



## ***Newsletter No. 12***

**May 2014**

Welcome to another newsletter.

Life carries on. We seem to have got on top of the amoeba situation, although they are still around. It seemed to be the turn of Norway to be badly affected last year.

There seems to be a lot of interest in fish medicine from veterinary students, and I had four last year. It is heartening to see such interest from future members of the profession, and the farm staff look forward to having young ladies on the farm!

### **Fish Veterinary Society meeting, 25<sup>th</sup> & 26<sup>th</sup> March.**

Fish Veterinary Society held their annual meeting at the Norton House Hotel near Edinburgh Airport on March 25<sup>th</sup> & 26<sup>th</sup> this year. Again, we had splendid weather (Fiona always seems to get us good weather!) and we had a varied agenda.

Jon Hlland from CEFAS started us off with an account of a rotenone treatment of the River Vefsna in Norway, as part of the Norwegian attempt to eradicate *Gyrodactylus salaris*. There was a “dry run” using rhodamine before rotenone was used at one part per million. After the treatment started, any floating fish were taken from the river and placed in sea cages (*G. salaris* does not survive in sea water). All the river, lakes, and along the creeks were treated, a massive job which required many tonnes of rotenone, as well as over 150 staff from agencies, groups angling clubs. 35 rivers have now been treated, but some are still infected.

Next, Martyn Jakeman, also from CEFAS, told us about a Cherry Fin Syndrome of Rainbow trout, a new condition which causes a swelling of the pectoral fin. Histologically, it is a histiocytoma, but they had not been able to find a cause yet.

Chris Mitchell then presented an investigation into the potential for a *Piscirickettsia salmonis* vaccine for prevention of Red Mark Syndrome. Alphaject Micro 2 was used to vaccinate Rainbow trout against *Piscirickettsia*, and Alphaject 2-2 was used as a control. The fish were then exposed to infection. This led to a discussion as to whether this was a trial under an Animal Test Certificate, or whether it was an experiment under Home Office legislation.

Chris also related an incident at a high level meeting attended by Ben North, where the Head of Public Health in England & Wales said that she had been told by her Norwegian counterpart that farmed salmon contained a lot of antibiotic residues. Ben stood up and said that not a lot of antibiotics were used in salmon, as vaccines were used. The official thought about this for a minute, then asked for a picture of vaccination of fish, so Pharmaq sent them one where the Crown Prince of Norway was vaccinating some fish! It is a bit depressing that such a high level official has such an erroneous view of fish farming, but there you go!

The first talk after lunch also prompted a lot of discussion. Paul Midtlyng presented a study on wound closure after an adipose fin clip, which was rapid. He also presented a new assessment scheme for farmed salmon welfare, based on a number of criteria, such as eye condition, proportion of aberrant fish etc. This was called Swim 2, and was felt to need more work before it was applicable in the farm. He quoted Marc Bracke as saying "Animal welfare is about how the animals perceive their own state, not how it happens to be perceived by us".

Dafydd Morris suggested he show us his holiday slides, but instead told us about treating with hydrogen peroxide after a Slice treatment. He found that there was better clearance seven or 12 days after the end of a Slice treatment, but not three days. There was also a significant difference at 1000 and 1400 PPM, but not 600 PPM.

After tea, we were still on the subject of lice. Vidar Aspehaug told us about a new sea lice resistance DNA marker. One is for organophosphate resistance, and lice are SS (sensitive), RS (intermediate) or RR (resistant). RR and RS have much better survival compared to SS after treatment. The pyrethroid marker is either sensitive or resistant. Both correlate well with field treatments.

Continuing on lice, Iain Berrill told us about sea lice management in Scotland. Every farm takes lice counts from five fish in five cages, and this goes into a national database. Last year, there was a National Treatment Strategy, which had significant benefits for lice, but results for Amoebic Gill Disease are more difficult to quantify. This year, there are more regional plans.

Our president, Jimmy Turnbull, took the stage next to tell us about a wellboat study carried out by one of his MSc students. He found that wellboats are well managed in general, but there are still plenty of things to sort out, such as disinfection, filtration or treatment of waste water, and disposing of large quantities of waste water.

We finished off with our Clinical Club. Matt Metselaar discussed the *Piscirickettsia* trial mentioned earlier. Gustavo Ramirez told us about his experimentally induced Francellosis in Tilapia, and Stephanie Grimmett had come all the way from Hereford to tell us about some interesting eye cases.

This completed the first day. Proceedings were followed by an excellent meal, where discussions raised during the day were no doubt aired further.

The second day started early with a session on laboratory fish. Gareth Readman presented his studies on chemotaxis in zebrafish, using a home made laminar flow tank. He found that of the anaesthetics he tested, quinaldine was the most aversive, and etomidate the least.

Paul Schroeder told us next about analgesia in experimental zebrafish. This used the affect of fin clips, and several analgesic compounds. There was a trend, but no overall effect on treatment effect, although low dose lidocaine may aid recovery.

After tea, Massimo Foa finished off this session with a discussion on health monitoring of zebrafish. Some of the diseases they encounter are *Pseudoloma neutrophilia*, *Mycobacteria* and Infectious Spleen & Kidney Necrosis Virus (ISKNV – another acronym for the fish disease list!). He also discussed pre- and post filtration sentinels.

This was followed by a discussion on the ornamental fish trade, which Keith Davenport stepped in to lead at very short notice after Chris Walster had to leave due to illness.

After being fortified with lunch, we were ready for the AGM. Keith Treves-Brown has stepped down after many years as our representative on the BVA. Fiona MacDonald is also stepping down as secretary, after many years, and Christine Quernal has been persuaded to take over. Willie is staying on as treasurer (meantime). There would also be a meetings committee.

Jimmy asked why we should not be a conference instead of a meeting.

Fiona reviewed her time as secretary, showing some pictures of past presidents. She also handed out prizes for the best attendees over the years. Marian McLoughlin and Chris Walster were first equal, followed by Willie Wildgoose. Fiona was presented with a Quaich (wide, shallow Scottish drinking bowl) for her time as secretary.

Willie gave the treasurer's report. Our bank balance is healthy.

The website is doing well, and receiving over 1,000 visitors a month.

John McArdle told us about ERM in Ireland. The main serotype encountered was 1 (Hagermann). Not all cases had the red mouth, but haemorrhages on the anterior skin were seen.

The final trip of the day was to Uganda with Nelly Isayagi. Most of the farms are small scale, and it was a case of giving diagnoses at a distance.

So, we had a good and varied programme, with plenty of discussion, as Jimmy said. There were seven sponsored students, which was good to see. But, there were some regulars who did not turn up, and no-one from Marine Scotland (where were you?). Never mind, only ten months to the next one!



Fiona is presented with a Quich by Jimmy.