



Derek Robertson and David Whitaker discussing production with Princess Anne.

around 70 invited guests for lunch. These guests, consisting of University officials, Institute staff and advisory committee members, MP's, MSP's, local Councillors, fish farmers and local dignitaries were all bowled over by HRH's charm and humour and obvious love of and interest in Argyll.

Following HRH's departure to open a wind farm at Tangy Hill, the guests were split into seven groups and given an escorted tour of the hatchery before departing to all corners of the country.

The day was a huge success and everything ran like clockwork, the party that night at Craigard house was memorable for many reasons, but that is another story!!

## Thesis Update

### MSc Aquaculture

#### Av Reyni L.

The use of pure oxygen in the pre-growing unit at a sea bass (*Dicentrarchus labrax*) and sea bream (*Sparus aurata*) hatchery in Portugal.

#### Baglina A. M.

The efficacy of alternative compounds for the treatment of *Ichthyophthirius multifiliis* (Fouquet, 1870) infecting rainbow trout *Oncorhynchus mykiss* (Walbaum).

#### Buray P. R.

The effect of dietary arachidonic acid on mit quality in the Atlantic halibut (*Hippoglossus hippoglossus*).

#### Campbell S.

n-3 fatty acid requirement of *Macrobrachium rosenbergii*.

#### Dickson G.

Comparison of reproductive and hatchery performance of *Oreochromis niloticus* strains under commercial seed production conditions.

#### Dowd S.

Observations on the cardinal tetra (*Paracheirodon axelrodi*) ornamental fishery with an emphasis on assessments of stress.

#### Gislason H. R.

The role of antioxidants in fish feed pigmentation.

#### Gongora M. E.

Resource management in Belize: The diversification of aquaculture using geographical information system.

#### Herlin M.

A nitrogen budget for farmed Atlantic cod (*Gadus morhua* L.).

#### Kakos A. I.

A quantitative assessment of the efficacy of Hyperkote™ for foulant removal from fish cage farming.

#### Kanellopoulos I.

Effectiveness of safety legislation in fish-farming.

#### McDonald N.

Investigations on feed related ammonia concentration in commercially reared Atlantic halibut *Hippoglossus hippoglossus* (L.)

#### McMullan R. A.

An examination of rainbow trout *Oncorhynchus mykiss* (Walbaum, 1972) egg incubation success in the wild in Scotland.

#### Minimilu P.

Broodstock management of brown trout (*Salmo trutta*) using microsatellite and passive integrated transponder (PIT) tag system.

#### Newton R. W.

Determinants of egg quality and the significance of blastomere morphology for assessment of egg quality in cod *Gadus morhua*.

#### Oliver R. L. A.

Investigation into the growth performance of juvenile Nile tilapia, *Oreochromis niloticus* L. fed on mixed feeding schedules, with particular attention to the compensatory response.

#### Price C.

A participatory observation study on the use of pesticides in integrated farming systems of central Thailand.

#### Schram M.

A qualitative study of the attachment mechanisms of fouling organisms onto fish-cage nets coated with Hyperkote™, a novel fouling-release coating.

#### Smith J. E.

The effects of fallowing on the biodiversity of sediments under Atlantic salmon marine cages.

#### Tan Y. W.

Investigation of particulate waste dispersion from a salmon farm and comparison with results predicted by spreadsheet and GIS waste dispersion models.



## MSc Aquatic Pathobiology & Aquatic Veterinary Studies 2003

### Alonso S.

An investigation of a skin disease in sea bass (*Dicentrarchus labrax*) in a commercial Portuguese farm.

### Andres M.

Effects of *Hafnia alvei* on sea bream (*Sparus aurata*) during the course of an experimental infection.

### Andres V.

Towards the control of *Saprolegnia* in summer smolts of Atlantic salmon, (*Salmo salar* L.)

### Baily J. E.

A histopathology based investigation of chronic erosive dermatopathy in Murray cod, *Maccullochella peelii peelii*.

### Beltran-Alcruo D.

Effect of the organophosphate methyl parathion on the immune response of white shrimp (*Litopenaeus vannamei*, Boone, 1931).

### Castaneira J.

Evaluation of the life cycle and pathology of the myxosporean *Chloromyxum* sp. in salmonids.

### Christofilopoulos L.

Investigating Atlantic salmon (*Salmo salar* L.) escapes from Scottish marine farm sites.

### Chubb H. M. A.

Aspects of the cod (*Gadus morhua*, L.) immune response to an experimental infection with *Lernaeocera branchialis* (L.)

### Covello J. M.

Molecular weight characterisation of Atlantic cod (*Gadus morhua* L.) IgM, and the specific antibody response elicited by immunisation with various antigens.

### Haberfield M. S.

Use of ELISA to detect pre-exposure to fish pathogens.

### Leguay E.

Pathology of *Argulus foliaceus* (Linnaeus) on *Oncorhynchus mykiss* (Walbaum).

### Leschen W. A.

Development of a case control study (for the identification of risk factors) for infectious pancreatic necrosis (IPN) in Scottish salmon farms.

### Lloyd R. G.

The use of polymerase chain reaction technology to detect aquatic *Mycobacterium* spp.

### Menanteau S.

Prevalence of lysogeny among diverse strains of luminous vibrios.

### Ross W. B.

A study of possible factors associated with mortality in migrating Atlantic salmon (*Salmo salar* L.) in a fish pass in north-west Ireland.

### Sirbopoulos G.

The effects of dietary palm oil on immune function parameters in rainbow trout (*Oncorhynchus mykiss*).

### Smith J. L.

The pathology of the crustacean parasite, *Lernaeocera branchialis* (Linnaeus, 1769) on its fish hosts.

## PhD 2002 - 2003

### Basso Mercado B.

Protein digestibility and proteinase inhibitors: tannic acid and gossypol, effects on growth performance and food utilisation of *Macrobrachium rosenbergii* (De Man, 1879).

### Berill I. K.

Environmental influences on growth, maturation and smoltification in Atlantic salmon parr, *Salmo salar*

### Carter P. K. L.

The impact of low concentrations of cadmium on host-monogenean interactions.

### Chara J. D.

Interactions between biodiversity and land use in low-order stream catchments of the Colombian Andes.

### Christofilogiannis P.

Use of antibiotics in Greek mariculture.

### Crichton C.

Responses of the freshwater snail, *Lymnaea peregra*, to pollutants as an indicator of ecological water quality.

### Del Campo Barquin L. M.

A bio-socio-economic simulation model for management of the red sea urchin fishery in Chile.

### Dixon T. J.

Molecular genetic studies of pollutant response in the European flounder, *Platichthys flesus* (L.)

### Felsing M.

An experimental approach to determining the fate of mariculture waste.

### Futter W.

Perception of light by rainbow trout (*Oncorhynchus mykiss* W.) and its role in development and maturation.

### Halfyard L. C.

A biochemical study of egg quality and first feeding diets in common wolfish (*Anarhichas lupus*) aquaculture.

### Hastings N.

Teleost fatty acyl desaturase genes: A comparative study.

### Jeng S. C.

Technological and economic adaptations in aquaculture development in Taiwan.

### Marshall L.

Dietary immunomodulation in salmonids, with particular reference to organic chromium.

### Retamales R. A.

A study of semi-intensive shrimp culture in Ecuador in relation to physical, chemical and biological conditions in the production ponds during El Nino and La Nina events (1996 and 1999).

### Riddell D.

Behavioural responses of an experimental aquatic food web

### Sayed S.

A comparison of immune responses and disease resistance in clonal lines of Nile tilapia *Oreochromis niloticus* L.

### Taparhudee W.

A technical, economic, and environmental assessment of intensive and closed cycle shrimp culture systems in Thailand

### Wayland M. T.

Studies on the biosystematics of species of the genus *Echinorhynchus* (Acanthocephala).

### Yuksel S.

Studies on the characterisation and detection of *Piscirickettsia salmonis*.

### Our first Sustainable Development

**PhD candidate** has just registered and will be part of a new collaborative research activity between Stirling, Bangladesh Agricultural University - Mymensingh, The WorldFish Center - Dhaka and the Universities of Sussex and Wales in the UK. Funded by the DFID-AFGRP the work is focusing on developing and promoting decentralised seed systems in Asia. Mr MM Haque, or Ripon as he is known, will be looking at the livelihood impacts on the poor of these approaches which have become established in the Northwest region of the country as part of a CARE project promoting rice-fish systems. The concept is spreading fast among farmers with little input from extension services once established and Ripon will assess the mechanisms by which a range of poorer people benefit and the likelihood that these benefits will be sustained.