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BELOW THE SURFACE

Editor's Note: At the MESP, we've been overwhelmed by the sheer number of new marine ecosystem services publications and ocean newsletters. In our new column, "Below the Surface," we highlight the interesting things you might have missed.

Marine Ecosystem Services: How Is That Valuation Thing Treating You?

--Linwood Pendleton



Well it finally happened ... marine ecosystem services have become trendy and that has some peoples' knickers in a twist.

Recent articles raise questions, and offer some answers, about the usefulness, and even the ethics, of ecosystem services (ES) thinking and valuation in marine management. [Unmüßig](#) finds grounds for fears that monetization will lead to commodification, diminish biodiversity, and ignore cultural and spiritual values. [Kronenberg](#) echoes those concerns using the little known field of economic ornithology. [Jax and collaborators](#) voice some of Unmüßig and Kronenberg's concerns from an ethics standpoint, but say they can be mitigated by making the ecosystem services concept more transparent.

[Schröter et al.](#) take a more positive view of valuation, pointing out that it provides additional arguments for decision making processes and does not replace ethical, ecological, or other nonmonetary arguments. It may steer people toward more sustainable management. It is the "vagueness" of the ecosystem services concept, say Schröter et al., that prevents societal actors from running with ES valuation.

Nonetheless, such valuation is becoming a greater part of marine and coastal management. As Dale Squires put it in a recent e-mail exchange "[ecosystem services valuation] might have a tangible but indirect contribution on a large scale by the slow accumulation of evidence that contributes to policy formation." I believe him. People are making decisions now as if ecosystems mattered to people, even if they don't know the first thing about valuation. [Sitas et al.](#) explore the ecosystem service science-practice gap, highlighting this with a South African case study.

They find that while ecosystem services were not explicitly referred to in documents, processes or by the individuals consulted, the implementers were working within the realm of ecosystem services. Given the trend towards transdisciplinary networks, Sitas et al. identify considerable opportunities for "bridging the gap."



"As you go through life, take time to monetize the roses."

Boiling everything down to a number does not always make the policy better (or, for that matter, the discussion more scientific). The key is to be clearer about what we are talking about, to then be honest about our ability to quantify ecosystem services, particularly when not everything can be reduced to a single currency and when money is not what everyone cares about, and to acknowledge that not everything needs to be valued. As Unmüßig points out, when things are irreplaceable or damage to them is irreversible, valuation is not what's called for.

Understanding that valuation is not the "be all/end all" may be what leads [Loomis and Paterson](#) to remind us that economists don't own ecosystem services. So just how far are we are willing to go to try to quantify the contribution of ecosystem services to human well-being? Too many valuation studies have distilled intuitive and convincing ecosystem services into shaky, if not preposterous, monetized values.

In their companion paper, Loomis and Paterson come up with a framework for quantifying the expanded universe of things that matter in the ecosystem service approach. Using a hierarchical approach, they identify 42 different dimensions of ecosystem services. Concentrating large lists of measures into one or fewer numbers is the norm right now - think Ocean Health Index or some grand valuation of [Global Ecosystem Services](#). I still don't know what these consolidated numbers mean.

Sometimes I wonder if we really want to know the true value of ecosystems? Are we willing to let other people decide how to manage ecosystem services once they know that value? Or do we always start with some hidden agenda that we call "conservation" or "management" and hope that an ecosystem service valuation will help our cause?

It's time to stop talking about marine ecosystem services as if they mean something specific. Ecosystem services thinking now covers a small universe of ideas, issues and dimensions that describe the uncountable ways that people depend on nature. You can't cover them all in an essay, a global valuation, a list of indicators, and certainly not in a conference session. So we've seen the forest, now it's time to start looking again at the trees. Let's narrow the conversation when we are talking about ecosystem services; let's quantify services that we can measure with relative confidence, and when we write, convene, and discuss ES, let's avoid expansive and sometimes incomprehensible catchall phrases.

Cartoon by Mike Twohy, New Yorker Collection, The Cartoon Bank.

Anne Kaup contributed to this column. For more information on these studies or MESP, contact info@marineecosystemserves.org.

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