

**ANIMALS & ENVIRONMENTALISM:
A LEGAL PERSPECTIVE IN THE
WAKE OF A GLOBAL PANDEMIC**



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University Law Review
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*Aquatic Animals in a Time of Political,
Social and Climate Change*

OVERVIEW



- Overview of challenges
- Additional pandemic-related challenges
- Animals as property
- Aquatic Animals - examples
- Some good news
- Moving forward

*My thanks to the other panelists, attendees,
Leah Nolan, and NIU*

Photo credits on file She/her pronouns

LAND ACKNOWLEDGEMENT



- I'm speaking from Portland, Oregon
- Important to acknowledge the ancestors of this place, to recognize that we are here because of the sacrifices forced upon them.
- At Lewis & Clark we honor the indigenous people on whose traditional and ancestral homelands we stand: the Multnomah, Kathlamet, Clackamas, Tumwater, Watlala bands of the Chinook, the Tualatin Kalapuya and many other indigenous nations of the Columbia River.
- In remembering these communities, we honor their legacy, their lives, and their descendants.
- Land acknowledgements can be fraught, but are important to note.

We can learn much about respectful relationships with animals and the planet from these historical and present-day communities.



SOME CHALLENGES

POLITICAL CLIMATE CHANGE



POLITICAL CHANGES

Trump Administration

- Undermining the Rule of Law
 - Role of courts, police, legislatures, military
- De-regulation as a goal
 - Trump administration reversing 100 environmental and animal regulations, attempted more
- Undermining & attacking journalism
- Hollowing out agency expertise and reducing staff
- Undermining public confidence in science, experts, and facts
 - Ignoring, side-lining, refuting government scientists
- Changing rules in the midst of decision-making
- Taking more direction from corporate interests
- Self-dealing to enrich government officials & families






POLITICAL DE-STABILIZATION

- Continuity & consistency crucial in good governance
 - For domestic and international relations
- Stable societies are good for everyone
 - Except those who profit from instability
- Institutions may be flawed, but important
 - Critical in times of crisis
- Animal & Environmental Protection doesn't work if you can turn it on and off at a whim
- Regardless of political party, stability, consistency, predictability, transparency – all important goals
 - Process of governing can be as important as outcome

Political Instability Impacts Our Work & Advocacy



Even things that don't initially seem connected to our work



ENVIRONMENTAL CLIMATE CHANGE



HISTORIC ENVIRONMENTAL DEVASTATION

Climate Crisis	Government Contribution
<ul style="list-style-type: none">• Wildfires• Hurricanes• Flooding• Monsoons• Drought• Species extinction• Snow & Ice	<ul style="list-style-type: none">• De-Regulation & inaction• Removal of protections• Reducing role of federal government as agent of environmental protection• Role on world stage• National and international concerns<ul style="list-style-type: none">• Release of Fukushima water



RESULTING PROBLEMS



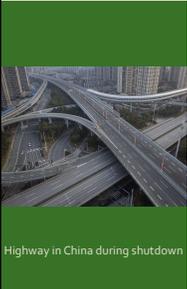
Environmental Damage Impacts Our Work & Advocacy

In unforeseen ways



ADDITIONAL PANDEMIC-RELATED CHALLENGES





Highway in China during shutdown

COVID-19 IMPACTS



Used PPE awaiting incineration



Covid-19 Challenges

WE'RE TEMPORARILY STAGNANT

- Elements of Political & Environmental Climate Change
 - Increased challenges:
 - Educational, Health, Safety, Economics
 - New challenges to the Rule of Law
 - Increased animal and environmental challenges
 - Opportunity to undo environmental and animal protections
 - U.S. EPA temporary restriction of Enforcement and Compliance Assurance Program
 - Less revenue, regulation, & enforcement of protection measures
 - Temporary benefits (less pollution, better breeding conditions) offset by new problems
 - Increased use of single-use plastics for safety
 - Search for vaccine could kill hundreds of thousands of sharks
 - Shark squalene (oil) alternatives exist (between 63-273 million killed annually – 2.7 million for cosmetic use of this oil)



ANIMALS AS PROPERTY



ANIMALS AS LEGAL PROPERTY

- Animals are legally classified as property
- Some jurisdictions have recognized animals are sentient, but still property
- Many global efforts under way to improve legal status
 - Focus on mammals rather than aquatic animals
- Need to acknowledge new science related to animal capacities

Animals
As
Property



- Animals are all deemed "owned"
 - By individuals and corporations as private property, or
 - By governments - wild animals
- "Ownership" does not always require responsible care
 - Owners have the ability to regulate all facets of animals' lives
 - Owners not always required to protect them from harm
 - Permissible to inflict harm – research, food production, etc.
- Animals are not seen as self-owning
 - Similar problems with children – guardians to assist
 - Other disfavored human populations
- Animals are seen as:
 - Plentiful resource
 - Designed to be used
 - Useful/valuable only for human ends or enjoyment

Animals Not Seen As Valuable For Themselves



- Law does not know how to attribute value to animals without human benefit
- Hard to value human lives
- No value = no protection
- Approach leads to abuse, neglect, cruelty, extinction
- Law also lacks metric to value the natural world

- Food
- Research Subjects
- Pets/Companions
- Clothing
- Workers
- Entertainment
- Jewelry
- Medicine
- Decoration
- Education
- Pests
- Environmental elements

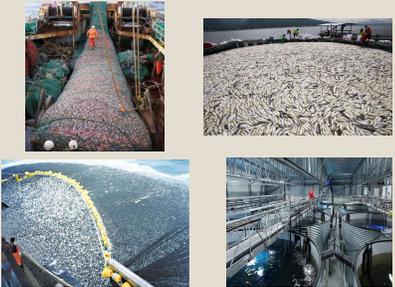
Aquatic Animal Example



FISHING & AQUACULTURE

POLITICAL AND ENVIRONMENTAL CLIMATE CHANGE

Fishing and Aquaculture



NUMBERS

2020 FAO
Report
2018 Data

- 96.4 million - *capture*
 - 82.1 million tons of aquatic animals - *aquaculture*
 - 51.3 million tons (62.5%) inland aquaculture
 - 32.4 million tons of aquatic algae
 - 26,000 tons of ornamental seashells and pearls
 - Up to over 1-3 trillion finfish a year
- From 1990-2018
 - 14% rise in capture fisheries production
 - 527% rise in aquaculture production
 - 122% rise in food fish consumption
 - Decrease in fish stocks within sustainable levels
 - From 90% in 1990 to 65.8% in 2017
- IUU (illegal, unreported, unregulated) fishing annual estimates
 - 26 million tons of fish
 - \$23 billion dollars



FISHING





FISHING
Environmental Impacts



- Wild caught fishing continuing in overfished areas
 - For human food
 - To support aquaculture industry
 - Insufficiently taking climate change into account when setting fishing quotas
- Climate change impacts pushing species to the brink
 - Higher water temperatures
 - Less food available
 - Movement affected – impacts food sources
- Pollution impacts – plastic, oil, runoff, other wastes
- Oil & gas production hastens climate change, exploration worsens impact on marine life and ecosystems
- Impact from wildfires incalculable (habitat and animal loss, pollution, etc.)
- More stress and less resiliency = harder for ecosystem to handle new crises

FISHING IMPACTS



- Sea lions to be killed to save endangered salmon and steelhead
 - Not reducing sports fishing take or commercial take
 - Not fully honoring treaty rights of tribes
 - Management policy flawed – pitting vulnerable species against each other
- 5 year closure of Apalachicola Oyster Fishery – too few oysters
- U.S Essential Fish Habitats
 - 800 million acres of habitat, and 1,000 federally managed species
 - No special management compared with other marine or river habitats
 - Only some areas protected – 2/3rds of that only minimal protection that doesn't help (minor modifications to fishing gear)
 - Latitude given to fisheries management councils – protecting areas usually only after courts mandate it
- Sometimes hard to know source of problem – dead zone in the Gulf of Mexico killing shellfish industry
 - Could be pollution, increased temperatures, and/or fertilizer from farms
 - Dead zone the size of Connecticut and Delaware – 6,700 square miles
 - June, 2020 – \$58 million in federal relief to Louisiana fishermen, seafood processors and aquaculture businesses

FISHING
Covid-19 Impacts



- Reduced regulation
- Reduced enforcement
 - Increased illegal fishing
 - Increased trade
 - Fewer resources to check trade at borders
- Increased production in some areas
- Fewer environmental impact studies
- Pause in conservation efforts
- Waste of animals captured who couldn't come to shore with lockdowns
- Government purchasing seafood to help businesses
 - Not doing that for all businesses

FISHING Political Impacts



- Former President Trump's executive order supporting fishing and lobster industries
 - "Identify and remove unnecessary regulatory barriers restricting American fisherman and aquaculture producers"
 - Will further corporate consolidation
 - Hurt local fishing communities
 - Increase public health risks
 - Does offer guidelines to combat illegal, unreported, and unregulated fishing
 - Does nothing to protect animal welfare
- Former President Trump's executive order Opening up marine sanctuary to industry
 - Likely illegal action
 - Undermining purpose of protection
 - Protection actually helps industry – increase stocks and spreads access more evenly

AQUACULTURE

- 527% increase in production from 1990-2018
- In 2018 people consumed twice as much fish as in the 1960's
- Fish sales - \$4.01 billion in 2018, more than half from aquaculture



AQUACULTURE Legal & Political Impacts



- NOAA approved sites in Gulf of Mexico and Southern California
 - 9th Circuit said no authority under Magnuson-Stevens Act to regulate offshore aquaculture – aquaculture is not fishing
- Trump administration's executive orders supporting aquaculture development
 - Trying to avoid regulations and overcome adverse court ruling
 - More funding for development - pushing more open ocean and land-based systems
 - Increase factory farms with all the negative outcomes
 - Disease, parasites, pollution, high mortality rates, mass escapes, significant animal suffering
- No welfare or humane treatment requirements
- AQUA Act – to support aquaculture development – not passed
- 2020 Dietary guidelines committee urges increased seafood consumption
- Washington state restricting ocean aquaculture
- Trade wars - USDA providing \$230 million to support seafood industry and fisherfolks impacted by retaliatory tariffs
- Not protecting indigenous fishers and aquaculturists

AQUACULTURE

Covid-19 Impacts



- PPP loans for industry
 - Not getting to smaller businesses well
- Government purchasing seafood to help businesses
 - Not doing that for all businesses
- Increased risk of disease transmission
 - Not enough PPE for food service industry workers, OSHA violations
- Alaska restrictions on seasonal workers
- As of February – over 2,000 workers infected with Covid-19
 - Mortality numbers not clear
 - No indication seafood industry workers fully included in counts
- USDA stopped collecting farm wage data
 - Workers worried about significant wage cuts below minimum wage
 - That order expired and counts should continue now

ECOSYSTEM & CONSUMER HARM



- Pollution from aquaculture affects wild animals, fisheries
 - Pesticides, Antibiotics, Pharmaceuticals
 - Fish waste
 - Copper sulfate to keep algae off nets
 - Dry pellet feed
- Most wild-caught fish have some contamination
- More than 50% of U.S. catfish contaminated with dioxin
- 50% of farmed cod are deformed
- Farmed salmon has highest toxic load of any food tested
- Humans living near fish farms have higher incidence of disease related to water pollution
- It takes 2-10 pounds of wild caught fish feed for every pound of farmed salmon
- Fishing to support aquaculture
 - Incidence of slavery and brutal treatment of workers
 - Taking away fish and other sea life small communities and businesses rely on

AQUACULTURE

Environmental Impacts



- Atlantic Sapphire problems – 1st large scale, land-based salmon co.
 - "Emergency harvest" at Florida farm
 - 200,000 fish (62%) - 400 tons – June 2020
 - 500,000 salmon "lost" – March 2021
 - 3 workers rescued from tanks, hospitalized – April 2021
 - Company hopes to produce 100,000 tons annually by 2026
 - Danish company has issues there too
- Waste from facilities piped into oceans – including salmon blood
- Estimates – costs 12 times as much to raise farmed salmon indoors
- No seat at the table for organic farmers in climate conversations at federal level
- False advertising lawsuits
 - Claims of sustainable salmon
 - Claims of salmon "from Maine"

AQUACULTURE

Environmental Impacts



- Sea Lice
 - Considered largest animal biomass in the world
 - Found broadly across the globe
 - Eat blood, mucus, skin
- In aquaculture facilities
 - Majority of animals impacted
 - Pesticides and other responses
 - Use of cleaner wrasse fish to eat the lice
 - Confined and used for pest control
- In the Wild
 - Wild salmon 73 times more likely to suffer lethal sea lice in waters near sea pens or facilities than those not near
 - One fish farm can increase incidence of salmon sea lice infestations up to 40 miles away

AQUACULTURE

International Impacts

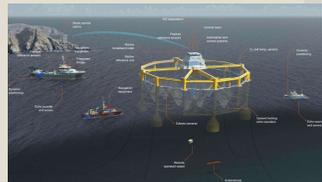


- Cleaner fish used to eat sea lice off farmed salmon
 - Questions about efficacy and welfare
 - 28,000 died in two separate occasions during and post transfer to facilities (Norway)
 - Cleaner fish have passed the self-awareness test
- Impact on First Nations ignored or downplayed
 - British Columbia leaders call for end to net pen salmon farming
 - Sea lice infestation destroying wild salmon stocks
 - 35% of farmed salmon exceed federal sea lice limits
 - 95% of sampled juvenile salmon migrating through Discovery Island were infected
 - Cross-jurisdictional impact – Canadian pens on Alaskan fisheries
- Ending marine farming faster solution than other measures (addressing climate change, overfishing, sediment from industrial forestry, natural disasters, introduction of pathogens)
- More funding and capital investment - from governments and private equity

AQUACULTURE

International

- Ocean Farm 1 – world's first offshore deep-sea fish farm
- 3 miles of Norway coast – 2017
- 250,000 cubic meters of habitat
- 3 million salmon – 16,000 tons – annually
- 2nd escape – 16,000 salmon – 2018
- Two 10,000 ton "unit" cycles completed – March 2021



AQUACULTURE IMPACTS WILD FISH

Factory Farms
cause wildlife
reduction

- Taking wild fish to feed farmed fish threatening marine ecosystems
- 2019 USFWS issued new BiOp allowing freshwater diversion that will likely make endangered delta smelt extinct – finding “no jeopardy” because hatcheries can supplement the population
 - 2008 finding that action would likely result in extinction
 - Hatcheries replacement didn’t work with Columbia Basin salmon
 - Hatchery fish make up 80% of salmon in the river
 - But total run has collapsed to less than 5% of historic numbers
 - Allowed folks to ignore need for habitat protection
 - Money, time and attention diverted to hatcheries as a failed solution
 - No likely success because no smelt yet released, so no survival data
 - Release not even allowed right now



AQUACULTURE IMPACTS WILD FISH

Fish Stocking

- 35-150 billion fish are raised in captivity to be released in the wild to:
 - Increase commercial fishing stocks
 - Increase sport fishing stocks
 - Restore population of threatened or endangered species - remediate environmental damage
- Up to 1 billion farmed baitfish in the U.S. annually
- Compare numbers
 - 75 billion terrestrial animals slaughtered for food (2017)
 - 40-160 billion Farmed fish slaughtered
- 3.6 billion finfish in U.S. in 2013
 - 1.25 billion shellfish - oysters and clams
- No welfare regulations, lawsuits, guidance



SOME POSITIVE IMPACTS

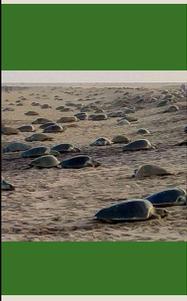
NEED FOR HOPE &
RESILIENCY





HUMAN IMPACT CAN ALSO BE POSITIVE

- Record number of turtles hatched
- Talequah gave birth
 - And another birth in same pod!
- Dutch mink farming ends early
 - Poland, Israel, France ending soon
 - Companies ending use
 - (1 million killed in Denmark)
- More elephants born than usual
- Plant-based food sales rising
- Maryland's polystyrene foam ban goes into effect
- Successful lawsuits to protect animals and environment



MORE POSITIVE NEWS

- 70 countries sign "Pledge for Nature" to reverse biodiversity loss by 2030
- U.S. House passed clean energy and transportation bill
- Poland will end coal mining
- Legislation expanding local meat processing options
- Florida shark fin import/export ban signed
- Aquaponics Assn. doesn't support de-regulation of marine fishing
- Atlantic States Marine Fisheries Commission to adopt catch limits for menhaden that take into account needs of predators and broader health of the environment
 - 8 years ago no catch limit
 - Catch was billions of pounds annually



MORE POSITIVE NEWS

- Quieter oceans give temporary reprieve to whales and other animals
 - Improves communication and hunting
 - Reduces stress
 - ECHO program – 82% of ships slowed down in critical areas in 2019 – get credits for retrofitting ships to reduce noise
- New Zealand will consider pain & distress caused by lobster slaughter methods complaint
- Polluter pays extended to manufacturers of fishing nets so that companies, not fishing crews, pay costs of nets lost at sea
- Whale Safe – detection system to help avoid collisions – used on California
- Courts in India and Pakistan say animals have legal rights
- County of Maui case – federal permit is required if the addition of pollutants through groundwater is the functional equivalent of direct release into navigable waters from a point source

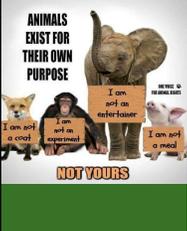




LACK OF
FOCUS ON
ANIMAL
INTERESTS

Failure to Consider Animal Interests

- Impoverishes the development of the law
- Hinders creation of appropriate mechanisms to restrain the cruelty and abuse humans inflict on animals
- Constrains broad understanding, conceptualization, and implementation of animal protection measures
 - And how animals fit into the environment
- De-prioritizes enforcement of the laws we do have to protect animals
- Very difficult for humans not to center themselves in thinking
 - Difficult not to privilege "in-groups" in decision-making
 - Difficult to share benefits beyond one's group
 - Especially when real or theoretical costs are involved – e.g. food
 - Difficult to let go of ownership concept over other beings deemed inferior
- Doing better takes significant effort to overcome current paradigms



Issues that matter to animals

- Personhood
 - Do they get protected, do they count, who speaks for them?
- Property status
 - Legal status – owned by others who dictate their fate
- Context matters
 - Lots of different conceptualizations depending on geography, culture, jurisdiction, history, religion, other epistemologies
- Decision-making not based on biology or ethics
 - Not based on consistent understanding of animals as biological beings with needs and interests (psychological & emotional as well)
- Need to include positive welfare in decision-making, not just the absence of negative welfare concerns



General Steps Forward – Working for Change

- Re-examine our frameworks
- Educate ourselves about the nature of animals
- Educate ourselves about the harms we inflict on them
- Change personal behavior
- Minimize our involvement in exploitation
- See intersections between forms of exploitation
- Make space for these conversations in our work
- Support others doing this work
- Identify and support systemic changes
- Be hopeful about change, patient, persistent, resilient

EXAMPLES

- Betta Fish - national consumer class action
- World Aquatic Animal Day
- Tilikum case
- Research papers
 - Marine Protected Areas
 - go-state survey
 - Fish protections
 - Turtle use and protections

AQUATIC ANIMAL LAW INITIATIVE



- Acknowledge problems
- Adapt and address
- Develop resilience
- Focus on sustainability
- Engage with others
- Work to build responses
- Clarify weaknesses in the legal system

Example:

Aquatic Animal Law Initiative



Reasons for our work

- Aquatic Animals are:
 - Misunderstood, ignored, unseen, and under-represented
 - Not protected in law, policy, or by society
 - Treated as a means to other ends - abused, exploited
 - Largest number of nonhuman animals impacted (other than insects)
 - Sentient – they experience pain, pleasure, and have other capacities
 - Rely on science
 - Need to be valued, respected, and protected from harm

Mission

AALL works to protect and promote the interests of aquatic animals by:

- Advocating on their behalf through the legal system
- Promoting their value to the public by providing education about their cognitive, emotional, and physiological capacities
- Harmonizing human, animal, and environmental interests

ANIMALS ARE NOT:

*Property
Products
Ours*



- Improvements we need to pursue
 - Include animal interests explicitly in our decision-making
 - Accept science that shows other non-human animals feel and have capacities we need to acknowledge – thinking, planning, reason
 - Accept legal obligation not to do unnecessary harm to those capacities
 - Need to discuss concept of harm
 - Need to discuss concept of necessary
 - Accept that humans are animals
- Reframe our relationship to animals
 - Within the law
 - Within philosophy and other disciplines
 - Within the natural world
 - Learn from traditional people's relationships with animals
- Look for ways to co-exist in a mutually supportive way

THANK YOU!

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Animal Law Clinic
Aquatic Animal Law Initiative



CENTER FOR ANIMAL LAW STUDIES
Clark School of Law
