



Management of habitats for target species, such as the Yellow Anaconda (*Eunectes notaeus*) in Argentina, can be beneficial to many other species, such as these Neotropical Cormorants (*Phalacrocorax brasilianus*) at Banyado la Estrella.

COMMENTARY

Is Wildlife Management Business or Conservation — A Question of Ideology

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Photographs by the author (except where noted).

Macroeconomics and Conservation Approaches

I published an article in 2007 about anaconda conservation and how it can be affected by macroeconomics (Rivas 2007a). I identified poverty as the ultimate threat to conservation in Latin America and how conservation efforts were bound to meet with little success as long as poverty remains the rule in rural areas. I also identified neoliberal policies¹ as one of the main causes of poverty and highlighted how well intended conservation efforts, based on neoliberal measures, fail to solve the poverty problems of rural regions — and thus also fail in their conservation goals. Instead, they work as a “painkiller,” creating the illusion of a solution, providing at best temporary relief, but in fact distracting from seeking real solutions.

What is True Conservation?

At the core of any disagreement regarding conservation programs in Latin America is the notion, widely held among many conservation biologists, that any plan for wildlife management, including ecotourism, is by definition a conservation plan. This notion has been promoted for the last few decades in order to capitalize on people’s increasing environmental awareness (e.g., Mansfield 2009). However, considerable evidence suggests that wildlife management is not *de facto* conservation. Consider a bird-watching operation located in an area inhabited by a very shy and rare species. Bird watchers flock to the site during the nesting season to see this rare species, which can produce an economic surge in the local economy. Although such an example might be considered an effective conservation plan, if this rare bird is so shy that the steady parade of tourists compromises nesting success, this population could literally be “watched into extinction.” A true conservation program must have conservation as its primary goal and not just as a byproduct. If only a byproduct, the system can easily stray into a regular business regulated solely by the bottom line — and one that might not even be sustainable.

Wildlife harvesting programs fall into one of three categories: (1) Businesses that exploit an environmental commodity until it is depleted. (2) Businesses that use an environmental resource in a sustainable manner but without providing enough economic incentives to the stewards of the land. (3) Programs that use a resource sustainably but also provide substantive economic incentives for local citizens who then have good reasons to protect the environment from other uses that might not be sustainable. When the bulk of the economic incentive benefits the local communities, they will have both reasons and resources to prevent external enterprises from threatening the environment. I would argue that the first example is not conservation at all and that only the third is true conservation. The second example can — and should — take credit for being sustainable, but just because it does not destroy the environment is not enough to construe

it as a conservation program. *As a matter of ideology, the goal of a conservation program must be conservation.* Economic gain can be a byproduct or a means to do conservation but it must not be the goal. Also, the main beneficiaries of a true conservation program must be the local communities. They are tightly linked to the land and will more likely try to protect an ecosystem that supports them — if they have the resources. External businesses can easily move their operation elsewhere and are not truly committed to the maintenance of the system.

Management of Anacondas in Formosa, Argentina

In my 2007 article (Rivas 2007a), I never intended to provide a comprehensive review of the Argentinean Yellow Anaconda management program and I do not intend to do so now. My concern then and now is that management programs that allocate most of the profit to an economic elite provide only superficial relief to the problems of the local people, do not protect the system against external influences, and do not constitute true conservation. In fact, they have the potential for distracting us from seeking real solutions.

Micucci and Waller (2007), and Waller and Micucci (2008) highlighted a number of positive elements in the Formosa program. In addition, the program has doubtlessly increased the economic status of the local population. From interviews with local people, I learned that the anaconda harvest could increase their yearly income by as much as 50%. I also learned from law enforcement officials that the rate of cattle robbery and common crimes had dropped to historic levels since the program began, which they attributed to the local people having legal means of earning an income. While all these are desirable traits in a management program, they do not



For more than two decades, the Venezuelan Spectacled Caiman (*Caiman crocodilus*) program generated a continuous profit and was often cited as an example of sustainable management in a free-market economy. However, the system collapsed as a consequence of over-hunting, and tanners moved their operations to other sites.

¹ In essence, neoliberal policies seeks to transfer much of the control of the economy from public to the private sector under the belief that it will produce a more efficient government and improve the economic health of the nation.



I started to study Green Anacondas (*Eunectes murinus*) in Venezuela in 1992 in order to explore the possibilities for sustainable use. Due to the collapse of the caiman program in the mid-1990s, the Venezuelan government halted other harvesting programs. Consequently, no attempt to harvest anacondas ever materialized in Venezuela. Conservation biologists often believe that their approach to conservation is *pure* conservation, strictly scientific, or somehow devoid of politics or ideology. However, management programs based on a free-market economy rely on constant growth, which is intrinsically at odds with conservation principles. Scientists who fail to realize this are at risk of becoming unwitting tools of economic agendas that they do not understand or with which they might not even agree.

differ from any other business moving into an area and they might fail to protect the ecosystem against non-sustainable uses — because the incentive offered by the anaconda program, as described in Micucci et al. (2006), is not enough to empower the local people, nor does it provide them with the means to oppose a corporate takeover in search of greater profits.

Wildlife management programs around the world are not asked to meet these high standards to qualify as conservation. I would also argue that this is the reason conservation programs more often than not show poor results. This and my earlier 2007 papers are intended to raise awareness about economics and politics among conservation biologists, to design management programs that not only use resources in a sustainable manner with conservation as a byproduct, but to design them with conservation as the principal goal and to include in them means of providing local communities with the resources to withstand pressures from external sources that promote non-sustainable uses in favor of short-term profits².

We should not use the term “conservation” for programs with goals that are not primarily conservation-oriented. For example, catching fish to supply high-end restaurants is called *fishing*, not fish conservation. Fishing operations around the world are first and foremost commercial businesses — and fishing operations have on many occasions over-fished their stocks (e.g., Hutchings and Myers 1994, Larkin 1977, Myers et al. 1997). Furthermore, even sustainable fishing operations do not try to disguise their business as conservation programs. The anaconda management program in Formosa may well be a legitimate, sustainable business that helps the local economy (like any business) and relieves pressure on the natural environment by providing jobs (as businesses often do) — but, if conservation is merely a byproduct, such a program should not be presented as conservation.

² Imagine that a corporation wanted to drain large portions of the swamp from which anacondas are being harvested to, for example, plant oil palms for the production of agro-fuels. This operation will destroy the habitat, but would also offer permanent employment with comparable or superior income to what the locals make from wildlife harvesting. Will the locals be willing to oppose this operation to protect the habitat? Will they have the resources to oppose the corporation? I contend that it is only conservation if the answer to these questions is yes.

Globalization or No Globalization? That is the Question

Conservation efforts based on globalization and the free market are risky because they are not time-tested models and fall within a narrow context of economic principles. We cannot trust our precious diversity to such untested economic models. Free-market economies have largely failed in the one task they purportedly are designed to do well: Production of wealth. The United States is one of very few countries (basically the G8³) that have benefited from a free market system — but that is not the case for the majority of the countries that have tried it. Furthermore, the countries that have succeeded under free-market economies are countries that have destroyed most of their pristine natural habitats, as a free market relies on constant economic growth. Using globalization and free-market measures for conservation policies is a response to ideological agendas, and it is not data-driven or supported by facts (e.g., Mansfield 2009).

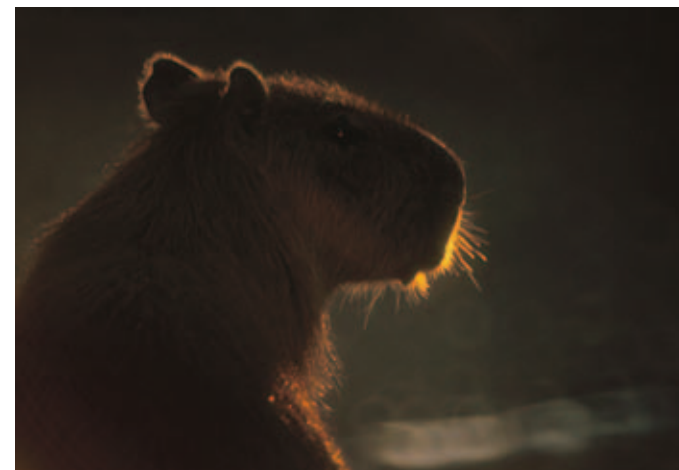
I do not intend to turn this commentary into a debate on economics or politics, but when we apply a conservation strategy that is tightly linked to an economic ideology we are supporting that ideology, whether we realize it or not. Insisting on free-market measures for conservation despite their repeated failures to protect biodiversity is not only ineffective but shows adherence — conscious or not — to ideological positions that are intrinsically at odds with conservation principles.

Tylenol Conservation

As I argued in my 2007 articles, temporary measures can and should be developed to address and relieve short-term problems. To differentiate them from real solutions, I labeled them “Tylenol Conservation,” as they work like a painkiller, ameliorating symptoms of a disease they are not intended to cure. A management program that relieves local poverty while we search for real solutions is a welcome tool as part of a conservation program, but it is not conservation by itself — and it should not replace the search for a real solution anymore than a painkiller should replace the search for a real cure.

Many of the conservation solutions we seek in today’s world are destined to fail because they rely on the same neoliberal framework responsible for the poverty that is largely responsible for the failure of conservation programs, and they provide only temporary and superficial relief. This is

³ A forum for the world’s major industrialized democracies (Canada, France, Germany, Italy, Japan, Russia, United Kingdom, United States) to discuss issues of mutual or global concern.



Large, non-aquatic animals have been unable to flourish in most Capybara (*Hydrochoerus hydrochaeris*) habitats (Hoogesteijn et al. 1997). In fact, Capybara are, for the most part, the lone large herbivore in most of their natural habitats. As such, the normal large prey predator has not evolved, and capybara can be farmed in an almost completely natural setting. Consequently, many conservationists have strongly pushed for governmentally subsidized Capybara farming.

why I seek to redefine what we do in conservation by promoting a greater awareness of the political and economic framework in which we function. Not doing so can render us unwitting tools of economic and political ideologies that compromise the success of conservation efforts.

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Always Opportunistic



TALURA EBANKS

Not one to question its luck, this Great Egret (*Ardea alba*) readily exploits the human-mediated introduction of Green Iguanas (*Iguana iguana*) onto Grand Cayman.