



Scientists Uncover the Biology of Boarfish and Major Acoustic Survey to Take Place

The boarfish project continues to make good progress and all the sampling effort put in by the pelagic fleet is paying dividends as results are starting to emerge.

Preliminary analyses of the age data indicate that boarfish initially grow rapidly and reach 9-10cm total length at approximately two years of age, after which growth slows considerably. This plateau in growth is likely as a consequence of the fish reaching maturity and redirecting their energy resources towards reproduction, with both males and females maturing at 9.6cm total length. The apparently rapid growth and early maturity is characteristic of many small pelagic species which contrasts with the results of a previous study that suggested boarfish were a late-maturing species.

The age estimates are made by extracting the ear bones, known as otoliths, and counting the rings on them in much the same way the rings of a tree are counted. In the current project, daily growth bands have been found in between the annual bands. These appear as very faint bands and may sometimes be mistaken for annual bands, which might help explain the older estimates from the previous study. However, old fish are still likely to be present in the population as it is essentially a virgin stock and future analyses will help to determine the complete growth pattern and longevity of the species.

Preliminary data also suggest that boarfish are likely to be an asynchronous batch spawner with indeterminate fecundity (number of eggs produced each year). This spawning strategy is common in small body species which are incapable of holding large volumes of eggs in their body prior to spawning. Instead they develop eggs in batches and spawn them when conditions are suitable. In the case of boarfish it appears that they can keep doing

this for an extended period of time if the conditions suit them. For instance in an aquarium setting they have been observed to spawn regularly over a period of several months. Therefore in the wild their reproductive output will be largely dependent on the environmental conditions and will vary from year to year. This makes it difficult to determine fecundity and spawning duration and as such an egg survey, as is the case with

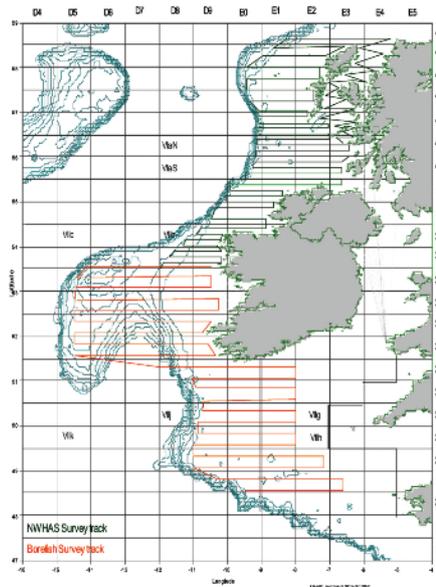


Figure 1. Proposed area coverage for the boarfish survey (orange) and the herring survey (green) July 2011. Boarfish survey: Total survey track 3,200nmi with 15nmi transect spacing.

mackerel, is unlikely to be the best method to estimate spawning stock biomass.

Boarfish have a strong and distinctive acoustic signal and form high density shoals which make them suitable for surveying using acoustic techniques. The large area of distribution of the 'northern stock', from Scotland to the Northern Spanish Shelf, does pose problems when trying to achieve a good coverage of the area. To that end, a 21-day pilot survey, the first of its kind, has been commissioned by the KFO, IFPO and Danish Pelagic Producer Organisation in collaboration with the Marine Institute and will be undertaken in early July. The primary aim of the survey will be to determine the distribution and abundance of boarfish within the area covered. A comprehensive and adaptive survey design has been established to cover not only core abundance areas but also peripheral areas to 'contain' the stock while establishing a firm foundation for a fishery independent survey time series.

The commercial survey will be timed to coincide both geographically and temporally with the *RV Celtic Explorer* which will be undertaking the MI annual summer herring survey in VIa-VIIb. Both surveys (see figure one) will work from north to south, so that as the herring survey nears completion, the boarfish survey will begin to provide a smooth transition. Data from both surveys will be interchangeable, allowing a greatly enhanced degree of area coverage for boarfish distribution from 48°N – 59°N.

Boarfish were recently added to the list of stocks for the ICES Working Group on Widely Distributed Stocks (WGWIDE) and will undergo assessment in August 2011. The age, growth, reproductive and length-frequency data will provide the basis for this assessment, whilst the acoustic survey will be the start of a time series which will become increasingly important in future assessments. Thanks to the co-operation of all involved we are in a strong position to produce well founded and reliable advice, which given Ireland's quota share will hopefully ensure the sustainable future of the boarfish fishery.

CRUSTACEAN SECTOR UPDATE

The first quarter of 2011 has been a period of relative calm on the shellfish markets. Having survived the logistical nightmare presented by some of the worst winter weather on record, fishermen and traders alike were relieved to see a comparatively good price for crab in excess of €3.00/Kg for the Christmas market, followed by a decline in demand and price rather than a plunge. Now the market is marking time until the pick-up for Easter which is quite late this year.

Vivier crabber owners and skippers from Ireland and the UK met in Edinburgh in early February at what is now becoming a fixture on the calendar. There was a review of events, prices and outcomes for 2010 and a lively discussion on expectations for 2011. Those in attendance felt it was essential to meet with our French colleagues as early as possible following the success of the 2010 meetings. This meeting is planned as an "add-on" to the Mid-Channel Conference being held in Cherbourg on April 5-6, with an agenda which reflects the concerns of all those in the crab industry. The current proposal for a joint transnational Interreg project promises to be of great interest (see article below right on the Atlantic Area Transnational Programme.)

The development of brown crab fishery management plans is gathering momentum in some of our neighbouring regions. The Northern Ireland initiative in 2010 employed the consultancy firm, Poseidon, to develop a brown crab management plan. This has now reached interim report stage and, following a series of stakeholder meetings (see schedule below) will progress to a final series of recommendations in May.

April 18 7pm Harbour Inn, Annalong, Co. Down

April 19 7pm Donaghadee Sailing Club, Co. Down

April 20 7.30pm, Glens Hotel, Cushendall, Co. Antrim.

Meanwhile DEFRA, under the very determined efforts of Juliette Hatchman, has prepared a discussion paper based on Rights Based Management which is currently being circulated.

The BIM Seafood Standard continues to evolve and another crabber has undergone audit. Assuming a positive outcome from the audit report, MFV *Peadar Elaine* will shortly join its sister vessel MFV *Amy Jane* by being awarded the Certificate of Seafood Stewardship. This type of certification will soon be a basic requirement for entry to many markets.

The Irish Electronic Recording and Reporting System - Update

The Implementation of the Electronic Recording and Reporting System (ERS) in Ireland has continued in 2011, notwithstanding the difficulties in other Member States. The system went live with Norway in February. This required all Irish Vessels over 24 metres operating in Norwegian waters to have a Live ERS system from February 1. In addition, all Norwegian vessels over 24 metres operating in EU waters have also been required to use ERS. In light of the delay by other Member States making their systems operational in EU waters, the Irish statutory instrument introduced for pelagic vessels operating in Norwegian waters is due to be rescinded. The second phase of ERS, involves some 100 vessels between 15 and 24 metres in length being fitted with ERS terminals in advance of the July 1, 2011 deadline. The third phase of the ERS will see a further 40 vessels over 12 metres becoming ERS and VMS compliant by the January 1, 2012. The type of equipment that will be used by these vessels is currently being evaluated and when chosen will be fitted to vessel over the coming months.

In the meantime, training on the ERS software is currently underway at eight locations around the coast and is being well attended. It now seems likely that it will be the end of this year or perhaps the start of next year before the ERS system will be fully operational in EU waters by all relevant Member States.

ICES Advice To Change in 2012

by Marine Institute

ICES had changed its advisory policy in 2010 from a purely precautionary approach (introduced in the mid 1990s), to advising in relation to maximum sustainable yield (MSY). The details of this were outlined in the July issue (no. 38) last year. Following a full cycle of assessments and advice in 2010, in January this year a review meeting (WKFRAME II) was held to discuss how the new advice was handled. That meeting was attended by industry representatives as well as NGOs and scientists. The issues of contention which arose were generally related to confusion in the interpretation of the ICES advice. E.g. where there was advice in relation to the precautionary approach (PA), and MSY and management plans which appeared inconsistent. As a means to address this issue, ICES has adopted a policy for 2011 where it will give advice on the basis of a management plan, where the plan has been endorsed by ICES, and where there is no objection from any client on the management plan being used as the basis for the advice. If there is no management plan, then advice will be based on the MSY framework. However, where the stock is at a low biomass, e.g. productivity impaired such that it cannot deliver MSY, PA considerations will be of primary importance, and where the stock is overfished with respect to Fmsy, that advice will be given on the basis of a transition; reducing fishing mortality (F) to Fmsy by 2015.

Well so far so good, but presumably the devil is in the detail? And the answer to that is yes. There is no specific condition under which advice will be driven by the PA, rather issues will be dealt with on a case-by-case basis. That means inconsistencies may arise; however that would not be anything new. The transition scheme used as the basis for advice is an interpretation by ICES of a request for a "smooth transition" by ICES clients (EU specifically). ICES has interpreted a "smooth transition" as equal steps in F, which are limited by Fpa in any year. This means that where F remains above Fpa (despite management actions) that the advice will remain at Fpa until 2013, and will jump to Fmsy in 2014 (as the basis for the F in 2015). It also creates a technical problem where the current F is very high and Fpa is not defined, meaning that the F is technically not capped in the first few steps of the transition. WKFRAME II has suggested using Fpa analogues from similar stocks, but it remains to be seen how this would be implemented. It has also been agreed that the transition should be calculated as five steps from 2010.

So the big change for advice for 2012 should be a reversion to a singular advice, given on the most appropriate basis according to ICES. That will be based on a management plan, or MSY transition, or PA considerations.

Atlantic Area Transnational Programme Could Hold the Key to Sustainable Economic Future of European Brown Crab Fisheries

An exciting transnational proposal is being submitted by the combined brown crab fishing, marketing and support agencies of the Atlantic Area countries whose aim is to "ensure and sustain the economic viability of the European brown crab industry through transnational co-operation." The project draws together a very impressive list of partners representing all facets of the industry throughout the regions. Its objectives are to:

- Form a transnational industry network to identify and address sectoral challenges to improve brown crab competitiveness through innovation;
- Develop and adopt a European brown crab standard and deliver to the market place a quality product which has been responsibly caught from sustainable stocks;
- Increase the economic viability of the entire sector through analysis of route-to-market for brown crab, improving competitive advantage at key cost points;
- Introduce focused European marketing of brown crab to increase market share.

Brown crab is a very important species for fisheries on the north-western fringes of Europe with fishing effort being concentrated in Ireland, the United Kingdom (Northern Ireland, Scotland, English Channel) and France (Normandy and Brittany coasts). In Ireland, landings of brown crab are worth in the region of €25m and support extensive processing, specialised transport and ancillary industries e.g. bait and gear. The fishery and associated industries are all located in isolated rural/maritime areas and are of huge importance to the socio-economic fabric of those areas.

By its nature, crab fishing – which uses static pots which only catch the target species – is looked on as sustainable and environmentally friendly. Unlike conventional whitefish and pelagic fisheries, there are no problems with "discards" - crab not suitable for market is returned alive to sea.

However, in recent years there has been an ever-increasing downward spiral of economic viability of the European brown crab industry. This has been brought about by a combination of several factors: an over-supply of product, the global recession which has diminished consumer spending power, the ready availability of cheap and convenient seafood products from non-EU countries, virtually non-existent generic promotion of brown crab and a less than efficient route to market.

In an effort to address this problem, the Crustacean Sector in KFO and its UK counterparts, aided by their relevant national development agencies, came together to form an *ad hoc* voluntary group to match supply with demand and thereby improve prices. This strategy has been relatively successful over 2010 but was constrained by being limited to just two jurisdictions. The operators involved recognised that their actions alone were not sufficient to address the many issues besetting the industry and identified areas where a transnational approach could have major positive impact: management, sustainability, improved industry networking, economic viability, quality and markets all need to be addressed in a coherent manner. The most effective way to achieve the necessary coherence would be within the framework of a transnational project such as that being proposed under the Interreg IVB Atlantic Area Programme.

Commissioner Damanaki hosted a political meeting on March 1 last, where she launched her proposals on banning discards. In her non-paper she advocates a mandatory discard ban as part of the CFP reform in accordance with the following timetable:

- (i) Year one of new CFP: The main pelagic species (mackerel, herring, blue whiting, etc.) would be covered by a discard ban;
- (ii) Year two of new CFP: the main target species in demersal mixed fisheries (cod, hake, nephrops, sole etc.) as well as by-catch species in these fisheries (haddock, whiting, hake, plaice, etc.) would come under the discard ban;
- (iii) Year two of new CFP: Mediterranean fisheries would apply the discard ban.

Other species could be included in the discard ban in successive steps in the years to follow. Under the discard ban, all catches of the target species and all by-catches of non target species would have to be landed and counted against quotas.

Single-stock fisheries (for example pelagics like herring, mackerel) could remain to be managed by quotas combined with an obligation to land all catches.

The non-paper proposes two options for managing non pelagic fisheries;

1. AN EFFORT MANAGEMENT SYSTEM

- Mixed fisheries (whitefish, flatfish, nephrops, etc.) could be managed by effort only;
- For mixed fisheries, current relative stability keys in quotas would be expressed as effort shares without affecting relative stability. This calculation would be based on current relative stability, not on deployed effort in recent years;
- All catches to be landed and time at sea to be counted against effort.

According to the non-paper a discard ban under an effort system will remove any incentive for the fishing industry to under-declare or falsely declare catches or to falsely declare catch areas, as landings are no longer counted against quotas. This discard ban could have the following flanking measures; controlling kw days at sea by VMS; an obligation for vessels to move fishing grounds; real time closures and area closures for spawning stocks, vulnerable habitats or protecting juveniles.

2. A CATCH QUOTA SYSTEM

In the catch quota system the proposal envisages that:

- All catches are landed and counted against quotas;
- Council would have to designate a sufficient portion of all national quotas as national by-catch quotas; or allow for quota transfers within an individual transferable quota system;
- MS would have to allocate quotas to vessels according to likely catch composition of hauls, fishing trips or metiers.

The Commission is of the view that a catch quota system will only work with efficient enforcement systems which include: CCTV on all vessels above 12 meters, or observer schemes, real-time closures and area closures for spawning stocks, vulnerable habitats or protecting juveniles, as well as discard avoidance measures, extending the use of electronic logbooks and VMS, improving landing controls with more personnel, deterrent sanctions against discarding, improving compliance by way of peer review.

The non-paper also covers as highlighted below some marketing issues and industry involvement in the ban.

MARKETING

Both systems will need to be accompanied by marketing measures:

- Minimum landing size to be replaced by minimum marketable sizes;
- Fishermen market the whole catch and keep part of proceeds (incentivising the sector to develop selective gear avoiding catches of undersized fish);
- As much fish as possible to be marketed for human consumption; marketing for fishmeal only allowed where human consumption market is not available.

INDUSTRY AND PRODUCER ORGANISATIONS

In a regionalised policy, industry and Producer Organisations become active players of a locally based effort or quota management:

- Industry in self regulation should choose best selective gears, discard-avoiding measures and the most adequate fishing strategy for specific fisheries based on objectives established at EU level taking into account the minimum market sizes;
- Producer Organisations need to plan fishing activities and take decisions such as closing a fishery once effort or quotas are used up.

The Commissioner has planned a stakeholders conference on her proposals on May 3 next.

Simplifying the Complex Mackerel TAC Amongst Coastal and Member States

In 1977 the establishment of the 200-mile EEZ by EU maritime states saw an end to the international fisheries by Russia and the eastern block countries in EU waters. Since then, the main mackerel fishing nations have been UK (Scotland), Norway, and Ireland. However Ireland's first mackerel quota from the EEC came in 1983, after prolonged negotiations on the CFP and is based on our track record established by the RSW fleet prior to that date. Thus before any international agreements on the sharing of mackerel, Ireland had negotiated a share of approximately 23 per cent of the EU TAC for the Western area. With the accession of other countries to the EU over the years, this share has been reduced to 21.3 per cent of the EU TAC for the Western area. Between 1983 and 2001 there was no international agreement limiting a singular TAC for mackerel. An international agreement on a TAC for mackerel was first established in 2001.

Historically, this TAC has been composed of three separate arrangements. Firstly, the Coastal States (Norway EU and Faroes), have split a reference TAC between them in the ratios of 30.35 per cent Norway; 66.20 per cent EU, and 3.45 per cent Faroes. The coastal states TAC represented 84.51 per cent of the overall TAC. Secondly, 9.57 per cent of the overall TAC was divided up at NEAFC, along the lines of EU 22.77 per cent, Norway 9.34 per cent, Faroes 17.89 per cent, Russia 47 per cent and Iceland three per cent. And finally the remaining 5.92 per cent of the overall TAC was claimed by the EC for fishing in the southern area.

In 2010 the three-party Coastal States arrangement was not agreed, with the Faroe Islands deciding to take a unilateral route and set their own TAC of 85,000t, they have since set a TAC of 150,000t in 2011. Iceland which has claimed Coastal States status has engaged in an Olympic style fishery outside of the Coastal States framework and set unilateral TACs of 130,000t and 154,000t in the years 2010 and 2011. As a result of this impasse, the EU and Norway concluded a long-term management agreement on mackerel in January 2010 which enshrines a sharing ratio between the two coastal states of 68.65 per cent EU and 31.35 per cent Norway, of the combined TAC available to both parties. Part of this agreement was the integration of the Southern area fishery into the overall TAC.

Up until the recent negotiations the EU received just less than 64 per cent of the overall agreed mackerel TAC. That 64 per cent was divided into a Western, North Sea, and Southern TAC according to the following split: 80.57 per cent for the Western area; 6.02 per cent North Sea; 9.22 per cent Southern area, and 4.19 per cent from transfers. Each of the areas has an allocation key which gives a fixed percentage to each member state. For example, Ireland has a 21.23 per cent share of the Western area. There are some exceptions to this. For example, Spain has a fixed allocation of 20t in the Western area instead of a fixed percentage, and Sweden has a fixed amount of 242t for the North Sea in addition to its percentage. This 242t comes from Norway under recognition of neighbour status and sharing agreements in the Skaggeak. However it is the transfers which are most complicated. The EU transfers a fixed percentage of the Western allocation to

Making the Most of Fisheries Information

The conference titled "Fisheries Dependent Information – Making the Most of Fisheries Information," was held at the National University of Ireland, Galway (NUIG) from August 23-26, 2010. Over 230 delegates attended, representing more than 30 developed and developing countries, as well as media. Delegates included commercial fishermen, industry representatives, fisheries managers and scientists from a number of disciplines.

A number of overarching issues and views emerged during the week, provoking and questioning the collection system, the conventional approaches to the analysis and interpretation of fishery dependent information and how fishermen, scientists and policy makers collectively interact during the process of analysis, advice and policy implementation based on that advice.

In his keynote speech, Steve Murawski, the chief fisheries advisor to the Obama administration, showed how the use of fishery dependent data is becoming increasingly important for shaping fisheries advice and policy and he identified a number of key areas where information collected by fishermen is vitally important. For example, how economic data is used to assess the impact of management policy on fishermen; how catch information is used for stock assessments; the location of fish and fishing activities can highlight important areas for fishing - all of which are used in management and policy advice.

The breadth of fisheries covered by the conference was huge, from high seas industrialised fisheries, with advanced technology data acquisition systems and high levels of observer coverage, to small-scale, artisanal fisheries, with very little infrastructure. These fisheries are faced with considerable challenges in terms of structured data collection systems, but in many respects are more

advanced in terms of greater inclusion of the fishing community in decision making about what, when and where to fish, and strong cultural structures are a key component of resource exploitation. No doubt, the so-called 'developed' fisheries have something to gain from fisheries conducted in 'developing countries'.

Many of the presentations looked at the technological developments in data acquisition systems and the scope is startling. Impressive innovation and development of analytical tools has enabled and enhanced data collection and interpretation, in many cases in real time and at fine scale spatial resolution. As technology continues to develop, data integration and management present ongoing challenges in both interpretation and utility. There is a need to properly link information requirements with appropriate technologies and to understand what both the advantages and limitations are, and to ensure that such information is gathered in a structured way. Involving fishermen themselves in data collection was also a big theme.

At the end, several open questions on the following themes were raised:

- institutional frameworks abilities to adapt and evolve
 - building trust between fishers and scientists
 - moving towards co-management of stocks
- . These need to be the cornerstone of any progress in drawing science, policy and the industry together with a common view to ensuring both economic and biological sustainability for the fishermen and the stocks on which their business depend. The challenge now is how to put the work into practise.

Editorial

by Sean O'Donoghue

CHIEF EXECUTIVE, KFO



The agreed Programme for Government provides for Marine responsibilities to be merged under one Department, for better co-ordination in policy delivery. This is a welcome step that the KFO has lobbied for over the years, as is the appointment of Minister Coveney to take direct responsibility for this area, particularly the fisheries element. Early indications based on an initial industry meeting are that Minister Coveney will be a very dynamic Minister that realises the developmental potential of the seafood sector in terms of growth and sustainable employment and is prepared to tackle the problems both at national and international level that are hampering this growth. The Programme for Government rightly identifies a positive outcome for Ireland of the Review of the CFP due to be finalised by end of 2012 as a key area for the future of the industry. The commitment to administrative sanctions for minor fishery offences is long overdue and I hope it is implemented without delay. An interesting idea in the programme is the provision for a "Sea Fisheries Sustainability Impact Assessment based on consultation with all major stakeholders, to be brought before the Dáil annually before EU fisheries negotiations commence." This could prove to be a useful mechanism provided it is approached in the right fashion and that the assessment is not just confined to stock sustainability but also includes socio-economic aspects.

The reckless and irresponsible behaviour of Iceland and Faros in setting enormous unjustified autonomous mackerel quotas has continued unabated for 2011. Iceland has set an

autonomous

quota of 154,000t and Faros 150,000t. Combined this represents a 47 per cent share of recommended ICES TAC of 646,000t. Under the agreed management arrangements between EU, Norway and Faros the combined percentage share up to 2009 was less than five per cent. This has to be stopped otherwise it is only a matter of time before a very healthy well managed stock will be put in jeopardy. The failure of the Coastal States negotiations in Oslo on March 9-11 last has led to a recent consultation document on an impact assessment on the possible utilisation by the EU of trade-related measures against non-cooperating States for the purpose of conservation of fish resources. Such a consultation document is welcome however at this stage it is beyond doubt that the only real effective measure is an immediate ban on all fish and fishery products imported into the EU from Iceland and Faros. A satisfactory resolution of this issue is of critical importance to pelagic fishing industry. Minister Coveney has been informed and is fully aware of the urgent need to address this issue with EU counterparts and Commissioner Damanaki.

Discards are high on the Commissioner's agenda at present with the issuing of a proposal for a blanket ban on them (see page three). Unfortunately this proposal does not provide a workable means of achieving it and will only make a bad situation even



worse. Discards is a multi-faceted complex issue that requires a suite of solutions. Using the sound bite of banning discards may be populist but does not address the issue. Commissioner Damanaki's proposals concentrating on landing all discards, fails to address the real issue of avoiding catching discards in the first place. Her proposals do nothing to address stock sustainability and would only lead to a market collapse in the EU whitefish sector. The emphasis has to be on avoiding and reducing discards rather than a blanket discards ban which is counter productive. Addressing the discards issue on a fishery by fishery basis by allowing the unwanted fish to escape unharmed through changes in gear design and fishing practices is the way forward. The Irish fishing industry has been at the forefront in proposing these changes in recent years.

On March 23, on the first day of the hearing in a fishery prosecution case in Galway Circuit Court, the State withdrew (or entered a nulli prosecuti, in legal terminology) and the judge awarded the defense its costs. The case was based on an inaccurate estimate of the weight of a by-catch of mackerel in a hailed in message, as compared to final accurate weighed figure declared in the logbook by the skipper. It beggars belief that the State took this case in the first place and that it decided that the alleged offence merited a criminal prosecution in the Circuit Court. It was very obvious based on the evidence that the skipper had fully complied with all the rules and had no case to answer. The State (bodies responsible) should be held accountable for its actions in this case and for the total waste of tax payer's money which I estimate to be in region of €400,000.

Simplifying the Complex Mackerel TAC Amongst Coastal and Member States

Continued from page 3.

Norway (10.8 per cent of Norwegian quota for the Norwegian Sea) under an agreement which has Norway transfer the exact same amount to the EU for fishing in Norwegian waters of IIa and IVa. The EU also transfers an amount of fish to the Faroes, most of which is also transferred back to the EU. The purpose of these transfers is to allow for a fishing opportunity in area IIa and IVa for Denmark. Denmark's final fishing opportunity is therefore the sum of its share of the EU North Sea allocation plus the transfers. The final Danish share of mackerel is further complicated by a special preference for Denmark on its mackerel quota in the North Sea, this is analogous to the Hague preferences which Ireland holds for many species. The exact text of this agreement is unclear but is widely interpreted as guaranteeing Denmark a minimum of 25,000t quota, and where the amount of fish available to Denmark (between transfers and North sea allocation) is less than this, the North sea allocation key is adjusted accordingly.

Currently, as a result of the EU/Norway long term agreement and the decision to integrate the Southern Component (area) the manner in which these transfers are dealt with is being reviewed. Any new approach will respect the Relative Stability of EU Member States fishing mackerel.

Important Dates April - June 2011

DATE	MEETING	VENUE
April 5-7	MEFEPO Workshop & Advisory Committee Meeting	Amsterdam
April 8	Celtic Sea Technical Conservation Measures	Dublin
April 12	Pelagic RAC Executive Committee & Blue Whiting Focus Group	Bilbao, Spain
April 13-14	NWWWRAC Working Groups, Executive Committee & Marine Spatial Planning Horizontal Working Group	Bilbao, Spain
April 14	LDRAC Working Group II	London
April 14	MSC Meeting	London
April 15	EAPO Hake Meeting	Bilbao, Spain
April 20	Whitefish Quota Management	Dublin
May 3	Stakeholders Conference on Discards	Brussels
May 9	Industry Science Partnership	Dublin
May 16-17	Fisheries Council & Extended Bureau of EAPO	Brussels
May 17	ACFA Working Group III Markets Meeting	Brussels
May 27	KFO AGM	Killybegs
June 14-16	ICES Advice Drafting Group Celtic Sea	Copenhagen
June 20	Extended Bureau of EAPO	Brussels
June 21	Bureau of ACFA	Brussels
June 22	Plenary of ACFA	Brussels
June 23	Industry of Science Partnership (Workshop on Seals)	Galway
June 27-28	Fisheries Council	Luxemburg
June 29	ICES Issue Advice on the Demersal & Herring Stocks	Copenhagen

Head Office: Killybegs Fishermen's Organisation Ltd.,
 Bruach na Mara, St. Catherine's Road, Killybegs, Co. Donegal.
 Tel: (074) 9731 089, (074) 9731 305, Fax: (074) 9731 577,
 Email: kfo@kfo.ie Website: www.kfo.ie
 Dublin Office Tel: (01) 825 8846, Fax: (01) 825 8847