Aquatic Animal Welfare and Sustainability

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The Aquatic Life Institute

The Aquatic Life Institute

Founded in 2019 to address the gap in the global animal rights movement regarding aquatic animals.

We work tirelessly to reduce the suffering of aquatic animals exploited for food around the world through science based advocacy with corporations, governments and international institutions.

AQUATIC LIFE
INSTITUTE

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Animal Welfare and Sustainability

Animal Welfare and S ustainability

Social issues

Inequality, poverty, slave labour, food insecurity

Ethical issues

Fish feel pain and experience suffering

Environmental issues

Emissions, water and land resource use, etc

Our definition of welfare

Holistic approach that considers both positive and negative physical and psychological experiences.

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Benefits of Welfare in Sustainability

Water quality

High stocking density +
Inefficient feeding
Poor animal welfare

Toxic wastewater

Depletes oxygen

Algae blooms and dead zones

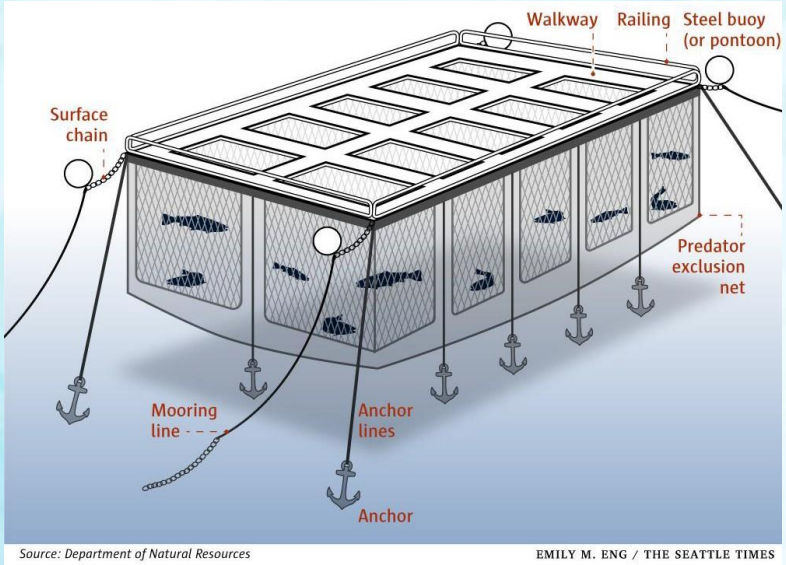
Recommendations for water quality

Adequate density and appropriate feeding

Careful zoning practices for aquaculture

Biosecurity

Net pen escapes



Net pen escapes

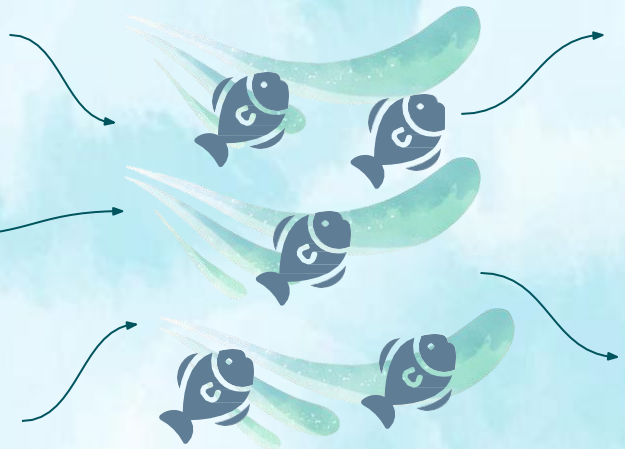
Poor animal welfare

Leads to aggressions

Poor infrastructure

Natural disasters

Storms, fires, tsunamis



Competition and displacement of native fish

Predation and environmental degradation

Recommendations for biosecurity

Caution against land-based aquaculture

Adequate animal welfare practices to reduce stress

Accountability for producers to prevent escapes

Disease control

Poor health, nutrition, rearing conditions

Compromised immune systems

Disease outbreaks

Pathogens spread beyond the farms

Damaged local fish populations and ecosystems

Recommendations for disease control

Appropriate animal welfare practices

Vaccination schemes with correct practices

Use of preventative measures (e.g sea skirts)

Staff training to monitor and recognize welfare indicators

Antimicrobial resistance

- Used to prevent or treat bacterial infections
- Poor welfare increases the need to use them
- Overuse causes concerns of antimicrobial resistance.

Recommendations for antimicrobial resistance

- Identify and treat isolated cases
- Prophylactic use of antibiotics should be phased out
- We do not oppose their use when it is needed to provide adequate care to a sick animal

Feed composition

⅓ to ½ of all wild fish caught are used for feed

Only 6.2% of global fish populations are underfished

93.7% are fished at the maximum before collapse

Aquaculture is the fastest growing food sector, producing 50% of consumed fish

Inadequate feeding results in poor welfare

Recommendations for feed composition

Use of alternative plant-based feeds where possible

Innovation to improve feed composition

Incentives for substitution of carnivorous species

We do not support the move towards insect-based feed

Climate change

Bottom trawling

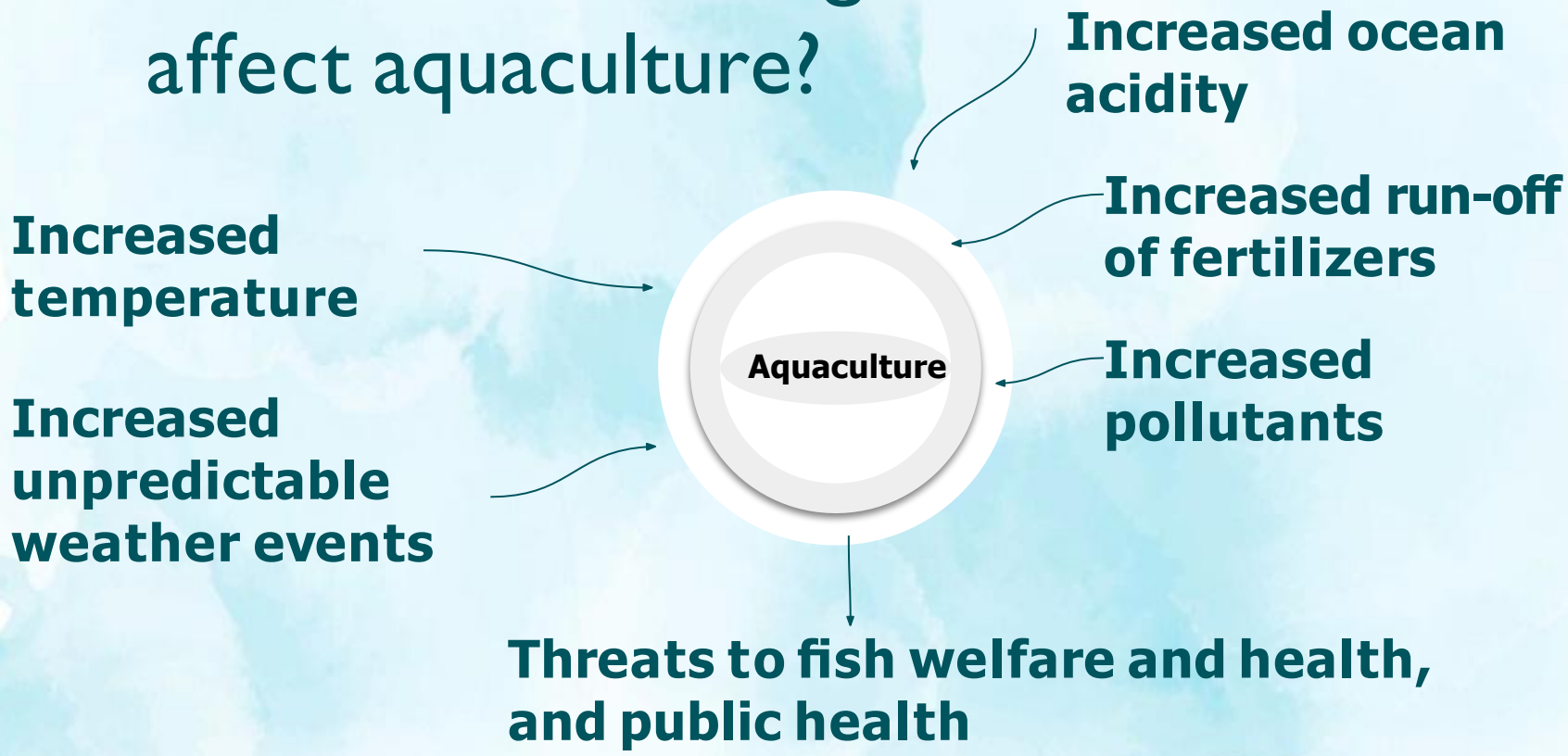
Releases huge amounts of carbon from seabed (Equivalent to aviation industry!)

Ocean acidification

Reduces ocean capacity to store carbon

Destruction of habitat, displacement of benthic communities

How will climate change affect aquaculture?



Recommendations for climate change

Ban borrow trawling

- Leads to highest amount of bycatch and discard rates, fish mortality, destruction of seabed habitats and carbon emissions

Where bans are not possible:

- Bottom long-lines or fish traps
- Modify trawl gear, reduce speed and duration, elevate nets to avoid damage to sea floor, use bycatch reduction devices
- Site-specific management measures

Recommendations for climate change

Regenerative ocean and seaweed farming

Alternative, plant-based feed

Establishment of marine protected area networks

Food security

- Reduce disease and mortality
- In the future, climate change will increase pressure on aquatic animals, reducing other stressors can increase survival rates
- Inefficient calorie use

Recommendations for food security

- Improve feed efficiency ratios to safeguard wild populations
- Use low trophic species
- Promote no-catch marine reserves to allow population recovery to feed local populations

Food safety

- Poor welfare: Bacteria, viruses, parasites, biotoxins
- Antimicrobial and chemical overuse
- During slaughter: Post-mortem bacterial growth

Recommendations for food safety

- High welfare standards for aquaculture and wild caught animals

Ecosystem health

Poor nutrition, high stress, agressions

Compromised water quality, aquatic pollution, attract wild fish and predators

Diseases can spread to local species

Escapes that can alter local biodiversity

Ecosystem loss

Clearing and conversion of mangroves

Fish and shrimp ponds

Mangroves help mitigate climate change acting as carbon sinks

Mangrove loss

Salinization and acidification aquifers and soils

Recommendations for ecosystem health

Welfare strategies to reduce stress levels

Anti-predation measures
(Lethal control methods not accepted, acoustic deterrence devices not permitted

Take into consideration other animals in the ecosystem like birds

Design fishing gear with welfare and environmental impacts in mind, and potential ocean debris

Trapping devices in effluent/drainage canals

Livelihoods

- 10% of global population rely on fisheries for employment, nutrition and human health.
- 50% of globally traded seafood comes from developing countries
- 39 million people directly employed by wild catch fisheries

Threats to communities

- Poor management and unsustainable fishing methods
- Overfishing, excessive bycatch, including endangered species
- Puts future job opportunities and families at risk
- Increases job insecurity and public health issues

WELFARE INTERVENTIONS CAN SUPPORT RATHER THAN COMPETE WITH POLICY INTERVENTIONS THAT PROTECT LIVELIHOODS

Human and labour rights

Human trafficking and human rights violations (especially for migrant workers)

Exposure to occupational hazards (death and injury)

Recommendations for livelihoods

Ratify ILO Convention No. 188 (Min. requirements)

Technological tools that allow workers to report onboard in real time

Adequate training including welfare indicators

Design catch share management systems according to community needs

Ban harmful fishing subsidies that encourage overfishing

Best practices to allow and policies that support coastal livelihoods

Conclusions

- **Increased consumer demand for seafood will lead to further strains from overfishing, climate change and unsustainable practices on our ecosystems**

- **Aquatic animal welfare practices play a key role in solving many sustainability issues related to the industry, and it should be an integral component of policies moving forward**

Thanks!

Do you have any questions?

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