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Recreational Fishery Management and Small Businesses: A Red Snapper Case Study

Commercial fisheries are managed for yield and are prosecuted by a relatively few fishers, all with the same goal – to catch as many fish as possible as efficiently as possible, in order to maximize profit from the sale of whatever species they pursue. Recreational fisheries, on the other hand, are dynamic in nature, prosecuted by millions of individuals with diverse goals; some try to catch fish for food, some like to catch and release fish, some just fish in order to enjoy the outdoors. Anglers are responding to stock abundance, weather, the economy or any of a myriad of factors. As fish populations increase, so does recreational effort and catch and, as fish populations decrease, effort and catch decrease as well. Abundance drives effort. Effort drives spending and value for small businesses. Which should be a good thing, but at the moment that value is not only being ignored, it is being squandered.

During rebuilding, effort increases as the stock increases. Because the stock is increasing, catch per unit of effort also increases, meaning it takes less effort to catch the same weight of fish as the stock grows. In fisheries with inadequate recreational allocations, this can induce a downward spiral of ever tightening regulation in the face of rebounding stocks when the recreational sector is managed like a commercial fishery. The original allocation of red snapper is widely accepted to be totally flawed. It was based on a brand new survey during a period when abundance, and therefore effort and catch, was at an all-time low. That early catch data was so awful it has been rejected for stock assessment use, but that data is the basis for this current allocation. Recently, new NMFS Marine Recreational Information Program estimates have been used to adjust these historic catch estimates upward. In other fishery management councils, this data adjustment would have triggered a nearly automatic allocation correction. Instead, the Gulf Shareholders are suing to stop this fair and equitable correction of the recreational red snapper annual catch limit in the Gulf. This flawed and unfair allocation has created this downward spiral that has all but crushed the recreational red snapper fishery and the businesses supported by recreational red snapper fishing, while the stock continues to grow rapidly. Many would say we have a bigger red snapper stock than we have ever seen or that many even thought was possible. Yet this rebuilding has been a disaster for the recreational industry jobs and income through the ever decreasing season while the commercial sector has thrived under rationalization.

This brings up an excellent point. Catch shares and fishery rationalizations are justified because they capture the resource rent, or economic value, from our shared, public resources that traditional commercial fisheries management drains. So if maximizing value, or at least vastly increasing value for the commercial use of red snapper, is a goal of our commercial fisheries management, why doesn't that same argument transfer over into recreational fisheries management or for fisheries management as a whole? The National Marine Fisheries Service's own scientists have shown the Gulf Council that reallocating fish to the recreational sector would further enhance value, perhaps to the tune of four times more value than the current rationalized commercial value, but that advice has been ignored. Other resource management agencies are bound to maximize economic value subject to minimizing harm on small business. MSA and its various reauthorizations, also call for maximizing value tempered by small business impacts.

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The latest analysis of commercial and recreational fisheries conducted by NMFS in support of Amendment 28, the reallocation amendment, showed that commercial value, or economic profit, was \$2.75-\$2.95 per pound of red snapper (Agar and Carter, 2012). That study established a recreational value of \$11.21 per pound for those same fish; over four times the commercial value (Table 1). Those NMFS economists concluded that the current allocation was economically inefficient and more value could be realized by the American public if commercial allocation was shifted to the recreational sector. The Socioeconomic Science and Statistical Committee (SESSC) of the Gulf Council agreed with those findings. The Griffin et al. (2009) study went so far as to simulate a market where recreational anglers could buy red snapper quota. Their simulation model showed that not only would the recreational sector purchase all the red snapper quota, they would also buy a significant portion of the shrimp quota to reduce bycatch and increase the red snapper stock further. Disregarding this NMFS analysis and the SESSC's recommendations, the council has yet to increase recreational allocations.

Table 1: Recreational Red Snapper Values Per Pound from the Scientific Literature
 Red Snapper Values Available in the Literature.

Study Authors	Year	Species	Recreational Value
Gillig et al.	2000	Red Snapper	\$20/fish
Haab, T. et al.	2008	Red Snapper	\$108/fish
Griffin et al.	2009	Red Snapper	\$52-\$155/day
Carter and Liese	2012	Red Snapper	\$20-\$63/fish
Agar and Carter	2012	Red Snapper	\$11.21/pound

Lately, the Gulf Shareholders have been fighting any sort of reallocation because they don't want to have their privatized public wealth, which they were granted for free, taken from them. They have been using the argument that the American public is owed red snapper protein. Nothing could be more disingenuous coming from this sector. The American public is owed the highest return on their resources. Particularly when that highest return benefits a larger number of small, coastal businesses. Recently, on the NatGeo show "Big Fish, Texas," a prominent red snapper commercial fisherman, Buddy Guidon, left 11,000 pounds of red snapper on the deck too long and those fish had to be sold for "dog food." Using the analysis above, those fish would be worth \$123,310 dollars to the recreational sector. Buddy sold those fish for only \$49,500 and his profit, or economic value, was only \$30,250. If those red snapper were caught by recreational fishermen, they would generate four times more value. Instead they ended up as dog food. Why doesn't Buddy Guidon think enough about the value of red snapper as a food for America to keep those fish from ending up as dog food?

State wildlife agencies recognize that recreational fisheries provide more value and economic activity than commercial fisheries. That is why the majority of the inshore species in the states are allocated predominantly or completely to the recreational sector. The states treat anglers not as regulated

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entities, as the Councils and the National Marine Fisheries Service do, but as clients. Recreational anglers, through license sales and excise taxes, pay the full cost of their own management and, generally, the lion share of enforcement and management of federal commercial fisheries too. As a result, the states tend to have a much less adversarial relationship with the recreational angling community.

To add insult to injury, the Gulf Council is currently considering giving recreational allocation in both the king mackerel and red drum fisheries to the commercial sector without any economic analysis at all. All the commercial sector had to do was ask for it. I have been valuing recreationally caught fish for most of my fisheries career and I would guarantee that those red drum and those king mackerel are worth more to anglers, worth more to the American public, in the recreational allocation. We can no longer ignore this double standard. It is time for allocation guidelines. Economic value must be considered when moving fish from sector to sector. The way this has been approached and is currently being approached is unfair, not transparent, inequitable and destroys economic value. We must be pro-active about examining allocations and allocating based on economic value or we risk damaging coastal livelihoods and the economic resilience of coastal communities.

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