Swiss villagers cover glacier in blankets to combat global warming

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Image 1. A Swiss flag floats on the Rhône Glacier. The glacier has been covered with insulating blankets that protect it from the sun. Photo from Fabrice Coffrini/AFP/Getty Images

The Rhône Glacier in the Swiss mountains is being wrapped up in white blankets. It's for a good cause: People are trying to protect the glacier from the effects of global warming.

Global warming, or climate change, is the heating up of the Earth. Most scientists agree that climate change is caused by humans. People use fossil fuels such as oil and coal to heat their homes and power their cars. When these fuels are burned, they emit greenhouse gases that trap heat in the air. This causes temperatures to rise. It is also causing the world's glaciers to melt.

The Rhône's neighbors want to protect their glacier. They don't want it to melt any more than it already has.



Spreading Blankets Every Spring

The local economy depends on the Rhsone. Tourists pay to come to Switzerland and visit the glacier. They hike along the glacier's trails and peer into its amazing ice cave. Eight years ago, nearby villagers started spreading blankets over parts of the glacier to keep its snowy cover frozen. The villagers have climbed up the mountain with blankets every spring since then.

The blankets are white to reflect sunlight that heats and thaws the ice. This helps slow down the glacier's melting. Over the years, the summer sun has already melted parts of the Rhône and other glaciers.

David Volken is a glaciologist, a scientist who studies glaciers. Volken, who is an expert on the Rhône, said the blankets reduce the melting by at least half.

Lake Getting Larger Every Year

The glacier is 12,000 feet high. It is located in the southern part of a chain of mountains in Switzerland called the Swiss Alps. Water from the melting ice flows into the Rhône River and Lake Geneva.

Over the past 150 years, the glacier has shrunk. In the past 10 years, it has lost an average of 33 feet of ice thickness, said Matthias Huss. He is the head of the Swiss Glacier Monitoring Network. The group of scientists measures the glaciers every year.

Melting water from the Rhône has formed a lake. It is becoming larger every year.

Hard And Expensive Job

Wrapping up the glacier is not easy or cheap. The blankets are made from heavy wool, and must be carried up the mountain and spread out. The project takes many hours and costs thousands of dollars. The local villages are paying for most of it.

The effort is worth it.

The blankets protect the snow and ice from the sunlight, Huss said. They don't completely stop the glacier from melting, but they do slow down the melting.



The blankets mainly cover the area closest to the ice cave. In the winter, the sparkly blue tunnel is 348 feet long. By the end of the summer, though, it shrinks by about 12 inches.

Carving Out The Cave Takes Three Weeks!

Every May, a specially trained worker carves out the cave to its original length. The process takes about three to four weeks, Volken said.

Blankets help save the cave and some of the glacier. Still, they are covering a pretty small area. They cover about 5 acres, which is the size of about four football fields.

Blankets will never save a whole glacier, Huss said.

Global Warming Will Destroy Glaciers

A few other glaciers in Switzerland also wear blankets during the summer. Most glaciers are not are covered because they are too large. Even if they were, Huss says that blankets can't protect glaciers from the effects of global warming.

"This method will never be able to save our glaciers," Huss said. It is only a temporary solution.

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Scientists predict that by the year 2100, the Rhône and other Alpine glaciers will practically disappear. Only about one-tenth of the ice will remain.

For now, at least, the blankets help the Rhône Glacier keep its cool.



Quiz

1 Read the paragraph from the section "Spreading Blankets Every Spring."

The local economy depends on the Rhône. Tourists pay to come to Switzerland and visit the glacier. They hike along the glacier's trails and peer into its amazing ice cave. Eight years ago, nearby villagers started spreading blankets over parts of the glacier to keep its snowy cover frozen. The villagers have climbed up the mountain with blankets every spring since then.

How does this paragraph support the MAIN idea of the article?

- (A) It highlights how difficult it is for the Swiss to get the Rhône Glacier covered in the spring.
- (B) It suggests that the Swiss and the tourists work together in order to preserve the Rhône Glacier.
- (C) It describes what the Swiss have to do in order to get the blankets on top of the Rhône Glacier.
- (D) It explains why the Swiss are so committed to saving the Rhône Glacier.
- 2 One MAIN idea of the article is that the Swiss know that wrapping their glaciers is only a temporary solution.

What is another MAIN idea of the article?

- (A) Although blanketing the Rhône Glacier is expensive, the Swiss think the effort is worth it.
- (B) Climate change is caused when too many greenhouse gases are emitted into the
- (C) The Swiss are blanketing their largest glaciers to slow the process of climate change.
- (D) Tourists enjoy seeing the Rhône Glacier and hiking along the glacier's trails.



- What is the relationship between blankets and glaciers?
 - (A) Blankets are able to save some parts of glaciers but not others.
 - (B) Blankets are able to slow down a glacier's melting by half or more.
 - (C) Blankets are effective in saving smaller glaciers only.
 - (D) Blankets are stopping the effects of global warming on some glaciers.
- 4 How does Matthias Huss feel about blanketing glaciers?
 - (A) Huss is proud that the Swiss have dedicated themselves to saving the Rhône Glacier, but he is worried about what will happen to other glaciers.
 - (B) Huss is hopeful about the success blankets have had in decreasing melting, and hopes that better, larger blankets will be created.
 - (C) Huss is happy that the blankets slow the process of melting, but he knows that the blankets cannot fully protect the glaciers.
 - (D) Huss is impressed with how well the blankets have been working on the Rhône Glacier and is eager to try them out on larger glaciers.