

# Climate Change Collection Scorecard

Date: February 21, 2005

Reviewer: Jack Ganse

Name of resource: Grinnell Glacier Recession Activity

Sponsoring Organization: Wright Center for Science Education • Tufts University

URL: [http://www.tufts.edu/as/wright\\_center/iecws/materials.html](http://www.tufts.edu/as/wright_center/iecws/materials.html)

Site Homepage: [http://www.tufts.edu/as/wright\\_center/iecws/index.html](http://www.tufts.edu/as/wright_center/iecws/index.html)

RESOURCE WITHIN A SITE?  Y / N

FOUND THROUGH DLESE? Y /  N I could not find this in DLESE

IF SO, WHICH COLLECTIONS?

**RECOMMENDATION** YES  YES WITH RESERVATIONS NO

**STARS** 1 2 3  4 5 (LAME TO STELLAR)

**NARRATIVE (USE OTHER SIDE IF NEEDED)** This activity asks students to trace the recession of Grinnell Glacier in Glacier National Park from 1860 to 1993. Students estimate the area of the glacier using maps and graph paper and plot its decrease over time. They calculate the rate of recession and are asked if the recession correlates with changing temperature. The activity appears to have been developed during a 2003 teacher workshop about the cryosphere that took place in Montana's Glacier National Park.

## INTENDED USE

REFERENCE

COMPUTER ACTIVITY

NON-COMPUTER ACTIVITY

EDUCATOR,  LEARNER OR BOTH (CIRCLE) IF FOR LEARNER, EVIDENCE ITS BEEN TESTED? Y /  N  
 BEGINNER OR ADVANCED (CIRCLE)

**Easily Printed?**  Y / N Activity and maps are all PDF files.

## BUGS & TECHNICAL DIFFICULTIES (PROBLEMATIC TO ROBUST)

1 2 3  4

COMMENTS: Easy downloads.

## SCIENTIFIC ACCURACY- FACTUAL ERRORS/OMISSIONS (NATIONAL ENQUIRER TO NATIONAL GEOGRAPHIC)

1  2 3 4

EVIDENCE IT HAS BEEN REVIEWED FOR ACCURACY? Y /  N

COMMENTS: I don't see any errors; however, there is little background material for the activity and no mention of the map sources.

## PEDAGOGICAL INFORMATION

REFERENCE ONLY

TEACHER GUIDE

MATERIALS LIST

ASSESSMENT STRATEGIES

TIMEFRAME PROVIDED

STANDARDS ALIGNMENT INDICATED Alignment to Maine Standards

## PROMOTES STUDENT LEARNING (WEAK TO STRONG)

1  2 3 4

COMMENTS: The activity by itself would fall short on promoting student learning as it is currently written. However, this activity has some good potential within a study of climate. It just needs supporting materials and a sense of context to come alive.

**APPROPRIATE/EFFECTIVE MULTIMEDIA DESIGN (WEAK TO STRONG)**

1 2 **3** 4

COMMENTS: This website has many links to materials, resources, activities, movies, and slides but there is little context as to how these things are meant to be used or where they came from. Browsing around the links on the page and watching one of the QuickTime movies helped me understand that this activity came about from a teacher workshop about the cryosphere in 2003. Good use of the web is evident, but it's like putting together a puzzle without being able to see what it's supposed to look like when it is done—the links are randomly organized.

**VISUAL APPEAL (WEAK TO STRONG)**

1 **2** 3 4

COMMENTS: Lots of links, but it is difficult to understand how they fit into the bigger picture.

**TEACHING TIPS: ANNOTATION DESCRIBING HOW SITE COULD BE USED OR ADAPTED FOR CLASSROOM:**

The glacier activity has good potential, but it missed in several ways. There was no background material or context as to why a student should care about Grinnell Glacier in this activity (perhaps it is hidden somewhere else). The activity mentioned using acetate graph paper to measure the glacier's recession, but I didn't find a master sheet for the graph. Finally, the activity asked students whether the glacier's recession was correlated with changing temperature, but no temperature data for Glacier National Park was provided (although I'm sure that data could be found on the internet).

**RECOMMENDATION: ANNOTATION DESCRIBING HOW THE DEVELOPER COULD IMPROVE THE SITE.**

I think the potential exists on this website to have a comprehensive curricular unit on the cryosphere using Glacier National Park as a case study. I would like to see the resources on the site organized into a logical fashion that could be used by teachers navigating to the site. Perhaps the resources from this workshop could be organized into a single downloadable PDF file that also includes links to supplementary materials such as movies, slides, data, etc. I see good stuff, but I don't clearly see how I should be using it directly from the website. It looks like all of the materials from the workshop were just dumped onto the internet after the fact without further thought.

Revised 12/3/04