

Survey & Diagnosis of fish diseases in 2015

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of the National Reference Laboratories for Fish Diseases
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Survey & Diagnosis of listed fish diseases in the European Community 2015



An Annual questionnaire-
now reduced and changed:

- General data:** Number of farms and categorization only
- Epidemiological data:** Only number of outbreaks and increase/decrease in number of infected/severity
- Laboratory data, NRL and regional laboratories:** Only total number samples tested and samples tested positive for each disease

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General production data taken from
"European aquaculture production
report 2005-2014" (FIGIS data)



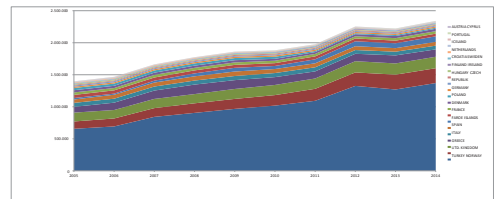
Prepared by the FEAP
secretariat August 2015

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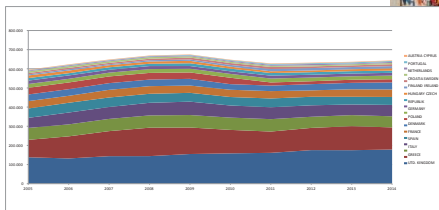
Development of Fish Farming in Europe (tons) 2005-2014



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Development of Fish Farming in the European Union (tons) 2005-2014

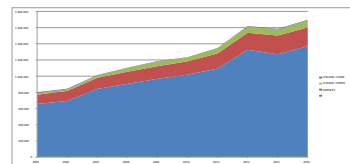


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Development of Fish Farming in non EU countries (tons) 2005-2014

Production (tons)	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Atlantic salmon	852,247	858,125	862,521	867,025	871,529	876,033	880,537	885,041	889,545	894,049
Trout	212,406	214,832	217,258	219,684	222,110	224,536	226,962	229,388	231,814	234,240
Rainbow trout	21,037	21,252	21,467	21,682	21,897	22,112	22,327	22,542	22,757	22,972
Common carp	0	0	0	0	0	0	0	0	0	0
Nile tilapia	0	0	0	0	0	0	0	0	0	0
European sea bass	0	0	0	0	0	0	0	0	0	0
Farmed Atlantic salmon	0	0	0	0	0	0	0	0	0	0
Farmed rainbow trout	0	0	0	0	0	0	0	0	0	0
Farmed common carp	0	0	0	0	0	0	0	0	0	0
Farmed Nile tilapia	0	0	0	0	0	0	0	0	0	0
Farmed European sea bass	0	0	0	0	0	0	0	0	0	0
Total	1,064,650	1,073,859	1,083,068	1,092,277	1,101,486	1,110,695	1,119,904	1,129,113	1,138,322	1,147,531



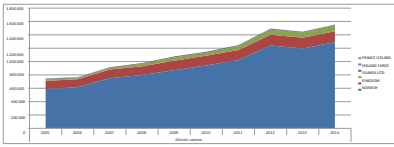
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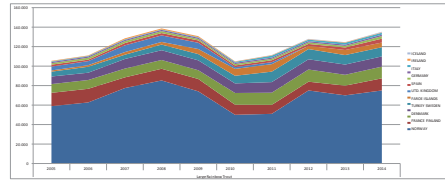
Atlantic salmon production (tons) 2005-2014
1.554.061 t



Country	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
UNITED KINGDOM	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000
FRANCE	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000
NET TOTAL	110,000	110,000	110,000	110,000	110,000	110,000	110,000	110,000	110,000	110,000



Large Rainbow Trout production 2005-2014
136.270 t.



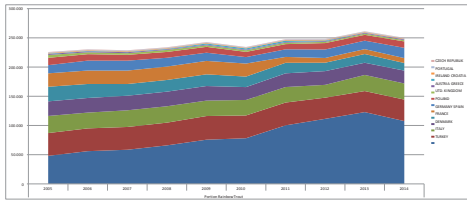
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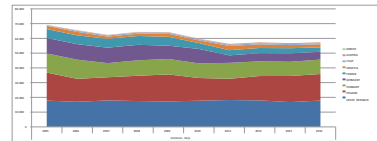
Portion Rainbow Trout production (tons) 2005-2014
250.013 t.



Common Carp production 2005-2014
57.370 t.



Country	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
UNITED KINGDOM	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000
FRANCE	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000
NET TOTAL	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000



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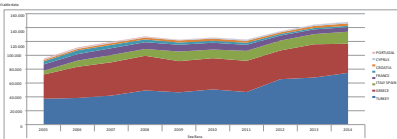
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Sea bass production (tons) 2005-2014
148.000 t



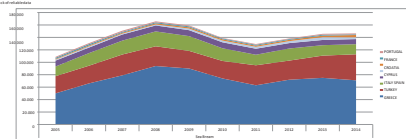
Country	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
UNITED KINGDOM	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000
FRANCE	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000
NET TOTAL	110,000	110,000	110,000	110,000	110,000	110,000	110,000	110,000	110,000	110,000



Sea bream production (tons) 2005-2014
146.467 t



Country	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
UNITED KINGDOM	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000
FRANCE	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000
NET TOTAL	110,000	110,000	110,000	110,000	110,000	110,000	110,000	110,000	110,000	110,000



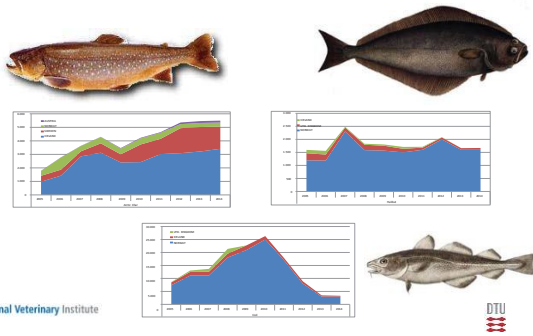
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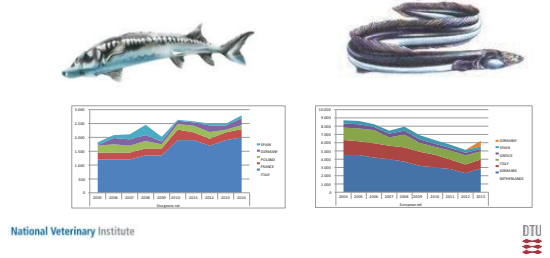
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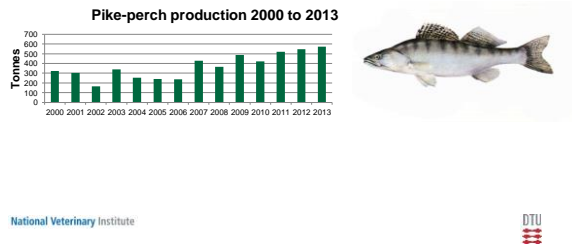
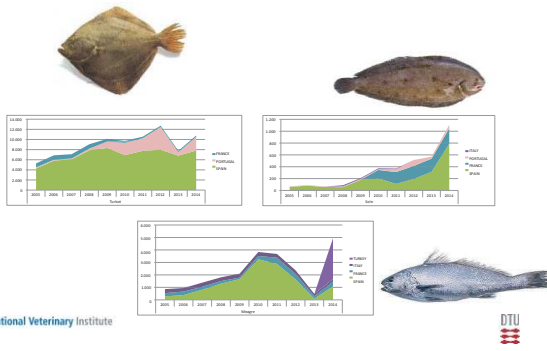
Arctic Char (5.496 t), Halibut (1.600 t) and Cod (3.310 t) production 2005-2014



Sturgeon (2.795 t) & Eel production (6.507 tons) 2005-2014



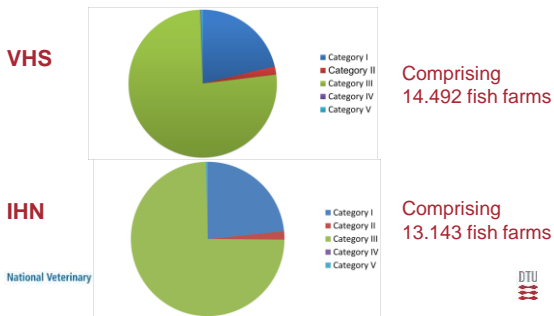
Turbot (10.787 t.), sole (1.107 t.) & meagre (5.021 t) production 2005-2014



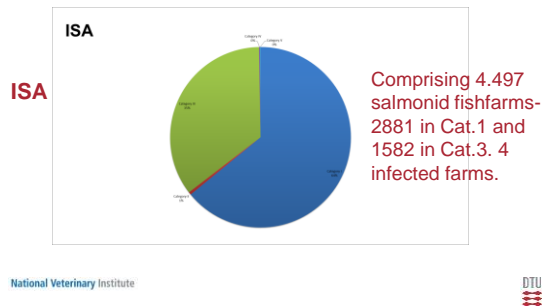
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Distribution of farms in zones and compartments according to category

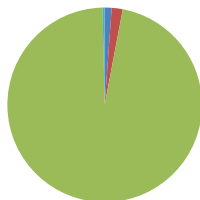


Distribution of farms in zones and compartments according to category



Distribution of farms in zones and compartments according to category

KHV



Comprising 12.130 cyprinid fishfarms- 11.725 in Cat.III and only 140 in cat.1.

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VHS in Europe 2015

- a moderate increase in the number of VHS infected farms in Austria, Belgium, Bavaria, Rhineland-Palatina, Saxony, and Thuringia,
- a decrease was observed in Czech Republic
- Outbreak in pike (*Esox lucius*) in Austria
- No other reports

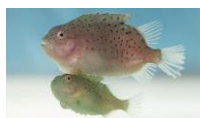


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VHSV in Lumpfish in Iceland

- October 2015
- OIE notification
- Wild caught broodstock
- Progeny
- Genotype IV
- Cleaner fish are exported and sold to many areas
- Risk for the salmon industry?
- Risk for the rainbow trout industry?



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VHS Ia in Iran



ISA in Europe 2015

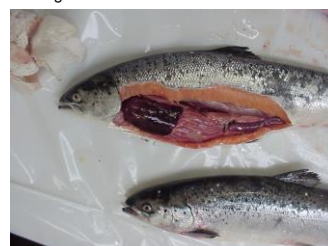
- In Norway increase in number of ISA affected farms.
- ISA was not seen outside Norway in 2015.
- Isavirus HPR0 no longer listed

IHN in Europe 2015

- Increase in number of infected farms and severity in Italy
- Increase in Bavaria, and Baden-Württemberg.
- Decrease in impact of IHN was observed in Baden-Württemberg.



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KHV in Europe 2015

- In Germany increases in number of infected farms in Bavaria, Lower Saxony, Rhineland-Palatina, and Saxony-Anhaltinia
- Decrease in Saxony.
- No other information on KHV in Europe were given



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Other fish diseases problems in Europe

- In rainbow trout: RTFS, ERM, and IPN but also, lactococcosis, BKD, PKD, ichthyophthiriasis.
- In Atlantic salmon: sea lice, PD, HSMI, CMS, AGD, and moritella (cold water disease).
- In cleaner fish it is primarily vibriosis and *A. salmonicida*
- In seabass and seabream it is primarily VER, Photobacteriosis, and Vibriosis.
- No information on carp



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Other specific findings and fish diseases problems in Europe



- IPN in Finland: detected in 25 fish farms. Mortalities were observed in a few cases
- PRV in France: 1 outbreak of Piscine Reovirus in a *Salmo trutta* farm. High mortality. High homology (98%) with PRV-Om from Norway
- VNN in France: wild grouper and farmed sea bass in Corsica
- PFRV – Pike fry rhabdovirus in farmed pike fry for the first time in Denmark

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Other specific findings and fish diseases problems in Europe



England and Wales

- Two skin diseases of unknown aetiology, **red mark syndrome (RMS)** and **puffy skin disease (PSD)**.
- emerged in the past 10 years
- cause low mortality
- considerable economic importance
- RMS reported in 41 % and PSD in 37% of rainbow trout farms.
- RMS can spontaneously resolve in older fish, but PSD tends to be more persistent

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Conclusion on S&D 2015

- **Stable production in EU**
- **Increased production in non-EU MS.**
- **Regain after decrease in 2013**
- **VHS increased number of affected farms**
- **VHS in lumpfish**
- **Severe VHS outbreaks in Iran**
- **No clinical VHS in Finland in the last 3 years!**
- **Several ISA outbreaks in Norway**
- **Skin distress a major problem in RT production**

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Report on S&D

- **This year, a complete report was produced and sent as pdf to all participants beforehand.**
- **The report and this presentation can be retrieved from our web site:**

WWW.EURL-Fish.EU

In "Surveillance and diagnosis"

National Veterinary Institute

Report on Survey and Diagnosis of Fish Diseases in Europe 2015



Report on Survey and Diagnosis of Fish Diseases in Europe 2015

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Thank you for all the significant work, efforts
and time used for compiling these data!!

Thank you for
your attention!

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