

“The Common Tragedy” by Jerrad Pierce

There are plenty of fish in the sea. That resources can be intensely, and indefinitely exploited without consequence is such an ingrained and unquestioned belief in our culture that that phrase has entered everyday vernacular, despite many historic examples to the contrary.

There are not plenty of fish in the sea. In fact, there are no fish in the sea. I should know; my competitors, partners and I caught them all and we made a tidy profit in the process. Fourteen thousand dollars cash put us well ahead of our five leading competitors each with approximately \$8,000 of useless capital. Of course, we sold out and we no longer have ships to fish with. My grandfather must be spinning in his grave. Anyhow, there aren't any fish left to go out for. Life is good.

I'm describing my experiences of playing a game called “Fish Banks” intended to recall the 1968 landmark work “The Tragedy of the Commons” by Garrett Hardin. The game is setup rather simply. Each team starts with the same assets (ships and cash) and play progresses in rounds. Choices to be made every round are whether or not to buy or trade ships, and how many ships should fish in the deep sea, coastal waters, and stay in dry dock. After all teams have made their decisions their choices are entered into a computer simulation which reports each teams' catch which is sold for a fixed price. The goal is, intuitively enough, to earn the most money possible. Being a game it was not taken too seriously, however we all knew we were being set up. The game was not against us in any way, there are fish to find, and the remaining fish could reproduce to leave more fish to be harvested later. Most participants acknowledged that we were going to drive the fish to extinction, and some made half-hearted though ultimately futile efforts to prevent this. Others still, made, almost gleefully, references to “strip-mining the ocean”.

The tragedy of the commons is a well known and special case of another infamous thought experiment, the prisoner's dilemma. In a prisoner's dilemma all participants must take a certain course of action in order for the maximum mutual benefit to be achieved. However, an individual who slights the group may do better himself than he would have otherwise and therein lies the rub. Hardin's thesis eloquently describes the mismanagement of common resources which are clearly limited, even if renewable, and the cumulative result of unfettered, perfectly reasonable individual actions: disaster.

Without fail short-term benefits are sought with disregard for long-term costs, and eventually there is nothing left from which to benefit.

History is rife with tales of humanity's ability to push species and ecosystems to the brink and beyond; it is clearly a repeatable event. From the razing of Europe's great forests to the well-known demise of the dodo. The disappearance of the passenger pigeon to the near extinction of the buffalo whose numbers fell from an estimated 40-65 million to just 1,000 in about 25 years. Man has pillaged nature since time immemorial. Lest one presume all such death and destruction is a consequence of Western European civilization there are several examples of other cultures, unindustrialized no less, having wrought the same fate. It is widely believed amongst natural historians that the first humans of the Americas were a significant contributing factor to the extinction of the native megafauna such as the mammoth. There is also the case of Easter Island (Rapa Nui), almost certainly quite lush and comparable to similarly situated South Pacific islands until it was settled by Polynesians. At some point between their arrival around 400-700 AD and the rediscovery of the island by Jacob Roggeveen in 1722 a civilization rose and fell. The inhabitants flourished and surely had a large and organized society in order to sustain the creation of their sole legacy, hundreds of moai, or large stone statues. Yet Roggeveen describes a denuded isle with inhabitants lacking the means to build watercraft adequate for approaching his ship let alone island hopping and colonization.

Clearly we cannot entrust our shared heritage and the common good to the actions of individuals. What other options do we have? A democratic society is seemingly left with only two options, both of them distasteful. We could *gasp* involve the government, much to the chagrin of industry and some economists. This involvement might dictate approved methods and equipment. We could privatize our natural resources under the precept that private owners would have vested interest in maintaining long term quality and productivity. Desperately hoping that none of them attempt to extract and sell as much as they can and exit the market with their gains. Pepsi (R) brand water anyone? Dasani (R) is a Coca-Cola (R) company. A privatized system would require government controls in any event. Quotas would be needed to prevent the scenario outlined, and checks installed to control the resulting oligopoly.

Collective action or government intervention is not a guaranteed solution. As Rapa Nui demonstrates it is possible to be led down the wrong path. But can we really afford not to reign in our destructive habits? We must develop a social conscience and manage our planet wisely. Parents make children eat their peas despite protest because they are good for them, and government should regulate markets, particularly those involving resource extraction, despite resistance and belly-aching as well.

I would kill for a tuna sandwich right about now.