

**"RESOLVING THE TRAGEDY  
OF THE COMMONS":  
A Comment**

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At the outset I think it is important to recognize a fundamental conceptual distinction. That distinction is between wildlife as an input into a production process and wildlife as an output valued by humans. The nature of economic goods is such that raw inputs are seldom valued for consumption in their original form. Some sort of entrepreneurial talent needs to be applied in order to transform those inputs into valued outputs. Even though the amenity value of wildlife often requires minimal interference with wild populations, the role of the entrepreneur is no less important here than in other production processes. Perhaps the most characteristic problem faced by a wildlife entrepreneur is how to provide human access to wildlife, so they may be seen and admired, without endangering the resource. In cases of nonamenity outputs, like the production of furs and meats, the entrepreneurial problems are more like those faced by producers of nonanimate goods.

If property rights can be established and enforced, entrepreneurial activity is rewarded and encouraged. Those incentives would very likely lead to resource arrangements that haven't yet been conceived. Smith's paper describes some marvelous examples of such solutions when the benefits from wildlife production have been capturable by the entrepreneur.

We expect good things from the market when property rights are clearly defined in both input and output markets. The commons lack such rights on the input side. As Smith clearly details, drawing from Garrett Hardin's "Tragedy of the Commons," when resources belong

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to all they are inevitably abused.<sup>1</sup> For wildlife species that abuse has often meant extinction.

The natural policy prescription for a common-property ailment is to establish property rights. But whether or not that is a practical solution is a function of available technology. It just happens to be the case that some resources are easily monitored. Chickens and green sea turtles can be farmed in pens and ownership is easily established. But wildlife species vary greatly as to their fugitive nature. For example, the various species of whales are not so easily monitored. Although technologies for keeping track of individual whales or herds are probably available, one can at least say that monitoring such beasts is much more costly than the monitoring of more sedentary, land-dwelling animals.

Certainly technology changes, and one could predict that private entrepreneurs would come up with creative means to corral effectively all sorts of wildlife. But our expectations for market solutions should be conditioned on technological and biological reality. The fact that large numbers of people place a high value on a particular resource is not sufficient to generate a workable set of property rights in that resource.

The absence of property rights on the input side leads to common-pool problems, and wildlife species vary significantly in their ownability. A separate issue is the definition of property rights at the output end. An absence of property rights here leads to the problem of public goods. If private parties provide habitat for migratory birds, they cannot exclude others from enjoying the benefits of their investment. A plausible scenario is that while the total benefits from the improved habitat are large, it doesn't pay any individual party to provide it. Here again, while many wildlife outputs are easily packageable and sold, many others, particularly the amenity values from migratory species, are not. The usual public-goods analysis applies. And we can predict the success of property rights schemes for different species based on the public-goods nature of the products they provide.

The usual analysis of market failure in the provision of public goods is often advanced in terms of organization costs. To overcome the public-goods problem in private markets, the potential consumers must be able to organize in some fashion and come up with the funds to provide the good. A common observation among economists is that organizational costs for potential consumers of wildlife and wilderness may well be high, prohibitively high.

<sup>1</sup>Garrett Hardin, "The Tragedy of the Commons," *Science* 162 (1968): 1243-48.

While casual observation might lead to that conclusion, such statements strike me as mere speculation. Perhaps it is time for resource economists to consider seriously unconventional solutions to problems inherent in unconventional resources. After all, wild species are not widgets, and we shouldn't expect that they will be provided in the same manner as widgets. It may well be that the costs of voluntary organization often aren't that high. For evidence on that, Smith provides interesting examples of how organizations like the Audubon Society have overcome public-goods problems. That evidence should not be ignored.

The bottom line is a choice between a range of governmental solutions and a range of private market solutions for wildlife management. When that choice is made, the analytical qualifiers I have mentioned can be taken as arguments against market provision of wildlife.

If, on the other hand, you believe, as I do more and more, that the "creation of private property rights in wildlife" is a viable option, that they can provide protection for wildlife superior to that of public management and increase the value to humans from the use of that wildlife, then the previous analytic devices can be taken as an agenda for reform. That is, we can predict the instances in which private markets have a higher probability of success than others. As an incremental step we should push hard for establishment of private property rights in species where we are confident of such success. Smith's paper, as well as being delightful reading, is an example of good empiricism toward that end.