

STATUTORY MEETING

25th October 2006

**AGENDA ITEM
No. 7**

To receive the Deputy Clerk's report on Defra's consultation to increase the Minimum Landing Size for Lobster

Background to the consultation:

Following Defra's decision not to introduce national legislation restricting the landing of berried lobsters, Defra opened a consultation for an increase in the minimum landing size of lobster in August 2006. Defra have consulted on proposals to increase protection for lobster stocks in the past. There is general agreement amongst the fishing community, fishery scientists and fishery managers that nationally lobster stocks are becoming under increasing fishing pressure and additional controls are required to ensure that effort does not lead to unsustainable fishing pressure with a resultant population decline.

Ensuring lobster stocks are protected/enhanced within the Eastern Sea Fisheries Joint Committee's (ESFJC) district has been recognised as very important by the Committee. In addition to national legislation prohibiting the landing of lobsters under 87mm carapace length, local measures to protect the breeding stock of the species have been in place for many years. ESFJC has byelaw 6 in place which prohibits the removal of berried (egg bearing) lobsters from the fishery within the district. Tighter enforcement of this legislation has been central to much of the lobster research that has been conducted by the Committee over the past few years with the development of a test to detect those female lobsters that have had their eggs removed by illegal means.

The lobster fishery within the district:

The lobster fishery is an important fishery within the Joint Committee's district with 80,214kg worth at first sale value £774,303 being landed during 2005 by approximately 70 vessels fishing 17,450 pots. These vessels target either the inshore or offshore lobster stocks within the district. Those vessels targeting the offshore stocks are generally larger vessels with inboard engines crewed by a skipper and a deck hand. These vessels work considerably more pots per vessel than the inshore fleet, which predominantly comprises of vessels with a single outboard engine, operated single-handedly.

Biological sampling of lobsters at sea has been intensified over the past few years in order to provide a greater understanding of the fishery. Extensive tagging studies have been conducted which indicate a trend of larger lobsters migrating from the inshore ground to the offshore areas. Investigations into the stock indicate a lobster population that is under stress and therefore additional conservation measures are required for this species within the jurisdiction of the Joint Committee. The importance of the fishery has been highlighted this year. Poor catches of brown crabs have meant that the fishermen in the district using pots have had to rely upon the lobsters to provide their main source of income. If poor landings of brown crabs continue and measures are not put in place to ensure that the health of lobster stocks is maintained or safeguarded, then this lucrative fishery may become unsustainable as fishermen simply deploy greater amounts of gear to catch those lobster stocks available.

Possible migration of larger lobsters from the inshore fishing grounds:

The supporting graphs illustrate the inshore and offshore lobster population structure. They clearly demonstrate that the inshore area supports a population based on smaller size classes than the offshore population. The paucity of large individuals recorded in the biological sampling conducted by Fishery Officers at sea suggests that either fishing pressure is 100% effective at removing these larger lobsters or that migration of the larger lobsters offshore must be occurring. Tagging studies conducted by Fishery Officers add credence to the offshore migration theory. It is also clear however that the fishing ground can support larger lobsters up to at least a 98mm carapace length and therefore there is merit in protecting a larger proportion of the lobster stocks inshore upto 90mm carapace length. A period of reflection and assessment of the effect any increase in the minimum landing size might have

must be conducted prior to any further increase in carapace size (*Defra also ask in its consultation document whether or not there should be further increases of carapace length*). If biological sampling conducted at sea during this assessment period showed that lobsters greater than 98mm were still not recorded then it could be inferred that the ground does not support larger lobsters. Similarly, the offshore population structure does show some effect of fishing directly after the minimum landing size of 87mm but this is much less than would be expected. It is possible that there is a larger fishing effect here than is apparent but the stocks of lobster at and around this carapace length are migrating from the inshore grounds and augmenting the offshore population at this point.

Options within the Defra consultation document:

Four options were laid out within the consultation document:

Option 1: increase the min. landing size in one step to 90mm (carapace length)

Option 2: increase the min. landing size gradually to 90mm (carapace length)

Option 3: increase the min. landing size to 90mm (carapace length) and introduce a maximum size limit

Option 4: increase the min. landing size to 90mm (carapace length) and increase the size in future years

ESFJC consultation with the fishing industry:

A letter was sent to each of the Fishermen's associations within the district to ascertain their thoughts on the proposals put forward by Defra. Area Fishery Officers have gathered opinion on the proposals from fishermen as they have conducted landing inspections. Letters received from the fishermen's associations have in general been supportive of additional measures to protect lobster stocks however it has been noted that lobster fishermen within the district already have more stringent restrictions on them i.e. they can not catch berried female lobsters. It should be noted however, that ESFJC is not the only Sea Fishery Committee in the UK that has this type of byelaw in place and that it is just one of a suite of measures in place to ensure a sustainable fishery.

Defra and ESFJC views of the impact on lobster fishermen within the ESFJC district:

Defra do acknowledge that the introduction of a 3mm increase in the minimum landing size would have a significant initial short term effect on landings by fishermen in East Anglia. Defra estimates the initial loss (in weight) based on the current average size distribution of landings, to be 21% and £150,000 in value. The Committees Officers deem these figures to be serious underestimates. The Committee's Officers estimate that the catch for the inshore fleet will be reduced by 33% whereas the offshore fleet will see catch reductions of 19%. If the maximum landing size limit is also considered then these reductions increase to 34% and 23% of the landed weight for the inshore and offshore vessels respectively. Considering the fleet as a whole, it is estimated that the short-term loss in regard to value will be approximately £198,000 in the first year if the minimum landing size limit is introduced but £223,000 if both measures are introduced simultaneously.

The introduction of a maximum size limit:

The consultation document seeks guidance as to an appropriate maximum size limit (carapace length) or maximum weight that lobsters could attain if they were to be landed. A maximum weight limit should not be pursued, as fishermen are unable to weigh lobsters at sea as scales are unreliable on a moving vessel. If a maximum weight were to be used, catch inspections by Fishery Officers would take longer thus inconveniencing fishermen. The use of stop/go (legal/illegal) gauges is much quicker, easier and more reliable than a scale when determining whether or not a lobster is of legal size. If a maximum size were to be introduced, then a carapace length of 120mm has been determined by Officers as the most appropriate for the fishery within the district. Very few lobsters are currently landed in excess of 120mm. Two vessels regularly land significant quantities of large lobsters. These vessels currently operate around wrecks where large lobsters reside. These two vessels are larger and more capable than the majority of the fishing vessels within the district and therefore have the potential to deploy their gear elsewhere. It is estimated that a maximum landing size of 120mm would only result in about 2.5% of a catch being returned to the sea. Demand for very large lobsters is limited and is reflected in the price these lobsters achieve per kg. It is generally recognised by

fishermen that large, highly fecund females within the population have a very important role in maintaining population stability. Any maximum landing size must be introduced at the same time as any increase in the minimum landing size. If it is not, then fishermen will simply increase the amount of gear that they deploy in order to maintain their catches. This effectively results in the remaining lobster population being fished more intensively, subsequently increasing the number of larger lobsters being removed from the fishery prior to them being protected by legislation.

Should the proposed max. landing size legislation apply to female lobsters only?

Analysis of catch and landing data has been conducted to ascertain the impact of this legislation protecting only females on reductions in catches and also income. The impact of this measure is significantly less than the impact of protecting both large male and female lobsters. However, it is not suggested that this approach be considered further as there are concerns that this may skew the male:female ratio within the local population. This could have potential implications on the breeding stocks with subsequent reductions in spawning and recruitment as it is not known whether or not a large female requires a correspondingly large male to fertilise her. The Joint Committee already has legislation in place to protect female lobsters therefore any additional measures to further protect females alone may exacerbate any alterations to the population structure if this legislation is introduced.

Potential cost to an individual of introducing the measures recommended by Defra:

Economic analysis (Background paper 1) based on the average landings of vessels targeting the inshore and offshore lobster stocks clearly illustrates the financial impact that different measures will have on a fisherman's income. If, for instance, the minimum landing size were to be increased in one step to 90mm and a maximum size limit of 120mm were introduced at the same time, an inshore fisherman would see their annual income from lobster fishing drop from £19,134 to £12,598 whereas an offshore fisherman would see a decrease in earning from £32,974 to £25,270. If 88mm (Min. LS) and 120mm (Max. LS) were introduced in the first year, the income of an inshore fisherman would decrease by £2,270 whereas that of an offshore fisherman would decrease by £3,461. These reductions of income although large are more realistic in terms of what a fisherman can cope with during years following any changes in legislation until the benefits of increased lobster stocks are realised.

If a 1mm annual increase in the minimum landing size were to be introduced over three years, and a maximum landing size were also to be introduced, then fishermen would have to purchase four new measuring gauges. The cost to manufacture each gauge from brass is approximately £20. If Defra does introduce these new size limits, Defra could provide each licensed fishing vessel with a set of gauges. Defra could do this at minimal cost as it would be purchasing several thousand of the gauges and economies of scale would apply. If fishermen wanted new/replacement gauges, then Defra or the Marine Fisheries Agency could sell additional gauges via its web site at cost value. If the gauges were provided with their licence then there could be no excuse that the licence holder was unaware of any changes in the legislation. Defra would also be showing its commitment to making this new legislation work. If the increase in the minimum landing size were to be increased annually, then the period of time that the gauges would be valid from/until could be engraved onto the gauges to avoid confusion amongst the fishermen. A ubiquitous piece of legislation in place in other countries around the world is that it is an offence to have lobsters aboard a fishing vessel without an effective measuring device onboard. This legislation again encourages adherence to legislated size limits for marine product and could be introduced within the proposed legislation.

Potential cost to the Joint Committee of introducing the measures recommended by Defra :

Enforcement costs of the Joint Committee are not envisaged to increase significantly as minimum landing size enforcement is conducted on a regular basis by both shore and patrol vessel based Fishery Officers. Prosecution costs may increase slightly in the first few years of any legislation being introduced, although this could be minimised by widespread communication with the fishing industry informing them of the measures to be introduced. If any measures were to be introduced, then Fishery Officers will visit local businesses that purchase lobsters to inform them of changes in legislation pertinent to them. This activity is one that is currently conducted annually prior to the start of each

lobster season therefore no additional costs will be incurred. One implication of new minimum and/or maximum landing size legislation will be the requirement for the Joint Committee to purchase new enforcement measuring gauges and calibration bars; these costs are set out below.

Cost of new enforcement measuring gauges to Eastern Sea Fisheries Joint Committee

Item	Quantity required	Cost
Brass double sided gauges 88mm and 120mm	10	£210
Brass double sided gauges 89mm and 120mm	10	£210
Brass double sided gauges 90mm and 120mm	10	£210
Brass calibration bars 88mm	7	£175
Brass calibration bars 89mm	7	£185
Brass calibration bars 90mm	7	£195
Brass calibration bars 120mm	7	£220
Cost to ESFJC to purchase new enforcement gauges/calibration bars		£1,405

Recommendation:

Option 3: increase the MLS to 90mm (carapace length) and introduce a maximum size limit.

The recommendation to Defra from the Joint Committee should be to increase the minimum landing size for lobster to 90mm (carapace length) over three years with a 1mm increase each April. By introducing the legislation in this manner the financial impact of these proposals would be spread over three years making them more acceptable to the industry. A maximum landing size of 120mm (carapace length) should be introduced at the same time as the initial increase in the minimum landing size (carapace length) and applied to the entire population (not just females).

The Joint Committee is asked to consider the report and agree to the Clerk submitting a response to Defra based on recommendations outlined within this paper.

Duncan Vaughan
Deputy Clerk & Chief Fishery Officer

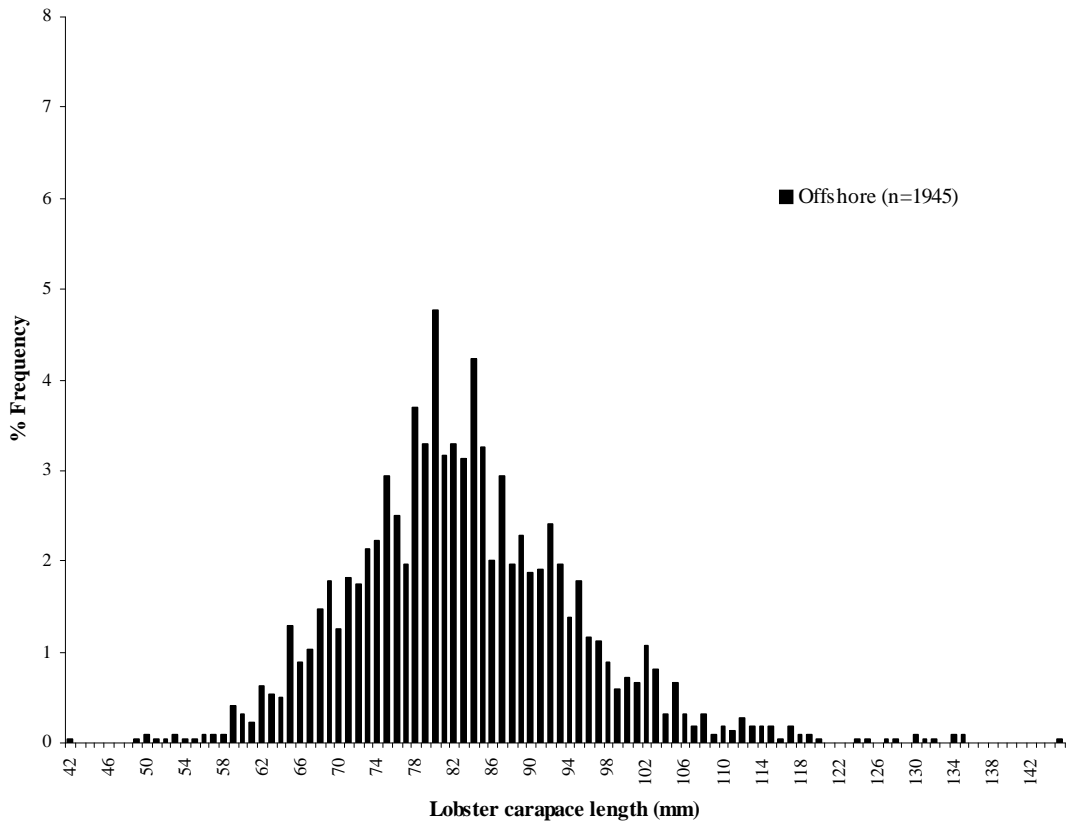
17th October 2006

LOCAL GOVERNMENT (ACCESS TO INFORMATION) ACT 1985

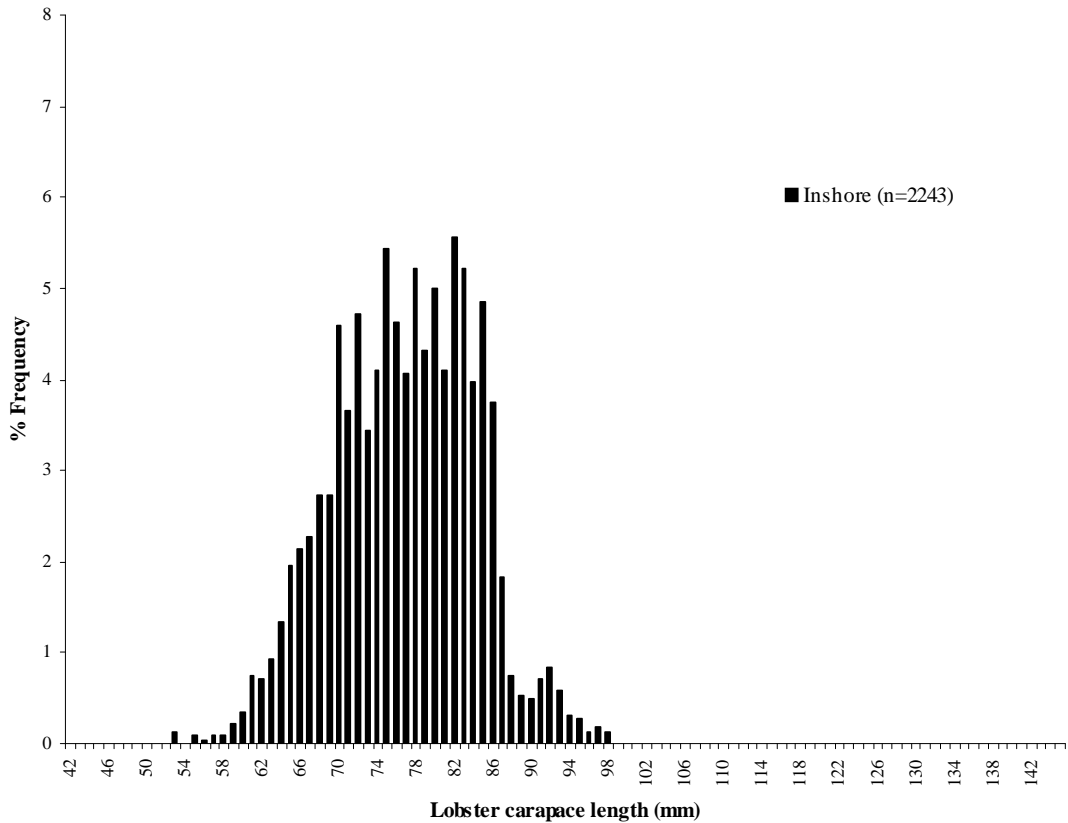
List of Background Papers

1. Predicted first year financial impact of proposed measures to protect lobsters stocks within the ESFJC district.
2. Graphs illustrating the population structure of the lobster stocks within the ESFJC District
3. Graphs illustrating the catch composition of lobsters from the inshore/offshore fishing grounds
4. Defra Consultation on proposals to increase the minimum landing size of lobster 24th August 2006.
5. Letter sent to each fisherman's association within the district regarding the Defra MLS consultation.
6. Responses from fishermen's associations regarding the ESFJC consultation on MLS changes.

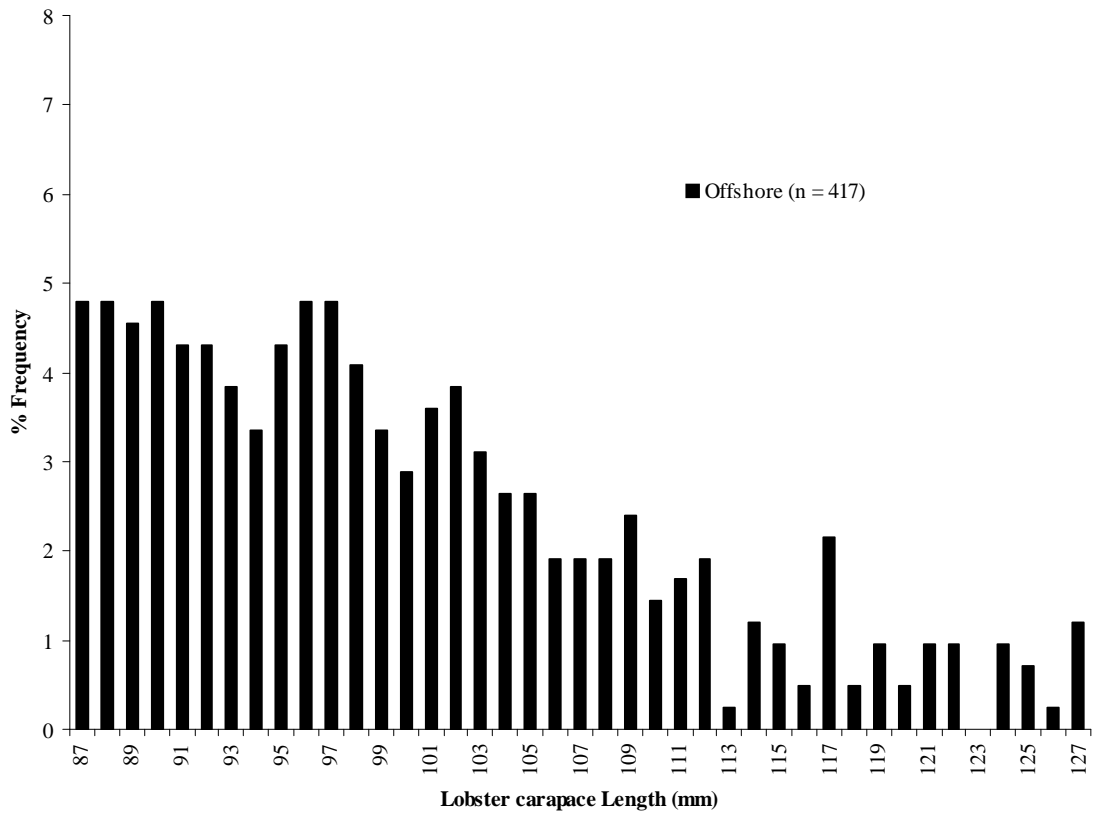
Survey at sea sampling showing the offshore population structure within the Eastern Sea Fisheries Joint Committee District during 2005



Survey at sea sampling showing the inshore population structure within the Eastern Sea Fisheries Joint Committee District during 2005



Biological sampling data showing the lobster catch compositions from the offshore populations within the Eastern Sea Fisheries Joint Committee District during 2005



Biological sampling data showing the lobster catch compositions from the inshore populations within the Eastern Sea Fisheries Joint Committee District during 2005

