

When should communities and conservationists monitor exploited resources?

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Abstract. Both conservationists and harvesters may be willing to contribute to participatory monitoring of exploited species. However, this can be costly and stakeholders need to choose whether monitoring programs or other alternatives, such as a moratorium or unmonitored exploitation, meet their objectives most efficiently. We discuss when, and how much, stakeholders may be willing to contribute to monitoring of exploited resources. We predict that communities' contributions will usually be much less than the annual value of the harvest, and will be affected by their dependency upon it; their discount rate; its cultural importance, vulnerability to overexploitation and amenability to monitoring. 'Efficient' conservationists' willingness to contribute should be similar to that of communities', since monitoring and management programs must compete with compensated moratoria. The combined willingness to contribute of both stakeholder groups will usually be much less than twice the annual revenue from the resource. Applying this framework to a case-study of crayfish harvesting in Madagascar, we find that the total willingness to contribute to monitoring is likely to be insufficient to support conventional monitoring efforts. We conclude that conservation planners must be realistic about what stakeholders are willing to contribute to monitoring programmes and consider low cost methods or negotiated moratoria.

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