

Ecosystem Management: Implications for Fisheries Management

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ECOSYSTEM MANAGEMENT: IMPLICATIONS FOR FISHERIES MANAGEMENT

BY ROBERT T. LACKEY

The core question before us is: "Is ecosystem management yet another stage in the evolution of our basic management paradigm—a paradigm that society and our profession have followed for a hundred years—or, is ecosystem management a shift to a totally different paradigm based on an alternative world view?" In short, are we witnessing evolution or revolution?

Each of us can dance around the question with impressive bureaucratic and expository skill. The dance involves a number of steps, some fairly obvious—others much more subtle.

The easiest step in the dance is to embellish our comments with overworked clichés: sustainability, biological diversity, holistic management, eco-

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system-based management, protecting the nation's biotic heritage, ecosystem integrity, stakeholder involvement, community empowerment, and so on. These are good words—for glossy brochures—but what is the answer to the question? Evolution or revolution?

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Some view ecosystem management as apparently little more than "holistic" management; characterized as having more awareness of the interactions and interconnectedness within ecosystems, considering sustainability over longer time frames, weighing a broader spectrum of benefits to society, better managing public lands, and involving all

those affected by public decisions. Or, as the poster says: "Ecosystem management: Considering Everything." We would be hard pressed to find anyone who is against these things. In short, they mean little.

What we have today is an evolution of the management paradigm long dominant in "modern" society. We may argue vociferously over the benefits of fish in the creel, debate the importance afforded biologic or genetic diversity, consider endemic species more important than exotic ones, or minimize the influence of man's activities. But the management paradigm is the same. There is change, but the change is incremental, and adjustment is relatively easy for bureaucracies and the public. A few of the big losers may whine or scream, but that is nothing new in implementing public policy.

This is evolutionary change. It is anthropocentric and utilitarian. It is a view that says all benefits, tangible and intangible, measurable and unmeasurable, flow to humans. Rights are intrinsic to humans. Consideration will be given to other animals and plants, but there are no intrinsic benefits except to humans. As a society, we may choose to preserve all biological diversity, protect all gene pools, and set aside vast tracts of land that few even visit, but the benefits of these decisions flow to humans, whether those benefits are tangible or intangible.

The other world view is dramatically different. It is the stuff of revolution. Perhaps that is why in some circles ecosystem management has been met with such ferocious resistance. The view is not evolutionary but is a fundamental paradigm shift. The demand is for justice—ecological justice. Like any revolutionary concept, it is unsettling.

In this view, the modern, linear, engineering, anthropocentric perspective, is wrong. It is immoral. It has caused many of our problems. We must reject the arrogance that humans should “manage” ecosystems. The demand is not for modification of our policies, but to ask fundamentally different questions.

Do animals and plants have rights? Who are we, as one species, to ask such a question? Of course they have rights! If we are to “manage,” it ought to be to maintain the planet in a state where all plant and animal species, if not individuals, can survive. A profession, such as fisheries management, does it not tacitly condone the killing of animals for sport? The elitism to assume that we have the right to “manage?” Speciesism at its worst!

Whose property is this? Is the concept of ownership even relevant? How can one species own another? Why should some humans be permitted to impose their destructive will on other species? It is bad enough that we have some animals in slavery, pets, but must we dominate the planet? Do we manage to maximize benefits to society? The revolutionary view says no, we make decisions as members of the biotic community. We demand ecological justice.

So what is happening within the fisheries profession? For those who don't support the revolutionary view of ecosystem management, there are two obvious choices: (1) Ban or outlaw it. Call it un-American. Not a very practical or effective approach. Label it subversive (and many do). In some of its formulations, ecosystem management is...well...it is radical change; or (2) (and this is the more sophisticated approach), co-opt it. Em-

brace the words but not the philosophy. In short, finesse the issue away. This is what we are generally doing today. Perhaps Henry Regier was correct in his address to the 125th Annual Meeting of the American Fisheries Society.... The first wave, the first paradigm, has crested and dissipated. Have we, professional fisheries managers and scientists, become the problem by clinging to yesterday?

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Which world view are we talking about as fisheries managers and scientists? I have a little recognition test. It is simple to apply—all you have to do is pay attention to how often certain keywords or phrases are used.

The first word is “health.” Health is a noble word. Health is good. Sickness is bad. “Healthy” describes a lifestyle you want for your kids. “Unhealthy” is something to be avoided.

Ecological health is a favorite of the management, anthropocentric world view—the view that ecosystem management is evolutionary change. You will hear: “Our agency is in favor of ecological health—we make decisions toward this end.” Never mind that health is a value judgement, a political judgement—we are all in favor of health. How many people champion sickness?

Individuals that see ecosystem management as a revolutionary concept have another world view and would not feel comfortable with this value-dependent view of health. What is better is “natural,” and natural is unaffected by

man (or only slightly by man with a very light footprint). Health is being co-opted as a concept. Watch for “health” to slip undefined into discussions of ecosystem management.

Next, look for the word “management.” Now management is one of those simple words that exposes your world view. Revolutionary ecosystem managers chafe under the rubric. To manage implies stewardship which implies an anthropocentric world view. If we are merely one of many species, how can we be so bold to presume to manage the others?

Evolutionary ecosystem managers would respond, at least if they were into straight talk, with: “Get a life—even aboriginal populations used animals and plants. They ‘managed’ as we do, only there were fewer of them and their standard of living was not as high. Besides, do you want to go back to human mortalities of 50 percent before age five?” Well, most of us aren't that direct, so you will not likely hear such views expressed in discussions of ecosystem management.

The word “sustainability” is a third part of the test. Evolutionary ecosystem managers love this term nearly as much as ecological health. Why? Because it conveys a different meaning to every listener. Who can be against sustainability? Not many have argued for unsustainability! Revolutionary ecosystem managers would say that if you are making the right, the moral decisions, sustainability happens. You don't manage for it; it is a by-product of the process.

There are other words and phrases to test the orientation of champions of ecosystem management. They fill the dialog and would make speech writers envious; yet they serve little function other than to mask our lack of consensus, our lack of even a coherent debate.

“Holistic”—we must make decisions looking at the entire ecosystem. Sounds good, who can be against that? Holistic is nearly always followed by a quote from Aldo Leopold about the impor-

tance of cogs and wheels...or bells and whistles...I always forget which.

"Biological Diversity"—invariably used with the word "protect" in front as if maintaining biological diversity was a newly unearthed 11th commandment. There are legitimate political and scientific debates over the role of biological diversity, but only the revolutionary ecosystem managers have a right to the moral high ground on this one.

"Empowerment"—a real good word to use because it sounds like you are getting something for free. Are you? What does "empowerment" mean in the context of ecosystem management? It's kind of like a slogan in a beer commercial: "It sounds great...or, does it convey less?"

This list goes on: biological integrity, community involvement, enlightened land ethic. You get the idea. Who knows what they mean in the debate over ecosystem management? The point is...no one does!

Where does all this leave us in fisheries management? There will continue to be a lot of ambiguity as to exactly what people do mean when they invoke ecosystem management. There are profound...and legitimate...differences of opinion, but it is often difficult to separate these differences from the rhetoric.

The divisive issues in ecosystem management are not technical: they are moral and philosophical. We argue about the importance of biological diversity for ecosystem stability or perhaps for a future cure for cancer, but the real debate is over the morality of extirpating species or gene pools. Fisheries scientists, with all our glorious technical gadgets—satellites and computers, DNA probes and genetic engineering, electrophoresis and

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electrofishing—will be no more relevant to resolving the moral issues in ecosystem management than are physicians in resolving the morality of abortion. These are not scientific questions!

Scientific uncertainty is obviously high in much of ecosystem management, but let's not kid ourselves that it will be substantially reduced anytime soon. There will only be incremental change. Science and research can—and must—play an important role in helping society

formulate policy options and evaluating their consequences, but a strong dose of humility is warranted when it comes to assessing our technical capability.

What will happen to the concept and practice of ecosystem management in fisheries management? My guess is that it will be embraced by the bureaucracy and become yet another step in the evolution of public policy. It will not be revolutionary. Few representatives from government or commerce will fail to enthusiastically support ecosystem management. It will mean a continuation of the trend toward placing greater weight on nonconsumptive societal benefits—environmental quality, if you will—a trend that should not surprise any of us.

And finally, the underlying moral philosophy that spawned the emergence of ecosystem management as a fresh, potentially radical concept will not disappear. Shards of this philosophy can be found in the "animal rights" theology, the "small is beautiful" proponents, and the "community-based green movement." Whatever the direction, it is a safe bet that future issues in fisheries management will be no less divisive and challenging than those we now face.◀