WORLD·WATCH

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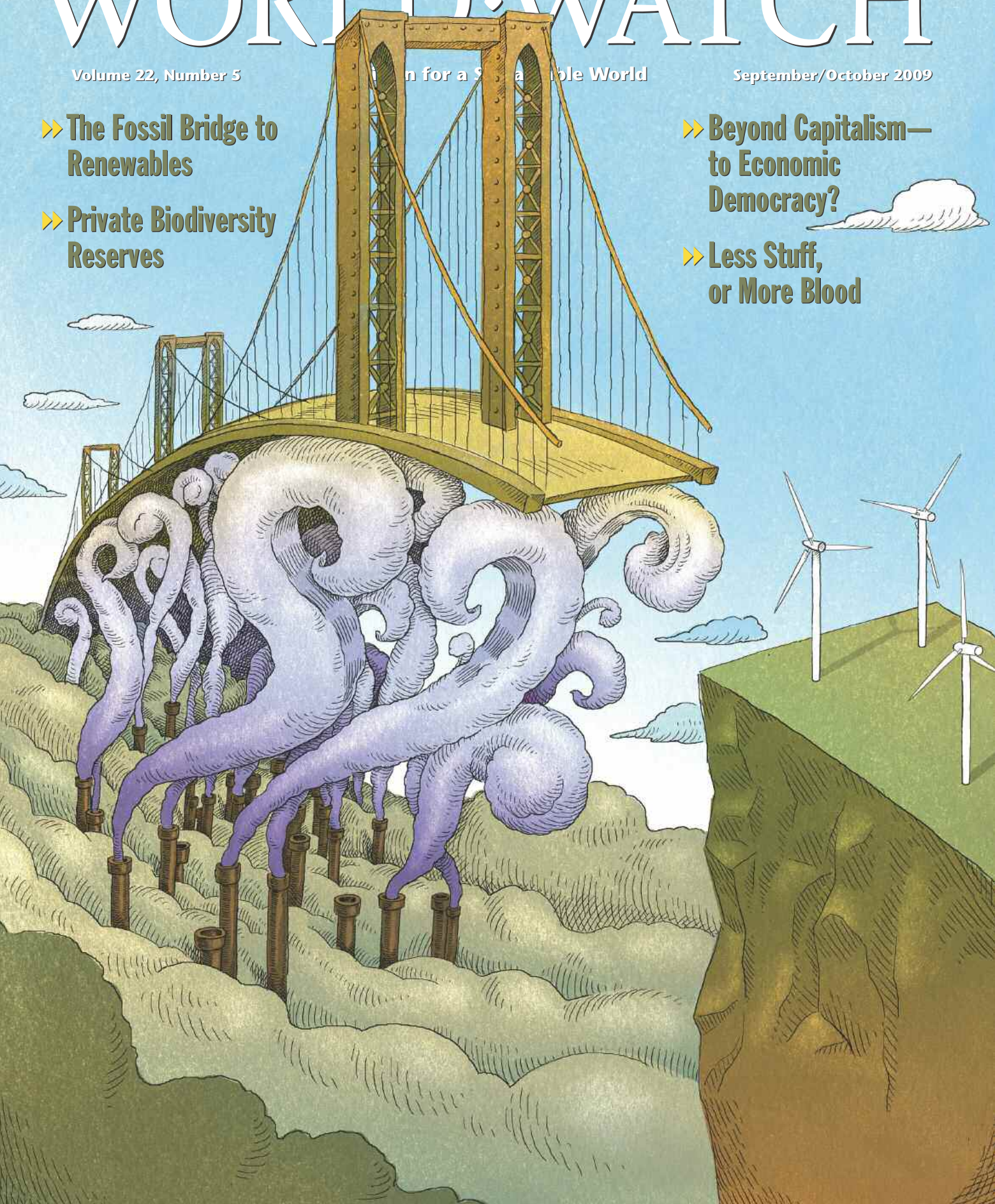

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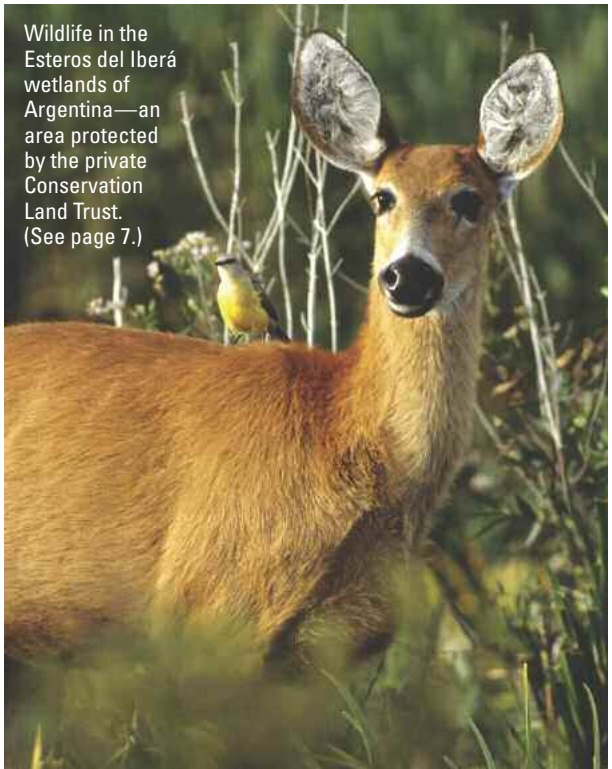
FEATURES



Wildlife in the Esteros del Iberá wetlands of Argentina—an area protected by the private Conservation Land Trust. (See page 7.)

Hernan Povedano, courtesy Conservation Land Trust

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Saving Species, Privately

Douglas Tompkins

Species continue to vanish rapidly despite the vast areas set aside by governments to protect them. Can private biodiversity reserves help?

by Jeff Langholz

Biological diversity continues to decline across most of the world, and threats are mounting as climate change kicks in. Scientists have documented temperature-related changes to the number, range, and behavior of several hundred species across the globe. Yet conservationists continue to tinker with the same old approach to saving species, when what they really need is a bold new strategy on a scale commensurate with the problem.

When it comes to biodiversity conservation, national parks and other government-protected natural areas have long served as the main tool. Since 1872, when the U.S. government established Yellowstone National Park (the world's first), governments have set aside more than 108,000 protected areas worldwide that protect some 30 million square kilometers. Many countries have reached the international standard of formally protecting 10 percent of their terrestrial surface area.

That's the good news. Hitting the 10-percent target is an impressive accomplishment, even if it took more than 135 years. But the specter of climate change suggests that 10 percent will not suffice. On a warmer planet, thousands of plant and animal species must shift to higher latitudes (or elevations) to find climatic conditions similar to those under which they evolved. Making these range shifts will take decades, if not centuries. Landscapes must also be linked with protected natural areas that facilitate safe movement. Thus, protecting the world's flora and fauna from mass extinction may require something on the order of 20 percent. And we need to do it faster this time, say within 50 years.

Is this even possible? The challenge seems especially onerous given that we already picked the low-hanging fruit. Many of the world's large, sparsely populated, ecologically significant areas have already been brought under government protection. This leaves hard-to-protect areas where substantial human populations and high political and financial costs prevail.

The key is to change our outdated protected-area mindset. In many regions, the most critical biodiversity areas are in private hands, and hoping that governments will simply expropriate them—despite the legal, social, political, and budgetary obstacles—is absurd. Instead of leaving protected-area establishment primarily to governments, we should stimulate a robust private-sector investment in protected-area creation. Not only could this help to double the protected-area estate, many of the newly protected areas could also make immense contributions to sustainable economic development.

So-called private protected areas have been gaining momentum over the past decade. Delegates to the 2003 World Parks Congress produced a *Private Protected Area Action Plan* designed to improve and expand worldwide use of this tool. A year later, parties to the UN Convention on Biological Diver-

Above: A portion of Yosemite-size Parque Pumalín in Chile. The park was created by Doug and Kris Tompkins through years of land purchases. In 2005 it was declared a Nature Sanctuary by the Chilean government, giving it additional protection from development.

sity (CBD) approved a *Programme of Work on Protected Areas* that included specific requirements relating to private protected areas. In 2005, the International Union for Conservation of Nature (IUCN) dedicated an issue of *PARKS* magazine to private protected areas. Finally, delegates to the 2008 World Conservation Congress called for establishment of the world's first Private Protected Area Task Force.

All of this high-level activity has raised the visibility of private protected areas. The race to save biodiversity will be won or lost where most of that biodiversity occurs: on non-state lands (see below). The upcoming climate conference in Copenhagen could increase that attention even further, as countries look to expand carbon sequestration payments globally. Yet the fact remains that private protected areas remain a little known and grossly underutilized conservation tool. Most people are familiar with national parks, but have never heard of private protected areas, let alone visited one.

Multiple Forms

Private protected areas represent a relatively small subset of parks. For years, only a small number of academics, NGOs, and government officials have paid them much attention. That is all changing now, as private sector conservation booms across much of the globe.

Sandra Hill

Some of the 7,000 head of purebred Boran cattle, an indigenous African breed, grazing on the Ol Pejeta Conservancy in Kenya.

What exactly is a private protected area? Definitions vary, but in general they are land parcels of any size that are managed mostly for biodiversity conservation, protected with or without formal government recognition, and are owned or otherwise secured by individuals, communities, corporations, or other nongovernmental organizations.

No single model exists, which makes definitions and generalizations problematic. Private protected areas consist of multiple approaches for different niches and purposes. For example, individuals and families often create private protected areas using lands that have long been within the family. On the opposite end lie the increasing number of affluent outsiders who purchase large land tracts for conservation purposes. Prominent examples include Ted Turner in the United States, Johan Eliasch in Brazil, and Doug Tompkins in Chile, all of whom are protecting hundreds of thousands of hectares.

When groups are involved, they can take the form of nonprofit organizations such as land trusts, or for-profit entities such as corporations. They also can be residential communities that integrate housing with protected natural areas. The biggest organizations owning private protected areas are large multinational corporations and international conservation organizations. Organizations such as The Nature Conservancy, Audubon, and the U.K.-based Royal Society for the Protection of Birds own and operate large networks of private protected areas.

Private protected areas also differ according to common activities occurring in them. These can range from purely nonconsumptive uses (such as in a strict nature reserve with no permanent human settlement or extractive activity) to primarily consumptive uses (e.g., sustainable logging and grazing). Most private protected areas fall somewhere between the extremes. They embody a multiple-use approach focused on sustainable development and seek to balance protection with production. For example, Ol Pejeta Conservancy in Kenya is a 30,000-hectare nonprofit wildlife conservancy that combines an extensive tourism operation, the world's largest population of black rhinos, and an ongoing cattle operation. The cattle operation is not only compatible with wildlife, but may in fact improve forage quality for grazers. It has also provided an economic buffer during tourism lulls.

Private protected areas vary widely in the level of formal designation as a conservation area. On one extreme are thousands of habitat patches that landowners protect informally for a variety of market and non-market values. In such cases, habitat protection has been a tradition and the landowner would be surprised to hear someone call the area a "nature preserve" or "protected area."

On the other extreme lie formal areas that are permanent units within a country's national system of protected natural areas. In order to become units in the park system in Brazil, Costa Rica, and other countries, these private protected areas must undergo a detailed screening process, have a government-approved management plan, and be formally declared by legislative or executive action (i.e., "gazetted"). They must also undergo periodic inspection and evaluation by the government agency with oversight responsibility. These reserves come closest to what most people consider to be a national wildlife refuge or similar government-protected area.

Between these extremes lie lands under a perpetual conservation easement or other longterm land restriction, as well as lands entered into a shortterm (5 to 20 years) government

conservation incentive program. Examples include the United States Wetlands Reserve Program, Conservation Reserve Program, and several others. Unless longterm conservation intent is apparent in some fashion, lands enrolled in such shortterm incentive programs are not generally considered to be protected areas given the limited time commitment and relative ease with which owners can revert to less conservation-friendly land uses.

State of the Ark

Unlike national parks and other government-funded protected areas, private protected areas need to pay their own way and employ an increasingly wide range of approaches for generating income. Revenue sources fall into two major categories: those originating outside the reserve (external), and those that are self-generated by the private protected area (internal).

Australian Wildlife Conservancy/Ecopix

The flooded Warburton River in the Kalamurina Wildlife Sanctuary, central Australia. The Australian Wildlife Conservancy, with support from The Nature Conservancy and the Australian government, has purchased almost 700,000 hectares of Australia's central desert to protect endangered flora and fauna.

Primary external sources include government budgets and programs, allocation of tax revenues (local, state, national), and private voluntary donations from foundations, corporations, and individuals. Primary internal revenue sources include sustainable resource extraction (e.g., livestock, crops, forestry, hunting, bioprospecting), nature-based tourism, and payments for environmental services such as provision of water, pollination, and carbon sequestration.

When it comes to generating revenue, private protected area owners have demonstrated great creativity. They often finance operations through the sale of local products, including native plant seeds and seedlings, jams and jellies, woodworking, handicrafts, organic produce, bottled water, essential oils, silk, honey, fruit and herbal medicines, butterfly ranching, wildlife and wildlife products, and residential home sites.

Reserve owners often create special attractions to generate tourism. Examples of special attractions and activities include canopy walkways and ziplines, wildlife rehabilitation centers, caving, birding, hiking, rafting, horseback riding, fishing, spiritual retreats, astronomy, cultural tours, and scientific research.

Despite diverse revenue streams, sometimes the money runs out. Then what happens to the reserve? Solutions vary. In the case of informal private protected areas, the landowner may choose a more traditional land use option that makes more money (e.g., ranching, logging, mining), in which case the land is no longer protected. In the case of many formally designated, NGO-operated private protected areas where reversion is not an option, a mechanism may be invoked whereby ownership reverts to an appropriate government agency should the NGO be unable to continue operating the reserve.

How much private land is out there? Where is it located? Is there enough to get us to 20 percent? No one knows for sure. Lacking a global assessment of land tenure, we must rely on localized information specific to counties, provinces, and countries.

For example, we know that more than 70 percent of Australia lies in private hands, including Aboriginal-owned lands. In Latin America, a majority of biodiversity hotspots consist almost entirely of private lands. Key examples include the Chocó-Darien of western Ecuador and Colombia, and the Atlantic Forest of Brazil, Argentina, Paraguay, and Uruguay. Other examples include the Valdivian forests of central Chile, and the Mesoamerica region (Mexico and Central America). These regions have three things in common: they are exceptionally rich in biodiversity, they face a barrage of threats, and they are mostly under private ownership. Protecting them is key to saving neotropical biodiversity, and it will require a private sector approach.

The size of the opportunity depends on the scope of the definition. Land tenure can be a confusing mix of property regimes, with pure public or private ownership hard to find. What we think of as "public" land often has private sector

© Lyle Rosbotham

A federally endangered wood stork dining in the National Audubon Society's Corkscrew Swamp Sanctuary in south Florida. The 5,260-hectare wildlife sanctuary was established in 1954.

interests crawling all over it, such as logging, grazing, and mining in national forests and biosphere reserves. Meanwhile, peel back the layers of "private" land and you often find public interests in the form of easements, subsidies, and other government support.

The IUCN clarified the situation with its 2008 *Guidelines for Applying Protected Area Management Categories*. The guidelines identify "private governance" as one of four protected-area governance types worldwide. IUCN notes that private protected areas are a large and growing subset of the world's protected areas, and comments on how private governance sometimes overlaps with ownership by local communities and indigenous peoples. Given the vast amount of critical land controlled by local communities and indigenous peoples, this overlap has huge implications for the total coverage possible by private protected areas.

The biggest news and greatest opportunity concerning private protected areas lies with the upcoming climate change negotiations in Copenhagen. A strong chance exists that global leaders will come together over a successor to the Kyoto Protocol. The replacement will not only limit carbon emissions but also expand mechanisms for countries to invest in carbon sequestration projects as a way to comply with emission caps. One mechanism generating a lot of discussion is REDD, or Reduced Emissions from Deforestation and Forest Degradation. If implemented as part of an international carbon market, REDD could fund public and private biodiversity projects on an unprecedented scale and conservation as a land use could become much more appealing than land uses that degrade biodiversity and emit carbon rather than sequester it. And it would happen in the world's most ecologically important areas.

The approach could also apply to marine resources. Most people assume that approaches to protecting marine resources must differ from terrestrial ones because the ocean is publicly owned. But in fact The Nature Conservancy already leases and owns submerged lands off the coasts of Texas, Washington, and New York. Significant quantities of submerged land are available for lease and ownership not just in the United States but across many parts of the world. This approach remains in its infancy, but evidence suggests that it can protect a wide variety of threatened ecosystems, including kelp forests, coral reefs, scallop beds, clam beds, tidal flats, oyster reefs, and seagrass meadows.

Next Steps

If private protected areas could lend a huge boost to biodiversity and sustainable development, then what can and should policymakers do to realize the potential? The World Parks Congress, the Convention on Biological Diversity, and other forums have made dozens of concrete suggestions for advancing this approach. The four recommendations below summarize and prioritize much of the thinking regarding next steps:

1) Assess the current status and potential role of private protected areas worldwide. Parties to the CBD are required to assess the status of "innovative" governance mechanisms such as private protected areas. States can funnel national-level information to the Secretariat, which can combine it into a global snapshot of where things currently stand. A natural next step would be to look at future opportunities. This would entail conducting a global gap analysis showing where non-state lands occur and the extent to which they coincide with critical conservation priorities. The analysis could also explore

best practices and opportunities with regard to private conservation in the marine realm as a supplement to marine protected areas. IUCN's new Private Protected Area Task Force, created at the 2008 World Conservation Congress, would be a natural focal point for these efforts. The task force could also fulfill the CBD mandate to promote international sharing of private protected area best practices.

2) Strengthen the legal framework for private protected areas. Implementing this recommendation requires two steps, the first of which is a global assessment of the current legal landscape. This includes analyzing existing legislation, such as laws in Ecuador, Costa Rica, Chile, Brazil, Australia, and elsewhere that explicitly define and support formal private protected areas. The second step would be to fill existing legal gaps by developing laws, regulations, policies, and programs that support creation of formally declared private protected areas in a variety of forms, such as conservancies, conservation easements, conservation concessions, and other protection mechanisms. This would include taking steps to strengthen legal security for conservation lands, including the recognition of rightful owners, reform of land tenure laws, and improved law enforcement. Such tenure security provides a necessary and powerful incentive for landowners to invest in longterm resource protection.

3) Broaden the suite of fiscal and other incentives that support private protected areas. The single best way to stimulate private protected area growth is to level the playing field by removing adverse incentives that steer land use decisions toward cattle, agriculture, mining, logging, and other extractive activities. This includes removing direct incentives, such as cash subsidies, for activities that destroy biodiversity. It also requires changing indirect incentives such as laws in several developing countries that still require people to cut down rain forest in order to get clear title to the land. Data consistently show that, on a per-hectare basis, private protected areas can compete financially with alternative land uses when given the chance.

Another way to level the playing field is for policymakers to create local, national, and international incentive mechanisms that support longterm private conservation. Incentives should focus on payments for environmental services, including but not limited to carbon sequestration. But they can take several other forms, such as protection from organized squatter invasions, expedited land titling processes, prestige and recognition programs, purchase or transfer of development rights, and a reduction of taxes.

4) Develop institutional capacity in the public and private sectors. It seems clear that even when supportive legislation and programs exist for private protected areas, implementation by government agencies is weak. Governments should invest greater resources in programs that support private conservation, with an emphasis on providing sufficient human and financial resources to implement policies and programs fully and on concerted monitoring and evaluation of private protected areas to ensure quality. Within the private sector, NGOs, community groups, and others should dedicate resources to creating new private protected area initiatives, or taking existing ones to new heights.

In summary, private protected areas represent a little-known but hugely important option for sustainable development and biodiversity conservation worldwide. They are not perfect (no approach is), but their potential contribution is immense, especially considering how they dovetail with indigenous peoples, local communities, sustainable development, and climate change.

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Porcelain crab and anemone in Chumbe Island Coral Park off the coast of Zanzibar. The park was gazetted in 1994 and became Tanzania's first marine park.

Market forces drive both climate change and biodiversity loss. The key, then, is to harness these market forces and steer them in a positive direction. Policymakers did this with the Kyoto Protocol and are poised to take an even bigger step in Copenhagen. REDD, in particular, could lead to an unprecedented breakthrough in both public and private conservation in areas where it matters most.

John Stuart Mill commented that every great movement must go through three phases: ridicule, discussion, then adoption. Once ridiculed by the mainstream, the private protected areas movement is now the focus of considerable high-level discussion. The immense challenges facing society require that these discussions not only continue, but also lead to concerted action.

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For more information about issues raised in this story, visit **www.worldwatch.org/ww/private**.