



## **NWWRAC Proposal on Nephrops Management in Area VII for 2012**

**December 2011**

### **1. INTRODUCTION AND SUMMARY**

The North Western Waters RAC (henceforth NWWRAC) is committed to the sustainable exploitation of the Nephrops stocks in the long term. The NWWRAC proposes that the TAC for Area VII Nephrops be maintained at the 21,759 tonnes for 2012, and that management be maintained on an Area VII wide basis into the future, on the basis of compelling evidence outlined below, having regard to:

- a) the long-term overall stability of Nephrops stocks in Area VII;
- b) the need for flexibility for fleets targeting Nephrops to respond to fluctuating patterns of availability - as opposed to abundance - occasioned by the timing of Nephrops being hidden in burrows and thus unavailable, in the different areas and of fluctuating weather conditions between the different areas;
- c) the economic requirements of the market for Nephrops;
- d) the differential uptake of quota by member states and the fact that aggregate landings have been below TAC levels - while not interfering with relative stability.

The views from the NWWRAC fishing industry members on maintaining TAC levels is supported by Irish Marine Institute advice which is more current than that available to ICES in view of the timing of ICES advice drafting in May 2011. It is vital in this sense that the sub-area TAC ("of which" limit) which was set at 1,254 tonnes for the Porcupine Bank Functional Unit 16 in 2011, be removed. This sub-area TAC is counter-productive and simply leading to distortions in fishing patterns which are serving no useful benefit. Solid evidence from the summer 2011 Irish scientific survey of the Porcupine Bank indicates a very positive and substantial improvement in the state of the stock with catch rates up 50% on those obtained in an analogous survey in 2010.

The fishing industry members of the NWWRAC also believe that the current seasonal closure should be adjusted in light of evidence of stock recovery to cover the period from 1 May to 30 June 2012, with further review in 2012 in light of additional surveys to be incorporated into ICES advice (see additional detail under item 2.5).

### **2. PORCUPINE BANK**

#### **2.1. Seasonal Closure**

In response to an acknowledged problem with the Nephrops stock on the Porcupine Bank, the NWWRAC, with the involvement and support of the relevant fishing interests, proposed in November 2009<sup>1</sup> a seasonal closure for a defined area for Nephrops to cover 75% of the stock area for the period 1 May to 31 July.

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<sup>1</sup> Advice available under the publications sections of the NWWRAC website:

[http://www.nwwrac.org/admin/publication/upload/NWWRAC\\_ADVICE\\_NEPHROPS\\_MANAGEMENT\\_VII\\_VII\\_111109\\_EN.pdf](http://www.nwwrac.org/admin/publication/upload/NWWRAC_ADVICE_NEPHROPS_MANAGEMENT_VII_VII_111109_EN.pdf)

This proposal was adopted by the European Council in December 2009 and implemented in 2010 and again in 2011. ICES reports that this closure was fully respected by the fleets.

## 2.2. ICES Advice in 2011

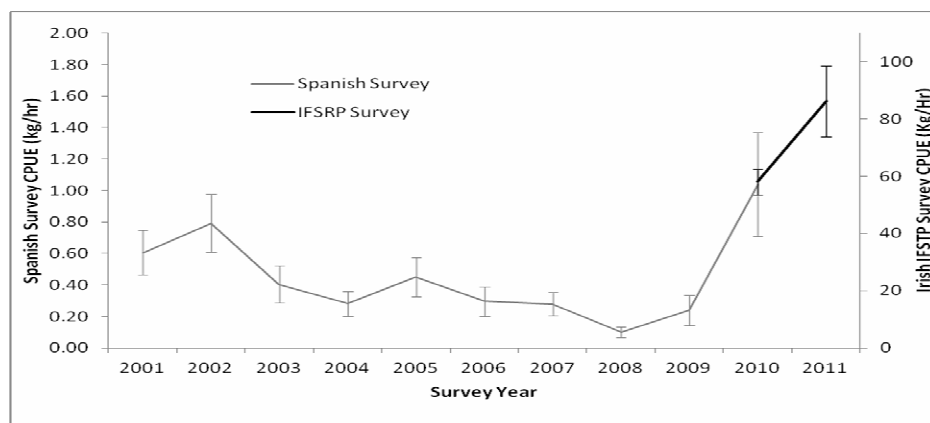
The 2011 ICES analysis of the state of the Nephrops stock on the Porcupine Bank indicates a significant improvement in recruitment and reflects the downward trend overall in fishing effort by the combined fleets which has been in evidence for many years, although there has been some increase in effort by the Irish fleet in the area. [ICES Advice 2011, Book 5 page 259,260]

It is notable that the advice from ICES has evolved from 2010, when it said to "*reduce catches to the lowest possible level*", to 2011 when ICES advises "*no increase in catch*". The advice also notes that "*the improved recruitment observed in the 2009 survey catches has resulted in a stock size increase for the first time in several years.*" This suggests that a significant improvement was underway ***before*** the imposition of a sub-area TAC limit in 2011 (see below).

## 2.3. Significant Additional Advice

NWWRAC notes that the Porcupine Bank saw an Irish Fisheries Science Research Partnership (IFSRP) survey being undertaken for a second year in the summer of 2011. The timing of this survey was such that it could not be reflected in the ICES advice cycle but it represents significant additional data which supports the NWWRAC approach which could see the removal of the need for any seasonal closure in the not-too distant future.

**This survey showed substantially increased catch rates in controlled conditions and confirms that there is a substantial recovery in the stock underway.**



**Figure 1.** Available time series of survey data for the Porcupine Bank (FU16). The Spanish survey (grey line) has been carried out since 2001. The Irish Fisheries Science Research Partnership Survey (black line) was commenced in 2010. The surveys are scaled on different axes and the error bars show 1 Standard Error.





## **2.6. Scientific and technical review of management measures for nephrops**

The NWWRAC recommends that ICES/STECF carry out a specific evaluation of both the management options and the time period of application and the effectiveness of the seasonal closure in FU16 since its implementation in 2010, and their impact on the recovery of the Nephrops stock. This assessment should take into account and incorporate the results drawn by the Irish and Spanish surveys.

Based on ICES recommendations, the closed area should be reviewed again in 2012, with a view to its progressive reduction in length and eventual elimination in subsequent years depending on the analysed state of Nephrops stocks in the Porcupine Bank.

## **3. AREA VII NEPHROPS FISHERY OVERALL**

### **3.1. Management Unit**

While the ICES assessment of Nephrops in Area VII is undertaken on a Functional Unit basis, the importance of maintaining the flexibility required for fleets to operate commercially necessitates the **management** unit continuing to be on an Area VII wide basis. This is absolutely critical.

No useful purpose would be served by any move to establishing separate TACs for the various functional units for the fishery. It would serve to strait-jacket commercial operations which need to react immediately to seasonal, tidal, market and weather conditions. It would further add to the enormous complexity of regulation and create difficulties in terms of TAC and quota setting and distribution of access to the resource as well as displacement of effort.

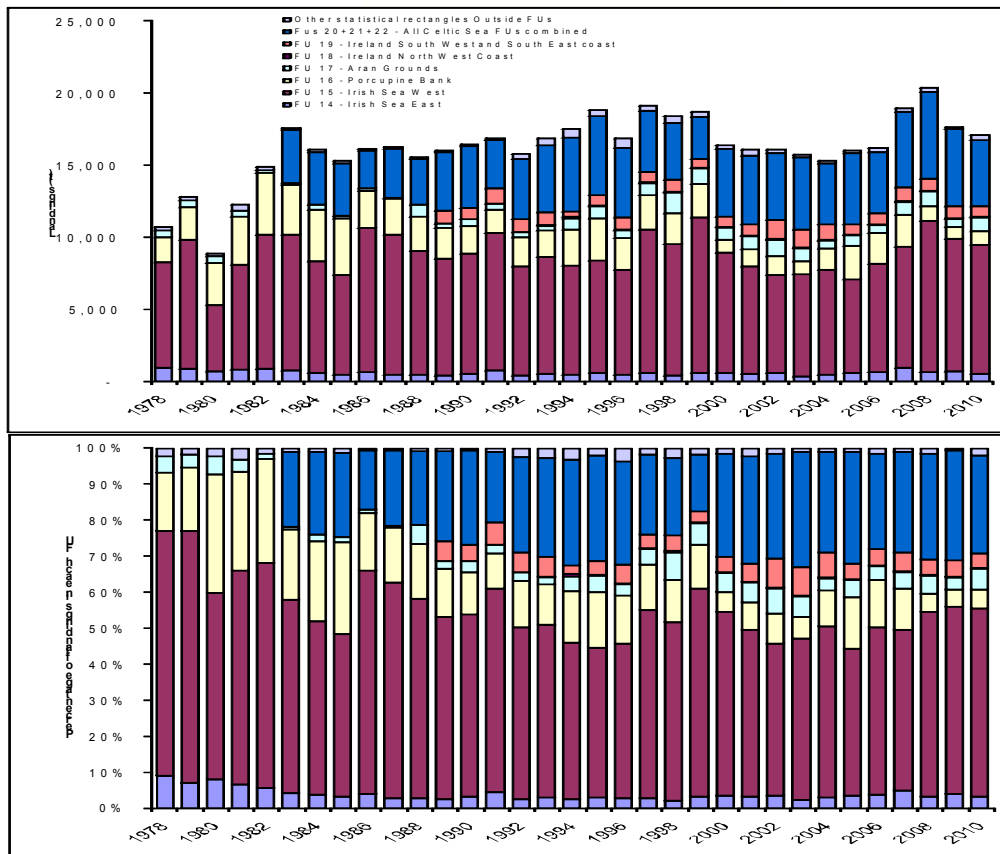
**The members of the fishing industry of the NWWRAC believe that there is no dichotomy between functional unit analysis and pan-Area VII management and that the current arrangements should be retained into the future.**

### **3.2. Sustainability of Nephrops Stocks in Area VII**

73% of the Nephrops landings from Area VII are from functional units which are at or below Fmsy. It is notable that ICES identifies the Aran Grounds (FU17) Irish Sea East (FU14), Irish Sea West (FU 15) as all being fished at below Fmsy target and Celtic Sea (FU 22) at Fmsy target, while the Fmsy status of functional units 19, 20 and 21 are defined as unknown or have no reference levels set.

There is no evidence of over-fishing in these latter areas, the advice simply reflects that reference points have not been set and information is insufficient in respect of setting MSY targets.

The overall volume of landings in Area VII is remarkably stable since the nineteen-eighties as evidenced in the ICES table 5.4.34.2 [ICES ADVICE 2011, p239] reproduced below as Figure 3, which also shows the origin of those landings by FU.



**Figure 3 (above)** ICES table 5.4.34.2 [ICES ADVICE 2011, p239] *Nephrops* in Subarea VII. Total landings (in tonnes, top) and percentage of the total landings (bottom) by Functional Unit (FU) and from rectangle outside FUs.

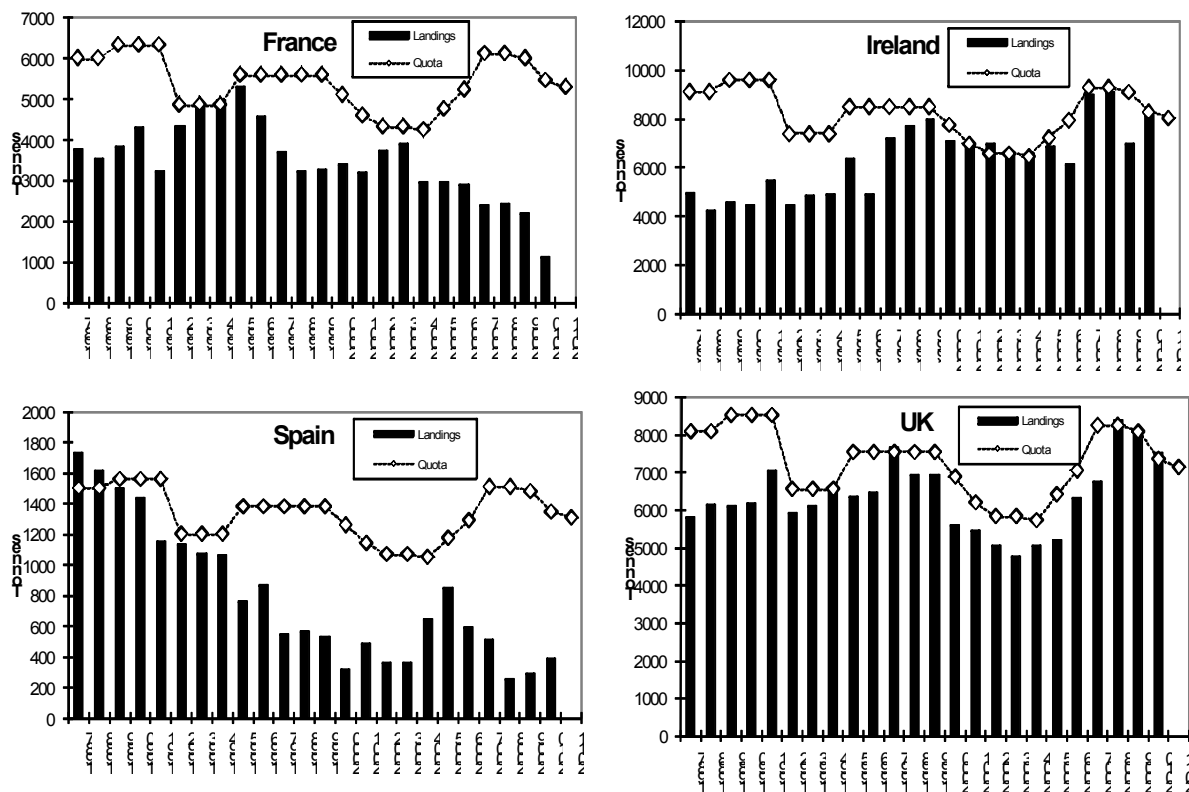
#### 4. DIFFERENTIAL EFFECTS OF TAC CHANGES

The fact that overall uptake of Area VII *Nephrops* has been considerably lower than TAC levels in recent years is a significant factor which needs to be taken into account in setting the 2012 TAC.

In addition to the above, it is notable that utilisation of national quotas varies significantly between member states and a reduction in the overall TAC would have no effect on landings by some countries but hit others which traditionally fish a high proportion of their allocations.

The effect on the Irish and Northern Irish fishing industries for example of a TAC reduction is extremely significant while the same would not be true of member states which do not reach their TAC levels. It should also be noted that the effect of an Area VII TAC reduction on the Spanish fishing fleet targeting *Nephrops* would also be very detrimental, as it only has access to the Porcupine Bank (with no access to the FU17 and FU19, and in practice to the FU20-22).

Differential take-up (having regard to limited opportunities for Spanish vessels as described above) for is illustrated clearly in Figure 4 below:



**Figure 4** Time series of landings and quotas by country for VII Nephrops *[Analysis of ICES advice]*

The need to improve management information and to set explicit conservation and management objectives needs to continue in 2012 in the interests of securing the sustainable future of this vital component of the European fishing industry. To this end, NWWRAC is advised that the commencement of a camera based survey is being considered by the Irish Marine Institute for the Porcupine Bank for 2012. The Irish Fisheries Science Research Partnership is committed to continuing its scientific survey specifically for the Porcupine Bank for a third year in 2012 which will augment established international surveys and will also provide valuable additional data for better management of the stock.

**THE NWWRAC CONSIDERS THE ADVICE IN THIS SUBMISSION TO BE A CONSTRUCTIVE, REASONED, BALANCED AND RESPONSIBLE APPROACH TO NEPHROPS MANAGEMENT IN AREA VII FOR 2012.**