

## **CAN WE AFFORD WILDERNESS?**

Ralf Buckley

Can the world still “afford” wilderness? This is a politically charged question. It is asked in the context of ever-expanding human population pressures. But it is asked largely by lobbyists for primary industries, from small-scale farmers to multinational oil and mining conglomerates, timber and tourism developers. Such interests argue that we should use wilderness “sustainably”. These arguments are purely political. We need wilderness for life support, and any use is unsustainable. Here I explain why.

To afford something means to have enough money to buy it. The total cash cost to buy all the world’s remaining areas of high biological diversity at current local prices is less than annual US expenditure on soft drinks. So yes, at a global scale we can afford wilderness. But most wilderness is not for sale, except politically. It is controlled by national governments; which protect it, exploit it or ignore it depending on their own economic and political power bases.

A more fundamental question is whether we can afford to lose wilderness. We rely on relatively undisturbed natural ecosystems to clean the dirty air and water which emanate endlessly from our cities. If the air in a city were not constantly replenished by winds bringing clean air from the wilderness, the people living there would die just as surely as those locked in a garage breathing car exhaust fumes. If urban rivers did not flow into the ocean and fall as rain into water catchments upstream, the people in those cities would be poisoned by a mixture of industrial effluents and human waste.

Wilderness areas, especially oceans and tropical grasslands and forests, absorb atmospheric carbon to mitigate human-induced climate change. The only realistic way to get carbon out of the atmosphere is to put it back in the soil. “Biochar” is one attempt to do this artificially, but it’s a lot cheaper and more effective just to keep these areas under native vegetation and let the plants maintain soil fertility. Current farming and forestry practices in most of the world typically reduce soil organic matter content, taking carbon out of the soil and into the air. So wilderness mitigates climate change impacts from human activities elsewhere.

Wilderness areas worldwide provide the genetic diversity which underpins our food, textile and pharmaceutical industries. It is plants and animals which provide the specific chemicals which we use to produce almost all our drugs and medicines. Wild plant and animal species also provide the genetic material which allows us to keep breeding new varieties of staple food crops and livestock, as older varieties continually succumb to new pests and diseases. This is why pharmaceutical and agricultural companies pay so much for “bioprospecting” rights, the opportunity to screen wilderness areas for potentially valuable species.

Ten years ago a group of economists calculated that the recurrent financial value of goods and services which human societies derive from the natural environment is at least twice as large as the entire global economy: many tens of trillions of dollars every year. Most of this is what they call “ecosystem services” – clean air and water, genetic materials and so on – and most of this relies largely on wilderness. So wilderness is something we definitely can’t afford to lose.

Given that we can afford to keep wilderness and can’t afford to lose it, is it perhaps possible to use it “sustainably”? This is a misleading question, for two reasons. Firstly, we do already use wilderness, all the time, to keep the planet habitable for humans. Every breath you take and every drop you drink uses wilderness.

Secondly, the concept of sustainability, which is vague at best and most often used as a soft excuse to avoid the hard realities of environmental science, is completely dependent on scale. At a global scale, there are large areas where the human economy consumes the natural environment: towns and cities, mines and manufacturing plants, logging areas and most croplands. Since humans as biological creatures are completely dependent on the

natural environment, they can only continue to survive as long as there are also areas where that environment is not being consumed: i.e., wilderness.

At a local scale, small numbers of humans with low material demands can indeed live in slightly-modified natural environments which provide economic services and environmental services at the same time. This is the basis for subsistence economies. As long as we have a large industrialised human population which lives in cities and eats food from intensive agricultural production, however, we cannot also occupy the wilderness areas at the same time. Under these circumstances, wilderness must be kept as wilderness for the world as a whole to remain “sustainable” in the sense of providing a place where humans can continue to live.

There are four main groups of people who want to use wilderness for purposes other than planetary life support. Unprotected wilderness suffers continual attrition and degradation from high-impact human uses. For example, the logging industry encroaches continually into old-growth forest. These uses are business as usual, the way the world economy currently operates. They are endorsed, encouraged and often subsidised by national governments, through arrangements ranging from land tenure to publicly-funded infrastructure. But they reduce the world’s wilderness, on which we depend for survival. The area within national parks is not enough on its own.

Even within protected areas, wilderness is still subject to some attrition, though at a lower rate. In many developing nations, parks are protected on paper but not on the ground, and are subject to continuing illegal incursions. In both developed and developing nations, the oil and mining industries lobby continually for the rights to operate inside parks, pretending that this will not destroy their value for conservation and wilderness. The real-world oil and mining industries create massive impacts through networks of roads and seismic lines, discharge of toxic mine tailings or drilling compounds, and the influx of people, trucks, helicopters and heavy equipment. That’s how the industry works. It relies on contractors and subcontractors, and when the dozer hits the dirt it’s about deadlines and cost control. That’s fine in a mine, but not in wilderness.

National parks in most countries are routinely used for recreation as well as conservation. The impacts are relatively minor and manageable. It has become part of modern politics that parks agencies must work to maintain political constituencies and operational funds, and independent recreation is one of their tools.

Midway between mining and hiking lies commercial tourism. National parks, especially World Heritage Areas, are major drawcards for both domestic and international tourists. The commercial tourism industry sells these tourists their transport, accommodation and some activities. At least a quarter of the entire Australian tourism industry bases its businesses principally in natural areas, including private as well as public lands.

Worldwide, almost all commercial tourist accommodation and infrastructure is on private property outside parks, with activities inside protected areas controlled by the parks agencies. This works well, even in parks with tens of millions of visitors a year.

At a much smaller scale, there are private landholdings run as conservation reserves funded by tourism lodges. But that is very different from public protected areas. Private landholders are running businesses using their own assets. They are not necessarily contributing to global conservation, the goal of public protected areas. And in private reserves, tourism revenues have to cover conservation management costs, as well as infrastructure and marketing. In public parks, these costs are paid by the country’s taxpayers. It’s a very different game.

Commercial property developers see publicly-owned parks and wilderness as opportunities to profit. If they can build tourist accommodation inside well-known parks, then the attraction, infrastructure, operational management costs, and marketing are all publicly subsidised. And if developers can negotiate exclusive rights in particular parks, then they can raise prices and reduce services with no competition. This generates profits for that developer, but it imposes

inequitable costs on the parks agency, on less wealthy independent visitors, on other tourism providers and regional industry, and on the wilderness areas which support the entire human race. So it is neither affordable nor sustainable.

The term which is used to push this approach is “partnership.” This is another misleading term. Tour operators want to use public parks resources and to have a say in park management practices. They do not offer parks agencies their company resources or a say in managing their businesses. So it's not a partnership in a business sense. Tourism property developers argue that they could make money for parks. But where tour operators have to pay parks fees already, e.g. per-person entry fees, they complain bitterly. They make money, but not for the parks agencies.

Some parks agencies do raise most of their operating funds from tourists. For South Africa it's about two thirds, and for Quebec in Canada it's about four fifths. But they do it directly, by charging fees to individuals. They have commercial deals with tour operators too, but these make up only about one twentieth of total turnover, and those deals may not even cover costs. There are privately run hotels in some US National Parks, but they were built in pioneer days and have presented problems ever since. There are campgrounds run by concessionaires, but under strict parks rules.

The suggestion that hotels inside parks instead of outside will somehow contribute to conservation is simply not supported by evidence. And people don't want hotels in parks. They want to go to parks cheaply, and camp. When Parks Victoria wanted to build a hotel in Wilson's Promontory National Park some years ago, there were more objections than for any previous development proposal in the State. People want wilderness the way it is. Even more so as there's more and more people, and less and less wilderness.

And this brings us to the elephant in the room, namely continuing population growth. Ultimately, unless global human populations soon stabilise and shrink, all other conservation measures will ultimately prove useless. Everything we can do to protect the environment is just a stopgap until we can reduce human populations. Yet at present, human populations worldwide continue to grow, and as countries such as China and India become more wealthy, *per capita* resource consumption increases too.

So the bottom line – and it really is a triple bottom line, social and economic as well as environmental – is an old truism from the pioneer days: “In wilderness is the hope for the world”.

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