

How To “See” The Wetumpka Impact Crater



The Cliffs, 1982

Photograph courtesy of M. Edwards

The unusual formation shown here, found near the center of the crater, is known by local residents as “The Cliffs.” Scientific research indicates that the cliffs themselves were part of a major post impact event, which caused a massive tsunami and slide that brought vast quantities of very large blocks of sandy and clayey target sediment back into the crater. The effect of this event can be seen in the widespread interior crater-filling deposits. Good examples of this are the red and tan sands of “The “Cliffs” and other areas along Harrogate Springs Road. These red and tan layers were moved from the southern rim of the crater to their present locations during this massive event. This “trans-crater slide” came to rest against the crater wall in the vicinity of the cliffs, where – thanks to erosion in that spot –we can see slide layers folded up against the sands and harder rocks of the crater rim.

How To “See” The Wetumpka Impact Crater: Self Guided Tour

The city of Wetumpka, Alabama sits right on the bull’s eye of what is thought to be the greatest natural disaster in Alabama’s history. Approximately 85 million years ago, near the end of the “Age of Dinosaurs,” a crater was created by a blast into the bedrock from a meteor that was approximately the size of today’s Bryant Denny Stadium. The hills just east of downtown are the eroded remains of the rim of a five-mile wide impact crater.

One of the most common questions asked by visitors to Wetumpka, Alabama is “How can I see the Wetumpka Impact Crater?” It is so visible, that most Wetumpka residents take the unusual terrain for granted. The Wetumpka Impact Crater Commission is hesitant to send people out on tours, because most of the best views are on private property and it is important to respect property owners rights. However there are several public places that you can get a good view.

Driving towards the city of Wetumpka, Alabama you can see large hills rising up to the east of US Highway 231 and south of Alabama Highway 14 to the east of town. The eastern crater rim is visible along Fire Tower Road. The hills are part of the almost five-mile-wide, crescent-shaped crater that was formed about 85 million years ago (during the Cretaceous Period,) when a very large meteor impacted the Earth’s surface in what would become the Wetumpka area. From US Highway 231, several communication towers can be seen on Bald Knob (1) (elevation 586.6 feet,) the highest point along the crater rim.

As you travel over the Bibb Graves Bridge (2) in downtown Wetumpka, Alabama, you can see rocks in the bed of the Coosa River that are part of the crater rim. If you look closely, you will notice that they dip in the upstream direction. When the water level in the river is high, these rocks are not visible. A float trip down the Coosa River is a great way to get an up-close and personal view the rocks. Kayak and canoe rentals are available through the Coosa Outdoor Center (11) and Coosa River Adventures (10).

In front of the Elmore County Health Department (3) on US Highway 231, an Alabama Historical Association marker has been erected and recounts the story of the Wetumpka Impact Crater. The location of the marker is approximately halfway between Bald Knob and rock of the crater rim exposed in the Coosa River.

On US Highway 231, one of the best places to see the rock that is representative of the crater rim up-close is behind the CVS Pharmacy or the First Community Bank (4). The bedrock of the north and northwestern crater rim is comprised of mica schist, a type of metamorphic rock common in the Alabama Piedmont. In this area, the bedrock dips in a north to northwest direction due to displacement caused by the impact of the meteor.

On Harrogate Springs Road approximately one mile east of Jasmine Hill Road intersection is an area referred to locally as “the cliffs.” (5) This location is located on the north side of Harrogate Springs Road just west of the Harrogate Springs Road/ Buck Ridge Road intersection and is visible from the roadway along a power line right-of-way. This unusual erosional feature is made up of five mega-blocks of the Tuscaloosa Group and the Eutaw Formation sediments that fell into the crater immediately after the impact. Due to the leaching and removal of iron-bearing minerals from these sediments by natural groundwater processes, the sediments now appear as approximately 40-foot-high white-colored cliffs inside the crater rim area. It is important to note that “the cliffs” area is on private property and visitors should not venture beyond Harrogate Springs Road in an effort to gain a better view to this area without obtaining permission from the property owner.

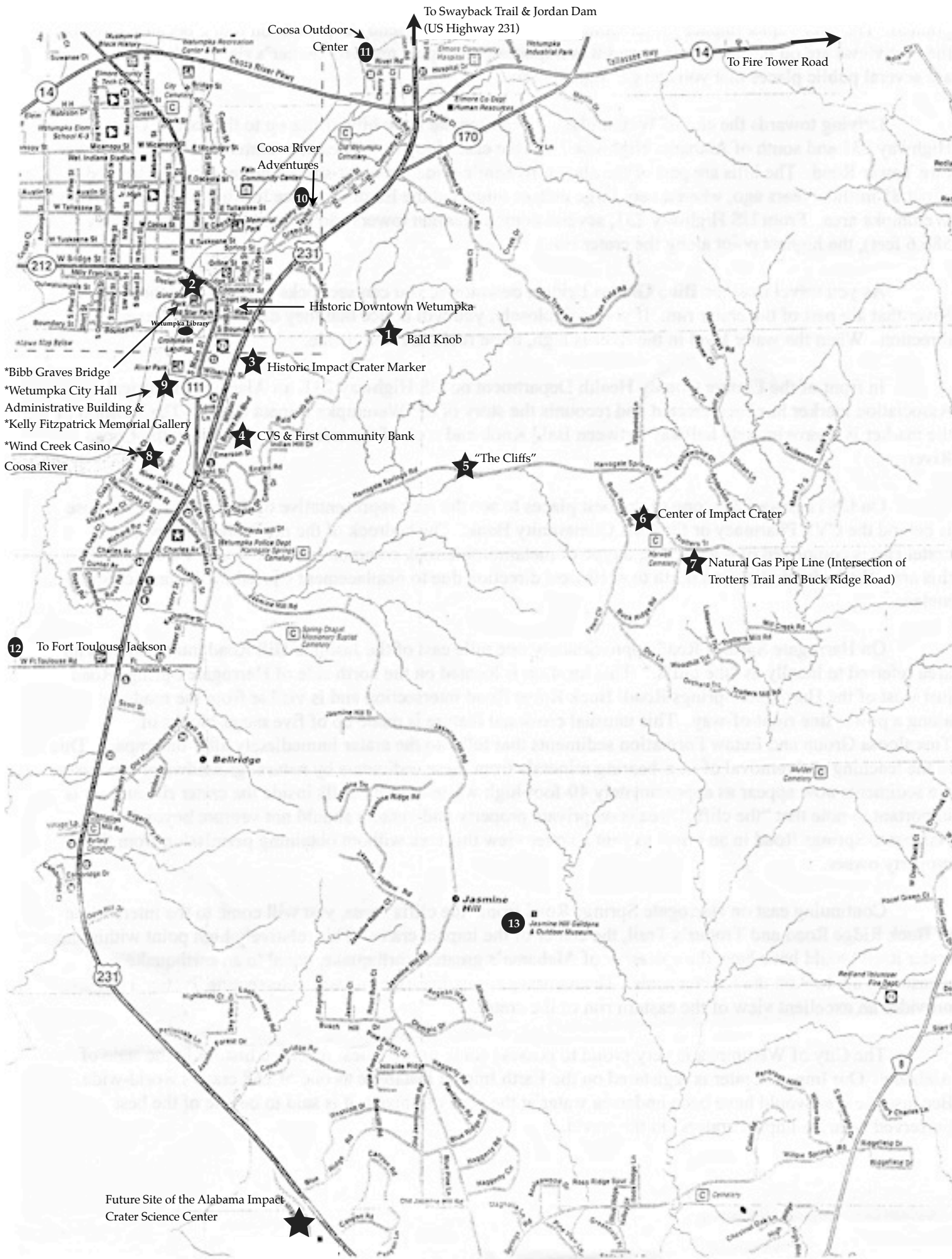
Continuing east on Harrogate Springs Road from “the cliffs” area, you will come to the intersection of Buck Ridge Road and Trotter’s Trail, the center of the impact crater (6). This relatively high point within the crater itself would have been the epicenter of Alabama’s greatest earthquake, equal to an earthquake measuring 8.5 to 9 on the Richter scale. The natural gas pipeline right-of-way (7) intersecting Trotter’s Trail provides an excellent view of the eastern rim of the crater.

The top parking deck of Wind Creek Casino (8) provides an excellent view of the Wetumpka Impact Crater.

The City of Wetumpka, Alabama is very proud to possess some of the oldest recorded history in the state of Alabama. Our impact crater is registered on the Earth Impact Database as one of 168 craters world-wide. Because the area would have been undersea water at the time of impact, it is said to be one of the best preserved “marine impact craters” in the world.

For more information please contact the Wetumpka Impact Crater Commission

P.O. Box 1180, Wetumpka, Alabama 36092, (334) 567-5147, www.wetumpkaimpactcratercommission.org



To Swayback Trail & Jordan Dam
(US Highway 231)

To Fire Tower Road

Coosa Outdoor
Center

Coosa River
Adventures

Historic Downtown Wetumpka

Bald Knob

Historic Impact Crater Marker

CVS & First Community Bank

"The Cliffs"

Center of Impact Crater

Natural Gas Pipe Line (Intersection of
Trotters Trail and Buck Ridge Road)

- *Bibb Graves Bridge
- *Wetumpka City Hall
Administrative Building &
*Kelly Fitzpatrick Memorial Gallery
- *Wind Creek Casino

To Fort Toulouse Jackson

Future Site of the Alabama Impact
Crater Science Center



How Was It Discovered?

In 1891, Alabama State Geologist Eugene Allen Smith noted the unusual geographical nature of the Wetumpka area. For many years the area was marked on geological maps as “structurally disturbed.”

In 1969-1970, Geologist Tony Neathery headed a team making detailed geologic maps of Elmore County as part of a Geological Survey of Alabama. As they approached Wetumpka, they found rock layers bent at dramatically different angles and in very different directions from other rocks in the area. It soon became clear that the unusual features were related to a disturbance centered in the hills east of downtown Wetumpka. Within this area, rocks were chaotically

disturbed and intermixed, unlike the evenly layered horizontal rocks surrounding the area.

In 1976, when the findings were published, this feature was called an “Astrobleme,” literally, a star wound. For a number of years, this conclusion was greeted with skepticism.

During 1998, two cores were drilled and core samples were extracted for testing. Geologists hoped to find materials proving the “Astrobleme” theory. Dr. David T. King, Jr., Professor of Geology at Auburn University, headed the research team. The researchers indeed found the core contained shocked quartz, which can only be formed by pressures

exerted during an enormous explosion such as a large meteor impact. The research team also found chemical traces of fallen meteorite embedded in the local bedrock.

In 2002, the research team published all of the evidence and established the site as an internationally recognized impact crater.

There is very strong evidence that at the time of the impact, a shallow sea of approximately 100 feet deep covered the area. The Wetumpka Impact Crater is now recognized as one of the best preserved marine impact craters in the world.

Above: Paintings by Jerry Armstrong illustrating the Wetumpka area before impact (Left) and the result of the meteor impact (Right.)