[Bonus] AFD Ep 412 Links and Notes - The US Fish Commission - [Miniepisode by Bill] - Recorded Feb 10, 2022

- On Feb 9, 1871, 151 years ago this week, the <u>United States Commission of Fish and Fisheries</u> (informally known as the US Fish Commission) was established as the <u>first-ever</u> US government wildlife conservation agency. It is today known as the US Fish and Wildlife Service of the Department of the Interior.
- What prompted Congress to feel there was a need to establish this agency in the 1870s? Well, in 1870, Congress appropriated \$5000 to study the "decrease of the food fishes of the seacoasts and to suggest remedial measures." This implies that they were aware there was some kind of problem and somebody ought to do something about it. (I would have started with 'stop dumping heinous industrial sludge in the rivers.' and indeed it did get identified almost immediately as a problem, but I guess Congress's big visible concern at the time was overfishing to extinction, which had only very suddenly become an imaginable possibility with the explosion of the new consumer economy of the post-Civil War period.) Anyway their solution was to set up an agency to look into the problem, starting off the southern coast of New England, where several states had already begun their own investigations in response to collapsing coastal and deep-sea fishing grounds. The earliest Fish Commission report, numbering nearly a thousand pages, is available online from the National Oceanic and Atmospheric Administration. and it includes such suggestions such as prohibiting certain kinds of fishing during specific hours of breeding seasons, with the added benefit of preventing market price volatility from excessive supply:

https://library.noaa.gov/Collections/Digital-Documents/Fish-Comm-Annual-Rep

- Here is one passage on another topic that seemed interesting to me coming nearly 100 years before the creation of the EPA:

Under the fifth head, that of human agencies, we may consider first the question of the pollution of the water by poisonous agencies.

XXIV REPORT OF COMMISSIONER OF FISH AND FISHERIES.

These may consist, as already stated, of chemical substances, which exert a directly poisonous influence, or of mechanical objects, such as sawdust, which, it is said, gets into the gills of fishes, and ultimately causes their death, or, falling to the bottom, with edgings, bark, &c., covers up the gravel and destroys the natural spawning-beds, and thus prevents the development of the eggs.

These causes, however, apply essentially to rivers, and their injurious action in such cases has frequently been substantiated, and has invoked, in many instances, legislative interference. They exercise very little influence, however, in regard to the fishes of the sea. The testimony before the Rhode Island legislature would tend to show that, in the immediate vicinity of factories on the Narragansett Bay and its tributaries, many of the smaller varieties of fish were as abundant as ever, and that, even in the vicinity of gas-works, the discharge from which, as containing creosote and other substances, might be expected to produce a very injurious effect, the only result was the imparting of an unpleasant, tar-like taste to oysters and other mollusks that occurred in the neighborhood. It is by no means impossible that some fish might be driven away from the vicinity of the discharge of such an establishment; but that any marked effect could be produced on a large scale is not to be admitted.

Whatever the condition of things may be in Narragansett Bay, we know that none of the agencies alluded to exist, to any considerable extent, along other portions of the New England coast, where the fact of a similar scarcity of fish has been equally established.

We come, therefore, to the question of improper or excessive fishing.

- Two years later, due to the American Fish Culturalist Association's and American Fisheries Society's lobbying of Congress and the Grant Administration (by which we mean extensive bribery, given the time period), Congress appropriated \$15,000 to start fish hatcheries on the seacoasts and interior lakes. The Commission would have a dual mandate for regulating and monitoring commercial fishing of wild fish as well as dealing with hatcheries. The National Fish Hatchery System was created by conducting research to determine the spawning sites of certain species of food fish like trout and salmon and from there gathering and shipping eggs across the country to develop artificial spawning locations for managed production. (You might want to refer back to our episode on ice and refrigeration to understand rail transport of delicate biological products in this era. In fact, the first report of the Commission explicitly cites in its opening analysis the effect of global ice shipping as having dramatically grown the demand for American fish.) Many of the natural spawning patterns of the migratory fish had already been severely disrupted even by the 1870s due to the extensive focus on damming and draining Western rivers to support crops and cattle grazing.
- The Fish Commission also expanded their mandate to marine mammals, not just fish or shellfish, because this was still the era of whaling (which was starting to decline due to petroleum exploration) and seal-hunting (which was about to peak). Even at the height of the Second Industrial Revolution in the final decades of the 19th century, there was already serious concern that fishing and sealing were out of control relative to what was sustainable. Commission research, provided in annual reports to Congress and often gathered aboard four dedicated research ships, helped support these conclusions. This led to growing friction between the United States and British Canada off the north Pacific, Alaskan, and north Atlantic coasts, where two or more countries would be over-harvesting the same coastal and deep-sea regions. Although this mostly would be resolved through bilateral arbitrations in the 1890s and multilateral treaties in the early 20th century, there was a phase of US Fish Commission and Treasury Department history where American federal agents were whipping around the ocean in fast cutters and unilaterally boarding and seizing Canadian fishing and sealing boats for alleged violations of US laws, rights, and protections. The Fish Commission constantly struggled to keep up with regulating overfishing or illegal harvesting along the massive US coastline and especially the remote and sparsely-populated Alaskan coastline, home to so many salmon, seals, and sea otters. By World War I, they had acquired a small flotilla of enforcement ships and boats, and by the end of the 1920s, they were also starting aerial recon flights.
- In the early 20th century there was also a surge in excessive harvesting of wild sea sponges in the Gulf of Mexico and the Fish Commission became involved in that issue too. Today, sponges tend to be either synthetic or harvested from aquaculture hatcheries.
- Anyway, this is just a fun mini-episode, but I wanted to close by reading a very dramatic passage from the first report of the US Fish Commissioner to Congress in 1872, when analyzing possible factors for decline in fishery hauls, because I thought it was amusing:

The fourth cause of decrease, as alleged, namely, the ravages of predaceous fishes, I am quite satisfied is one worthy of serious consideration, the principal offender in this respect being the blue fish. No one who has spent a season on the coast, where this fish abounds, can fail to have been struck with its enormous voracity, and the amount of destructiveness which it causes among other kinds of fish. Wherever it appears in large numbers it is sure to produce a marked effect upon the supply of other fishes, either by driving them away from their accustomed haunts or by destroying them in large quantities in any

REPORT OF COMMISSIONER OF FISH AND FISHERIES. XXHI

given locality. Ample evidence to this effect will be found in the testimony presented in the present report, as well as in the article on the blue-fish, (page 235.) As there stated, it is a pelagic or wandering fish, going in immense schools, and characterized by a voracity and blood-thirstiness which, perhaps, has no parallel in the animal kingdom.

The fish seems to live only to destroy, and is constantly employed in pursuing and chopping up whatever it can master. As some one has said, it is an animated chopping-machine. Sometimes among a school of herring or menhaden thousands of blue-fish will be seen, biting off the tail of one and then another, destroying ten times as many fish as they really need for food, and leaving in their track the surface of the water covered with the blood and fragments of the mangled fish.