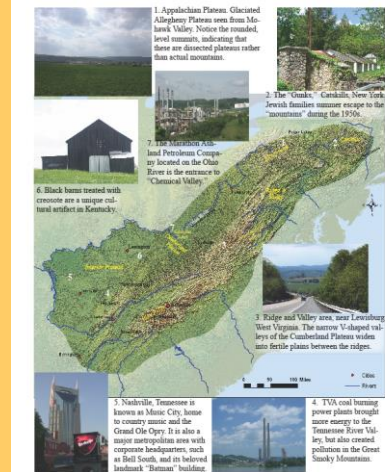




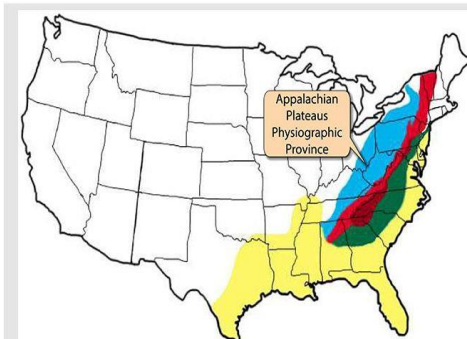
## Ch 8: Appalachia From the Finger Lakes, NY to Birmingham, AL



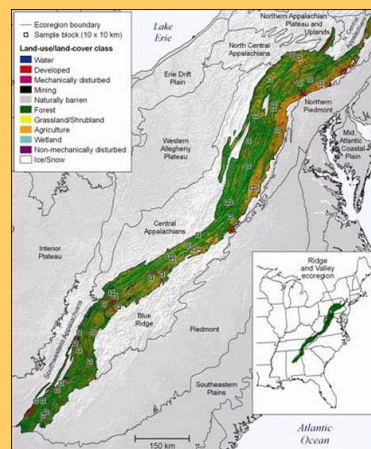
1

## Physical Geography

- The Plateaus province of the Appalachian Mountains extends from Alabama to New York state.



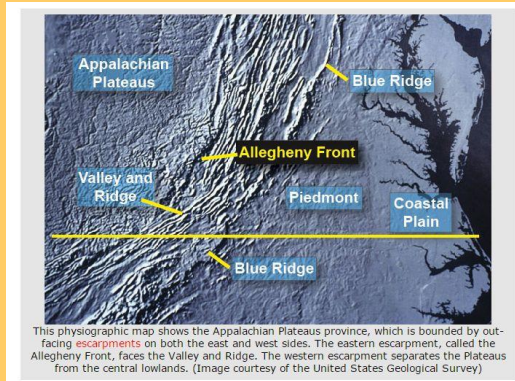
Location map showing the four major Appalachian physiographic provinces -- Piedmont (green), Blue Ridge (maroon), Valley and Ridge (red), and Appalachian Plateaus (blue) -- and the Coastal Plain (yellow). The Appalachian Plateaus extend from Alabama to New York state. (Image by Phyllis Newbill. Base map courtesy of the United States Geological Survey.)



2

<http://arcg.is/1WoqNSc>

# Physical Geography



• The Plateaus province is characterized by deep narrow, disconnected valleys and steep, rugged mountain sides. Random, **dendritic** stream drainage patterns are very typical.



In the Appalachian Plateaus, flat-lying beds offer the same resistance to erosion; therefore, a random (dendritic) pattern of erosion developed. The flat-lying beds of the Plateaus are shown (right) in Daniel Boone National Forest of Kentucky.



Horizontal- Easier to get to coal in mountains.

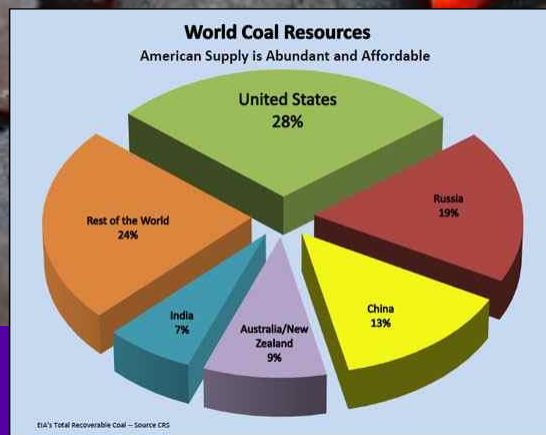


# Climate

- 3<sup>rd</sup> highest precipitation behind Pacific North west and Gulf Coast.
- Growing season varies 140 days to 205 days

5

**Why coal? Is abundant, readily accessible, is cheapest to extract esp. in US, esp. in Appalachia**



6



**Appalachian coal company town Box 8.4  
thrived from 1900s-1927**

- **Real estate owned by the coal company**
- **Housing may be a better alternative, 'industrial eden'?**
- **Owns local overpriced stores where paychecks are spent**
- **Only employer in town**
- **Exploitation could be severe**
- **WWII urban job markets opened for residents drawing away.**
- **Companies sell real estate holding to inhabitants.**



7

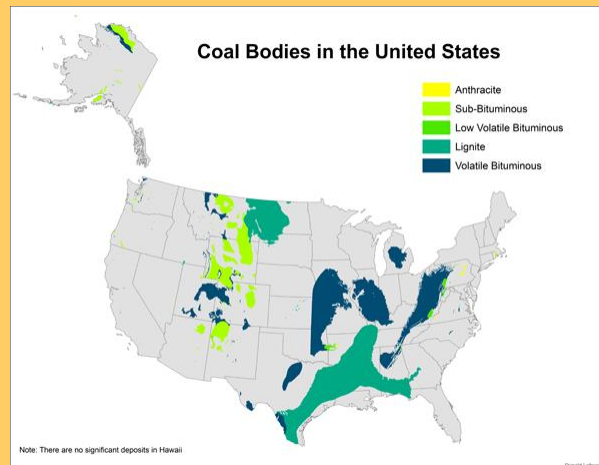


**Mountaintop removal (MTR)**

- **Efficient only when enviro. and social costs are not factored in**



8



### Coal

Canada and even more so the U.S. have abundant supplies of coal. Coal in Appalachia is either anthracite (found near Scranton, Pennsylvania) or bituminous (in the Appalachian Plateau and some Ridge and Valley areas). Appalachian coal is much older and more compressed than the other major North American coal deposit, Powder River Basin sub-bituminous coal. Lignite is located in Texas, Montana, North Dakota, Illinois and the Gulf Coast.

## Legislation

- Clean Air Act 1972
- Regulated sulfur emissions
- Favored low sulfur coal of Wyoming.
- West Virginia and Kentucky 37% of coal.
- Mine Safety 1977
- Federal Mine Safe and Health Act
- Surface Mining Control and Reclamation Act
- Black lung disease
- Clean Water Act 1972
- Problems with enforcement and redefining terms.

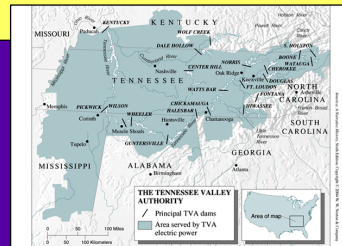
Since 1935, the Tennessee Valley Authority (TVA) provides:

- Relief from flooding
- A way to stop erosion
- Year-round navigation on the Tennessee river
- Affordable electricity
- Economic growth



But:

- Water is diverted for industrial use
- 11 Coal-burning power plans use it
- Water degradation results



## Friends of coal vs. activists



Table 7: Educational Standards

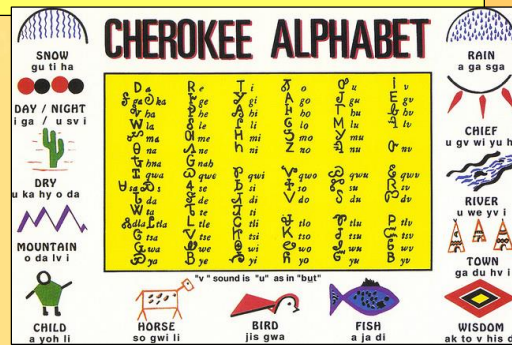
State	High School Graduation Rate, SY2007-2008 <sup>1</sup>	Advanced Placement High Test Scores (3 or Above) Per 100 Students in grades 11 and 12 for 2009 <sup>2</sup>
Kentucky	84.5	14.6
Tennessee	82.2	10
Virginia	80.0	35.2
West Virginia	84.0	8.8

SOURCES: <sup>1</sup>EDFacts/Consolidated State Performance

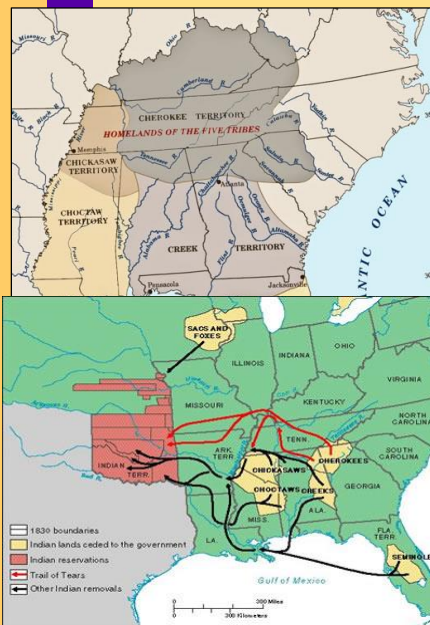
West Virginia  
Massey Energy

## History and settlement

- Native Americans (begin 6000BC)
- Woodland period (500BCE-1000CE)
- Burial mounds, jewelry, trading networks
- Algonquians- Central Appalachia
- Cherokees (related to Iroquois) to the south



## After Europeans, Cherokee organized into 5 'civilized tribes'



- Adopt 'white' ways:  
private property,  
Christianity, public  
education
- Until gold is discovered,  
then are removed
- *Trail of Tears*  
(starts in 1830)

**Scot-Irish settled in plateau valleys and Germans in more level farmland.**

- **Are very religious and patriotic: ‘proud Americans’**
- **Pride sometimes expressed in the form of racism**
- **Cultural seclusion = breeding ground for racist ideologies, narrow-mindedness**
- **Ironically, such bigotry plays a vital role in keeping Appalachians from being recognized as a legitimate minority**



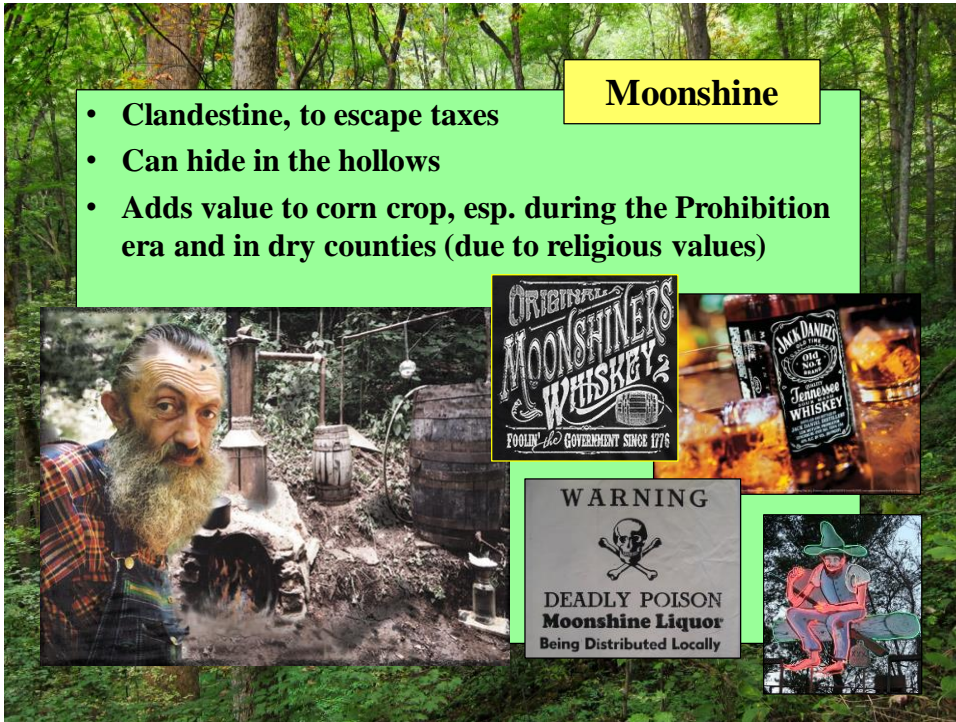
### **Folk culture**

- **Then, industrialization up north, and departure of Appalachians, along with Afr.-Americans in 1920s (Great Migration)**
- **Created neighborhoods in cities, with a distinct Appalachian culture**
- **Have: their own music, history, art, tradition, literature, dialect, religious beliefs, and ideas of ecology, justice, education**



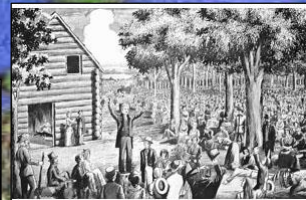
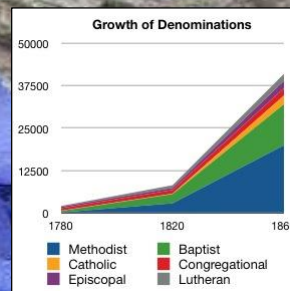
## Moonshine

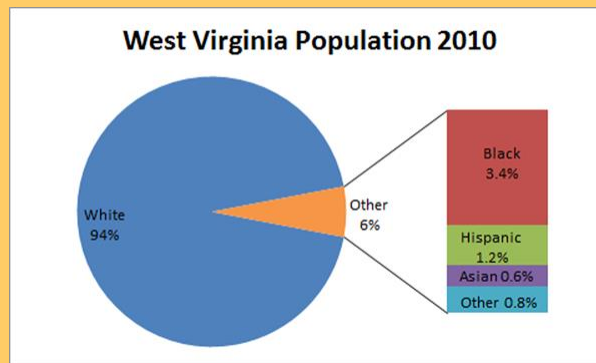
- Clandestine, to escape taxes
- Can hide in the hollows
- Adds value to corn crop, esp. during the Prohibition era and in dry counties (due to religious values)



## Second 'Great Awakening'

- Religious revival: evangelical conversions
- New religions are not waiting for ordination of distant ministers
- Reinvigorates rituals to fit the settlers' real world
- Held Appalachia together despite isolation
- Camp meetings, revivals





### West Virginia Population

West Virginia provides an ethnic snapshot of the entire region. The racial makeup of the state was 94 percent white (2010); the next largest group was blacks, who comprised 3.4 percent of the population and lived in segregated towns in extreme southern West Virginia

### Berea College, KY

- **Founded by slavery abolitionist**
- **1<sup>st</sup> in SE US to be coed, racially integrated**
- **Liberal arts college, top rankings**
- **1,500 students, all poor**
- **No tuition, everyone works 10 hrs a week on work study, no one can work outside jobs**
- **Green? Bicycle sharing program, ecovillage, enviro. studies demonstration house, wetlands, permaculture food forest, individual gardens, natural wastewater treatment plant**
- **Free laptops**

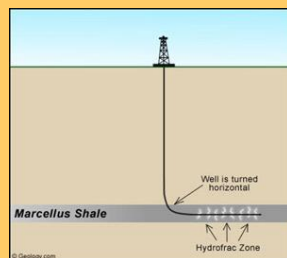




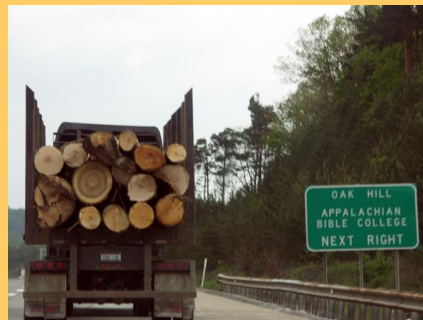
### Allegheny Plateau

The Finger Lake microclimates favor dairy farms and vineyards. The region contains 85 percent of New York's winery acreage.

## Economy



### Fracking





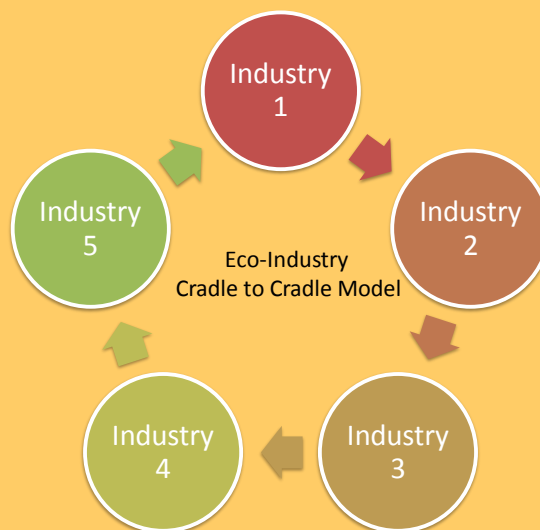
### Appalachian Regional Commission (ARC)

In 1965 a federally funded economic development program—the Appalachian Regional Commission (ARC)—aimed to improve the regional quality of life by raising educational levels, building roads in inaccessible areas, and improving the job market.

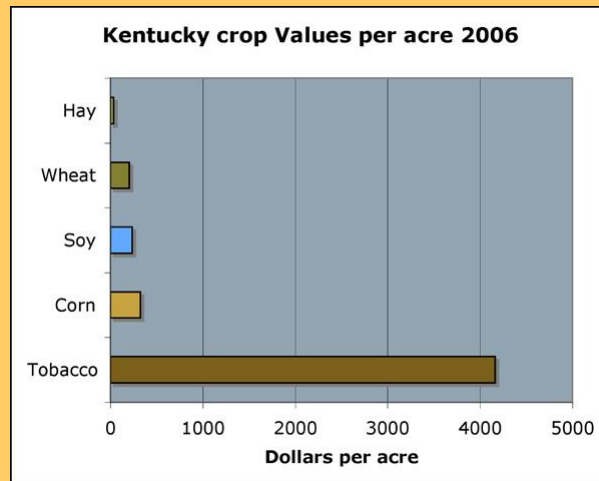
### *Sustainable City Chattanooga, TN 2010 population MSA: 551,000*

Beginning in 1984 city leaders met and established Vision 2000, based on sustainable ideals and adopted “economy, ecology, equity,” as its slogan

Everything is a resource for something else.  
Shoe Model







About half of Kentucky's tobacco farmers halted tobacco production after the 2004 buyout. But exports exceeded production in 2005 and Phillip Morris offered incentives to grow tobacco on contract. In 2006 tobacco acreage and production returned on a smaller scale. Higher than growing corn or wheat.



### **Kentucky Bluegrass**

The Kentucky bluegrass around Lexington is known for its horse farms and gentleman farmers. The mineral rich limestone soil produces grass that builds the bones and muscles of champion horses.

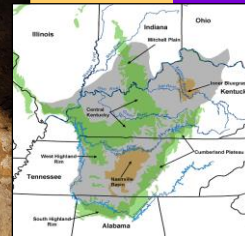
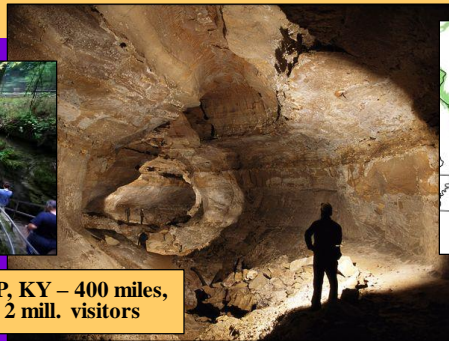
Kentucky Derby, Tennessee Walking Horse,  
Mule days!

## TOURISM



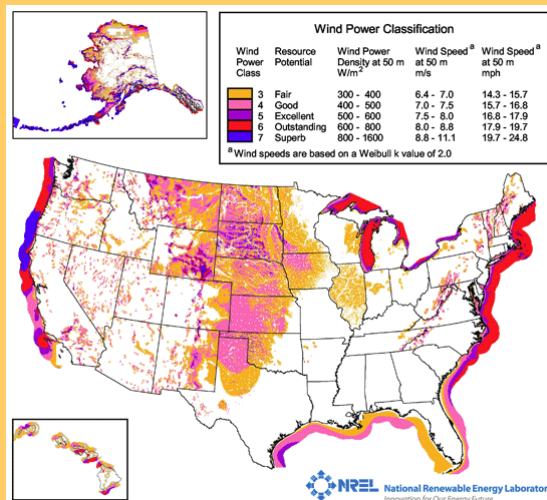
Karst topography:

Limestone, dissolved by slightly acidic rain



Mammoth Caves NP, KY – 400 miles,  
longest in world: 2 mill. visitors

27



### Wind Farm Potential in Appalachia is limited

Though those favoring and opposing wind farms have valid cases, both agree in that conserving energy is much of the answer, and that building smaller, locally owned generation, individual wind farms, solar panels, is more secure and friendly than another outside group taking from Appalachia.



**A Sustainable Future**