

# Basis Statement

## Chapter 13 Whelks and Periwinkles

These regulations implement a prohibition on the harvest by mechanical pump, suction methods, and or diving, including hand harvest by diving; establish a minimum size of 9/16<sup>th</sup> girth based on a quart sample count of 220; limits the maximum aggregate drag size to 6 feet in width; require culls and undersize to be released into marine waters in the area where harvested; night time dragging is prohibited; adds a no cost license endorsement to the required commercial fishing license; and provides an exemption for personal use. Reporting of periwinkles landed by dealers is required as of 2008.

Over the past winter the Department was informed about concerns of depletion of the periwinkle resource due to the renewed increase in the harvest of periwinkles by suction pumping. In the lower water rock-mud interface, in the rock cracks and crevices, winter periwinkles are normally not harvestable by picking or dragging and function as an annual spawning source. The suction or pumping type harvest is particularly capable of access to the resource in these locations and removing the spawning stock. The requirement to return graded or screened periwinkle culls to marine water, and preferably the harvest site, would further help conservation of the resource similar to other fisheries such as lobster, sea urchin, scallop, halibut, that grade or liberate undersize or by-catch on site.

In the late 1990's similar concerns were raised and discussed with the industry. At that time regulations were drafted that would have prohibited pumping, implemented a minimum size, and included other measures such as limiting the drag width to what was in common use then and a closure during spawning season. This issue was raised again about 3 years ago, and again faded due to lack of continued use of the pumping or suction method. As with many fisheries the Department may lack specific data to satisfy some of the need for these restrictions. Conversely, the Department has been strongly criticized for lack of conservation measures to prevent the decline or near collapse of resources, the sea urchin in southern Maine for example. Although incomplete, recent landings data and hearing comments indicate a resurgence of effort to harvest the periwinkle resource and the Department therefore considers it prudent to move forward with the regulations, with only one change. When the regulation of drag size was discussed in the late 90's, the recommendation was that the size be limited to what was in use at that time (4-5 feet). The comments during the present rulemaking recommended limiting the drag size to what is now commonly in use, which is 6 feet.

### CHAPTER 13 – Whelks and Periwinkles

#### 13.20 Harvesting of Periwinkles

##### 1. Definitions

A. "Periwinkle" means the common periwinkle of the genus *Littorina*.

##### 2. Harvest restrictions

###### A. Methods of harvest prohibited

It shall be unlawful to fish for or take periwinkles by diver/diving (SCUBA or snorkel), pump, suction or any type of mechanical pumping.

###### B. Minimum size

It shall be unlawful to take, possess, ship, transfer, transport, buy, or sell undersize periwinkles. For the purpose of this regulation undersize periwinkles will be determined by numerical count as follows:

The numerical count shall be determined by taking a random one quart sample from the bulk pile and then counting the periwinkles to determine the amount of periwinkles in the one quart container. If the one quart sample contains more than 220 periwinkles they will be considered undersize. This method of measurement results in an average taken at the narrowest diameter of the girth of 9/16" or less.

###### C. Drag size

It shall be unlawful to fish for periwinkles in Maine's territorial waters with any one combination of drags having an aggregate size in excess of 6' in width measuring from the extreme outside edge on one side to the extreme outside edge on the opposite side.

###### D. Culling requirement

Undersize periwinkles as well as all bycatch must be immediately liberated into marine waters in the area where harvested.

###### E. Night prohibition

It shall be unlawful to fish for or take periwinkles within Maine's territorial waters by dragging during the period ½ hour after sunset, as defined in [12 M.R.S.A. §6001\(46\)](#), until ½ hour before sunrise, as defined in [12 M.R.S.A. §6001\(45\)](#).

###### F. Personal use exemption

Recreational harvesters may possess up to 2 quarts per day of periwinkles for personal use without a license.

##### 3. License Endorsement

It shall be unlawful to harvest periwinkles unless the harvester holds a Commercial Fishing – Single license with the Periwinkle Permit endorsement or a Commercial Fishing – Crew license with the Periwinkle Permit endorsement\*. There will be no additional charge for this permit. \*DMR License Division telephone (207-624-6550) or for online information select the following link: <http://www.maine.gov/dmr/license/index.htm>

# Summary of Comments

Public hearings were held in Machias and Rockland June 9 and 10, 2009 respectively. A summary of the comments and questions pertaining to the proposed rules with the Department's responses follow the list of hearing attendees. Hearing attendees who provided comments at the hearings are identified in bold. Individual summarized hearing and written comments are also included.

## **Machias Hearing attendees:**

Jessie Frazier, Beals (wrinkle pumper) (plus written comment)

Cindy Mawson, Jonesport

Jason Mawson, Jonesport

Sheena Frazier, Beals

Dawn Peabody, Beals

**Inez Frazier, Jonesboro** (plus written comment)

**John Frazier, Jonesboro (periwinkle dealer)** (plus written comment)

Lois Wallace, Milbridge

Keith Small, Hancock

Jamey Gaddis, Harrington

Kevin L. Beal, Beals

**Dan Rogde, Jonesport**

Larry Emerson, Beals

Broderick Alley, Beals

**Avery Kelley Jr., Beals**

John Cox, Jonesboro

Roger Hurlbert, Steuben (picker) (written comment)

**James E. Smith, Jonesport (picker)**

**Franklin Smith, Jonesport (periwinkler, lobster fisher)**

Todd Gray, Marshfield

Roger Dame, Jonesport (picker, buyer)

**Ralph Smith, Jonesport (dealer)** (plus written comment)

**Tom Saad, Gouldsboro (fisherman)** (plus written comment)

**Paul Cox, Dennysville (wrinkle pump)**

**Paul Molyneaux, Whiting**

Jim Forcier, Whitneyville

Adam Boutin, Trescott

**Joseph Keene, Trescott**

**Julie Keene, Trescott**

**Isaac Beal, Beals**

Todd Gray, Machiasport

DMR: Lt. Talbot, P. Thayer, L. Churchill

## **Rockland Hearing attendees:**

**Jim Wadsworth, Camden, Friendship International**

Jessie Frazier, Beals (wrinkle pumper)

John Frazier, Jonesboro (periwinkle dealer)

DMR: Sgt. Cloutier, P. Thayer, L. Churchill

## **Additional written comments received from:**

Paul H. Farmer, Cushing

Maine Seafood Alliance, Pres. Jim Markos, Cherryfield

Dean Norris, Livermore Falls

Mercy A. Beal and Rebecca Lombard, Jonesport

## **Culling requirement**

Undersize periwinkles as well as all bycatch must be immediately liberated into marine waters in the area where harvested.

## **Support culling in to marine waters:**

Seed should be returned to its natural environment. It shouldn't matter where it is returned.

Overall this is supported however, the harvesters say the dealers should do this and dealers say the harvesters should do this: dealers should be required to do this within a certain number of days; harvesters should be required to take their culls from the dealer back to the shore.

[As a dealer I] support the requirement to take them back to the shore.

Periwinkles do not stay where you put them; even after being out of the water for days or sometimes weeks, many survive and crawl away when placed back in the water.

There should be no obvious dry seed screening by either harvesters or dealers.

**Opposed to culling in marine waters:**

This will not work, it is impractical; particularly in the winter when the periwinkles are frozen together or to the rocks. This would make slipping on the icy ledges at night especially dangerous when picking.

Carrying a screen to the shore would be too difficult. How would Marine Patrol know if someone has a screen?

Why bother, they are going to be screened at the dealer's anyway.

The dealers should be required to do this not the harvesters. It is the dealers who are leaving them in the sun to die.

If you screen them on top of the ledges then you will create a run of small periwinkles there.

[As a dealer I] do not have time to take them back to the shore.

There should be a penalty for letting them die on shore.

**Response:**

*Various fisheries have culling rules either directly or indirectly through size limits or liberation at the time of harvest. Examples include urchins, scallops, groundfish, lobster, clams, etc. Size restrictions for each species have met with resistance to varying degrees. Over time, however, these measures have been accepted and contribute to the conservation of the resource.*

*The extra time it takes to cull is comparable to the extra time scallop harvesters have to take to cull the bulk pile before allowing any cutting, particularly in the winter. Scallop harvesters argued it would take too much time in icy conditions. But the conservation benefits gained by returning the undersize scallops overboard more quickly outweigh the extra effort required. As described, hand-picked periwinkles are already on shore frozen together and, therefore, they are not in danger of being frozen to death. They are however in danger of drying out by not being returned to the shore from a dealer's shop. The objective of slowing the harvest effort is the intent of such conservation measures, to allow the resource to remain available to reproduce and survive for the long term sustainability of the species.*

*For conservation purposes liberating the culled resource at or near the harvest location is best for the conservation of the periwinkle resource versus moving to another location several times. If the culls were the sole responsibility of the dealers to return to the shore, and if there also was no size limit, there would be no incentive on the harvester to be selective. This would result in the harvesters bringing any size to the dealer. Overall comments from both harvesters and dealers support returning the culls to the shore but by someone other than themselves.*

*Regarding enforcement, a size limit with a count per volume (quart) is the most practical enforcement method. Liberation at the site of harvest is better conservation than being moved to another location then waiting to be moved again. The common practice of culling aboard draggers reduces the number of culls from this method of harvest. The underwater suction method as described may or may not allow direct visual inspection of what is being harvested, depending on the individual harvester or equipment used; hearing commentators indicated mechanically pumped periwinkles could only be culled at a dealer shop. Hand harvesting is similar to other hand harvested species with a size limit and can be visually inspected before leaving the harvest area. It is commonly observed by Marine Patrol that clam, urchin and scallop harvesters do not use a measuring device (measuring tool or screen device). Instead they've learned to "eyeball" the legal size sufficiently to not be found in violation. Urchin divers argued they could not possibly handle a minimum or maximum measure because it was too difficult to harvest by other than "scooping" clumps or groups of urchins. The argument that this is not feasible because one must harvest only by "scooping" or the periwinkles are frozen in clumps has comparisons in other fisheries which have been overcome. Screens have been previously used by the industry over 10 years ago and discussed at that time as a potential regulation.*

*The penalty for violation of this regulation would be a civil violation for which a fine of not less than \$100 for each violation may be adjudged; see 12 M.R.S.A. §6174.*

## **Minimum size**

It shall be unlawful to take, possess, ship, transfer, transport, buy, or sell undersize periwinkles. For the purpose of this regulation undersize periwinkles will be determined by numerical count as follows:

The numerical count shall be determined by taking a random one quart sample from the bulk pile and then counting the periwinkles to determine the amount of periwinkles in the one quart container. If the one quart sample contains more than 220 periwinkles they will be considered undersize. This method of measurement results in an average taken at the narrowest diameter of the girth of 9/16" or less.

### **Support the minimum size:**

This is a good idea. Anyone who has been picking periwinkles can figure this out; like clams with the 2-inch rule, scallops 4 inch minimum or the minimum size for urchins. Harvesters develop an eye for the right size and don't need or use tools to measure them.

### **Opposed to the minimum size:**

The 220 will not work coast wide; maybe in Cobscook as the periwinkles are larger the further east along the coast. This is not feasible. The count should be 270-280.

Periwinkles are screened aboard the draggers. We use a ½ inch screen and all culls go back overboard.

The 9/16 inch size will not work; too many are smaller; some never grow to this size.

The market takes care of the size limit; don't need this.

Letting them grow will just end up with dead periwinkles as many never get to this size.

### **Response:**

*The common harvested, large, periwinkle species Littorina littorea is an introduced and a larger species that displaces the two common and smaller size indigenous species. Commentors who indicated "smaller" periwinkles that never grow to the 9/16<sup>th</sup> inch girth could possibly be seeing the smaller species. L. littorea grows to 1 inch (25mm) to over 1.5 inch (42mm) as reported for Passamaquoddy Bay, and is distributed throughout the intertidal and subtidal zones. Whereas L. obtusata grows to ½ inch (12-13mm) and inhabits the lower intertidal zone. L. saxatilis grows to 1 1/16 inch (18mm) and inhabits the higher intertidal zone. The point that some commentors made that the periwinkles will never grow to or over ½ inch or to 9/16<sup>th</sup> inch is quite possibly one of the smaller species. The Department acknowledges L. littorea is an introduced species. However, in reality it has been long established (since the 1800's) and is considered a "local resident" today.*

*Commentors did not, for the most part, support the minimum size as a conservation measure even though the minimum size would provide a period of up to approximately one year of sexual maturity for the periwinkles to reproduce before becoming legal size. Although a literature search indicates a range in the size to sexual maturity, the 9/16<sup>th</sup> girth is a prudent number within the range found.*

*Allowing the primary targeted species, L. littorea, to reproduce for approximately a year before legal size is considered prudent considering the number of comments made on the increased effort or that there are recently too many harvesters in this fishery. According to preliminary data from 2008 and 5+ incomplete months in 2009 the majority of the harvest is taken by hand.*

*A size limit at the harvester level is the most practical method to enforce across all methods of harvest. See response to culling above.*

## **Methods of harvest prohibited**

It shall be unlawful to fish for or take periwinkles by diver/diving (SCUBA or snorkel), pump, suction or any type of mechanical pumping.

### **Support prohibiting suction & diving harvest methods:**

Ban harvest by mechanical pump, suction methods, and or diving, immediately.

Limit harvest methods to hand picking and dragging. Pickers work in the intertidal and draggers work the subtidal area leaving areas in between where the broodstock is not tampered with or removed.

Picking is limited to a 3-hour tide; pumping allows persons to fish the rest of the day depleting the resource further.

Areas have been pumped to death. An area on Fisherman's Island was suction harvested eight years ago and it has never recovered to my knowledge.

Suction harvesting and periwinkle harvest by any method has become more popular; if suction harvesting is not banned more harvesters will be forced to use this method to access them because they won't be available to crawl up on the rocks in the intertidal.

During the 1980's a wrinkle pump from France was offered to buyer Ralph Smith; upon inquiring on the status of the periwinkle industry in France he found out there was no more industry, it had been over fished.

There is documented history of declining fisheries production being boosted by technology (such as suction harvesting); this does not help the resource grow or recover.

**Opposed to the prohibition of suction & diving harvest methods:**

After asking Marine Patrol I bought a wrinkle pump this year; now I can't use it even though it didn't harvest enough to pay for the gas to run the pump. If you prohibit the use of suction pumps the \$2000 or higher cost for the pump will be worthless.

During the peak harvest in the late 80's, on the landings data sheet, [in my opinion] this was due to hand harvesting not suction harvesting.

Pump or suction harvest should be allowed and is very selective about where it works and what it is affecting; it opens up an extra portion of the bottom that is not harvestable [by other methods]. Diving with a pump should be allowed.

Hand harvest by diving should be allowed.

What proof do you have that suction harvest using a 3 inch diameter nozzle is hurting anything; pumping is too new to know enough about it.

Draggers tow acres upon acres a day whereas suction harvesting covers a much smaller area; meaning that draggers cause habitat damage whereas suction harvesting does not; versus dragging occurs in a different habitat where no hand picking occurs and usually on flat mud.

The only reason person are opposed to suction harvest is because they are jealous of the rumored large amount of money the suction harvesters make.

Too many rules will result in the Canadian's taking over the market and fishery. They glut the market now when their people come of unemployment in the spring and fish periwinkles to earn an income. They sell below our prices due to the exchange rate too.

Alternative suggestions:

Close areas to protect broodstock.

This should be a hand harvest only fishery; get some back bone in regulations to be effective.

Hand diving should be allowed (they are not using a pump); this is like hand picking. If prohibited DMR should offer a buy back program.

Dragging should be prohibited; dragging for periwinkles damages other higher value species.

Place a daily cap of 500 or 600 lbs on the amount of harvest; cap instead of prohibiting gear.

Add a season instead; limit days like the urchin season; or limit pumping to spring and summer.

***Response:***

*Suction harvest/diving of periwinkles, as described by proponents and opponents, targets the periwinkle habitat located between the rocky intertidal where hand harvesting primarily occurs and the subtidal habitat on flat mud bottom where dragging occurs. The in between area is just subtidal and typically provides refuge in ledge and or rocky crevices. As described this is the area periwinkles tend to congregate in the winter. This congregation and usually inaccessible location make them more vulnerable to over harvest by targeted suction harvesting versus intertidal hand picking, which would normally not occur in this location; nor raking which would normally not be used to reach into crevices, or by drag, which tows flat mud areas.*

*Add to this the expressed interest/concern that if this method is allowed to continue it will become more popular and therefore see greater use, it is the Department's opinion that this is not a new method of harvest, nor one that is completely benign as claimed. Similar concerns have been raised periodically since the late 1990's regarding the potential for this method of harvest to over harvest the previously inaccessible resource. Suction type harvesting has been tried in several fisheries; it is a non-selective method that takes everything pumped in to it compared to drags, which right or wrong, do allow passage of other species through its netting or "bag", although tumbled and not necessarily raised to the surface.*

*The argument that dragging covers a greater area compared to suction harvest is more destructive to the habitat and therefore should be banned is not considered an acceptable alternative given that flat mud typically towed for periwinkles is not prime habitat for many species. Also, periwinkles would not be as concentrated or congregated on mud as they would be in the winter in the just subtidal crevices. Picking, hand diver harvest and dragging each have their limitations and although suction harvest may not have the highest landings of all harvest methods to date or cover the greatest area, it does target a unique location and*

at a time of highest concentration that has, in the Department's opinion, the highest potential to impact the previously inaccessible resource, whether it be broodstock or simply a segment of the periwinkle population that is left alone to reproduce without being harvested.

The Department acknowledges the monetary loss for those persons who have purchased the suction equipment. This is not different from other types of required gear changes or area prohibition such as lobster trap limits, areas closed to dragging, drag configuration changes, ring size changes, vent size or escape panel changes in hundreds of traps, sink rope replacing float rope for protected species, etc, each of which have cost hundreds or thousands of dollars. Each of these changes have incurred equal or higher costs to the fishermen either for gear changes or prohibited areas. The resource is not being made unavailable; limits are being placed to improve conservation of the resource for future harvest to continue.

Regarding a buy back program there is no funding available for this. The Department may be sympathetic to the loss; however there would be a far greater loss to many more fishermen if this method is allowed to continue only to increase and need to be shut down in the future. The Department has been highly criticized for not enacting greater restrictions and being more proactive rather than reactive manner; most notably to prevent the collapse of the urchin resource in southern Maine.

The objection that the increased rules would drive the industry to Canada does not hold up as periwinkles are not the only fishery to experience depressed value in the spring and has had this type of up and down in the past.

The suggested daily cap is not acceptable as harvesters tend to forget the quantity and target the maximum. The lobster trap limit is an example of this, which resulted in an unintended increase in effort. Also the recent preliminary landings data indicate much lower daily average trip harvest amounts than 600 or 500 lbs per trip, which indicated such levels would likely become targeted therefore increasing the impact on the resource.

Regarding the alternative suggestions, as the new landings program data become more complete it will be monitored to help determine if these suggestion or others necessary to conserve the resource.

### **Drag size**

It shall be unlawful to fish for periwinkles in Maine's territorial waters with any one combination of drags having an aggregate size in excess of 4' in width measuring from the extreme outside edge on one side to the extreme outside edge on the opposite side.

### **Opposed to the 4' drag size limit:**

Making this 4' won't impact the amount of periwinkles harvested, draggers will just make more tows. This would therefore be ineffective.

Use the current drag size of 6' instead as the largest size allowed.

A 4' drag would have to be made very heavy to make that width stay on bottom.

### **Response:**

Dragging periwinkles typically occurs on flat soft mud. The drag configuration includes a wide (22") 'ski' on the mouth or front to keep the drag from sinking in or digging into the mud bottom. This type of drag is lighter than a typical scallop drag. The opening of the periwinkle drag is quite narrow compared to the entire width of the currently used overall 6' width due to the ski and the bag configuration or design. Since this type of drag is not designed to cut in to the bottom, is typically fished on flat mud bottom, the proposed size reduction will not be moved forward at this time; the currently used 6' drag will. If the amount of harvest by drag shows a sharp increase and contribution to the level of landings then the method of harvest will be reconsidered.

Also see response above on method of harvest.

## **E. Night prohibition**

It shall be unlawful to fish for or take periwinkles within Maine's territorial waters by dragging during the period ½ hour after sunset, as defined in [12 M.R.S.A. §6001\(46\)](#), until ½ hour before sunrise, as defined in [12 M.R.S.A. §6001\(45\)](#).

### **Opposed**

Nobody drags at night due to the shoal waters periwinkles would be fished in therefore this is unnecessary. This is a waste of time.

#### **Response:**

*The Department recognizes that dragging in shoal water at night is highly unlikely due to the inherent danger. The rule will be retained though for consistency with other night dragging prohibitions in the event technology or markets should change this viewpoint. Consistency of this rule is helpful for enforcement purposes and clarification for the various dragger type fisheries.*

### **Other topics:**

#### **Landing statistics are bogus**

##### **Response:**

*The landing data handout provided at the Machias hearing calculated the meat price [per pound of meat] in the final column. The meat price per pound in 2008 was \$3.48 per pound. This data is how the National Marine Fisheries Service (NMFS) lists it. Harvesters thought this was the price per whole animal weight and believed it to be faulty. The conversion used to calculate the whole animal price per pound was provided on the handout at the Rockland hearing and has been changed on the Landings Program web site to avoid further confusion. The whole animal price per pound for 2008 was \$0.84.*

*The landings data from 1987 – 1993 was the highest peak recorded and was much higher than the landings in 2008. However the incomplete landings for the first incomplete 5 plus months of 2009 indicate the harvest to be equivalent to more than half of what was landed in 2008. Although the prior landings could be underreported for each year starting with 2006 through 2008 the next year approximately doubled from the previous year. If 2009 double from 2008 this would place the amount harvested in the same level harvested in the years between 1987 and 1993 except for the peak year of 1989. Note: The peak in 1989 is suspect and being reviewed with National Marine Fisheries Service (the data source). The elevated years around 1989 are considered to be correct.*

#### **Dragging Season**

A season for dragging was suggested either on its own or as an alternative to the drag size.

##### **Response:**

*This would be considered a substantive change to the proposed rulemaking and would require subsequent rulemaking to consider this alternative.*

#### **License eligibility**

There shouldn't be a non-resident license so persons from Campobello Island, Canada cannot fish periwinkles. Licenses for periwinkles should be capped as there are too many people in this fishery, creating too much effort. Periwinkle licenses should not be free.

##### **Response:**

*Prohibiting or establishing eligibility requirements for a license requires a legislative change, which is beyond the authority of this rulemaking.*

*To harvest periwinkles requires the purchase of the commercial fishing license, which is not a free license. The proposed requirement to check off the periwinkle box on the commercial fishing license application is similar to the check off boxes for halibut or herring. These are used as a preliminary indicator of effort.*

See separate, attached file for individual summarized hearing and written comments.