Activists protest National Parks proposal to profit from microbes

National parks in the US are usually teeming with tourists—and with companies aiming to make money from the organisms found there.

The US Park Service, which oversees the 390 national parks and monuments in the country, is considering a plan that, beginning this summer, would allow the parks to share the profits from these schemes. But critics say the lure of profits will endanger the parks' natural resources and wildlife habitats.

"Commercial exploitation could compromise the plants and animals, the whole system, really," says Michael Garrity, executive director of the Alliance for the Wild Rockies, a Montana-based environmental nonprofit.

Scientists have for decades tapped the richness of national parks to study topics from geology to microbiology, so far needing only a permit to take samples. When they have found something promising—such as an enzyme with potential pharmaceutical applications—they have had to learn to make the compound in the lab instead of extracting more of it from the park.

In the late 1980s, for instance, scientists from California-based Cetus developed *Taq* DNA polymerase, used in the ubiquitous polymerase chain reaction (PCR), from the microbe *Thermus aquaticus*. The enzyme has generated billions dollars in sales each year.

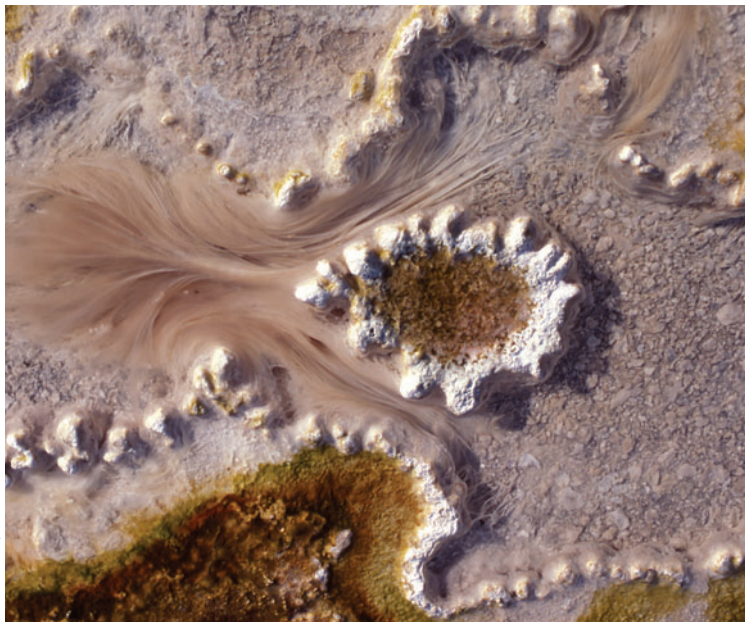
The parks' previous attempts to capitalize on their biodiversity also met with stiff opposition.

In 1997, the agency made a deal with Diversa Corporation, a San Diego-based biotechnology company, to share in the profits of the company's microbial research in Yellowstone. Outraged environmental groups, including the Alliance for the Wild Rockies, sued the Park Service, arguing that commercial bioprospecting is illegal in national parks. In 2000 a federal judge suspended the agreement until the agency completed an evaluation of the proposed projects' environmental impact.

Over the next six years, the agency drafted an assessment of environmental impact for all the parks. The agency supports a plan that would allow companies to take samples and, in exchange, offer the parks royalties from product sales, says Al Nash, a National Park Service spokesman. Park employees would also receive scientific training and use of the company's research equipment.

For instance, before the court suspended the Diversa agreement, the company analyzed the DNA of wolves from Yellowstone Park—something the park's scientists couldn't afford to do—allowing conservation biologists to track how the endangered packs were mixing.

But the alliance and four other nonprofit groups are campaigning to ban all commercial research and last year launched parksnotforsale.org to call attention to the plan.



F Hirschman; 1978

Rich diversity: *Taq* DNA polymerase, developed from bacteria (above) in Yellowstone National Park, has generated billions of dollars in sales.

Officials are reviewing letters received during the plan's public comment period, which ended 29 January. They expect to publish the final environmental impact statement in the spring and make a decision on the plan in the summer.

"The national parks exist, in part, to enhance scientific research," says Charles Chester, an environmental lecturer at Brandeis University. "I would argue that they ought to try to do whatever they can to benefit from science that's being conducted in the park."

Alisa Opar, New York

by the US National Institute of Allergy and Infectious Disease, faces a 0.7% cut.

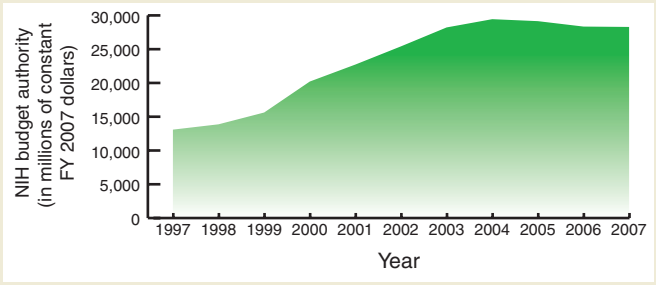
In 2006, the Bush administration approved minuscule increases or even cuts for funding of biomedical research. As *Nature Medicine* goes to press, however, the newly Democratic Congress is debating a bill that would rescue the 2007 NIH budget from the proposed $28.6 billion, bumping it up to $29.1 billion.

If that bill passes, the president's $28.8 billion proposal for NIH in 2008 would in effect be a cut from the 2007 levels. Counting a required payment to the Global Fund to Fight AIDS, Tuberculosis and Malaria, the institutes stand to lose $529 million in 2008.

With inflation, the NIH has lost about 12% of its total purchasing power since 2004, when a campaign to double the agency's budget ended. The nosedive the NIH has taken since then makes many observers question a new scheme to double the budget of the US National Science Foundation. The NIH cuts are in part funding that increase.

"While we applaud the efforts to shore up agencies who have not had as much attention in the recent past," says Furcht, "we would submit that it should not come at the expense of the NIH."

Alan Dove, New York



Source: AAAS Reports

Tough times: The budget for the US National Institutes of the Health has not seen a substantial increase since 2004.