

## **We Cannot Stay the Course**

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## We Cannot Stay the Course

In her article on catch shares fisheries management (*BioScience* 60: 780–785), Sharon Levy quotes four people who equate catch shares with private property. She then questions the idea that property rights for fish create incentives for stewardship.

There are two problems with this question. First, while the nature and strength of the privilege created under catch shares varies among countries, catch shares are not property rights. They are defined in US federal law as resource use privileges and that definition has held up in the courts. Moreover, catch shares are part of a social contract that demands many serious responsibilities in return for the catch privilege, including accountability to conservation and management measures.

The second problem is that the most appropriate measure of catch share effectiveness is not whether they create incentives for stewardship, but whether they result in desirable fishery performance. There is strong evidence that catch shares do improve performance, including higher compliance with conservation standards such as allowable catch levels, reductions in gear deployment, less discarding of fish and other wildlife, dramatically improved safety, reduced fishing costs, and increased revenues.

Levy also suggests throughout her piece that catch shares are based on a belief in “free-market perfection.” The reality is that catch share programs create constrained markets that can be designed to achieve ecological and social goals. Far from creating unfettered markets, catch shares represent a powerful way to counter market forces that result in overfishing, excessive bycatch, and damage to ocean habitats.

Some degree of dislocation and distress is inevitable when fish stocks are depleted or when fleets are overcapitalized, and some negative results attributed to catch shares are actually legacies from conventional management. Well-designed and well-implemented catch shares can

minimize social and economic impacts often associated with transitioning to a more sustainable fishery. Each step of the catch share design process provides an opportunity to build in measures aimed at achieving social, ecological, and economic goals (see the Environmental Defense Fund’s new Catch Share Design Manual for more details at [www.edf.org/catchsharedesigncenter](http://www.edf.org/catchsharedesigncenter)).

Without catch shares, fisheries have suffered from overfishing, excessive bycatch, and even collapse resulting in massive job loss, lost fishing opportunity, and crumbling fishing communities. Imposition of stringent conservation measures without catch shares has often exacerbated adverse social and economic impacts, resulting in strong opposition to conservation measures. We cannot stay the course: instead, we must design catch shares to work for the fish, for fishermen, and for society.

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## Response from Levy

My article makes clear the urgent need to curb global overfishing, and discusses the successful use of catch share systems in Alaska and Namibia. Nowhere in the piece do I advocate “staying the course” of failed conventional fisheries management. By granting rights to a set proportion of the total allowed catch, catch shares management does end the wasteful and destructive race for fish, and this has clear economic benefits. Existing studies of the success of catch shares management in restoring threatened fish stocks are more equivocal. Sometimes fish populations hold steady or even rebound; sometimes not.

Understanding how catch share systems work, in both economic and ecological terms, is essential to building effective new management schemes. The assertion that catch shares work by creating stewardship incentives appears frequently on the Environmental

Defense Fund’s (EDF) Web site—so it’s ironic that Rod Fujita dismisses this issue. One example appears on page 2 of the EDF’s new Catch Share Design Manual, cited in Fujita’s letter: “By allocating participants a secure share of the catch, catch share programs give participants a long-term stake in the fishery and tie their current behavior to future outcomes. This security provides a stewardship incentive for fishermen that was previously missing.”

There is little empirical support for this claim. In catch share systems where participants indefinitely hold rights to quota, these rights become concentrated in the hands of a fortunate few who often retire from active fishing to live off the income from leasing fees. Active fishers must pay out most of their profit in lease fees. Quota holders—the people supposedly inspired to act as stewards—no longer go out to sea. This is the outcome of what some vocal advocates view as an ideal free market in quota.

Catch shares involve rights to harvest and profit from a public resource: wild ocean fish. In practice, most existing catch share systems assign quota rights without charge, and then allow these rights to be held indefinitely. The EDF seems to prefer this version of catch shares management, and the organization’s design manual advocates “secure” and “transferable” rights to quota. But there are more equitable alternatives. Instead of gifting quota rights to select individuals or groups for an indefinite term, governments can rent out quota rights for limited time periods, investing the resulting revenue in fisheries conservation and monitoring. This approach may disregard the “stewardship incentive” argument—but it returns the wealth arising from publicly owned fishery resources to the public, rather than a few lucky quota holders.

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