In the 1930s, Frank Manaka sought work as a fisherman off the coast of Monterey, California. He chartered a boat but was unable to market his catch. Local canneries would not purchase fish from him. In 1940, he filed suit against the Monterey Sardine Industries, Inc., a cooperative association of fishing boat owners, and the Del Mar Canning Company for allegedly conspiring to set prices and restrict entry into the California sardine fishery. Under an agreement between the association, the local canneries, and the local fishermen’s union, the association set the price for which its members’ fish were sold to canneries and reduction plants. The canneries, in turn, agreed to purchase fish exclusively from members of Monterey Sardine who were assigned to it by the association. Manaka was not a member, so he could not sell his fish and so he sued.

Although Monterey Sardine may have operated like the typical collusive cartel, it served both pecuniary and conservation purposes. On the one hand, it increased members’ profits by increasing fish prices and restricting entry by non-local fishers. On the other, it helped to conserve fish stocks by limiting the harvest. Challenged by Manaka, Monterey Sardine Industries was found guilty of conspiracy in restraint of trade under the Sherman Act. The federal district court held that the association was “not freed from the restrictive provisions of the anti-trust act” merely because it sought “the conservation of important food fish.” In other words, the association’s conduct was no less exclusionary because it served, in part, to conserve fish stocks.

In the 1930s, the California sardine fishery was at its peak, yielding over 500,000 tons of fish per year. By the early 1950s, the annual catch had dropped to under 20,000 tons as the fishery began to collapse. It is possible that the sardine fishery’s decline was unavoidable. Commercial harvesting might have depleted the fishery even if Monterey Sardine Industries’ collusive arrangement had been permitted to survive. Changing environmental conditions might have made the collapse inevitable. Then again, perhaps if it were not for antitrust enforcement, this tragedy of the marine commons might have been avoided. The existence of a private association capable of ensuring the local fish catch was maintained at a sustainable level might have saved the fishery. Busting up this “conservation cartel” might have made the fishery more “competitive” in a narrow sense, while at the same time undermining the equally important goal of resource conservation.

Off the California coast and elsewhere, fishermen who sought to organize such “conservation cartels” to manage fisheries and control catches were prosecuted for antitrust violations. At the same time, the depletion of ocean fisheries continued apace, to the point where fishery depletion has become one of the greatest environmental problems on the planet. Antitrust law, though well-intentioned, may have discouraged—if not in some cases actually prohibited—private arrangements that could ensure the sustainable utilization of marine resources.

The Marine Commons

Conservation of marine fisheries presents the archetypal “commons” problem, most famously depicted by ecologist Garrett Hardin in “The Tragedy of the Commons.” Hardin described the fate of a common pasture, unowned and available to all. In such a situation, it is in each herder’s self-interest to maximize his use of the commons at the expense of the community at large. Each herder captures all of the benefit from adding one more animal to his herd; the costs of over-
grazing the pasture, however, are distributed amongst every pasture user. When all the herders respond to the incentives created by the open-access nature of the commons, the pasture is overgrazed. “Each man is locked into a system that compels him to increase his herd without limit — in a world that is limited,” Hardin wrote. The pursuit of self-interest in an open-access commons results in a tragedy; “Freedom in a commons brings ruin to all.”

This analysis applies well to most marine fisheries; indeed, it was described and documented by fishery economists over a decade before Hardin’s influential essay. So long as there is open-access to the fishery, each fisher has an incentive to catch as much as possible, even beyond the point of sustainability.

The incentives for such behavior are strong in the fishery context because the marginal cost of an active fisherman increasing his effort is often quite small compared to the potential economic reward. Fishers do not benefit from self-restraint because none have any assurance that other participants in the fishery will follow suit.

Open-access fisheries have suffered from the tragedy of the commons just as Hardin would have predicted. On the open seas, overcapacity — what many describe as “too many boats chasing too few fish” — is the norm, resulting in substantial depletion of fishery stocks worldwide. Approximately 65 percent of fisheries are fully exploited or overexploited, according to the United Nations Food and Agriculture Organization,
and that number continues to climb. An additional 10 percent of fisheries are “significantly depleted.”

The plight of domestic fisheries is no less grave despite several decades of federal regulation. In 2003, the National Marine Fisheries Service (NMFS) reported that 66 fish stocks were subject to overfishing and another 86 species were already overfished. In the same report, the NMFS acknowledged that out of the 932 fish stocks under federal management, the status of nearly 700 is unknown. While the NMFS reports the number of healthy fish species has increased in recent years, such gains have come at tremendous cost to local fishing communities faced with fishery closings and other stringent conservation measures. Populations of once-abundant food fish such as cod, haddock, and flounder may be near collapse.

**PRIVATE PROPERTY** The initial choice of solutions to the commons problem, as described by Hardin, is between political controls and some form of private property. “The tragedy of the commons … is averted by private property, or something for-

Conservation of the commons requires privatization or government regulation to control access and limit overuse of the underlying resource.

where they have emerged. Such arrangements often evolved over time so as to facilitate both the exploitation and conservation of the resource in question. Today, some fishing communities have turned to various cooperative approaches, including common property, to help rationalize fishery management. Collective associations also may have a comparative advantage against government agencies in regulating fishing activity, particularly in the development, acquisition, and distribution of relevant information about fish stocks, fishing activity, and the like. In New Zealand, holders of individual fishing quotas have begun to collaborate to conserve fish stocks by, among other things, monitoring catch levels and supporting fishery research.

**REGULATION** Despite the potential benefits of property-based fishery management regimes, the dominant approach to fishery conservation — where conservation has been attempted at all — has been government regulation. In practice, such regulations turn the fishery from an open-access resource into a “regulated open-access” resource, and the results have been little better than one would expect in the open-access commons. Fishers operating under “regulated open access” have little incentive to steward the underlying resource or support sustainable regulatory measures. Even where fishery management decisions are made by “expert” administrators, resource users typically view long-
run decisions as “substantially unpredictable and unresponsive.” The lack of a concrete property interest in the fishery means that individual fishers have no expectation that sustainable management will inure to their benefit. Thus, they push regulatory entities to allow higher harvest rates. This problem is compounded by the scientific uncertainty inherent in fishery assessments, as this provides fishers with an excuse to push for less conservative catch limits.

Fishery regulations have typically taken the form of limits on season length, boat size, equipment, and even total seasonal catch. None have worked particularly well, largely because they fail to alter the open-access nature of the resource. Season limitations produce a “race to fish” as fishers seek to catch as much as possible before the fishery is closed. The results are rampant overcapitalization and a destructive “derby” system in which each fisher races to catch as much as he or she can before the season closes. Mandates on the type of equipment that can be used — an effort to control total catch by mandating that fishers use less-efficient means of catching fish — encourage fishers to increase their investment in additional vessels or gear to compensate for the efficiency losses. Efforts to protect fisheries by directly controlling entry have not fared much better. License systems may limit the number of boats of firms in the fishery, but they do not control the amount of effort. As with season limitations, license limits also tend to encourage overcapitalization and the “race to fish.” The regulated commons seems no less prone to tragedy than Hardin’s uncontrolled one.

**CONSERVATION VS. COLLUSION**

Where formal private property institutions are absent, users of marine commons may nonetheless seek to organize themselves into communities or associations — what could be called “conservation cartels” — to manage and maintain the marine commons. The arrangements can be seen as an effort to define and enforce quasi-communal property rights where such rights are absent. In the commercial context, fishery associations often organize to limit the catch. The limits are often indirect, achieved through the setting of minimum prices or the exclusion of outsiders, as the impetus for such measures is higher profit for the fishery rather than its sustainable utilization over time, and enforcement costs preclude more direct measures. Irrespective of the motivation that drives the formation of such associations, the impact on the fishery is the same. Private associations that limit the catch can help ensure the fishing practices remain sustainable. In the commercial context, fishery associations often organize to limit the catch. The limits are often indirect, achieved through the setting of minimum prices or the exclusion of outsiders, as the impetus for such measures is higher profit for the fishery rather than its sustainable utilization over time, and enforcement costs preclude more direct measures. Irrespective of the motivation that drives the formation of such associations, the impact on the fishery is the same. Private associations that limit the catch can help ensure the fishing practices remain sustainable.

Resource conservation requires limiting consumption to sustainable levels. The number of fish caught in a given season cannot be greater than the regenerative capacity of the fishery, or fish populations will decline. Fishery output must be restricted. Yet antitrust law is inherently suspect of private arrangements that restrict output. When harvests are restricted, prices will increase above competitive levels. In economic terms, conservation may yield monopoly rents for producers. Private actors who seek to protect environmental resources by agreeing to limit the exploitation of the resource are doing precisely what antitrust law forbids. From the perspective of resource conservation, we recognize the value of conserving a natural resource by restraining consumption to sustainable levels. From the antitrust perspective, any agreement or association that seeks to restrict output or otherwise raise prices above their competitive levels is a pernicious market influence to be expunged. In short, what conservation demands, antitrust condemns.

Beginning in the late 1930s, there were several private and public prosecutions of fishermen’s unions and other cooperative efforts to limit fishery exploitation. While in many, if not all, of those cases the motivation for adopting measures to limit catches was pecuniary (i.e., the fishers sought higher prices for their goods), the conservation potential of such arrangements was evident. At a time when fishery conservation had yet to become a matter of great public concern, fishers adopted means to limit the fish catch to sustainable levels.

Despite those potential conservation benefits, the conservation cartels were uniformly held per se illegal arrangements under the Sherman Antitrust Act. Today, antitrust law continues to limit collaboration among fishers in regulated fisheries, although some fishing cooperatives have escaped antitrust condemnation.

The application of per se rules in the context of resource conservation is a potential problem because what antitrust enforcers fear — agreements that restrain output — is precisely what conservation demands. When a monopolist or cartel restricts output, it is harmful to consumers because it tends to increase prices and reduce consumer welfare. When a conservationist reduces output, however, it can be beneficial to consumers because it sustains a valuable resource. Conservation of a depletable resource requires limiting consumption. Such limits will tend to increase prices by lowering the market supply of the resource, while at the same time preventing future price increases by ensuring a long-term supply of the resource in question. By reducing consumption in the short run, conservation can actually increase consumption in the long run and therefore enhance consumer welfare. Agreements among resource users may also help to overcome free-rider problems or otherwise facilitate beneficial cooperation. In this sense, such agreements are efficient (even if they increase price or reduce output) as they address some of the inefficiencies resulting from the existence of a common pool resource. Nonetheless, conservation agreements can run afoul of antitrust law’s prohibitions. As a result, antitrust law may be inhibiting the evolution and development of voluntary associations and community-based conservation measures that conserve marine resources.

**THE CONSERVATION CARTELS**

*Manaka v. Monterey Sardine Industries* was not an isolated case. In the 1930s and 1940s, there were several antitrust actions against fishers’ unions throughout the country. In some cases, the suits were brought by government authorities. In others, private plaintiffs used the antitrust statutes to seek treble damages against the defendants. In case after case, the
courts found against the fishers’ associations and condemned their cooperative efforts as collusive attempts to restrain trade in seafood products.

In California, for example, the federal government successfully prosecuted Local 36 of the International Fishermen & Allied Workers of America for conspiracy to “restrain trade” in fresh fish and crustaceans. Approximately 75 percent of the fishers operating out of southern California were members of Local 36. Members of the union were convicted of setting minimum prices for which they would sell seafood to local dealers, agreeing to sell their catch solely to those dealers who would contract with the union and engaging in various tactics, including boycotts and picketing, to induce dealers to contract with the union. The union ultimately sought to prevent non-members from fishing off the coast of southern California and selling their catch in southern California ports, thereby enabling the union to control the catch and charge higher prices. Local 36, like the union defendants in most of the fishery cases, unsuccessfully sought to demonstrate that fishers’ unions were subject to antitrust law exemptions provided to labor unions and certain types of agricultural cooperatives, including fishing cooperatives.

The indictment of Local 36 acknowledged that “except for the illegal restraints described hereinafter, a much greater volume of fresh fish and crustaceans would have been brought to the fishing ports . . . and sold, processed, and distributed.” Irrespective of whether the restrictions were adopted with conservation in mind, they had the same effect as would have conservation measures on the fishery: they reduced the volume of fish caught. Yet this was part of Local 36’s crime. By reducing output, Local 36 may have been helping to conserve fisheries off the Pacific Coast, but they were also “prevent[ing] the public from receiving a normal and usual supply of fresh fish” and maintaining non-competitive prices. Whether this had broader economic impacts on fish markets was immaterial, as was whether the contract price was “reasonable.” As the court noted, “Unless specifically authorized by legislation, a conspiracy to fix prices is in and of itself a violation” of the Sherman Act. Conservation or other benefits were immaterial: “No inquiry as to substantiality, directness, effectiveness, or reasonableness of restraint is permitted.”

The fact that collusive arrangements among fishers and processors could have positive environmental impacts has been acknowledged by reviewing courts — and explicitly deemed irrelevant for purposes of the antitrust analysis. As the court made explicit in the Manaka case:

Such an association as that of the boat owners is not freed from the restrictive provisions of the anti-trust act, because they profess in the interest of conservation of important food fish to regulate the price and the manner of taking such fish unauthorized by legislation and uncontrolled by proper authority.

While the government may sanction collective efforts to control output or increase prices, the courts deemed independent conservation efforts tantamount to the defendant unions “taking the law into their own hands.”

The fact that fishery users are driven by their pursuit of profit to create associations and adopt measures that could facilitate the long-term conservation of ocean fisheries is not, as of yet, a consideration in the application of antitrust laws. Rather, as the Supreme Court noted in another context, “the interest of the public in the preservation of competition is the primary consideration.” Indeed, some courts viewed private cooperative efforts to reduce fish harvests as presumptively suspect. In Columbia River Packers Association v. Hinton, a private antitrust action for damages against the Pacific Coast Fishermen’s Union, the court suggested that to allow private associations to conserve fish stocks without government approval would unduly threaten the public’s right to have fish:

In any year when defendant’s members did not ‘choose to fish’, how would the consuming public get its needs of salmon, tuna, and other marine products from North Pacific waters? Since the union’s contract does not guarantee a supply of fish, where would the canneries get fish, having agreed to look to the union for their sole supply? Surely reasonable men will agree that the public’s interest in an important item of food supply should not be put in such jeopardy.

Left out of the court’s analysis was any consideration of where the “consuming public” might “get its needs” of fish should unrestrained harvests produce unsustainable levels of consumption in Pacific fisheries. Surely, higher-priced fish are preferable to no fish at all.

GCSOA Perhaps the best known antitrust prosecution of a fishery association involved the Gulf Coast Shrimpers and Oystermen Association (GCSOA). In the 1930s, shrimpers and oystermen operating along the Mississippi coast created the GCSOA to increase their revenues by controlling prices and limiting entry. The GCSOA entered into contracts with local shrimp and oyster packers and canners whereby all association members would sell their shrimp and oyster catch to contracting packers and canners. In return, the packers and canners agreed to purchase all of the catch offered by association members and to provide other services. Some of the packers owned boats of their own that also abided by the association’s rules.

The federal government brought suit against the GCSOA for violating the Sherman Antitrust Act. Specifically, the government alleged the association prohibited its members from selling shrimp and oysters below set prices and barred participating packers and canners from purchasing catches below the set price or purchasing the catch of non-member fishers. Violators were subject to fines, suspension of membership, and forfeiture of proceeds from the offending catch. The GCSOA also encouraged picketing and boycotting of non-participating packers and canners. On this evidence, the GCSOA and several of its officers were found guilty of antitrust violations.
Although the GCSOA engaged in proscribed conduct, it is not at all clear that the union’s activities were anticompetitive or otherwise harmed consumer welfare. In their study of the case, Ronald Johnson and Gary Libecap found that the union explicitly sought to alter the harvesting practices of its members. The union set a floor on shrimp prices based upon shrimp size, specifically the number of tails per pound. This price was generally greater than prevailing market prices for small shrimp. This discouraged the catching of smaller shrimp, so shrimpers shifted their harvests to later in the season when shrimp are larger and worth more. It also served to lessen the overall shrimp catch, as shrimpers were not driven to catch more lower-value shrimp to cover their expenses. Interestingly enough, Libecap notes, union price floors for larger shrimp were generally no higher than the prevailing market price, suggesting that the challenged arrangements did not have an anticompetitive effect.

The effect of the antitrust litigation was to inhibit the development of nongovernmental cooperative structures that could have addressed fishery problems.

Until the arrangement was struck down, it was apparently successful at discouraging the harvesting and sale of smaller, less-mature shrimp in Mississippi. The state’s shrimp prices were generally higher than those in neighboring Louisiana, reflecting the greater proportion of larger shrimp for which consumers would willingly pay higher prices. From this evidence, Libecap concluded that “private group regulations of fisheries could be an alternative to government regulation if that option were politically acceptable.” Yet it was not. Years after the GCSOA was challenged in court, government regulations were adopted with the same goal of increasing the value of the local shrimp catch by discouraging the catching of smaller shrimp early in the season.

**STATE ACTION**

Associations of boat owners and fishing crews were also subject to potential antitrust actions under state law. Massachusetts successfully enjoined the Atlantic Fishermen’s Union and its members from conspiring to “control completely not only the catching but the marketing and price” of all fish caught by boats operating out of Gloucester, Boston, and New Bedford by operating a “selling room” through which all union members were required to sell their catch. The stated purpose of the union was to improve working conditions and ensure that its members received a “fair share of the profits of our labor commensurate with the dangers and hardships” of fishing. Most boat crews operating out of Massachusetts at the time consisted of the union’s members.

Among other things, the union was accused of maintaining fish prices “by limiting the quantities of fresh fish which could be brought into the three ports named.” Specifically, the union adopted rules limiting the volume of fish of various species that could be brought in by a boat on each trip and setting minimum prices for fish sales. According to the Massachusetts trial court, the artificial limitations on fish supplies made it probable that “fish cost more to the Massachusetts buyer and the Massachusetts ultimate consumer” than it would have otherwise. The Massachusetts Supreme Court concurred, finding that the union’s “direct and intentional limitation of total production and the arbitrary fixing of prices” was unlawful without even needing to consider “whether prices have actually reached a level which by some standard can be pronounced unreasonable.” The positive environmental benefits of reducing fish catches off the shores of Massachusetts were not considered.

Notwithstanding the successful state prosecution of the Atlantic Fishermen’s Union’s anticompetitive conduct, Patrick McHugh, an officer of the union, was subsequently subject to federal prosecution for his anticompetitive actions under the Sherman Act. In this case, the court noted that McHugh’s actions through the union “effectively limited the quantity and species of fish landed in New Bedford. . . . Had it not been for defendants’ illegal restraints, a ‘much greater’ volume of scallops and other fish would have been brought into and sold in the port of New Bedford.” Again, that such actions might facilitate the conservation of local fisheries in the long-run was not considered by the court.

**STRUCTURE AND INCENTIVES**

The various marine conservation cartels were not perfect. Most were clearly focused more on maximizing receipts for their members than on fishery conservation. But the effect of the litigation was to inhibit the development of nongovernmental cooperative management structures that could have addressed fishery problems. That the unions’ motivations were pecuniary or otherwise “impure” should be of little consequence; Adam Smith’s “invisible hand” does not depend on noble intentions but self-interest. From a conservation perspective, what matters is whether institutional arrangements developed — or could have developed — to ensure sustainable utilization of the resource. Congress would not enact the Magnuson Fishery Conservation and Management Act for another two decades, and that act has been largely ineffective. It is possible that collusive fishery organizations, whatever their costs to consumers, would have done more to conserve marine resources and ensure their long-term supply. Yet by
Cooperative fishery management may appear anticompetitive and even reduce output, but it has the potential to serve conservation goals.

at controlling the catch, the greater incentive there is to cheat. In a marine fishery, cheating is difficult to control. The activities and catches of individual boats are difficult to monitor. It is easier to police landings or sales to canneries, particularly as there will typically be fewer canneries than fishers. Thus, the fishery association enters into contracts with the canneries to monitor or control the volume of fish caught. Minimum prices can help maintain fisher income, potentially reducing the incentive to cheat. They will also reduce the quantity of fish that canneries will purchase. The vertical aspects of the arrangement—the contracts between the fishermen and the canneries—serve to help control shirking and free riding by individual fishers.

Another threat to the viability of such a partnership in a marine fishery is the entrance of outsiders. So long as there is open access to the fishery, conservation efforts remain a questionable investment. A fishing association cannot limit the catch if non-member fishers are free to catch fish from the same fishery. The conservation cartel addresses this concern by making contracts with canneries exclusive, so that non-member fishers cannot sell their fish in competition with the association. Such contracts protect the cartel by protecting its investment in the conservation of the fishery.

Despite their anticompetitive appearance (if not effect), such conservation measures ensure a long-run supply of fish and thus may be welfare enhancing, the harm to individually excluded fishers notwithstanding. The short-term efficiency losses caused by the exclusion may be outweighed by the long-term efficiency gains from conserving the underlying resource and maximizing resource output over time. Protecting an individual fishery from depletion may be pro-competitive insofar as it maintains the fishery as a viable source of fish for consumers. That does not mean that all such arrangements should necessarily be legal under federal antitrust laws. It does, however, suggest that such arrangements should not be inherently suspect.

RECONCILING COMPETITION WITH CONSERVATION

Antitrust law has evolved substantially since the prosecutions of the GCSOA and other fishery associations. There is a growing recognition that many arrangements that appear anticompetitive have the potential to enhance consumer welfare. All economic agreements have the potential to restrain trade to some degree. Yet some such agreements may benefit consumers by increasing the efficiency of producing firms, there-
resource users, however, statutory reforms could be considered. Yet a statutory “fix” has the potential of imposing a “one-size-fits-all” rule in an area where context-specific judgments may be more appropriate.

In the conservation context, the cost of an overly restrictive antitrust rule is not simply the invalidation of marginally more efficient economic arrangements. In at least some instances, the cost of an overly restrictive rule is the continuation of unsustainable fishery practices that threaten to deplete, if not exhaust, marine fish populations. The trade-off to be made is between the risk of economic inefficiency and that of substantial environmental harm. While restrictions on output may be undesirable from a consumer welfare standpoint, such potentially anticompetitive behavior may be net welfare-enhancing in comparison to the likely alternative of fishery depletion. Viewed in this light, there seems to be ample justification for evaluating the potentially collusive conduct of private fishery associations under the rule of reason, rather than a per se rule.

Insofar as antitrust laws inhibit the development of formal cooperative arrangements among resource users, it forces users to adopt one of three courses, all of which may be substantially less optimal than the reliance upon formal cooperative efforts to control resource use. First, they may seek government regulatory measures to limit consumption of the resource. Given the poor record of regulatory measures aimed at conserving fish stocks, that is a less-than-ideal course. The adoption of property-based conservation schemes may provide substantial benefits, but such proposals can be politically difficult to implement. A second option is to adopt informal community restraints upon overfishing. Such measures can be quite effective at controlling catch levels in many contexts. Formalizing such arrangements is not an option, however, as to memorialize the rules into formal contracts is to raise potential antitrust concerns. A third option is simply to leave well enough alone and to extract rents from the fishery so long as one can. Given the nature of open access commons, this latter course may well lead to both economic and ecological ruin.

The obstruction of cooperative solutions to the commons problem is not likely to be unique to fisheries policy. At heart, most if not all environmental problems are commons problems of some sort. Admittedly, where total catch limits are in place, antitrust law is more tolerant of agreements among fishing firms to allocate portions of the catch. Such arrangements enable firms to capture some, but not all, of the gains that would come from private property. Moreover, where there is no government-imposed limit on the total catch from a fishery, the limitation on vertical integration in fishing cooperatives — that is, the limitation on agreements between fishers and processors or wholesalers — can make it more difficult for fishing firms to implement self-enforcing cooperative ventures.

**Conclusion**

The purported aim of antitrust law is to improve consumer welfare by proscribing actions and arrangements that reduce output and increase prices. Conservation aims to improve human welfare by maximizing the long-term productive use of natural resources, an aim that often requires limiting consumption to sustainable levels. While conservation measures might increase prices in the short run, they enhance consumer welfare by increasing long-term production and ensuring the availability of valued resources over time. That is true whether the restrictions are imposed by a private conservation cartel or a government agency.

Insofar as antitrust law fails to take this into account, it bars the creation and evolution of ecologically valuable and socially beneficial arrangements among resource users. The threat to consumer welfare from potentially collusive arrangements is real, but no more so than that of resource depletion and environmental ruin. A conservation cartel may force consumers to pay higher prices for a time, but the failure to conserve marine resources may lead to species extinction and ecosystem disruption. It is time to consider that the costs of antitrust law to conservation are greater than the threat of conservation cartels in the marine commons.

**Readings**