

# Ham Demographics

Where the hams are... and aren't  
Delvin R. Bunton, N7QMT

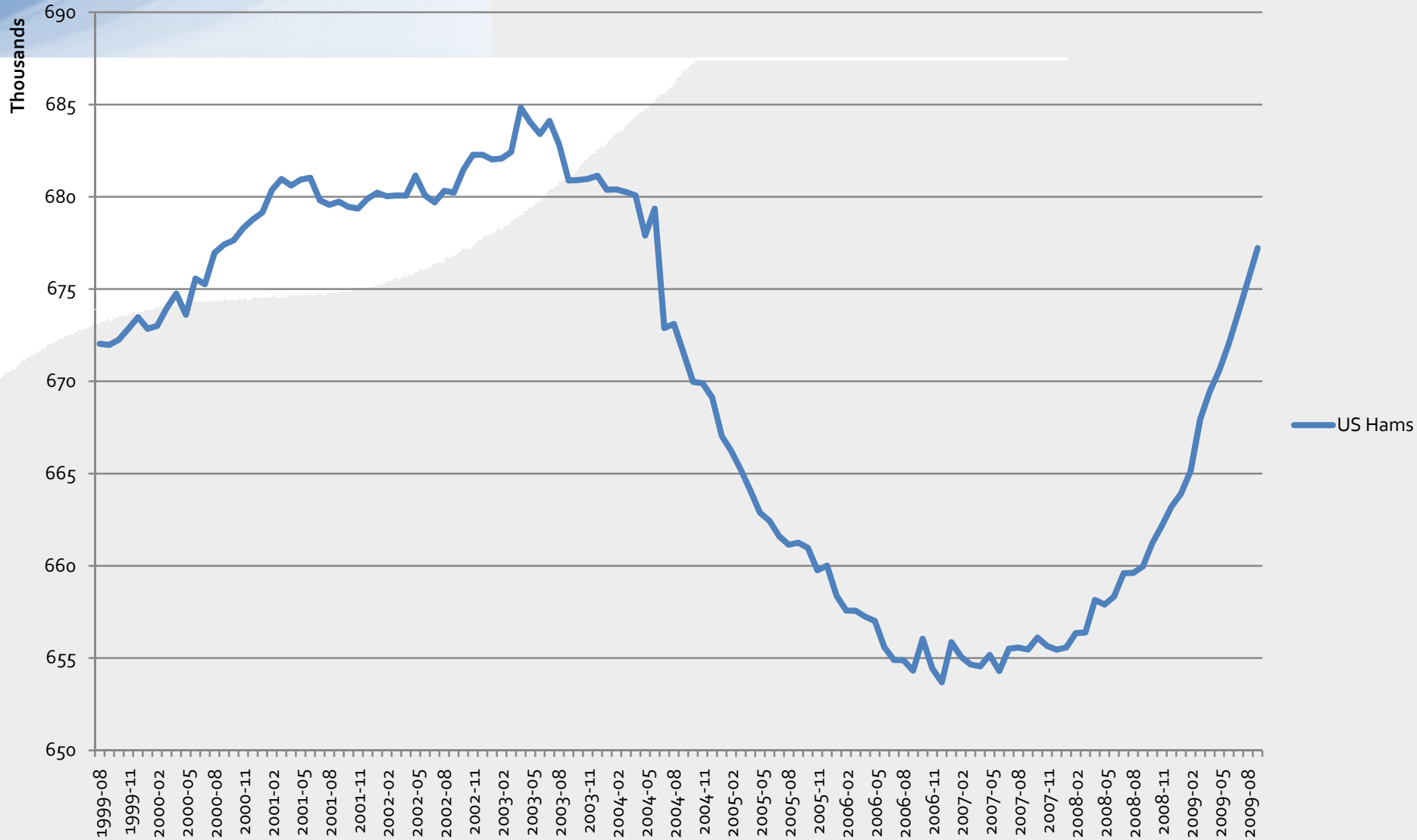
- 
- Demographics: the study of population characteristics

# Data sources

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- [www.ah0a.org](http://www.ah0a.org) for monthly ham populations by state, ARRL section and division
- FCC license data download on May 2, 2010 from <http://wireless.fcc.gov/uls/>

# US Ham Population, 1999-2009



Data from AH0A.org

Three divisions significantly increased population over the decade, while 12 divisions either grew slightly or lost population

- Increases:

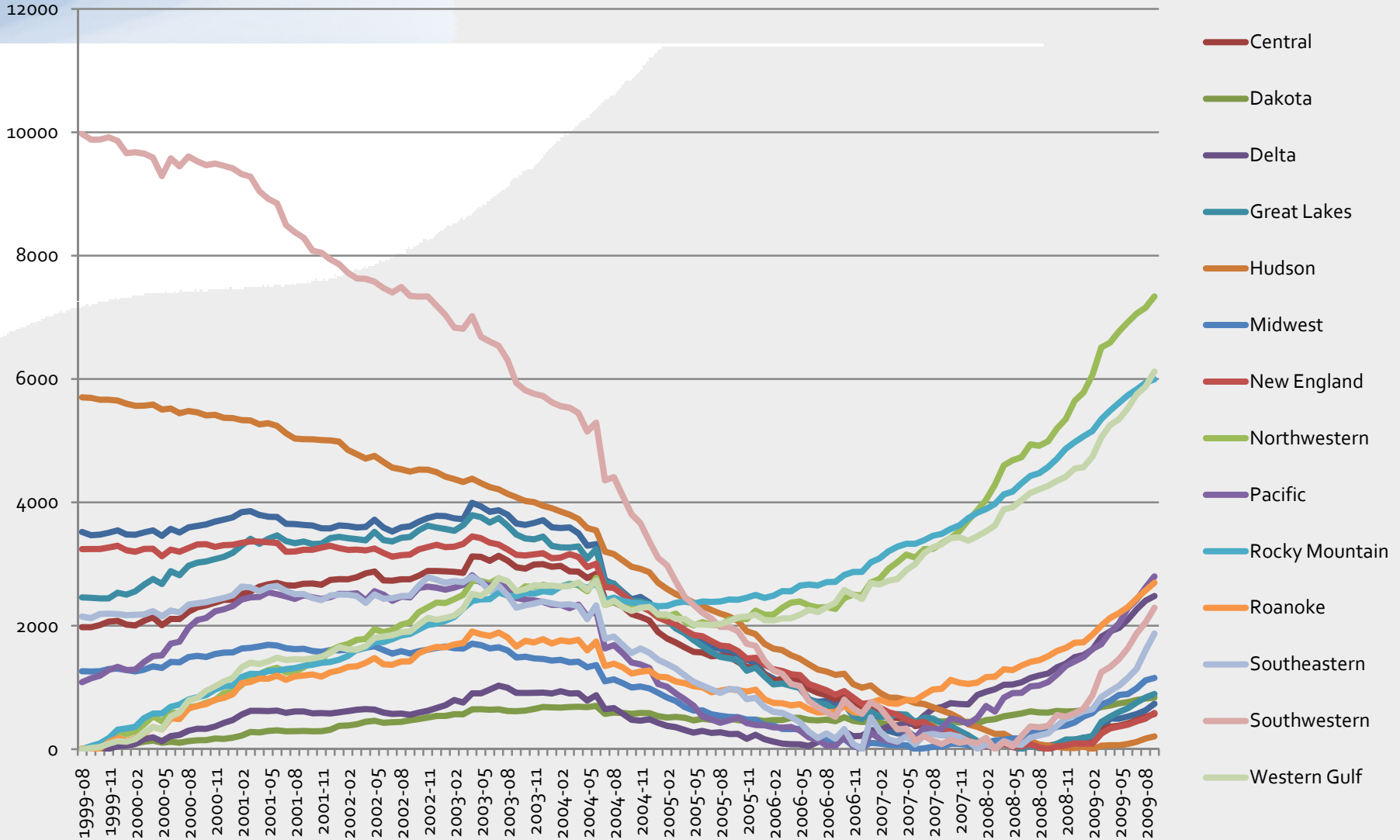
- Rocky Mountain
- Northwest
- Western Gulf

- Big Losers:

- Hudson
- Southwestern
- New England

# ARRL Division Ham Population Changes

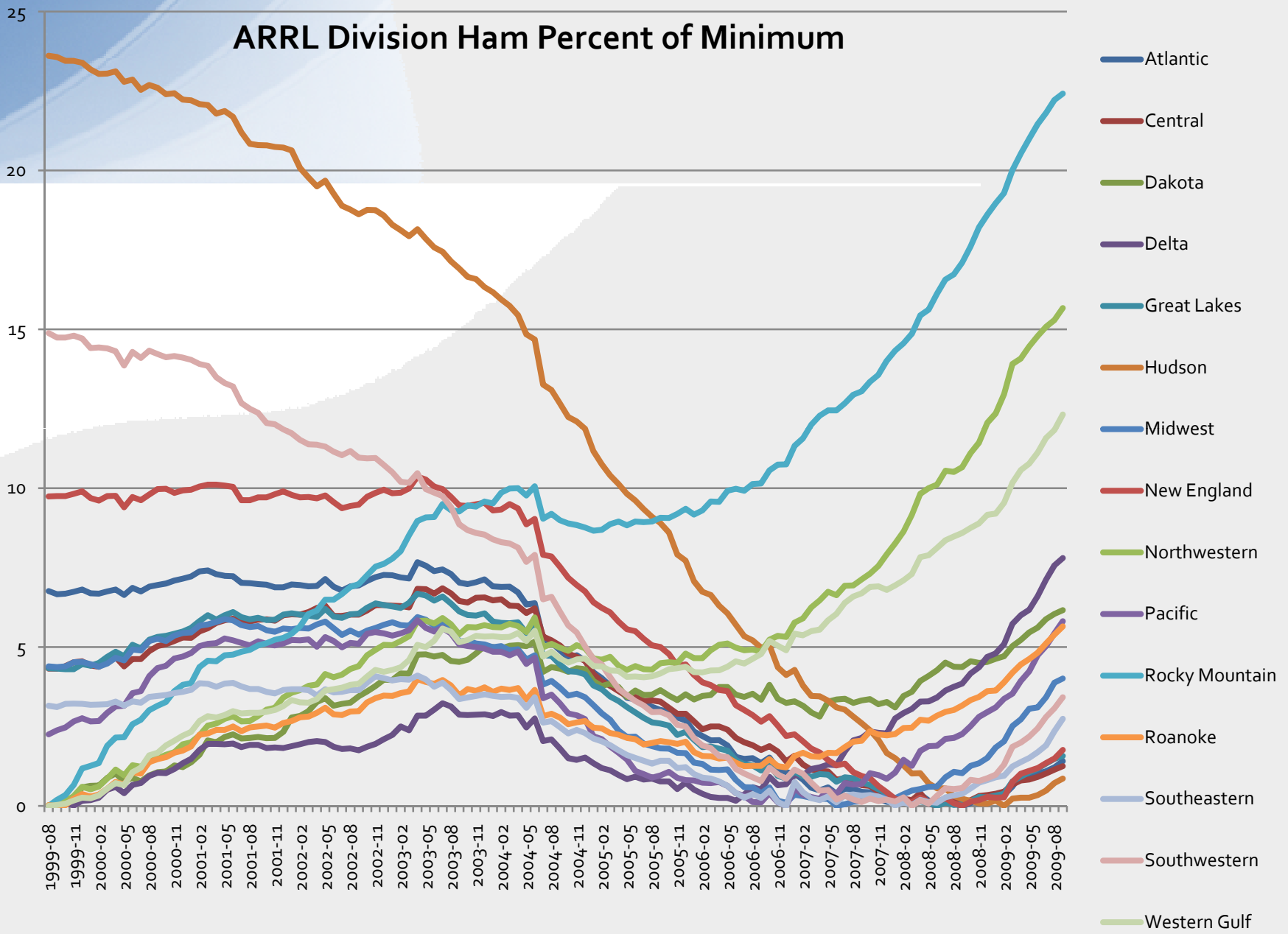
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Data from AH0A.org

# ARRL Division Ham Percent of Minimum

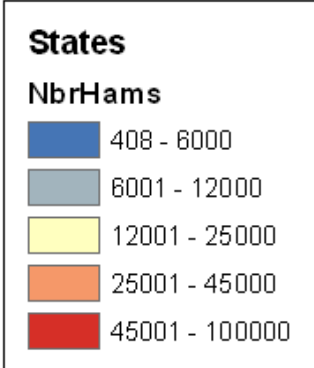
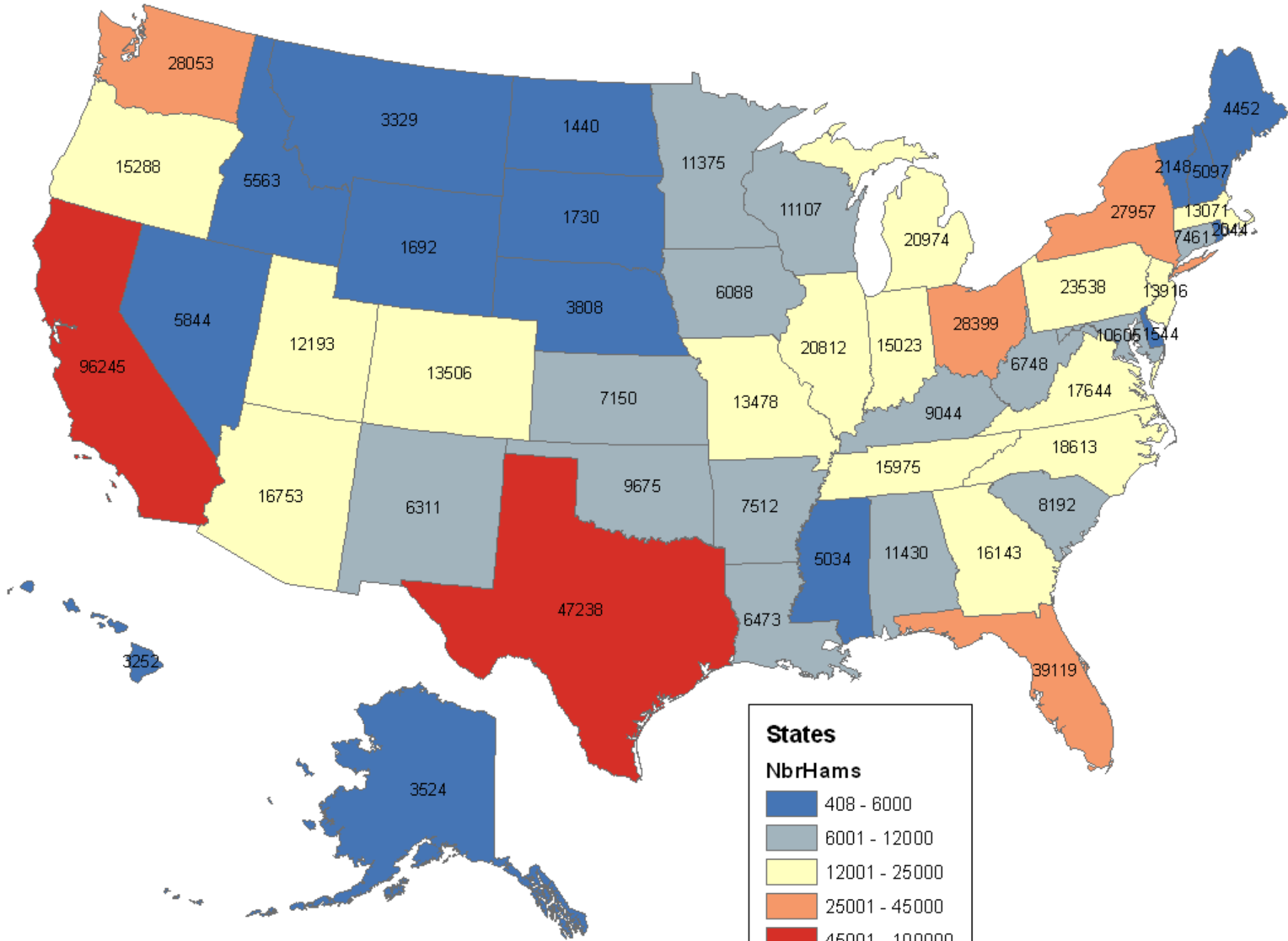
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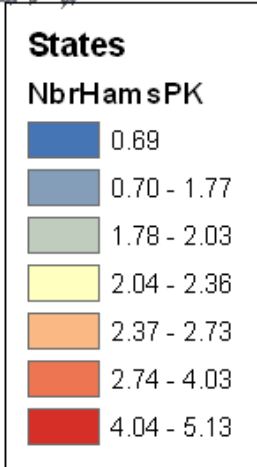
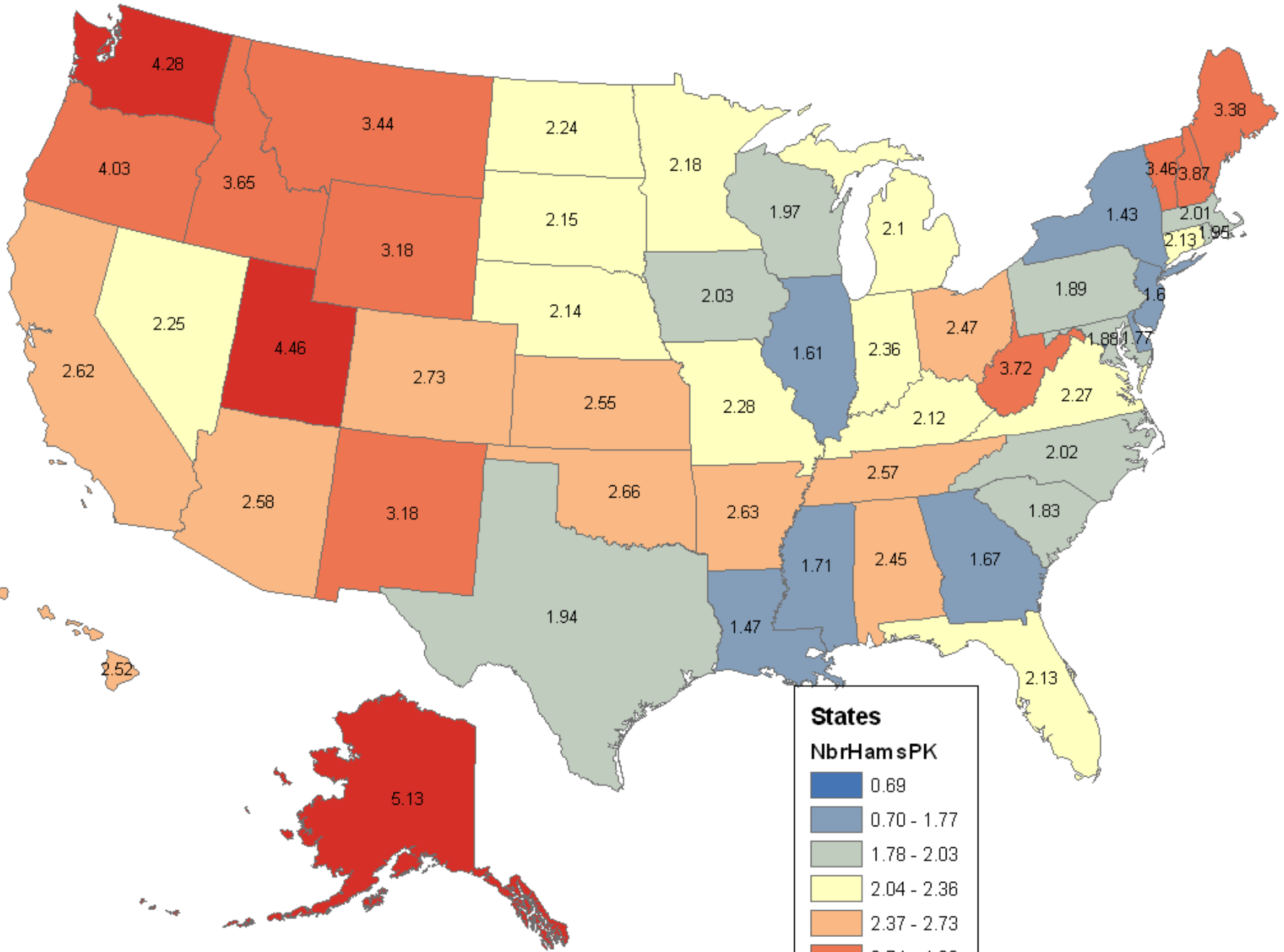


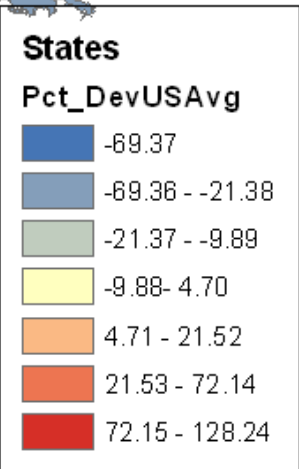
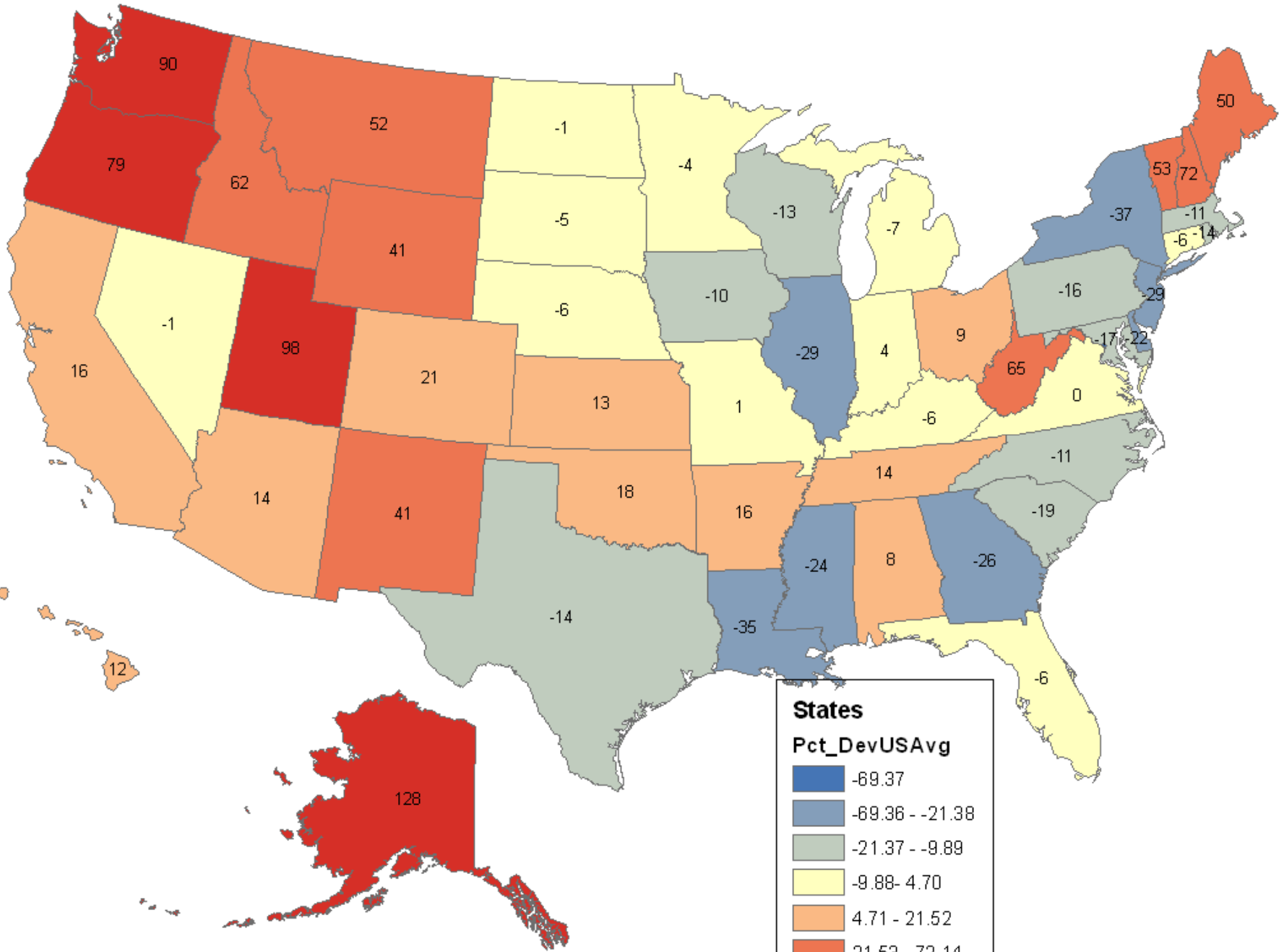
Data from AHQA.org



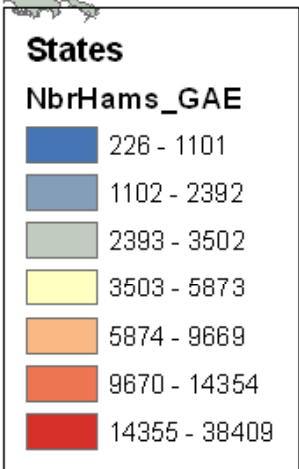
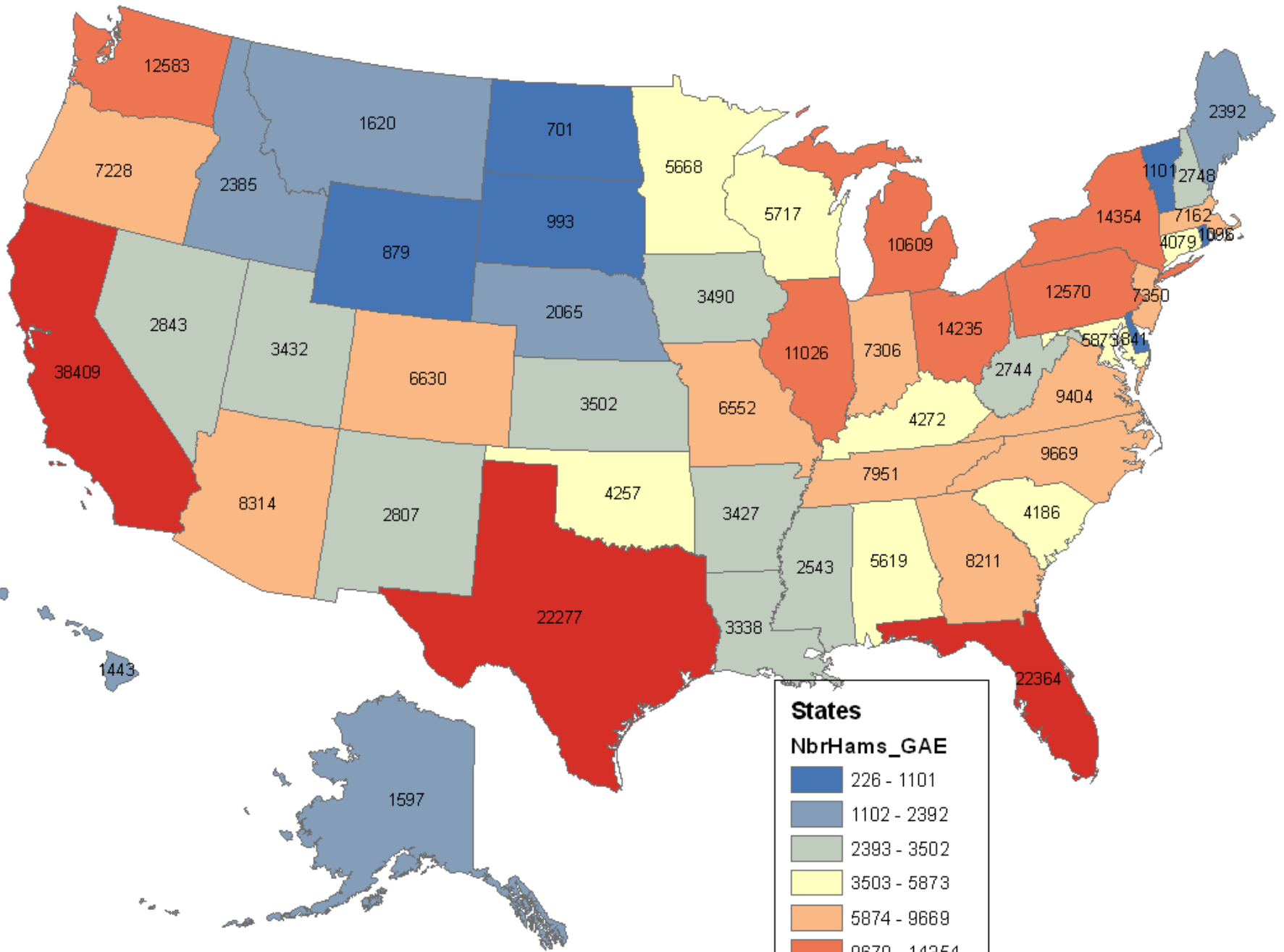


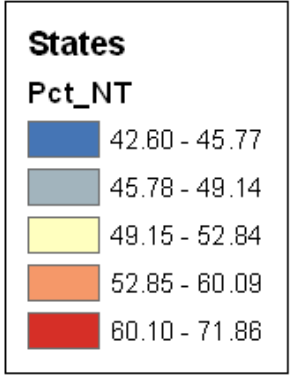
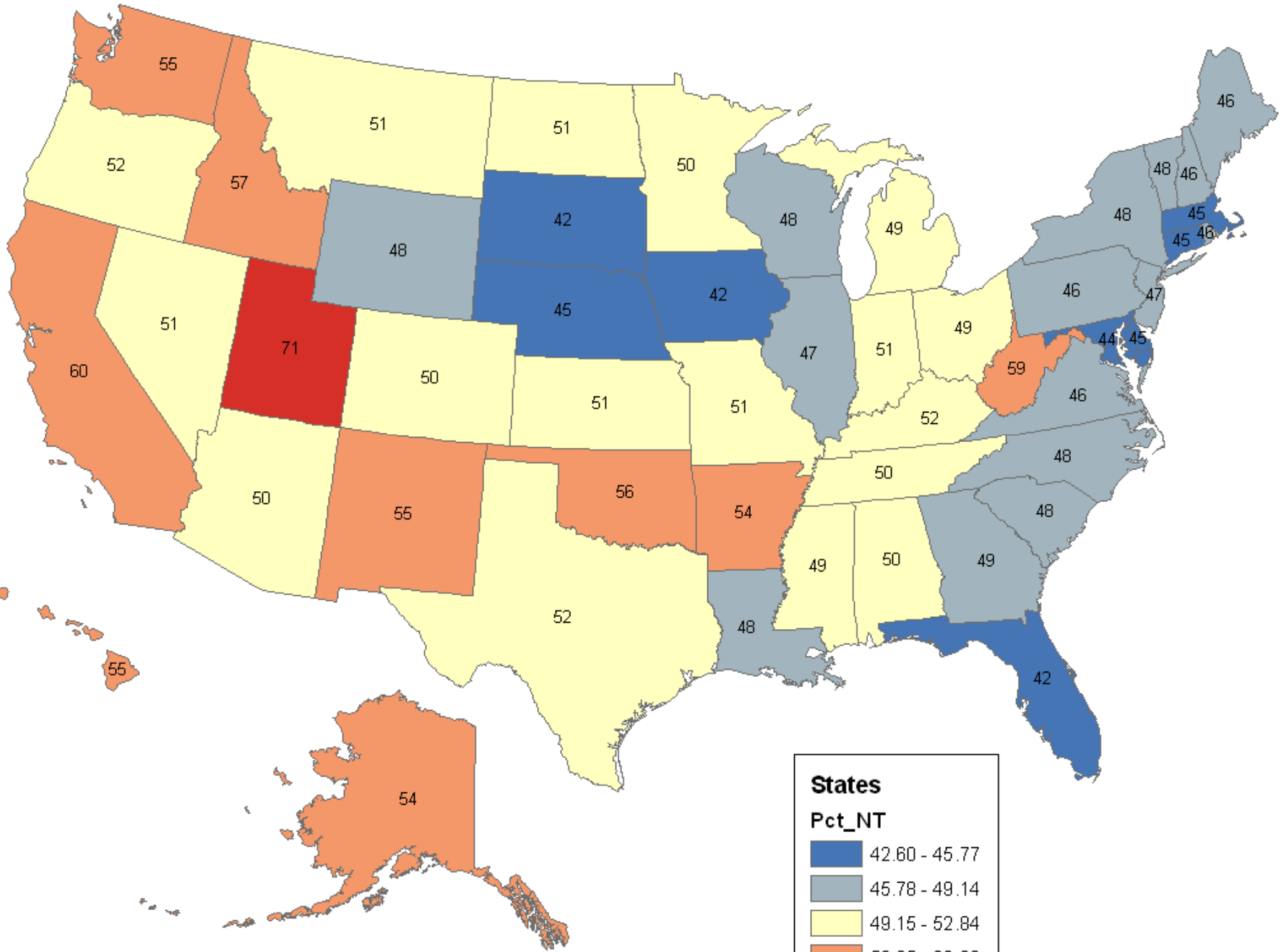






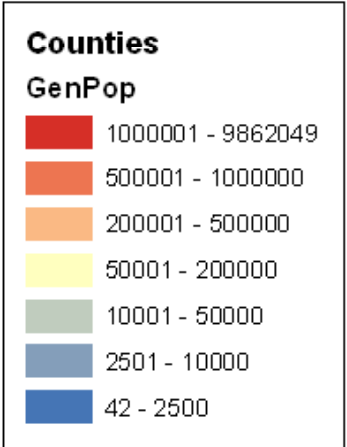
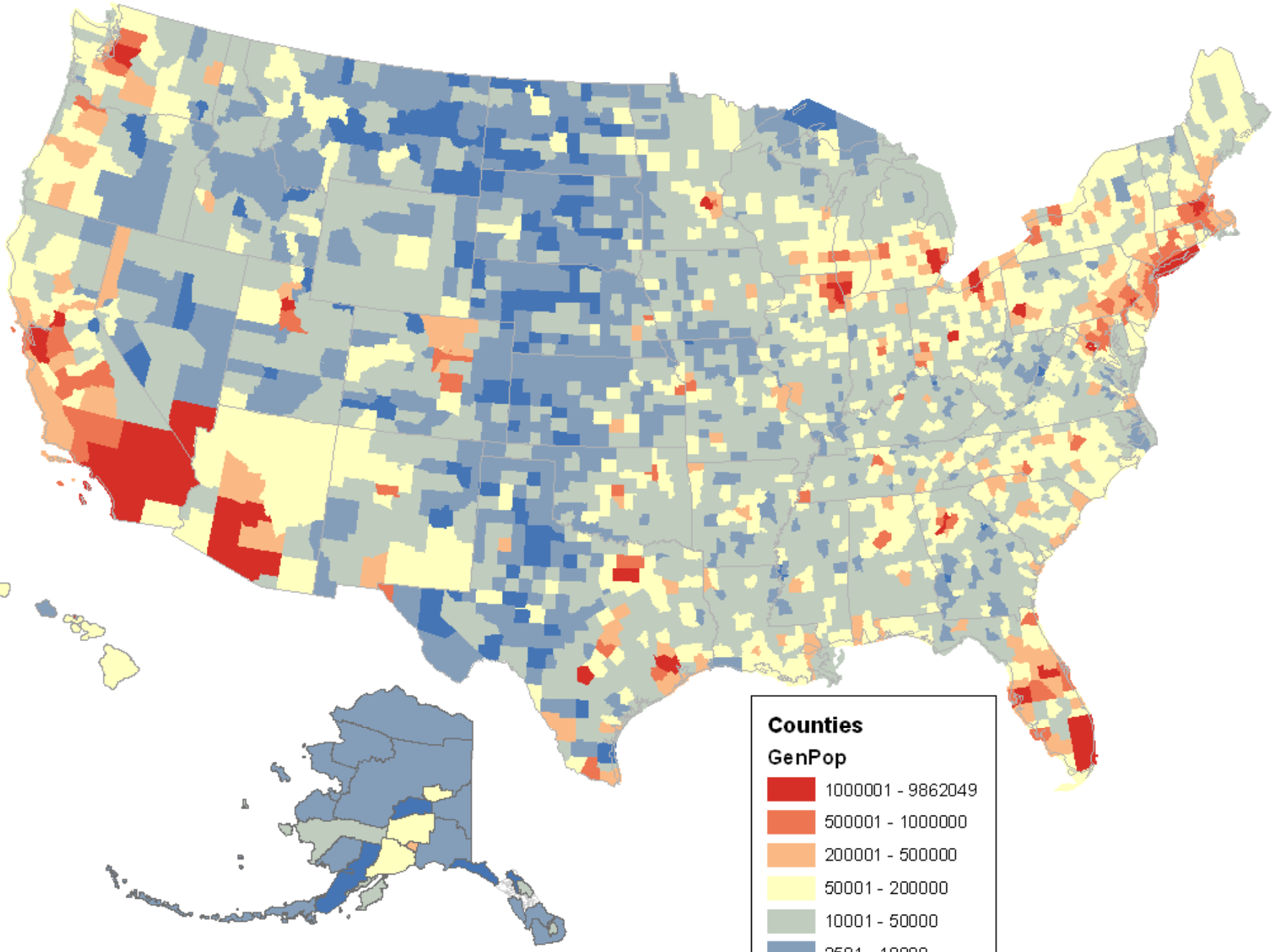
State	Pct_DevUSAvg
Alaska	128
Alabama	8
Alaska	128
Arizona	14
Arkansas	16
California	16
Colorado	21
Connecticut	-11
Delaware	-17
District of Columbia	22
Florida	-6
Georgia	-19
Idaho	52
Illinois	-29
Indiana	4
Iowa	-6
Kansas	13
Kentucky	1
Louisiana	-35
Maine	50
Maryland	-11
Massachusetts	-14
Michigan	-7
Minnesota	-4
Mississippi	-24
Missouri	-10
Montana	-1
Nebraska	-5
Nevada	-1
Nevada	98
New Hampshire	72
New Jersey	-16
New Mexico	41
New York	-37
North Carolina	-26
North Dakota	-6
Ohio	9
Oklahoma	18
Oregon	79
Oregon	90
Pennsylvania	-17
Rhode Island	53
South Carolina	-11
South Dakota	-6
Tennessee	14
Texas	-14
Utah	41
Vermont	72
Virginia	-11
Washington	90
West Virginia	65
Wisconsin	-13
Wyoming	-1



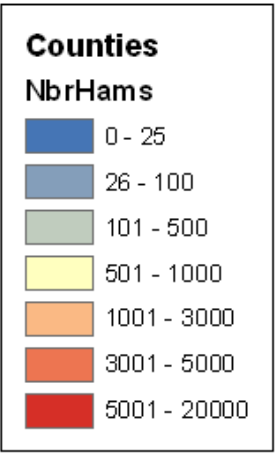
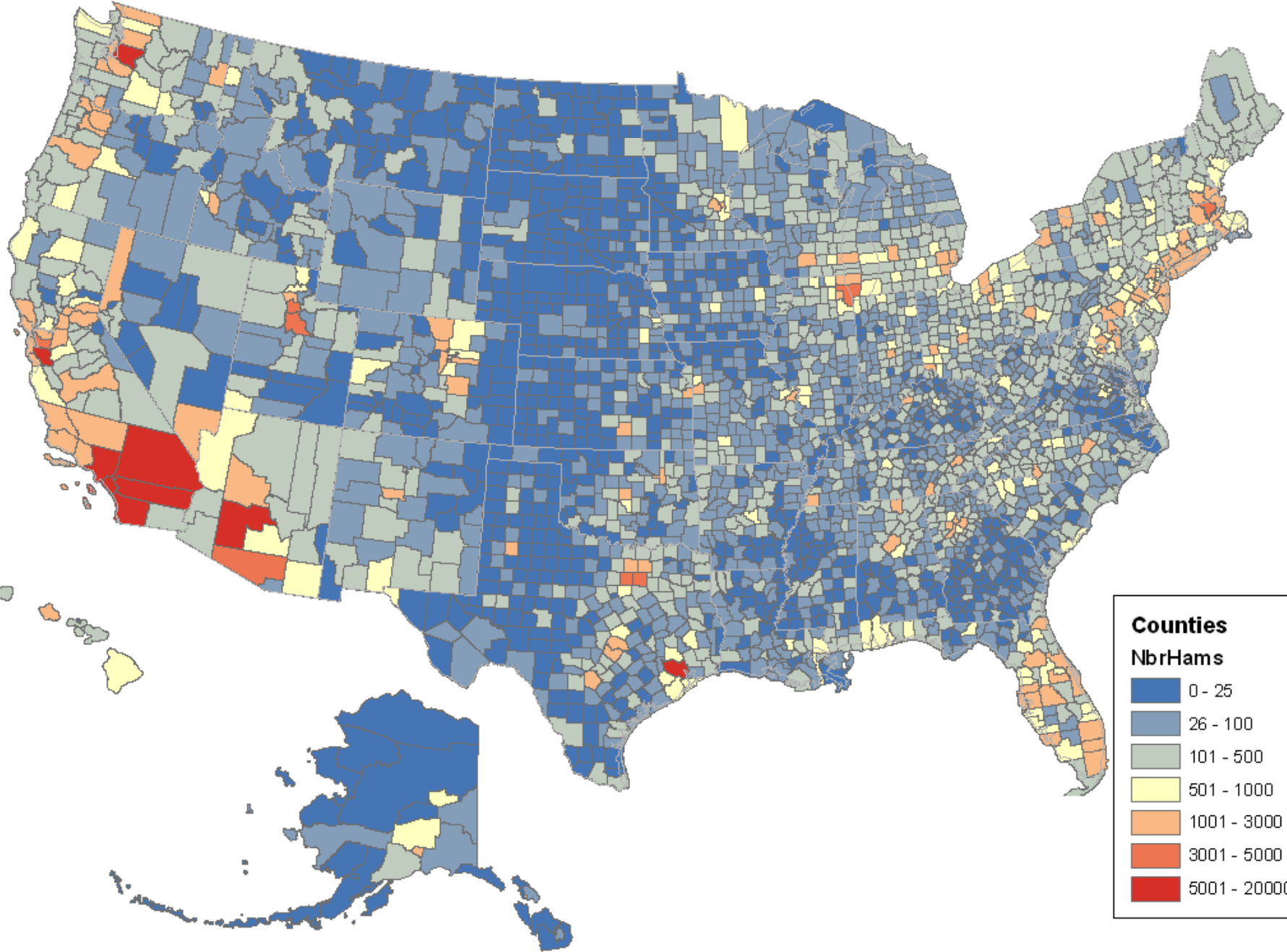










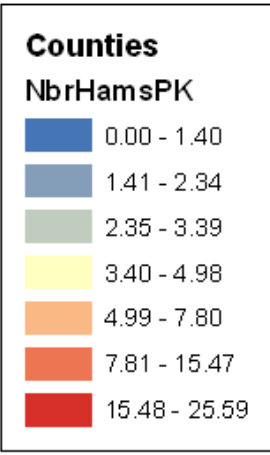
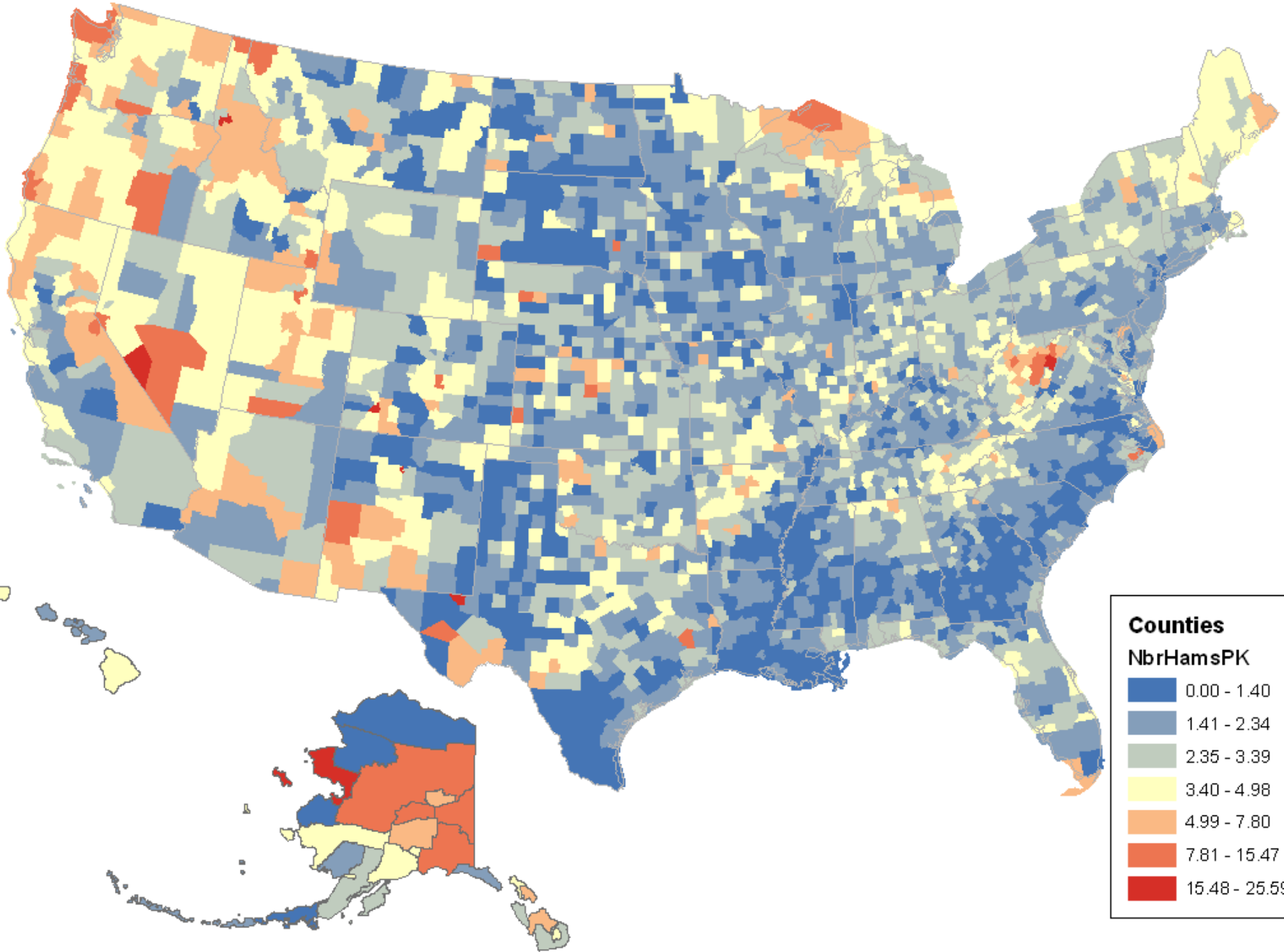


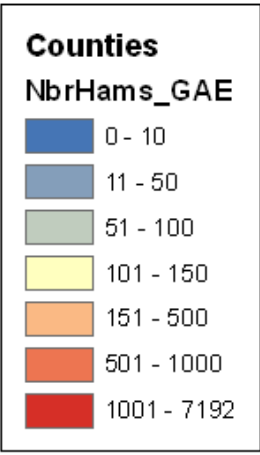
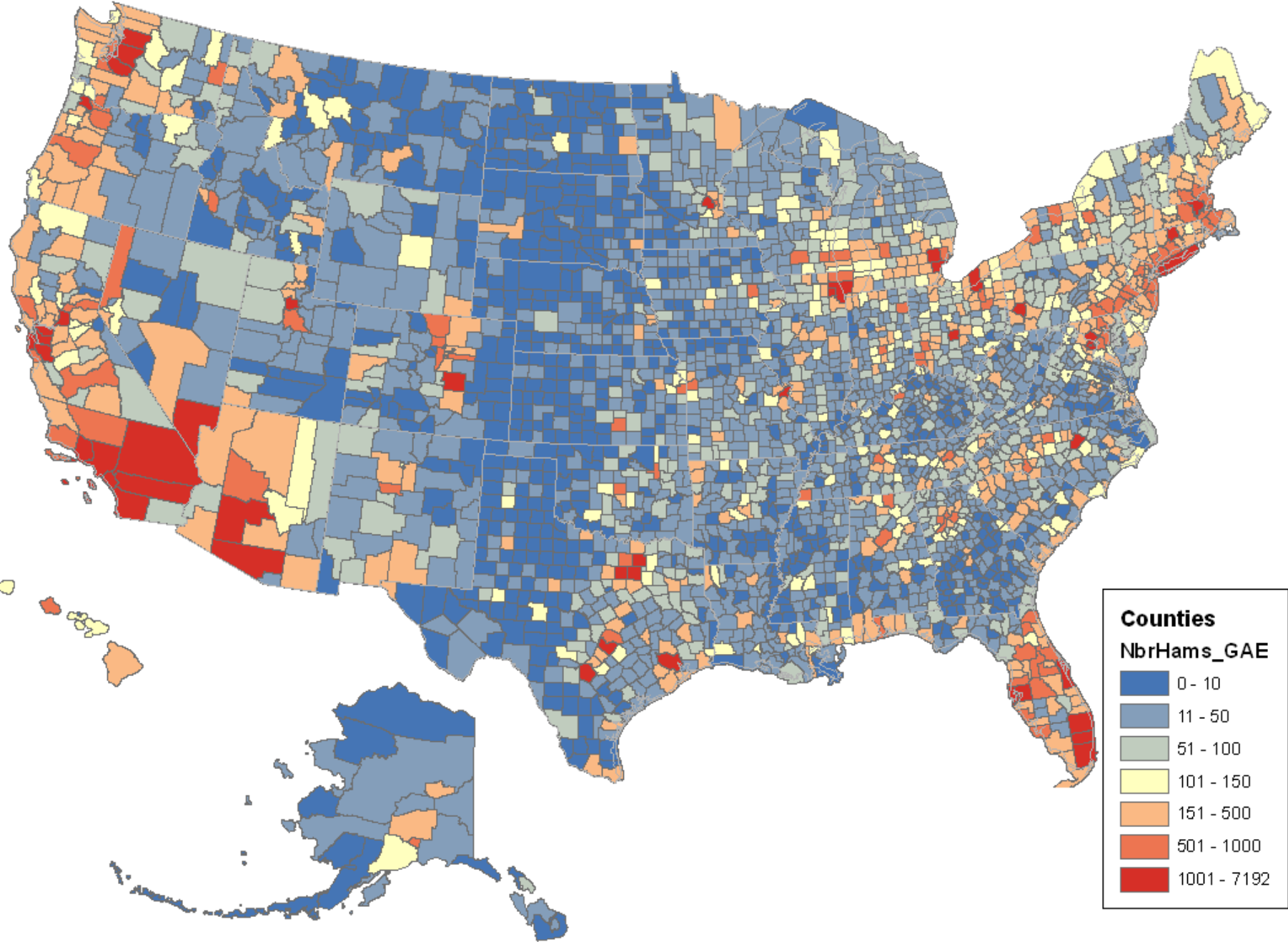
# Top 25 Ham Population Counties (18.95%)

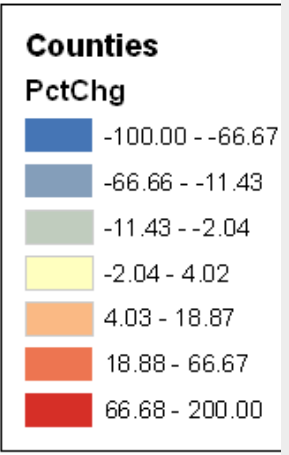
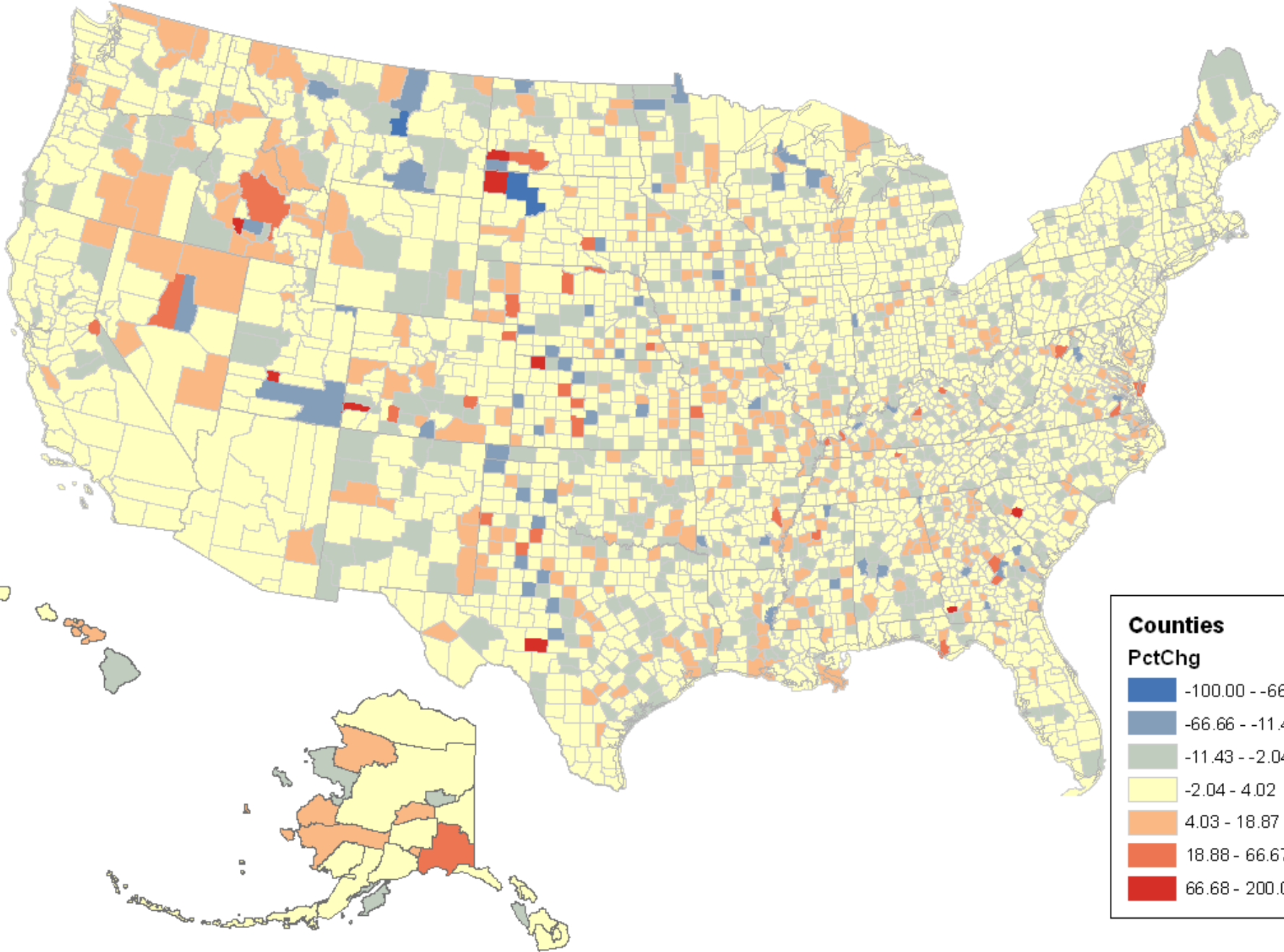
County	Hams 2009 Nov	Hams 2010 May	County	Hams 2009 Nov	Hams 2010 May
CA, Los Angeles	19,255	19,355	MA, Middlesex	3,490	3,708
CA, Orange	9,595	10,351	UT, Salt Lake	3,628	3,701
CA, San Diego	8,316	8,489	UT, Utah	3,037	3,162
AZ, Maricopa	8,359	8,408	AZ, Pima	3,005	3,030
WA, King	8,158	8,327	CA, San Mateo	2,736	2,799
CA, Santa Clara	6,887	6,951	CA, Sacramento	2,703	2,754
TX, Harris	5,399	5,448	NY, Suffolk	2,728	2,742
CA, San Bernardino	5,244	5,391	WA, Pierce	2,702	2,738
CA, Riverside	4,775	5,119	WA, Snohomish	2,708	2,725
IL, Cook	4,648	4,648	NV, Clark	2,652	2,693
TX, Dallas	3,969	4,006	CA, Ventura	2,661	2,675
TX, Tarrant	3,891	3,957	FL, Brevard	2,655	2,650
CA, Alameda	3,793	3,819			

## 28-30 counties with zero hams

- **GA** (Calhoun, Clay, Echols, Taliaferro)
- **HI** (Kalawao)
- **LA** (East Carroll)
- **MS** (Issaquena)
- **MT** (McCone, Petroleum, Treasure)
- **NE** (Arthur, Blaine, Hayes, Loup, McPherson, Sioux, Wheeler)
- **NM** (Harding)
- **SD** (Jackson, Jones, Ziebach)
- **TX** (Borden, Glasscock, Irion, Kenedy, King, McMullen, Sherman)
- **VA** (Bedford, Emporia)?
- **WI** (Menominee)

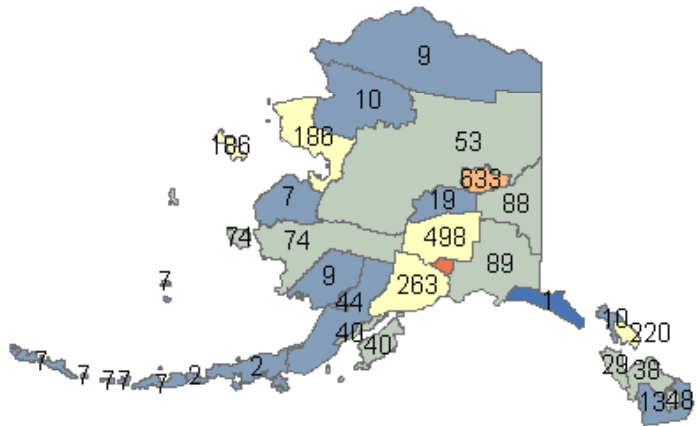
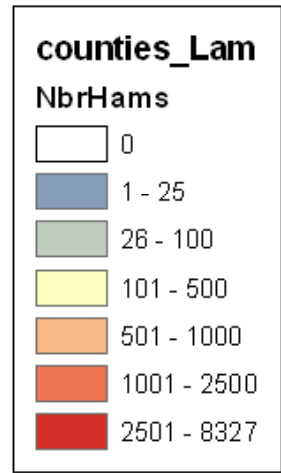
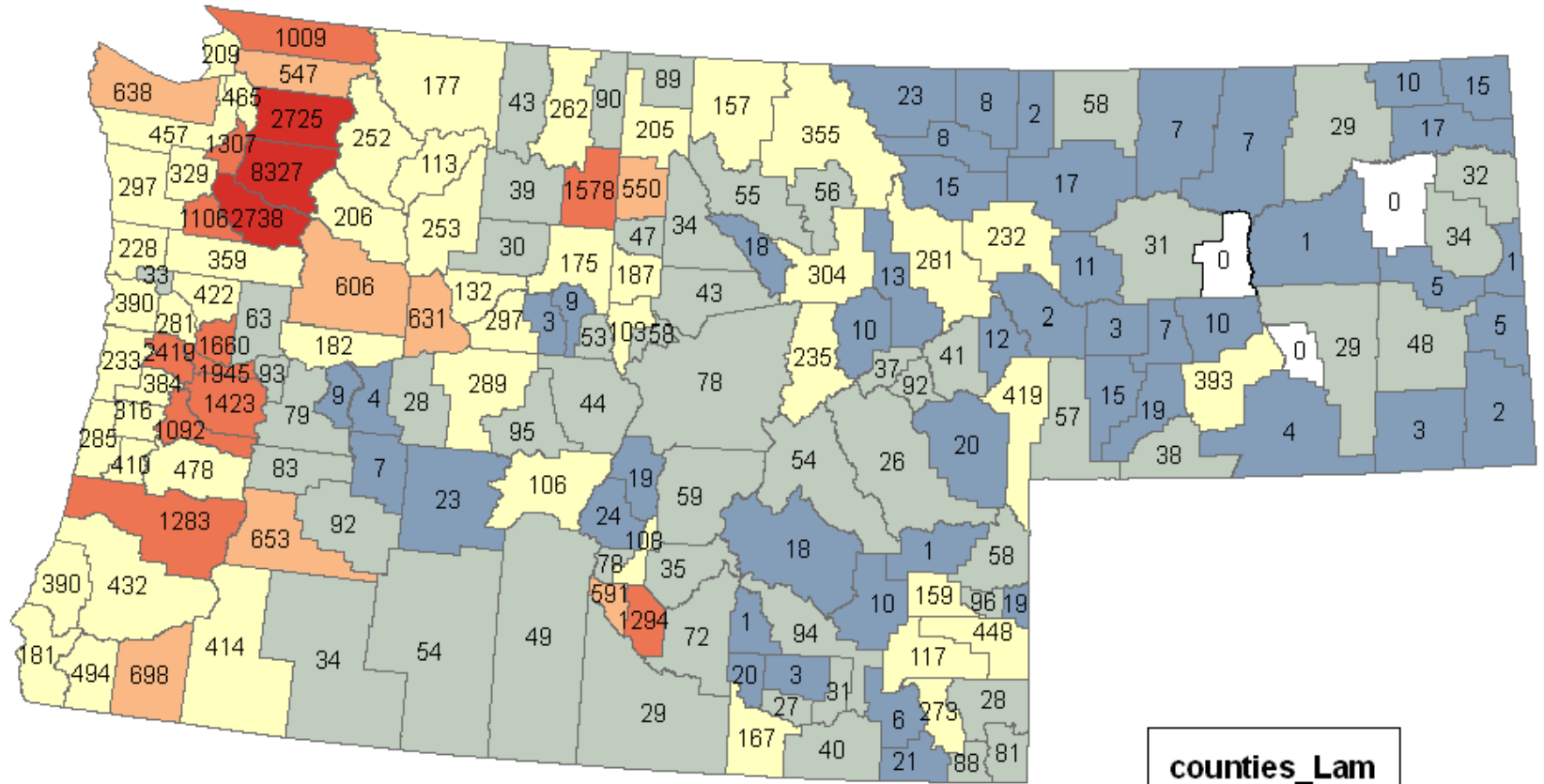






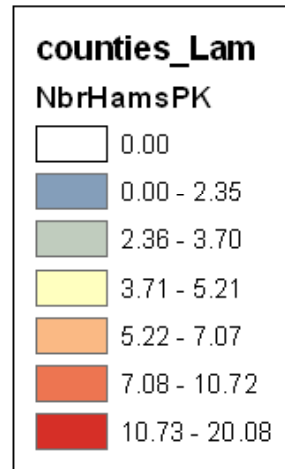
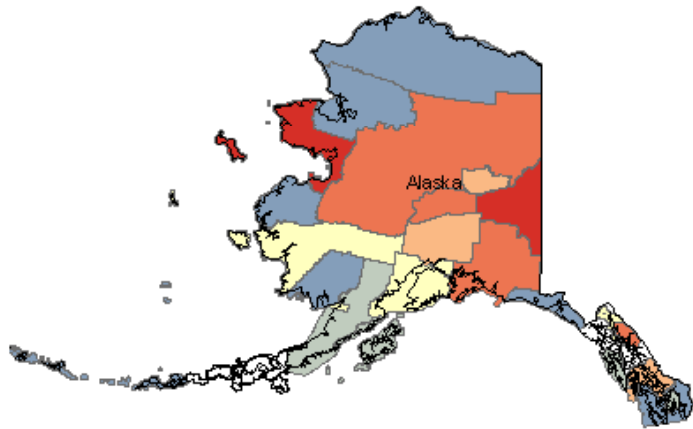
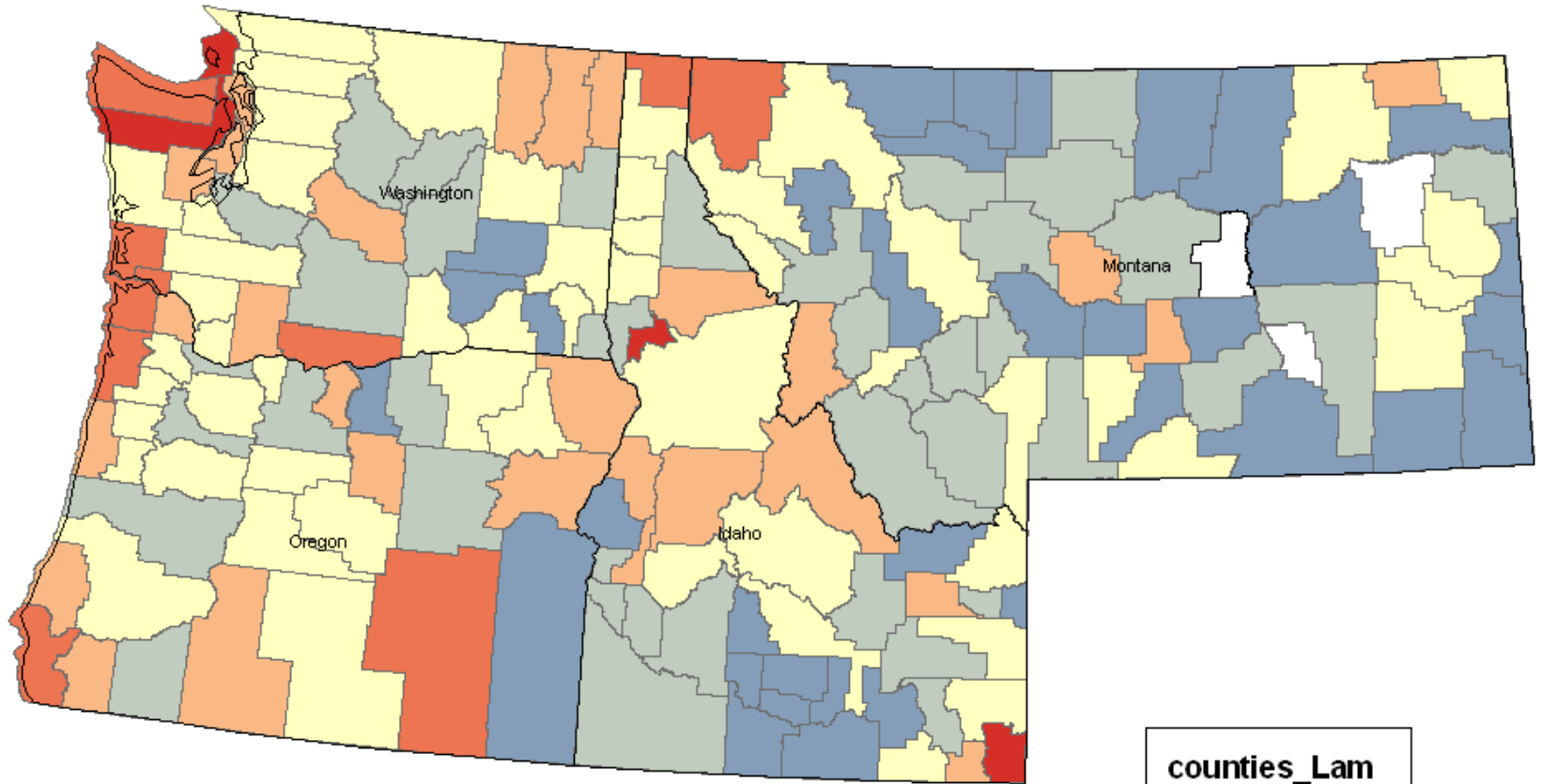


# Number of Hams

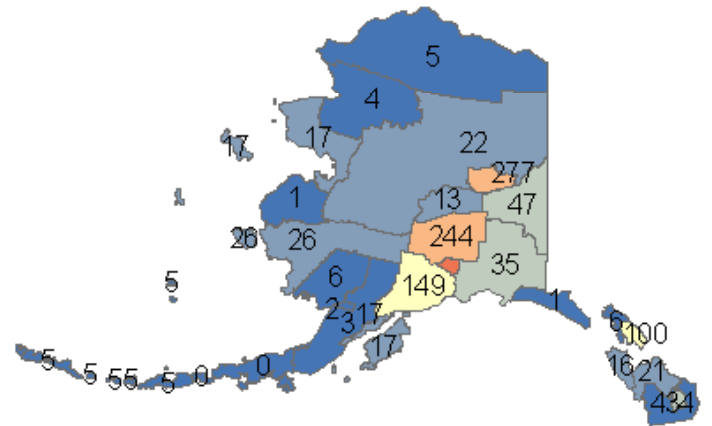
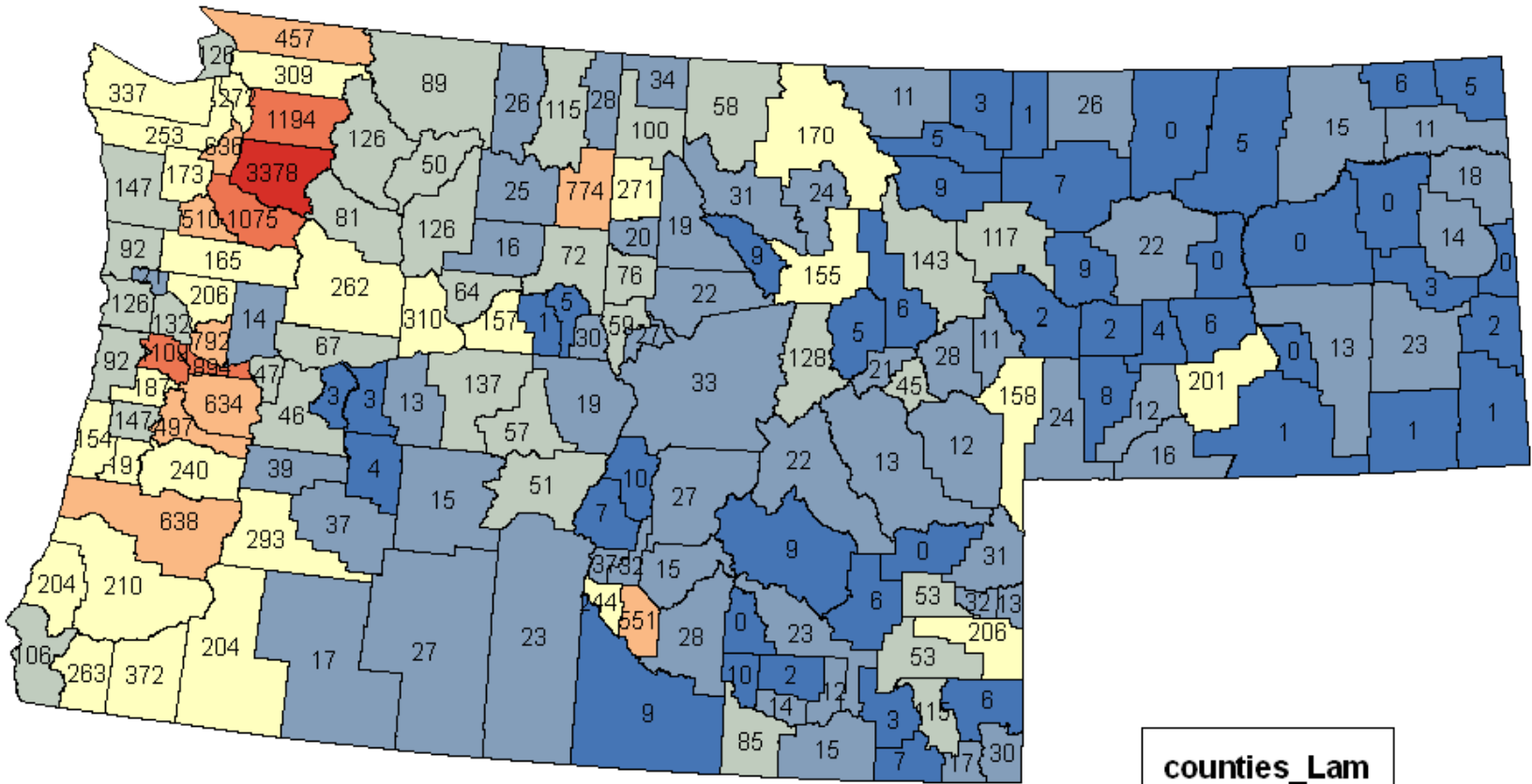




# Number of Hams per Thousand

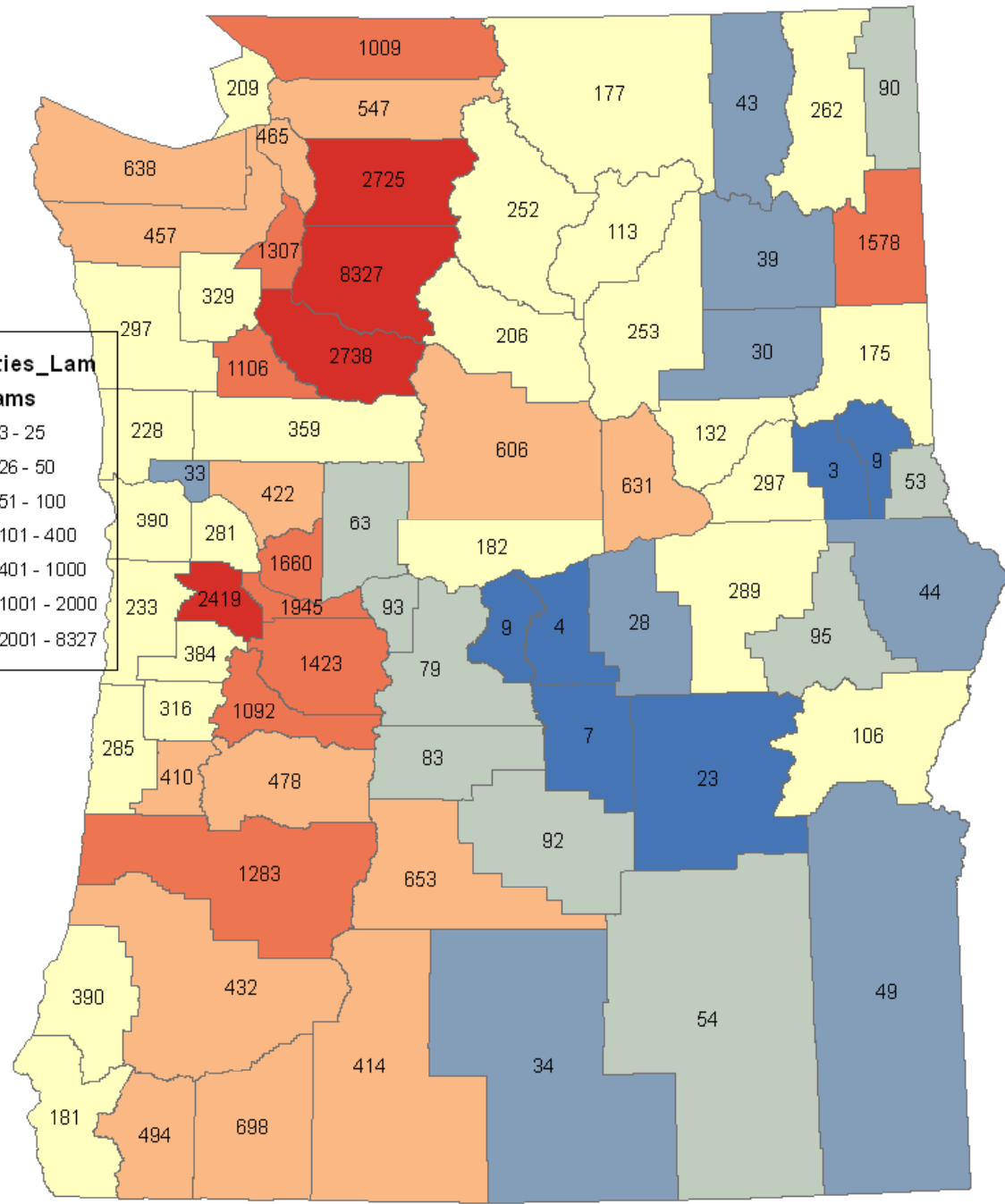
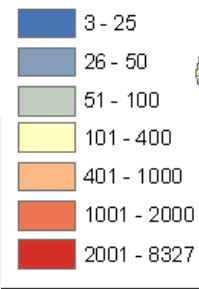


# Number of Hams with General, Advanced, Extra Licenses



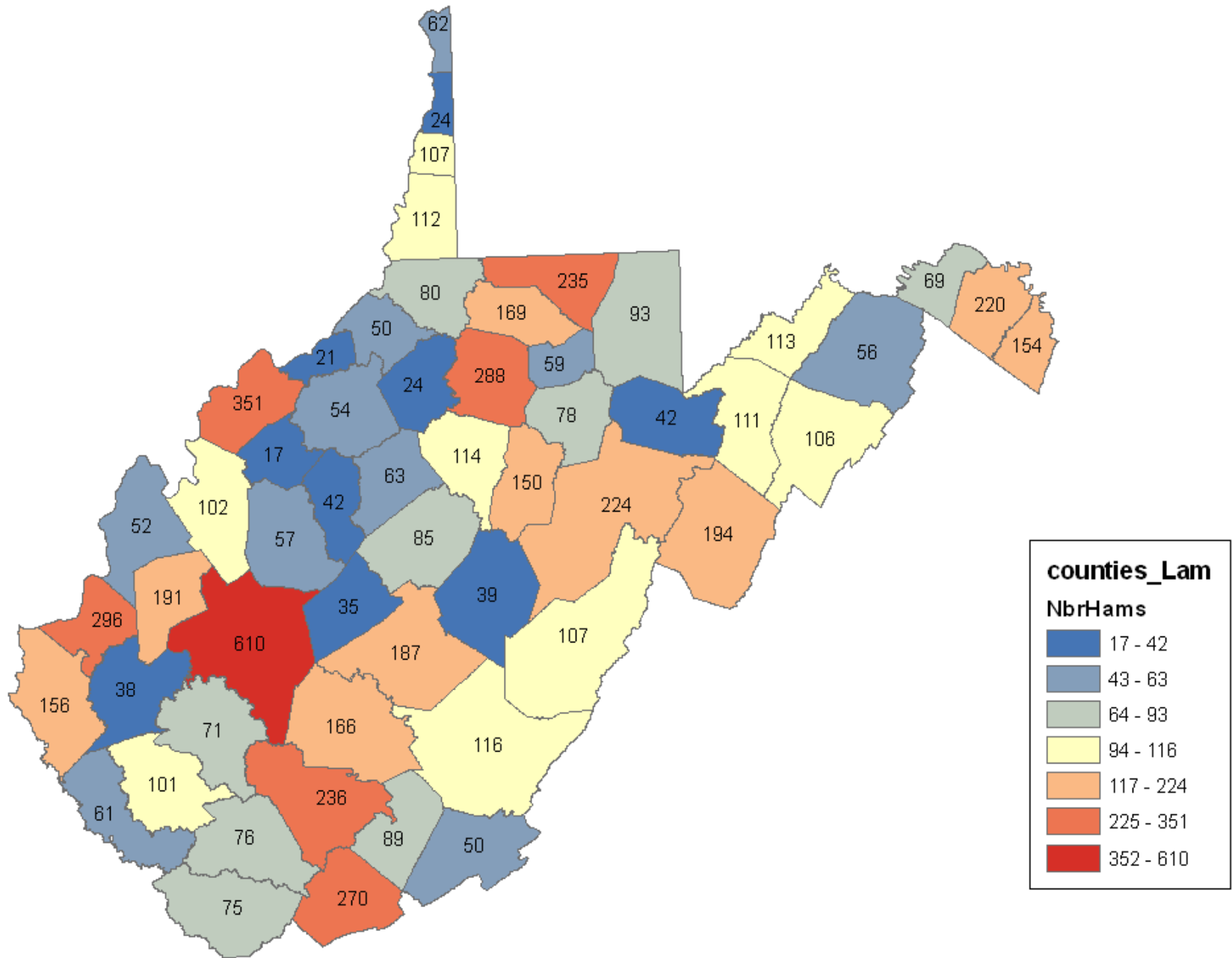


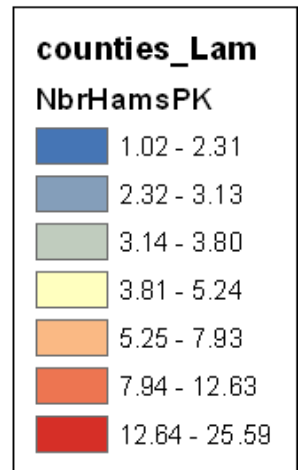
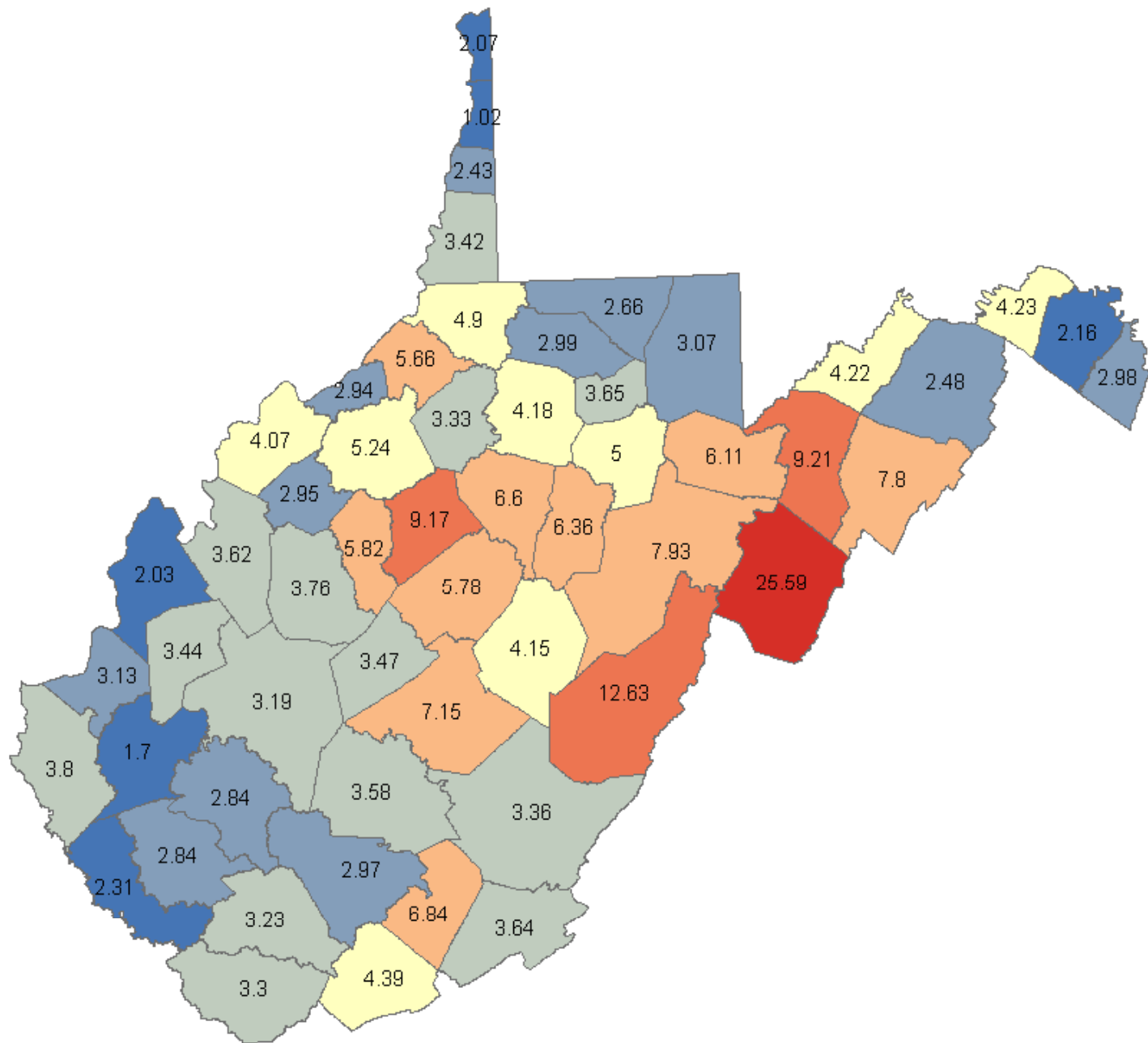
**counties\_Lam**  
**NbrHams**









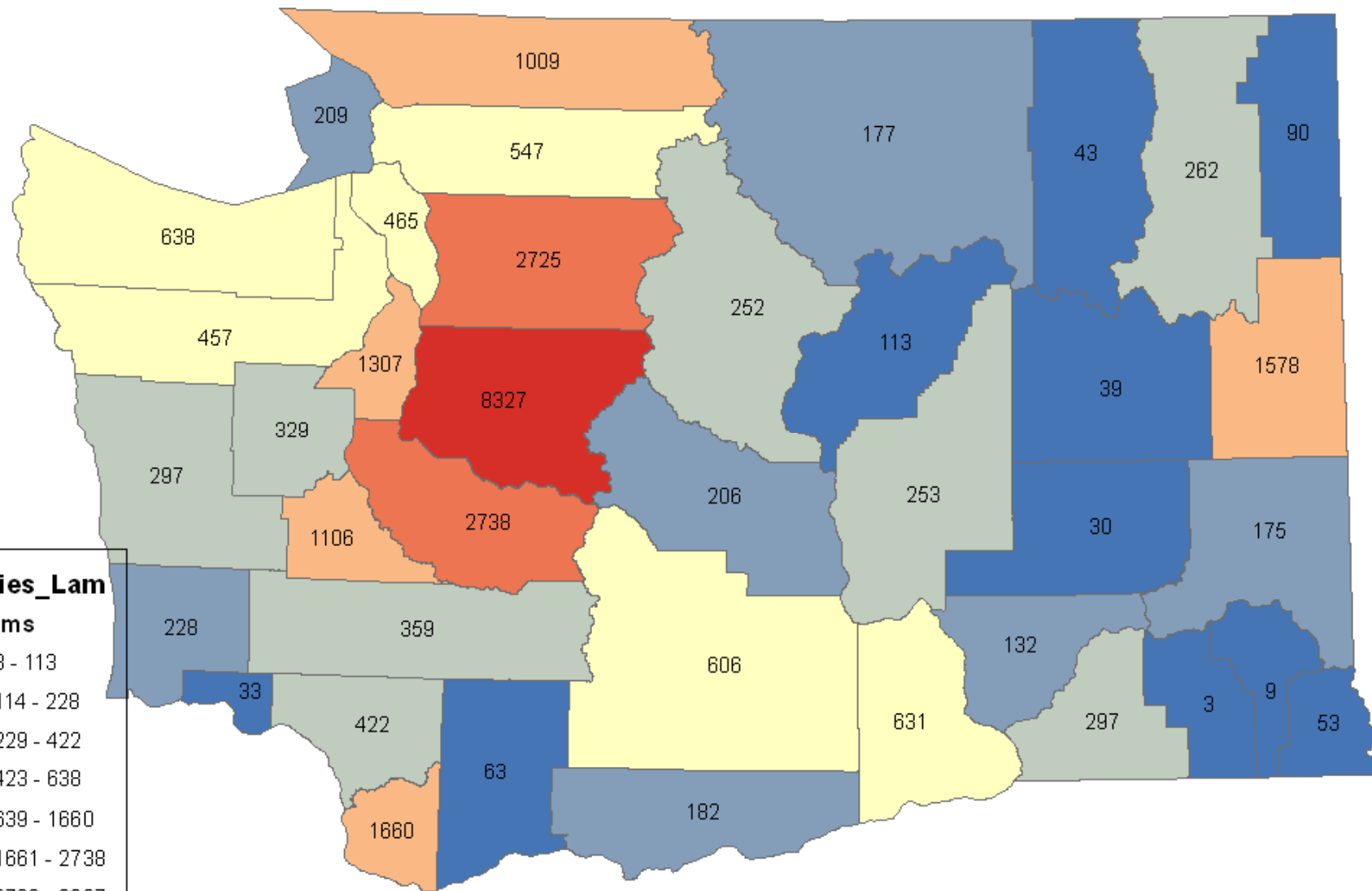








# Number of Hams

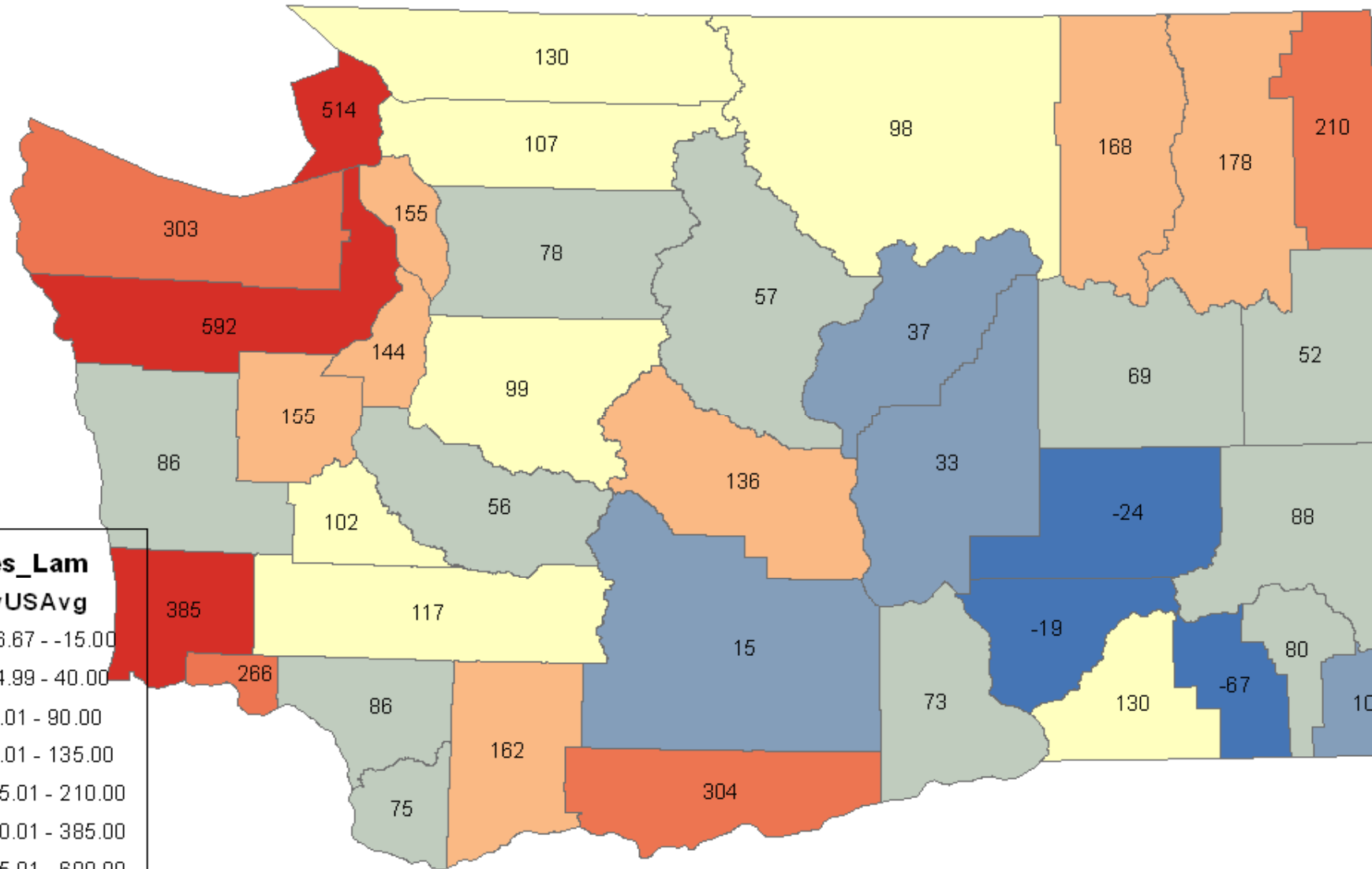


**counties\_Lam**

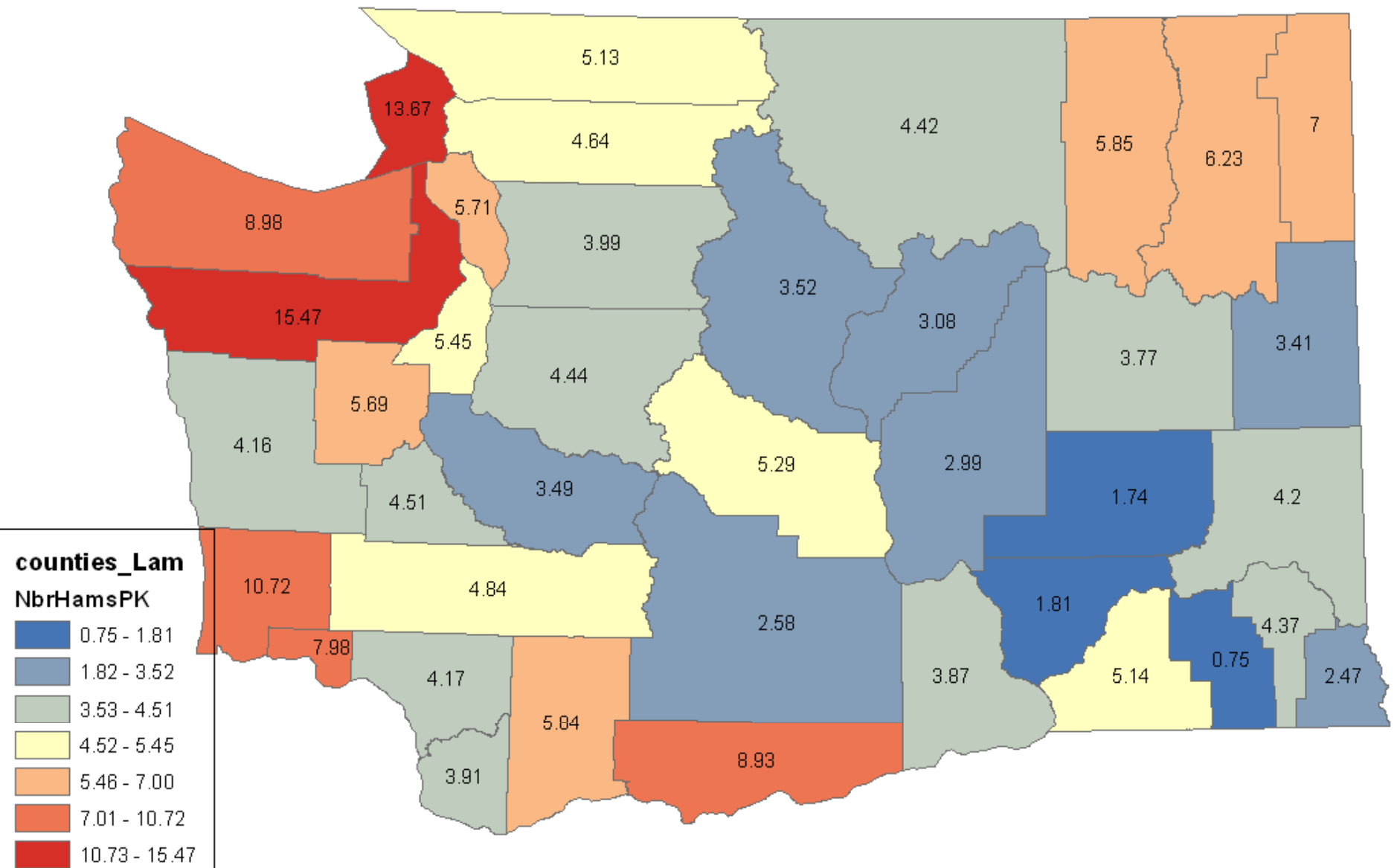
**NbrHams**

Dark Blue	3 - 113
Medium Blue	114 - 228
Light Blue	229 - 422
Yellow	423 - 638
Light Orange	639 - 1660
Dark Orange	1661 - 2738
Red	2739 - 8327

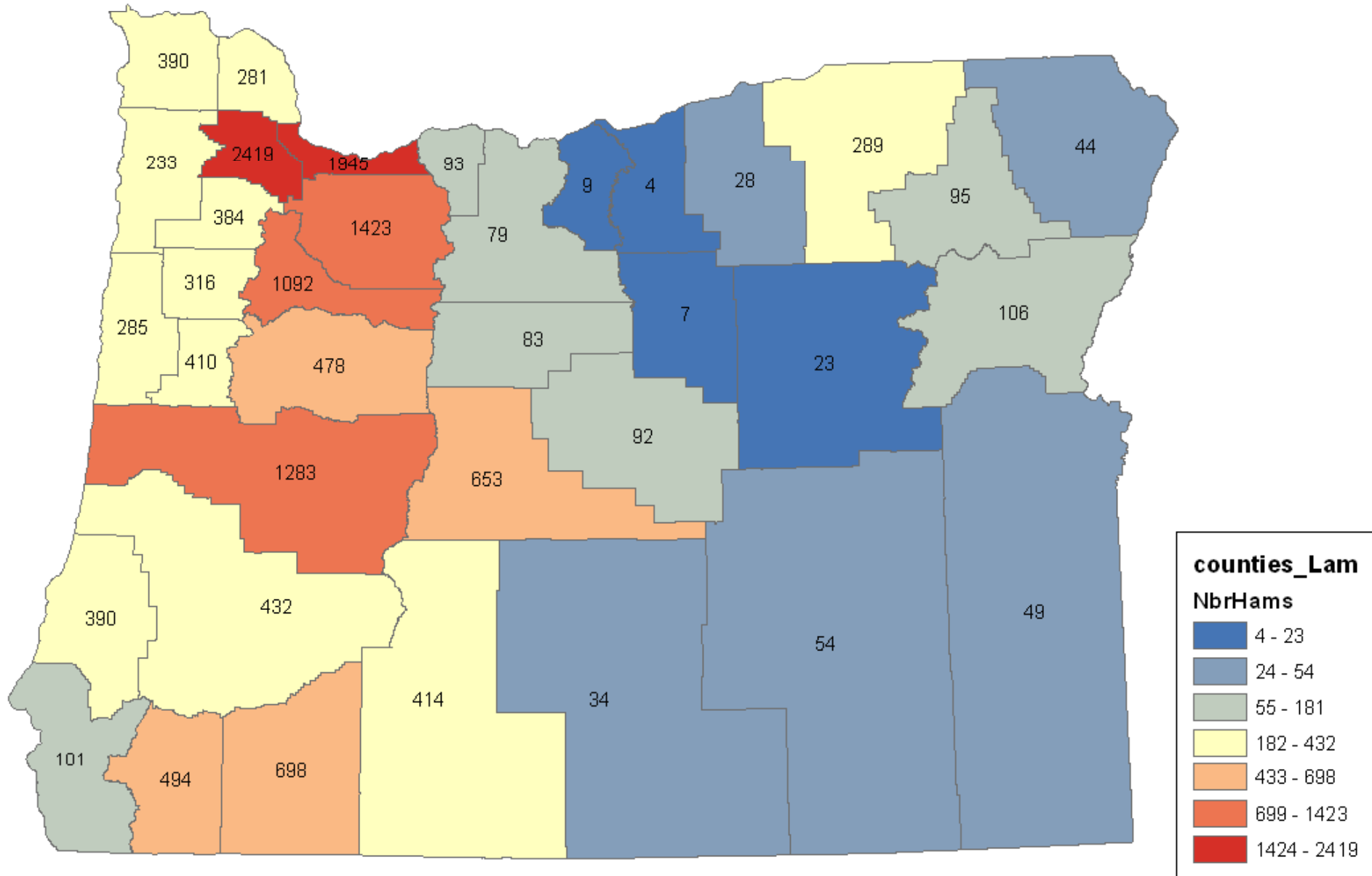
# Percent Deviation from US Average of Hams per Thousand



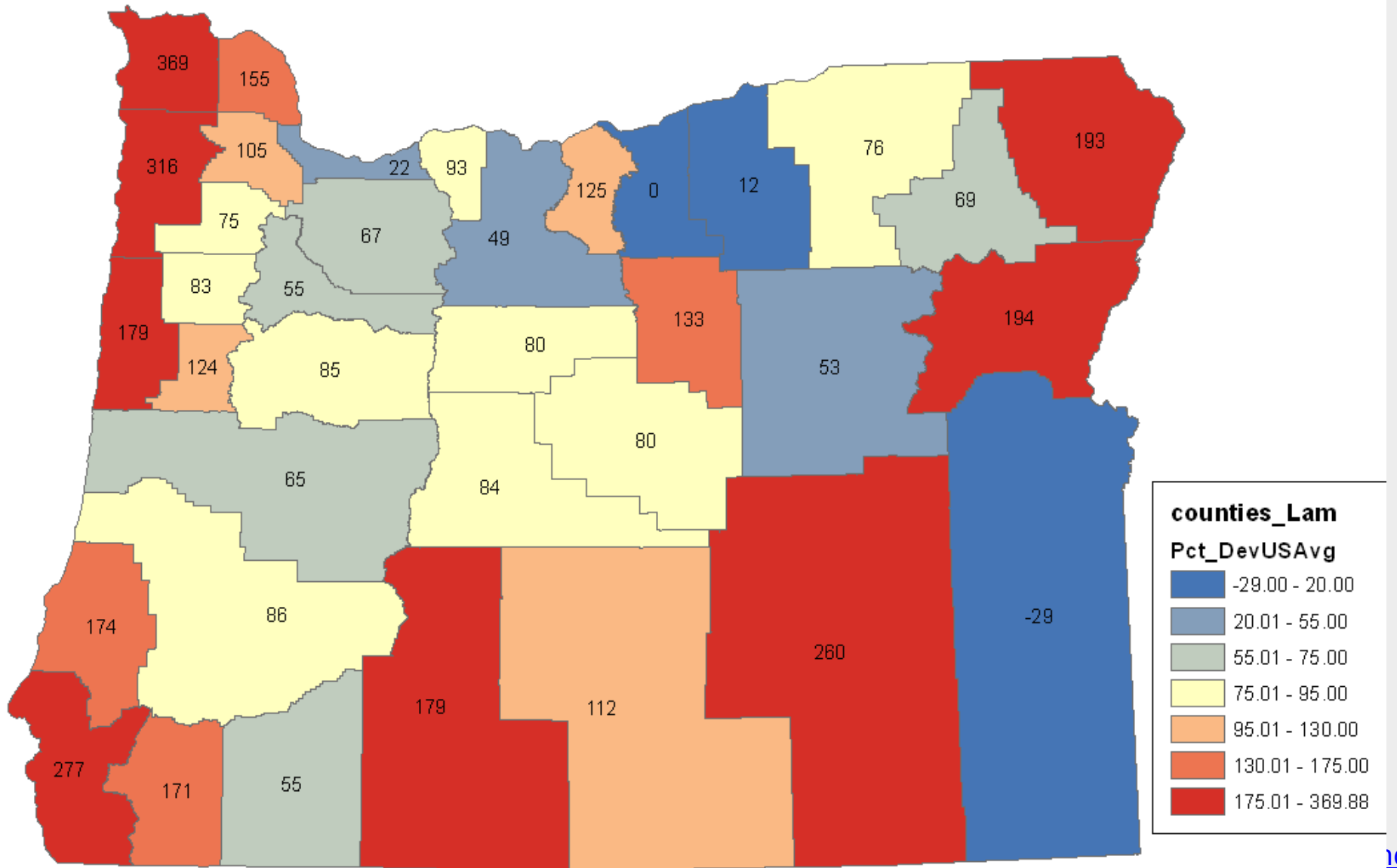
# Ham per Thousand



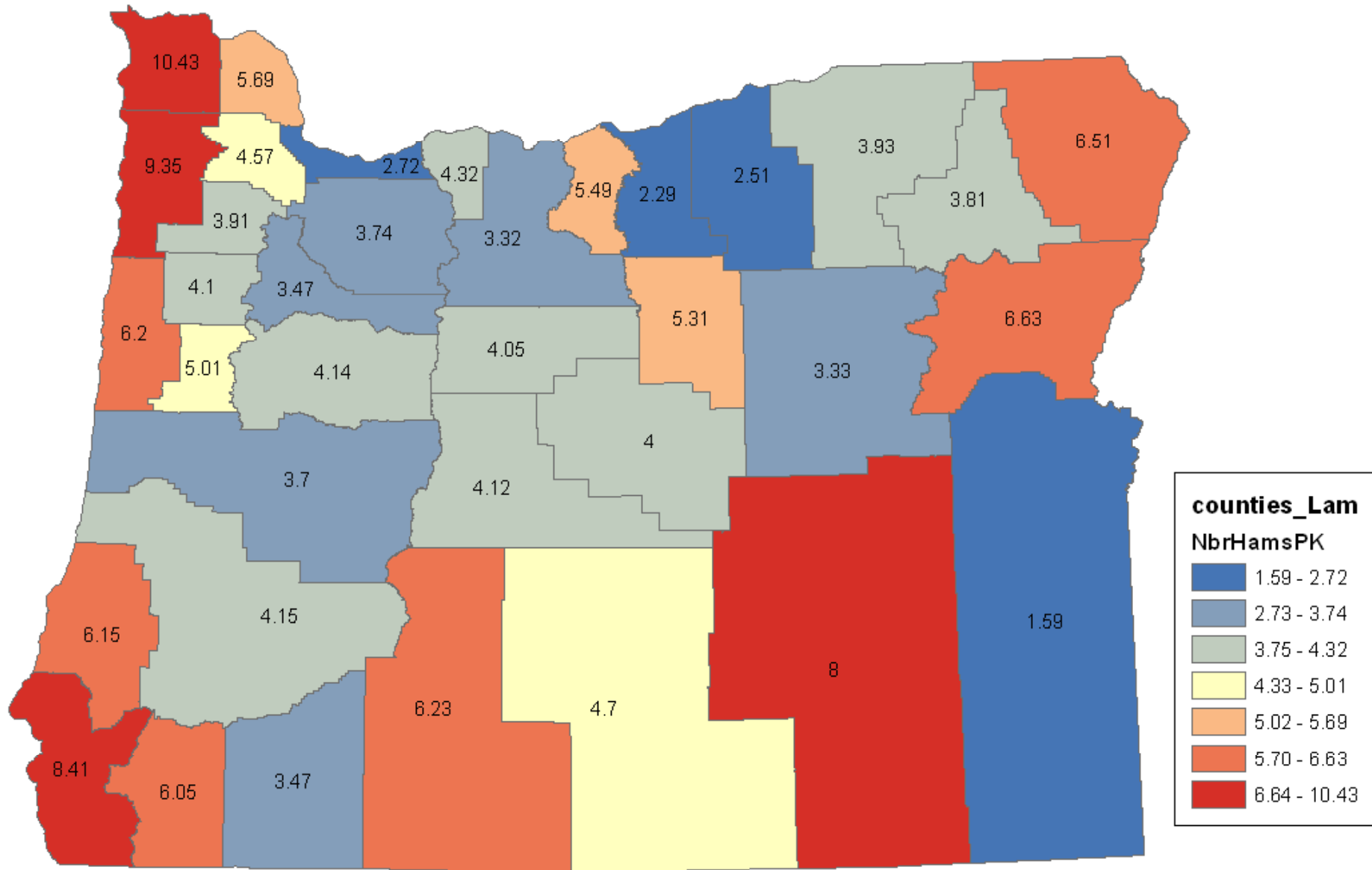
# Ham Population in County



# Percent Deviation from US Average of Hams per Thousand

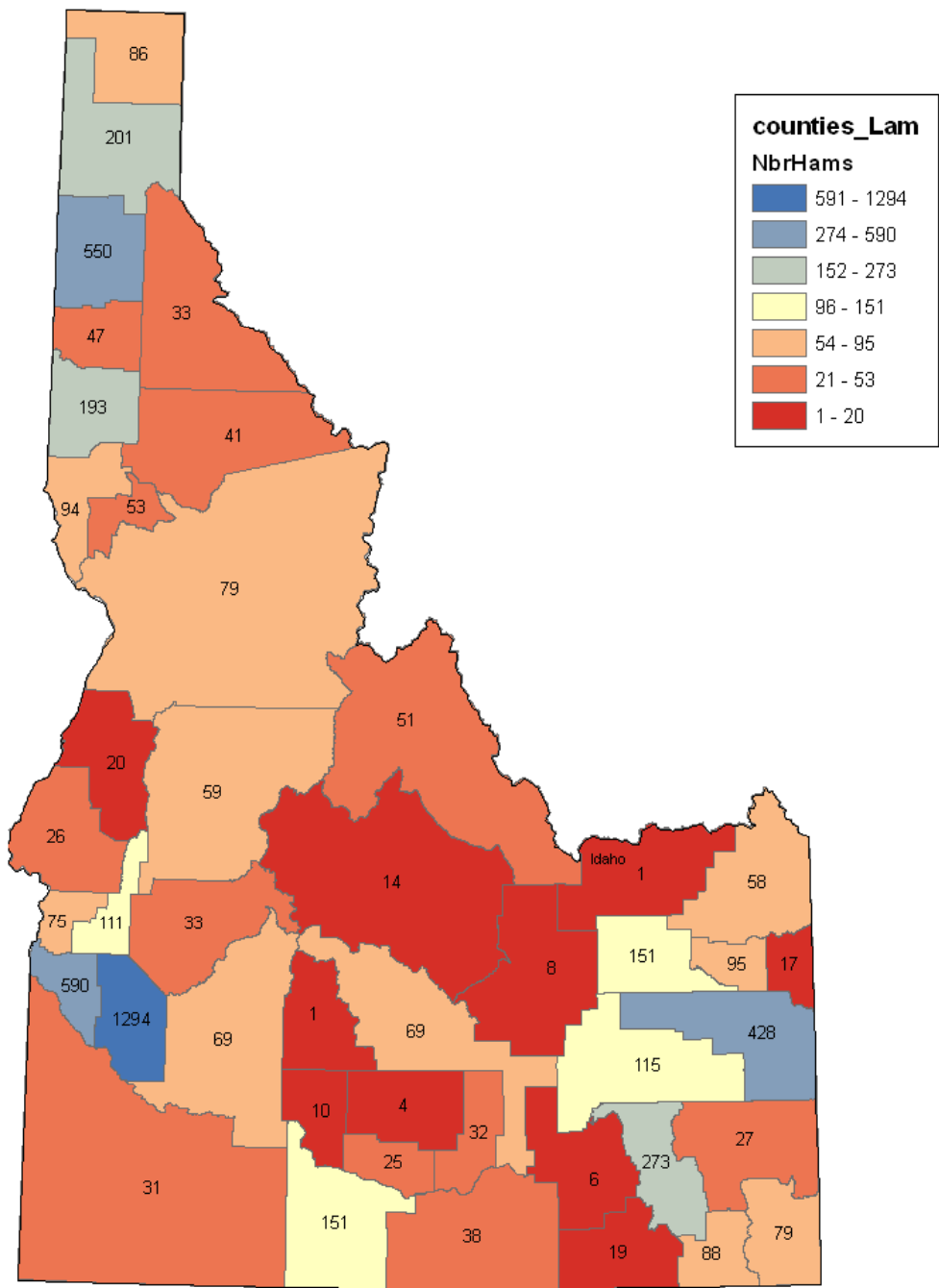


# Hams per Thousand

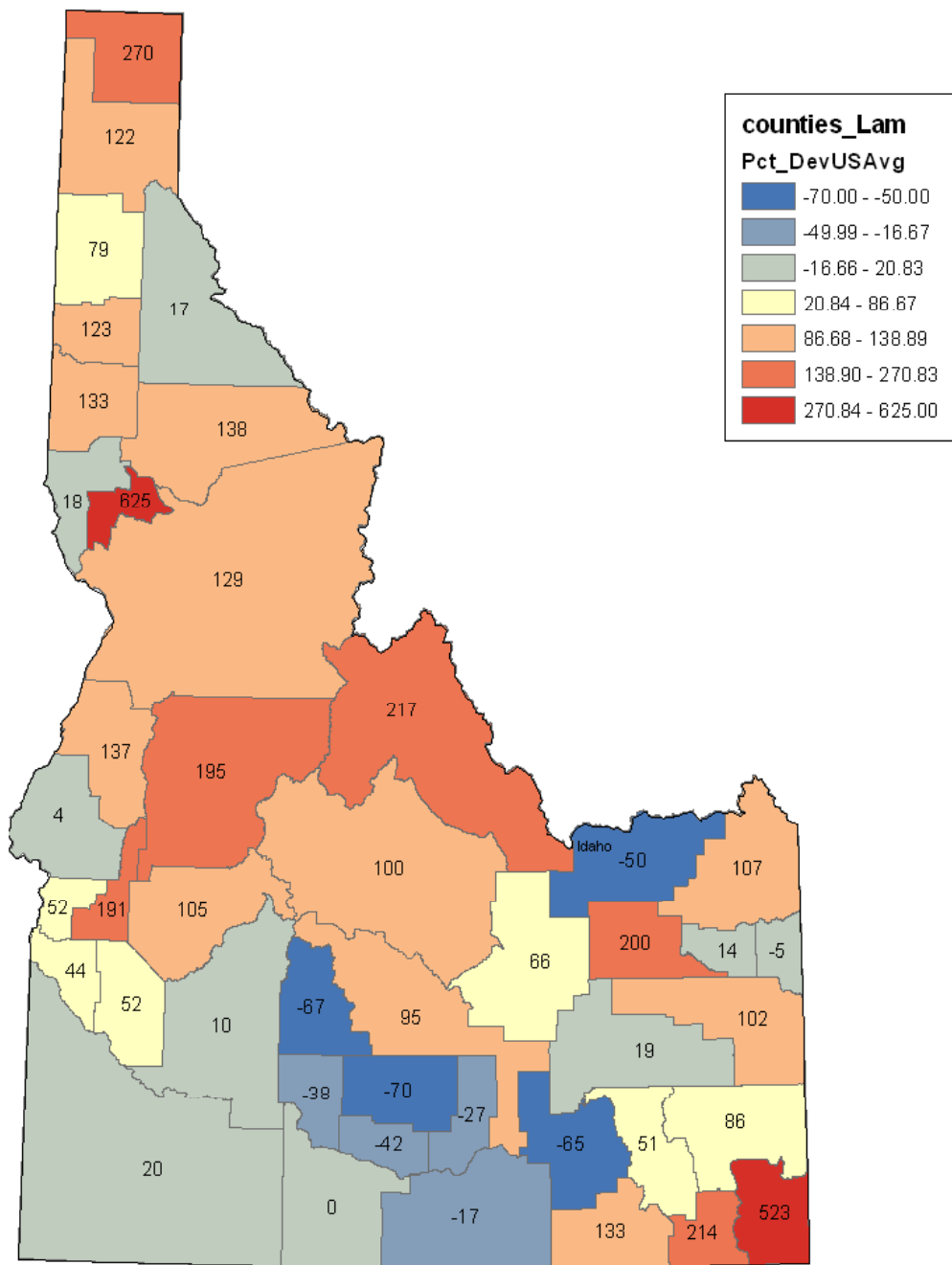




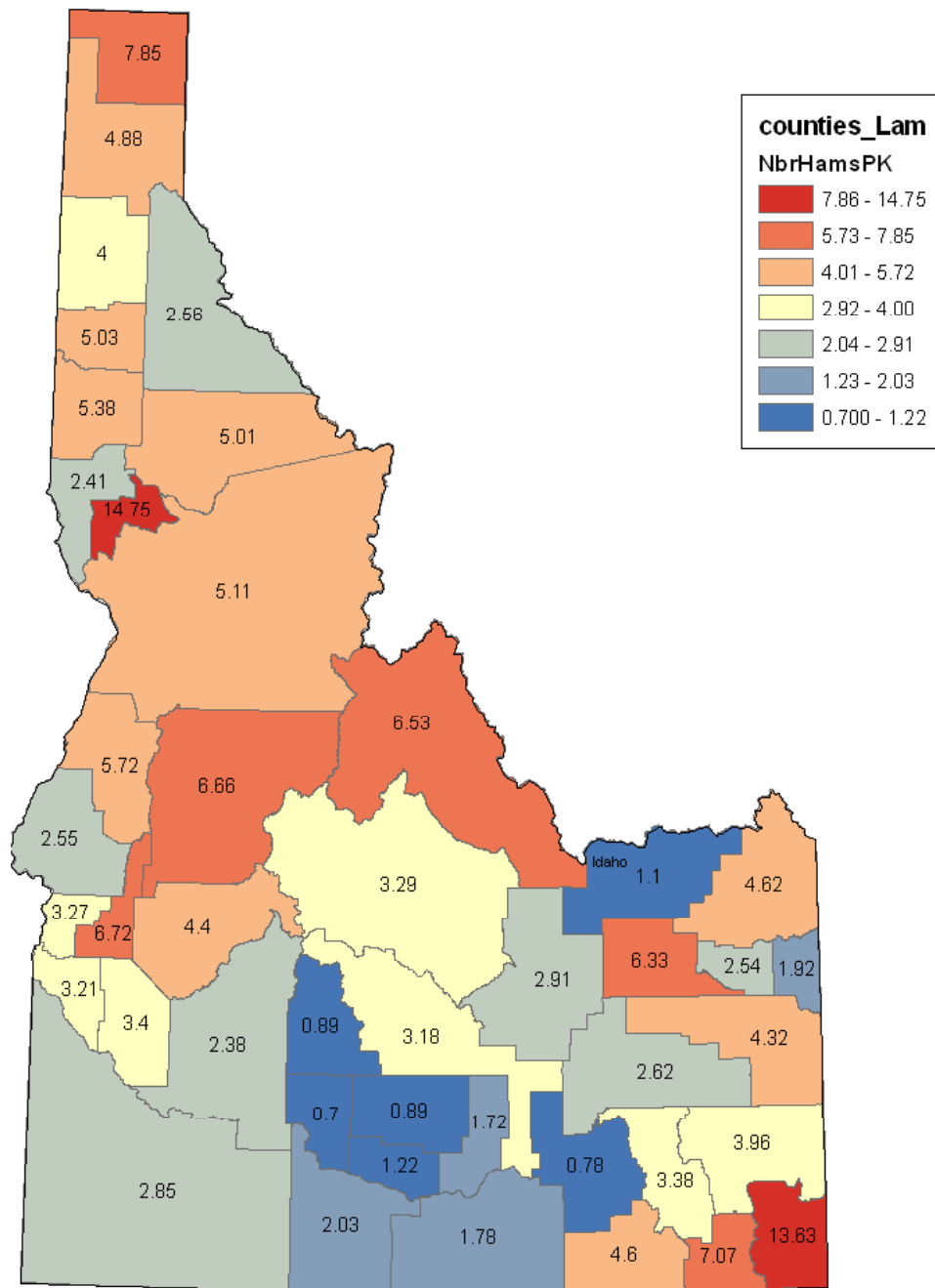
# Total Hams by County



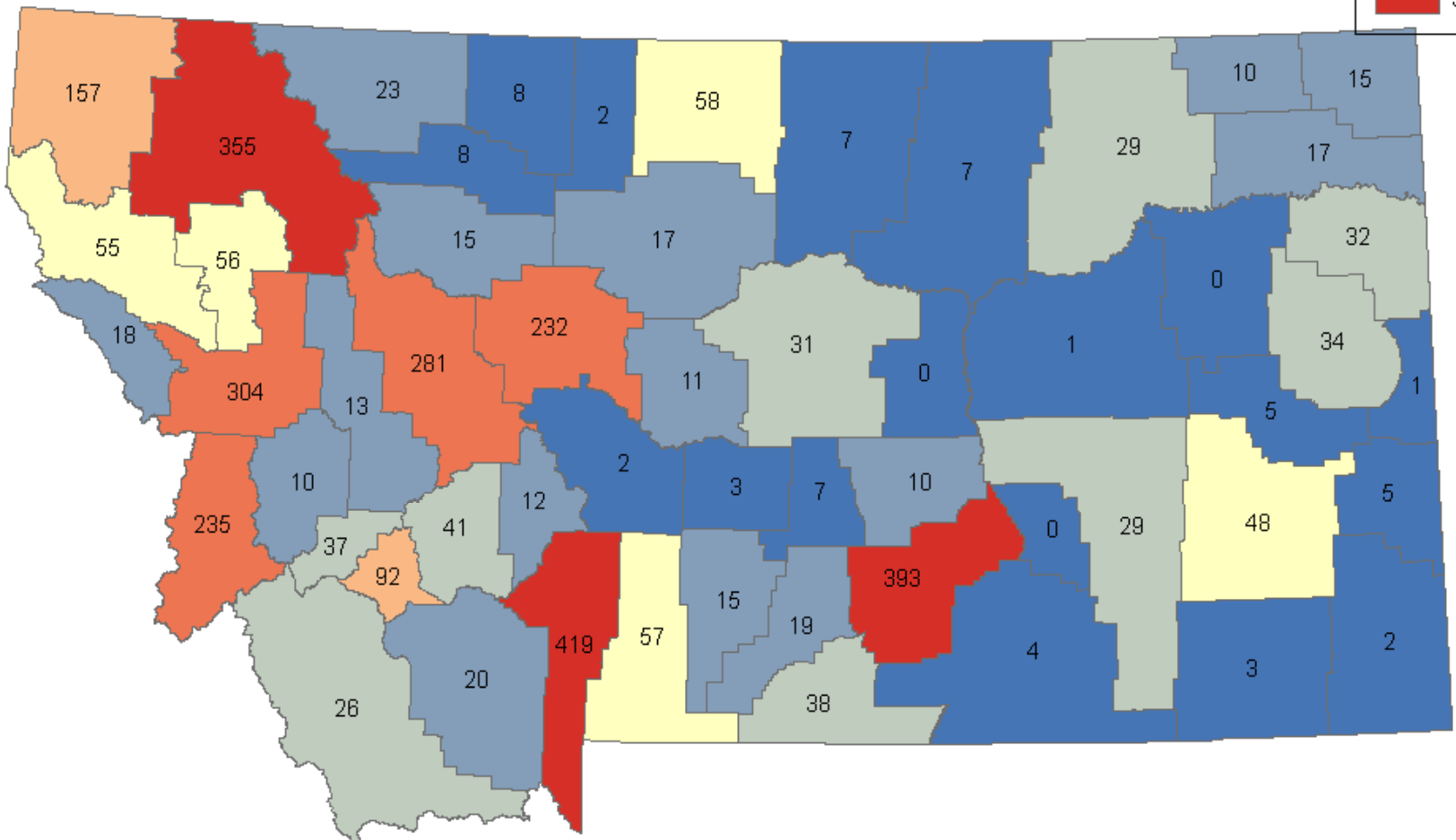
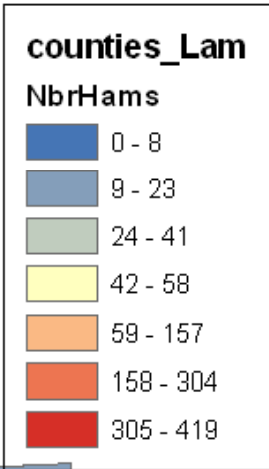
# Percent Deviation from US Average of Hams per Thousand



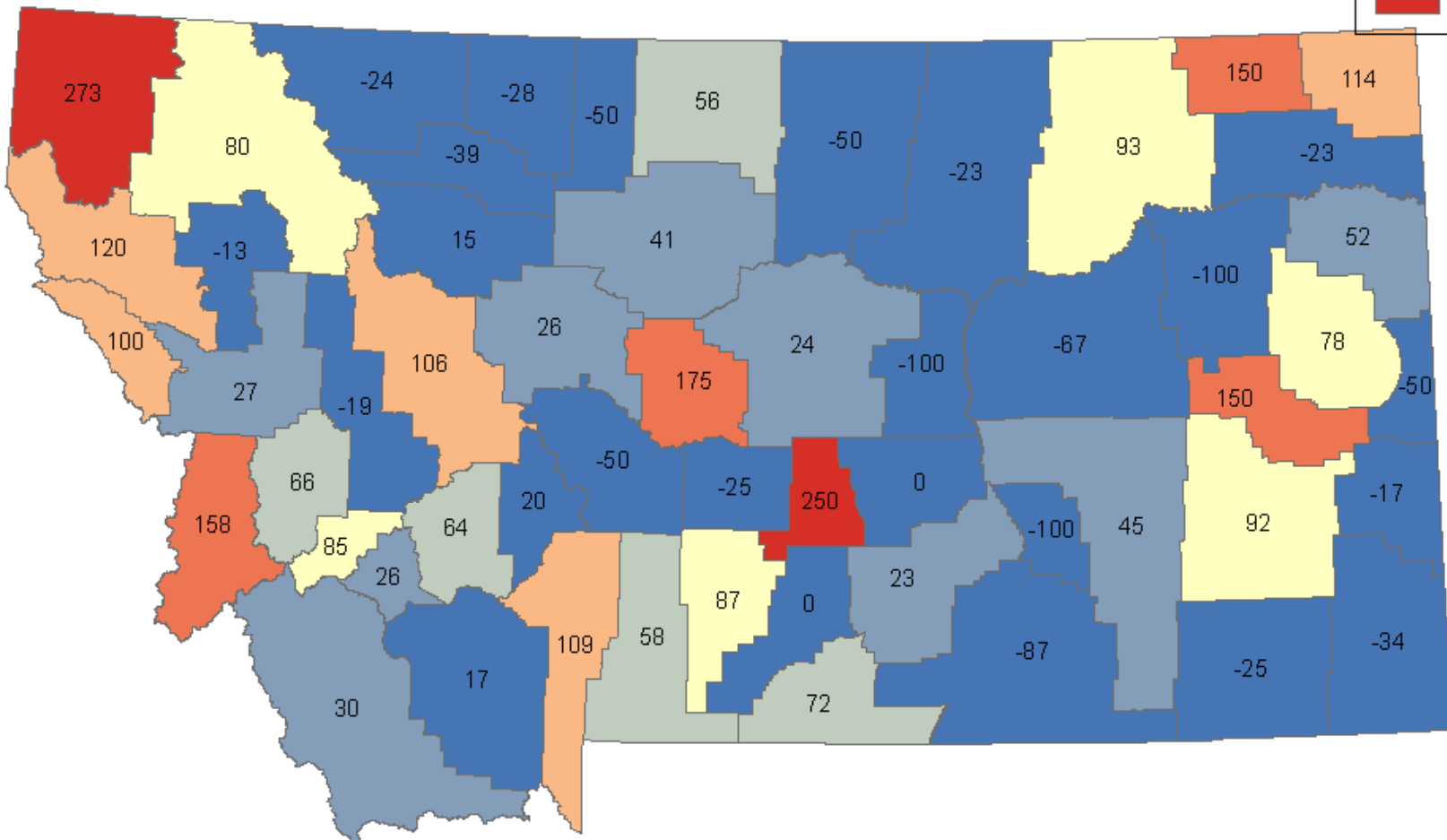
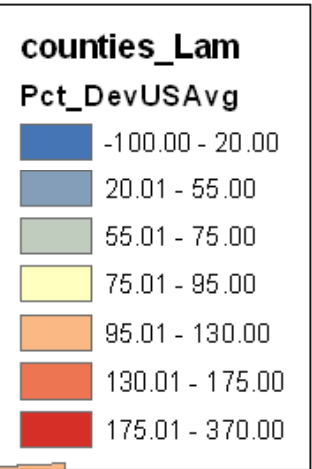
# Number of Hams per Thousand



# Total Hams in County



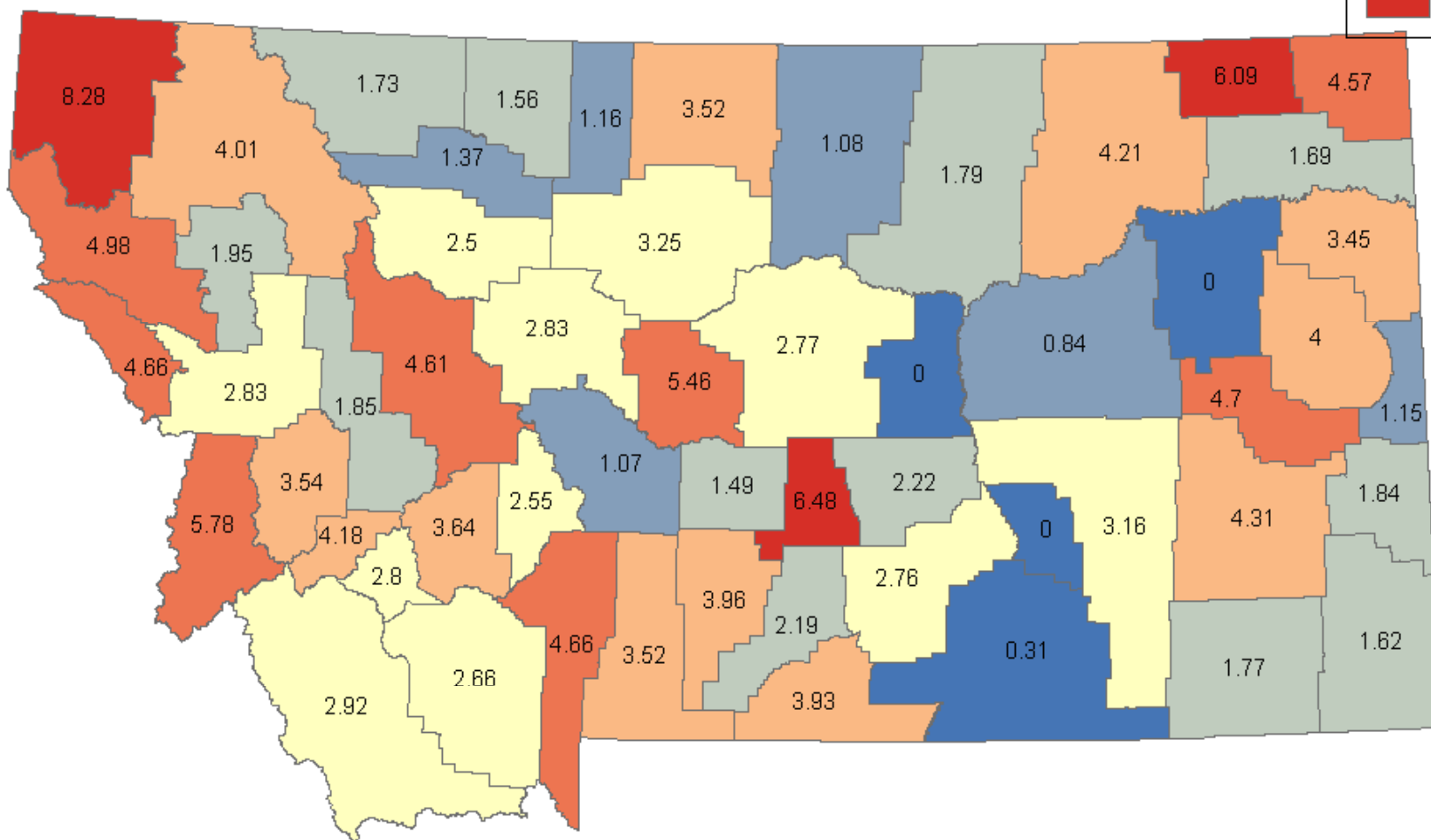
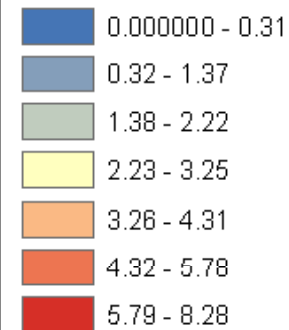
# Percent Deviation from US Average of Hams per Thousand



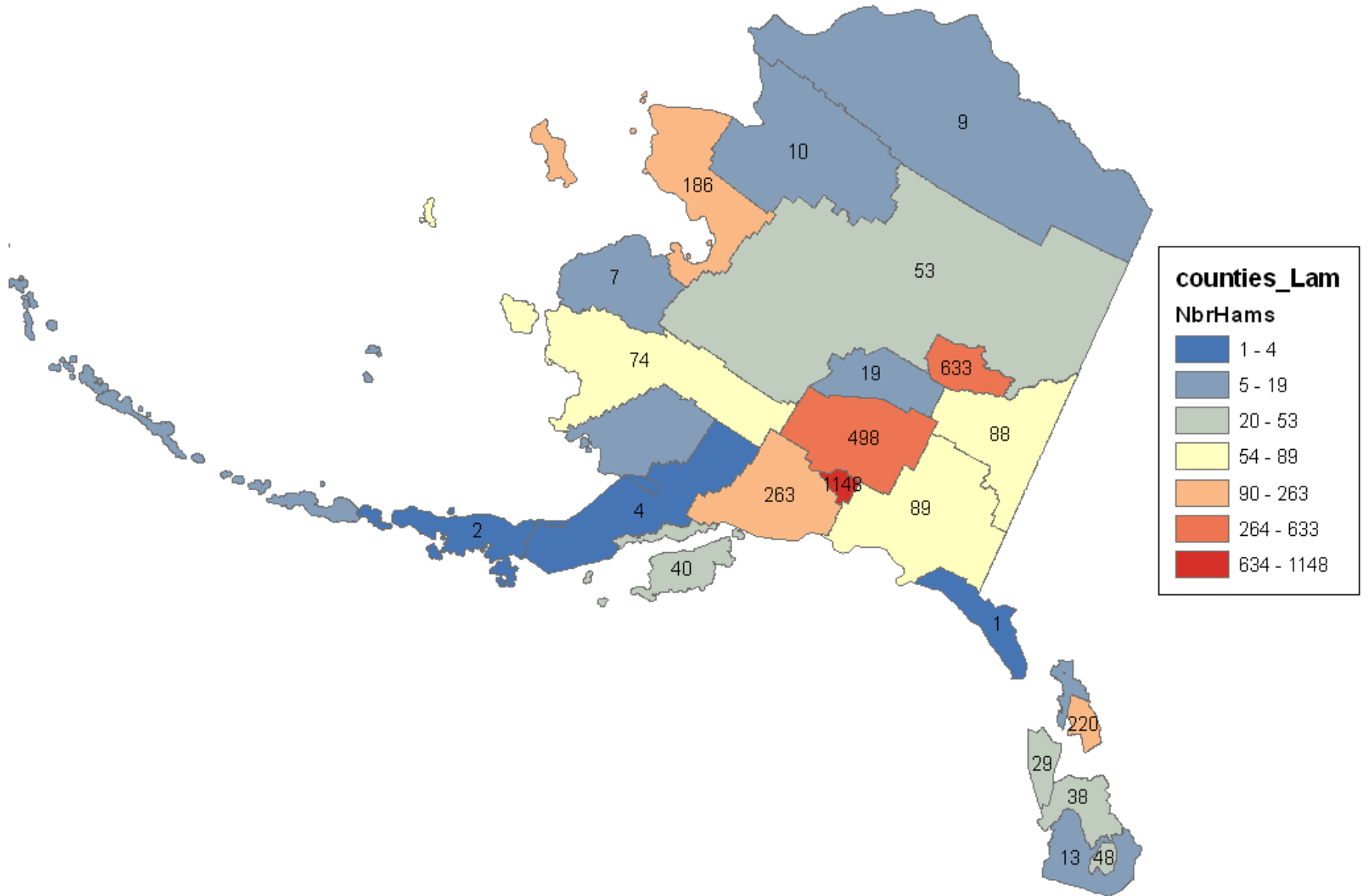
# Hams per Thousand

counties\_Lam

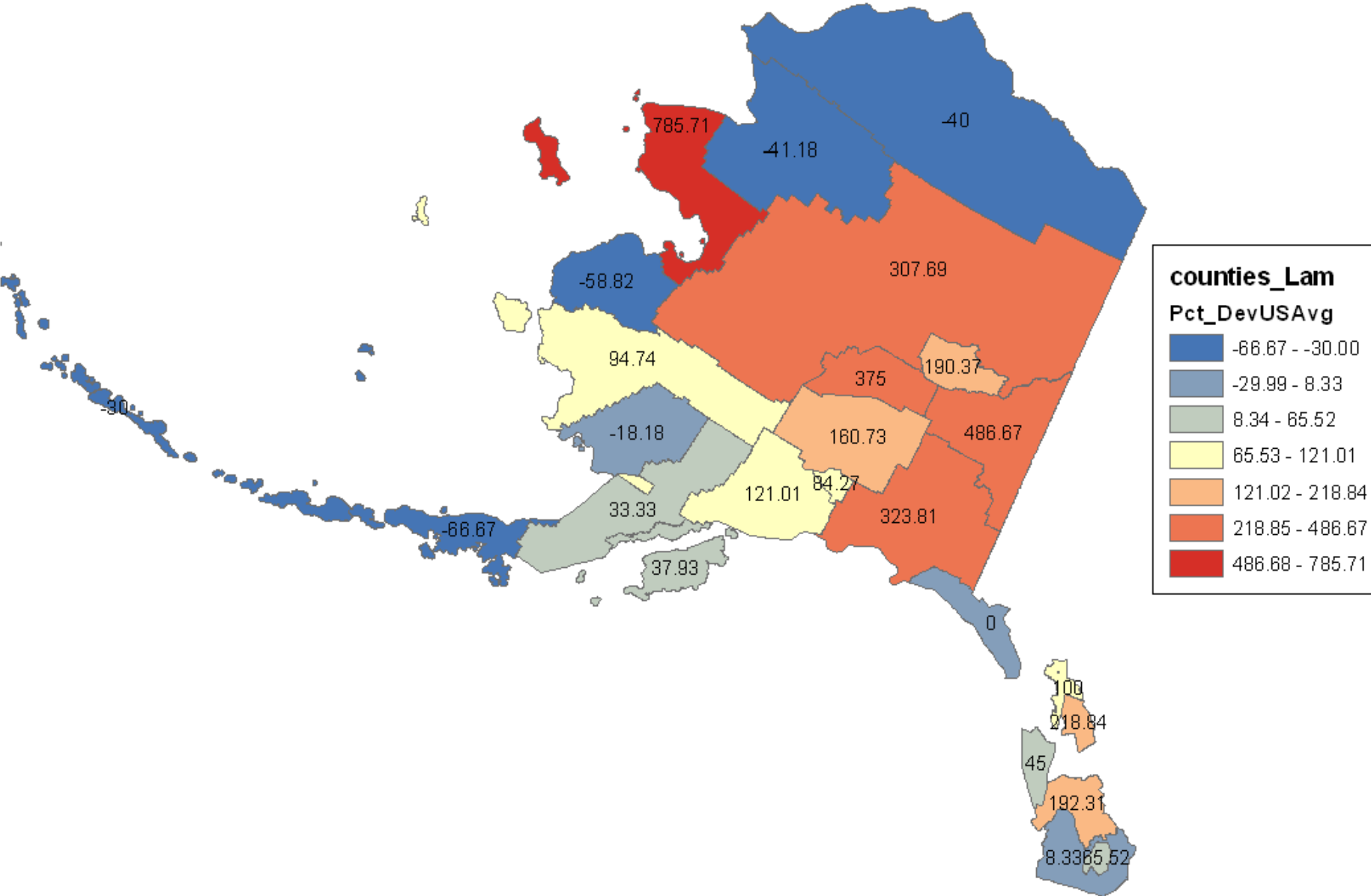
NbrHamsPK



# Total Hams in County

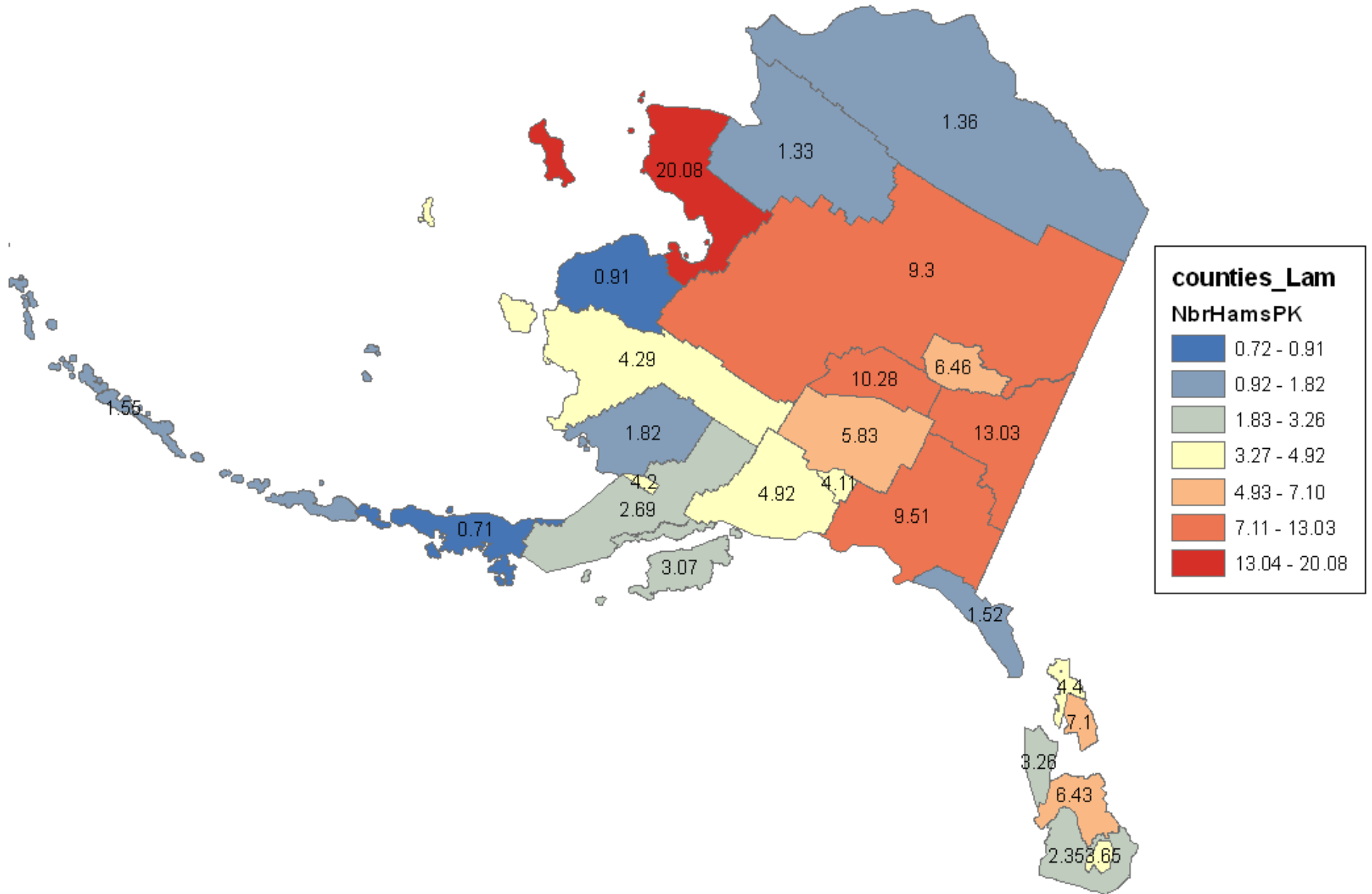


# Percent Deviation from US Average of Hams per Thousand





# Hams per Thousand



## Wrap-up

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- Ham populations are growing towards the previous high
- Ham populations vary somewhat with population, but are far from homogeneous
- Washington ham population is growing faster than most states
- Only 25 counties contain 18.7 percent of US hams

# Ham Population Predictions

- The US ham population will surpass the previous high in mid- to late-2010
- Washington recently moved ahead of New York to 5<sup>th</sup> place
- Washington will move ahead of Ohio to 4<sup>th</sup> place in late 2010 or early 2011
- Oregon will move ahead of Indiana to 15<sup>th</sup> place late in 2010
- Oregon could move to 14<sup>th</sup> or 13<sup>th</sup> place in 2011 with an increase in ham classes throughout the state

