

Out of Sight & Out of Mind

A New Oceanic Imperialism

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In the July–August 2003 issue of *Monthly Review* (titled “Imperialism Now”) a number of compelling articles brought into clear focus the rapidly-emerging reconfiguration of U.S. global domination. As John Bellamy Foster noted in his lead essay, “The New Age of Imperialism,” the current reshaping of the world under capitalism is indicative of a “systematic reality arising from the very nature of capitalist development.” Within this new systematic development, the logic of capitalism penetrates everywhere in its quest to secure new markets and natural resources. This article addresses an important but as yet little examined area of capitalist penetration—the open ocean—and the Bush administration’s attempt to privatize this last remaining remnant of common property. The social and economic consequences of such a privatization have yet to be played out, but every indication leads us to anticipate that these will include windfall profits for corporations, slackening environmental regulations, and the relentless externalizing of costs while profits accrue to a handful of oceanic actors, namely oil corporations and fish farmers. Remarkably, the lead federal agency, the Department of Commerce (DOC), is paving the way for these results under a cloak of great secrecy, masking their case for privatization with the disingenuous hyperbole of a seafood trade deficit, “farming the seas,” and “feeding the world.” Under the auspices of the DOC, the National Oceanic and Atmospheric Administration (NOAA) has drafted legislation that will allow the ocean waters and bottom lands of the continental shelf to be leased to fish-farming operations, a move that promises to unleash a host of ominous environmental, economic, and social consequences.

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The struggle for control of the oceans by nation-states for shipping, defense, trade, and natural resource extraction, has been of vital importance for capitalist growth. Capitalism, by its nature, is hostile to any property held in common, and its history has been one of unending attack upon such property. The historical result has been that most of what was once held in common is now private property. Today, capital, using new technologies, is again seeking profit in its old hunting ground, the open ocean. And once again, the state is closely allied with private corporate interests. Consider the recent publication of the preliminary report of the U.S. Ocean Policy Commission. The "U.S. Ocean Policy Commission Report" recommends a new science-driven regime. On the surface, this appears to be an encouraging development. However, an analytical reading of text and an understanding of the current political climate leave little doubt as to the ultimate intent of U.S. policy: the full capitalist exploitation of oceanic resources.

This essay examines how our ocean is set to become the new frontier for capitalist exploitation. Our organizing thesis takes off from DOC/NOAA's efforts to move fish farming "offshore" into the Exclusive Economic Zone (EEZ) where it can flourish "out of sight and out of mind." The EEZ, as designated by the United Nations Convention on the Law of the Sea (1982), transforms the oceanic commons by giving coastal nations exclusive economic jurisdiction to the ocean waters and seabed from 3 to 200 miles off their coasts. Thus the EEZ gives the United States, as well as other nations, the right to use living and nonliving ocean resources within 200 miles of their coastlines for economic exploration and exploitation. This is just the tip of the iceberg. Offshore aquaculture has close ties with oil and related corporate interests. Fish farming in the EEZ, while appearing novel, is an exemplar of a new twist in the imperialistic oceanic regime. Similar to other resource use and extraction processes, open ocean aquaculture (OOA) is the latest property transformation ignited by government policy, made possible through technological innovation, and driven by capital's quest for profits. The result is a fundamental contradiction. Big business and its client agency, NOAA, promise to reduce the U.S. seafood trade deficit and "feed the world," but in reality, the displacement of labor, community alienation, and massive environmental degradation are the likely outcomes.

So far it has proven difficult, if not impossible, to develop a convincing rationale for private oceanic property. A particularly useful way to understand this is through an examination of the Public Trust Doctrine. Originating in Roman law, embedded in the Magna Carta, and further

articulated in England and the United States, the Public Trust Doctrine, shaped by court decisions, social conflict, and culture, has acted as a guiding legal principle with respect to common property. The implications of the doctrine are summarized as follows:

First, in light of the essential inalienability of public trust resources, [the doctrine] reinforces concerns about the “giveaway” of public resources to private interests. Second, it confers on government a continuing duty of supervision and responsibility to choose courses of action least destructive to trust resources. Third, it strengthens the principle set forth in the Magnuson-Stevens Act that individual [fishing] quotas are privileges, creating no property rights and therefore subject to modification or revocation without compensation to their holders. Finally, it suggests that conferring exclusive rights of use should be accompanied by some form of compensation to the public.¹

In the modern era, the struggle over interpretation of the public trust, the commons, and the drive to privatize property captures a large portion of systematic capitalist development. The fundamental tension is best seen as a class conflict. In a general historical sense, elites have attempted to privatize the commons, thereby excluding commoners. In the United States, the idea of privatizing nature in order for it to be used more efficiently is abundantly evident and represents the central tenet of property struggles. At the same time, exerting private property claims and rights over what was once commonly held provides a forceful means for capital accumulation. The first U.S. court decision on Public Trust—*Arnold v. Mundy*—occurred over efforts to privatize oyster beds, thereby excluding those who felt it was a public right to freely harvest these sedentary food sources.²

The often-cited “tragedy of the commons” argument put forth by Garrett Hardin is the clearest articulation of modern capitalist ideology concerning privatizing resources that were once held in common.³ Hardin’s argument has become the dominant discourse drawn upon by governments, and especially biological and administrative scientists, to explain the problem of allocating natural resources for private profit from the commons. Hardin used the analogy of a field “open to all” to argue that common ownership inevitably leads to the deterioration of the environment. The solution is to privatize what was once held in common (security of tenure is necessary to allow sufficient time for investments to be recouped), because individuals are seen as too selfish to effectively manage common pool resources. Though now widely discredited,⁴ this argument remains especially resonant, and it finds clear expression in

NOAA's attempts to privatize the ocean waters and bottom lands for the expansion of fish farming in the open ocean.

In our examination of the surge to develop offshore aquaculture, we find a complicating intersection of statutes, laws, and jurisdictions, and federal as well as state agencies that exercise influence over activities in the Exclusive Economic Zone. NOAA is seeking to exempt fish farming from the requirements of the pertinent statutes and place it out of the jurisdiction of other agencies, making it a completely self-regulated industry. In sum, we are rapidly entering into what ecological anthropologist Bonnie McKay calls a "Constitutional moment."⁵ It is clear that numerous legal challenges involving the Public Trust Doctrine will determine to what extent aquaculture will transform property relations in the open ocean.

The political-economic structures prepared to usher in the privatization of the ocean did not cohere in a vacuum; they are the result of a long history of systematic capitalist development. Modern-day globalization, with its "free trade" agreements and neoliberal ideology, has paved the way for the spread of the global capitalist production of aquacultured species. The combination of a critical set of precursors, notably in the global South, led to the expansion of industrial aquaculture and extensive corporate involvement in a lucrative new growth sector. After the Second World War, the industrialization of capture fishing led to unprecedented increases in fish production. As these fisheries began to collapse and the Law of the Sea imposed territorial restrictions on ocean fishing, international aid agencies such as the World Bank, Asian Development Bank, and a host of bilateral entities identified aquaculture as an export-led growth strategy for newly-emerging capitalist states. Even China, whose traditional domestic aquaculture dates back thousands of years, confronted the need to increase income and foreign exchange, which fueled the recent intensification of shrimp and finfish production for export. Emerging capitalist states such as Thailand fueled economic growth in part by the export of lucrative pond-raised shrimp. Other countries such as Vietnam, Brazil, Nigeria, and Madagascar are following this growth machine. Aid agencies acting on behalf of developed countries such as the United States, the United Kingdom, and Japan, used aid dollars to stimulate economic growth and political stability through aquaculture, gain entry to the resultant burgeoning markets, and establish a geopolitical foothold in these strategically important regions. These developments, especially in the case of shrimp, led to a corresponding rash of environmental degradation, dis-

placement of traditional resource users, and the inevitable exploitation of labor.

Beginning in the 1970s, Norway's technological advances in aquaculture aided the development of a global salmon farming industry. Norwegian corporations are heavily invested in other producing regions of the world including Chile and Canada. In twenty years, Chile went from producing no salmon to overtaking Norway as the world's largest producer, a feat made possible by its lax environmental regulations and low labor costs. In the 1990s, subsequent over-production of salmon and increased efficiencies have led to cycles of consolidation and expansion for the industry, with seven transnational corporations now owning over 40 percent of global salmon production. Firms invested in aquaculture have close ties to other extractive offshore industries. For example, the parent company of Stolt Sea Farm (Stolt-Nielsen S.A.) also owns 41.7 percent of Stolt Offshore S.A., a leading offshore contractor to the oil and gas industry. The internal relations between offshore aquaculture and oil and gas exploration are just beginning to be exposed.⁶

Imports of artificially cheap seafood have sparked demand in the United States, where annual consumption of seafood is rising steadily. Last year's seafood trade deficit (U.S. seafood imports minus U.S. seafood exports) ran close to \$10 billion, second only to oil. A crucial policy development that spurred aquaculture's move further offshore was the National Aquaculture Act (NAA) of 1980, which posited that, "it is the national policy, to encourage the development of aquaculture in the United States."⁷ In defining aquaculture development as in the national interest, the NAA sought to lessen dependency on foreign imports through creating self-sufficiency in seafood production. The Department of Commerce Aquaculture Policy, drafted in 1999, explicitly advanced this process by planning for an increase in "the value of domestic aquaculture production from the present \$900 million annually to \$5 billion" by 2025.⁸

A convergence of state and corporate interests has subsidized aquaculture research to entice subsequent private investment in the industry. In the mid 1990s, NOAA began researching the technical and economic feasibility of raising fish offshore in conjunction with the National Sea Grant College Program. The University of New Hampshire, Texas A&M, Auburn University, the University of Hawaii, and the University of Puerto Rico are all key Sea Grant funded universities. Through these partnerships, NOAA appropriates public funds for what it hopes will eventually become a privately-run activity. The Agriculture Research

Service, a branch of the United States Department of Agriculture (USDA), states that, “A strong USDA commitment to aquaculture research, technology development, and technology transfer... in cooperation with university and private research programs... is needed to energize industry development.”⁹

By utilizing a research and development burden borne by the public, the OOA industry can expect to benefit from artificially low production costs and exaggerated profit margins. In addition, the State provides bailout mechanisms at the behest of corporate forces that have already exploited the ocean’s resources. Recent research in OOA proposes anchoring fish cages to expired oil drilling platforms, thereby removing all contractual obligations to clean up or decommission the obtrusive extraction machinery. The front-loading of investment in OOA with public research money demonstrates how corporate interests can extend capital’s quest for limitless growth and drive all other fishing practices out of the market.

The most recent report from the U.S. Ocean Policy Commission has recommended amending the National Aquaculture Act to make NOAA the lead federal agency for implementing policy on marine aquaculture. This would effectively allow NOAA carte blanche to expand the offshore aquaculture industry. NOAA’s policy-driven research agenda has focused largely on perfecting the biological production of hitherto uncultured fish species and emphasizing questions of biotechnological feasibility over those of social desirability. This a priori approach to aquaculture development privileges the mechanics of production and the bureaucratic imperatives of its implementation over any meaningful evaluation of social and ecological integrity.

The NOAA bureaucracy is pushing to secure dominion in the oceanic sphere by drafting a national OOA bill. This bill will do little to regulate industrial activity once OOA operations are established. It will implement a “one stop” permitting process to encourage aquacultural investment. The bill will also provide exemptions from the Magnuson-Steven Fishery Conservation and Management Act, which provides critical legislation to limit certain sizes of fish and prevents foreign ownership of fishing vessels and, by default, fish-farming operations in the EEZ. Regulating offshore operations (e.g., choosing whether to raise genetically-engineered or exotic species) will be largely voluntary and based on the NOAA-authored Code of Conduct for Responsible Fisheries (2000). Such self-imposed “standards” feature prominently in the much-maligned salmon aquaculture industry, where they are often used as a

tool to deflect criticisms of “business-as-usual” practices. While these efforts may go some way toward promoting a less environmentally damaging industry, they frequently act more as a public relations smoke-screen. Profit will always take precedence over stewardship unless the stewardship is externally enforced.

The transition from near-shore aquaculture to offshore aquaculture will further amplify the social and ecological contradictions of industrial aquaculture’s global expansion. The effect of near-shore aquaculture on fishing-based communities—unemployment, idle fishing fleets, and the out-migration to urban centers—are likely to accelerate under capital-intensive, open-ocean aquaculture. For example, industrial shrimp aquaculture in Asia rapidly expanded as a “development” strategy, mirroring the supposed goals of the Green Revolution. The “Blue Revolution,” the moniker under which aquaculture presents itself, extends similar disregard for traditional and subsistence lifestyles around the globe. Traditional Asian fishers had long relied on harvesting fish from mangroves and estuaries near the shore. Industrial shrimp aquaculture abruptly changed the coastal people’s way of life, transforming what had been multiple-user areas into privately-owned, single-purpose property. This trend has been repeated at a host of other global locales. Following the well-worn path of near-shore industrial aquaculture, OOA will further disintegrate subsistence lifestyles and common usage by encouraging capital intensive technology and private property relations.

Aquaculture’s coastal net-pen farming and its vision of OOA will increase labor’s alienation from nature. Fishermen are intimately connected to the natural histories of the fish and their marine environment. The diminished role of labor in aquaculture widens the rift between labor and nature. Since industrial aquaculture exists to return profit to capital, the minimization of all costs—labor included—is a primary concern. Not only do fishery workers lose their relationship with natural fish stocks, labor itself is reduced to a set of low-skill, repetitive tasks. The OOA industry strives for complete automation. For example, the Net Systems Corporation, armed with public university funding, is designing a twenty-ton buoy that will automatically feed and monitor tens of thousands of fish caged in fifty-feet high by eighty-feet wide submerged complexes. One project manager boasts that, “ultimately, you should be able to run the farm from a desk onshore.”¹⁰ As if submerged complexes are not rife with their own uncertainty and risk, research is already underway to develop the next generation of fish pens—enor-

mous, motorized pen structures built to withstand self-propelled, transoceanic journeys destined for whatever global port is offering the highest prices.

Aquaculture also impacts the labor of those still employed in commercial fisheries. For example, between 1990 and 2002, the price for a limited-entry salmon permit in Alaska fell by 75–90 percent for some of the most lucrative wild fisheries in the state.¹¹ This dramatic decline in value had devastating repercussions for fisherman dependent on wild-capture harvest. Alaska's sustainably-managed fisheries produce vast numbers of salmon annually, a large portion of which now go unutilized due to aquacultural overproduction, glutted international markets, and depressed prices for all salmon. The outcome is that harvesting wild fish is no longer a viable profession. Norway and Japan have both experienced significant losses in the fishery labor force between 1990 and 2002.¹² The aquaculture industry's promise of increased jobs rings hollow in light of these significant declines in fisheries labor.

In addition to displacing fisher labor from commercial or traditional livelihoods, OOA also disrupts the economic viability of entire coastal communities that depend on healthy ocean and river ecosystems. Ocean-dependent employment in sport fishing, marine tourism, the marine supply sector, and science education is jeopardized by the future potential of OOA's environmental pollution and economic depression. According to the Canadian Centre for Policy Alternatives, marine-based industries in British Columbia directly jeopardized by salmon farming (fish processing, sport fisheries, commercial fisheries, and marine tourism) contributed \$582 million to British Columbia's GDP, while salmon aquaculture contributed only \$87 million.¹³ The income from ocean-dependent employment, currently distributed to a wide range of regional workers, will in the future be directly appropriated by aquaculture capital in the hands of concentrated ownership.

The aquaculture industry's legitimacy relies on its disingenuous claim of "feeding the world." In fact, many types of aquaculture actually result in a net loss of protein. Raising carnivorous species such as salmon in aquatic feedlots requires massive amounts of fishmeal derived from wild stocks (herring, anchovy, sardine, krill). Fish that could serve as an excellent source of protein for people throughout the world are instead ground up to produce fewer pounds of high value fish to satisfy wealthy consumer tastes. The extraction of fish from the marine regions of protein-poor nations to produce salmon for wealthy North American and European consumers illustrates the global inequalities resulting from

aquaculture's capitalist organization. World Bank loans to fishing countries of the global South are rife with export incentives and privatization policies, effectively removing a nation's autonomy regarding fisheries production and trade balances.

Typical to capitalist enterprise, industrial aquaculture relies on externalizing the costs and risks of production wastes, resulting in myriad ecological problems. Offshore aquatic feedlots create massive densities of caged fish whose fecal and antibiotic waste contaminate the local environment. The result is an inevitable transfer of disease and parasites. Often, the caged pens are filled with tens of thousands of species exotic to the area where they are farmed. Invariably, penned fish escape and quickly invade the surrounding habitats, destroying the wild stocks.

Current research is underway to use genetically-engineered pen fish for increased growth rates and profit margins. The manipulated gene codes further detach OOA from natural biological processes. Although the escape of genetically-engineered fish will severely compromise the ocean's biodiversity, NOAA has stated that, "priorities to conserve genetic biodiversity should not deter research to improve breeds."¹⁴ The clear intersection of industry and government agency accelerates the capitalist penetration into the ocean commons, threatening labor, food security, environmental health, and biological diversity.

The globalization of industrial aquaculture has caused hundreds of peasant-based grassroots and NGO groups in Asia, Latin America, and Africa to protest its social and environmental consequences.¹⁵ North American fishermen, conservation groups, and First Nations have joined forces to resist and critique near-shore aquaculture.¹⁶ By placing OOA operations at a distance of three to two hundred miles offshore, however, capitalist interests hope their detrimental impacts will go unnoticed by the public.

The rise of OOA represents the convergence of a unique set of political, historical, social, technical, economic, and environmental factors, and changing power relations, both at a national and global level. Far from being coherently defined, it results from shifting political opportunities in resource utilization among the bureaucratic institutions of the state and corporations. The effect is a somewhat nebulous formation most explicitly fashioned around the ill-conceived thesis that industrial aquaculture development in any conceivable form can be an economic driver and is therefore desirable. However, an equally, if not more, compelling reason for the development of OOA that is seldom articulated, is

its potential to open the last remaining common property frontier to enclosure and subsequent capitalist exploitation.

The Ocean Policy Commission, which has argued for a more ordered approach toward managing oceanic resources (and thrown its support behind OOA and an empowered NOAA), counts among its sixteen board members nine with easily traceable ties to oil, mining, development, aquaculture, and waste disposal. This may provide a telling glimpse at the beginnings of a new era of aggressive capitalist development for the oceans.

The prospects for the first steps toward ocean privatization rest on the success of a number of political actions. The pending OOA bill is slated to go to Congress in the first quarter of 2005. The bill is currently being reviewed internally at NOAA and typically, given the secretive nature of the project, no one outside of these elite policy circles has been given access to it. Before going to the Office of Management and Budget, the proposed bill must be reviewed by other federal agencies, slowing down its progress. Mandated safeguards such as a Legislative Environmental Impact Statement would take years to conduct and will be resisted by NOAA in favor of quicker and far less stringent evaluation processes. Complicating this matter further are potential conflicts between intersecting laws, statutes, and jurisdictions. For example the National Environmental Protection Act (NEPA) may prove applicable in this setting, while the Law of the Sea may prohibit flotillas of automated cages from drifting all over the world. The relationship between the federal and coastal states governments is another area requiring greater demarcation.

It remains to be seen what effect the Ocean Policy commission's report will have on the future use of our seas. Ominous in this regard is the commission's recommendation that gas and oil companies underwrite the cost of protecting our oceanic heritage. This is clearly an example of having the fox guard the chicken coop. While it is obvious who would stand to gain from the potential sell-off, it is doubtful that any real opposition to oceanic privatization will be mounted. The best chance for a challenge exists with environmental NGO's, but the majority of organizations with any real political clout, the "beltway" green groups headquartered in Washington D.C. may become muddled when pet incentives such as the Marine Protected Areas and continued largesse are extended their way. Still, given their legal expertise and financial capabilities it is these groups that have the greatest potential for mounting serious challenges to OOA based on Public Trust law. It is

clear that, should the continental shelf be divvied up for the benefit of corporate resource extraction, it will be the people of the United States and the marine environment that suffer, along with the world's population whose livelihoods and cultures depend on a freely accessible ocean.

Notes

1. Commission on Geoscience, Environment, and Resources, *Sharing the Fish* (Washington, DC: National Academy Press), 39–40.
2. *Arnold v. Mundy* 1821, 6 N.J.L. 1 (Sup. Ct.).
3. Garrett Hardin, "The Tragedy of the Commons," *Science* 162 (December 13, 1968), 1243–48.
4. Bonnie McKay, *The Question of the Commons* (Tucson: The University of Tucson Press, 1987).
5. Bonnie McKay, *Oyster Wars and the Public Trust* (Tucson: The University of Tucson Press, 1998), 114.
6. <http://www.stoltnielsen.com>.
7. National Aquaculture Act, Public Law 96–362, September 26, 1980.
8. United States Department of Commerce Aquaculture Policy, 1999, <http://www.nmfs.noaa.gov/trade/>.
9. Agriculture Research Service, USDA, <http://www.ars.usda.gov/research/>.
10. Charles Mann, "The Blue Water Revolution," *Wired Magazine*, May 2004, www.wired.com/wired/archive/.
11. Rosamond Naylor, Josh Eagle and Whitney Smith, "Salmon Aquaculture in the Pacific Northwest," *Environment* 45, no. 8 (October 2003), 19–39.
12. Food and Agriculture Organization of the United Nations, *The State of World Fisheries and Aquaculture, 2002* (Rome: FAO, 2002).
13. Dale Marshall, "Fishy Business" *Canadian Centre for Policy Alternatives* (2003), <http://www.policyalternatives.ca>.
14. National Marine Fisheries Service, "A Code of Conduct for Responsible Aquaculture Development in the U.S. Exclusive Economic Zone," (2000), 21.
15. Susan Stonich and Conner Bailey, "Resisting the Blue Revolution: Contending Coalitions Surrounding Industrial Shrimp Farming," *Human Organization* 59, no. 1 (2000), 23–35.
16. For example, the Coastal Alliance for Aquaculture Reform is comprised of ten membership organizations with a mission to "protect wild salmon, coastal ecosystems, coastal communities, and human health from the destructive practices of fish farming practices." For more information visit <http://www.farmedanddangerous.org>.

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Name" with Ossie Davis, Harry Belafonte, and others who resisted the McCarthyite witch hunt of the 1950s. They are interviewed about the shameful events of that time and their devastating effect on black artists and entertainers. The Malcolm documentary is scheduled for February 21, 9–11:30 p.m. (EST) and "Scandalize My Name" for February 28, 9–10 p.m. (EST), but times may vary so please check local listings.