

*Some species play a key cultural role in our lives – could that be used to protect nature and benefit local people?*

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Protecting nature is a challenge we have been failing to tackle. The longer we take, the harder finding solutions becomes, given the growing demand for natural resources by an ever-increasing human population. Human activities have triggered the extinction or sharp decline of numerous species in the last centuries, and the artificial imbalance of many, if not most ecosystems worldwide. Over the last decades, parks and reserves have been showcased and implemented as one of the main solutions to protect wildlife and ecosystems. However, these initiatives often fail to reconcile environmental goals with the social rights of local peoples with a long history of living in close dependence on nature. In many cases and contrarily to expectations, market insertion has not necessarily undermined the connection, respect and customary rules local people adopt towards nature, but the collapse of some species might have such negative impact. Preventing species collapse and promoting ecosystem protection needs us to include aspects we may have overlooked. Ecologists have long used keystone species as the basis for conservation plans and decision making, but what about species that play a key role in human culture? Could conservation efforts be focused on these culturally important species (CIS) as a way of protecting both nature and traditional ways of life? In this perspective article, we use data from the literature and explore the outcomes of two management schemes, both encompassing multiple independent initiatives, to show that the cultural importance of some species should be regarded as a highly relevant aspect of conservation strategies in places where natural resource use is critical to local livelihoods. We argue that management initiatives focusing on the recovery of CIS will likely stimulate the interests of local people, their engagement and compliance, as well as local surveillance against infractions. Local and continuous enforcement is potentially more effective than official institutional mechanisms,

which are typically funding and staff-deficient and only sporadically deployed, especially in developing countries. CIS-management can achieve a wide range of positive ecological, social, cultural and economic outcomes and be an effective tool to reconcile biodiversity conservation with local people quality of life.



*Photos of local fishermen interacting with aquatic resources in the Juruá River basin, Amazonas, Brazil. Left: Man carrying an arapaima (*Arapaima sp.*) individual (Photo credit: Helder Espírito-Santo). Right: Man carrying a yellow-spotted river turtle (*Podocnemis unifilis*). (Photo credit: Carolina Freitas). According to ethical standards, every person shown in the pictures authorized the use of their photographs through an informed written consent.*



*Fishers waiting an arapaima (*Arapaima sp.*) to come up to the surface to harpoon it, during an arapaima co-management harvest season in the Amanã Sustainable Development Reserve, Amazonas, Brazil. Photo credit: Carolina Freitas). According to ethical standards, every person shown in the pictures authorized the use of their photographs through an informed written consent.*

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