island Harvester Catch and Effort Logbook fields:

License

Trip Date

Statistical Area fished

Species

Pounds landed

Gear

Gear quantity

Number of Hauls

Soak Time

2. Dealer report fields:

Trip ID

Species quantity

Port of landing

Market grade

Statistical Area fished

Price

**b. Biological Sampling Program** – The State of Rhode Island currently conducts a Sea and Port sampling program for American Lobster. This program will be expanded to include Jonah Crab sampling during fishery dependent sea sampling and port sampling events on a monthly basis.



Implementation Plan for the Jonah Crab Fishery Management Plan.

See Appendix 1 for a copy of the portion of the Commissioner Declaration pertaining to this FMP.

### 1. Commercial Fishery (*Section 5.1*)

- a. A regulation which limits participation in the directed trap fishery to only those vessels and permit holders that already hold a lobster permit or can prove prior participation in the crab fishery before the control date of June 2, 2015. Traps used by these fishermen must conform to the specifications of the lobster management plan.

Connecticut does not offer a pot/trap license authorizing the take of crabs other than the lobster pot license. Consequently, all Jonah crab harvesters fishing state waters are in the limited access lobster pot fishery. All such lobster pots fished are naturally subject to the lobster trap specifications in the FMP. It is possible that a federally permitted vessel is fishing in federal waters specifically for Jonah crab without a federal lobster permit and landing in Connecticut but such activity was not evident in our review of landing statistics.

- b. A regulation which states that all other fishermen who direct fishing effort on Jonah crabs (ie: those who have neither a lobster permit nor a history of landings, or those who do have a history of landings but do not have traps which conform to the lobster management plan), are required to obtain an incidental permit from the state or federal agency for the appropriate jurisdiction in which the vessel is fishing and is subject to landing limits.

As mentioned above if a non-lobster trap fisherman is landing trap caught Jonah crabs (and we are not aware of any) then NOAA would need to issue an incidental permit to that person(s). Landing Jonah crab in Connecticut requires a landing license from this state.

- c. A regulation which sets a 4.75" minimum size with zero tolerance. The measurement should be taken at the widest point of the carapace.

A Commissioner Declaration adopting the 4.75 inch minimum carapace width (no tolerance) requirement was signed December 29, 2015 and will become effective January 15, 2016.

- d. A regulation that prohibits the retention of egg-bearing females.

A Commissioner Declaration banning the possession of egg bearing Jonah crabs (or crabs from which the ova have been removed) was signed December 29, 2015 and will become effective January 15, 2016.

- e. A regulation which specifies that only whole crabs may be retained and sold with the exception of individuals who can prove a history of claw landings before the June 2, 2015 control date in the states of New Jersey, Delaware, Maryland, and Virginia. (Note: this measure may change before the implementation date)

A Commissioner Declaration specifying that crabs must be landed whole was signed December 29, 2015 and will become effective January 15, 2016.

- f. A regulation which establishes an incidental bycatch limit for non-trap gear of 200 crabs per calendar day, 500 crabs per trip. (Note: this measure is currently under consideration and may change before the implementation date.)

A Commissioner Declaration specifying a 200 crab daily possession limit or 500 crab trip limit was signed December 29, 2015 and will become effective January 15, 2016. The declaration specifies the 500 crab trip limit applied only to trips longer than five days. Note: the lobster plan allows 100 per day/5 per trip greater than 5 days. The Jonah crab FMP is not clear on the length of trip for which the 500 crab limit applies.

## **2. Recreational Fishery (Section 5.2)**

- a. A regulation which sets a 50 whole crab possession limit per person per day.

A Commissioner Declaration specifying a 50 crab possession limit in the recreational fishery was signed December 29, 2015 and will become effective January 15, 2016.

- b. A regulation that prohibits the retention of egg-bearing females.

A Commissioner Declaration banning possession of egg bearing crabs or crabs from which the eggs have been removed was signed December 29, 2015 and will become effective January 15, 2016.

## **3. Fishery Monitoring (Section 3.4.1)**

- a. A catch reporting system in which there is 100% harvester reporting and 100% dealer reporting. Jurisdictions that currently require less than 100% harvester reporting in the lobster fishery are required to, at a minimum, maintain their current programs and extend them to Jonah crab. A state's catch reporting plan must contain the following information:

- i.** A harvester report which includes a unique trip ID, vessel number, trip start date, location (NMFS state area), traps hauled, traps set, quantity (lbs), trip length, soak time in hours and minutes, and target species.
- ii.** A dealer report which includes a unique trip id, species quantity (lbs), state and port of landing, market grade and category, areas fished, hours fished, and price per pound.

Connecticut requires all fisherman and dealers to report commercial fishery landings and transactions (i.e. 100% reporting). Both the fisherman logbook and dealer reporting are consistent with the requirements outlined above except: 1) the fisherman provides the areas fished and hours fished rather than the dealer; 2) soak time is reported in days or hours (not hours and minutes); 3) fishermen do not report a target species.

- b.** A biological sampling program in which jurisdictions conduct port and/or sea sampling. The following information should be collected where possible: carapace width, sex, discards, egg-bearing status, cull status, shell harness, and whether landings are whole crabs or part.

Connecticut does not have a port or sea sampling program for Jonah crab, but will make an effort to add Jonah crab biological data collection to any lobster sea sampling trips made. The formal lobster sea sampling program ended following the loss of Interjurisdictional Fisheries Act funding, and the collapse of the lobster fishery which made scheduling regular trips very challenging.



## APPENDIX I

### Commissioner Declaration D16-01

#### Jonah Crab (*Cancer borealis*)

##### (a) Commercial Fishery.

- (1) No person engaged in commercial fishing by use of a pot or trap shall take Jonah crab except by lobster pot or trap meeting the requirements set forth in Sections 26-157c-2 and 26-157c-4 of the Regulations of Connecticut State Agencies.
- (2) No person engaged in otter trawl fishing including scallop dredge fishing shall possess or land more than 200 crabs per day provided that if the trip exceeds five days, such limit shall be 500 crabs per trip. Said limits shall apply to the aggregate of all persons on board such vessel.
- (3) No person engaged in commercial fishing or acting as a seafood dealer shall possess or land Jonah crab:
  - (A) less than 4.75 inches carapace width; or
  - (B) with ova or spawn attached or from which the ova or spawn has been removed; or
  - (C) claws detached from the body of the crab, unless also in possession of the body and not more than two claws per body are possessed.

##### (b) Recreational Fishery.

- (1) No person engaged in sport fishing for Jonah crab, including by personal use lobster pot fishing, shall possess or land:
  - (A) more than 50 crabs per day or per trip whichever is the longer period of time; or
  - (B) crabs with ova or spawn attached or from which ova or spawn has been removed.



## **NY's Implementation of the Jonah Crab Interstate Fishery Management Plan**

The Atlantic States Marine Fisheries Commission's (ASMFC) American Lobster Management board approved the Jonah Crab Interstate Fishery Management Plan (FMP) in June 2015. The Jonah Crab FMP establishes limits and restrictions for commercial and recreational fisheries, as well as requirements for fishery monitoring. The following is an outline of NY's planned implementation of the new FMP requirements.

### **1. Commercial Fishery Management Measures**

The mechanism to implement changes to NY's jonah crab fishery is through Environmental Conservation Law Article 13 Section 13-0331 subsection 7 which states:

7. The department may, until December thirty-first, two thousand fifteen, fix by regulation measures for the management of crabs of any kind including horseshoe crabs (*Limulus* sp.), including size limits, catch and possession limits, open and closed seasons, closed areas, restrictions on the manner of taking and landing, requirements for permits and eligibility therefor, recordkeeping requirements, requirements on the amount and type of fishing effort and gear, and requirements relating to transportation, possession and sale, provided that such regulations are no less restrictive than requirements set forth in this chapter and provided further that such regulations are consistent with the compliance requirements of applicable fishery management plans adopted by the Atlantic States Marine Fisheries Commission and with applicable provisions of fishery management plans adopted pursuant to the Federal Fishery Conservation and Management Act

- a) A regulation which limits participation in the directed trap fishery to only those vessels and permit holders that already hold a lobster permit or can prove their participation in the crab fishery before the control date of 6/02/2015. Traps used by these fishermen must conform to the specifications of the lobster management plan.*
- i. Regulations are currently being drafted to implement a new special permit for the directed Jonah Crab fishery, pending discussions with NY's legal department.

Qualifications for the directed jonah crab permit:

- 1) Fishermen with a valid NY commercial crab permit, NY commercial lobster permit, or landings history for jonah crab
  - a. Anyone intending to harvest less than 200 crabs per day or 500 crabs per trip would be covered by NY's current commercial crab permit
- 2) Landings History
  - a. Landings history will be defined as vessel trip reports with jonah crab landings submitted between 1/1/2008 and 6/2/2015

- ii. NY already requires that Lobster traps conform to the specifications of the FMP. Title 6 NYCRR Part 44.1 states that:

(1) Effective June 1, 2000 all lobster pots or traps in use shall contain in the parlor section (that part of a pot or trap farthest from the entrance or entrances which holds the lobsters until they are removed by the permit holder) either one or more unobstructed rectangular openings not less than five and three quarter inches by not less than two inches or two or more unobstructed circular openings not less than two and five-eighths inches in diameter each. These openings, called escape vents, shall be placed so that they are on a side, but not at the bottom or top, of the parlor section of the pot or trap.

(2) In addition to the requirements set forth in paragraph (1) of this subdivision, lobster pots or traps made of any material other than untreated natural wood shall contain on a side, but not the bottom, of the parlor section an escape panel, which when open, will provide an unobstructed opening of not less than three and three-fourths inches by three and three-fourths inches in length and height. The panel may incorporate escape vents having the dimensions described in paragraph (1) of this subdivision. If this panel is constructed of wood, it shall be untreated natural wood not more than three-eighths of an inch thick. If the panel is constructed of any material other than untreated natural wood, it shall be hinged to open. Effective July 19, 2006, the panel shall be hinged in such a manner that upon degradation of the material keeping the panel closed, the panel is released to produce an opening which is not blocked or otherwise obstructed by the panel material. Hinged panels shall be held in the closed position with either untreated, uncoated ferrous wire not more than three thirty-seconds of an inch in diameter or an untreated natural fiber such as cotton, sisal, hemp or manila not more than three-sixteenths of an inch in diameter. If the pot or trap is constructed of nylon, polypropylene, or any other synthetic fiber mesh netting placed over the frame, the escape panel may be made by having a section of the mesh netting on the outside of the parlor section comprised of an untreated natural fiber which when rotted out or deteriorated will leave an opening of at least the size specified for an escape panel in this subdivision.

- b) A regulation which states that all other fishermen who direct fishing effort on Jonah crabs, are required to obtain an incidental permit from the state or federal agency for the appropriate jurisdiction in which the vessel is fishing and is subject to landing limits.*

- i. NY already has permit requirements that would cover all other fishermen. Pending discussions with NY's legal department, this will be the permit used to cover incidental take of jonah crab.

Environmental Conservation Law Article 13 Section 13-0331 subsection 1 which states:

1. No person shall take crabs, including horseshoe crabs (*Limulus* sp.) for commercial purposes without first obtaining a permit from the department. For purposes of this subdivision, a presumption of "commercial purposes" shall be made wherein one takes or lands more than fifty crabs in any one day or sells or barter or offers for sale or barter any crabs he or she has taken.

c) *A regulation which sets a 4.75" minimum size with zero tolerance.*

- i. Regulations are currently being drafted to implement the size limit. These regulations should be in place by 6/1/2016

d) *A regulation that prevents the retention of egg-bearing females.*

NY already prohibits the retention of egg-bearing females. Environmental Conservation Law Article 13 Section 13-0331 subsection 5 which states:

Female crabs with eggs visible thereon, commonly called sponge crabs, or any female crabs from which the egg pouch or bunion has been removed, shall not be taken, possessed, transported or offered for sale at any time.

e) *A regulation which specifies that only whole crabs may be retained and sold.*

- i. Regulations are currently being drafted to implement management measures for crab parts pending management board decisions. These regulations should be in place by 6/1/2016.

f) *A regulation which establishes an incidental bycatch limit for non-trap gear of 200 crabs per calendar day, or 500 crabs per trip.*

- i. Regulations are currently being drafted to implement a bycatch limit pending management board decisions. These regulations should be in place by 6/1/2016.

## 2. **Recreational Fishery**

a) *A regulation which sets a 50 whole crab possession limit per person per day.*

- i. NY already has this law in place. Environmental Conservation Law Article 13 Section 13-0331 subsection 1 states:

1. No person shall take crabs, including horseshoe crabs (*Limulus* sp.) for commercial purposes without first obtaining a permit from the department. For purposes of this subdivision, a presumption of "commercial purposes" shall be made wherein one takes or lands more than fifty crabs in any one day or sells or barter or offers for sale or barter any crabs he or she has taken.

b) *A regulation that prohibits the retention of egg-bearing females.*

i. NY already prohibits the retention of egg-bearing females see section 1d above.

**3. Fishery-Dependent Data Collection requirements.**

a) *Catch, Landings, and Effort Information*

i. DEC current collects New York landings information using a two-ticket system compliant with ACCSP reporting requirements. Jonah Crab landings are reported through the New York State Fishing Vessel Trip Report (SVTR) and Dealer Report programs. The SVTR program collects trip level fishing activity and is submitted to the department monthly.

The following information is collected from SVTRs:

Vessel Name	Average Depth
State Reg or Vessel Doc #	Species Fished
Permit Type and Number	# of each Species Kept or Discarded
Date/Time Sailed	Dealer Permit # or Sales Disposition
# of Crew	Dealer Name
# of Anglers	Date Sold
Gear Fished	Port and State Landed
Mesh/Ring Size	Date/Time Landed
Quantity of Gear	
Size of Gear	
# of Hauls	
Average Tow/Soak Time	
NMFS Statistical Area Fished	
LAT/LONG or Loran of Area Fished	

The following information is collected from Dealer Reports:

Dealer Name, Address and Phone Number	Fishermen SVTR #
Dealer Permit Number	Species and Grade
Number of Purchases	Pounds
Purchase Date	Price per lb
Fishermen Name and Permit	Dollars
Vessel	
Vessel Fed Permit #	
State Reg Number	

## Gear

- b) *A biological sampling program.*
  - i. Currently the department conducts a sea sampling program to collect biological data from lobster catch. Jonah crab information will be collected while on lobster sea sampling trips. If resources are available, staff will conduct sea sample trips directed on the jonah crab fishery.
  - ii. The department in conjunction with Cornell Cooperative Extension of Suffolk County conducts market and port sampling to collect biological data from New York landings. Jonah crab will be added to the collection list.

## **New Jersey Implementation Plan for Jonah Crab**

The following is New Jersey's implementation plan as of January 2016 for Jonah Crab in regards to the FMP. Items are subject to change pending final actions by the Commissioner of the New Jersey Department of Environmental Protection (Commissioner) and New Jersey's Marine Fisheries Council (Council).

The Commissioner, in conjunction with the Council, has authority to modify regulations pertaining to Jonah Crab. The majority of future regulatory actions expected for Jonah Crab will be completed through the Notice of Administrative Change Process (Notice) which takes about two months for implementation. If any actions cannot be achieved through the Notice process, full rule making will be required which can take up to two years for implementation. Current regulations regarding lobster management can be found at N.J.A.C. 7:25, subchapter 14 and regulations regarding lobster and fish pots licenses can be found in N.J.A.C. 7:25, subchapter 18.

New Jersey's Marine Fisheries Council will be meeting January 7, 2016 and will be discussing and taking potential action on those provisions that can be accomplished through the Notice of Administrative Change process. Those items will be noted below.

### **1. Commercial Fishery**

- a. In 2003, NJ implemented a limited entry program (license) to manage its lobster and fish pot fisheries. This program restricts any additional lobster or fish pot licenses from being issued and caps the number of licenses available to 272. A vessel must also possess a valid New Jersey Lobster Pot Permit in order to land lobster with a lobster pot in New Jersey. In order to land Jonah crabs a vessel or person must possess a NJ lobster/fish pot license and a NJ Lobster Pot Permit. This provision will be addressed by the Council through Notice and will be implemented by the June 1, 2016 deadline.  
Regulations under N.J.A.C. 7:25, subchapter 18 specify the vent and trap dimensions that already conform to ASMFC's lobster trap specifications.
- b. The only directed fishing effort on Jonah crab is covered in 1.a. above.
- c. The Jonah crab minimum carapace size limit of 4.75" minimum size with zero tolerance will be addressed by the Council through a Notice and will be implemented by the June 1, 2016 deadline.
- d. A prohibition on the retention and possession of egg-bearing females will be addressed by the Council through a Notice and will be implemented by the June 1, 2016 deadline.
- e. The Council will discuss the issue of landing claws only and this provision can be accomplished through the Notice process, but NJ will likely delay any action depending upon future action taken by the Board regarding the landing of claws.
- f. The Council will be considering the incidental trip limits of 200 crabs per day or 500 crabs per trip and this provision can be accomplished through the Notice process. NJ will likely delay any action on the incidental trip limit depending upon the outcome of Draft Addendum I to the FMP.



## **2. Recreational Fishery (Section 5.2)**

a & b. The recreational possession limit of Jonah crab and a prohibition of the possession of egg-bearing females will be addressed by the Council through a Notice and will be implemented by the June 1, 2016 deadline.

## **3. Fishery Monitoring (Section 3.4.1)**

- a. The NJDFW will continue to implement mandatory vessel and dealer reporting for all Lobster/Conch/Fish Pot Licenses. Mandatory monthly reporting is currently required of all NJ Lobster Pot Permit holders. All New Jersey Jonah crab fishermen will be required to sell Jonah crab landed in New Jersey to a federally permitted American lobster/Jonah crab dealer. Any fishermen harvesting Jonah crab will be required to report landings through a Federal Vessel Trip Report when they possess federal permits or New Jersey vessel trip reports if they do not have a federal species permit. New Jersey vessel trip reports include at a minimum;
  - i. a unique trip ID, vessel number, trip start date, location (NMFS state area), traps hauled, traps set, quantity (lbs), trip length, soak time in hours and minutes, and target species.
- b. When practicable, NJDFW staff will include sampling Jonah crab while on board at-sea sampling trips for American lobster. Presently, the ACCSP Biological Sampling Matrix does not include Jonah crab, and our at-sea lobster sampling is funded by ACCSP. If no funding is available for Jonah crab sampling, NJ would request deminimus status to be exempt from the sampling mandate.



**STATE OF DELAWARE**  
DEPARTMENT OF NATURAL RESOURCES  
& ENVIRONMENTAL CONTROL  
DIVISION OF FISH & WILDLIFE  
89 Kings Highway  
Dover, Delaware 19901

**State of Delaware**  
**Jonah Crab Implementation Plan**

January 1, 2016

Delaware will implement the following management measures, as prescribed in the Jonah Crab Interstate Fishery Management Plan (FMP) no later than June 1, 2016. This implementation plan includes implemented regulations that meet some requirements of the Jonah Crab FMP as well as regulations and actions (in red) that will be promulgated and taken to meet the remaining Jonah Crab FMP requirements.

**1. Commercial Fishery (*Section 5.1*)**

- a. Delaware will propose a regulation to limit participation in the directed trap fishery to permit holders that currently possess a lobster pot permit or individuals who have documented landings of Jonah Crab prior to June 2, 2015. Delaware's landings occur in Lobster Conservation Management Area 5. Delaware's current regulation, as shown below, meets the vent requirements of the FMP: either a rectangular vent no less than 2 X 5  $\frac{3}{4}$  inches or Circular Vent no less than 2  $\frac{5}{8}$  inches; at least 1 rectangular vent; and the trap size must not exceed 22,950 cubic inches. Delaware will modify its regulations to include the at least two circular vents on Lobster Traps.

Title 7, Section 3755

1.0 It shall be unlawful for any person to set, tend or conduct shellfishing for lobsters with any pot or trap in the waters under the jurisdiction of the State unless said pot or trap has an escape vent, slot or port of not less than two (2) inches by 5  $\frac{3}{4}$  inches located in the parlor section of each pot or trap, or if a circular escape vent is used in the parlor section of any lobster pot or trap, it shall be unlawful to use any circular vent that is less than 2  $\frac{5}{8}$  inches inside diameter.

3.0 It shall be unlawful for any recreational or commercial lobster pot fisherman to set, tend or conduct shellfishing for lobsters with a lobster pot or trap with a volume larger than 22,950 cubic inches.

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through Science and Service***

- b. Delaware will be more conservative than required by the FMP and propose a regulation that will only allow fisherman with a lobster pot permit or individuals with landings prior to the control date to land Jonah Crabs.
- c. Delaware will include a 4.75” minimum size with zero tolerance in its Jonah Crab regulation, with the measurement taken at the widest point of the carapace.
- d. Delaware’s regulation will prohibit the retention of egg-bearing females.
- e. Delaware’s regulation will specify that only whole crabs may be retained and sold with the exception of individuals who can prove a history of claw landings before the June 2, 2015.
- f. Delaware’s regulation will establish an incidental bycatch limit for non-trap gear of 200 crabs per calendar day, 500 crabs per trip.

**2. Recreational Fishery (Section 5.2)**

- a. Delaware’s regulation will set a 50 whole crab possession limit per person per day for the recreational fishery.
- b. Delaware’s regulation will prohibit the retention of egg-bearing females.

**3. Fishery Monitoring (Section 3.4.1)**

- a. Jonah Crab harvest occurs in federal water and all landings are reported by the dealers through the SAFIS system, which includes all the necessary parameters needed to be reported. Delaware has a regulation, shown below, that require the reporting of all shellfish being landed **but will modify the current Harvester Logbook System to include Jonah Crab landings, and reporting will include all necessary reporting elements.**

Title 7 § 1910

Except in the case of shellfish aquaculture in Delaware's Inland Bays, any person issued a commercial shellfishing license or permit by the Department shall file monthly reports of his or her catch by area, effort, species, and weight or number on forms provided by the Department. A commercial shellfishing license or permit holder who does not file said monthly report by 4:30 p.m. of the last working day of the month following the month for which the report is due shall be guilty of a class D environmental violation.

- b. Delaware will conduct biological sampling at port. Since landings may be claws only, the data gathered may be limited to claw lengths, weights, and numbers.

Implementation Plan for the Interstate Fishery Management Plan for Jonah Crab  
December 29, 2015

**Background**

The Atlantic States Marine Fisheries Commission published an Interstate Fishery Management Plan (FMP) for Jonah crab under the authority of the Atlantic Coastal Fisheries Cooperative Management Act (ACFCMA 1993) in August 2015. States are expected to implement the FMP requirements by June 1, 2016.

The development of the FMP was prompted by the American Lobster Board’s concern for potential impacts to the status of the Jonah crab resource given the recent and rapid increase in landings. The goal of the FMP is to support and promote the development and implementation, on a continual basis, of a unified coastal management program for Jonah crab, which is designed to promote conservation, reduce the possibility of recruitment failure, and allow full utilization of the resource by the United States industry.

**Regulations**

In order to comply with the FMP, Maryland will declare Jonah crab in need of conservation which will allow that species to be added to the Code of Maryland Regulations. The Department will then be permitted to establish regulations. These changes will follow the regulatory process that includes scoping, drafting regulations, and public comment periods. Given the amount of scoping and review time necessary, regulations will most likely be effective June 20, 2016.

Regulations will be established that meet the following FMP criteria for sections 5.1 and 5.2.

**1. Commercial Fishery (Section 5.1)**

- a. **A regulation which limits participation in the directed trap fishery to only those vessels and permit holders that already hold a lobster permit or can prove prior participation in the crab fishery before the control date of June 2, 2015. Traps used by these fishermen must conform to the specifications of the lobster management plan.**

**Lobster Trap Specifications**

Mgmt Measure	Area 1	Area 2	Area 3	Area 4	Area 5	Area 6	OCC
Vent Rect.	1 <sup>15</sup> / <sub>16</sub> x 5 <sup>3</sup> / <sub>4</sub> ”	2 x 5 <sup>3</sup> / <sub>4</sub> ”	2 <sup>1</sup> / <sub>16</sub> x 5 <sup>3</sup> / <sub>4</sub> ”	2 x 5 <sup>3</sup> / <sub>4</sub> ”	2 x 5 <sup>3</sup> / <sub>4</sub> ”	2 x 5 <sup>3</sup> / <sub>4</sub> ”	2 x 5 <sup>3</sup> / <sub>4</sub> ”
Vent Cir.	2 <sup>7</sup> / <sub>16</sub> ”	2 <sup>5</sup> / <sub>8</sub> ”	2 <sup>11</sup> / <sub>16</sub> ”	2 <sup>5</sup> / <sub>8</sub> ”	2 <sup>5</sup> / <sub>8</sub> ”	2 <sup>5</sup> / <sub>8</sub> ”	2 <sup>5</sup> / <sub>8</sub> ”
Escape Vent	At least 1 rectangular vent or 2 circular vents matching the requirements above (vent size corresponds to minimum legal size of lobster)						
Trap Size	A maximum trap size of 22,950 cubic inches in all areas except area 3, where traps may not exceed a volume of 30,100 cubic inches						

- b. **A regulation which states that all other fishermen who direct fishing effort on Jonah crabs (ie: those who have neither a lobster permit nor a history of landings, or those who do have a history of landings but do not have traps which conform to the lobster management plan), are required to**

obtain an incidental permit from the state or federal agency for the appropriate jurisdiction in which the vessel is fishing and is subject to landing limits.

- c. A regulation which sets a 4.75” minimum size with zero tolerance. The measurement should be taken at the widest point of the carapace.
  - d. A regulation that prohibits the retention of egg-bearing females.
  - e. A regulation which specifies that only whole crabs may be retained and sold with the exception of individuals who can prove a history of claw landings before the June 2, 2015 control date in the states of New Jersey, Delaware, Maryland, and Virginia. (Note: this measure may change before the implementation date).
  - f. A regulation which establishes an incidental bycatch limit for non-trap gear of 200 crabs per calendar day, 500 crabs per trip. (Note: this measure is currently under consideration and may change before the implementation date.)
2. **Recreational Fishery (Section 5.2)**
- a. A regulation which sets a 50 whole crab possession limit per person per day.
  - b. A regulation that prohibits the retention of egg-bearing females.
3. **Fishery Monitoring (Section 3.4.1)**
- a. A catch reporting system in which there is 100% harvester reporting and 100% dealer reporting. Jurisdictions that currently require less than 100% harvester reporting in the lobster fishery are required to, at a minimum, maintain their current programs and extend them to Jonah crab. A state’s catch reporting plan must contain the following information:
    - i. A harvester report which includes a unique trip ID, vessel number, trip start date, location (NMFS state area), traps hauled, traps set, quantity (lbs), trip length, soak time in hours and minutes, and target species.
    - ii. A dealer report which includes a unique trip ID, species quantity (lbs), state and port of landing, market grade and category, areas fished, hours fished, and price per pound.

Existing harvester and dealer reports collect this information. Natural Resource Article, §4–206, Annotated Code of Maryland provides the authority to require weekly dealer reports to meet monitoring requirements.

<http://www.mgaleg.maryland.gov/webmga/frmStatutesText.aspx?article=gnr&section=4-206&ext=html&session=2016RS&tab=subject5>

COMAR 08.02.13.06 requires that any person licensed to fish commercially shall accurately record their catch on forms provided by the Department.

<http://www.dsd.state.md.us/comar/comarhtml/08/08.02.13.06.htm>

- b. A biological sampling program in which jurisdictions conduct port and/or sea sampling. The following information should be collected where possible: carapace width, sex, discards, egg-bearing status, cull status, shell harness, and whether landings are whole crabs or part.

Maryland began sea sampling for Jonah crab in 2015. Maryland will continue to conduct port and/or sea sampling for Jonah crab. When possible, carapace width, sex, discards, egg-bearing status, cull status, shell harness, and whether landings are whole crabs or part will be recorded.



# COMMONWEALTH of VIRGINIA

*Marine Resources Commission*  
2600 Washington Avenue  
Third Floor  
Newport News, Virginia 23607

Molly Ward  
Secretary of Natural Resources

John M.R. Bull  
Commissioner

December 28, 2015

## MEMORANDUM

TO: Megan Ware,  
American Lobster FMP Coordinator

FROM: Robert L. O'Reilly *RLOR*  
Chief, Fisheries Management Division

SUBJECT: Virginia Jonah Crab FMP required implementation plan

In order to comply with the Atlantic States Marine Fisheries Commissions Jonah Crab Fishery Management Plan requirements, the Virginia Marine Resources Commission will adopt all of the Jonah Crab FMP requirements, as part of a VMRC regulation.

The regulation will be made effective by June 1, 2016. A copy of the draft regulation, Chapter 4 VAC 20-1310-10 et seq., "Pertaining to Jonah Crab", is attached to this memorandum. Harvester reporting is not included in the draft regulation pertaining to Jonah crab. Chapter 4 VAC 20-610-10 et seq. already provides for the required harvester reporting, with the level of detail stated for the FMP.

Thank you

*An Agency of the Natural Resources Secretariat*

[www.mrc.virginia.gov](http://www.mrc.virginia.gov)

Telephone (757) 247-2200 (757) 247-2292 V/TDD Information and Emergency Hotline 1-800-541-4646 V/TDD

VIRGINIA MARINE RESOURCES COMMISSION  
“PERTAINING TO JONAH CRAB”  
CHAPTER 4VAC20-1310-10 ET SEQ.

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**DRAFT**

**PREAMBLE**

This chapter establishes minimum size limits, gear restrictions, and quotas for the harvest of Jonah crab. This chapter is promulgated pursuant to the authority contained in §§28.2-201, 28.2-700, and 28.2-204.1 of the Code of Virginia. The effective date of this chapter is June 1, 2016.

**4VAC20-1310-10. Purpose.**

The purpose of this chapter is to conserve and protect Jonah crabs from overfishing and to provide consistency among federal and interstate laws and regulations.

**4VAC20-1310-20. Definitions.**

The following words and terms when used in this chapter shall have the following meaning unless the context clearly indicates otherwise:

"Jonah crab" described in this chapter refers solely to the crustacean *Cancer borealis*.

**4VAC20-1310-30. Possession Prohibitions and Commercial Fishery Minimum Size Limit.**

A. It shall be unlawful for any person to possess for a period longer than is necessary for immediate determination of the presence of eggs, any egg-bearing Jonah female crab, except for scientific purposes and with the express written consent of the Commissioner of Marine Resources.

“PERTAINING TO JONAH CRAB”

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B. It shall be unlawful for any person to land any Jonah crab unless the whole crab is in possession, except as provided in 4 VAC 20-1310-40 D.

C. It shall be unlawful for any person to possess or land any Jonah crab, for commercial purposes, that measures less than 4.75 inches, across the widest point of the carapace.

**4VAC20-1310-40. Commercial Harvest, Possession Limits and Reporting.**

A. In accordance with the provisions of §28.2 201 of the Code of Virginia, the Marine Resources Commission establishes a no cost commercial Jonah crab incidental permit for any harvester using any gear or methods other than lobster traps in Virginia waters.

B. Landings by fishermen using gear or methods other than lobster traps (nontrap fishermen) shall be limited to no more than 200 Jonah crabs in a 24-hour period or more than 500 Jonah crabs, for trips exceeding a 24-hour period.

C. Possession by any nontrap fishermen aboard any vessel on Virginia waters or the landing by any nontrap fishermen of quantities greater than those specified shall constitute a violation of this chapter.

D. It shall be unlawful for any person to take, catch, possess, or land any Jonah crabs in excess of the amounts listed in 4 VAC 20-1310-30 B without first having obtained a Jonah Crab Limited



**“PERTAINING TO JONAH CRAB”**

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Entry Fishery Permit from the Marine Resources Commission. Permits shall only be issued to Virginia registered commercial fishermen or Virginia Seafood Landing Licensee, who also hold a valid federal lobster permit and who have at least one pound of documented landings, prior to June 2, 2015, in the Marine Resources Commission’s mandatory harvest reporting system. Federal dealer reports to the Standard Atlantic Fisheries Information System can satisfy the one pound harvest requirement.

E. It shall be unlawful for any person to take, catch, possess, or land any Jonah crabs in excess of the amounts listed in 4 VAC 20-1310-30 B without first having obtained a Jonah Crab Limited Entry Claw Fishery Permit from the Marine Resources Commission. Permits shall only be issued to Virginia registered commercial fishermen, who also hold a valid federal lobster permit and who have at least one pound of documented claw landings, prior to June 2, 2015, in the Marine Resources Commission’s mandatory harvest reporting system. Federal dealer reports to the Standard Atlantic Fisheries Information System can satisfy the one pound harvest requirement.

F. Any licensed seafood buyer who purchases Jonah crabs shall provide written reports to the Commission of daily purchases and harvest information, organized by month, on forms provided by the Commission. Such information shall include: the date of the purchase, the harvester's Commercial Fisherman Registration License number or Virginia Seafood Landing License number, the gear type, water area fished, city or county of landing, total amount of pounds

“PERTAINING TO JONAH CRAB”

CHAPTER 4VAC20-1310-10 ET SEQ.

landed and the price per pound. These reports shall be completed in full and submitted to the Commission, no later than the 15th day of January, for the prior year's purchases.

**4VAC20-1310-50. Daily Recreational Harvest and Possession Limit.**

It shall be unlawful for any person fishing recreationally to possess more than 50 Jonah crabs per person per day.

**4VAC20-1310-60. Penalty.**

As set forth in §28.2-903 of the Code of Virginia, any person violating any provision of this chapter shall be guilty of a Class 3 misdemeanor, and a second or subsequent violation of any provision of this chapter committed by the same person within 12 months of a prior violation is a Class 1 misdemeanor.

\*\*\*\*\*

This is to certify that the foregoing is a true and accurate copy of the chapter passed by the Marine Resources Commission, pursuant to authority vested in the Commission by §28.2-201 of the Code of Virginia, duly advertised according to statute, and recorded in the Commission's minute book, at meeting held in Newport News, Virginia on May 23, 2016.

**COMMONWEALTH OF VIRGINIA  
MARINE RESOURCES COMMISSION**

**BY: \_\_\_\_\_  
John M. R. Bull**

**VIRGINIA MARINE RESOURCES COMMISSION**  
**“PERTAINING TO JONAH CRAB”**  
**CHAPTER 4VAC20-1310-10 ET SEQ.**

**PAGE 5 OF 5**

**Commissioner**

Subscribed and sworn to before me this \_\_\_\_\_ day of May 2016.

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Notary Public