

Wednesday evening - 5 hr lecture for preparation of field portion of class. Topics include brief overview of general geology, especially rock cycle, plate tectonics, and stratigraphy and sedimentology and regional historical geology and paleontology overview. Start at 3:00 pm to 9:00

Field Day 1- “A walk through the Grand Staircase”

Leave at 8:00 a.m. from Kanab VC

Stop 1. Buckskin Gulch

- Part 1-The calm before the storm-Permian Paradise (Pangea).
- Part 2-The day the earth almost died-End Permian extinction.
- Part 3-Surf’s not up!-Withdrawal of the panthalassic seaway.

Stop 2. Paria Movie Set (Lunch here at 12:00)

- Part 1-The phoenix rises from the ashes-Mesozoic terrestrial ecosystems.
- Part 2-Reshaping the continent- The breakup of Pangea, the rise of the mesocordilleran high and the evolution of a convergent margin in North America (ash in the Chinle).
- Part 3-Jurassic Park-Drying out the North American interior and the end Triassic extinction.

Stop 3. The Cove

- Return of the seas-The Carmel and Entrada Formations

Return to Kanab-Arrive approximately 6:00 pm for dinner.

Field Day 2-“The Kaiparowits Plateau speaks”

Leave at 8:00 a.m. from Kanab VC

Stop 1. Rimrocks

- Part 1-What’s missing here? The Jurassic-Cretaceous unconformity and the Sevier Orogeny.
- Part 2-And now for something completely different-A place of rivers, lakes and swamps.
- Part 3-Paleontology overview-Cenomanian-Turonian extinction, significance of the Dakota Formation fossils (old style NA Mesozoic replaced by Eurasian invaders).

Stop 2. Cretaceous Hogbacks (Lunch at the end of this stop).

- Part 1-Return of the seas part II-The Cretaceous Interior Seaway and the Tropic Shale and Straight Cliffs formations.
- Part 2-Laramide Uplift and the rise of the Colorado Plateau.

Stop 3. Grosvenor Arch

- The making of the modern landscape-Sculpting exposed rock (Geomorphology).

Stop 4. The Gut

- Part 1-Endless coastal plains-the paleogeography and climate of Laramidia.

- Part 2-Fossil treasure trove-The highest geologic units (early Laramide stack-Wahweap through Claron) and the Kaiparowits fossil resource.

Return to Kanab approximatey 6:00