Educators gather at Glacier
By MICHAEL JAMISON of the Missoulian

Park hosts global workshop on environmental change

WEST GLACIER - School teachers from around the world gathered in Glacier National Park this week, sitting under the summer sun to watch the ice melt.

The four-day workshop is part of a multi-year program that looks at environmental change from a variety of perspectives and locations around the globe.

The perspective this week is focused on what scientists call the cryosphere - a fancy word for the veneer of ice and snow that covers parts of the earth.

Teams of teachers will learn about climate change by clambering around on glaciers and snowfields in and around the park.

With Dan Fagre, a research ecologist with the U.S. Geological Survey who is leading a scientific exploration into global climate change in the park, the group will hike four miles to Grinnell Glacier. There, the teachers will experiment with the high-tech tools scientists use to monitor cryospheric change, and talk about how to use scientific data in the classroom.

In recent years, Fagre has mapped the loss of Glacier's glaciers, documenting the decline from 150 glaciers in the mid-1800s to just 26 today. Currently, the park is home to about 19 square kilometers of ice, which is less than half the 40 square kilometers estimated in 1966 and a fraction of the 100 square kilometers estimated in 1850.

"Our position has been that if current climate trends continue, Glacier Park's glaciers will be gone by 2030," Fagre told the Missoulian earlier this year. "The bottom line is the glaciers are shrinking and breaking up into more pieces."

Across the street from Fagre's office in West Glacier is the newly established Crown of the Continent Learning Center, a park research arm that is co-sponsoring the international teacher workshop.

Dr. Leigh Welling, the center's director, calls the gathering "a great opportunity for teachers from around the world to see first-hand the effects of climate change on glaciers."

Her center is partnering with the Wright Center for Innovative Science Education at Tufts University to play host to the event.

"This offers teachers the opportunity to learn about cutting-edge research that is going on in the park that is pertinent to the global environment," Welling said. "And that information is then passed on to thousands of students."

Welling's educational center was established last year to provide academics and private-sector scientists with the opportunity and office space to conduct research in the park. The park, in turn, reaps the benefits of that research, a partnership made especially important by the fact that Glacier, like most parks, has no scientific research staff of its own.

The Learning Center functions as something of a hub in a scientific network that includes the Flathead Lake Biological Station, climate researchers, the USGS science team, regional community colleges, Montana's Department of Fish, Wildlife and Parks, the Forest Service, nearby Indian tribes, and several other public and private scientific groups and agencies.

This week's workshop is part of the Wright Center for Innovative Science Education's International Environmental Change Workshop Series. Additional workshops will be held during 2004 and 2005 in other parts of the world, examining environmental change from different perspectives.

Participating in the first workshop of the series is an important step for the fledgling center, Welling said, because doing so "gives global visibility to our region. The changes that are going on at Glacier National Park are touchstones for the change taking place on a broader scale around the world."