

Montana Earthquakes: A "Virtual Field Trip"

name: _____

Go to this web site to begin: www.formontana.net/bengals.html

1. Look at the top photo shown on the web site and read the caption below it. When was the "new" Helena High School dedicated? _____
2. On what date was it "severely damaged" by an earthquake? _____
3. What was "fortunate" about that evening?
4. Explain what is shown in the bottom photo, and tell what it has to do with the top photo.
5. Think about what it would be like to go to school every day in railroad "coach cars" (not box cars). What is something you might like about this situation?
6. What is something that you would not like about the situation?

Next: Click on the Hot Link at the bottom of the web site to see the next photo.

7. The top photo on this page has nothing to do with the 1935 earthquakes in Helena. The photo shows what happened as a result of a 1959 earthquake near Yellowstone Park. Explain what happened. Be sure to tell how this affected the river and the people camping that were camping there.
8. Look at the map included with this worksheet. According to the map how many people did the landslide kill? _____ How many bodies are still beneath the landslide? _____
9. Scroll down to the second photo on the web site. Look at the man standing there. Assuming that he is about 6 feet tall, estimate how much the land was offset during the earthquake. _____ feet
10. (same photo) What is the name of this "fault scarp"?

11. On your map, locate the fault that is shown in the photo. What creek starts near the west end of the fault?
12. Skip the next photo on the web site. Scroll down to the one labeled "#17". . . What famous person owned this house?
13. Find the house on your map. **According to the map**, what fault had the house been built on?
14. Skip the next photo. Scroll to the bottom of the page and click on "page 2". Skip the first photo. Tell what happened to each of the five family members that camped in the area shown in the second photo?
15. Locate this campsite on your map. What's the name of the small lake located near Cliff Lake?
16. Scroll down to the photo of Hebgen Lake. Did the dam survive the earthquake of 1959?
17. Look at the NW area on your map. What river is the Hebgen Dam built on?
18. Scroll down to the photo of the man standing on the dam. What was he showing the photographer?
19. **Skip the next photo, and click on "page 3"**. Look at the top photo. The land that the cabin was built on is submerged beneath the lake water. Explain why.
20. Look at the next photo (#53). Why were these boat docks "high and dry" after the earthquake? Circle one.
 - a. The quake caused some of the water to spill out of the lake.
 - b. The quake caused the land beneath the other side of the lake to drop down.

21. Look at the diagram shown on this web site: www.formontana.net/bengals2.html

On which side of the lake was the cabin? A or B (circle one)

On which side were the boat docks? A or B (circle one)

22. Go back to the page showing photo #53 and others. Browse through the rest of the photos on this page, and then click on "page 7" at to see the next group of photos. Look at the last photo on page 7. What is the Army Corp of Engineers doing here?

23. Why was it important for the Corp to do this?

24. According to your map, which two cities would have been flooded if the lake washed the landslide away?

Go to this web site: <http://formontana.net/landslide.html> and then scroll down to where it says, "Click here to see what the landslide looks like today. This site is intended to let you see what the area around the landslide looks like today. Move your mouse to the left or right to see the area.

25. Which lake can you see from here (your map may help)?

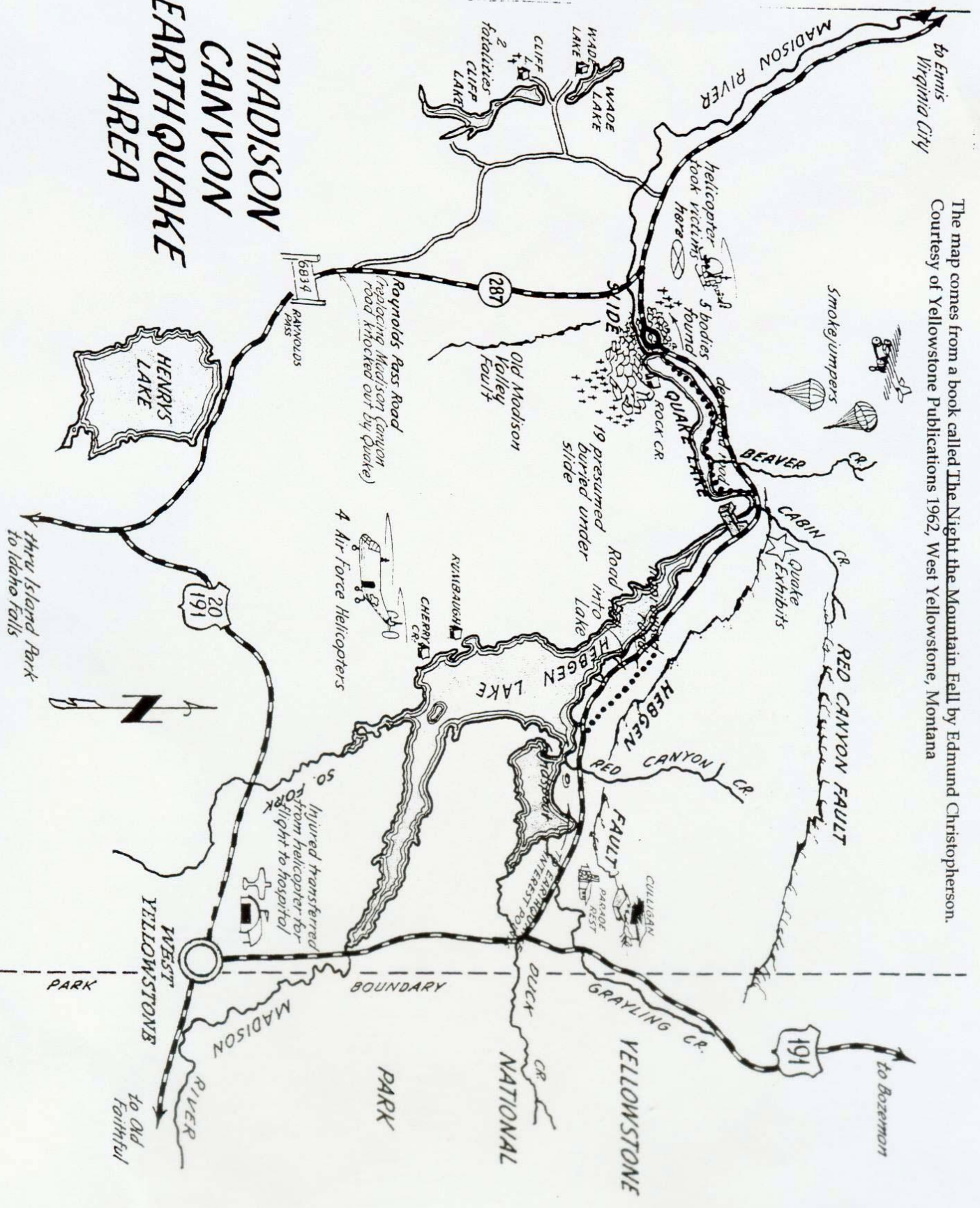
26. What is growing on the landslide?

27. The person that made this video was standing on the Madison Canyon Landslide. What does the photographer call the landslide (he is incorrect)?

28. Can you see the visitor center down by the lake? _____

Have you ever stopped at this visitor center? _____

MADISON CANYON EARTHQUAKE AREA



The map comes from a book called *The Night the Mountain Fell* by Edmund Christopherson. Courtesy of Yellowstone Publications 1962, West Yellowstone, Montana