

SLU Geology Department Lantern Slides (1930s-1950s)

MSS 221

3 Linear Feet

Background

Lantern Slides were a commonly used teaching aid in public schools and in higher education from the mid-19th to the mid-20th century. The lantern slide was first developed in the 17th century when a device was invented that could focus a light source to project an image on a wall or screen from a painted glass slide. These devices, known as “magic lanterns” became more popular after the development of photography.

Scope and Content

This collection consists of over 350 lantern slides, most of which are photographs of various geological features from around the world, and illustrations of prehistoric animals and plants. Approximately 100 of the slides are of photos of North Country, New York State, and Northeastern regional geological features. The North Country photo slides also include a three-page description of the numbered slides. The number of slides is about evenly split between geological/geographic features and prehistoric life. In addition to the slides, the collection includes a large, working, mid-20th century lantern slide projector.

Provenance

The materials in this collection were transferred to Special Collections from the SLU Geology Department in the spring of 2019.

Box 1—Lantern Slides of Northern New York

Slide No.	Description
101	Map of major geological divisions of northern NY
102	Same with cross-section of structural relations added
103	Stratigraphic column, maximum thickness to scale, of Paleozoic strata of northern NY
105	Paleographic maps of northern NY, all of same area, with black dot for Canton;
112	Upper half of preceding; shows disturbance and igneous injection
113	Glacial boulder of lit-par-lit injection gneiss, Laurentian granite into Grenville or amphibolite.
117	Probably Round Pond, west of Copperas Pond; Grenville quartzite;
119	The “Hole in the Cliff” in the Indian River gorge at Theresa; Potsdam sandstone on Grenville schist;
122	Lower fall in the Rutland Hollow brook at East Watertown. Sherman Fall (Trenton) limestone
123	Hunting Trenton fossils above the same fall. (The lady is probably Mrs. Frank Cleveland)
124	Upper fall in same brook, at East Watertown.
125	High bank of shale at Fox Creek, a mile southeast of Allendale.
126	Same, from bridge. Photo by Walter. Meander sweep. Small talus
127	Joints in this shale by roadside on south side ascent from the bridge.
128	Mouth of north tributary into Lorraine Gulf (South branch Sandy Creek) a mile east of Allendale and just on edge of Watertown quadrangle
129	Maps of glacial history in northern NY showing stages of recession of Wisconsin ice-sheet and accompanying glacial lakes
130	Glacially grooved gneiss, with the banding diagonal to the grooves, somewhere near Canton, exact locality not known

Slide No.	Description
131	Glaciated serpentized Grenville marble, near Edwards.
132	Glacial boulder of Algonian porphyritic granite, on ledge of same rock, near South Edwards. Roy and Leland Freeman on top.
133	Same, showing more sky under it. Leland Freeman on top.
134	Split glacial boulder of coarsely porphyritic Algonian granite, southeast of Canton (on road to Crary's Mills?).
135	Glacial potholes in Potsdam quartzite on a hilltop near Theresa.
136	Glacial pothole in banded Grenville marble near east end of road bridge over Elm Creek above Hermon
137	Sacketts Harbor; Boulders washed clean from drift in glacial river channel east of and above the Iroquois beaches near Allendale
138	Gouverneur; Fullerville delta of Oswegatchie River into Lake Iroquois
141	Same, view south. Sand drifting up on rock hills to east. Flint?
144	Russell; Terraces of Lake St. Lawrence (590' A.T.) on Elm Creek at Scotland School 3 miles northeast of Edwards
145	Bouldery beach (bench) of Lake St. Lawrence on Waterman's Hill, visible from Canton after light snowfall
148	Gravel pit in marine spit, along railway north of Norwood
150	Lengthwise view of Marine (Hochelagan) beaches near Plum Brook, north of Norwood.
151	Sand waste on marine shore north of same hill as preceding.
155	Same from top. Top of a full-grown wild cherry tree showing between the slices gives measure of height.
156	Detail of same. Top of a full-grown wild cherry tree showing between the slices gives measure of height.
162	Spring delta into Little River at Canton, NY. Nearer View.
164	Rill dissecting its delta, Little River, Canton, NY. Front View.
165	Stream and Ware Work on delta, Little River, Canton, NY. At close range.

Box 1--Lantern Slides of Local Geology

Slide No.	Description
754	Ice block and debris. Grasse River Falls, Canton, NY.
755	Grasse River, Canton, NY. R.W.D Ridge and Terrance
761	Lumber Yards and Mills. Canton, NY.
762	Fold-granite and schist Canton, NY.
763	Schist and granite. Canton, NY.
764	Intrusion and folds. Granite and schist. Canton, NY.
766	Joints - weathered and glaciation. Canton, NY.
768	Folded schist and glacier. Canton, NY.
769	Granite demanded and schist. Canton, NY.
771	Granite and schist in contact. Glaciation. Canton, NY.
772	Contact line, schist, and granite. (Glaciation). Canton, NY.
774	Maps - Canton, Pyrites and Grasse and Little River.
775	Pyrite Mill. Gouverneur, NY.
783	Marble Quarry. Gouverneur, NY.

Slide No.	Description
784	Bedding places in L.S quarry. Gouvernuer, NY.
786	Grasse River in Canton, NY.
787	Grasse River and corner of log boom Canton, NY.
889	Grasse River, Ice gorge Canton, NY.
890	Grasse River, Ice going out Canton, NY.
893	Laminated Schist. Canton, NY.
894	Canton, N.Y.
897	High Falls – exit of gorge Pyrites, NY.
904	Stratified Delta ... High Falls Reta, NY. [glacial]
905	High Falls Rapids Grass River Pyrites, NY.
906	Sedimentary Strata High-Falls Gorge, NY.
907	High Falls- middle of gorge Pyrites, NY.
908	Grass River NY. Log boom above High Falls.
910	Archaeon Rocks Canton, NY.
913	River and Valley Cooper Falls, NY.
915	River Valley, abandoned Cooper Falls, NY.

Box 2--Lantern Slides of Sedimentary Rocks and Formations

Slide No.	Description
1	Megascopic Classification of Normal Sedimentary Rocks
2	Scheme of Sedimentary Differentiation in Time (Diastrophic) and Space (Depositional)
6	Chilhowee and Post- Chilhowee Depositions
7	Sketch Map: Tye River Gap and Vacinity
8	Unidentified rock face
9	Unidentified rock face
10	Pickaxe pictured on deposit

Box 2--Lantern Slides of Geology of NY, Eastern States, and Adirondacks

Slide No.	Description
1 + 4	Appalachian chain structural map
5	Known characters of Pre-Cambrian basement rocks
6	Fig 5- aerial geology of Trenton, NY
7	Fig 14- stratigraphy of Upper Cambrian sediments in Adirondack mountains
8	Map of geology of Appalachians
9	Map of Blue Ridge
10	Formations of the Chilhowee group in Tennessee and Virginia
12	Fig 3- stratigraphic diagrams between northeastern Tennessee and northern Virginia
15 + 19	Gravity Map of the Appalachian Region
17	Fig 123- five schematic sections showing development of double island-arc
Blank?	Generalized stratigraphic map of Adirondacks
N/A	Fig 204- Lakes along the border of continental glacier

Box 2--Lantern Slides of Grand Canyon

Slide No.	Description
1	Map of Western U.S.
2	Storm on the North Side, With Sunshine in the Canyon
3	The Grand Canyon from the Fossil Rocks
5	The Grand Canyon on a Clear Day
6	The First Mile of the Bright Angel Trail
7	The Bright Angel Trail from Top to Bottom of the Canyon
8	The Kolb Brothers' Studio and Cameron's Indian Garden

Box 2--Lantern Slides of Mountains and Deserts

Slide No.	Description
21	Fig 3- The ebb at Cape Ferret on the Bay of Arachon
22	Fig 279- glacial drift, coarse and fine together
23	Needles Mountains, from slope west of Hidden Lake
24b	A Caravan on the march
27	Collection of rocks in a forest

Box 2--Lantern Slides of Physical Geography, Mountains and Rivers

Slide No.	Description
40	High vertical, intricate network of streams in central valley California
41	Wichita River near Wichita Falls, Texas
42	Near Richmond, Texas. Lakes on the flood-plain of the Brazos River
43	Hogback, heavily forested in Sierra Maestra near Santiago, Cuba
44	Delaware Water Gap, eastern Virginia
45	The Book Plateau in Colorado
46	Two overlapping view of Pliocene strata deeply dissected by streams
47	White Mountains, NH. Crawford's Notch
48	Surface expression of Bayou Blue ... near Oberlin, Louisiana

Box 2--Lantern Slides of Physical Geography, Beaches and Shorelines

Slide No.	Description
60	Diagram of wave approaching shore and forming surf
61	Wave-built, submarine shelf of silt on the west shore of Lake Michigan
62	Daytona Beach, Florida, on seaward side of a "barrier" land, waves are oblique to shore
63a	Boca Ciega, Florida, long barrier beach and "lagoon"
64b	Fig. 315 – A recurved spit in Dutch point, Grand Traverse Bay, Lake Michigan

Slide No.	Description
65	Ram Island, Long Island. Islands have been tied together, and to the shore, by wave-beaches
66a	Long "barrier" islands, built mainly by wave action in Miami, Florida
66b	Fig. 320 – Map showing that in the early stages of the simplification of a shore-line the irregularities
67	Intricate system of open channels in a swamp (a salt marsh) on the coast near Jacksonville, FL
71	The entire peninsula on which Golden Gate is built, lakes show effects of San Andreas Rift
74	Deep stream valleys were "drowned" forming navigable bays

Box 3 -- Lantern Slides of Elsewhere in New York

Slide No.	Description
220	Union of Chemung and Chenengo Rivers
221	Terraces, Catatunk River in Caudon, NY
222	Islands, Barss, meanders, Chemung River
226	Buttermilk (Upper) Falls in Ithaca, NY
??	Niagara Falls. The water flows upward from bottom of picture out through the gorge and to the right

Box 3 – Lantern Slides of New Hampshire Geology

Slide No.	Description
805	Tree in Whitefield, NH
821	Conn. River and Dalton Paper Mills
823	Profile Notch NH, Profile House
825	Bald Mt. & Echo Lake NH, Profile NH
826	Profile Notch + Echo Lake, Profile NH
827	Profile Notch + Echo Lake for Bald Net
828	Cliffs – Mt. Lafayette Profile, NH
830	Mt. Lafayette N.H. Bald net.
845	Flume, eroded dike, Profile N.H.
849	N.H. & R.R Engine and Car
850	Hiking Trail in N.H
852	Diana's Bath N.H
853	Mt. Kearsarge N.H. Diana's Bath
854	Holes, Dianas Bath, Intervale, N.H.
855	The Pot Hole, Diana's. Intervale, N.H.
862	Mt. Chocorua N.H
864	Mt. Washington. Mt. Barlett.
866	Carter & Pinkham Notch.
870	Mt. Kearsage from village road N.H
871	Kearsage & Bartlett from Echo Lake. N.H
872	Goodrick Falls. N.H
873	Wildcat River and Valley N.H

Slide No.	Description
881	Mt Adams & Madison N.H
927	Cliffs and Net. White Lake Lodge and moat wet. N.H
941	Crawford Notch

Box 3 -- Lantern Slides in Massachusetts, Pennsylvania, Delaware, and Maryland

Slide No.	Description
300	Surf + Sand Ripples. Preston Beach Mass.
301	Preston Beach & Marblehead. Swampscott, Mass.
310	Bridge near river with mountains in the background in Maryland
424	Basalt Lava. Swampscott, Mass.
???	Weymouth. Mass. Drumlins forms beneath the recent continental ice sheet and left standing when the ice melted away, can be seen rising above the water of Boston Bay.
???	Hull, Mass. Boston Bay. Drumlins formed beneath the recent continental ice sheet, were left standing when the ice melted away. They can now be seen rising above the waters of Boston Bay.
???	Boulder spilt in half next to tree in PA.
???	River Scenery with mountains in background in Delaware.

Box 3 -- Lantern Slides in California, Utah, Arizona, and Colorado

Slide No.	Description
118	El Capitan, Yosemite, Cal.
119	El Sintors – Yosemite - Cal.
120	Half Dome, + Merced Valley. Cal.
213	Mountains at Yellowstone National Park.
228	Gunnison's Butte, Utah.
229	Grand Canyon – Point Sunshine. Arizona
232	Royal Gorge from the top, above the bridge. Colorado
302	Harbor in California.
303	Santa California. "Stack" and point Cal.
304	Santa California. The Stack. Cal.
305	Santa California. The Stack. Cal.

Box 3 – Lantern Slides in Switzerland and Japan

Slide No.	Description
122	Zermatt, Matterhorn, 14, 705 ft., from Riffel Hotel. Switzerland.
123	Mt Fuji behind village in Japan.
124	The Eiger and Monch from Murren. Switzerland.
230	Mountain Range and Valley in Switzerland.
403	Chamounix Valley, Mer de Glace and grand Jorasse from Montanvert. Switzerland.
???	Snow and Ice covered Mountain Peak

Box 3 – Unidentified Lantern Slides

Slide No.	Description
???	bed rock, Kingston, Des Moines in Iowa?
121	2 Shots, the left side is a picture of a river and the right side is a picture of a waterfall
4	A really rocky and steep hill or mountain

Box 4 – North American Glaciation Lantern Slides #300 – 325

Slide No.	Description
300	Map of Laurentian Old-Land showing probable drainage
302a	The Continental Glacier in United States. Showing area covered by the latest or Wisconsin glaciation in white
302b	Glacial and Interglacial Stages
303b	Figure 2 - Glacial Lakes Maumee, Saginaw, and Chicago
304	Figure 3 - Glacial Lakes Whittlesey, Saginaw, and Chicago
305	Figure 4 - Glacial Lakes Warren and Chicago
306	Figure 5 - Glacial Lakes Lundy (Dana, Elkton), Chicago, and Duluth
307	Figure 6 - Glacial Lakes Algonquin and its Correlatives
308	Figure 8 - The Nipissing Great Lakes and Correlatives
309	Figure 7 - Isobases of Lake Algonquin
310a	Figure 9 - Isobases of Nipissing Great Lakes
310b	Figure 10 - Diagraming Relation of Hinge Lines and Isobases to Ice-Borders, Old – Land Areas, and Lake Basins.
311	Niagara falls. Looking upstream toward the American and Canadian Falls. Vapor. Turbulent waters below the falls are excellently shown by reflected sunlight.
312	Map of Laurentian Ice Sheet in NY State
313	Map of Central and Norther NY
314	Three Stages in the recession of the ice sheet from NY, showing the Great Lakes and changing outlets.
321	Figure 88 - Diagram of the reef structure in the Traverse (Middle Devonian) limestone of Alpena, Mich.
322	Figure 6 - Reef in Niagara Gorge
323	Figure 1 - Diagram Illustrating Progressive (Transgressive) Overlap.
324	Figure 157 – Diagram showing the westward replacing overlap of the Utica shale on the Trenton limestone
325	Figure 158 – Diagram showing replacing overlap of terrigenous marine, followed by continental sediments

Box 4 - Glaciers/Glaciation – Canada

Slide No.	Description
100	Upper limit of glaciation; highest regions not affected; Mayo dist. Yukon Territory
101	Unidentified; no description
102	Unidentified; no description
103	Receding glaciers Northern B.C.
104	Eagle glacier, Coast Mtns., Northern B.C.
105	Potholes in quartzite near N.W. corner outpost isls. N.V.P.T.

Box 4 - Physical Geology Mountainscapes and Glaciers

Slide No.	Description
80a	Northern Col. Mt. Hallet, Mt. Otis, and Flat Top, the principal chain of the Rocky Mts.
80b	The Zemu glacier and Mt. Siniolchum
82	A glacier in the Cascades near Cascade Pass, Wash.
83	Boulder on ice pinnacle; Forno glacier, Switzerland
84	Fig. 236 – Diagram to show the rate of movement of the Rhone Glacier at various points in its course
85	Fig. 235 – A glacial cirque. Head of Little Timber Creek, Montana.
86	Oblique; White Mountains, summit of Mt. Washington looking north
87	260 – Contrast between glaciated topography below and non-glaciated topography above. The minarets in the Sierras, Col.
88	259 – U-shaped valley resulting from glaciation. Littler Cottonwood Canada, Wasatch Mts.
89	Fig. 172 – Territory covered by the max extension of the glaciers in North America

Box 4 - Geographic Features Western Canada

Slide No.	Description
100	Belcher Island, Hudson Bay
101	Coronation Gulf, N.W. Territory
102	Fault, Canadian Shield
103	Raised beaches + drumlines, Thelon River. N.W. Territory
104	Joint system in paneplaned, folded quartzite. Glodenville, Nova Scotia
105	Mackenzie Mtns., Northwest Terr.
106	Granite (light) and greenstone (dark) Gordon Lake, N.W. Terr.
107	Unidentified Location, Western Canada
108	North Battleford, Saskatchewan; glacial grooves in unconsolidated sediments
109	Coast Mtns., British Columbia
110	Lakes behind recessional moraine; Saskatchewan
111	Drumlins, Northwest Terr.
112	Mudjatic River, Saskatchewan
113	Boom Lake, Alberta

Box 4 – Faults

Slide No.	Description
1000	The Lowell fault (part of the San Andreas Rift zone) at the W base of the Temblor Range in Obispo County, California
1001	A long plunging anticline of Pliocene strata surrounded by Quaternary alluvium, deeply eroded
1002	A large plunging fold, joints, and faults in Pre-Cambrian metamorphic rock. Glacial lakes are also shown.
1003	A system of parallel faults in nearly horizontal Permian strata near Crane, west Texas
1004	Bad-land dissection of the steeply dipping soft strata of a plunging anticline. Kettleman Hills, Kings County, central valley of California

Box 5 – Physical Geology River Systems

Slide No.	Description
2000	The meanders and meander scars of the Connecticut River as seen in winter. The snow and ice bring out the most detailed markings of the flood-plain. Near Haverhill, N.H
2001	The delta which the Ottawa River has built in Lake Kanikawanika is shown at the left. The river now flows south eastward across the delta and empties into the lake more than two miles from its former mouth. Western Quebec.
2002	Branching gullies in clay, near Dallas, Texas.
2003	High vertical. Missouri River, White Cloud, Kansas. Main Channel with sand bars in the center. The positions of the channel are seen to the right (flood-plain and with scars). Steep gullied banks to the left. Muddy water.
2004	Vertical. Red River, somewhere in Texas. The main channel and part of the flood-plain are shown. Small channels branch off from, and rejoin, the main channel. The ... "braided".
2005	High vertical. Missouri River near Mondamin, Iowa. Main channel with sand bars. The water is muddy with a few inches deep over most of the channel. The lowlands to the left are under water in time of flood (flood-plain). Changes to the position of the main channel can be traced.
2006	Sharply incised stream valleys in a mountainous area of steeply dipping monoclonal strata. The streams debouch and the valleys disappear on the alluvial fan at the northeast. Structural control. Subsequent streams. Kettleman Hills, Kings County, central valley of California.
2007	A very hard thin layer is responsible for the continent hog back. All the other strata are much less resistant and have been more easily removed by the running water. The layers and their ... of slope can be nevertheless be seen. SW part of Fresno County, valley of California.
2008	The Kissimmee River, near Lake Okechobe in central Florida. The river has changed its position on its flood – plain very often; and the scars which mark earlier positions ... are readily seen. (Meander scars). Limestone "sink-holes" may ... on the uplands.
2009	Irregular meanders and the meander scars of the Connecticut River. The snow increases the visibility of the detailed features in Piermont Station, N.H and Vermont.
2010	Meanders and meander scars of the Connecticut River. Winter. Near Haverhill, N.H.
2011	A young valley and tributary gorges in symmetrical dendritic pattern. Semi-arid region. West Texas.

Box 5 – Physical/ Human Geography

Slide No.	Description
2100	Fig. 313. – A lake – beach barrier; Griffin’s Bay, Lake Ontario. When the agitation of the water along shore becomes ... to carry the material it is dropped.
2101	Oblique. Jersey City. The Hudson River and part of Manhattan Island are seen on the right. Railroad terminals and docks in the ground. Hackensack Meadows (a former bay, now filled with silt, up to the level of high tide). Such swamp-land in the edge of the ocean is called "salt-marsh".
2102	Fort George Inlet, near Jacksonville, Florida. A changing spit. Earlier positions of the spit can be seen by the beach ridges in the center. Shifting sands, tide-water-channels (estuaries), open ocean.
2104	Fig. 192. – North polar view of the world showing existing outlines, and (dotted areas) elevation to the 200 fathom line, indicating the northern areas of migration in Pleistocene time.

Box 5 – Fossils - Sea Life

Slide No.	Description
400	Figs. 1 – 5 Atikokania Lawosni Walcott
420	Fig. 85. – Atrypa Reticularis Linne, from the Hamilton formation, (Middle Devonian of New York. 5 different examples, from A – E, on slide.
430	Fig. 119. – Scaphites nodosus, var. brevis Meek. An entire shell from the Pierre (cretaceous) of Montana.
431	Fig. 112. – Nautilus Pompilus, from the Philippine Islands. See more info on slide.
432	Fog. 113. – Nautilus macromphalus, creeping upon a horizontal surface. See more info on slide.
450	Unknown root like fossil?
451	Fig. 1889. Melocrinus pachydaetylus.
452	Fig. 1793. A (left) Pentremites Fig. 1794. Pentremites cervinus. (After Pryiformis : b, P. Godoni.)
453	Grooves extending only to something.
600	Fig. 1555. A, b, Olenellus thompsoni, complete individual, and young cephalon; c – e, O. gillberti, small individual, and two views of larger cephalon; f, Mesonaces vermontana, complete individual.
605	Fig. 1558. Paradoxides harlani.
610	Aglaspis eatoni. (After Fig. 1703. Pseudoniscus roosevelti)
616	Fig. 167. – Ordovician Graptolites and 11 more fossils on slide
617	Fig. 160. – Ordovician Cephalopods and 8 more fossils on slide
618	Fig. 165. – Ordovician Echinoderms and 16 more fossils on slide
619	Fig. 163. - Ordovician Brachiopods and 27 more fossils on slide
620	Fig. 164. – Ordovician Bryozoans and 11 more fossils on slide
621	Fig. 161. – Ordovician Gastropods and 17 more fossils on slide
690	Fig. 434. – Eocene Molluscs: Gastropods and 23 more fossils on slide
691	Fig. 457. – Miocene Pelecypods and 17 more fossils on slide
692	22 Unknown Shell Looking Fossils
693	Fig. I683. Emmelezoe decora, a single valve and a nearly complete individual, but with segments of abdomen reversed and thrown forward so as to project from anterior; width of segments increased by comparison.
???	Fig. 173. – Microfossils from the P.A Foraminifera and 13 more fossils on slide
???	Fig. 118. – Reconstruction of eurypterides on a Silurian sea floor.
???	Fig. 78. – Restoration of the Cambrian trilobite, Paradoxides harlani.

Box 5 – Horse Evolution

Slide No.	Description
100	Horse hoofs and legs getting larger
101	Fig. 102. – The Lower Oligocene cursorial rhinoceros Hyracodon.
102	Fig. 110. – The Lower Oligocene three toed horse Meshippus, a swift, light limbed animal. To the right, Dinictis, the light limbed saber tooth cat.
103	Fig. 45. – The Wind River Eocene four toed horse or Eohippus.
104	Horse Evolution- includes: Eohippus, Hypohippus, Equus Scotti, Neohipparion, Mesohippus
105	Horse Evolution- Eohippus, Hypohippus, Equus Scotti, Neohipparion, Mesohippus

Slide No.	Description
106	Four toed horses and Uintatheres
107	Four toed horses and Uintatheres

Box 5 – Cosmology

Slide No.	Description
100	Solar System including Pluto
101	Fig. 37. – Diagram to explain the tidal forces in a planet.
102	Fig. 32. – Chief members of the Solar System represented on a uniform scale. The planets are arranged from left to right in order of their distance from the Sun.

Box 6 – Prehistoric Mammals

Slide No.	Description
100	Primitive Camels, Small Rhinoceroses, Three Toes Horses, Elotheres, and Moropus
101	Woolly Mammoths and Woolly Rhinoceroses
102	American Mastodon
103	Aquatic Rhinoceroses, Four Tusked Elephants, and Oreodons
104	Woolly Rhinoceroses, Mammoths, and Saiga Antelopes
105	Woolly Mammoths and Woolly Rhinoceroses
106	Primitive Camels, Small Rhinoceroses, Three Toes Horses, Elotheres, and Moropus
107	Woolly Rhinoceroses, Mammoths, and Saiga Antelopes
108	Rancho, La Brea Pitch Pools – California
109	Fig. 76. – Entelodonts, giants pigs of Europe and America. A middle Oligocene stage. The position of the ears in this restoration is erroneous; they are placed too high.
110	Rancho, La Brea Pitch Pools – California
111	Megatherium (Giant Ground Sloth) and Glyptodons (Early Armadillos)
112	Zeuglodon – A fossil whale

Box 6 – Reptiles/ Dinosaurs

Slide No.	Description
100	Drawings of Dinosaurs
101	Stegosaurus
102	Unknown Dinosaur in Water
103	Mammal like reptiles from the karoo beds of South Africa
104	Pteranodons, Mosasaurus, and Archelon
105	A group of Cretaceous Dinosaurs
106	Triceratops and Tyrannosaurus
107	Stegosaurus
108	Permian Reptile Group – Texas
109	Pteranodons, Mosasaurus, and Archelon
110	Archaeopteryx, Pterodactyls, and Small Dinosaur
111	Unknown, large, dinosaur with long neck, starts with Bro- then the word cuts off in slide
112	Plesiosaurs and Ichthyosaurs
113	Giant Salamander – Carboniferous Period
114	Stegosaurus
115	Brontosaurus
116	Triceratops and Tyrannosaurus

Slide No.	Description
117	Small to Medium size Unknown dinosaur, name cut off in slide but ends with –ops
118	Protoceratops
119	2 pictures; reptiles coming out of water going towards land
120	Fig. 200. – A Triassic phytosaur, Rutiodon.
121	Fig. 219. – Rhamphorhynchus phyllurus, a small pterodactyl about the size of a crow?
122	Fig. 192. – Permian reptiles, 4 on the slide.
123	Protoceratops
124	Triceratops and Tyrannosaurus
125	Fig. 157. – A restoration of the three horned, neck frilled, dinosaur, Triceratops prorsus, living during the uppermost Cretaceous in the lowlands of what at present forms the Rocky Mt of North America.
126	Unknown Dinosaur, possibly a Stegosaurus?
127	Fig. 204. – A mammal like reptile, Cymognathus from the Triassic of South Africa.
128	Unknown, medium to large, dinosaur standing on its hind legs in the water
129	Small to Medium size Unknown dinosaur, name cut off in slide but ends with –ops
130	Giant Salamander – Carboniferous Period
131	Mammal like reptiles from the karoo beds of South Africa
132	Archaeopteryx, Pterodactyls, and Small Dinosaur
133	Fig. 201. – A Triassic dinosaur. Anchisaurus colurus.
134	Permian Reptile Group – Texas
135	Triceratops and Tyrannosaurus
136	Pteranodons, Mosasaurus, and Archelon
137	Fig. 191. A characteristic Permian stegocephalian, Erypos megaloccephalus.
138	A group of cretaceous dinosaurs.
139	Drawings of Dinosaurs
140	Brontosaurus
141	Plesiosaurs and ichthyosaurs
142	Stegosaurus
143	Fig. 158. A marine turtle, Archelon ischyros Wieland, from the Pierre (Upper Cretaceous) of South Dakota

Box 6 – Prehistoric Fish + Plants

Slide No.	Description
100	Fig 162. Calamites, a securing rush.
101	Fig. 163. Pennsylvanian trees. Left, Lepidodendron; center, Sigille; right, Cordaites
102	Fig. 101. Ordovician graptolites. Natural size.
103	Fig. 188. Restoration of a Permian conifer. Fig. 180. Leaf of the Permian “tongue fern.”
104	Fig. 131. Model of the giant arthrodire, Dinichthys.
105	Fig. 119. A primitive fish (Pharyngolepis oblongus) from the uppermost (Downtonian beds) of Norway.
106	Fig. 99. An ostracoderm fish, Drepanaspis gemundenesis, from the Lower Devonian of Germany.

Box 7 – General Geology

Slide No.	Description
100	Several kinds of constructional land forms showing the different genetic types of streams
101	Stages of development of shorelines of emergence

Slide No.	Description
102	The erosional features of pitching anticlines
103	Cycles of erosion in folded mountains
104	Fig. 130. Diagrams of widening valley
105	Stages in the formation of cutoffs and in the development of new meanders
106	The erosional development of coastal plains
107	Diagrammatic representation of Alpine folding showing two nappes, thrust from the right, the second one far overriding the first
108	A mountain region before, during, and after glaciation
109	Forms produced by geysers and hot springs
110	Four stages in the life cycle of a plateau having underground drainage
111	Fig. 137. The structure of a delta of coarse material at the head of a lake or bay
112	Four stages in the life cycle of a folded and faulted region having underground drainage
113	Stages in the process of stream capture
114	Conditions influencing artesian wells in different regions
115	Factors influencing the circulation of ground water
116	Stages in the geomorphic cycle of an arid region
117	Types of cars, spits, and tombolos
118	Geological diagram of eroded pitching anticlines and synclines to illustrate patterns of outcrop are influenced by the structure
119	Fig. 29. Map of North America with outcrops of Pre-Cambrian rocks shown
120	Fig. 161. Ejn See in einem Gletschertrog
121	Fig. 149. Entwicklung eines vergletscherten Hangetales
122	The formation of cirques and matterhorn peaks
123	Effects of glacial lowering of sea level
124	Fig. 251. Block diagrams to show fringing reef (left), barrier reef (middle), and atoll (right) around sinking volcano, as proposed by Darwin
125	Classification of rocks and their reaction to weathering and erosion
126	Stages in reef development on a subsiding island
127	Grabens and horsts
128	Types of neutral shorelines
129	Scheme showing types of landslides and other related phenomena
130	Zones of stream action in arid regions
131	Stages in the erosional development of dome mountains
132	Various forms of hogbacks
133	The development of river terraces
134	Diagram and profile showing different stages of development in different parts of a stream system
135	The development of glacial troughs
136	The origin of eskers and kames
137	Diagram showing the erosional development of folded mountains; folded mountains peneplaned and rejuvenated
138	Conditions influencing springs in different regions
139	Diagrams showing effect of rejuvenation along middle course of stream and of rejuvenation of headwater portion
140	Cave deposits
141	Diagrams showing effect of deposition by tributary along the middle course and along the headwaters of a graded stream
142	Stages in the development of superposed and antecedent streams

Slide No.	Description
143	Types of shorelines
144	Chart of estimated date in years of fossils and cultural stages
145	Chart of the Cryptozoic Eon
146	Distinctive features of the Cenozoic, Mesozoic, and Paleozoic Eras and Cryptozoic Eon
147	Chester, Meramec, and Osage
148	Chart demonstrating relative positions of Lockport limestone, Clinton group, Medina group, and Queenston shale
149	Chart from Archeozoic to Cenozoic
150	Kinds of faults
151	The structures of sedimentary rocks
152	Theories explaining the origin of coral reefs
153	Relief features of the second order: the constructional land forms
154	View of North America

Box 8 – Regional Geology

Slide No.	Description
100	Fig. 182. - Reconstruction of the eroded Appalachian folds near Harrisburg.
101	Fig. 177. - Idealized section of the Guadalupe series from South to North across the northern parts of the Delaware basin and the Captain reef, showing the relations of different types of deposits as they were close of this epoch.
102	Fig. 7, Fig. 8, Fig. 9 of Harrisburg Peneplane
103	Fig. 4, Fig. 5, Fig. 6 - Arching of the Fall Zone Peneplane and its coastal plain cover.
104	Fig.1, Fig. 2, Fig. 3 – rejuvenated Appalachians in Post- Newark Time
105	Fig. 194. – Areas occupied by the Newark series
106	Fig. 90. – Map showing the approximate extent of the Silurian salt basin.
107	Diagrammatic Map of Atlantic Coastal Plain
108	Fig. 94. – Section of the Middle – Ordovician rocks crossing the Adirondack arch in NY.
109	Fig. 95. – Stereogram of the Queenston delta as it would have appeared at the close of the Ordovician period.
110	Fig. 85. – Vertical section (idealized) showing the structural relations of the Laurentions and Algotman granites to the Keewatin and Timiskaming systems.
111	Fig. 156. – PA coal fields of the Unites States
112	Map of Great Britain and Northern Ireland; Mountainous Land Extending northwest to unknown distance
113	Map of North American and Europe during Glacial Time
114	Fig. 107 – Map showing location of the Caledonian Mt of late Silurian date.
115	Diagram of Mammoth Cave Kentucky
116	Fig. 104 – Geologic map of England and Wales, with cross - section from northwestern Wales to London.
117	Fig. 71. – Profile across the North American continent in Cambrian time (black), to how the relations of the geosynclines and borderlands to the modern continent (broken line).
118	Fig. 197. – Idealized section suggesting the probable structural relations of the Triassic basin of Connecticut and that of Pennsylvania and New Jersey.
119	Fig. 195. – Four stages in the development of the Triassic Basin of Central Connecticut.
120	Fig. 51. – Six Stages in the Pre Cambrian history of the Grand Canyon region.
121	A During the folding and metamorphism of the Vishnu schist; B peneplation after Vishnu time; C After deposition of the Grand Canyon (Proterozoic) system

Slide No.	Description
122	Coral Reefs in the Society Islands, showing complete sequence florals.

Box 8 – Miscellaneous

Slide No.	Description
100	Fig. 22. Series of skeletons from reptile to man.
101	Image showing frog looking animal evolving from a sea dwelling creature to a land dwelling one.
102	Fig. 133. – Resemblances between a crossopterygian fin and the limb of a primitive land animal.
103	Location Map including location of Tertiary, Cretaceous, and Paleozoic in South East United States
104	Fig. 23. – Homologous structures in the left fore limb of man, seal, bat, and dog.