

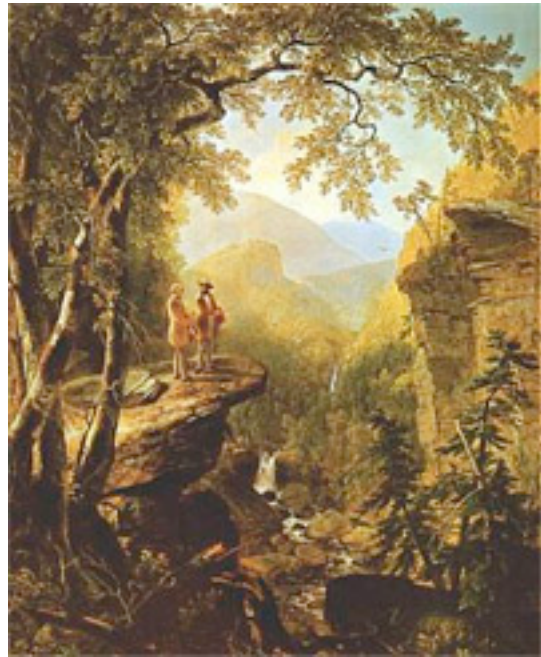
## Communing with nature less and less

Courtesy University of Illinois at Chicago and World Science staff

In an alarming trend, outdoor activities are on the wane as people around the world spend more leisure time on line or watching TV, researchers say. They worry that the trend will lead to fatter, unhealthier populations—and more environmental destruction, as people lose interest in both nature and its protection.

Asher B. Durand, "Kindred Spirits" (1849)

"There's a real and fundamental shift away from nature—certainly here [in the United States] and possibly in other countries," said Oliver Pergams, a biologist at the University of Illinois at Chicago.



Activities as varied as hiking and fishing are dropping in popularity, the researchers said.

Pergams and Patricia Zaradic of the Environmental Leadership Program, Delaware Valley in Bryn Mawr, Penn., had previously reported a steady decline in per capita visits to U.S. national parks since the late 1980s. That, they found, correlated very strongly with a rise in video-game playing, Internet surfing and movie watching.

The researchers call this shift to sedentary, electronic diversions "videophilia." It "has far-reaching consequences for physical and mental health, especially in children," Pergams said. "Videophilia has been shown to be a cause of obesity, lack of socialization, attention disorders and poor academic performance."

In the new study, Pergams and Zaradic said they gathered and analyzed survey data on various nature activities from the past 70 years, including the two decades since U.S. national park visits began their ongoing decline.

"We felt that national park visits in the U.S. were a pretty good proxy for how much people were involved in nature," said Pergams. "But we wanted to see if people were going less to other nature-related venues or participating less in nature recreation activities, both here and in other countries."

The biologists examined figures on backpacking, fishing, hiking, hunting, visits to national and state parks and forests. They found comparable statistics from Japan and, to a lesser extent, Spain. They found that from 1981 to 1991, per-capita nature recreation declined at rates from 1 percent to 1.3 percent per year, depending on the activity studied. The typical drop in nature use since then has been 18-25 percent, they said.

The study is published in this week's online issue of the research journal Proceedings of the National Academy of Sciences.

"We don't see how this can be good for conservation," Pergams said. "We don't see how

future generations, with less exploration of nature, will be as interested in conservation as past generations.”