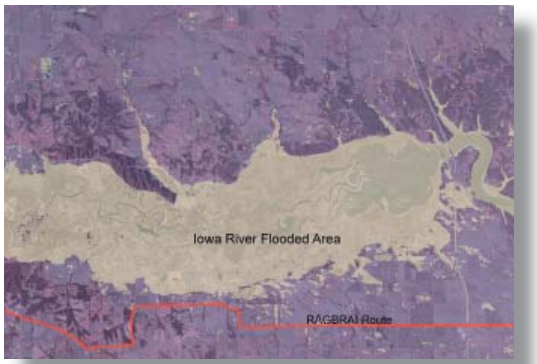
Flood of 2008

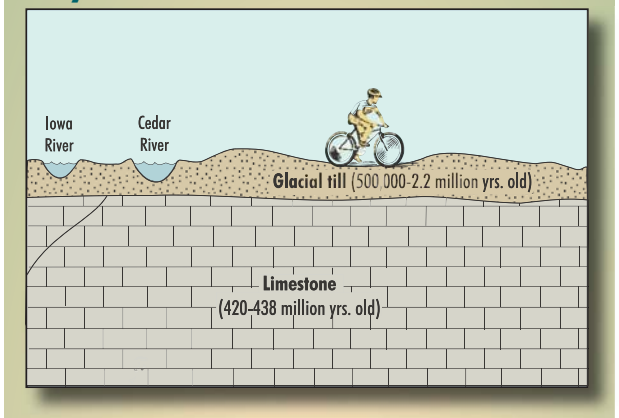


Estimated extent of flooding of the Iowa River during the Flood of 2008.

Damaged remains of the Sutliff Bridge over the Cedar River following the historic Flood of 2008.

A view of the Coralville Strip during peak flooding in mid-June of 2008.

Day 6 Milestones



Start: North Liberty
Iowa River (last crossing!): 3.0 miles
Lake Macbride: 5.2 miles
Cedar River (and Sutliff Bridge): 16.1 miles
Cedar River Wildlife Area: 18.1 miles
Mount Vernon Paha: 23.5 miles
Finish: Tipton – 64.4 miles

USGS personnel used an acoustic measuring device to take streamflow measurements on the Cedar River near Conesville on June 15, 2008 when the river peaked about 10 feet above flood stage. Over a three-week period, 158 streamflow measurements were taken across the state. For more information about the flooding in Iowa, visit http://ia.water.usgs.gov/flood/flood.html.

RAGBRAI 2008

Learn about the Land

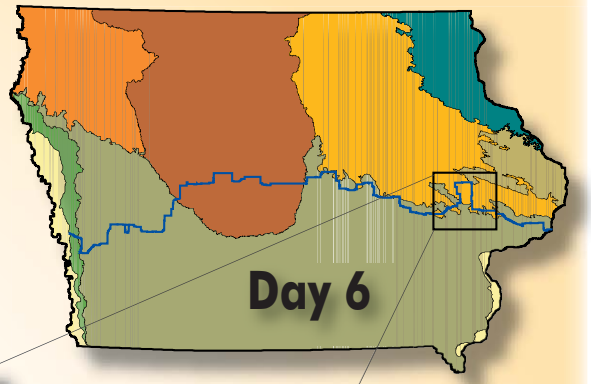
Friday, July 25

Day 6

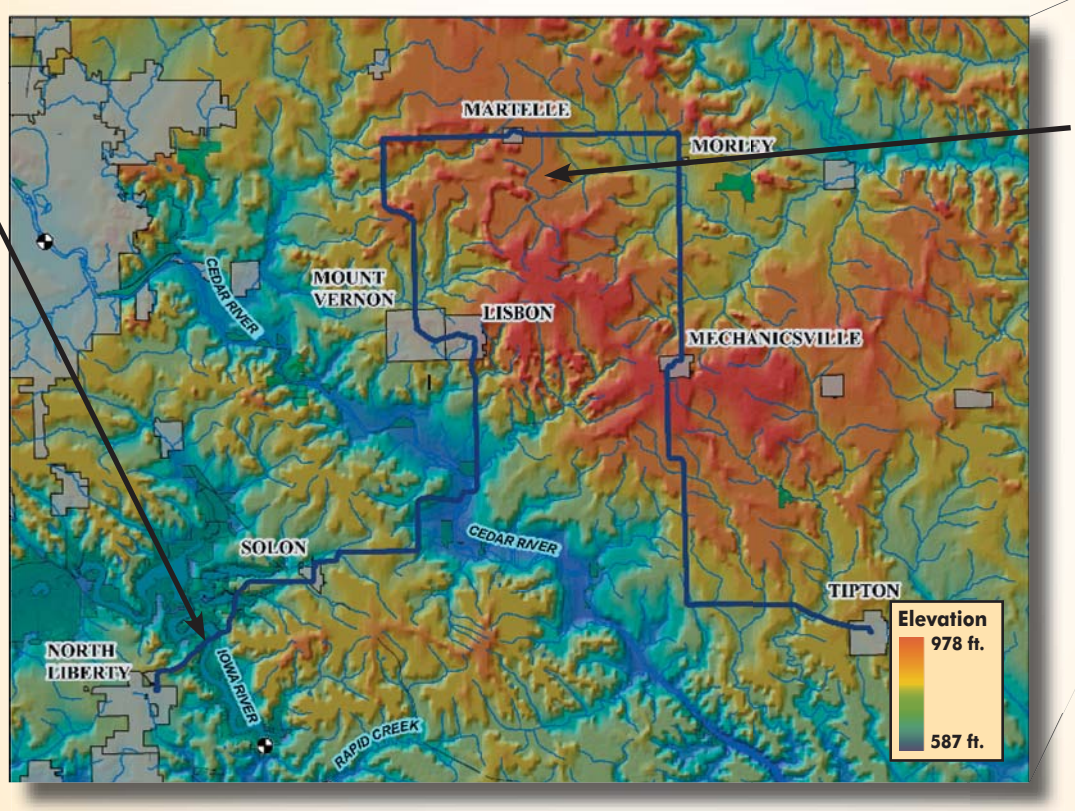
Iowa DNR – Geological and Water Survey
109 Trowbridge Hall
Iowa City, IA 52242-1319
(319)-335-1575
www.igsb.uiowa.edu

US Geological Survey
Iowa Water Science Center
400 S. Clinton St.
Iowa City, IA 52240
(319) 337-4191
http://ia.water.usgs.gov

Today you will be biking over the Iowa and Cedar rivers, two major rivers hit by the **Iowa flood of 2008**. Three miles northeast of North Liberty you'll cross the Iowa River. The river crested on June 15, 2008 at a record 31.53 ft., three feet higher than the previous record during the flood of 1993. The flooding river caused extensive damage to the University of Iowa (see cover photo of Iowa Memorial Union taken by Univ. Relations, Univ. of Iowa), Coralville, and numerous smaller towns. The flooding of the Cedar River, which RAGBRAI will cross at Sutliff, caused even greater damage. At Cedar Rapids, the 2008 flood crest of 31.12 ft. was over 11 ft. higher than the previous record set in 1851! This massive amount of water inundated downtown Cedar Rapids, Palo, and Columbus Junction and caused massive damage to buildings and infrastructure. When crossing the Cedar River at Sutliff, be sure to look to your right to see the remains of the Historic Sutliff Bridge, one of the many casualties of the Iowa flood of 2008.



Northeast of North Liberty you'll be near two of Iowa's 94 State Preserves: The **Old State Quarry** and the **Merrill A. Stainbrook State Geological Preserve**. Located immediately before the Mehaffey Bridge on Rice Ridge Rd., the 8.4-acre Old State Quarry opened in the 1830s to supply building materials for the original Iowa State Capitol in Iowa City. Located immediately after the Mehaffey Bridge, the 32.5 acre Merrill A. Stainbrook State Geological Preserve is named after Merrill A. Stainbrook, an Iowa Geological Survey geologist who laid the groundwork for our modern understanding of Devonian brachiopods. The fossiliferous limestone exposed at both preserves was originally deposited in the shallow seas that covered Iowa at the time (350 million years ago), and all show evidence of emergence from the sea and erosion at their tops. Fossils found in the preserves include brachiopods, crinoids, corals, bryozoans, and others. At the top of the Merrill A. Stainbrook Preserve you can view scratches carved by glaciers that moved across the bedrock surface over 500,000 years ago. Both areas were dedicated as Iowa State Geological and Historical Preserves in 1969.



You will have the opportunity to see several excellent examples of **paha** (a Dakota Sioux word meaning 'hill') are erosional features made after the formation of the Iowan Surface. These elongated ridges are oriented northwest to southeast and are commonly found near the boundary with the Southern Iowa Drift Plain. Geologic cores indicate that Paha are remnants of an older till plain with a thick mantle of loess and an intervening paleosol (ancient soil surface). The famous Mt. Vernon paha will be the first of many paha you will cross today. The town straddles the paha, with Cornell College sitting atop the northwestern end. Approximately 3 miles north of

Mt. Vernon you will bike down another unnamed paha, and will cross two more before the route turns east into Martell. Other major paha along the route occur at Mechanicsville and Stanwood.