

Fisheries Information Notice 02-2015 Lobster fishing and conservation efforts



The Sea Fisheries Protection Authority has issued Fisheries Information Notice 02-2015 entitled “Lobster fishing and conservation efforts”.

LEGISLATION

Council Regulation (EC) 850/1998 enforced by S.I. 197/2013
Statutory Instrument 591 of 2014 (Lobster Conservation of Stocks) Regulation 2014

INTRODUCTION



The European Lobster

The European lobster, *Homarus gammarus*, is a bottom-dwelling marine crustacean that is widely distributed over the continental shelf of the Eastern North Atlantic from the Mediterranean Sea to the coast of Norway. The centre of its distribution is in the waters around Ireland and Britain. The lobster is a solitary nocturnal animal and is usually found on rocky areas of the sea bed where it hides in crevices amongst the rocks. It is one of Ireland’s most valuable fisheries with sales averaging over €7,000,000 per annum. It is estimated there are over 1200 lobster fishermen in Ireland, many of whom are totally dependent on lobsters for their livelihood.

Reproduction / Recruitment

Lobsters are encased in a hard external skeleton that provides protection and body support. The exoskeleton, or shell, is cast off periodically in a process called moulting or shedding. Moulting allows the lobster to grow and to mate. Mating occurs soon after moulting when the female's shell is soft. Each female can lay from 5,000 to 100,000 eggs depending on body size. The female carries the eggs within her shell for up to one year, and attached to the underside of her tail for another 9-11 months.

Newly-hatched lobsters go through a free-swimming or pelagic larval stage during the first four moults, or for about 15-25 days, depending on water temperature. Young lobsters resemble the adults after the first four moults, and begin to seek shelter on the bottom. Lobsters moult about ten times during their first year of life and the moulting

frequency decreases as they grow older. Lobsters moult approximately 20-25 times over the 5-8 years that it takes to reach sexual maturity. However, very few lobsters reach the age of sexual maturity, with scientists estimating that **only one in 10,000 hatched lobsters reaching the age of three weeks**, as most are preyed upon by larger lobsters or other marine predators.

Management

Though lobster is a highly exploited species for which landings in Ireland are significant, there is no quota or limit on the numbers of lobsters that can be caught. Scientific advice is that fishermen are catching too many lobsters the first year they moult to a legal size, **often many do not have the chance to extrude eggs before being caught**. To have a sustainable lobster fishery, good recruitment is needed, meaning that there are sufficient numbers of juvenile lobsters in the population to provide a healthy fishery.

In Ireland the management strategy for a healthy lobster fishery is directed towards increasing natural egg production and thus recruitment to the population by Technical Conservation Measures (TCM).

Minimum Size

The minimum landing size is currently 87 mm carapace length (EU regulation 850/1998), as adopted by S.I. 197 of 2013, as this allows lobsters to breed at least once before being caught. The legal minimum size refers to the length of the hard back-shell or carapace (See Diagram). Lobsters at the legal minimum size, 87 mm, weigh approximately 600 grams (1.25 lbs). Scientists have not discovered any method to determine the age of a lobster, but lobsters have been known to grow to a weight of over 9 kilos (20 lbs). It is impossible to tell the age of a lobster because all of the hard parts of the body are lost when the lobster moults. Most lobsters are caught within one year from the time that they reach the legal minimum size.

Maximum Size

The stock advice from the Shellfish Stocks and Fisheries Review 2012 by the Marine Institute and BIM notes that the egg production level for the lobster stock is estimated to be below generally accepted limit reference points. The stock advice recommended the introduction of the maximum landing size of 127mm to support existing conservation measures. This recommendation was aimed at protecting these lobsters with large reproductive potential and protecting “some of the investment that has been made through the national v-notch programme since 2002”.

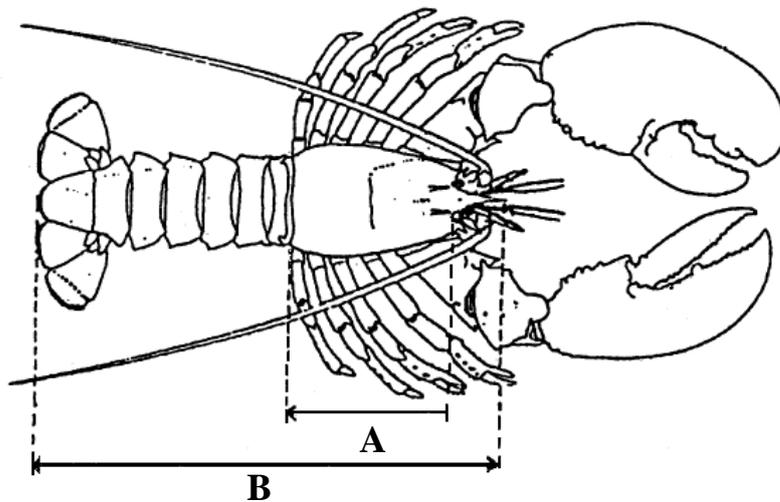
Introduction of a 127mm maximum size (lobsters above this size could not be landed) will provide increased protection over time to v-notched lobsters as they grow above this measure. Lobsters over 1.3kg in some cases achieve a lower price per kg but produce 6 times more eggs than an 87mm lobster. They also spawn more frequently and possibly produce higher quality eggs. From a biological perspective this option

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provides increased protection to the stock and, importantly, creates a refuge for lobsters that are repairing the v-notch as they approach this size. It therefore protects the investment that has recently been made in v-notching.

Lobster size is determined by measuring the length of the carapace (A) as described in Council Regulation (EC) No 850/98 for the conservation of fishery resources through technical measures for the protection of juveniles of marine organisms. See Diagram below



Lobster (*Homarus gammarus*)

- A. Carapace length
- B. Overall length

Figure 1

Measuring Gauge



V-notch Program

Also, it is illegal to land or sell lobsters that have V-notched or damaged tail fins (S.I. No. 591 of 2014 Lobster (Conservation of stocks) Regulations 2014). 'V-notching' is one of the most important technical conservation measures for the Irish lobster stock. A V-notch is cut in the lobster's tail with a special notching tool. The V-notch normally remains visible for about six years/or three moults during which time the lobster will spawn at least three times. When a lobster is marked in this way, it is illegal to land, possess or sell it and it must be returned live to the sea.

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Mutilated Lobster – this means a lobster where the tail has been damaged in such a manner which could hide a V-Notch.

Maximum size – any Lobster with a Carapace length greater than 127mm.

The following rules apply: Where the rules prohibit an action in relation to a Lobster, the Lobster should be carefully handled, have any bands removed, and be returned alive to the Sea without delay.

<u>Size or condition</u>	<u>Retaining on board</u>	<u>Landing</u>	<u>Storage</u>	<u>Transport/ Tranship</u>	<u>Offer for sale/ Sell or Buy /Process</u>
<u>Carapace length Less than 87mm</u>	<u>Prohibited</u>	<u>Prohibited</u>	<u>Prohibited</u>	<u>Prohibited</u>	<u>Prohibited</u>
<u>V Notch</u>	<u>Prohibited</u>	<u>Prohibited</u>	<u>Prohibited</u>	<u>Prohibited</u>	<u>Prohibited</u>
<u>Mutilated</u>	<u>Prohibited</u>	<u>Prohibited</u>	<u>Prohibited</u>	<u>Prohibited</u>	<u>Prohibited</u>
<u>Carapace length greater than 127mm</u>	<u>Prohibited with effect from 1st January 2017</u>	<u>Prohibited with effect from 1st January 2015</u>			

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