

Agassiz Glacier

Glacier National Park, MT



1913

*W. C. Alden photo
Courtesy of GNP archives*



2005

*Greg Pederson photo
USGS*

Agassiz Glacier

Glacier National Park, MT



1943

M. V. Walker photo
Courtesy of GNP archives



2005

Greg Pederson photo
USGS

Blackfoot – Jackson Glacier

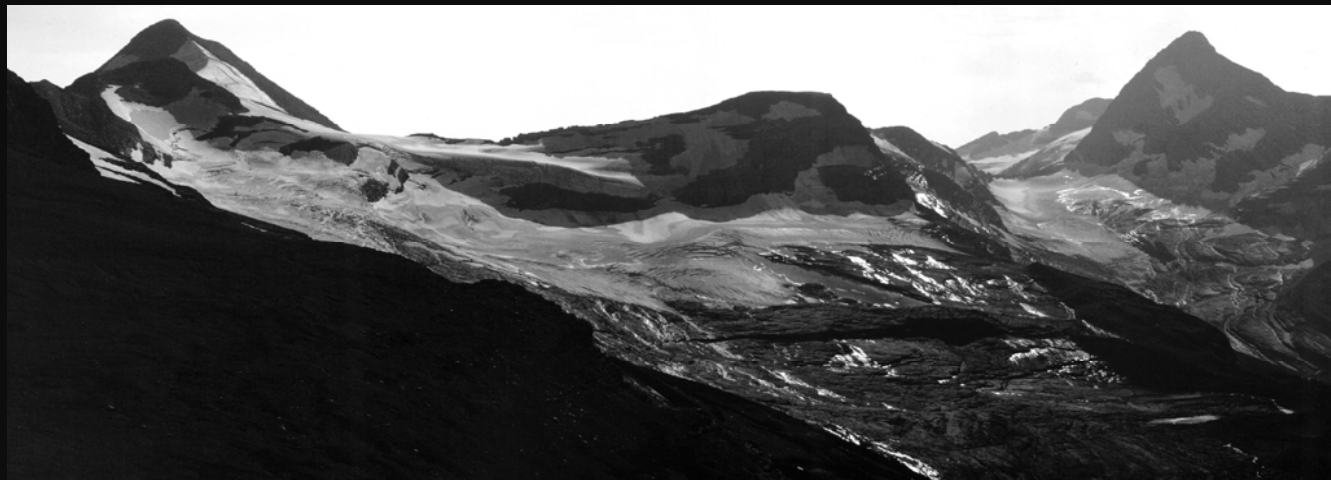
Glacier National Park, MT

1914



*E. C. Stebinger photo
Courtesy of GNP
archives*

2001



*Blase Reardon photo
USGS*

Boulder Glacier

Glacier National Park, MT



1932

T. J. Hileman photo
Courtesy of GNP archives



2005

Greg Pederson photo
USGS

Boulder Glacier

Glacier National Park, MT



1932

*T. J. Hileman photo
Courtesy of GNP archives*



1988

Jerry DeSanto photo

Boulder Glacier

Glacier National Park, MT



circa **1910**

*Morton Elrod photo
Courtesy of GNP archives*



2007

*Fagre / Pederson photo
USGS*

Chaney Glacier

Glacier National Park, MT



1911

M.R. Campbell photo
USGS



2005

Blase Reardon photo
USGS

Chaney Glacier

Glacier National Park, MT



1911

M.R. Campbell photo
USGS



2005

Blase Reardon photo
USGS

Grant Glacier

Glacier National Park, MT



1902

*Morton Elrod photo
Courtesy GNP Archives*



1998

*Karen Holzer photo
USGS*

Grinnell Glacier

Glacier National Park, MT



1900

*F. E. Matthes photo
Courtesy of GNP Archives*



1998

*Lisa McKeon photo
USGS*

Grinnell Glacier

Glacier National Park, MT



1910

*Fred Kiser photo
Courtesy of GNP Archives*



1998

*Karen Holzer photo
USGS*

Grinnell Glacier

Glacier National Park, MT



1911

USGS photo



1998

Lisa McKeon photo
USGS

Grinnell Glacier

Glacier National Park, MT



circa **1920**

*T. J. Hileman photo
Courtesy of GNP Archives*



1998

*Karen Holzer photo
USGS*

***Grinnell Glacier from footbridge at head of Lake Josephine, Glacier National Park.
Changes in the size of Grinnell Glacier are evident as well as changes in stream channel and
vegetation in the foreground of this pair of photographs.***

Grinnell Glacier

Glacier National Park, MT



circa **1940**

*Unknown photographer
Courtesy of GNP Archives*



2006

*Karen Holzer photo
USGS*

Grinnell Glacier taken from the Grinnell Glacier Overlook off the Highline Trail, Glacier National Park. The view of Grinnell Glacier taken circa 1940 shows the early formation of Upper Grinnell Lake, a proglacial lake visible at the terminus of the glacier. The 2006 photo shows a dramatic increase in the size of the lake as a result of melting ice.

Grinnell Glacier

Glacier National Park, MT



1900

*Marble photo
Courtesy of GNP Archives*



1938

*Hileman photo
Courtesy of GNP Archives*

Grinnell Glacier from the shore of
Lake Josephine, Many Glacier Valley



1997

Fagre photo, USGS

Grinnell Glacier

Glacier National Park, MT



1938

T. J. Hileman photo
Courtesy of GNP Archives



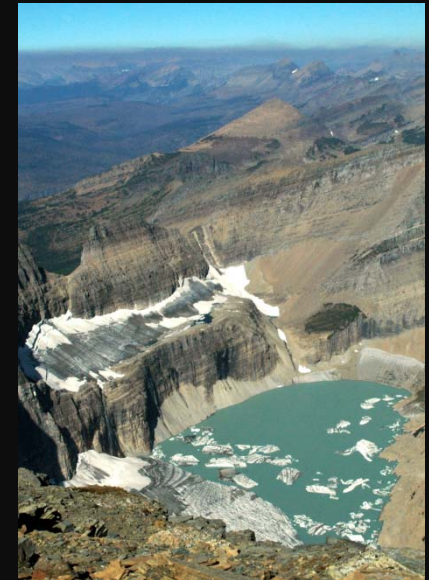
1981

Carl Key photo
USGS



1998

D. Fagre photo
USGS



2006

Karen Holzer photo
USGS

Oblique view of Grinnell Glacier taken from the summit of Mount Gould, Glacier National Park. The relative sensitivity of glaciers to climate change is illustrated by the dramatic recession of Grinnell Glacier while surrounding vegetation patterns remain stable.

Piegan Glacier

Glacier National Park, MT



circa **1930**

*George Ruhle photo
Courtesy of GNP Archives*



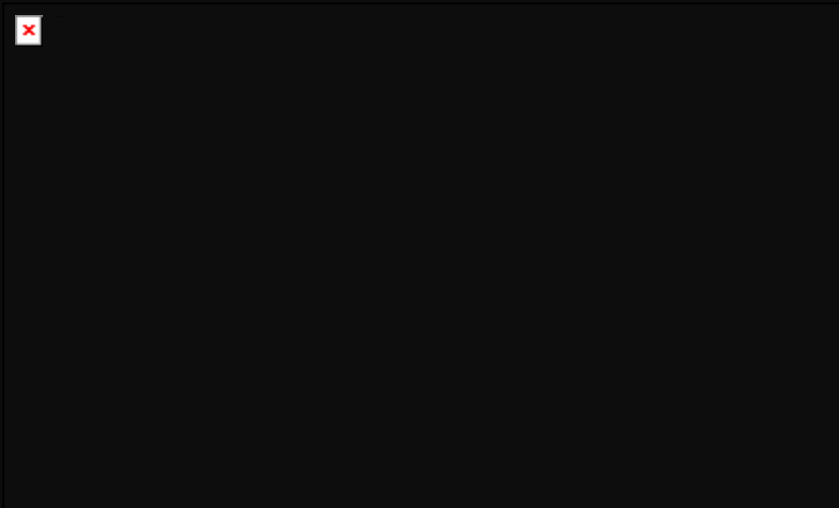
1998

*Lisa McKeon photo
USGS*

Piegan Glacier appears visibly unchanged in this pair, but the meadow in foreground has undergone significant vegetation change.

Piegan Glacier

Glacier National Park, MT



1938

*T. J. Hileman photo
Courtesy of GNP Archives*



1998

*Lisa McKeon photo
USGS*

View from Mount Siyeh

Piegan Glacier is one of the few glaciers in Glacier National Park that has not significantly changed since photographed in the 1930s.

Sexton Glacier

Glacier National Park, MT



1901

Matthes photo
Courtesy of GNP Archives



1998

Lisa McKeon photo
USGS

Shepard Glacier

Glacier National Park, MT



1913

*W. C. Alden photo
Courtesy of GNP Archives*



2005

*Blase Reardon photo
USGS*

Sperry Glacier

Glacier National Park, MT



Sperry Glacier, Alden photo, GNP Archives, 1913

1913

*Alden photo
Courtesy of GNP Archives*



Sperry Glacier, K. Holzer photo, USGS, 2005

2005

*Karen Holzer photo
USGS*

Sperry Glacier

Glacier National Park, MT



1907

*Morton Elrod photo
Courtesy of GNP Archives*



2001

*Lisa McKeon photo
USGS*

*The northwest portion of Sperry Glacier once spanned
Comeau Pass to the base of Edwards Mountain.*

Sperry Glacier – northeast view

Glacier National Park, MT



1913

*Alden photo, Courtesy of GNP Archives
Aug. 13, 1913*



2007

*Lisa McKeon photo, USGS
Sept. 15, 2007*

This view of the northeast portion of Sperry Glacier shows evidence of the glacier's recession as well as the advancement of conifer species and other vegetation on the glacial moraines.

Swiftcurrent Glacier

Glacier National Park, MT



circa **1900**

Matthes photo
Courtesy of GNP Archives



1998

Karen Holzer photo
USGS

Swiftcurrent Glacier

Glacier National Park, MT



circa **1930**

*Unknown photographer
Courtesy of GNP Archives*



2002

*Karen Holzer photo
USGS*

View from Swiftcurrent Lookout

Thunderbird Glacier

Glacier National Park, MT



1907

*Morton Elrod photo
Courtesy of GNP Archives*



2007

*Dan Fagre / Greg Pederson photo
USGS*