

## Goodbye to the snows of Kilimanjaro

"It's a done deal," says one global warming expert: Tanzania's famous ice fields will disappear within 15 years.

hen Ernest Hemingway wrote *The Snows of Kilimanjaro* in 1938, no one dreamed the crowning glory of Africa's highest peak might someday just melt away.

But in 2002, geological sciences professor and global warming expert Lonnie Thompson and colleagues shocked the scientific community by predicting that the famed Tanzanian ice fields would disappear between 2015 and 2020. They determined that the ice had lowered by about three feet every year since 1962.

In his recent, third expedition to the summit, Thompson was saddened to see that the prediction is coming true. "The change is so dramatic," he said. "The rate of ice loss may even be accelerating. It's a done deal."

The latest expedition added more evidence:

- An ice wall 164 feet high has retreated about 16 feet since 2002.
- Massive new holes will split one glacier within six months and the northern ice field within two years.
- Various ice fields have lost 6.5 to 16.5 feet from their surfaces. No new ice has accumulated since 2000.

"This is a dramatic symptom of global warming," Thompson said. "It's caused by emissions from fossil fuels and burning of the rain forests—not by natural climatic changes."

Scientists know this because air pockets deep in the ice show the amount of toxic carbon dioxide that's occurred in the earth's atmosphere for the past 650,000 years. The researchers can document changes by drilling into the ice and analyzing the parts per million (PPM) of carbon dioxide. "We know PPMs have fluctuated from 180 to a maximum of 290 for 650,000 years," Thompson said. In the past 20 years, the number has increased to 381 PPM.

For the people living at the base of Kilimanjaro, this means more than lost revenue from tourism. They depend on meltwater from the glaciers and precipitation in the rain forests that cover the mountain's flanks for drinking and irrigation.

And for the rest of the planet, Thompson sees the receding ice fields as a warning of the urgent need for action. He says related events include the European heat wave in 2003 and recent hurricanes (intensified by warmer ocean temperatures) and typhoons.

"We need alternative energy, hybrid cars, and nanotechnology that uses less energy—now," he said. "The longer we wait, the more painful the crises and their solutions will be."

## IN BRIEF

## Cheaper to keep her-or him

A new nationwide study has found that divorce reduces a person's wealth by more than three-quarters (77 percent) compared to that of a single person. "Divorce causes a decrease in wealth that is larger than just splitting a couple's assets in half," said Jay Zagorsky of Ohio State's Center for Human Resource Research. Conversely, married people see an increase in wealth that is more than just the combination of the assets of two people. The study also casts doubt on the assumption that divorce is significantly harder financially on women. After divorce, the typical man held 2.5 times the amount of wealth of the typical woman a difference in absolute dollars of only about \$5,100.

## Another benefit of exercise

The older you are, the longer it takes your body to heal even small skin wounds, and that increases the chance of infection. But a new study of older adults found that regular exercise may speed the healing process by as much as 25 percent. The participants in the study, ages 55 to 77, had not exercised regularly for at least six months. For the study, they exercised for 75 minutes three days a week. After a month each participant received a small puncture wound in the back of the upper arm. On average, those who exercised healed in 29 days, 10 days faster than those in a control group, who did not exercise.

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