

# Kentucky's Cave Country Traveling Classroom Experience April 29 – May 2, 2014 Itinerary

The experience  
of studying,  
teaching,  
and traveling abroad  
is enriching and exciting!

For some of us,  
this will be  
our first trip away from home.

For others,  
it will be  
an additional traveling experience.

In any case,  
we will all learn much  
and enjoy the experience!  
We will also face new challenges  
as we find ourselves  
in unfamiliar situations and surroundings.  
Our greatest learning opportunities  
will come from those challenges!

As students and faculty  
of Berkshire Middle School,  
we will be representatives of  
ourselves,  
our families,  
our school,  
the Birmingham Public Schools,  
and the State of Michigan.

Our actions,  
thus,  
have implications  
beyond their impact on us as individuals.

(Adapted from Hope College trip introduction, Spring, 2002.)

Website Address for this year's Traveling Classroom Experience to Kentucky's Cave Country:

<http://kentuckyber.weebly.com/> Comment on the Blog!

Follow us on Twitter and Instagram @KYTravClass14

## Tuesday, April 29, 2014

- Pack a dinner to eat on the way to Kentucky.  
We do not plan to stop to eat! Bottled water only on the bus. Parents may deliver a dinner to students at 3:25 p.m. in the Cafeteria (less parking lot congestion then). NO NUTS or NUT Products!
- Check the weather forecast!
- Bring luggage to school  
Leave luggage in Teacher-Chaperone's classroom.
- Normal School Day.
- Do not go home!  
Go to Teacher-Chaperone's classroom.
- **Phone Calls Home?**
- **Fill Water Bottles.**
- **Use Restroom!**
- Teacher/Chaperones pass out T-shirts. Bring Echoes Groups to Cafeteria for departure.
- Load luggage on bus according to Echoes Groups.
- Board bus according to Echoes Groups.

### **Order of Boarding:**

1 <sup>st</sup> : Brooks	4 <sup>th</sup> : Mason
2 <sup>nd</sup> : Bruyneel	5 <sup>th</sup> : Phillips
3 <sup>rd</sup> : Fisher	6 <sup>th</sup> : Straub

Each day, students will have an opportunity to choose a different seat. Students should keep the same seat all day long. Echoes groups will board in a different order each day. Students are expected to sit next to other members of their application groups!

- **Depart** from Berkshire Middle School **as soon as bus is loaded!** Destination Cave City, KY (490 miles)
- Rolling Classroom! Pass out Itineraries. Map Reading. Eat dinners!
- **Investigative Question Quiz! (Which question(s) are you responsible for?)**
- Cross Rouge River Middle Branch.
- Watch for **Sanitary Landfill**. Note methane gas burn-off pipes. Methane gas is produced as garbage decomposes.
- Cross Rouge River Lower Branch.
- Cross Huron River.
- The two cooling towers from the **Enrico Fermi Nuclear Power Plant**

- **Karst Landscape** in Monroe County, Michigan. The land here is very flat, and its elevation is close to that of Lake Erie. At times, a strong east wind may blow for days raising the elevation of Lake Erie's western end and flooding these lowlands. Limestone is just below the surface in this area, and water-filled underground passages exist. Farmers report that the flood waters and fish all drain away into small sinkholes that exist in their fields.
- Cross River Raisin. Notice how Spring is more advanced the further south we travel...
- Cross La Plaisance Creek.
- Cross Muddy Creek.
- Cross Bay Creek.
- Cross Halfway Creek.
- Leave Michigan. Enter Ohio!
- Ohio became a state in 1802/1803! <http://www.ohiohistorycentral.org/entry.php?rec=530>
- Cross Ottawa River.
- Toledo is the **Glass Capital of Ohio**. Where I-75 crosses the **Maumee River**, the floodplain is filled with glass waste.
- **Phillips Avenue!**
- Cross Maumee River.
- Between Toledo and Findlay, Ohio, we travel through the **Toledo-Findlay Oil-Gas**
- **Field**. The oil and gas deposits are located in the Trenton Limestone (Ordovician), about 1,000 – 1,400 feet below the surface.
- "South of North Baltimore the road rises as it crosses the **Defiance Moraine**... This moraine is the northernmost Wisconsinian-age [Neogene] moraine in Ohio." (Camp, 2006, p. 64) **This moraine can be traced back to Franklin Village and Bloomfield Hills, Michigan!** (A moraine is a ridge of glacial till. Till is an unsorted mixture of boulders, cobbles, sand, and clay, that is deposited as a glacier melts.)
- Cross Blanchard River.
- **Findlay is Flag City USA!**
- Watch for large quarry on the right. Silurian dolomite was quarried here and used for flagstone, lime, and building stone. Dolomite is similar to limestone.
- Watch for quarry on right. Silurian dolomite was quarried here and used for flagstone, lime, and building stone.
- Between Beaver dam and Lima, the interstate passes over the rolling terrain of the **Fort Wayne Moraine**. (Camp, 2006, p. 68) **This moraine can be traced back to Farmington Hills and Bloomfield Hills, Michigan!**
- Cross Ottawa River.
- Watch for **large quarry** just north of Lima, Ohio. Quarry is on both sides of the road and tunnels underneath I-75! The rock is Silurian dolomite.
- Rest Stop! (or at Milepost 81...) Use Restrooms. Fill Water Bottles.
- Cross Auglaize River.

- **Wapakoneta** is the birthplace of **Neil Armstrong, the first human to set foot on the Moon!** (July 20, 1969) It is also the location of the **Armstrong Air & Space Museum**. <http://ohsweb.ohiohistory.org/places/nw01/index.shtml>
- Enter the Ohio River Watershed (Drainage Basin).
- **The Bicycle Museum of America**, 7 West Monroe Street, New Bremen, Ohio 45869  
<http://www.bicyclemuseum.com/>
- **Anna** is the **Earthquake Capital of Ohio!** Anna lies above a 1-billion year old
- Precambrian fault. (Camp, 2006, p. 69)
- Cross Great Miami River.
- **Rest Stop** (Alternate) after about 3 hours. Use Restrooms. Fill Water Bottles.
- Review behavior expectations! Personal Hygiene! Tick lesson! Breakfast sign-up.
- **Bus Work: Read Tomorrow's Itinerary!**
- **Reduced Noise!** Conversations only with the person seated next to you! Sleep on bus? Reading? Quiet games? Music by headphones?
- Cross Great Miami River.
- I-75 bridges the **Great Miami River** five times in downtown Dayton. **Watch for levees** along the river.
- **Dayton Aviation Heritage National Historic Park** Includes the Wright Cycle Company complex, the Wright Brothers Aviation Center at Dayton History at Carillon Park, the Huffman Prairie Flying Field and Interpretive Center on Wright -Patterson Air Force Base, and the Paul Laurence Dunbar House. <http://www.nps.gov/daav/index.htm>
- How do you think the **town of Moraine** got its name?
- As we cross the **Ohio River** in Cincinnati, watch for barge traffic. We cross on the upper level of a double-decker bridge. Leave Ohio. Enter Kentucky!
- Kentucky became a state in 1792! <http://www.infoplease.com/ipa/A0108217.html>
- Watch for layers of **Ordovician sedimentary rocks** as the bus climbs up out of the valley of the Ohio River. These are the oldest rocks we will see!
- **Rest Stop** in Kentucky.
- Use Restrooms
- Fill Water Bottles
- Quiet time. No conversations! Try to sleep!
- Alternate Rest Stop.
- Larue-Hart County Line: **Leave Eastern Time Zone. Enter Central Time Zone.**
- **Subtract one hour!**
- Arrive in Cave City, Kentucky
- **Students pick up all trash on bus larger than 3 mm.**
- Teacher/Chaperones unload luggage from bus.
- **Stay on bus** until you receive your room key from you teacher/chaperone.

- Student groups receive one key per room. **Teacher/Chaperones keep extra keys.**
- Get off bus with your teacher/chaperone.
- **Quietly** check into Hotel
- Report any room problems to Teacher/Chaperones!
- **Check Weather Forecast!**
- Showers? Lights Out!
- **Cave City** (Elevation: 633 feet above sea level.)
- Pink and yellow Calcite Crystals can be found in quarries around Cave City. (Where to Collect Minerals, Rocks, and Fossils in the United States-The Southeastern Quadrant, 1987, by Allan W. Eckert, Harper & Row, Publishers, New York, p. 150-151)

## **Wednesday, April 30, 2014**

- Rise and Shine! Showers? Phone Calls Home?
- Put on sturdy walking shoes/boots and comfortable hiking clothes.
- Bring a sweatshirt or jacket. Mammoth Cave temperature is ~ 54 F.
- Keep rain gear accessible! Cameras? Water bottles? **No flashlights today!**
- Continental Breakfast
- Motel Classroom! Elective Classes in Botany, Remote Sensing Probes, Memory Block, Get Fit!, Picture This!, and Photography meet in teacher/chaperones' motel rooms.
- **Use Restrooms! Fill Water Bottles!**
- Board Bus according to Echoes groups. Today's order:
 

1 <sup>st</sup> : Bruyneel	4 <sup>th</sup> : Phillips
2 <sup>nd</sup> : Fisher	5 <sup>th</sup> : Straub
3 <sup>rd</sup> : Mason	6 <sup>th</sup> : Brooks
- Rolling Classroom! **No personal audio players allowed today!**
- Travel to Mammoth Cave National Park through karst landscape .Watch for layered sedimentary rocks (Mississippian lime stones and Pennsylvanian sandstones), sinkholes, caves, springs and wildlife!
- Map Reading.
 

"How to Behave in a Cave!"

Tick Talk!
- **Mammoth Cave National Park Visitor's Center**
- **The following items are not permitted in the Visitor Center Area:** firearms, knives, sharp instruments (box cutters, scissors, etc.), pepper spray/mace, any other type of weapon (clubs, batons, brass knuckles, etc.), backpacks, luggage, (suitcases, duffel bags, etc.), strollers, camera bags, and tripods!

- In Mammoth Cave, **shoes that have been worn in another cave or mine are not permitted!** This is to prevent the spread of White Nose Syndrome. This disease has already killed over a million bats.
- **Do not make Gift Shop purchases until after this morning's tour!**
- **Fill water bottles.**
- **Use Restrooms!**
- Underground Classroom! "The Historic Tour," Mammoth Cave National Park
- **No Flashlights Allowed! No Collecting!** Bring water bottles. Wear good shoes for walking. No restrooms available!
- Remote Sensing Probes! Photographs! This tour will take 2 hours and is 2 miles long. It is considered to be a strenuous hike with approximately 457 steps to negotiate. The elevation change is 300 feet. Enter through the natural Historic Entrance, as did the earliest explorers and visitors. Descend in search of the spectacular! Explore huge pits, domes, and avenues along the oldest tour routes! There are heights, close places, and the hard-packed dirt trails may be wet and slippery with steep inclines. Discover the role Mammoth Cave played during the **War of 1812**, and ponder the mysteries that surround the prehistoric people who walked these passages as many as 4,000 years ago. Rotunda, Broadway Avenue, Methodist Church, Salt Petre artifacts, Giant's Coffin, Sidesaddle Pit, **Bottomless Pit**, Fat Man's Misery, River Hall, Mammoth Dome, Audubon Avenue, Mammoth Dome Tower. Use remote sensing probes to monitor the cave's temperature, humidity, and barometric pressure. Bat detectors!
- **Mammoth Cave Historic Entrance** The main section of Mammoth Cave is believed to have been discovered in 1797 by Robert Houchins. He is said to have been pursuing a wounded bear he was hunting which disappeared into the main entrance to the cave. This entrance is known as the Historical Entrance. There are presently some 30 entrances to the cave system, approximately a quarter of which are natural. However, the Historical Entrance was the only one known until 1921. It is currently the only natural entrance which is used on the public cave tours offered by the National Park Service.  
<http://www.shannontech.com/ParkVision/MammothCave/MammothCave.html>
- **Picnic Lunch** near Mammoth Cave Visitors' Center
- Visit Gift Shops in Mammoth Cave National Park Visitor's Center and the Mammoth Cave Hotel. **Use Restrooms! Fill Water Bottles!**
- Outdoor Classroom! **Stay with your Echoes Teacher!** Hike 1.7 miles! Elevation change is over 300 feet. Photographs. Use Remote Sensing Probes to monitor air temperature, and the temperature and pH of the Green River, River Styx Spring and Echo River Spring. Topographic Map Reading. Compasses. Two-way Radios. Pedometers. Calculators, Field Guides. Sky Eyes! Animal Calls! GPS devices! Flipcams!
- **Follow Old Guides Trail to Old Guides Cemetery (~0.2 miles).**
- The boards of the walkway are made of recycled plastic!
- "During the winter of 1842, the cave owner, Doctor John Croghan, cared for 13 tuberculosis patients in the cave. Several patients died and are buried in the Old Guides Cemetery near Stephen Bishop's grave. The date on Bishop's

headstone is incorrect. He died June 15, 1857.” (Guide to the Surface Trails of Mammoth Cave National Park by Stanley D. Sides, 1996, p. 34)

- **Continue on trail to Sunset Point**
- **Descend trail to River Styx Spring.** Watch for deer!
- **Big Clifty Formation** This Pennsylvanian formation consists of 50-100 feet of sandstone that overlies the Mississippian limestones in which the Mammoth Cave System is located. The Mississippian-Pennsylvanian boundary is marked by thin layers of green-gray shale near the base of the sandstone. “The Big Clifty is the brown, resistant rock that stands out in low cliffs along the roads and paths leading to the cave entrances.” It forms the resistant caprock on the ridges of Mammoth Cave National Park, and keeps the caves below fairly dry. The sediments of these rocks were transported by the **Michigan River** from highlands to the northeast and “were deposited when the delta of the **Michigan River** extended into the Mammoth Cave area” about 300 million years ago. (A Geological Guide to Mammoth Cave National Park, by Arthur N. Palmer, 1981, Zephyrus Press, p. 66)
- **Green River Bluffs** Outstanding views of the Green River Valley. Good exposures of the Pennsylvanian sandstone caprock.
- **Green River** Beginning in Lincoln and Casey counties, Kentucky’s 300-mile-long Green River is a tributary of the Ohio River, pouring its water into the Ohio near Evansville, Indiana. The Green River gets its name from the depth of the river, and it flows through Mammoth Cave National Park for about 15 miles. The river drains the cave and controls the master base level of the Mammoth Cave System. The river was canalized in 1842. The construction of a 9 foot (2.7 m) dam at Brownsville, Kentucky in 1906 has raised the water level in some parts of the cave system by as much as six feet (1.8 m) above its natural value. Several of Kentucky’s record fish have been caught in the Green River including a 97-pound flathead catfish! ([http://en.wikipedia.org/wiki/Green\\_River\\_\(Kentucky\)](http://en.wikipedia.org/wiki/Green_River_(Kentucky)))
- **Cave Island** is just upstream. In 1901, boat traffic was able to reach Cave Island ([http://en.wikipedia.org/wiki/Green\\_River\\_\(Kentucky\)](http://en.wikipedia.org/wiki/Green_River_(Kentucky))) where passengers disembarked. “A ferry operated here years ago.” (Guide to the Surface Trails of Mammoth Cave National Park by Stanley D. Sides, 1996, p. 14)
- **Dossey Domes Cave** The gated entrance of Dossey Domes Cave, commercialized at the turn of the century by Edmund Turner, can be seen across the river.” (Guide to the Surface Trails of Mammoth Cave National Park by Stanley D. Sides, 1996, p. 14)
- The **River Styx Spring** is one of the major outlets for water that flows through Mammoth Cave. The cave ceiling drops below the water surface a short distance inside the opening.
- **Trail Junction. Follow Echo River Trail to Echo River Spring (~0.7 miles).** Hiking on the **floodplain.**
- **Echo River Spring** is one of the outstanding karst features of the park. The drainage basin feeding the spring extends far to the southeast of the park. Much of the water of the spring’s drainage basin is now being pirated to the west to resurge at Turnhole Spring. The walk from the spring is nearly level, through a forest of tall sycamore, elm, and tulip poplar. The cave spring emerges from the St. Louis Limestone of Mississippian Age. (Guide to the Surface Trails of Mammoth Cave National Park by Stanley D. Sides, 1996, p. 44). In 1974, divers entered the spring and traversed

1,300 feet of water-filled passage to emerge near the boat landing in Mammoth Cave. (Guide to the Surface Trails of Mammoth Cave National Park by Stanley D. Sides, 1996, p. 21)

- **Trail Junction. Follow trail to Green River Ferry to the right (~0.4 miles).**
- **Snack Break!**
- **Green River Ferry.** How does this ferry move across the Green River? What keeps it from being carried downstream by the river's current? Why can our bus not use it to cross the river?
- **Cave Gate** Caves are dangerous places and fragile ecosystems. Gates are built to keep people safe, keep vandals out, allow bats and other wildlife access, and to permit the natural airflow. Note that the bars are horizontal. Why?
- **Board bus! Ahhh!**
- Rolling Classroom through karst landscape. (25 minutes) Watch for layered sedimentary rocks (Mississippian limestone's and Pennsylvanian sandstones), sinkholes, caves, springs, and wildlife!
- Return to Cave City Hotel,
- Dinner Sign-up!
- **Students pick up all trash on bus larger than 3 mm.**
- Inspect Bus for Cleanliness – Bruyneel's Echoes Group!
- Phone Calls Home? Write postcards? Showers? Naps? **Tick check?**
- Dinner – Nearby Restaurants, Cave City, Kentucky
- Motel Classroom! Echoes – small group discussions facilitated by Berkshire staff, followed by reflective journal writing. Use of laptops to record important facts learned, answers to investigative questions, and quotes.
- Evening Program. Meet in hotel Breakfast Room. Snack.
- Packing and Dressing for Hidden River Cave.  
Hidden River Cave group identification and scheduling. Mammoth Cave relief, topographic, and subsurface map. "The Sinkhole," from The Yearling, by Marjorie Kinnan Rawlings, and "Dangers Underground," by Mary Zettelmier.
- **Assignment: Read tomorrow's Itinerary!**
- **Assemble gear for Hidden River Cave.** Assemble extra change of clothes, socks, and shoes in a plastic garbage bag. Use a piece of masking tape to label it with your name. Extra light sources! Wear warm clothes, sturdy boots, and gloves!
- **Check Weather Forecast!**
- Phone Calls Home? Write postcards? Showers? **Tick check?**
- Website team meets with Mr. Phillips.
- Bat detectors! Astronomy!
- Room Check – Lights Out!
- Staff meeting in Mr. Phillips' room.

## Thursday, May 1, 2014

- Up and At 'Em!
- Phone Calls Home? Write postcards? Showers?
- Continental Breakfast at Hotel
- Phone Calls Home? **Use Restrooms! Fill Water Bottles!**
- Board Bus by Echoes Groups.
- Today's order:

1 <sup>st</sup> : Fisher	4 <sup>th</sup> : Straub
2 <sup>nd</sup> : Mason	5 <sup>th</sup> : Brooks
3 <sup>rd</sup> : Phillips	6 <sup>th</sup> : Bruyneel
- **Rolling Classroom!** Travel to Horse Cave, Kentucky. Watch for layered sedimentary rocks (Mississippian limestones and Pennsylvanian sandstones), sinkholes, caves, springs, and wildlife!
- Map Reading. Prepare Remote Sensing Probes\*
- **No personal audio players allowed today!**
- Lunch Talk.
- **Underground Classroom!** Hidden River Cave Adventure, Horse Cave, KY
- **Use the restroom!** Hard hats and lights will be provided by the American Cave Conservation Association. <http://cavern.org/hrc/hrchome.php> A wild cave adventure investigating ecology and conservation. Safe caving practices emphasized. **No Collecting!** Discuss environmental issues related to the story of Hidden River Cave. Explore a rushing subterranean river flowing 150 feet below the city of Horse Cave! Investigate undeveloped portions of the cave off the beaten path! 350 million year old limestone (Mississippian Period). **No restrooms available.** 174 steps down! View cave formations. Discover unique and elusive cave wildlife, and learn about cave ecosystems. Use remote sensing probes\* to monitor the cave's temperature, humidity, and barometric pressure, as well as checking the temperature and pH of Hidden River. Strenuous hiking through muddy and wet cave passages, crawling and climbing over rocks. Bat detectors!
- **Do not take expensive cameras into this cave!** It is wet and muddy!
- Gear Up & Safety Talk at Thomas House
- Caving Adventure Tour
- Group 1: Phillips & Straub
- Group 2: Bruyneel & Mason
- Group 3: Brooks & Fisher
- Change into clean clothes at Thomas House. Place wet things in the plastic garbage bag with your name on it and **stow it on the bus in the rear storage compartment.** Wash up in the Museum.
- All You Can Eat Salad Bar and Hot Bar at **Turtlelini's Pizza and Pasta,**

- Horse Cave, KY
- **Fill Water Bottles! Use Restrooms!**
- Mason, Straub & Phillips: **American Cave Museum**  
Scavenger Hunt
- Bruyneel, Brooks, & Fisher : **American Cave Museum**  
Gift Shop
- Bruyneel, Brooks, & Fisher : **American Cave Museum**  
Scavenger Hunt
- Mason, Straub & Phillips : **American Cave Museum**  
Gift Shop
- **American Cave Museum** - An environmental education center operated by the American Cave Conservation Association. Exhibits include Prehistoric Cave Explorers, Modern Cave Explorers, Cave Lighting, History of Horse Cave, Kentucky Cave Wars, The Story of Floyd Collins, Groundwater Science and Conservation, Saltpetre Mining in Kentucky Caves, and Gallery of American Caves. <http://cavern.org/hrc/hrchome.php>
- Travel to the **Battle for the Bridge National Historic Preserve** via a Buffalo Trace. Visit Civil War battlefield for the Battle of Munfordville (September, 1862). <http://www.battleforthebridge.org/>
  - Bruyneel, Mason, & Phillips: **Woodson House**
  - Brooks, Straub, & Fisher: **Battlefield**
  - Brooks, Straub, & Fisher: **Woodson House**
  - Bruyneel, Mason, & Phillips: **Battlefield**

- Reading of a Civil War Soldier's letter home...?
- Topographic Map Reading. Compasses. 2-way radios.
- **Stay With Your Echoes Teacher!**
- **Rowletts** Pieces of Petrified Wood up to 25 pounds can be found in the Rowletts area.
- ([Where to Collect Minerals, Rocks, and Fossils in the United States-The Southeastern Quadrant](#), 1987, by Allan W. Eckert, Harper & Row, Publishers, New York, p. 169)

**Buffalo Trace** Kentucky Highway 335 follows the course of a Buffalo Trace, a trail left by large herds of buffalo as they traveled through this area in the 1700's. This trace leads northward toward the Green River to a natural ford where the buffalo could cross and drink. Early Americans followed animal trails such as this as they explored and traveled through North America.

**Munfordville** This site on the Green River was first settled in 1801 by Richard Jones Munford, and was known at that time as the Big Buffalo Crossing. In 1802, Munford established a ferry for river crossing here. During the Civil War

(1861-1865) Munfordville was occupied by both Confederate and Union military forces. Three battles were fought here. Munfordville is the county seat of Hart County. <http://www.visitmunfordville.com/history.htm>

**Louisville-Nashville Railroad Bridge** This 1,800-foot bridge was first constructed in 1857-59, and crossed 150 feet above the Green River here. A large army could only advance as far as it could be supplied by railroad or river. If this bridge were destroyed, the Union army stationed in Louisville could not invade the South along this route. In October of 1861, the Confederates destroyed the bridge. <http://www.visitmunfordville.com/history.htm>

**Battle of Rowletts Station** December 17, 1861. The Union army included soldiers were from Kentucky, Indiana, Illinois, Ohio, Pennsylvania, and Wisconsin. The Confederate forces included soldiers from Texas and Arkansas. <http://www.visitmunfordville.com/history.htm>

**Anthony Woodson House and Farm** At the time of the Civil War, Anthony L. and Eliza B. Chapline Woodson lived in this house with their nine children. On the first day of the Battle of Munfordville, Confederate Col. Robert A. Smith of Mississippi was wounded and brought to the Woodson home where he died a few days later. The Woodson home was heavily damaged during the battle. <http://www.visitmunfordville.com/history.htm>

**Fort Craig** Union forces began building Fort Craig in January of 1862. During the Battle of Munfordville, this was the left end of the Union line. The Union right was 1,000 yards to the west, ending just beyond the Bridge at the steep banks of the Green River. <http://www.visitmunfordville.com/history.htm>

**Battle of Munfordville** September 14-17, 1862. The Union army included soldiers from Kentucky, Ohio, and Indiana. The Confederate army approached from the south and included soldiers from South Carolina, Alabama, and Mississippi. After a Confederate assault and siege, the 4,000+ Union troops defending Munfordville and the Bridge surrendered. The victory cost the Confederates over 700 men.  
<http://www.visitmunfordville.com/history.htm>

**Col. Robert A. Smith Monument** Located at the southern end of the Railroad Bridge, it is said to be the largest single stone in America (with the exception of Cleopatra's Needle). It's weight is estimated at 35 tons, and it is 21 feet high. The monument is a solid block of limestone that was quarried near Bowling Green, Kentucky.  
<http://www.visitmunfordville.com/history.htm>

**Skirmish at Woodsonville** September 20-21, 1862. The Confederate forces included soldiers from Kentucky, Alabama, Georgia, Texas, and Tennessee. The battle began about 3 miles north of Horse Cave near Mammoth Onyx Cave (Kentucky Down Under), and became a running battle along the route of what is now Kentucky Highway 335. The Confederates slowly retreated as a large Union army approached from the south.  
<http://www.visitmunfordville.com/history.htm>

**US-31** This highway is called the Dixie Highway, and can be followed north where it eventually traces the west coast of Michigan's Lower Peninsula. US-31's southern end is at Mobile, Alabama. Its northern end is at its intersection with I-75, just three miles south of the Mackinac Bridge, that connects the Upper and Lower Peninsulas of Michigan.

- **Mr. Fisher's Travelogue:** Travel to Hotel, via the Dixie Highway (US-31W), through karst landscape. Watch for layered sedimentary rocks (Mississippian limestone and sandstones), sinkholes, caves, springs, and wildlife!
- Dinner Sign-Up!
- **Students pick up all trash on bus larger than 3 mm.**
- Inspect Bus for Cleanliness – Alder/Phillips' Echoes Group!
- Wash up! Showers? **Tick check?**
- Dinner – Nearby Restaurants, Cave City, Kentucky
- Board bus and travel to Kentucky Action Park (5 minutes)
- **Recess** at Kentucky Action Park (1 hour) (270) 773-2560 **Weather Permitting!**
- Go-carts, bumper cars, putt-putt, scenic chairlift, quarter mile long Alpine slide, rock climbing wall, trampoline thing, snack bar, and game room.
- In the event that recess is cancelled due to unforeseen circumstances (e.g., severe weather), students will meet for an enrichment session with their Echoes Group.
- Board bus and return Sleep Inn & Suites, 270-773-2050.
- Breakfast sign-up!
- Motel Classroom! Echoes – small group discussions facilitated by Berkshire staff, followed by reflective journal writing.
- Quiet Time.
- **Assignment: Read tomorrow's itinerary.**
- Pack up belongings for tomorrow's departure.
- Phone Calls Home? Showers? Write Postcards? **Tick check?**
- **Check Weather Forecast!**
- Website team meets with Mr. Phillips.
- Bat detectors! Astronomy!
- Room Check – Lights Out!
- Staff meeting in Mr. Phillips' room.

## **Friday, May 2, 2014**

- Showers? Phone Calls Home?
- Continental breakfast at Sleep Inn & Suites. (Opens at 5 a.m..)

- Phone Calls Home? **Fill water bottles. Use restrooms!**
- Upon returning to the Sleep Inn & Suites, students place luggage outside their rooms.
- Room Check by Teacher/Chaperones. – Vacate Rooms.
- Load luggage on bus according to Echoes groups.
- Board bus according to Echoes groups.
  
- Today's order:
 

1 <sup>st</sup> : Mason	4 <sup>th</sup> : Brooks
2 <sup>nd</sup> : Phillips	5 <sup>th</sup> : Bruyneel
3 <sup>rd</sup> : Straub	6 <sup>th</sup> : Fisher
- Departure from Cave City, KY.
- Travel to Big Bone Lick State Park in Union, KY.
- Notice how Spring is less advanced the further we travel north.
- **Rolling Classroom!** Watch for layered sedimentary rocks (Mississippian lime stones and Pennsylvanian sandstones) and wildlife!
- Map Reading.
- "The Floyd Collins Story"
- "Ballad of Floyd Collins" – Kentucky Bluegrass Music!
- "Dirty Jobs" Hidden River Cave segment...
- **No personal audio players allowed until after lunch today!**
- Cross Green River.
- The **Landscape of Kentucky** is much more rugged than that of Ohio and Michigan because continental glaciers never covered the Bluegrass State. In Michigan and Ohio, the glaciers acted like bulldozers, leveling the landscape.
- Hart-Larue County Line: **Leave Central Time Zone. Enter Eastern Time Zone. Add one hour!**

**Abraham Lincoln Birthplace National Historical Park.** Abraham Lincoln Birthplace National Historic Site was established by the Lincoln Farm Association in the early 1900s. The site was donated to the federal government and became a national park on July 17, 1916. At that time it was called the Abraham Lincoln National Park. The Boyhood Home Unit at Knob Creek was established by the Howard Family in the 1930s. It stayed within the family until it was added to the national park system on November 6, 2001 by donation. The Park focuses on Lincoln's life in Kentucky. The Birthplace Unit demonstrates Lincoln's humble beginnings with a symbolic birth cabin enshrined within a neo-classic Memorial Building. The Boyhood Home Unit at Knob Creek Farm was home to Lincoln during his formative years. Events in Kentucky helped mold a young boy into the man who became the nation's sixteenth President. **This might be an alternative to the Caving Adventure Tour should Hidden River Cave be flooded.** <http://www.nps.gov/ABLI/index.htm>

**Fort Knox Military Reservation** Congress designated Camp Knox as a permanent garrison on Jan 1, 1932, and changed the name to Fort Knox. On Jan 16, 1932 the 1st Cavalry Regiment -- the Army's oldest mounted unit -- arrived at Fort Knox and traded its horses for combat cars. The new 1st Cavalry Regiment (Mechanized) was joined in 1936 by the 13th Cavalry Regiment, which in turn traded its horses for tanks and, together with the 1st, comprised the 7th Cavalry Brigade (Mechanized). In 1936 the U.S. Treasury Department began construction of the U.S. Bullion Depository. The Gold Vault opened in January 1937, During World War II, the U.S. Bullion Depository continued to operate at Fort Knox, receiving more and more shipments of the country's gold reserves. The **Gold Vault** was also used to store and to safeguard the **English Crown Jewels** and the **Magna Carta**, along with the gold reserves of several of the countries of occupied Europe. On DEC 26, 1941, the Gold Vault also received the original documents of the **Constitution**, the **Bill of Rights**, and the **Declaration of Independence** for safekeeping. These historic documents left Fort Knox on Oct 1, 1944, and were returned to Washington DC for public display. <http://www.knox.army.mil/IMA/sites/about/history.asp>

- Cross Salt River.

**Kentucky Derby** -This year will be the 140<sup>th</sup> running of the **Kentucky Derby at Churchill Downs** on Saturday, May 3, 2014. Horse racing in Kentucky is rich in history, dating back to 1789 when the first race course was laid out in Lexington. Racing in Louisville dates back to 1783 when local sources reported that races were held on Market Street in the downtown area. To alleviate the problems associated with racing on the busy city thoroughfare, a course was developed at the now abandoned Shippingport Island in 1805. Racing was conducted on the island in the Ohio River at what was called the Elm Tree Gardens. It was almost 100 years later, in 1875, that Churchill Downs officially opened and began its tradition as "Home of the Kentucky Derby. See <http://www.churchilldowns.com/>

**Louisville Slugger Museum and Factory** "It takes a special place to craft the Official Bat of Major League Baseball. Since 1884, Louisville Slugger has put prime lumber in the hands of the greatest players of the game. A visit to the museum shows you how the sport has changed a bit between then and now, but the "crack of the bat" remains one of the sporting world's most thrilling moments." <http://www.sluggermuseum.org/>

- Watch for rock quarry.
- Cross Little Kentucky River.
- Cross Kentucky River.
- View short film, "Big Bone Lick"

**Big Bone Lick State Park**, Union, Kentucky <http://parks.ky.gov/findparks/recparks/bb/> Big Bone Lick is a National Natural Landmark. Visit Bog Diorama. Examine fossil bones and teeth displayed in Interpretive Center. Visit gift shop.  
Hike

- **Big Bone Creek Trail?**

**Ancient sulfur spring. Bison herd. Paleozoic Fossils.** During the Pleistocene Epoch (12,000-20,000 years ago in the Neogene Period), prehistoric animals were driven southward by the advancing glaciers just north of the Ohio River. Michigan was covered with glacial ice at this time. Prehistoric creatures such as woolly mammoths, mastodons, giant ground sloths, giant stag moose, ancestors of modern-day horses, and bison wandered through varied grassland, wetland, and savannah environments. They were attracted to the salt and mineral springs found in the swamp area now known as Big Bone Lick. Many of these large animals became trapped in the soft, water-soaked ground. The fossilized remains of these past inhabitants provide clues about life in Kentucky thousands of years ago. Native Americans knew about the bones long before the Europeans entered the area. Bones from historic times that have been discovered here include those belonging to bison, white-tailed deer, dogs, horses, hogs, and humans. The 'discovery' of the bones in the 1700's inspired a new field of study. During colonial times, collections of these bones found their way to France and England. President Thomas Jefferson directed Colonel William Clark to retrieve specimens from the site that were displayed in the White House. Early settlers used this location as a salt making site. The scientific world recognizes Big Bone Lick as the Birthplace of American Vertebrate Paleontology. Ordovician invertebrate fossils are also present in creek bottoms in the Park.

- **No Collecting Permitted!**

- **Use restrooms! Fill water bottles!**

- Picnic Lunch at Big Bone Lick State Park.

- **Watch for Michigan's State Fossil!** <http://www.statefossils.com/mi/mifossil.html>

- Board bus

- Depart for home!

- As we descend toward the Ohio River, the road has been cut through layers of Ordovician Rocks.

- Rolling Classroom! Watch for the Ohio River! Map Reading.

- Cross the Ohio River on the lower level of the double-decker bridge.

- Leave Kentucky and enter Ohio.

- Enter Lake Erie Watershed (Drainage Basin).

- Rest stop **Use restrooms!** Snacks and drink provided.

- Sleep on bus? Reading? Quiet games? Music by headphones?

- Ohio-Michigan border.

Michigan became a state in 1837! <http://www.enchantedlearning.com/usa/states/michigan/>

- Teachers read aloud published stories of Traveling Classroom students from Language Arts classes. As we pass Luna Pier, MI, the telephone fan-out will be activated.

- Arrive at Berkshire

- Students check overhead compartments.

- Students check under seats.
- **Students pick up all trash on bus larger than 3 mm.**
- **Teacher/Chaperones give student medications to Mr. Phillips!**
- (Parents should pick up medications from Mrs. Weber on Monday.)
- **Students will be dismissed from the bus seat-by-seat!**
- **Be sure to pick up all luggage including the trash bag with your wet and muddy clothes!**
- Teacher/Chaperones inspect bus to be sure all items have been removed. (Just the things that belong to us!)
- Parents/Guardians pick up students. **Please be on time!**

**Student Artists:** Emma Ferguson (T-shirt), Morghan Larson (Echoes Journal), Sofia Di Stefano (Itinerary).

**Website Team:** Michael Brown, Dylan Cohen, Noel Stanley, Lily Spencer, Chloe Rivera, Morghan Larson, Michael Fischer, Beto Romano, Maddy Penozza, Olivia Snead, Reigan Henderson, Sofia Di Stefano, James Laport, Diego Suazo De la Rosa, Gray Mulligan, Yanis Bousarsar.

**Teacher-Chaperones:** David Brooks, Scott Bruyneel, Dan Fisher, Yoshi Mason, Mark Phillips, Deana Straub.

**Substitutes:** Tyler Austin, Victor Chanussot, Jana Dinkeloo, and Hailey Van Wordragen.

**Special Thanks to:** Michael Babcock, Barbara Babich, Brian Baldrige, Angelina Battle, Roy Bishop, Jason Clinkscale, Debbie Damman, Jauron Davis, Stacey Eggert, Suzi Epstein, Kim Flowers, Susan Gienapp, Laurie Garbutt, Suezane Hammoud, Rhonda Hardeman, Billy Jackson, Barbara Johnston, Lori Lachowicz, Lauren Laginess, Erin Lincoln, Annmarie Lo, Katie Maxwell, Cindy McAdams, Peggy Nims, Cathy Phillips, Cheryl Rivera, Theresa Sensenig, Jim Stearns, Sara Tucker, Bridget Weber, Todd Wriska, Sylvia Yaldo, Amanda Zwiren, the parents/guardians of our students, and the families of the traveling teachers.

- Trip Debriefing Wednesday, May 7, 2014

**Final Echoes Meeting during Lunch on Wednesday, May 7!**

**Website Team meets with Ms. Garbutt!**

**Students share their experiences with their classmates!**