



Update on developments in Aquatic Animal Health

Dr Olga Haenen

**Member OIE Aquatic Animal Health
Standards Commission**

Outline

1. Aquatic Animal Health Standards Commission (AAC)
2. Aquaculture & trends
3. Aquaculture Diseases in 2009-2010
4. Outcomes of Sept 2009 & Feb 2010 meeting of the AAC, as presented at the 78th General Session (2010)
5. Other work of the AAC
6. Aquatic Animal focal points
7. Working Plan of the AAC 2010/2011
8. Conclusions

Aquatic Animal Health Standards Commission Members (elected May 2009)



President:

- Dr Barry Hill



Vice President:

- Dr Ricardo Enriquez Sais



Secretary General:

- Dr Franck Berthe



Members:

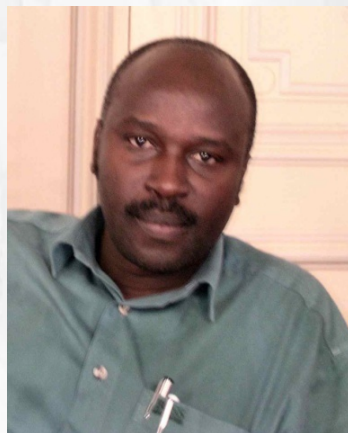
- Dr Olga Haenen
- Dr Huang Jie
- Dr Victor Manuel Vidal



The Commission is regularly assisted by:



Don Lightner
USA



Eli Katunguka-Rwakishaya
Uganda



Rohana Subasinghe
FAO, Rome

Expanded mandate

- Commission's mandate expanded to include:
 - aquatic animal production food safety
 - aquatic animal welfare

Adopted at 2009 OIE General Session

Dutch African catfish



Meetings

● Aquatic Animals Commission

- 28 September - 2 October 2009
- 9-13 March 2010
- 11-15 October 2010

● Ad hoc Groups



Crustacean Team of the *ad hoc* Group on the OIE List of Aquatic Animal Diseases (electronically) July - September 2009; December 2009 and February 2010.

Safety of Commodities Derived from Aquatic Animals: 24–26 August 2009; 1–3 February 2010 and August 2010 (electronically).

Responsible Use of Antimicrobials in Aquatic Animals: 19-21 January 2010; 4-6 October 2010

Disposal of Aquatic Animal Waste: 26-28 January 2010.

Aquatic Animal Health Surveillance: 8–10 February 2010; 27-29 July 2010

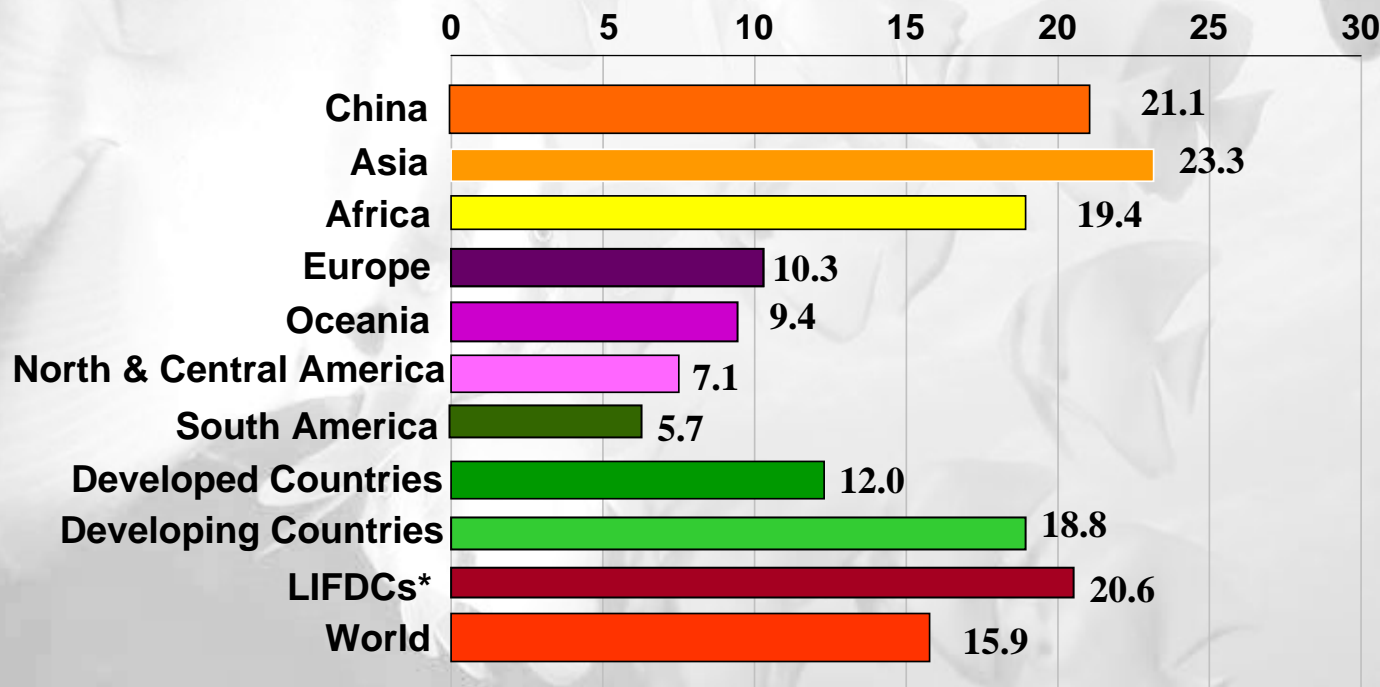
Aquaculture: global trends

(source: www.fao.org)

- Fastest growing food producing sector in the world: accounts for 50% of global fish production
- In 2007, 53 million tons of fish produced (US\$ 75 billion)
 - given the projected global population growth, an additional 37 million tons of aquatic food needed by 2050 to maintain current per capita consumption
- Trends: intensification (new systems) & diversification (new species) → sustainable & organic aquaculture
- Fish has always been a “global” commodity
- Fish trade is increasing: around € 100 billion in 2008

Contribution to human diet

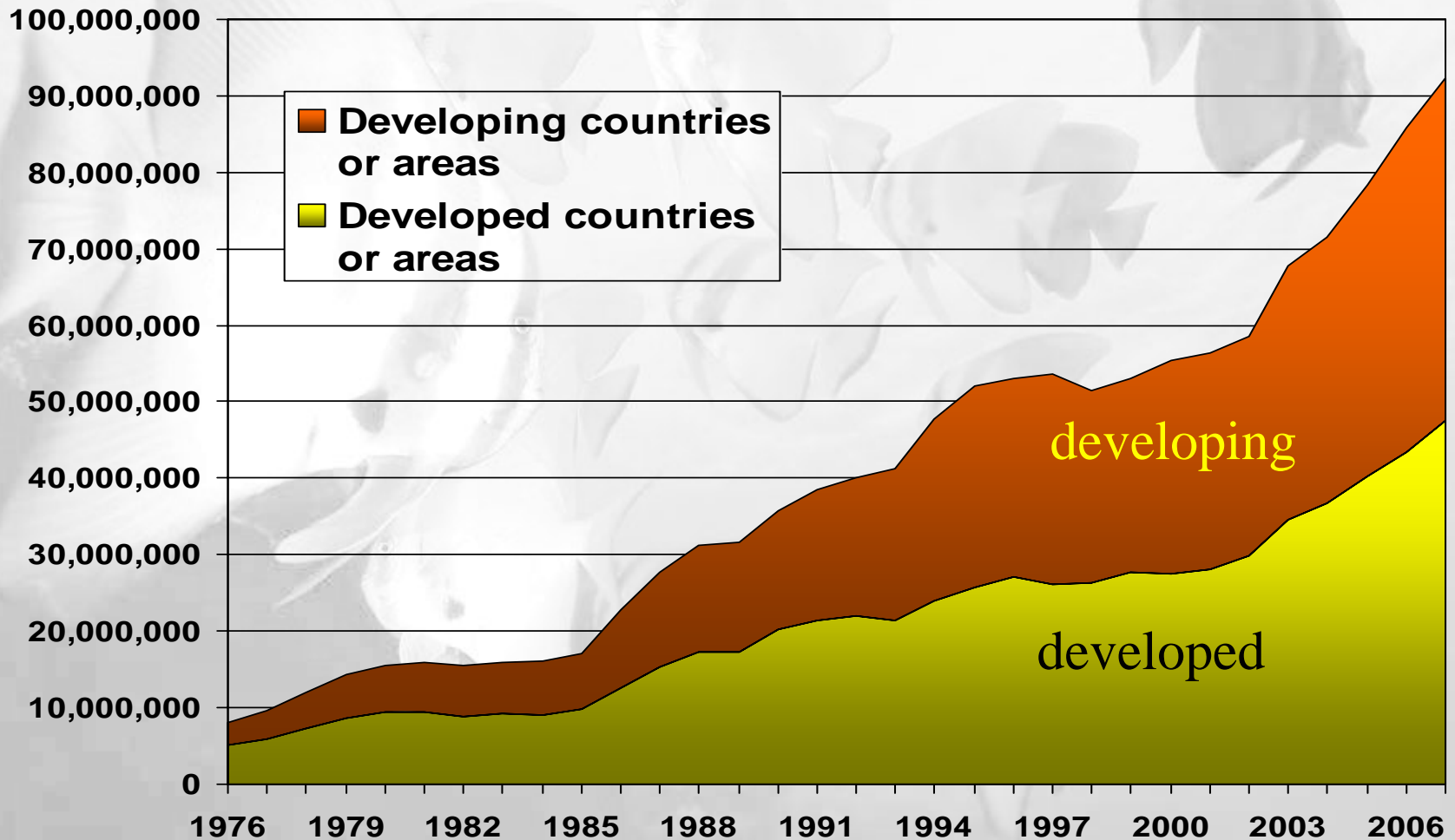
Fish as percentage of total animal protein intake



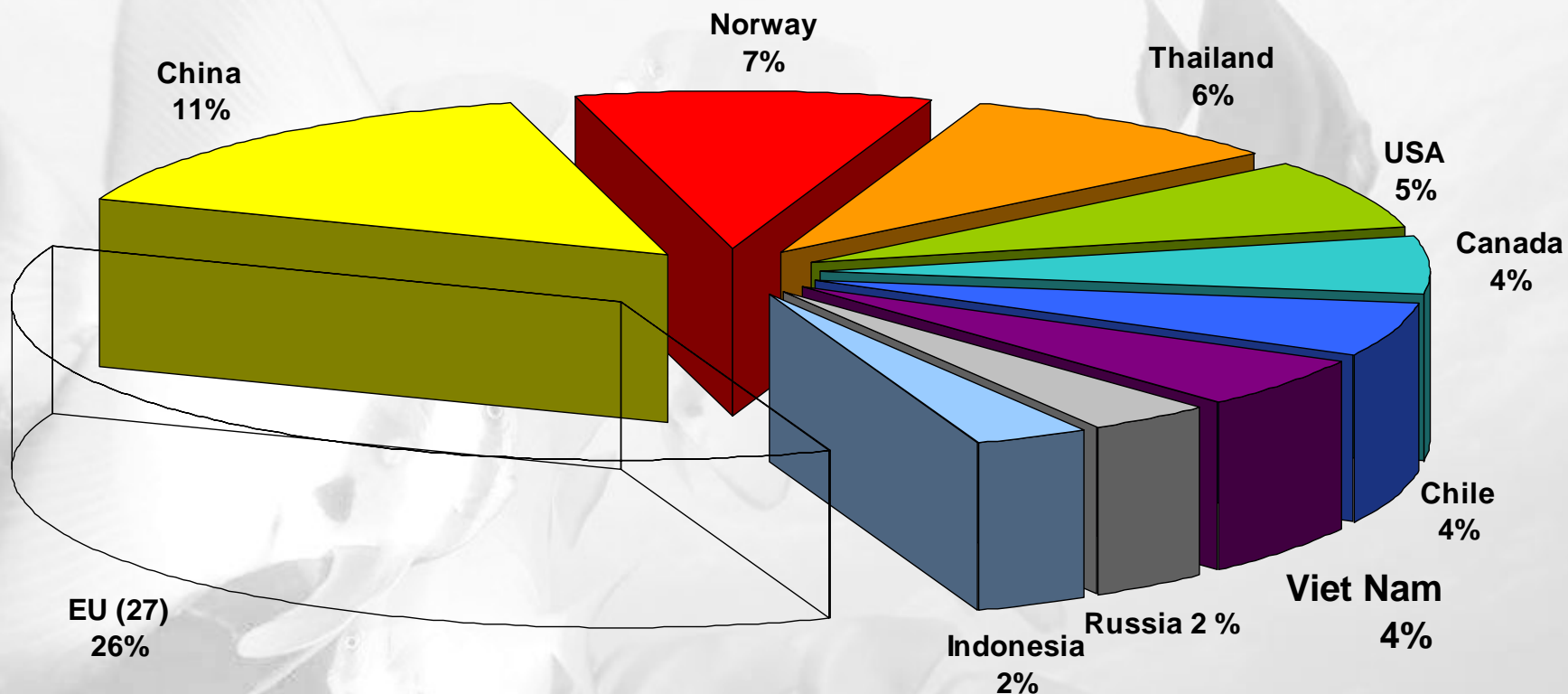
* including China

World fish trade: export value

- in 1000 US\$ (FAO) -



Main fish exporters (2007 value)



- EU imports in 2007 were about US\$ 41.8 bill., accounting for 43.5 % of the global volume
- Take home message: high volume of international trade in aquatic commodities

Trends in European Aquaculture

- Main species: salmon, trout, sea bass, sea bream, carp, eels, turbot and cod
- Main producers: Norway (1,25 billion € in 2000, 423,000 tons of fish), France, Italy, UK (each k€375/y), Spain (€212/y)
- Slow growth of aquaculture of especially new species; reduction of dependence on wild stocks; sustainable aquaculture



Source: www.aquamedia.org & FAO



Fish, shellfish, crustaceans, amphibians

*24th Conference of the OIE Regional Commission for Europe
Astana, Kazakhstan, 20-24 September 2010*

Diseases in Aquaculture: WORLD

2009 & 2010: WAHID

- **2009:** 8 items acutely notified; 2010 (1x or more)
- **2010:** 7 items (1x or more)
- 2009: 4x 1st occurrence of disease:
 - * Norway, June: *Bonamia ostreae* in wild flat oyster
 - * Brazil, Aug: IHHN in shrimp (*Litopenaeus vannamei*)
 - * Italy, October: Crayfish plague in European freshwater crayfish
 - * Canada, Dec: ISA in Atlantic salmon
- 2010: 3x 1st occurrence of disease:
 - * Sweden, Feb: *Marteilia refringens* in mussel (*Mytilus edulis*)
 - * Sweden, June: 3x *Batrachochytrium dendrobatidis* in European green toad
 - * Spain, July: 1x *Bonamia exitiosa* in flat oyster

Diseases in Aquaculture: WORLD 2009 : WAHID (continued)

- Chile: 35 ISA outbreaks in salmon
- Canada: 7 VHS outbreaks in salmonids
- Brunei Darussalam 52 and Mexico 57 IHNV outbreaks in crustaceans
- Mexico: 45 white spot outbreaks in crustaceans
- Canada 3x and USA 2x ranavirus in wild amphibians

Diseases in Aquaculture: WORLD 2009 & 2010: WAHID (continued)

- France, Ireland, UK: OsHV-1 emerging in 2009-2010
- Epizootic Ulcerative Syndrome outbreak in fish of Zambezi River, July 2009 (*source: PROMED*)
- Koi Herpes Virus spread further to Canada, Costa Rica and Slovenia; India and Guatemala became KHV-suspicious (*source: EPIZONE questionnaire*)



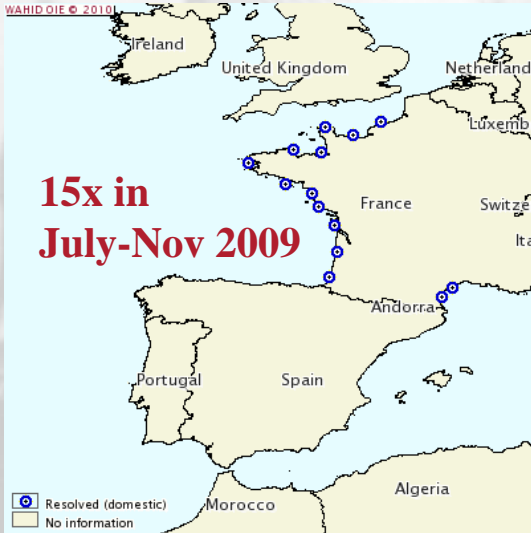
Koi with KHV

©CVI

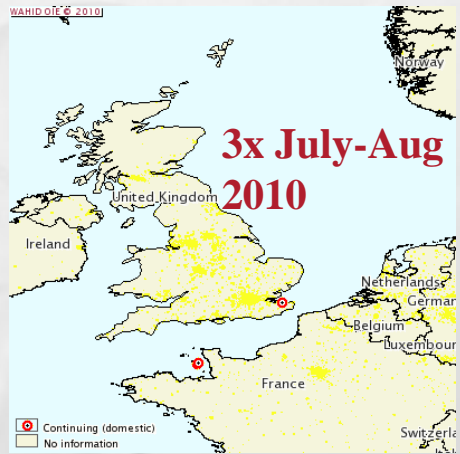
Diseases in Aquaculture: EUROPE 2009 & 2010: WAHID

- UK: 6 ISA outbreaks since Feb 2009, and 2 SVC outbreaks, stamped out
- Norway: 9 ISA outbreaks (endemic)
- France: July-Nov 2009 & April-now: OsHV-1 outbreaks
- UK & Ireland: summer 2010 OsHV-1 emerging
- Very worry some for Belgian and Dutch oyster cultures

Ostreid Herpesvirus OsHV-1 emerging disease in Europe

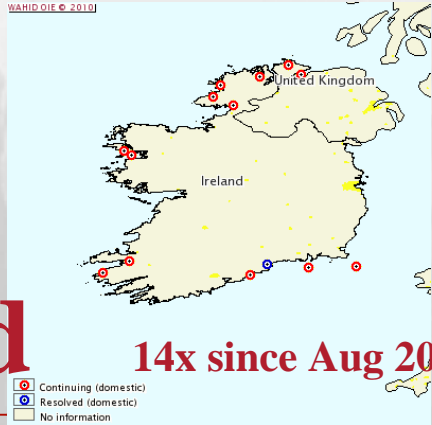


France



UK

Ireland



Obligations to all OIE Members

To report outbreaks of listed diseases to
WAHID (OIE) without delay:


Article 1.1.2. of the *Aquatic Code*:

- 1. Countries shall make available to other countries, through the OIE, whatever information is necessary to minimise the spread of aquatic animal diseases and their aetiological agents and to assist in achieving better world-wide control of these diseases.*

Diseases in Aquaculture: EUROPE 2009 & 2010

(source: www.crl-fish.eu)

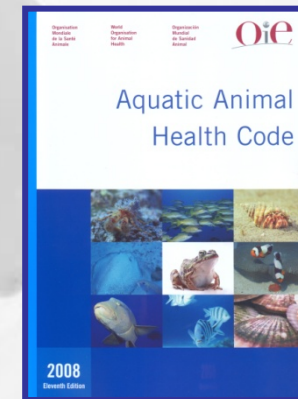
- VHS: no outbreaks in Denmark in 2009
- IHN & VHS outbreaks in endemic areas
- ISA in Shetland Islands, stamped out
- PD (alphavirus) outbreaks in salmon & trout (Norway, UK, Ireland)
- Koi Herpes Virus outbreaks in wild carp (Netherlands, Germany, UK, a.o.)

The background of the slide features a faded, grayscale image of a herd of cattle, with several heads and horns visible, looking towards the camera.

**Outcomes of the AAC
meetings
Sept 2009 & Feb 2010, as
presented at the
78th OIE General Session
2010**

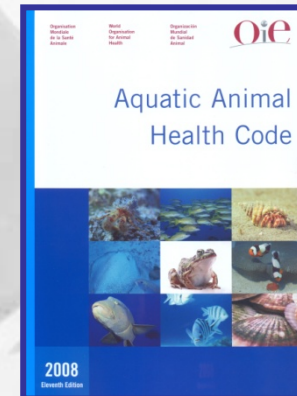
Aquatic Code

- Adoption of new texts (key changes):
 - Glossary
 - Diseases listed by the OIE (Ch 1.3.)
 - List necrotising hepatopancreatitis
 - Not to list milky haemolymph disease of spiny lobsters
 - Articles X.X.3; X.X.9; X.X.12. – for all disease specific chapters
 - Commodities listed for EHN; Taura syndrome; Infection with *Bonamia ostreae*
 - Criteria to assess safety of aquatic animal commodities (Ch 5.3.)
 - Application of compartmentalisation (Ch 4.X.) – new chapter

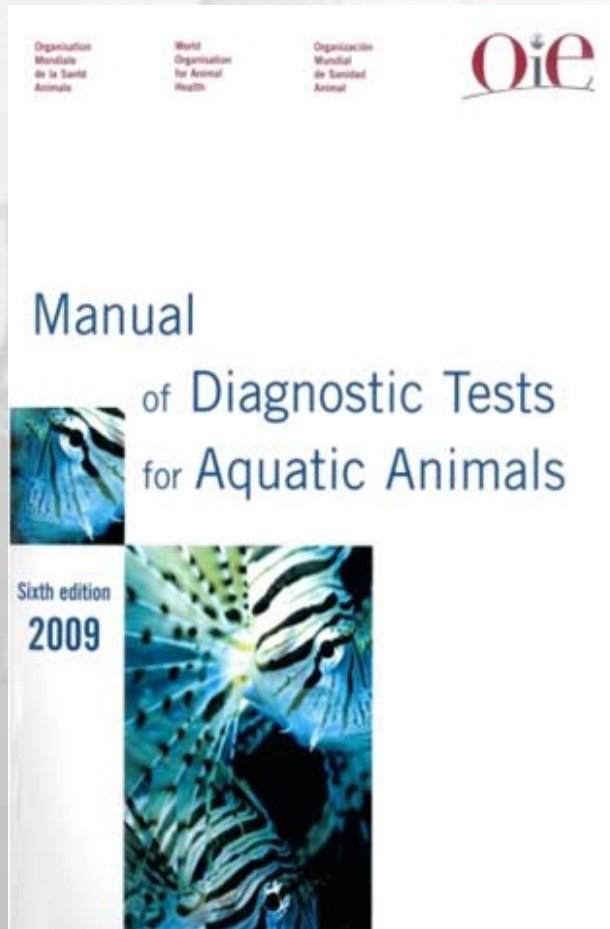


Aquatic Code

- New disease chapters adopted:
 - Necrotising hepatopancreatitis (Ch 9.4)
 - Abalone herpes-like virus (Ch 11.1)
 - Introduction to recommendations for controlling antimicrobial resistance (Ch 6.2)
 - Welfare aspects of the stunning and killing of farmed fish for human consumption (Ch 7.3)
 - Handling, disposal and treatment of aquatic animal waste (Ch 4.6)
 - New articles on disinfection of salmonid eggs (10.4.13, 10.5.13, 10.9.13)



Aquatic Manual - 6th edition, 2009



- Published in September 2009
- Major updates for all diseases
- Chapters only for listed diseases
- Amended format for future editions
- Next printed edition will be in 2012
- In the meantime, amendments can be made to the web version

Aquatic Manual

- Work has started for 7th Edition 2012
- Only listed diseases in Manual
- New references on non-susceptible species in mollusc disease chapters
- New chapter on infection with Abalone herpes-like virus

Other work - AAC

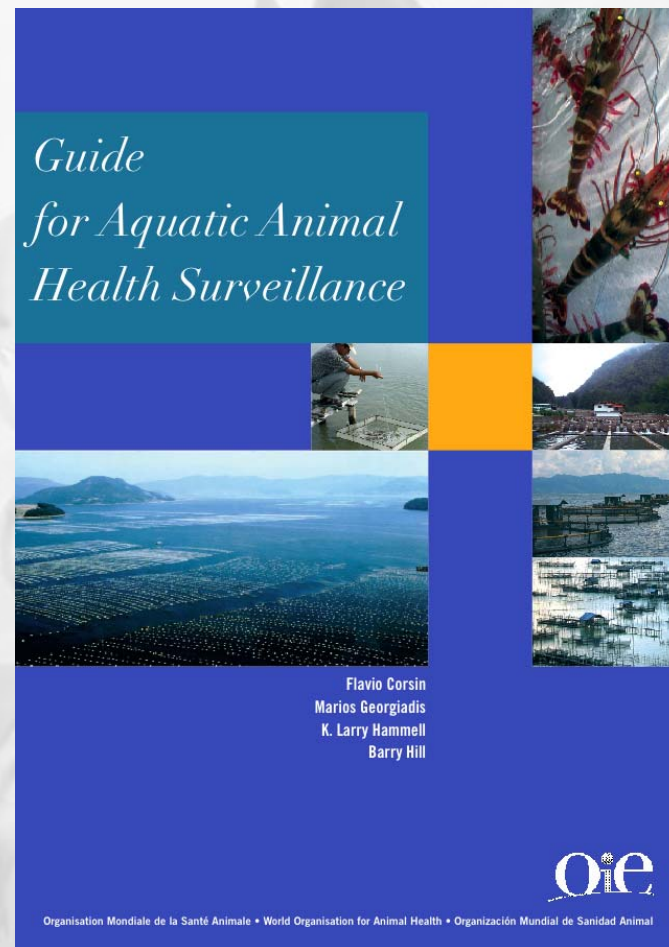
- Chinese Taipei approved as OIE Ref Lab for Abalone herpes-like virus;
- **New OIE Collaborating Centre for 'Epidemiology and Risk Assessment of Aquatic Animal Diseases' (Norway and Canada) approved;**
- First twinning project aquatic labs approved: Canada & Chile, on ISA; 2 more under development.

New publication

- **Guide for Aquatic Animal Health Surveillance**

- developed by the *ad hoc* Group on Aquatic animal health surveillance.

- published late 2009



A request

- The Commission strongly encourages Members to participate in the development of the OIE's international standards by submitting comments.

**Scottish landbased
Salmon farm**



Aquatic Animal Focal Points

As of April 2010, **119 Members** have nominated an Aquatic Animal Focal Point.

Members that have not already nominated a focal point are encouraged to do so.

Aquatic Animal Focal Points

OIE Regional Training Workshops:

Africa: Swakomund, Namibia, 15-19 June 2010

Middle East: Dubai, UAE, 27-29 September 2010

Europe: Dubrovnik, Croatia, 16-18 November 2010

Americas: Roatan, Honduras, 23-25 November 2010.

Asia, the Far East and Oceania: venue to be decided, 2011



OIE PVS evaluation of aquatic animal health services

*24th Conference of the OIE Regional Commission for Europe
Astana, Kazakhstan, 20-24 September 2010*

OIE PVS Evaluation

A pilot PVS evaluation of a Member's aquatic animal health services was conducted in November 2009.

On the basis of the experience gained, it is proposed to develop a parallel aquatic PVS Tool to that used for terrestrial animal health services.

OIE considers the strengthening of both aquatic animal health services and classical veterinary services as a global priority.

Members are encouraged to request PVS evaluations of their aquatic animal health services.

Working plan of the AAC for 2010/2011: *Aquatic Code*

- Ongoing review of the list of diseases
- Review emerging diseases
- Prepare text for disease chapters for gaining and regaining freedom for compartments
- Harmonise horizontal chapters with those in the *Terrestrial Code*
- Develop disease specific surveillance model chapters (1 fish, 1 mollusc, 1 crustacean)
- Identify commodities that can be considered safe for trade and be included in the *Aquatic Code*
- Develop chapters on antimicrobials in aquatic animals
- Prepare chapter on humane killing for disease control purposes
- Contribute to OIE work on antimicrobial resistance in the field of aquatic animals
- Develop a chapter on evaluation of Competent Authorities.

Working plan of the AAC for 2010/2011: continued

- Revise the template for disease-specific chapters for the *Aquatic Manual*
- Make presentations on the activities of the AAC at the conferences of the OIE Regional Commissions
- Be proactive in presenting the activities of the AAC at scientific conferences
- Contribute to the 2nd OIE Global Conference on 'Contribution of Aquatic Animal Health to Global Food Security' and the OIE Aquatic Animal Focal Point training workshops
- Make a discussion paper on zoonotic diseases of aquatic animals
- Keep the Commission's web pages up to date
- Consider new candidates for OIE Reference Laboratories for listed diseases
- Provide input into the PVS to ensure its applicability to the evaluation of aquatic animal health systems
- Contribute to FAO/OIE Regional Aquatic Biosecurity Framework Project for Africa

OIE Global Conference on Aquatic Animal Health

**“Aquatic Animal Health Programmes:
their benefits for global food security”**

Panama, 27-29th June 2011

Conclusions

- Aquaculture grows slowly, with more species, towards sustainable systems
- Diseases: in 2009 & 2010 some serious outbreaks, but still underreported
- Emerging disease: OsHV-1 in Europe
- Your input is essential!

Aquatic Animal Commission Home Page:

www.oie.int/aac/eng/en_fdc.htm

OIE website:

www.oie.int

Scottish trout farm



Aquatic Animal Health Standards Commission

World Organisation for Animal Health

Thank you for your attention

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Astana, Kazakhstan, 20-24 September 2010*