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Norwegian Veterinary Institute

GBAD
and the new
Norwegian Strategy on aquaculture

Edgar Brun, Norwegian Veterinary Institute

Examples of chronology of disease/pathogen emergence in aquaculture

1970s

Gyrodactylus (salmon)

EUS (many finfish)

1980s

MBV (shrimp)

LCDV (tilapia)

ISA (salmon)

IPNV (tilapia)

Sea lice (salmon)

WSSV, HPV, IHHNV, BP (shrimp)

NHP (shrimp)

Many bacterial, fungi, parasitic diseases affecting all phases of production (hatchery, nursery, grow-out). Vaccines available for some bacterial diseases

1990s

YHV, TSV (shrimp)

KHV (carps/koi carp)

Vibriosis: *Vibrio (harveyi, damsela, alginolyticus, vulnificus, penaeicida)* (shrimp)

2000

MoV, IMNV, CMNV, LSNV (shrimp)

AHPND (shrimp)

TiLV (tilapia)

EHP *Enterocytozoon hepatopenaei* (shrimp)

VNN (tilapia and marine finfish)

Parasites
Bacteria
Virus
Fungi

TiLV (tilapia)

Ref: FAO

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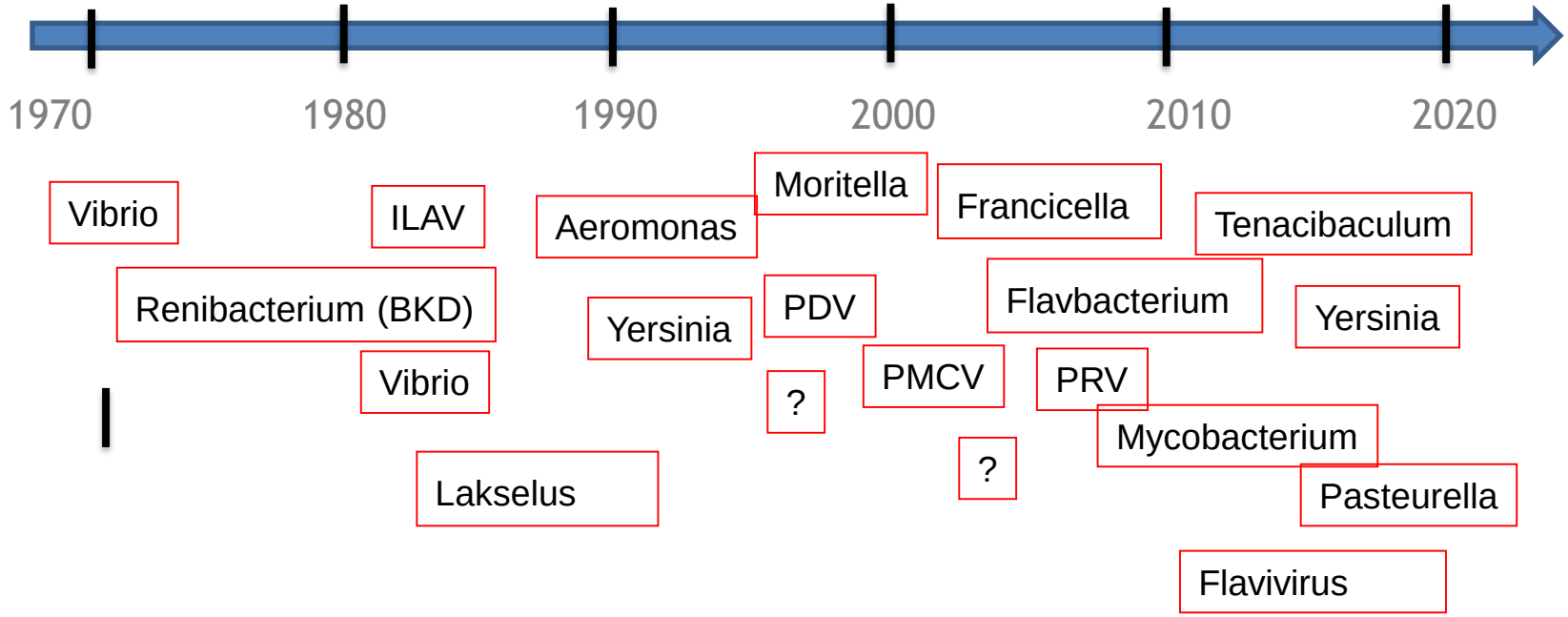
.... and in the Norwegian Aquaculture



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Adresseavisen NYHETSSTUDIO NYHETER SPORT KULTUR DEBATT UKEADRESSA

Pluss+

Nå har villaksen havnet på rødlista: – Den kan bli helt borte

Onsdag legger Artsdatabanken fram rødlista over truede arter. Villaks og villrein er blant de nye artene på årets liste.

Salmon is listed red in Norway
--- meaning; it can be disappear as a viable species from the Norwegian fauna

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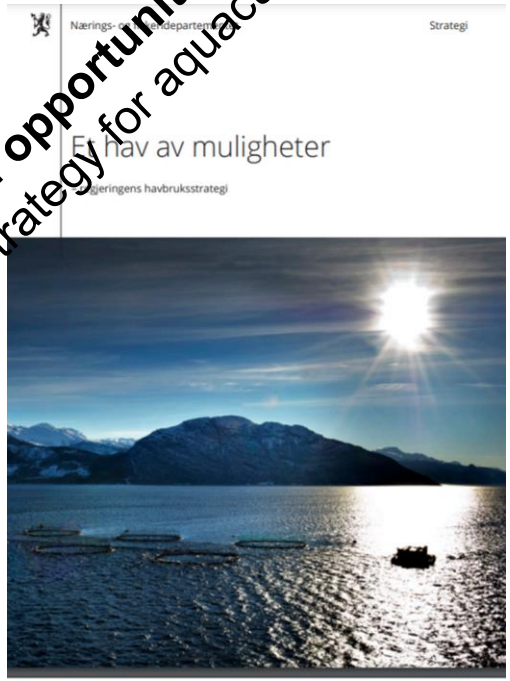
2021

An ocean of opportunities
National strategy for aquaculture



Political platform for our new government

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From the strategy plan

- There are big challenges related to health and welfare. These **challenges have not enough focus** in today's regulations.
- As a major aquaculture nation, Norway should be a pioneer on good fish health and welfare
- Reduced fish health and abnormal mortality increase the **footprint of aquaculture**. Resources invested in the fish are lost
- Research is needed to **reduce the environmental effect** of salmon lice and infectious diseases.

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From the strategy plan

- .. … is all about creative **sharing and use of data** for knowledge production, increased value of the industry, innovation and productivity to support a sustainable development of the industry and create efficient regulation systems.

- Science-authority-industry based collaboration is needed to develop **tailored measures to improve structure and biosecurity** and make sure all actors are taken into account when designing these measures.

- **Biosecurity is crucially important to reduce the burden of diseases**

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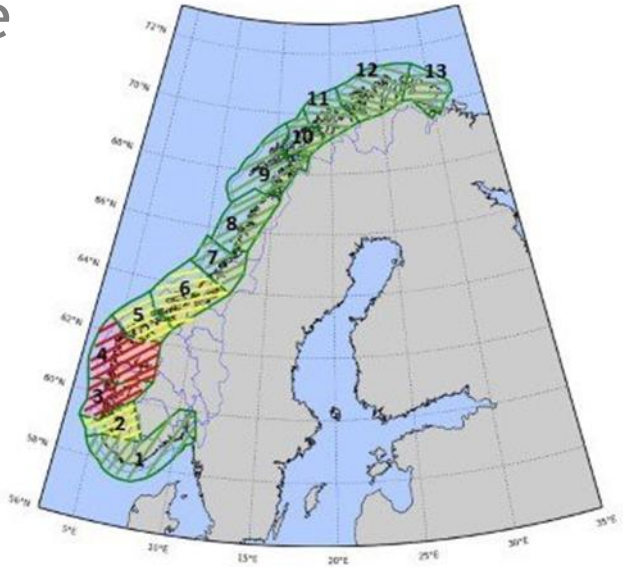
The new Political platform

.... more indicators are needed in the Traffic light system



- Industrialised farming of aquatic animals is the latest addition to our traditional livestock

  - Is an important part of animal food production chain
  - Diseases affects animals, local farmers, local communities, and society as such
  - Diseases affects the environment

- Need action in accordance with the importance and value of animals in society and efficiently allocate resources to disease control and key social, economic and environmental problems
  - GBAD is a tool to support a holistic, tailored action

Thank you for your attention