



Bord Iascaigh Mhara  
Irish Sea Fisheries Board

# Aqua Culture

Newsletter from B.I.M.

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## A New Year and a New NDP Beckons

The year 2006 marks the final year of the various NDP programmes administered by BIM for the sustainable development of the aquaculture, fisheries, processing and marketing sectors. Under the NDP for the seafood industry 2000-2006 the Government allocated €150 million in National and EU support for industry development and it is expected, by the time all payments are made to approved projects that this allocation will be more than fully taken up. In the case of aquaculture the initial allocation of National and EU funding which amounted to €31.7 million was supplemented by the Government to €36.8 million to meet the larger than expected project development activity especially in the areas of farmed shellfish.

Over the past six months the Government appointed Strategy Review Group has afforded everybody with an interest in the seafood industry (including aquaculture) the opportunity to take stock of the challenges confronting it with a view to preparing a strategy for a sustainable and viable industry up to 2013.

It is hoped that the new strategy if approved by Government can form the basis for the seafood compo-



ment of the new National Development Plan for 2007-2013.

Finally, I want to wish everybody with an interest in the aquaculture and wider seafood industry a very happy, peaceful and successful New Year.

**Pat Keogh**

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### Status of Irish Aquaculture 2005

The third annual report on the Status of Irish Aquaculture is now available and a copy is enclosed with this Newsletter. The overall aim of the report is to provide useful reference material for the industry, trade customers, investors, researchers and interested parties. The objectives of this report are:

- To provide a useful, objective and comprehensive source of information on the status of Irish Aquaculture 2005.
- To show trends in the production, employment, export and market statistics for the Irish industry in 2005.
- To summarise the current licensing activity.
- To present the result of the wide range of monitoring programmes for farmed shellfish and finfish.
- To highlight the various research and development initiatives.
- To report on issues/events/initiatives that occurred during the year 2005.

## IRISH BOTTOM CULTURE GIGAS OYSTERS COMPARABLE TO FRANCE.

### Introduction

A group of oyster fishermen involved in the extensive bottom culture of gigas oysters in south Galway undertook a fact-finding trip, last April, to Brittany. The main focus of the trip was to see at first hand the type of boats and equipment currently employed in the bottom culture of gigas and get an overview of bed management techniques employed by the industry there. The extensive bottom culture of gigas in Brittany has been ongoing for nearly 25 years and is widely practised with the main production areas being confined to the Bay of Quiberon (deep water culture) in the South and the Bay of Carentec (intertidal and shallow water culture) in the North.

### Bay of Quiberon

The Group was met at their hotel by the president of the South Brittany oyster producers Mr. Harv Jenot and were given an overview of oyster operations in the Bay of Quiberon.

They are approximately 2,500ha licensed in the bay, 1,400ha of which are given over to deep-water culture. In total, there are about 90 farmers involved with some of them belonging to Co-Ops. Most farmers have both inter-tidal and deep-water sites and operate their own boat and have access to land based facilities for grading and storing oysters. Seed is taken in from Arachon and depending on the size they are either placed in bags or put straight out on the bottom. Bailiffs strictly police the area and are paid to do so by the industry itself with severe penalties in place for poaching offences.

### Ostreicole Cadoret

In the afternoon the group was taken to the land

together with 50 tonnes of edulis. The group was first shown the variety of dredges employed by the company in maintaining beds and removing predators, mainly drills and starfish. The main type used was a pin harrow, with the pins 5 inches apart and 6 inches long and the harrow is usually pulled at a speed of 2 knots. This light harrow is generally used on small oysters that have been newly laid. A heavier version is used on bigger stock to break up clumps and lift and turn oysters on the bottom. This heavier harrow was 3m wide with 4 sections and 2 rows of 9 pins per section. Once the dredging season is over the company uses a heavy chain to level and clean beds.

### Land Based Facilities

The facilities of Ostericole Cadoret contained the usual washing, sorting and grading machinery. Everything is taken off the beds during the course of a season, graded and sold or re-laid. Empty shells are stored and used as cultch for flat oyster settlement at a later date.

What was most impressive among the array of oyster gear was the C.J.Briad<sup>®</sup> pneumatic grader. The grader contained 3 conveyor belts with each belt having 6 offshoots for various grade sizes. Built into the grader were Edixia<sup>®</sup> computers/cameras, with one camera mounted on each of the conveyor belts. Several programmes can be installed based on the quality and grade of oysters that are required and the programmes are based on oyster biometrics (weight, length, shape, width etc). Each camera can assess the dimensions of an oyster at a rate of 3 per second and the whole production line can process 7-10 tonnes an hour.

### Sea Site Visit

The Group was split up into 2 and taken out on separate boats the MV Excalibur II and MV Eagle IV. The boats steamed due south out of La Trinite Sur Mer for 40 minutes out on to the Bay. The MV Excalibur II is the biggest and newest boat of the fleet at 24m long and was built at a cost of 350k. All the big boats operate twin dredges, which are mounted on trawl beams, however the

Excalibur II, has her dredges mounted on cranes, which can span as far as mid

ship. After arriving on the fishing grounds several jobs were then carried out the first of these was the spreading of 18 x 1/2tonne bins of un-graded and sub-market size gigas. This was carried out by revving the engines to 2k revs approx, putting the rudder into reverse and allowing the boat to spin on its main axis. The bins were then individually tipped over the side and the whole operation took no more than 20 minutes. The spreading occurs at high tide to ensure a more even

spread on the bottom. If spreading occurs at low tide a bunching effect can occur which can lead to higher mortalities and a poor oyster shape.

The boat then steamed on to a different bed where the main task of the day, to dredge and fill 34 half-tonne bins with gigas oysters, got under way. Both dredges were released simultaneously and after towing for about 4 minutes they were hoisted on board and emptied individually. A full dredge filled nearly 2 bins. The bins were filled mid ship and when full they were stored at the bow. The complete operation took under 3 hrs to fill the 36 bins.

The boat then steamed back to port and to the owners land based facilities, which had its own private pier. Once unloaded grading and packing of the oysters got under way.

On board the MV Eagle IV the Group got a good insight into the harrowing operations and bed maintenance that is part and parcel of the extensive bottom culture. The boat itself was 20m long and like Excalibur II operated twin dredges, which were 2.5m wide. Usually when fishing the 2-man crew can land 25 tonnes of oysters in 1/2 day. When dredges are full they contain 400kgs and the tension on wires indicates the fullness of the dredge. Harrowing is carried to keep beds free of seaweed and when spring growth is good the oysters are harrowed to break off the new soft shell. These 2 yr. old oysters will then be sold off in Oct. The poorer quality and chipped oysters will be sold later in November/December. Over hard ground more warp is released while over soft ground less warp is used. The boat dredges in a straight line with cross currents being the biggest threat as the boat may be blown off course.

All the deep-water operators take wild seed from the Marenne region and the preferred option is to stock with 3 gram fish at 3k per sq.m. Harvest yields are in the region of 1kilo per sq.m., however, this varies greatly throughout the bay.



*Emerald Oysters Ltd. were represented by Pat Joe Bannon, Martin Burke, Tommy Corbett, Michael Egan, James Linnane and P.J. Martyn, BIM personnel included Fabrice Richez and the late Tom s Burke*

based facilities of Jean Francois Cadoret a 4th generation farmer. His company Ostericole Cadoret is one the biggest in the Quiberon area producing 800-1000 tonnes of gigas annually



*Dredges employed by the company in maintaining beds*



*Spreading of half tonne bins of ungraded and sub-market size gigas.*

## Gigas Bottom Culture in Brittany - Carantec Bay

### Carantec Bay

The group left St. Brittany and travelled due north to Caratec Bay which is located north west of the town of Morlaix. Carantec, unlike Quiberon, is dedicated to the inter tidal/shallow water culture of gigas and to a lesser extent *edulis* oysters. They are three main companies operating in the bay and the annual production is in the region of 3.5k to 4k tonnes with the water being Class A. One of these companies, Les Huitres Cadoret owns a licensed area of 500ha and produces 2k tonnes annually. The 500 ha's cover a multitude of different parcs of various sizes, which are scattered throughout the bay and occupy both deepwater and intertidal areas. Oyster seed is obtained from all over France and both wild and hatchery is used. In total 18-20 tonnes of G7 seed is acquired annually and is deployed directly on the bottom or held in



Parcs are scattered throughout the bay and occupy both deepwater and intertidal areas

bags on trestles and from seed to market size losses of up to 60% can be expected. On the finishing parcs usually 35 tons of oysters are obtained. On mixed parcs i.e. parcs that contained several year classes, usually 15 tonnes is obtained.

The seed is deployed on early nursery parcs, which are intertidal and are especially prepared with fresh sand and liberal amounts of shingle, which is made up of small quarry stones and sand washed pebbles. Sand is simply acquired from the nearby beaches while the stones and pebbles are purchased from suppliers. Seed is re-laid at high tide from a boat using water jets. From these early nursery sites and as the oysters grow, they can be shifted to other parcs on at least 3 occasions until they attain a market size however they didn't appear to be a policy of grading the oysters before they were transferred on to new parcs. The whole process takes 3/5 years to get oysters from seed to a grade 0. Once they have attained a market size they are sold directly or sent for fattening to an estuarine site at the Company's headquarters in Reic Sur Belon outside Lorient.

### Bed Maintenance

Bed maintenance takes up a lot of time in the day-to-day running of the farm and up to 20 people can be employed doing vari-

ous jobs as all parcs are routinely checked. These include cleaning beds,



Snowplough is used to level the substrate

collection and deployment of sand and shingle, fence maintenance etc. When beds become uneven and/or if there is a build up of sand in certain areas, especially after winter storms, a snow plough is used to level the substrate especially on inter-tidal parcs and remove debris and seaweeds that has collected along the parc fencing. The fencing is about 18 inches high and made up of wooden stakes, placed 1.5m apart, and 35mm garden fencing mesh. On deeper sites harrowing is carried using a variety of harrow sizes depending on the extent of the problem. In certain years seaweeds are problematic in that they coat the bottom and prevent the lifting of oysters. When there is a problem with mud build up sand and gravel is added to stabilise the substrate. If the problem is severe up to 125 tonnes of sand and gravel is applied per ha.

### Land Based facilities

The company also has land-based facilities which consists of holding ponds and grading facilities. Oysters are loaded into a washer from 1/2tonne bins and sand and grit is washed into a settlement pond. The oysters are then transferred in doors where they are graded into various categories and stacked using colour coded baskets. The baskets are held in ponds, which continually hold 200 tonnes as 50 tonnes a day can be sold during the height of the season.

### Summary

Overall the Group felt the trip was a very worthwhile exercise. For most of visiting Group is was the first time to see at first hand the extent, mechanisation and organisation of the oyster industry in France and how it has become such an integral and important part of coastal community life and that it has, in itself, become a major tourist attraction and also combining very well with other water users. The Group felt that there was a significant potential for extensive bottom culture in Ireland, especially in areas that have old native oyster beds, however, poor infrastructure and the cost of seed and labour were cited as major stumbling blocks. On a more positive note, however, the quality of oysters currently being pro-

duced on the bottom in Ireland, were comparable to what was seen in France by the Group.

Emerald Oysters Ltd were represented by Pat Joe Bannon, Martin Burke, Tommy Corbett, Michael Egan, James Linnane and P.J.Martyn while BIM personnel included Fabrice Richez and Tomás Burke.

### Dr. Tomás Burke



Tomás with Danny McNulty when deploying current meters in Killary.

The news of Dr. Tomás Burke's sudden death was received with sadness and deep shock by all in BIM.

Tomás, who wrote the articles on page 2 and the above article about his visit to Brittany earlier in the year, was a well known and much loved figure in the Irish aquaculture industry.

He joined BIM in 1995 and worked on a wide variety of projects both in County Galway and further afield on sea urchins and abalone. Prior to joining BIM, Tomás worked in the Shellfish Research Laboratory Carna, UCG, and was well known for his expertise identifying both marine and freshwater zooplankton. He was universally liked and respected by everyone he came into contact with and his passing leaves a gap which will be very hard to fill.

Everyone in BIM and especially the staff of the Aquaculture Development Division and the Galway office, offer their deepest sympathies to Tomás' family and in particular to his wife Olivia and his two sons Lorcan and Stephen. Our thoughts are with them at this sad time.



## NEWS FROM AQUACULTURE INITIATIVE

### Grading is of paramount importance for Irish oysters in France.

As part of the Quality Programme of the Aquaculture Initiative, the Quality and Environmental Officer made a trip to the Marennes region of France to discuss the quality of Irish oysters with French buyers. Over three days twenty buyers were met and their opinion sought on the quality of Irish oysters. The feedback received was very positive in the area of improved shape with the majority of buyers commenting on the obvious increase in time investment in shaking and turning by Irish producers. However all buyers highlighted grading as an area that needed much more attention. If Irish oysters are to achieve top prices in the French market, grading is of paramount importance given the niche markets of individual buyers. Buyers who offer top prices for Irish produce look for a specific grade and oysters falling below or above that must be sold on, or sold at a much reduced rate, which affects the profitability of the French companies.



Most buyers indicated that the market for Irish oysters in France this year will be good, with prices expected to increase by up to three percent on last season, if the produce is milk free and well graded.

### Environmental Heritage Service hold Conference on Seaweed Harvesting in County Down.

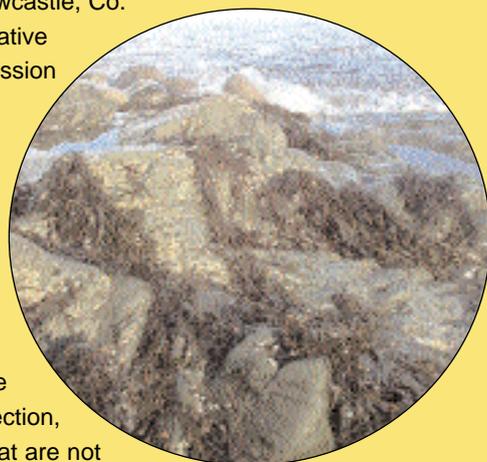
*Martin Flanigan, A.I. writes*

A conference on seaweed harvesting in Northern Ireland was held by the EHS in Newcastle, Co. Down at the start of October. The purpose of this conference was for a set of informative talks to be given on the subject of seaweed gathering and then for an informed discussion to take place between the various interested parties. Previous to the conference the EHS had produced a draft Position Statement and this document was the basis on which further discussions would be based.

Certainly this conference brought together an interesting spectrum of views and information on the subject. Some overall pieces from the conference could include that there are only five businesses involved in seaweed harvesting in Northern Ireland, (two in the table market, two manufacture fertilizers, and in the last six months, a spa business gathering for seaweed baths). At the same time there is a Professor of Phycology in each of the two Universities in Northern Ireland. Within the six counties around 80% of the coast is under an environmental designation for protection, and almost all of the foreshore is owned by the Crown. The sections of the coast that are not owned by the Crown are owned by the larger private land owners.

The issues that are currently of relevance for seaweed gathering operations and perhaps more so in the future, are that each piece of the coastline with an Area of Special Scientific Interest (ASSI) includes a list of Notifiable Operations. These Notifiable Operations are activities in an area that effectively have to be applied and approved in order for them to be undertaken. In the future, the gathering of seaweed in an ASSI may have to take into account the direct and indirect effects that removing seaweed may have on the sites designated characteristics. In a similar vein the Crown estate may become more interested in the levels and value of the seaweed flora that is being gathered on its property.

It should be emphasised that the current level and method of seaweed gathering is not considered to present a detrimental effect on the coastline and therefore the development of this Position Statement is seen as an attempt to safeguard the seaweed resource for the future. An example of how the Position Statement will impact on operators is that a code of practice for seaweed gathering has been produced by the EHS and the next stage is where the seaweed gatherers will contribute and help produce a revised version. For seaweed gathering operators this very complicated legal situation has started to make the prospect of licensing seaweed gathering more interesting and also in stimulating interest in the culture of seaweeds. The licensed culture of seaweed species could eventually in the future be used as a complementary source of primary product and a source that the businesses themselves could have a greater degree of control over.



## WFD – Cross Border Implementation

*Joanne Gaffney, A.I. writes:*

The Water Framework Directive has divided the island of Ireland into eight River Basin Districts, three of which are cross border in nature; Neagh-Bann, North Western and the Shannon IRBD, of which a small portion falls in County Fermanagh. Given that the River Basin District is the primary management unit for the implementation of the Directive, cross-border cooperation and coordination are essential for the successful delivery of the various management tools and reports required by the Directive. This is recognised in the Directive which states "the success of the WFD relies on close co-operation and coherent action at Community, Member State and local level as well as on information, consultation and involvement of the public users".

This requirement led to the establishment of the NS Share River Basin District Project which is the vehicle for delivering the objectives of the Water Framework Directive within the Northern Ireland and the cross-border river basin district between August 2004 and March 2008. Further policies have also been agreed to ensure a coordinated approach for matching deadlines and report formats on both sides of the border. However, due to different jurisdictional and administrative structures, differences in the mode of implementation are inevitable. Two areas where differences are already evident are the approach to public participation and the implementation of the programme of measures.

### Public Participation

Article 14 of the WFD requires that Member States encourage the active involvement of all interested parties in the implementation of the Directive. Furthermore, Member States are required to carry out public information and consultation in the development, review and updating of River Basin Management Plans.

In ROI the requirement for public participation led to the establishment of River Basin District Advisory councils which are composed of members nominated by the participating local authorities, sectoral representatives and members of the public. The advisory councils range in membership numbers from 16 to 53. A recurring trend is the high numbers of county councillors in each group, who account for 50% to 79% of the membership across all the advisory councils.

In NI a Stakeholder Forum was established. It is composed of 27 active members and 59 corresponding members who represent various industries, NGO's and departments. There are also plans to establish eight targeted groups across the province, to address local issues.

A marked disparity exists between these systems most notably the difference between involvements by elected representatives. This has been raised as a concern in both jurisdictions, in NI as an indication of a lack of interest in the WFD by elected representatives and in ROI as a concern that political policies could outweigh other interests within the advisory councils to the detriment of the whole process.

### Abstraction

The programme of measures of the Water Framework Directive does not demand the regulation of abstraction of surface water and groundwater; it does however require that controls be placed on such an activity and gives the member state the power to exempt from controls abstractions or impoundments that have no significant impact on water status, such controls should be in place by 2009.

In NI this requirement coupled with an ongoing infraction case against the UK under the Habitats Directive, led to the regulatory authorities giving a commitment to have an abstraction and impoundment licensing control scheme in place by the end of 2006. This is to be done through the enactment of the Water Abstraction and Impoundment licensing Regulations and an associated charging scheme. This policy has the potential to have a detrimental impact on the aquaculture industry given the large volumes of water required to operate all fish farms, yet in the absence of a published charging scheme it is impossible to predict the severity of the impact.

In ROI the issue of abstraction has been flagged as a pressure that must be managed, however, we are yet to see what form this management might take and whether non-consumptive industries such as aquaculture will be included or exempted from management measures.

### Conclusion

While the Water Framework Directive has yet to receive much attention from the majority of the population, it is inevitably going to require the implementation of a host of new regulations and policies that will impact all water users, some of which will undoubtedly be very unpopular. All we can do at the moment is carefully watch what is being done by the regulatory authorities and when necessary ensure that the aquaculture industry has a say in the formulation of all policies that have a potential to impact on its activities.

## DONEGAL CLAMS GROUPS

*Peter McGroary, A.I.*

Currently there are three CLAMS groups active in Donegal, a reflection of the importance and degree of aquaculture activity in the county. The Lough Swilly group led the way with its founding in 2001 and was followed in 2005 with the setting up of the Trawbreaga Bay and Mulroy groups. With a combined membership of over 36 companies the concept has been a considerable success.

As to be expected the issues the groups have had to deal with have been both diverse and at times far reaching. In recent years there has been a proactive approach from the groups in meeting the local authorities on issues such as treatment works, discharge licenses, infrastructural developments etc., but also with State organisations such as the Irish Lights and the Dept. of Communications, Marine & Natural Resources, on navigation and general licensing concerns.

The Trawbreaga group in particular have instigated direct discussion with the Coastal Zone Division of the DoCM&NR on the future management of their bay and it is hoped that such dialogue will mean that potential problems can be headed off before they become significant. In Lough Swilly too the group have opened lines of discussion with NGO's in an attempt to develop harmonious relations with other users of the Lough.

The setting up of the groups as also allowed individual companies to discuss and gain the support of the other bay producers at the initial stage of project developments. In addition to fostering a culture of co-operation amongst producers this has led to the dissemination of expertise and experience that might otherwise have remained untapped.

Being firmly established the future of all three groups' looks healthy and with the links developed with regulatory and development bodies they are in a strong position to positively influence potentially negative developments taking place in their catchments.

*Peter had now left the Aquaculture Initiative to take up a position with the Department of Communications, Marine & Natural Resources, and we wish him well with his new career move.*

# CARRYING CAPACITY CONFERENCE - WESTPORT

More than 70 delegates travelled to Westport, Co. Mayo, on 27th September, to participate in a one day conference on Carrying Capacity. Participants travelled from all parts of Ireland, the UK, Netherlands, Portugal and Norway, to listen to a host of international speakers who presented pertinent aspects of carrying capacity studies with a particular focus on shellfish aquaculture and fisheries and the industry's application of carrying capacity modelling in bay areas of Ireland.

The conference was organised by Aqua TT on behalf of Clew Bay Marine Forum, South East Shellfish Co-op. and La Tene Maps, who are the Irish representatives in the EU Cooperative Research Carrying Capacity Project, KEYZONES. The conference was generously sponsored by Bord Iascaigh Mhara and the Marine Institute.



*Mr. John Coleman, Director, Aqua TT and Fine Gael spokesperson for the Marine, Mr. John Perry.*

The opening session, chaired by Mr. John Coleman, a director of Aqua TT and chief executive of La Tene Maps, introduced the first speaker Mr. John Perry TD, opposition Fine Gael spokesperson for the Marine. Mr. Perry made a brief policy speech and formally opened the conference.

The first presentation "Introduction to Carrying Capacity Studies" was given by Dr. Brendan O'Connor a director of Aquafact International, who gave an overview of carrying capacity concepts and modelling experiences both past and present and thus established a solid base for the remainder of the day's discussions. This was followed by Benen Dallaghan of BIM who spoke about BIM's plans for the future and emphasised the benefits for industry associated with the computerised modelling solutions. He also stressed that the main goal of the carrying capacity project was to develop a computer application that will have industry relevance.

After the morning coffee break, Declan Clark, of the Martin Ryan Institute, NUI Galway, chaired the second session which concentrated on individual components of a carrying capacity study.

Under the title "Shellfish Modelling and Carrying Capacity" presented by Phil Pascoe from Plymouth Marine Laboratory, explained the extensive and interesting work underway in Plymouth with regard to the development of shellfish growth equations and shellfish carrying capacity studies. This theme was continued by Aad Small, from RIVO in the Netherlands, with his talk on biological modelling. Ms. Ana Sequeira, from the Institute of Marine Research in Portugal, then detailed the role of GIS in carrying capacity studies which was quite important as the mechanism through which to demonstrate results. Ana simplified some difficult concepts and gave an excellent take on the uses of GIS in this field study.

The penultimate session of the morning was presented by Marcel Cure, who outlined the Marine Institute's strong modelling capabilities and he also flagged the Marine Institute's plans

to embark upon a carrying capacity modelling project in 2007. The last talk was presented by MarCon Computations International Ltd. who spoke about the carrying capacity studies for mussel and scallops in coastal areas.

The afternoon session, chaired by Mr. Mark Norman of Taighde Mara Teo. was devoted to examples of carrying capacity projects.

Matt Service, Fisheries & Aquatic Ecosystems Branch, AFESD, Belfast, N.I., presented "The background to the SMILE Project to date, followed by Mr. Dennis Gowland who spoke about the Keyzones Project. Under the heading "Estimating food resources for shellfish" Anouk Blauw of Delft Hydraulics, Netherlands, shared with us their vast experience in this field. Thom Nickell, Scottish Association for Marine Science, spoke about the ESCASA Project.

The final speaker of the day was Mr. Niall O'Boyle, Clew Bay Marine Forum who gave an excellent insight into the realities of assessing carrying capacity and bay management experiences in Clew Bay, County Mayo.

A Questions & Answer session followed the last speaker and was chaired by Mr. Richie Flynn of the IFA. Many topics were discussed with suggestions / discussions topics ranging from the fostering of inter agency co-operation on large scale projects, to the industry's relevance of carrying capacity studies.

Overall the conference was a great success and it was a wonderful opportunity for all delegates to get to grips with many of the concepts and also the relevant work underway in this area.

Speaking at the conference, Mr. John Coleman, said "The speakers were pleasantly surprised both at the turnout and also the genuine interest by the Irish attendees in the experiences from other areas. As most of the studies presented are at an intermediate stage and ongoing, there were calls for a follow-up conference to look at the results in about two years time. This is something that Aqua TT will actively consider."

*Downloadable files of the conference proceedings are available from the Events Section of the Aqua TT website, [www.aquatt.ie](http://www.aquatt.ie).*



*Benen Dallaghan, BIM, takes a break at the Conference.*



*Hugo Vajk, Caledonian Oysters, Scotland and James Ryan, AquaVision, attended the Conference.*

## SHELLFISH WATERS DESIGNATION PROJECT - UPDATE

The Shellfish Waters Directive (79/923/EEC) was enacted in (79/923/EEC)1979 and passed into Irish law by S.I. No. 200/1994, the Quality of Shellfish Waters Regulations and amended by S.I. No. 459/2001. Fourteen areas around the coast were designated as Shellfish Waters. They were: Mulroy Bay, Co. Donegal; Clew Bay and Killary Harbour, Co. Mayo; Kilkieran Bay, Clarinbridge / Kinvara and Aughinish Bay, Co. Galway; Inner Bay, Maharees, Cromane, and Kilmakilloge Harbour, Co. Kerry; Glengarriff Harbour, Bantry Bay Inner and Roaringwater Bay, Co. Cork; Bannow Bay, Co. Wexford; and Carlingford Lough, Co. Louth.

A case was taken to the EU in 2002 over Ireland's failure to establish Water Quality Improvement Programmes for designated shellfish waters. In response to this, the Department of Communications, Marine & Natural Resources, requested BIM to prepare Water Quality Improvement Programmes for the 14 designated areas. In conjunction with the DoCMNR, BIM Regional Officers and the Shellfish Waters Designation Co-ordinator prepared a report on each area, including a description of the boundaries and characteristics of the designation, sampling point, the surrounding catchment, population centres and waste water collection systems, development pressures, local agriculture, shellfish aquaculture activity, other aquaculture or fishing activities and current classification under shellfish hygiene legislation.

Discharges in the catchment were catalogued and those which might have a significant impact on water quality were identified and listed in the reports under the following types: Untreated Sewage; IPPC licensed activities; Section 4 Discharge Licenses; Section 16 Discharge Licenses; Waste Water Treatment Plants; and Others. Potential issues arising from these discharges, and actions to be taken on these issues were identified, and included in the Water Quality Improvement Programmes. Compliance was also assessed using results from an ongoing sampling programmes. These programmes, along with the accompanying maps, are available online at <http://www.dcmnr.gov.ie/Marine/Coastal+Zone+Management/Shellfish+Waters+Directive.htm>

S.I. No. 200/1994 and the amending S.I. No. 459 /2001, have been revoked by S.I. No. 268 of 2006, the European Communities (Quality of Shellfish Waters) Regulations 2006. This outlines the general duty of public authorities and the Minister. It also sets standards for quality parameters including in seawater or flesh, and criteria which must be met in order for a designated shellfish water to be deemed compliant.

An inter-departmental committee, The Shellfish Waters Management Committee has been established and meets regularly to address objectives to be met, and issues arising from the legislation. In light of the work done to characterise the water bodies and pressures on them, as well as the ongoing sampling and work toward remediation of said pressures, the case taken by the EU against the State, for failure to establish Water Quality Improvement Programmes has been closed.

Work is ongoing on preparing for designation of other shellfish waters around the coast.

*Pete Donlon, BIM.*

## ROPE MUSSEL DELIVERY PROTOCOL...BUILDING BRIDGES

*Vicky Lyons BIM writes:*

Arising from the ISA "Review of Rope Mussel Sector in Ireland 2004", BIM, at the request of industry, embarked on a project to develop a Rope Mussel Raw Material Delivery Protocol. The PWC Report, "Review of the Rope Mussel Industry", also endorsed this Protocol. The overall aim of the Protocol was to establish what the current problems, for both the producer and processor, are with regard to raw material delivery and to establish a means of best addressing these issues, to the mutual advantage of both parties addressing the PWC Recommendation Core Theme 6. The objective was to build a bridge of understanding between the producer and the processor, to the mutual benefit of both parties.

The producer side of the equation felt that there was insufficient transparency and consistency in the situation, while the processors felt that they were being left with unacceptably high levels of unusable raw material. There was a measure of agreement that if an appropriate protocol could be developed and implemented then mussels fitting this specification would attract a premium over mussels, which did not. The extra payment to the producer would be generated by savings in waste disposal and intake labour on the part of the processor.

The initial phase of the project involved an extensive process of consultation to canvass industry opinion and to ascertain if there was a reasonable degree of consensus, which could be built upon. It was proposed that, once agreed, all of these parameters be packaged under the I.Q.M. umbrella using a concept novel to the mussel farming industry, through the adoption of a Premium Grade, similar to the approach used in the salmon farming sector.

After completion of the first round of consultation, the common ground emerging from the parties consulted were summarised as follows:

- Waste (Tare)
- Size grade/ Pieces per kilo
- Shell fouling
- Meat yield
- Water loss

Having agreed the key parameters the next step was to define and agree on their objective measurement. BIM's approach was to codify the measurement of these parameters into Standard Operating Procedures (SOPs), which together with sample delivery paperwork may be used as a template for regularising the relationship between the grower and the processor in a win-win situation. The approach has been captured in a user friendly DVD entitled "Rope Mussel Delivery Protocol...Building Bridges", which was launched at the BIM workshop in Bantry in November. It was well received by the delegates and will be followed up by a pilot launch of the scheme in early 2007.



*Richie Flynn, IFA and Vicky Lyons, BIM, at the launch the CD on Rope Mussel delivery protocol... Building bridges.*

## AQUAVISION 2006 – STRATEGIES FOR SUSTAINABLE AQUACULTURE

Vera Heffernan and Grainne O'Brien from the Aquaculture Development, Environment & Quality Section, BIM, recently attended the International Aquavision Conference in Stavanger, Norway. The schedule packed in three days of site visits, conference presentations and exhibitions. Given the theme of Strategies for Sustainable Aquaculture there was much discussion in the areas of securing feed supply into the future, eco labelling of aquaculture products, investments in operational improvements, promoting a good reputation for the sector and emerging trends in aquaculture development.

Of note were talks from Dr. Jason Clay WWF whose objective is, "show me don't tell me" in relation to environmental management of aquaculture. He spoke of the importance of eco-labelling in achieving this objective. The story of olive oil and its global marketing success was told by Habib Essid. 'New waves in Aquaculture', was addressed by experts from different continents discussing how modern aquaculture is evolving around the globe. Robert Landman discussed the 'coming' of Africa & Middle East, Javier Ojeda addressed the status in the Mediterranean and Lars Liabo debated if salmon will continue to dominate aquaculture in cold water regions.

As a final thought John Naisbitt a mega trend author and philosopher suggested that the Aquaculture sector has a great story to tell so get out there and tell it!



*World's largest Halibut farm.*

## FETAC AQUACULTURE TRAINING COURSES 2006 / 2007

This is a nationally and internationally recognised qualification in Aquaculture (FETAC Level 5). The course is practical and hands-on. It will appeal to anybody who loves the sea with plenty of practical experience through boat handling and work on shellfish and finfish farms.

There are only eight places on the full-time FETAC Level 5 Course in Aquaculture at the Regional Fisheries Centre, Castletownbere, Co. Cork. The part-time course is the same FETAC Level 5 Course as the full-time course, but is timetabled on a part-time basis. The aquaculture certificate course is designed to give comprehensive training in the skills required to work competently on a fish farm. It would suit anyone who wants to enter this growth industry or who are working in the industry already. Some modules will be available in 2007 on a pilot basis in Portaferry, Co. Down. 70% of the course is practical a lot of work is done on site on shellfish and finfish farms.

Applicants should note that BIM cannot undertake to secure work experience for students, who will have ample opportunities during their course of study to meet fish farm managers and organise their own work placements.

Priority is given to applicants who are EU citizens resident in Ireland, meeting the specific course entry requirements and in a position to take up immediate employment / or already employed in the Irish seafood industry.

Application forms are available from the Regional Fisheries Centre, Castletownbere.

Further information on full-time and part-time courses is available from Susan Steele on 027-71232; e-mail: steele@bim.ie

Application forms for the full-time course in aquaculture must be sent to Regional Fisheries Centre, Castletownbere, Co. Cork. Course will start on 15th January 2007.

## Fish Welfare During Transport

A one day Forum to focus on fish welfare during transport was organised by the Humane Slaughter Association (HSA) in October in Inverness, Scotland.

Attending the forum were industry representatives and scientists involved in the transport of fish. The aims of the Forum were to review current knowledge and technology for the methods of transport available, establish possible research requirements and knowledge gaps and to encourage information and technology transfer throughout the industry. Speaking at the forum was Chris Elmar from DEFRA, highlighting implication of new EU Transport Regulation (Council Reg (EC) No 1/2005), which harmonises EU rules on the animals during transport and related operations, which come into effect from 5 January 2007.

The Regulation mainly relates to the transport of domestic mammals and birds, however according to Article 1, it will apply to live vertebrate animals, which will include fish.

The main elements of the Regulation are:

- All transporters of live animals irrespective of the distance travelled must comply with general conditions concerning animal welfare.
- Persons who transport live animals over distances in excess of 65km for commercial purposes must in addition be officially authorised and undergo training.

*Vera Heffernan, BIM*

## AQUALAB Student Conference 2006

The seventh and final AQUALABS training event of the 2005/06 series was the three-day AQUALAB Student Conference 2006, hosted in November at the impressive new Marine Institute headquarters in Oranmore, Galway.

After a competitive application process, 52 participants were selected, representing 18 countries from across the world. While the previous six courses in the series focused on the transfer of state-of-the-art laboratory techniques in specific fields of aquaculture, the Student Conference programme was geared towards the transfer of generic competencies, such as communication skills, networking, proposal writing and technology transfer, which are of real value to a research career.

Following the workshop, Dr. Maura Hiney, senior research coordinator of the National University of Ireland, presented excellent guidelines and advice on how to identify and source grants, an essential skill for researchers who so often need to apply for a limited pool of public and private funds.

Towards the end of the first day, an introduction was presented to describe the "ITHACA Island" case study, an exercise which puts into action theoretical knowledge and professional skills. The case study was facilitated under the expertise and mentorship of Dr. Denis Lacroix, IFREMER, with an objective to encourage each participant to consider every possible aspect involved in starting up an aquaculture business in harmony with other water users.

On the second day, participants were divided into a number of groups representing relevant stakeholders, such as fishermen, the tourism board and planning officials. All participants not only got a taste for the diverse range of issues and bodies who have an input into the sector, but also had the opportunity to practice skills such as leadership, communication, decision making, negotiation, delegation, time management and team work.

The third and final day of the workshop the group set out on a field trip to visit the MRI Carna Laboratories of the National University Ireland in the west of Ireland. On route, the tour winded through the unique landscape of Connemara, while Mr James Ryan provided narration detailing the area and local aquaculture activities. The field trip culminated with a Killary cruise, which provided a unique experience of Killary Harbour, Ireland's only fjord.

## BIM COMPLAIN THAT BIRD'S EYE SALMON ADVERT IS "MISLEADING"

BIM have made a formal complaint to the Broadcasting Complaints Commission (BCC) that the advert that Bird's Eye have been running on RTE for their frozen salmon meals is misleading and not in the interests of the Irish consumer.

In the advert, well known British food journalist Richard Johnson, is seen on a small fishing vessel talking about wild salmon and what makes them pink-fleshed. He holds up a glass jar full of shrimps and tells the watchers that it is by eating these crustaceans that wild salmon get their colour. At the end of the piece there is a shot of a freezer with the Bird's Eye products in it, and a sultry female voice tells the viewer that only wild Alaskan salmon is used in their manufacture.

What the innocent public are not told is that the fish shown at the start of the advert are not the same kind of fish as those used in the Bird's Eye product. The fish and shrimps held up by Richard Johnson are Atlantic salmon and a species of shrimp also only found in the Atlantic Ocean. The fish used by Bird's Eye are from the Pacific Ocean and have no relationship whatsoever with the animals portrayed in the advertisement.

BIM felt moved to make the complaint both because it was misleading and because it will cause confusion and serve to put Irish consumers off eating fresh salmon. Recent research shows, that when they are worried or confused, the majority of consumers simply stop buying a whole product range rather than making discerning choices amongst particular products in

the category. Thus this advert is likely to depress sales of fresh salmon which would be bad for the health status of Ireland's population as eating oily fish is shown to have major benefits in reducing the number of deaths from heart attack and other causes.

It seems to us that what Bird's Eye are attempting to do is to make a virtue of the fact that they are using a cheaper raw material by choosing frozen Pacific salmon as opposed to using the more expensive fresh alternative, which would be Atlantic salmon. There is nothing wrong with a processor trying to make a product in as economic a manner as possible, they have a duty to maximise profits and returns to their shareholders after all. However it is taking things a step too far, if that zeal is translated into seeking competitive advantage over rival products by cynically manipulating consumer concerns with misleading messages.

Promoting fish consumption as a means of improving consumer health is a core mission for BIM. We believe that the health and welfare of Ireland's citizens is too important an issue to be used as a pawn in a cynical game of expensive advertising merely for commercial gain. Arising from this concern, we felt compelled to raise our concerns with the relevant authorities.

The BCC are considering the complaint made by BIM and their decision will be published in due course.

### Shellfish Market Comment - December 2006

#### Oysters:

Meat growth in most areas along the French Atlantic coast was good during September and October, however significant mortalities have been recorded in Quiberon (bottom culture), this could possibly effect the market of large size oysters grade 1 and 2.

Delivery prices in the bulk market remains stable at around €2.20-2.30/kg for ordinary and around €2.80/kg for "speciale". Prices can fluctuate according to shape and grading quality. Top quality product can reach a price of up to €3/kg. Ex packing prices for Normandy grade 3 are around €3.25 and €4.30/kg for "speciale" from Marennes-Oleron.

BIM French retail chain store watch selling price: Marennes Oleron grade 3 €5.30/kg; Fine de Claire label rouge grade 4 €7.49/kg, Utah Beach oysters grade 3 €7.49/kg.

#### Mussels:

French packers have reported poor sales during November.

Product quality is good with meat yield of around 27% in the vivier summer area. The poor autumn demand will most probably result in an extension of bouchot mussel sales into January/February. Production prices have dropped slightly. Bouchot mussels for ex. packers selling prices are around €1.80-€2.00/kg packed in 15kg jute bags. €2.30/kg for debyssed mussels and €2/kg for MAP. Dutch mussels are starting to appear in French stores. Retail chains buying prices are reported to be around €2/kg for MAP.

**Trend:** There are increasing signs of a market glut; therefore we might observe a slight drop in bouchot and other types of mussels. As a result French demand for Irish rope mussels will probably only pick up towards the end of January. High prices for Dutch mussels will limit French demand.

#### Flat Oysters:

Price for Irish flat oysters remained high this season. Most recent delivered prices were around €6/kg (10-11% per kg). The quality of Danish flat oysters is said to be very good. Most of these oysters are exported to Holland and Spain. Delivered prices are reported to be around €6.30/kg. French production is slightly down but quality is up on average.

[www.bim2b.com](http://www.bim2b.com)



**DATE FOR YOUR 2007 DIARY!**

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25-28 september 07

presented by  
International Association of Seafood Producers

hosted by  
Irish Seafood Producers Association

supported by  
Department of Agriculture, Fisheries and Food  
Irish Seafood Producers Association

co-organised by  
IFOP

The 2007 World Seafood Congress will be one of the premier international seafood events of next year.

The Congress' three-day Dublin-based offering, running from 25-28 September 2007, will consist of a conference and an exhibition dedicated to the theme of 'Innovation in the Seafood Industry'.

Due to unprecedented, global interest in the Congress, WSC organisers are advising potential delegates to book promptly and avoid disappointment.

Presenters, exhibitors, industry members and students are invited to register their interest in the Congress by visiting the Congress website [www.worldseafoodcongress07.com](http://www.worldseafoodcongress07.com).

The World Seafood Congress looks forward to welcoming you to Ireland for one of the most important events in the 2007 global seafood calendar.

[www.worldseafoodcongress07.com](http://www.worldseafoodcongress07.com)

*Diary Guide 2007 .....*

February 10-13: **Italy.** Mediterranean Seafood & Processing. Details: Orietta Foschi, RiminiFiera, Via Emilia 155, 47900 Rimini, Italy. Tel: +390541 744358; e-mail: 0541 744 225; www.riminifiera.it

February 26 - March 2: **San Antonio.** Aquaculture 2007: The World Aquaculture Society's Annual USA Show. Details: Conference Manager, PO Box 2302, Valley Center, California, 92082, USA. Tel: +01 760751 5001. Fax: +01 760751 5003. e-mail: worlداqua@aol.com

February 27-March 1: **Norway.** North Atlantic Seafood Exhibition and Conference, Oslo. Conference and exhibition held in conjunction with seafood week in Oslo. The conference will run from February 27-28. Study tours to farms and processing plants will take place March 2-4. Details: Calle Nordengen. Tel: +47 66939146; e-mail: cn@messe.no

March 1-4: **Portugal.** InterPescas, Aveiro. Leading Portugal national show covering aquaculture, fish processing, fishing and vessel construction. Details: Marcia Madeira. Tel:+351 243370174. e-mail: marcia.madeira@exposan.pt

March 1-4: **Germany.** Aqua-Fish, Duisburg. International trade fair for aquaculture and fish hobbyists. Details: Klaus Guntzel, Zoo Zajac GmbH, Baustrasse 15-17, 47137 Duisburg, Germany. Tel: +490203 4504550; e-mail: guentze@zajac.de; www.zajac.de

March 18 - 23: **New Zealand.** 6th International Conference on Molluscan Shellfish Safety - A Fresh Look to the Future - Enquiries - New Zealand Food Safety Authority, 68-86 Jervois Quay, PO Box 2835, Wellington, N.L. Phone: +64 4 4632500 Fax: +64 4 463250.

<http://www.nzfsa.govt.nz/events/icmss07/announcement/index.htm>

**SEEDING OF OYSTERS IN DUTCH COASTAL WATERS REFERRED TO THE EUROPEAN COURT.**

The European Commission has taken the Netherlands to the European Court of Justice over its rules restricting the seeding of mussels and oysters coming from other Member States into Dutch coastal waters. The Commission does not agree with the Dutch argument that this is necessary to protect the vulnerable habitats of such waters, as the kind of protection sought by the Dutch authorities is already guaranteed by a parallel licensing regime in execution of the Dutch nature protection law. The Commission has referred this case to the European Court of Justice arguing that the Netherlands makes the free movement of goods in the internal market difficult.

For decades fisheries companies have been catching young mussels and oysters in other Member States and seeding them out in Dutch waters, to harvest the fattened mussels and oysters later on and sell them for consumption. However, in recent years the Netherlands have been subjecting these seeding activities to a restrictive fisheries licensing regime, highlighting the need to protect the vulnerable habitats of such waters as the Oosterschelde and the Waddenzee against the accidental introduction of alien species.

The Commission takes the view that the risk of such accidental introduction is not of such a degree as to warrant the restrictions of intra-community trade created by the licensing regime. Moreover, transfers of mussels and oysters between different Dutch waters, which should entail the same degree of risk, are not subjected to the same kind of restrictions.

Finally, the kind of protection sought by the Dutch authorities is already guaranteed by a parallel licensing regime in execution of the Dutch nature protection law.

*IP/06/1422 Brussels - 18th October 2006.*

**Irish Shellfish Association  
New Executive Committee**

The Executive Committee of the Irish Shellfish Association unanimously elected Mr. Flor Harrington of Kush Seafarms, Ardroom, Co.

Cork, as its new Chairman at a special meeting in Bantry on Thursday 16th November.

Mr. Harrington has been a member of the national Executive Committee of the ISA for three years. He farms rope grown mussels on a natural spat settlement system in Ardroom Harbour on the Beara



Mr. Flor Harrington

peninsula and has been involved in aquaculture for many years.

The new chairman of the ISA began work immediately following his appointment with a meeting with the Minister for Community, Rural and Gaeltacht Affairs, Mr. Eamon O'Cuiv TD to discuss coastal infrastructure and the Clár programme.

Name	Company	Position
Flor Harrington	Kush Seafarms Ltd	Chairman
Simon Kennedy	Killary Fjord Shellfish	Rope Mussel (North)
Richard West	Omey Oysters	Oysters (North)
Ronan O'Doherty	Aqua Shellfish	Bottom Mussels (North)
William Murphy	Cormorant Mussels	Rope Mussels (South)
Cliona Mhic Ghiolla Chuda	Meitheal Trá Na Rinne Teo	Oysters (South)
Stephen Kelly	Crescent Seafoods	Bottom Mussels (South)
Jackie Sullivan	Bere Island Seafoods Ltd.	New Species
Michael O'Neill	Tower Aqua Products Ltd.	New Species
Finian O'Sullivan	Bantry Harbour Mussels Ltd.	Shellfish Safety

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## CASTLEMAINE AQUACULTURE GROUP CLEAN-UP CROMANE POINT

*Máirtín Walsh reports*

A full-scale clean up of the Point at Cromane was organised by Castlemaine CLAMS (Co-ordinated Local Aquaculture Management Group), Bord Iascaigh Mhara and Castlemaine Harbour Fisheries Society on June 20th. The CLAMS group consists of local mussel and oyster farmers, who are committed to ensuring the use and enjoyment of Cromane Point for all. Despite very bad wet windy weather a large group of local aquaculture producers volunteered their time and loaders to remove waste materials from the area

Castlemaine Harbour is an important mussel and oyster production centre. However, as there is no designated work area, the Point at Cromane has to be used as a launch site and storage area. Inevitably, a certain amount of waste accumulated over time and the CLAMS group, in-conjunction with BIM's Environment & Quality Section (Gráinne O' Brien) and BIM's regional officer (Máirtín Walsh), scheduled the one day clean-up to allow the farmers to dispose of any waste in a safe, responsible and cost effective manner.

All old aquaculture and fishing materials were removed from the site, with funding from Bord Iascaigh Mhara through the CLAMS process. Killarney Waste Disposal removed all metals for recycling and general waste will be removed and responsibly disposed of. The clean up facilitated the removal of damaged boats, scrap metal, fish boxes, storage containers and old

netting etc. The clean-up was deemed to be a big success and many local producers expressed a desire that such clean-ups be organised regularly to allow them to maintain the area so that it remains safe, user friendly and open for the enjoyment of the public.



*The one day clean-up at Castlemaine Harbour was a big success and local producers hope to maintain the level of cleanliness achieved.*

## B.I.M. SURVEY VESSEL UPDATE

*John Dennis, BIM, writes:*

The construction of B.I.M.'s purpose built survey vessel is on schedule.

The boatyard of Fitzgerald Marine Ltd was visited by independent surveyor Peter Southern and John Dennis of B.I.M. on Wednesday 1st November. Director Gearoid Fitzgerald presented the vessel and explained what was currently underway in its construction.

Every detail of construction technique used and reason for from resin application to rubber fender fitting was queried and explained by Gearoid. As much construction as possible for example is carried out outside of the hull before fitting to minimise handling of construction materials and to avoid contaminating the hull surfaces.

The resin and other materials used in construction is of a high specification.

The construction shed is maintained as much as possible at a constant temperature to ensure proper setting by the resin.

The vessel hull layup is complete and was being ribbed during the visit. The 4 bulkheads are about to be installed. Hull construction is over spec to ensure the safest working platform that satisfies all parties including the surveyors from the Department of Communications, Marine and Natural Resources.

The wheelhouse layup is complete but remains in its mould for the present to ensure maximum strength and to avoid any prospect of warping over time and differing conditions

Deck fittings; hauler, winch and associated hydraulics are due to arrive at the yard by November 20th. and the electronic surveying equipment has just been returned from Scotland after servicing and upgrading and can be shortly sent to the yard for fitting.

The main engine, a 350 hp caterpillar has been ordered by the yard. Currently there is a three month waiting list for these so it is hoped to receive it before Christmas. A Yanmar diesel generator and inverter for running electronic surveying equipment is being ordered at present.



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BIM cannot accept responsibility for any errors or omissions and the opinions expressed are those of the authors and not necessarily those of BIM.

## Dream Team' Brought on Board for BIM Shellfish Carrying Capacity Project.

Brian O' Loan, BIM, writes:

Leaders in the world of modelling shellfish carrying capacity and water quality have been brought onboard to the new BIM Carrying Capacity Project. Each of the groups / names mentioned below will bring unique world leading skills and tools to the project to make it one of the most advanced and ambitious projects in this area to date. At meetings held in Dublin on 11th and 12th December 2006 these experts engaged with the BIM Carrying Capacity team, lead by Dr. Terence O' Carroll, and mapped out the tasks that will be done over the next 18 months to produce a modelling tool that can be used by industry and regulators to optimise shellfish production in bays throughout Ireland.

### 'Dream Team'

Martin Ryan Institute (MRI)  
Marcon Computations International Ltd.  
Plymouth Marine Laboratory (PML)  
Institute for Marine Research (IMAR)  
Compass Informatics Ltd.  
Great Eastern Mussel Farms  
Blue Hill Hydraulics Inc.  
Aqua-Fact International Services Ltd.

Dr. Mike Hartnett, Declan Clarke et al (Ire)  
Alan Berry (Ire)  
Dr. Tony Hawkins (UK)  
Prof. Joao Ferreira (Port)  
Gearoid O' Riain (Ire)  
Dr. Carter Newell (USA)  
Dr. John Richardson (USA)  
Dr. Brendan O' Connor (Ire)

Shellfish production will be modelled at three scales: structure scale (trestle, longline, mussel bed), farmscale and bayscale. Three pilot bays: Killary, Dungarvan and Wexford Harbours have been selected to represent a cross section of different aquaculture and species methods within different systems which nonetheless face similar issues viz optimisation of shellfish production and improving water quality. The goal is to produce a computer application that will run various scenarios that will allow risk free predictions of shellfish production and water quality under different conditions e.g different stocking densities, different weather patterns, different point source discharges etc.

## Association Scottish Shellfish Growers International Conference 2006

The theme of this year's Association of Scottish Shellfish Growers (ASSG) International Conference, which was held in Oban at the end of October, was entitled "The interaction between science and regulation and management in the shellfish sector".

Over the two days of presentations and debate, delegates heard the views from representatives of the scientific, regulatory and policy 'communities' from the UK, Europe (Belgium, France, Ireland, Spain), USA, Canada and Chile, alongside members of the shellfish industry, on the role of science in informing both the decision making process and regulatory control of the shellfish sector.

Topics discussed and debated successfully over the two days covered issues such as biotoxin testing, testing methods, management regimes, bacterial and viral sampling, risk assessment and management, along with issues relating to environmental protection, seed mussel concerns and threats from and potential regulation of alien species. Irish speakers included Bill Dore, of the Marine Institute who gave a presentation 'Viruses in shellfish – new science and the challenges for risk managers' and Gavin Burnell, UCC who talked on 'Managing Irish Sea mussel seed stocks – the biological issues'. Dick Bates, DG Fisheries and Maritime Affairs, EU Commission, gave a presentation 'Proposal for a Council Regulation on exotic species in aquaculture – background and update'.

This year for the first time BIM assisted the ASSG in co-sponsoring this successful event by funding one of the key speakers – Roberto Flores Aguilar, I-Mar from Chile. Following the conference Mr. Aguilar visited with abalone and sea urchin hatcheries and production units in the south of Ireland. It is envisaged that a CD with all the ASSG Conference 2006 presentations will be available in the New Year. For further details contact ASSG Chairman Doug McLeod, email DouglasMcLeod@aol.com



Group of speakers who took part in the ASSG Conference in Oban.

## Rope Mussel Workshop

BIM's biennial rope grown mussel workshop took place in Bantry, Co. Cork on the 16th December last. Growers from all around the coast made presentations summarising the technical advances that had been made at local level in their particular bays and also letting their colleagues know



Delegates attendij1

what had and had not been successful, and why.

Everyone agreed that this frank sharing of information helps growers to learn from the experiences of their friends and colleagues and avoids farmers, who would otherwise be operating in isolation wasting precious resources and time.

The Workshop also saw the launch of BIM's Environment & Quality Section's "Raw Material Buying Protocol" and the Irish Quality Mussel (IQM) Premium Grade concept. This initiative stemmed from the recommendations contained in the recently published "Review of the Irish Rope Mussel Industry", which was jointly commissioned by BIM and EI.

A DVD detailing the operation of the proposed system together with sample paperwork and other equipment was demonstrated to the farmers and the processors, who showed a keen interest. Questions were then asked and some very valuable suggestions were made from the floor which will be taken on-board and used to refine the system so as to build better relations and understanding between the processors and producers in the sector.