

Mountain Lions Through Time

Below is a map of the current and historic (pre-1920) ranges for the mountain lion in the United States. Use the map to answer the questions.

*Figure 1: Current and Historic Range of Mountain Lions in the United States**



** Recent evidence indicates that the mountain lion may be extending its range*

QUESTIONS

1. In how many states could mountain lions be found before 1920?
2. In how many states can mountain lions now be found?
3. Why has such a dramatic decline occurred in the lion's range?
4. What is the overall trend in the mountain lion's current range?
5. What could be the reason for this trend?
6. Why have mountain lions been able to survive in Florida?

Humans Through Time

Below is a data table that shows the population density for each state in 1880 and 2000. Use the table to answer the questions below.

Table 1: Population Densities for United States, 1880 and 2000

State, Region, or Territory	Population Density (people/square mile)	
	1880	2000
Alabama	24.9	87.6
Alaska	0.1	1.1
Arizona	0.4	45.2
Arkansas	15.4	51.3
California	5.5	217.2
Colorado	1.9	41.5
Connecticut	131.1	702.9
Dakota Territory	0.9	N/A
Delaware	69.2	401.1
District of Columbia	2960.6	9316.4
Florida	4.5	296.4
Georgia	26.5	141.4
Hawaii	N/A	188.6
Idaho	0.4	15.6
Illinois	55.6	223.4
Indiana	58.5	169.5
Iowa	29.5	52.4
Kansas	12.3	32.9
Kentucky	43.8	101.7
Louisiana	22.7	102.6
Maine	18.5	41.3
Maryland	84.0	541.9
Massachusetts	228.6	809.8
Michigan	29.0	175
Minnesota	9.3	61.8
Mississippi	24.0	60.6

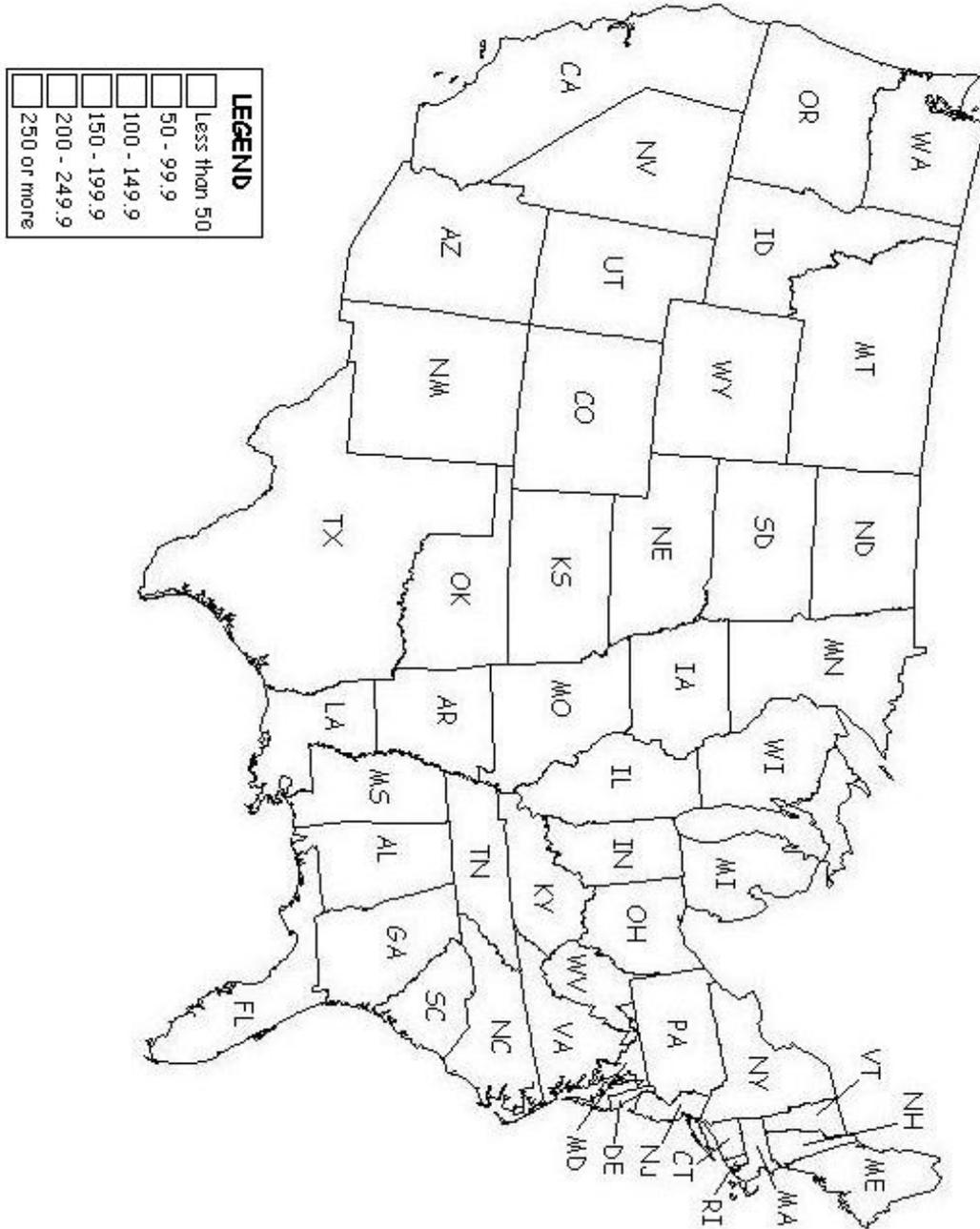
State, Region, or Territory	Population Density (people/square mile)	
	1880	2000
Missouri	33.2	81.2
Montana	0.3	6.2
Nebraska	6.0	22.3
Nevada	0.6	18.2
New Hampshire	37.4	137.8
New Jersey	135.9	1,134.40
New Mexico	1.0	15
New York	108.2	401.9
North Carolina	27.6	165.2
North Dakota	N/A	9.3
Ohio	80.0	277.3
Oklahoma	N/A	50.3
Oregon	1.8	35.6
Pennsylvania	93.1	274
Rhode Island	211.7	1,003.20
South Carolina	29.3	133.2
South Dakota	N/A	9.9
Tennessee	33.8	138
Texas	5.8	79.6
Utah	1.7	27.2
Vermont	32.5	65.8
Virginia	39.4	178.8
Washington	1.1	88.6
West Virginia	26.9	75.1
Wisconsin	24.4	98.8
Wyoming	0.2	5.1
United States	14.0	79.6

Data courtesy of the U.S. Census Bureau <http://www.census.gov>

1. Explain why no data are available for Hawaii, Oklahoma, and North and South Dakota in 1880.
2. What trend do you notice between the population densities of the states in 1880 and in 2000?
3. Which state or region has the largest population density? Why? Which has the smallest? Why?

Use the 2000 Population Density data to color the map below. The densities will be divided into six ranges: less than 50, 50 - 99.9, 100 - 149.9, 150 - 199.9, 200 - 249.9, and 250 or more. Select six colors – one for each density range – and color the map and the legend. Answer the questions at the bottom.

Figure 2: United States Map with Postal Abbreviations



1. What basic trend do you notice about the colored map?
2. Why would the ranges used to represent the 2000 population density not be very good to represent the 1880 data?
3. Compare this map to the current range of the mountain lion. What do you notice?

The United States at Night

Below is a photograph of North and Central America showing the United States at night. The lighted areas indicate the places where people live.



From Astronomy Picture of the Day,
<http://antwrp.gsfc.nasa.gov/apod/ap001127.html>