



"Hubbard Glacier and the Ongoing Blockage of Russell Fiord" **Presented by Dr. David Barclay**

In June 2002 the terminus of Hubbard Glacier advanced across the entrance of Russell Fiord and began to convert this Alaskan saltwater inlet into a freshwater lake. Two months later the ponded waters of "Russell Lake" broke-out through the ice and sediment dam in the second largest glacier outburst flood in historical times, exceeded only by a similar "Russell Lake" outburst in 1986. Peak discharge of the 2002 flood was approximately equal to the greatest ever recorded discharge of the Mississippi River. Research by Dr. Barclay has shown that "Russell Lake" has formed and catastrophically drained at least six times during the past 8000 years. In addition, reconstruction of the history of Hubbard Glacier provides insight into the dynamics of this iceberg-calving glacier and suggests that "Russell Lake" will probably form permanently within the next few decades. This will cause major ecological change as saltwater Russell Fiord becomes a freshwater lake, flooding around a regionally important airport, and destruction of a world-class steelhead fishery.

Presenting September's program is Dr. David Barclay, Assistant Professor of Geology at SUNY Cortland. Dr. Barclay's research interests focus on using glacier fluctuations and tree-rings to understand how climate has changed in the past. These paleoclimate studies are important for helping understand how Earth's natural climate system operates and so may provide insight into how climate could change in the future. His current

project is aimed at reconstructing climate change over the last 2000 years in the Prince William Sound region of coastal southern Alaska, and is involving several SUNY Cortland undergraduate students. This work is in collaboration with Drs. Parker Calkin (INSTAAR) and Greg Wiles (The College of Wooster), and is supported by a National Science Foundation Grant.

(The summary above was taken from the SUNY Cortland Department of Geology Website <http://www.cortland.edu/geology>).

Meeting logistics: The meeting will take place on Thursday, September 18th at Green Lakes State Park, Route 290 Fayetteville, NY. Please partake in a self-guided walk around the lakes from 5:00 p.m. to 6:00 p.m., followed by a catered dinner. The dinner will start at 6:00 p.m. and our featured speaker, Dr. Barclay, will begin his program at 7:00 p.m. The cost of dinner is \$10 for members, \$12 for non-members, and \$10 for student members. Please RSVP by Monday, September 15, 2003 to Bonnie at Parratt-Wolff via e-mail at bolney@pwinc.com or 437-1429.

DIRECTIONS: To get to Green Lakes State Park, take Route 290 east from Fayetteville and enter the main gate. We will be meeting in the large reserved picnic pavilion which is located on the first left off the campground road.