EXAM INFORMATION

- Exam Two will be Friday, April 7.
  - Format same as Exam 1
  - Covers regions from Northlands to Appalachia including Canada’s National Core.
  - Multiple choice questions including maps, plus choice of essay topics.
  - See Study Guide. Review PP lectures on home page + text chapters.
  - Missed exam make-up is all essay format.

Regional Landscape Studies

- NORTHLANDS
- NORTHEAST COAST
- MEGALOPOLIS
- CANADA’S NATIONAL CORE
- AMERICA’S HEARTLAND
- APPALACHIA and THE OZARKS
  - THE SOUTH
  - PLAINS and PRAIRIES
  - MOUNTAINS and PLATEAUS
  - DESERT SOUTHWEST
  - NORTH PACIFIC COAST
  - HAWAI’I

For each region:
- Know its physical geography.
- Identify its unique characteristics.
- Be able to explain the human imprint.
- Discuss its sequence occupancy and economic development.

SNOW DAY MAKE-UP HANDOUT: Take home assignment is due on April 21st. Canada’s National Core material will be on Exam II.

Regional Landscapes of the United States and Canada
Appalachia and The Ozarks

Prof. Anthony Grande

Parts of chapters 13, 15 and 16 in Conzen textbook

Appalachia and The Ozarks

When you think about this region, what images come into your mind?

OVERVIEW

- Grouped because of similar geographies (physical and human), yet 300 miles apart.
- Both experience isolation because of geologic setting
- Unique regional culture and landscapes are the result of many site and situation factors.
- Human geography distinguished by poverty: poor farming, poor education, poor transportation network and poor choices of economic opportunity.
- Northern Appalachia has ties to the Heartland (coal supplier); Southern Appalachia and The Ozarks have ties to the South (historical interaction).
- West Virginia is the only state totally within this region.
TERM: Appalachia

- Appalachian: area of eastern US characterized by poverty/lifestyle that is below the national norm.
- It is a cultural region, a social region and an economic region.
- But it is NOT a physical region.
- It is different from the physical region called The Appalachians (Appalachian mountains, highlands and plateau).
- Yet “Appalachia” is located within the Appalachians and owes its identity and uniqueness to its geologic setting!

Poverty in Appalachia

Using economic and social criteria the region is enlarged to include more counties of New York, Mississippi, and South Carolina. It contains some of the highest levels of poverty in the US.

Landscapes of Poverty

Poverty and Health

Poverty and health issues are evident in both Appalachia and the Ozarks but are pronounced in the heart of the Appalachia’s Coal Belt (WV, KY, TN).

Land Use Limitations

- Narrow valleys
- Steep hillsides
- Lack of flat land
- Thick forest
- Low density network of roads, railroads and waterways.

What do you see or don’t see?

All these limit the area’s appeal to industry (plus low education levels/skill sets) in spite of the proximity to Megalopolis and Industrial Core.

The Ozarks

The Ozarks is a physical region, cultural region, social region AND an economic region, all within the SAME boundaries.
Ozark Topography

This upland area is composed of two units:

- **Ozark Plateaus** (north)
  - Highest/most rugged area of the area is in N. Arkansas (Boston Mts)
  - It is dissected plateau created by doming (hot springs in the area).
- **Ouachita Mts**. (south)
  - Folded parallel ridges run in an east-west direction.
  - Separated from the Ozark Plateaus by Arkansas River Valley.

+ Physiography supports mining and forestry but hinders agriculture.
+ Area became a retirement and vacation destination in the 1990s.

Ozark Culture

Hillbilly Persona

Term "HILLBILLY" is applied to backwoods settlers of both areas.

“Hillbilly Mansion”

Appalachian Mountain Region

Ancient folded mountains caused by the collision of Africa and North America (460 mya).

Central Appalachian Region

Western Maryland road cut deformed strata.
Five physiographic sub-regions:

a) Blue Ridge
b) Ridge and Valley
c) Great Valley
d) Appalachian Plateau
e) Piedmont (to be covered in the section on The South)

- Entire area exhibits vertical zonation of climate. Valleys tend to be warmer than the ridge crests.

The Blue Ridge
- Rises abruptly from the Piedmont to the east. Ridge and Valley to the west.
- Crestline preserved in national parks.
- “Gaps” allowed early settlers to cross the region.

Appalachian Topography

Cumberland Gap National Historical Park
Preserves a key route through the central Appalachians, used by Native Americans then by the frontiersmen, to cross the mountains. The trail was widened to create the Wilderness Road, the primary route of East Coast settlers into Kentucky.

The Blue Ridge Parkway connects Shenandoah National Park with Great Smoky Mountains National Park.

Great Smoky Mountains
National and state parks preserve the Appalachians’ highest peaks, all around 6600 feet high.

Mt. Mitchell (6684 ft) in North Carolina is the highest point east of the Mississippi River.

b) Ridge and Valley Area
Series of parallel highlands and lowlands
- Ridge tops: resistant shale and sandstone; forested slopes.
- Valleys: softer limestone; good farm land.
Appalachian Topography

c) Great Valley
- Largest and longest of the valleys located between the Blue Ridge and Ridge-and-Valley sections.
- Historic travel route between the south and north.
  ✓ Strategically important in the American Revolution and the Civil War.
  ✓ Productive inland agricultural area that provided food for the coastal cities.
  ✓ Shenandoah Valley segment is best known farming area and was the site of many Civil War battles.

Area of rich agricultural land.

Appalachian Topography

d) Appalachian Plateaus
  Two portions: Allegheny Plateau and Cumberland Plateau

Allegheny Front is an escarpment on the eastern edge of the plateau. Significant barrier to westward movement because of the rugged terrain.

Appalachian Plateau

A dissected plateau is one where rivers have cut into its flat top to create steep-sided valleys and gorges.

The New River cuts a deep gorge in the Appalachian Plateau of southern West Virginia. The New Bridge was the world’s longest arch bridge when opened in 1977 (now 4th) and shortened the trip across the gorge from 45 minutes to 2 minutes!

Appalachia’s Social Landscapes

Northern Portion: NY/PA/OH/MD
- Characterization: Less isolated, more modern, and less poor than southern portion.
  - Mountains easier to cross
  - Access to coast
  - Links to Industrial Core and to Washington/Baltimore areas
- Population: Settled by people from Europe and New England. Penn. Dutch really Deutsch (Germans)
- Religion: Less conservative; fewer fundamentalist churches.
  - Catholic and Orthodox
  - Christian church affiliations.

Southern Portion or Upland South (West Virginia to Alabama)
- Characterization: Limited mobility and interaction
  - Width/height of ridges plus living in small valleys = isolated development
  - Little in-migration; little out-migration; minimal interaction with rest of country = assimilation/acculturation issues
  - Largest US white low-income area
  - Politically/religiously conservative
- Early stereotyped: “Behind the times” and “unsophisticated”

Divided States of Appalachia

❖ West Virginia: only state totally within Appalachia
  • Mountain people opposed secession from the Union
  - Plantation agric. was not part of mountain way of life
  • In 1863 mountain part of Virginia became the State of West Virginia (see maps in Section 5 of Historical Atlas)
❖ The states that are partially in Appalachia have:
  • Their largest city, industrial center and/or state capital (centers of power) sited outside of the Appalachia region.
  • Thus the Appalachia areas within those states became marginalized by more prosperous/progressive sections.
  - Less access to education, media, economic incentives.
  - Less access to the state’s tax base.

❖ SO isolation does NOT pay off (you are forgotten) especially if you avoid paying taxes (you are ignored).
Over 50% the population is classified as rural living outside of towns. 
Farming is main occupation, but):
- Most owner-operated farms, no corporations
- Small farm sizes (c. 100 acres on average)
- Rugged topography, poor soil, short growing season in many areas.
- General farming; no dominant crops
- Recent trend: part-time farmers.

Different from the Agricultural Core.
Coal mining/lumbering are still locally important.

Rural Landscape

Coal beds were created as tectonic movement compressed organic material in swamps under great heat and pressure. Geologically, it happened quickly: little decomposition so a high carbon content is retained.

Coal Formation

Coal Definitions

- Anthracite ("hard coal") is a metamorphic rock.
  - Highest grade of coal.
  - Burns the hottest.
  - Naturally clean and smokeless.
  - Became the preferred fuel in cities in the mid-1800s and was supplied from mines in NE Pennsylvania.

- Bituminous coal is softer, cheaper and more plentiful, but dirtier, than anthracite.
  - Powered railroad locomotives and stationary steam engines.
  - Used to make coke for furnaces (coking coal).

- Lignite (brown coal) and peat are the lowest grades
  - They are the "coolest" and "smokiest" burning of the carbon fuels.

Coking Coal

Coke (coking coal) is created by processing bituminous coal with intense heat to drive off its volatile components.
- Result is almost pure carbon and creates little ash.
- Coke is used in blast furnaces to make steel.
- It is usually manufactured on site.

Region’s proximity to the industrial core is important because cheap bituminous coal was moved by rail from the coal fields to the steel mills.

Mining Coal in Appalachia

Early coal mining was very labor intensive. Provided steady source of income for local men with little education.
- Tunnels were dug by hand.
- Coal was mined by hand.
- Mine workers carried coal to mule-drawn carts or to the surface.

Conveyor belts for use in coal mines were invented in the early 1900s.

Mechanization = fewer miners
- Unions protested the use of machinery.
- Strikes and concessions (higher salary in return for using machinery) hurt the miners more by eliminating jobs.

Modern continuous movement excavator replaced scores of miners.
Shaft (underground mining)
- Earliest and still dominant method
- Used when seams are deeply buried or tilted at sharp angles.
- Huge mobile drills make the shafts
- Continuous mining machines bore and mine at the same time.

Surface (strip) Mining
Used when mineral is close to the surface, in near horizontal layers and spread over a large area.

Environmental Impact
Coal's Decline and Appalachia

Post–World War II
- Coal’s use declines with growth of petroleum and natural gas
- Leads to rising unemployment, out-migration
- Economic depression in coal-mining regions

Late 20th century
- Increased demand as a fuel with 1980s energy crisis and clean-burn technologies. However...
- Cheaper mining in other regions, as Wyoming
- Continued environmental concerns (air, water, land pollution)
Coal's Decline and Appalachia
Mines Shut Down
- Mine shafts sealed
- Surface mines left exposed to rain/wind
- Buildings abandoned
- Towns emptied

Tennessee Valley Authority (TVA)
Created by Congress (1933) to oversee production of electricity in a 7-state area drained by the Tennessee River and its tributaries in southern Appalachia and to get people back to work during the Great Depression (1930s). Dams created navigable waterways linked to the Ohio River which allowed access to the ocean, but impounded water flooded valleys.

- Still an essential component for the regional economy.
- Supports industrial, commercial and recreational activities.

TVA's Landscape Altering Projects
Hydroelectric dams and navigational locks changed the area's landscape and ecology by creating reservoirs, flooding valleys and cutting down trees for power line corridors.
- Reservoirs are used for recreational activities. They require access and various support activities.
- Coal-powered generators have added pollution to the area.

NEXT TIME: EXAM
Then “The South”:
Atlantic and Gulf Coastal Plains, The Piedmont, and Florida