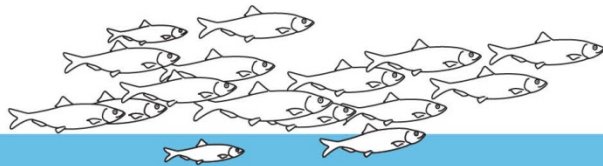


The Swedish eradication programmes for bacterial kidney disease (BKD) and infectious pancreatic necrosis virus (IPN) 2011

Swedish Board of Agriculture
4-5 October 2011

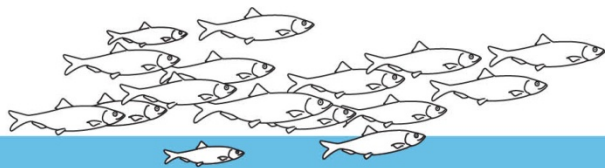


Eradication programmes in Sweden

- Bacterial Kidney Disease (BKD): Inland
- Infectious Pancreatic Necrosis (IPN): Coast
- Number of farms 2011 rearing susceptible species in areas with the additional guarantees:

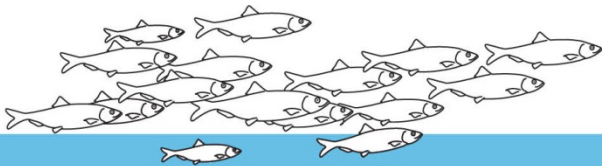
BKD: 134 farms

IPN: 153 farms (133 inland and 20 coastal)



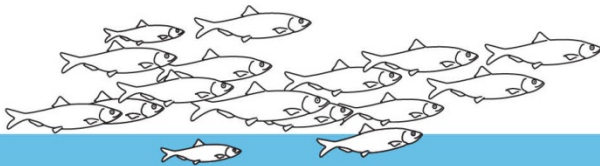
Surveillance of fish farms rearing susceptible species for BKD and IPN

- Passive surveillance, farmers and staff are obligated to notify the authorities in case of suspicion of any disease
- Targeted and active risk-based surveillance 1-4 times every year
- Targeted Surveillance on wild fish is performed every year at ten (10) locations at the coastal zone and three (3) locations in the inland zone.
- All wild females that are used for breeding are tested before they are used in production



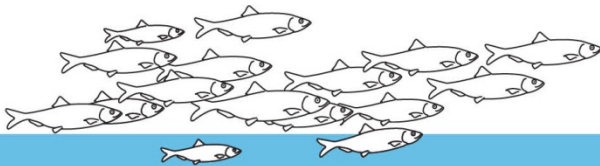
What happens if an outbreak of BKD or IPN occurs?

- Fish are sampled and sent for analysis. A positive diagnosis is immediately reported to the Competent Authority which always has an official on standby
- The farm is placed under restrictions by the Competent Authority
- An investigation of the source of the infection is initiated
- Diagnostic techniques:
 - ELISA (Enzyme-linked immunosorbent assay) (screening)
 - Realtime-PCR (for verifying)
 - Cell culturing (single cases)



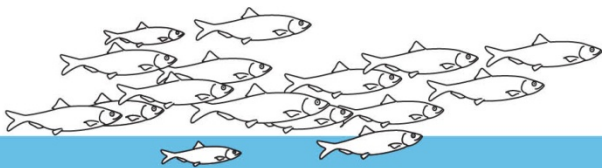
BKD 2011

- One positive diagnosis in June on farmed rainbow trout in north of Sweden the farm was immediately put under restrictions
- Contact tracing was performed and the farm from where the fish originated was also put under restrictions.



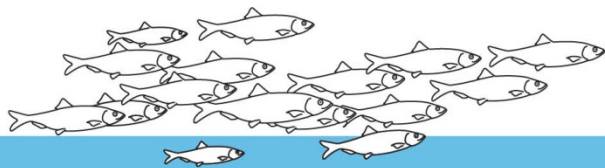
Measures in the BKD positive farm

- the group from where the BKD positive fish originated had been in the farm only 3 weeks and been kept separated from other groups
- all fish from the infected group was euthanized and all areas that could have been contaminated was sanitized.
- 60 fish from other groups were tested with ELISA and PCR with negative results
- Restrictions were lifted in August



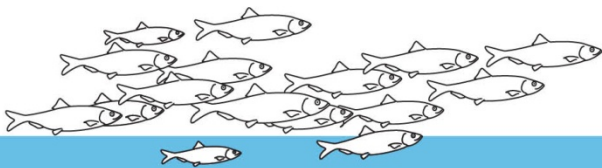
Measures in the contact farm

- 60 fish from other groups were tested with ELISA and PCR with negative results
- Restrictions were lifted in August
- The farm will be placed in a higher risk category and the BKD sampling from the farm expanded.
- The farm is recommended to test brood fish in connection to spawning.



IPN 2011

- Last reported case of IPN in farmed fish in Sweden was in 2007 and emanated from feral brood fish.
- The prevalence in wild fish is very low. One (1) positive case every 2nd year of about 2000-3000 sampled individuals/year
- A positive finding is immediately reported and the farm put under restrictions.
- A tracking of the origin of the infection will be performed.
- Veterinary fish health authorities will visit the farm and an sanitation plan will be produced.
- All infected and suspected infected fish will be “stamped-out”. Buildings, equipment, vehicles will be disinfected.



Thank you for your attention

