

Ham Demographics

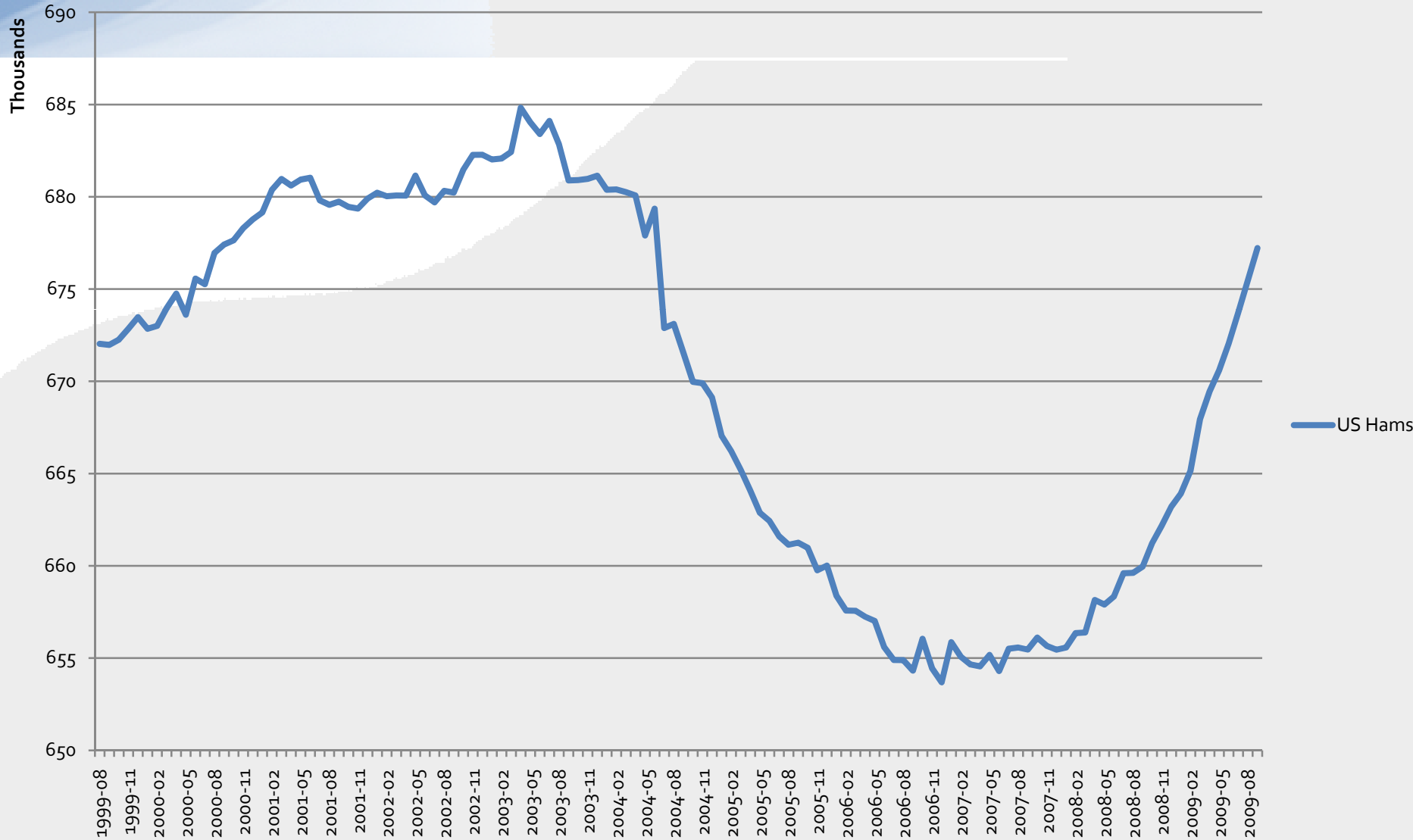
Where the hams are... and aren't
Delvin R. Bunton, N7QMT

- 
- Demographics: the study of population characteristics

Data sources

- www.ah0a.org for monthly ham populations by state, ARRL section and division
- FCC license data download on Oct 11, 2009 from <http://wireless.fcc.gov/>

US Ham Population



Data from AH0A.org

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

- Increases:

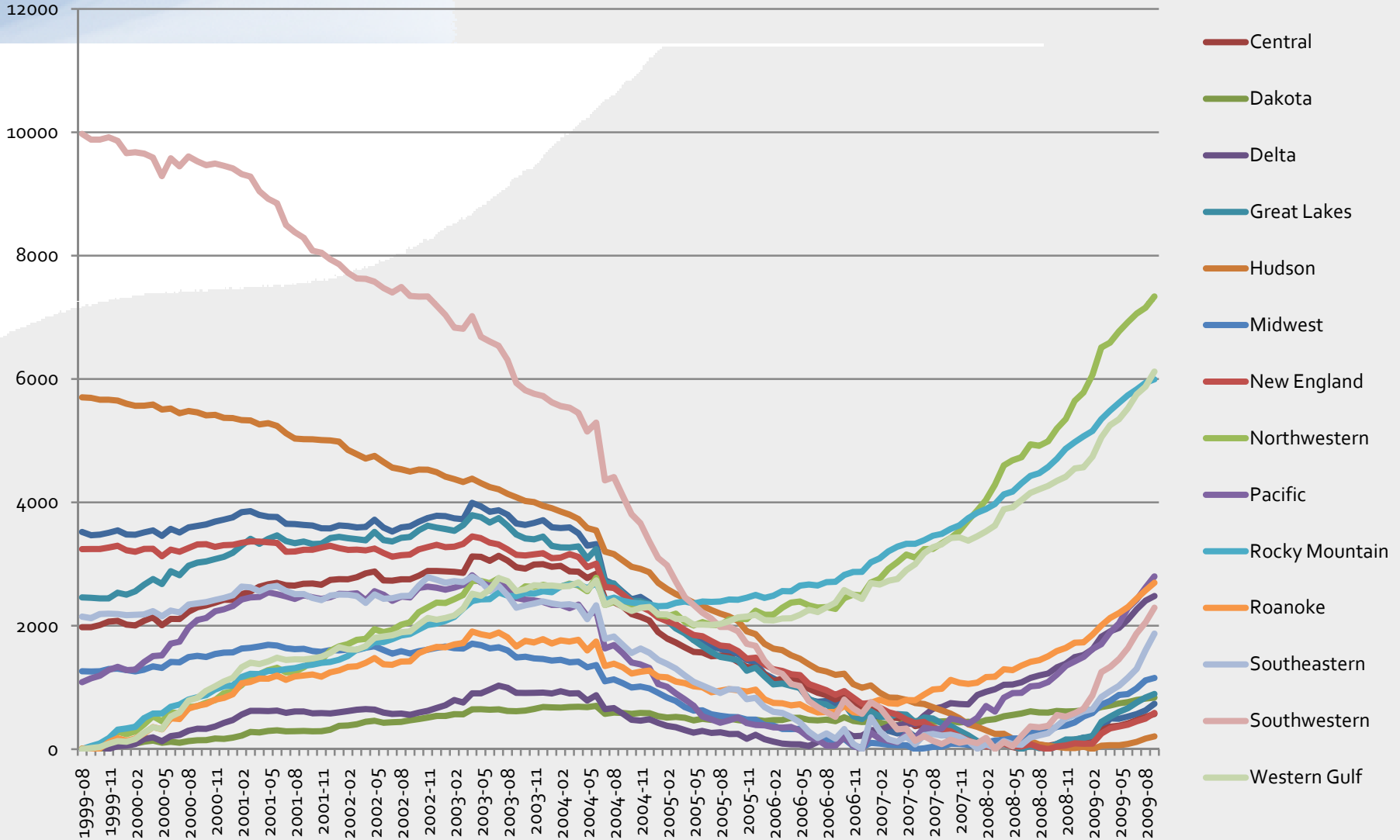
- Rocky Mountain
- Northwest
- Western Gulf

- Big Losers:

- Hudson
- Southwestern
- New England

ARRL Division Ham Population Changes

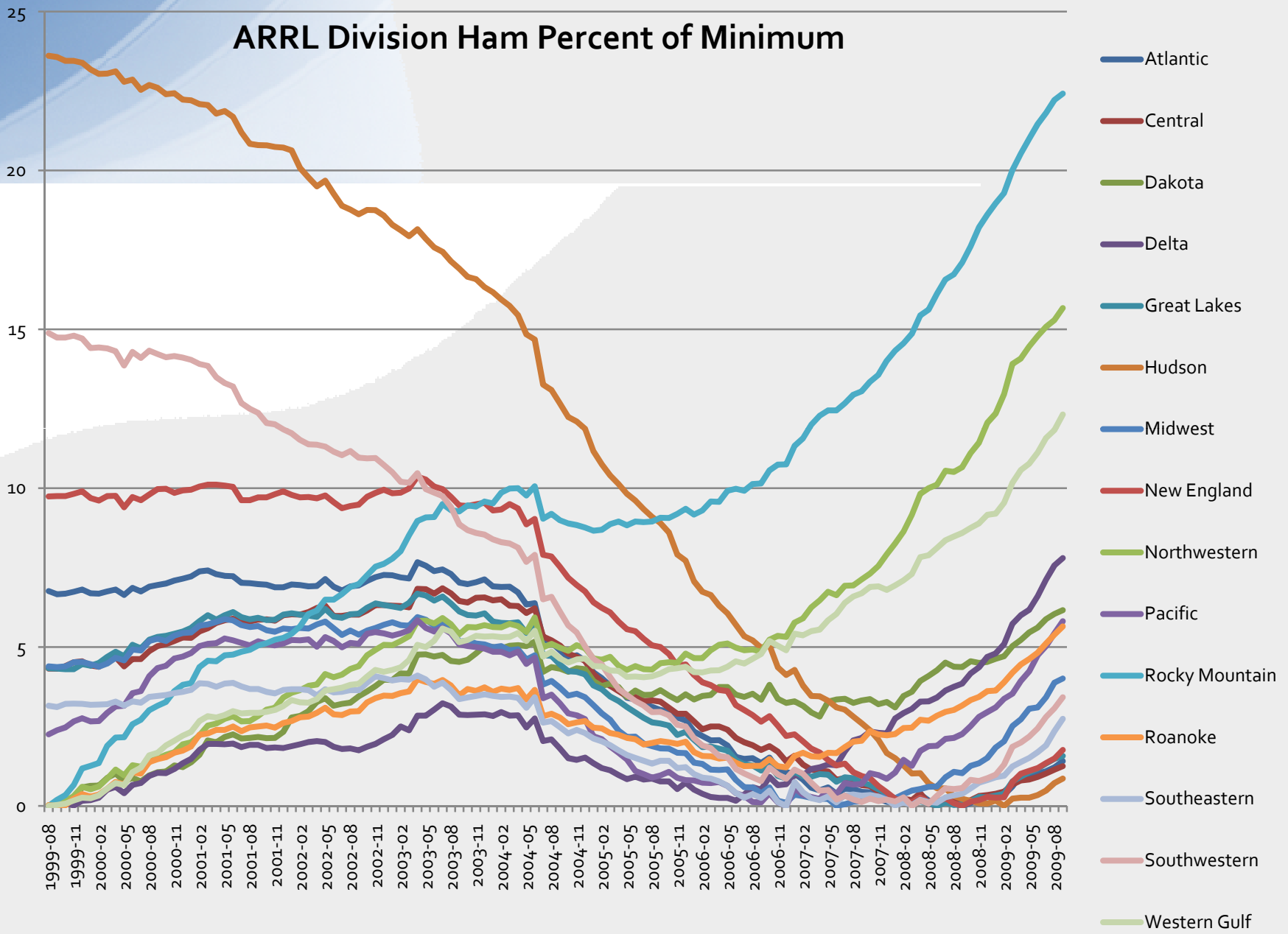
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Data from AH0A.org

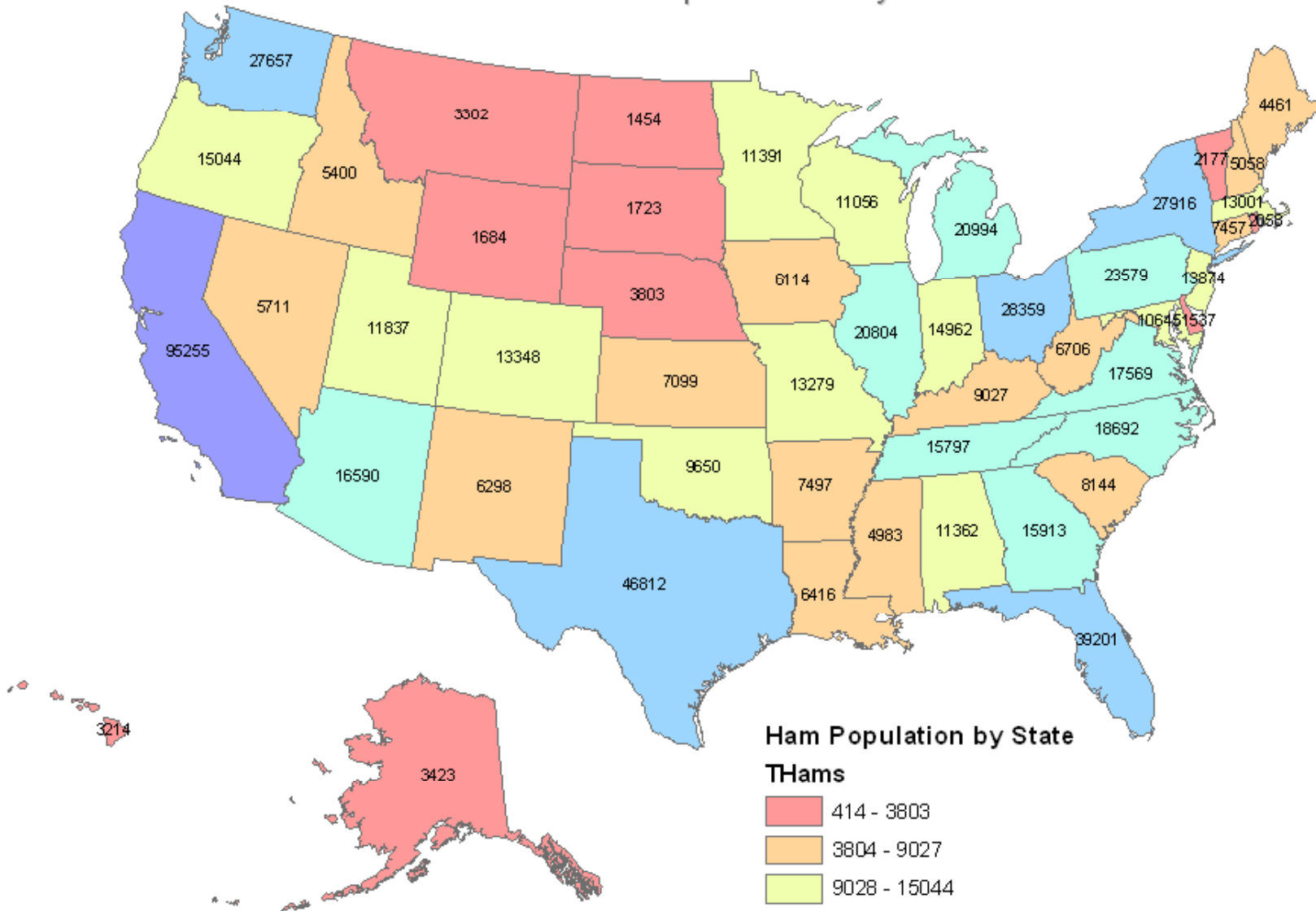
ARRL Division Ham Percent of Minimum

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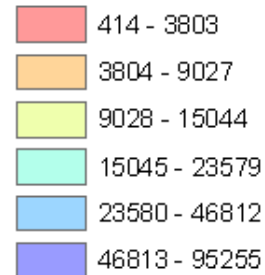
Data from AHQA.org

Ham Population by State



Ham Population by State

THams

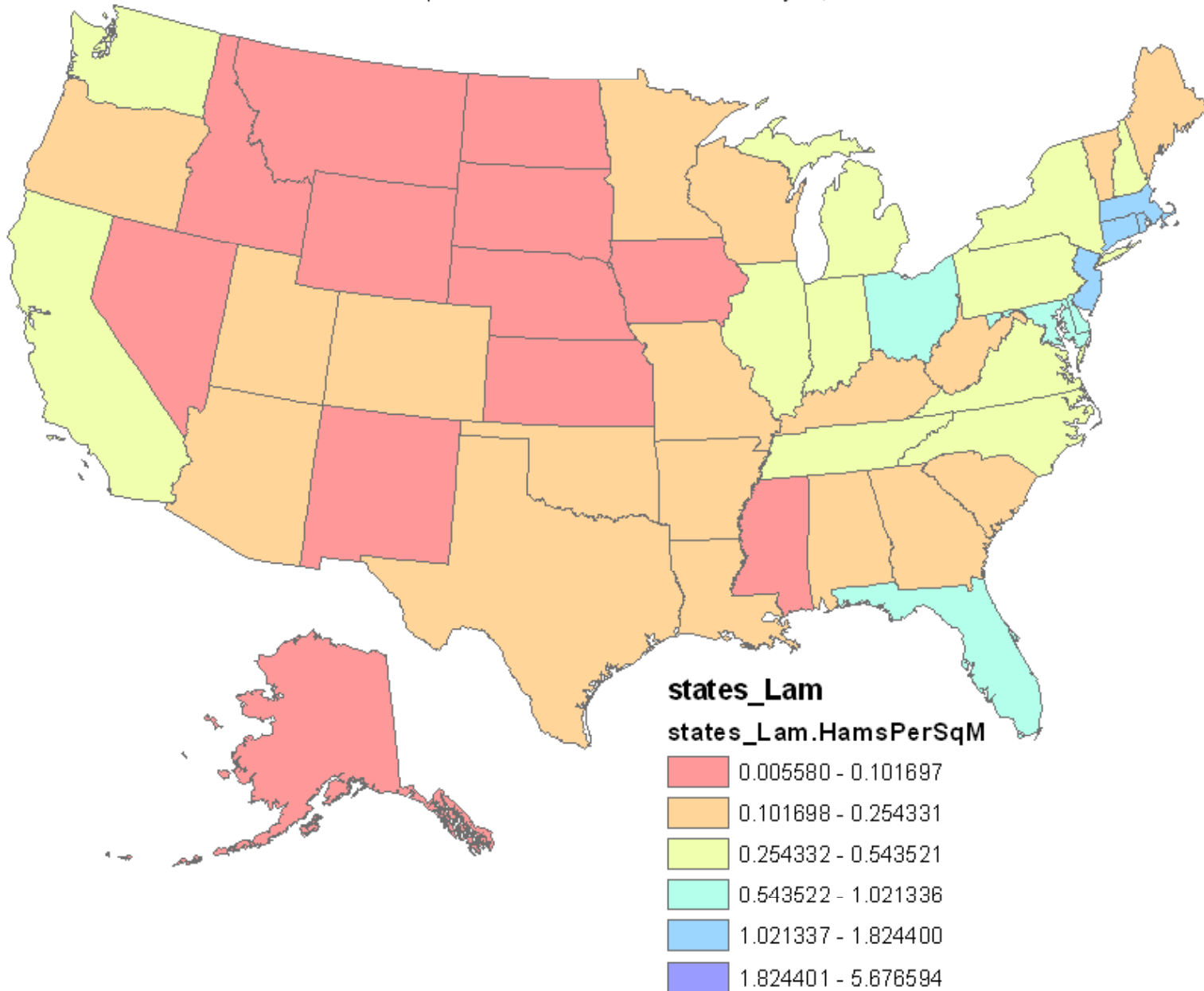


General population based on 2008 US Census estimates.
Ham populations based on FCC data extract of October 11, 2009

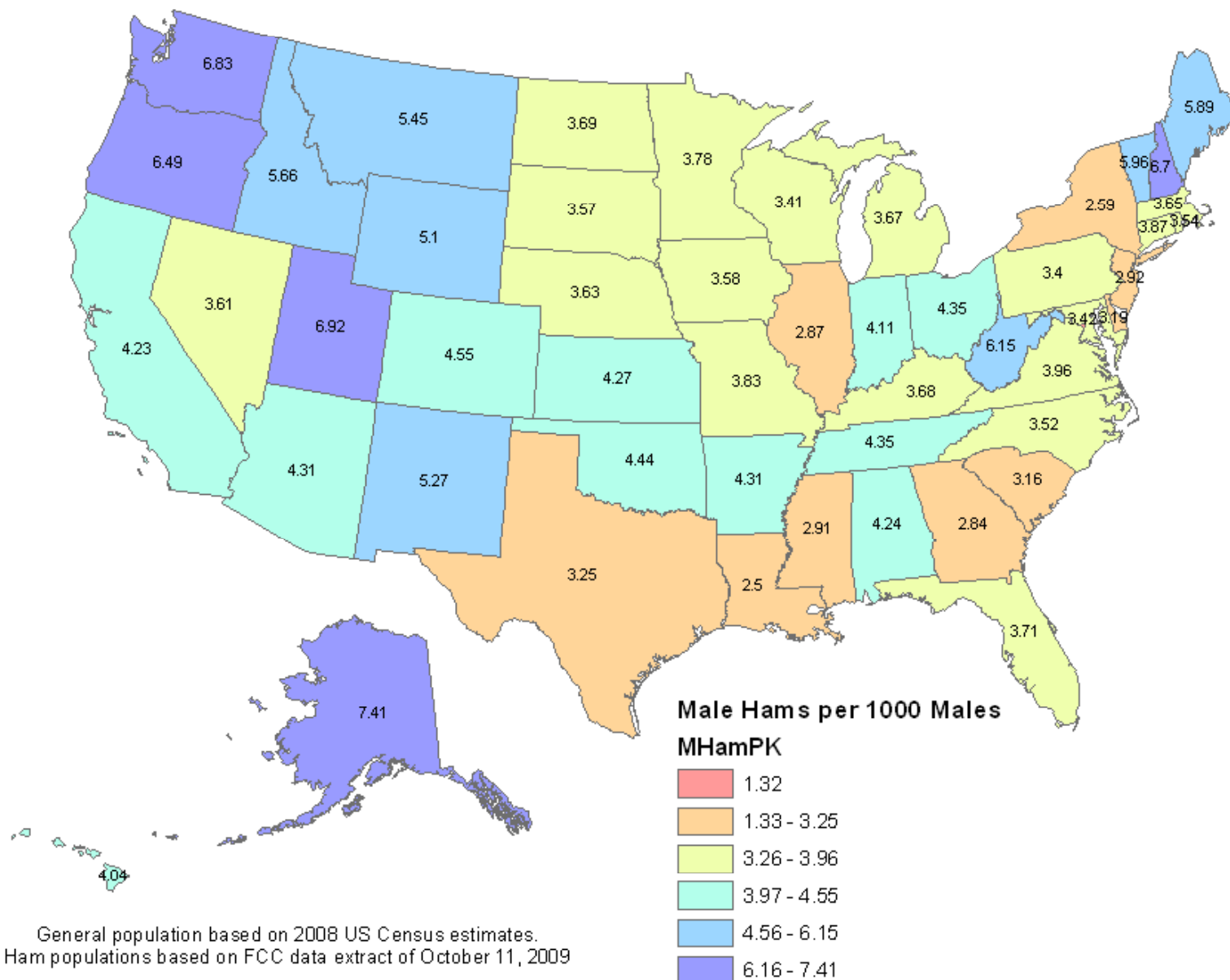
Value in each state shows the ham population.

Hams per Square Mile

Map based on data retrieved from FCC May 10, 2009

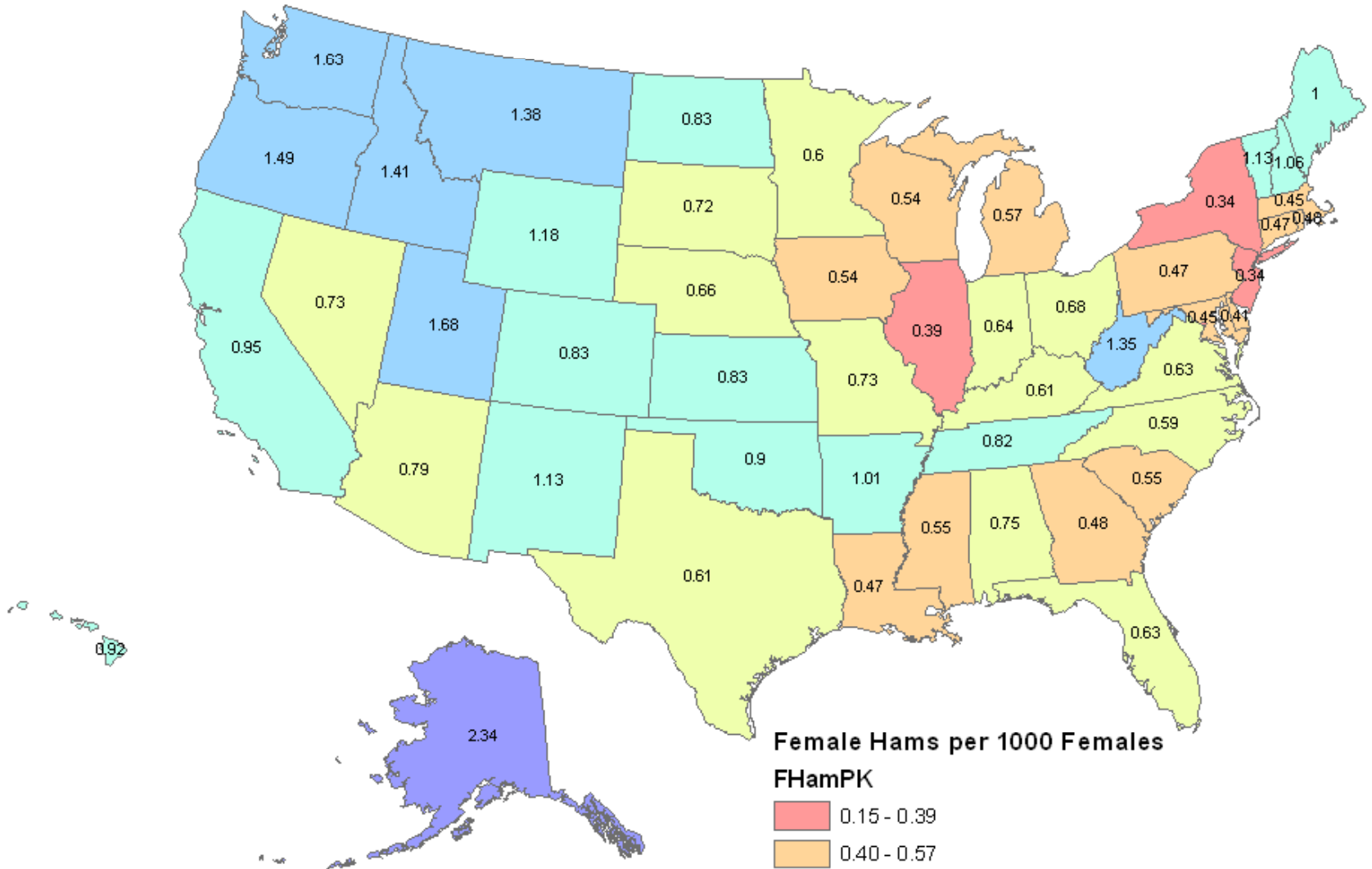


Male Hams per Thousand Males in General Population

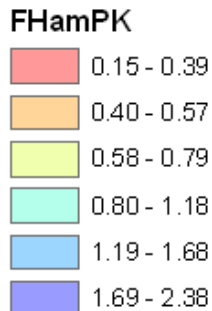


General population based on 2008 US Census estimates.
Ham populations based on FCC data extract of October 11, 2009

Female Hams per Thousand Females in General Population

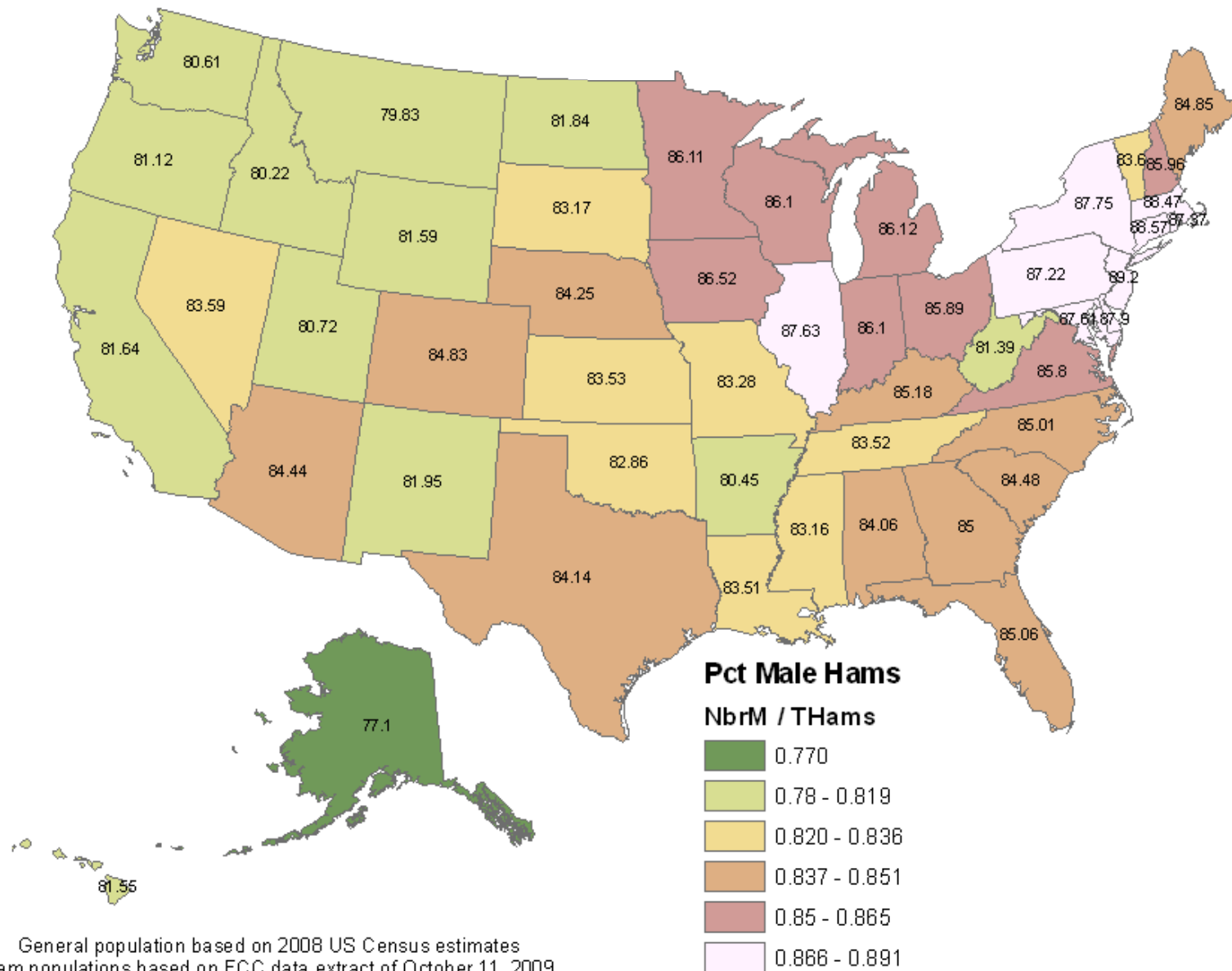


Female Hams per 1000 Females



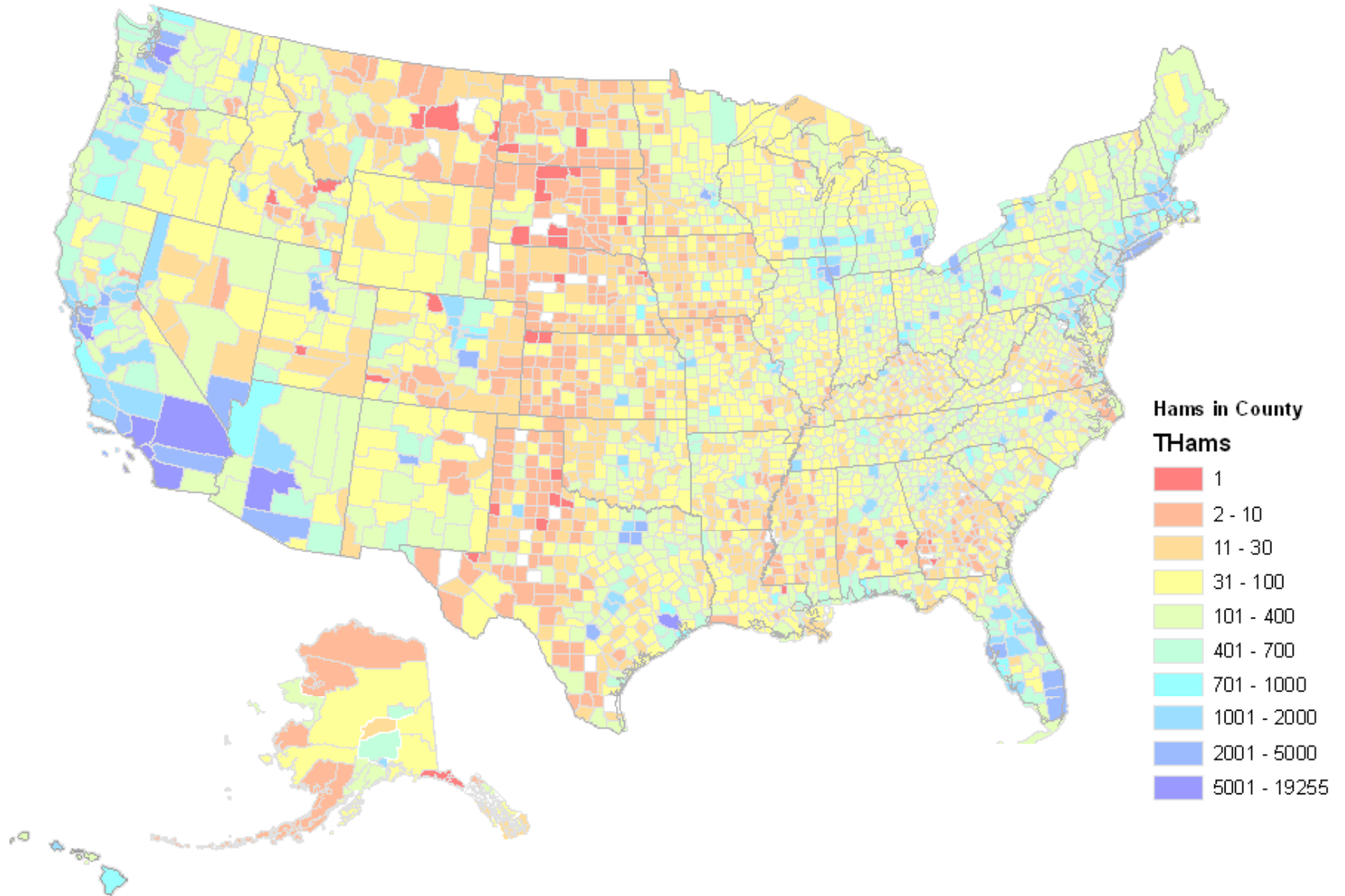
General population based on 2008 US Census estimates.
 Ham populations based on FCC data extract of October 11, 2009

Percent Male Hams



General population based on 2008 US Census estimates
Ham populations based on FCC data extract of October 11, 2009

Number of hams in counties



General population based on 2008 US Census estimates.
Ham populations based on FCC data extract of October 11, 2009.

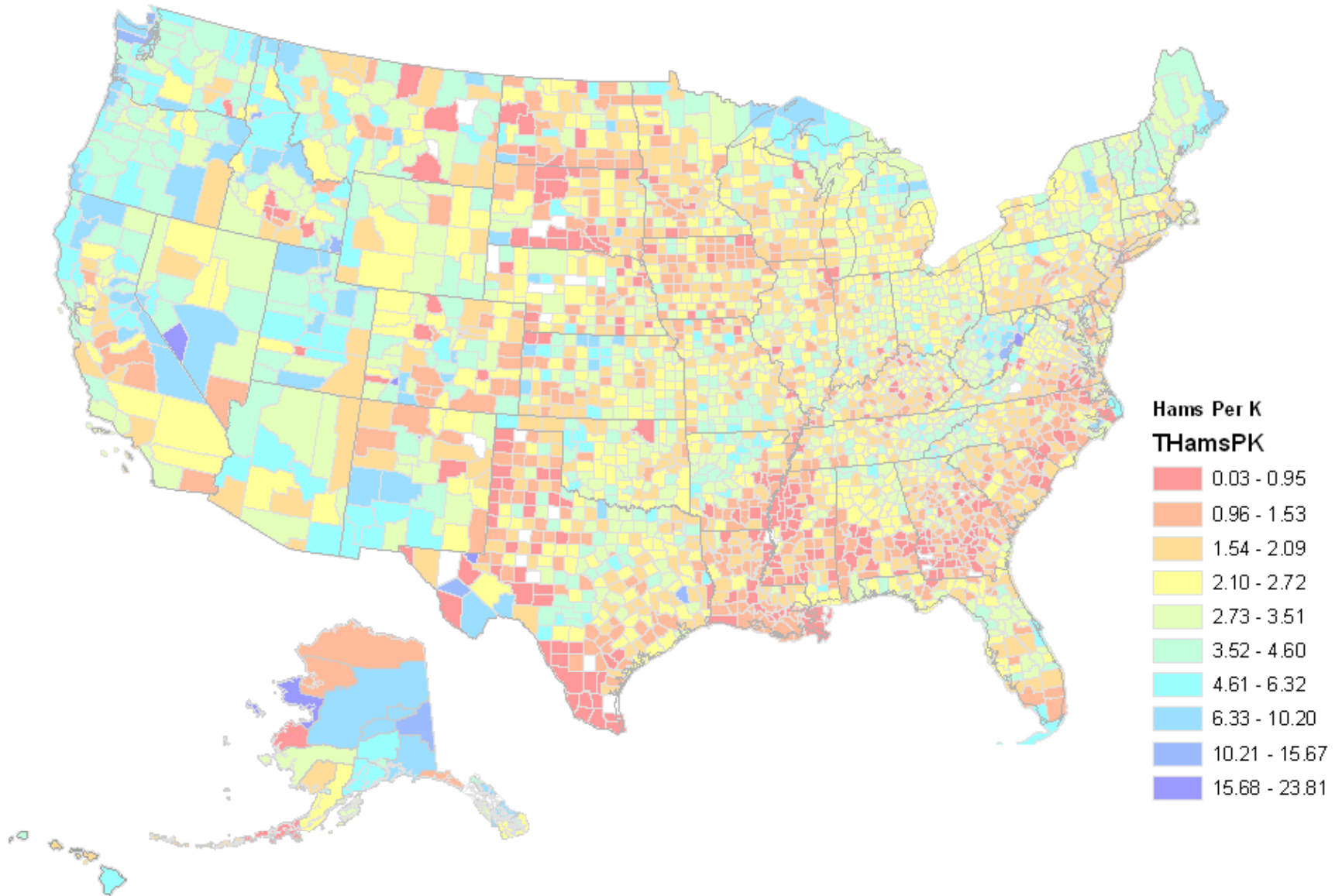
Top 25 counties: 18.68 percent of US hams

| County | Nbr Hams | | County | Nbr Hams |
|--------------------|----------|--|----------------|----------|
| CA, Los Angeles | 19,255 | | UT, Salt Lake | 3,628 |
| CA, Orange | 9,595 | | MA, Middlesex | 3,490 |
| AZ, Maricopa | 8,359 | | UT, Utah | 3,037 |
| CA, San Diego | 8,316 | | AZ, Pima | 3,005 |
| WA, King | 8,158 | | CA, San Mateo | 2,736 |
| CA, Santa Clara | 6,887 | | MA, Suffolk | 2,728 |
| TX, Harris | 5,399 | | WA, Snohomish | 2,708 |
| CA, San Bernardino | 5,244 | | CA, Sacramento | 2,703 |
| CA, Riverside | 4,775 | | WA, Pierce | 2,702 |
| IL, Cook | 4,648 | | CA, Ventura | 2,661 |
| TX, Dallas | 3,969 | | FL, Brevard | 2,655 |
| TX, Tarrant | 3,891 | | NV, Clark | 2,652 |
| CA, Alameda | 3,793 | | | |

29 counties with zero hams

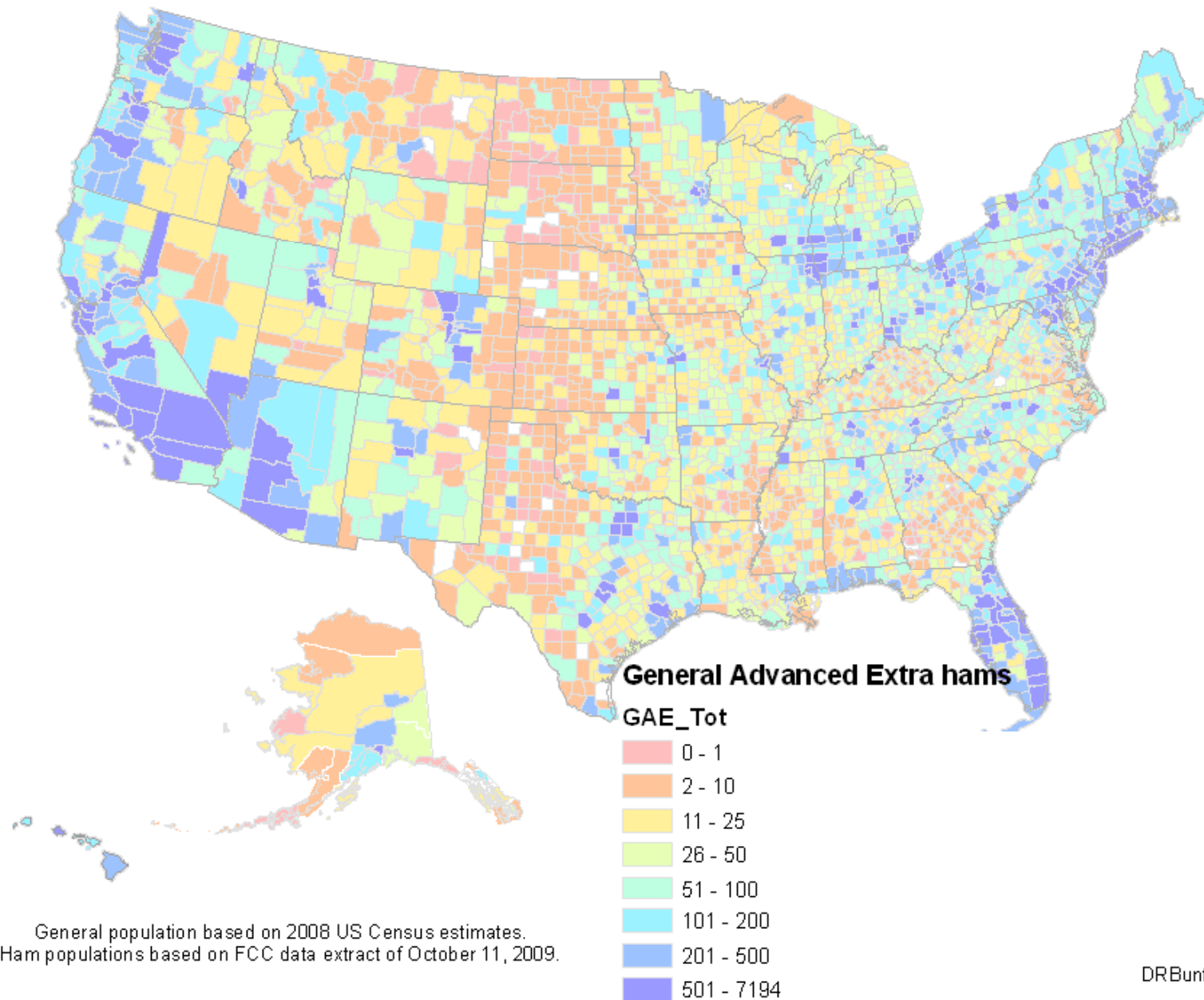
- **GA** (Calhoun, Clay, Echols, Miller, Taliaferro)
- **HI** (Kalawao)
- **LA** (East Carroll)
- **MS** (Issaquena)
- **MT** (McCone, Treasure)
- **NE** (Arthur, Blaine, Hayes, Loup, McPherson, Sioux, Wheeler)
- **NM** (Harding)
- **SD** (Jackson, Jones)
- **TX** (Borden, Culbertson, Glasscock, Irion,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

Number of hams per thousand in counties



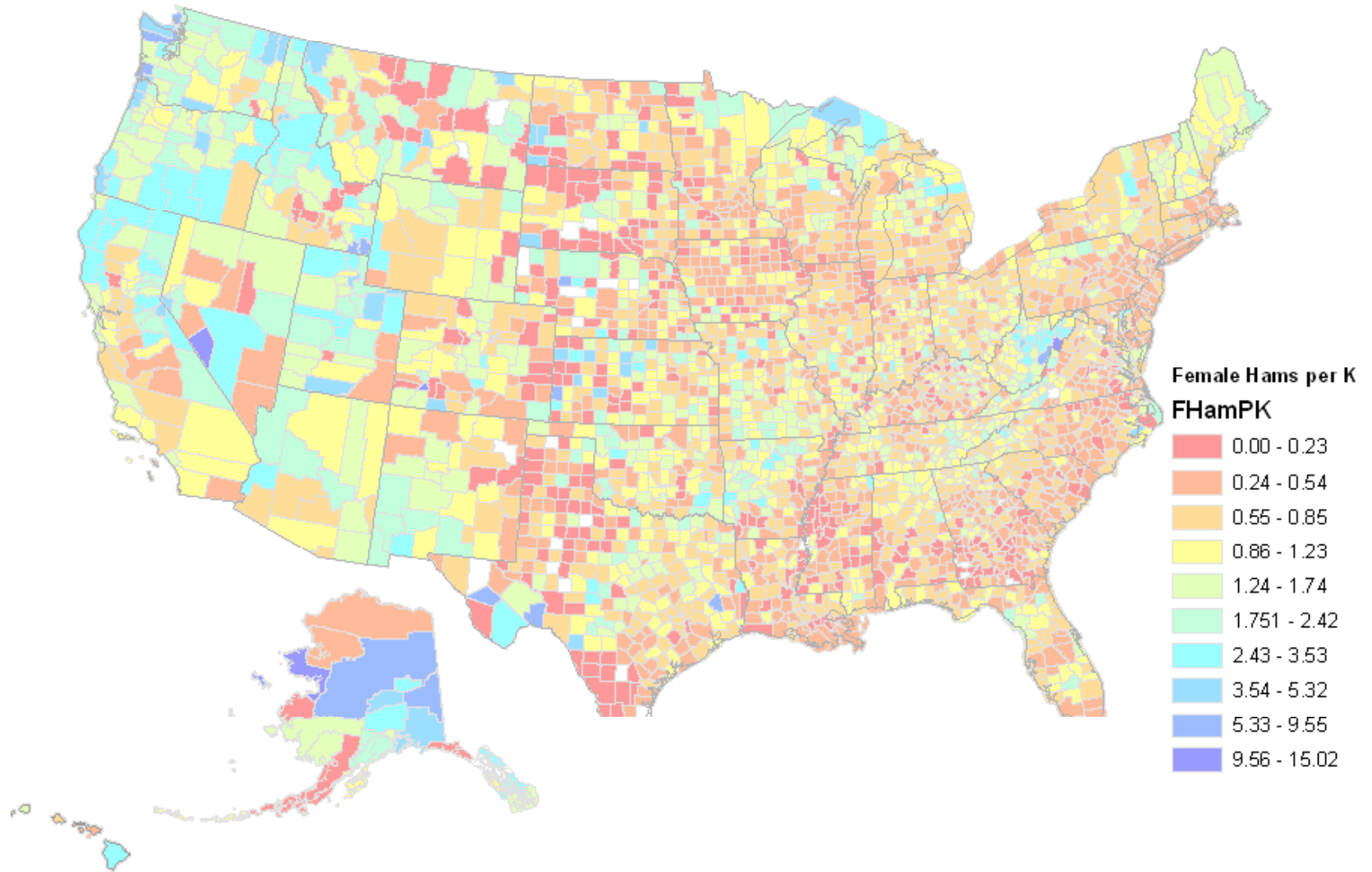
General population based on 2008 US Census estimates.
Ham populations based on FCC data extract of October 11, 2009.

Number of General, Advanced, and Extra hams in counties



General population based on 2008 US Census estimates.
Ham populations based on FCC data extract of October 11, 2009.

Female hams per Thousand



General population based on 2008 US Census estimates.
Ham populations based on FCC data extract of October 11, 2009.

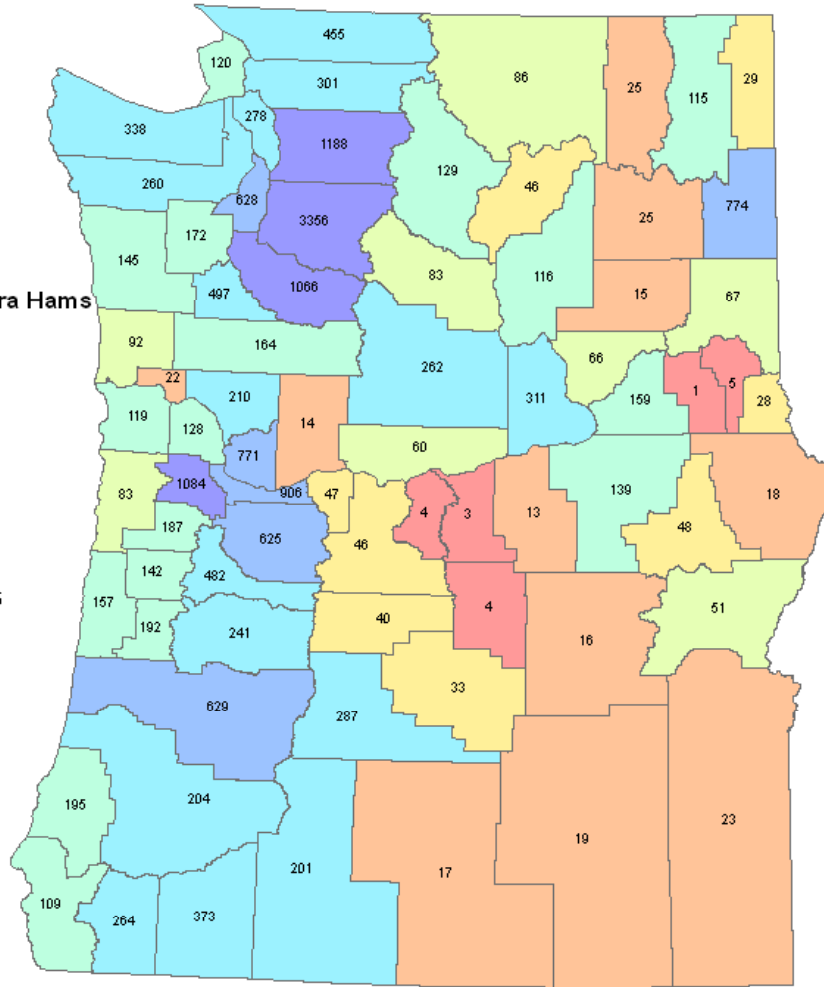
DRBunton, N7QMT, 2009

Number of General/Advanced/Extra Hams

Gen/Adv/Extra Hams

GAE_Tot

- 1 - 5
- 6 - 25
- 26 - 50
- 51 - 100
- 101 - 200
- 201 - 500
- 501 - 1000
- 1001 - 3356



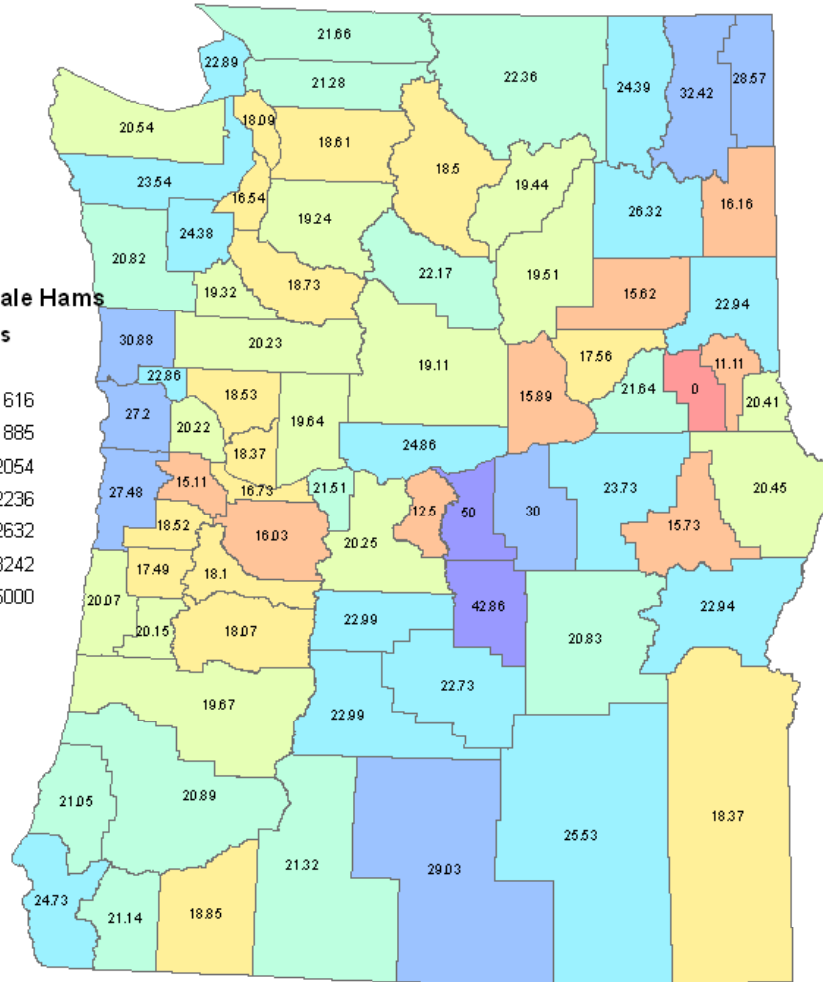
Ham numbers based on FCC extract on October 11, 2009.
Only individual licenses are counted.

Percent Female Hams by OR/WA County

Percent Female Hams

NumF / THams

- 0.0
- 0.0001 - 0.1616
- 0.1617 - 0.1885
- 0.1886 - 0.2054
- 0.2055 - 0.2236
- 0.2237 - 0.2632
- 0.2633 - 0.3242
- 0.3243 - 0.5000



Ham numbers based on FCC extract on October 11, 2009.
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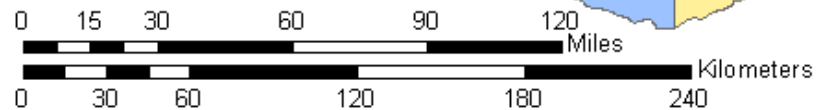
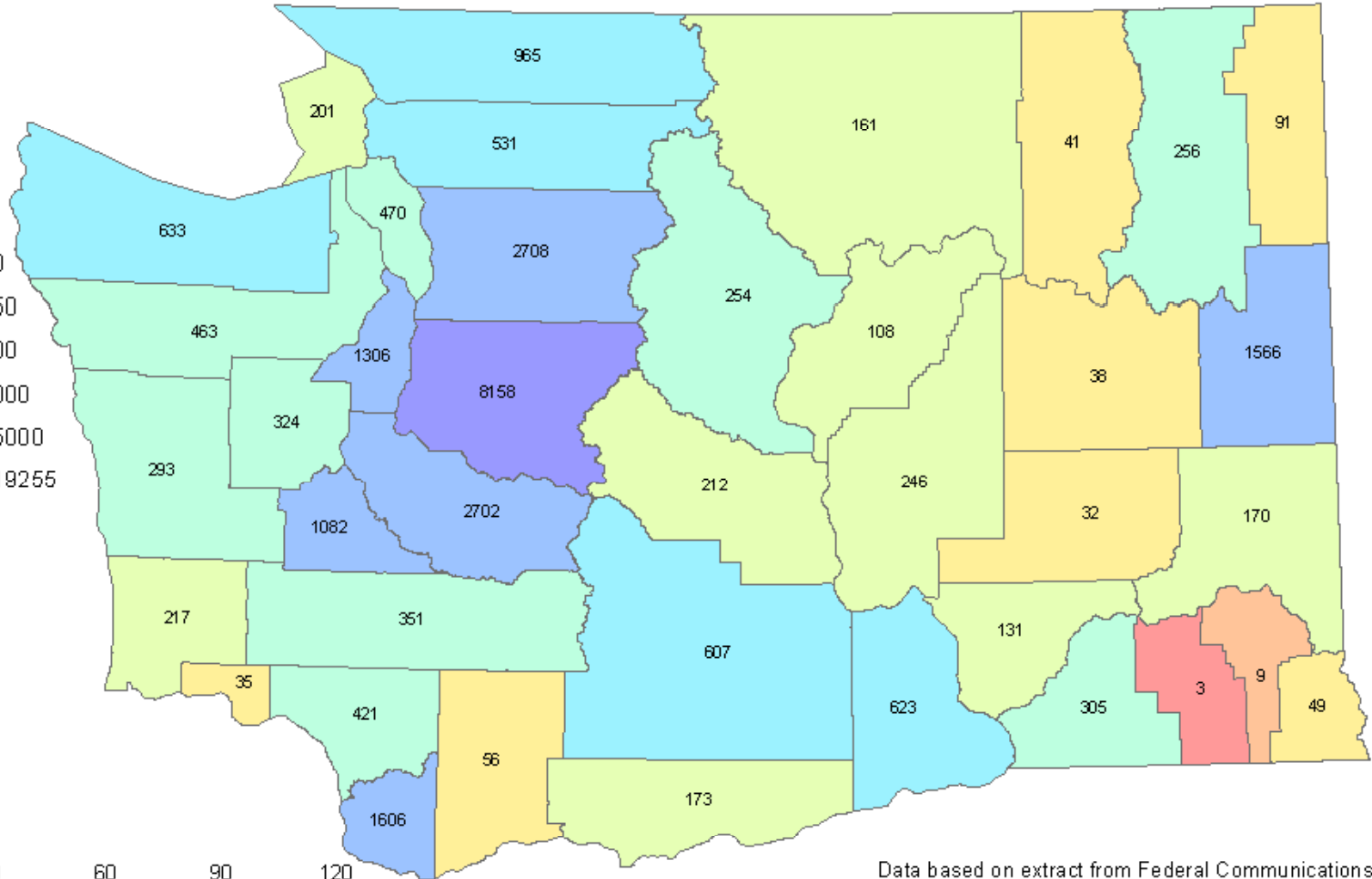
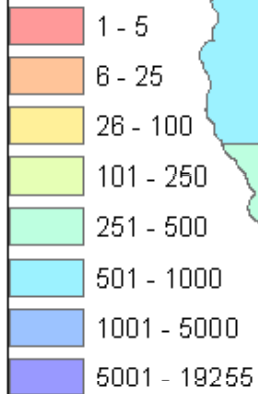
DRBurton, N7QMT, 2009



Ham Population by Washington County

Total hams

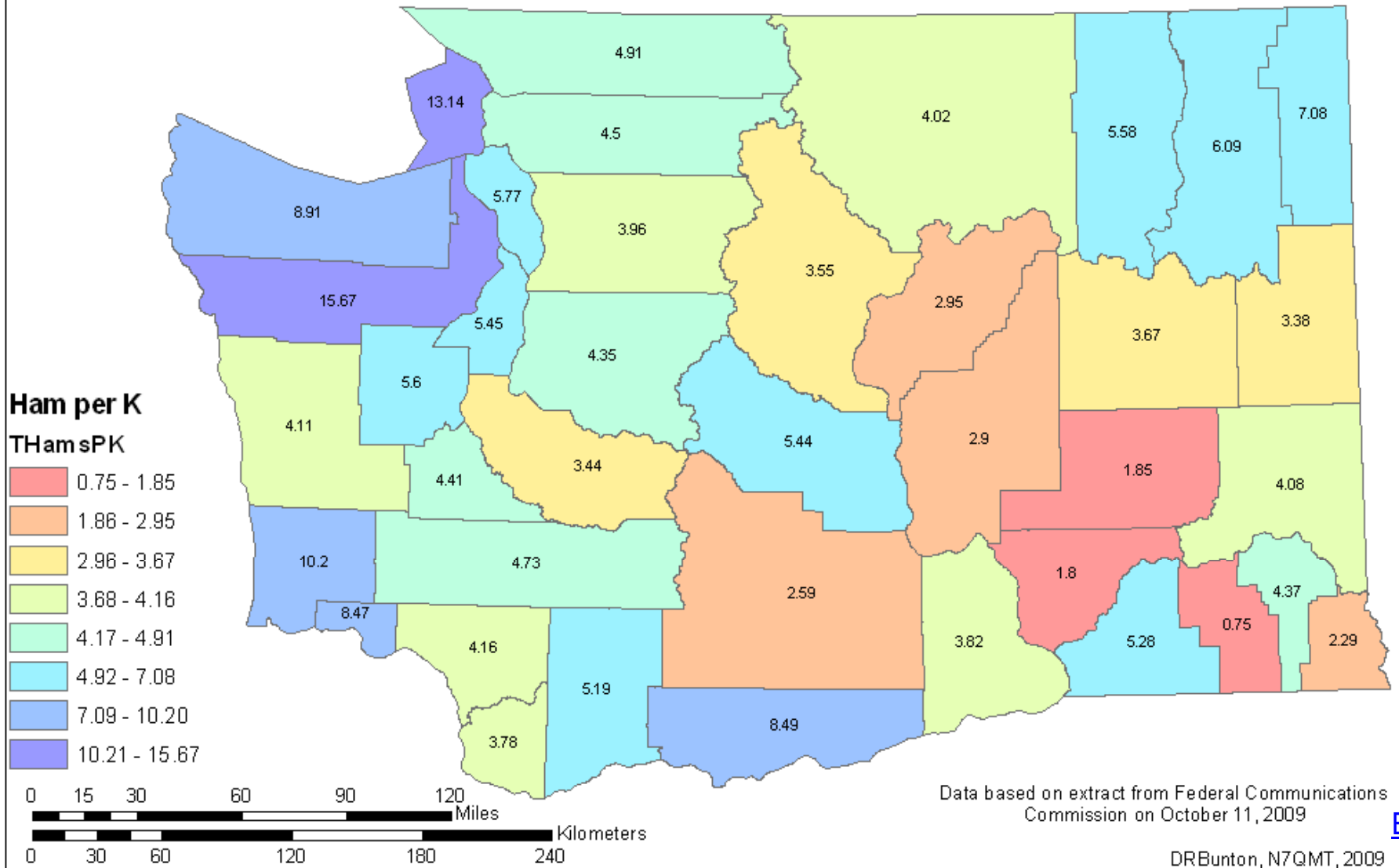
THams



Data based on extract from Federal Communications Commission on October 11, 2009

DRBunton, N7QMT, 2009

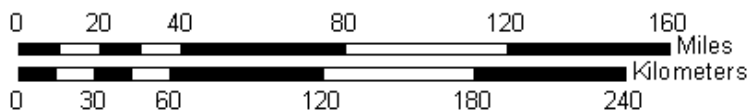
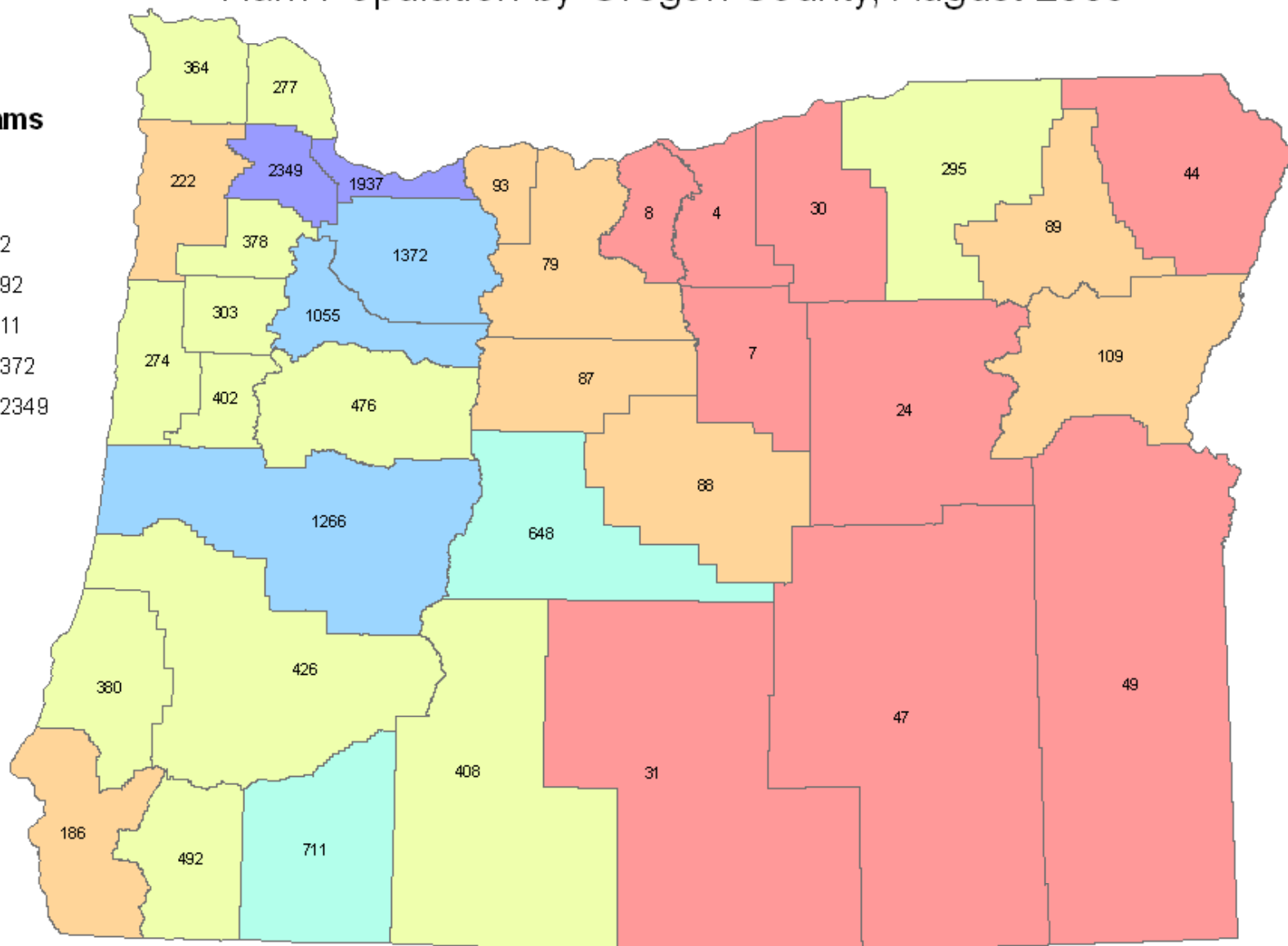
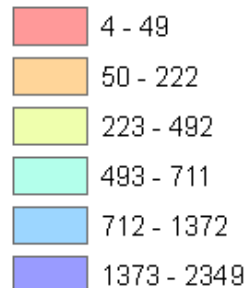
Hams per Thousand of General Population by Washington County



Ham Population by Oregon County, August 2009

Oregon Hams

THams



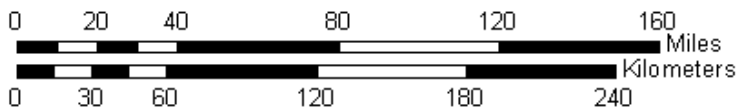
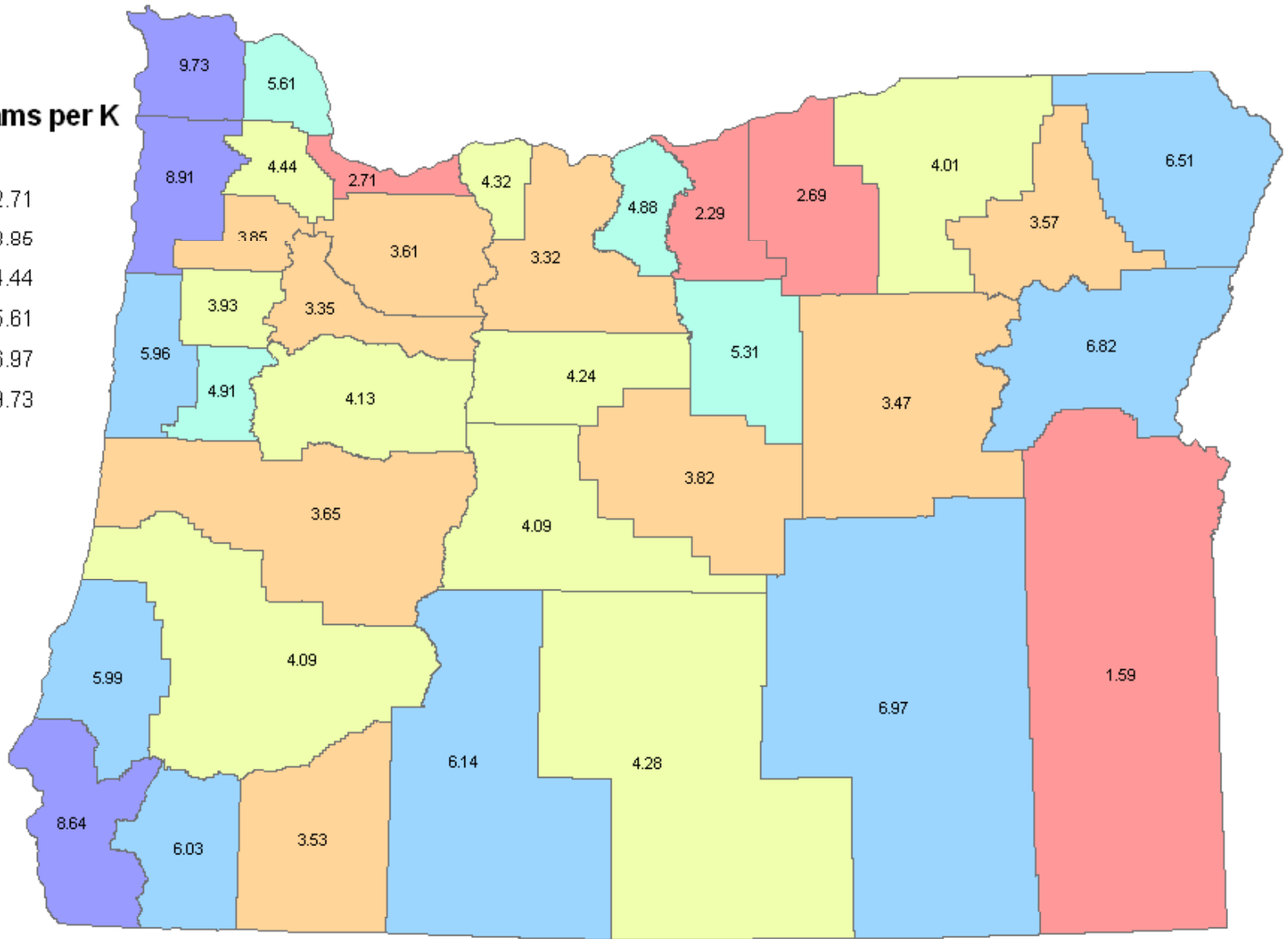
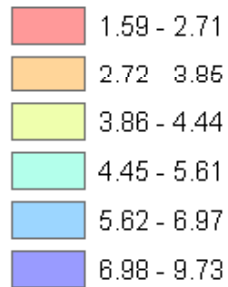
Ham numbers based on FCC extract on October 11, 2009.
Only individual licensees are counted.

DRBurton, N7QMT 2009

Hams per Thousand of General Population

Oregon Hams per K

THamsPK



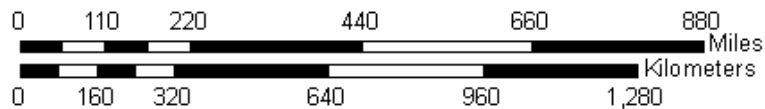
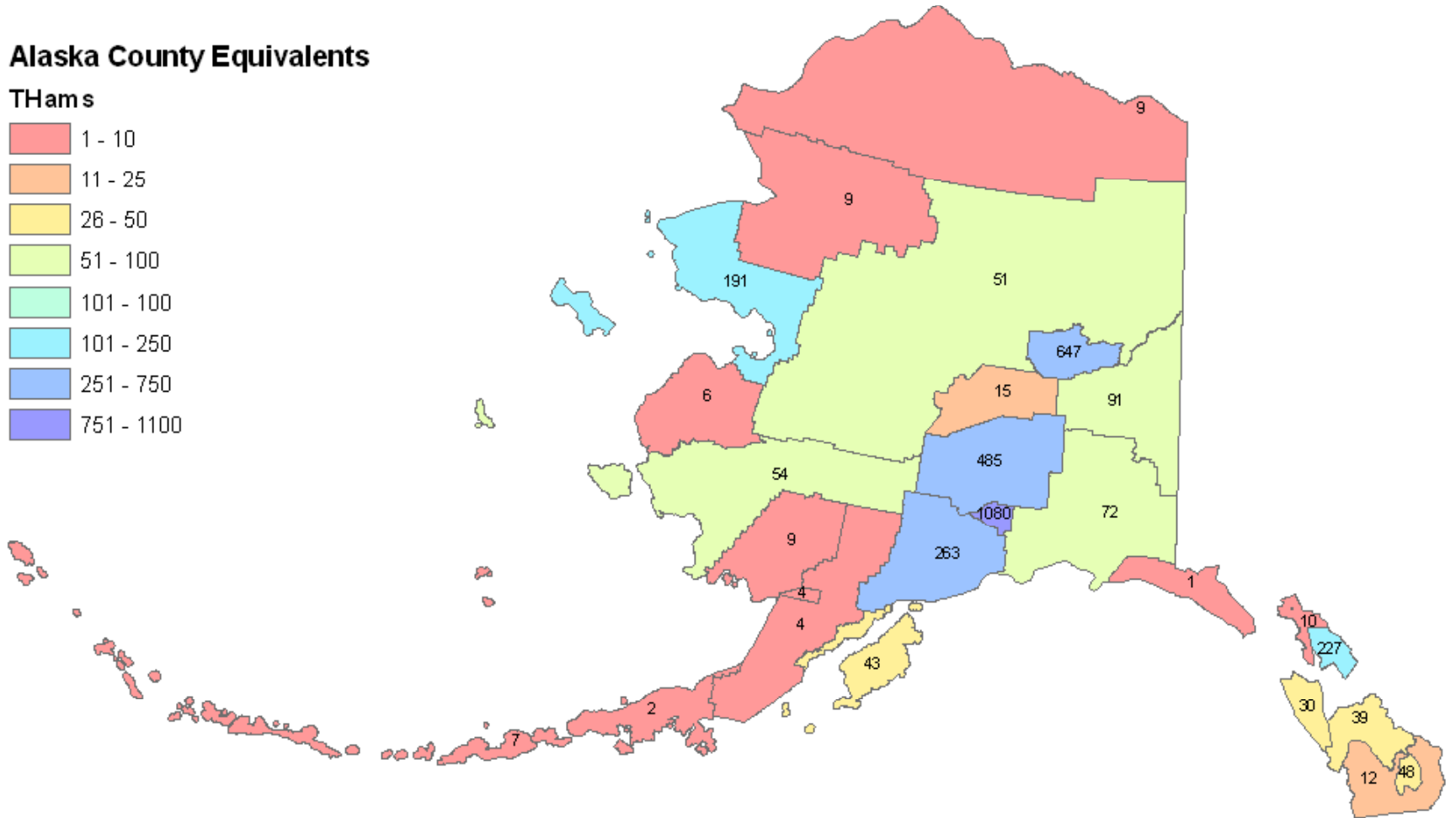
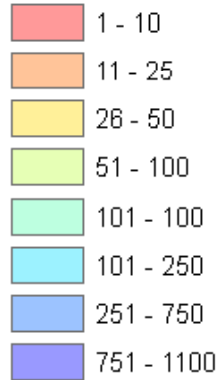
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Ham Population by Alaska County Equivalents, August 2009

Alaska County Equivalents

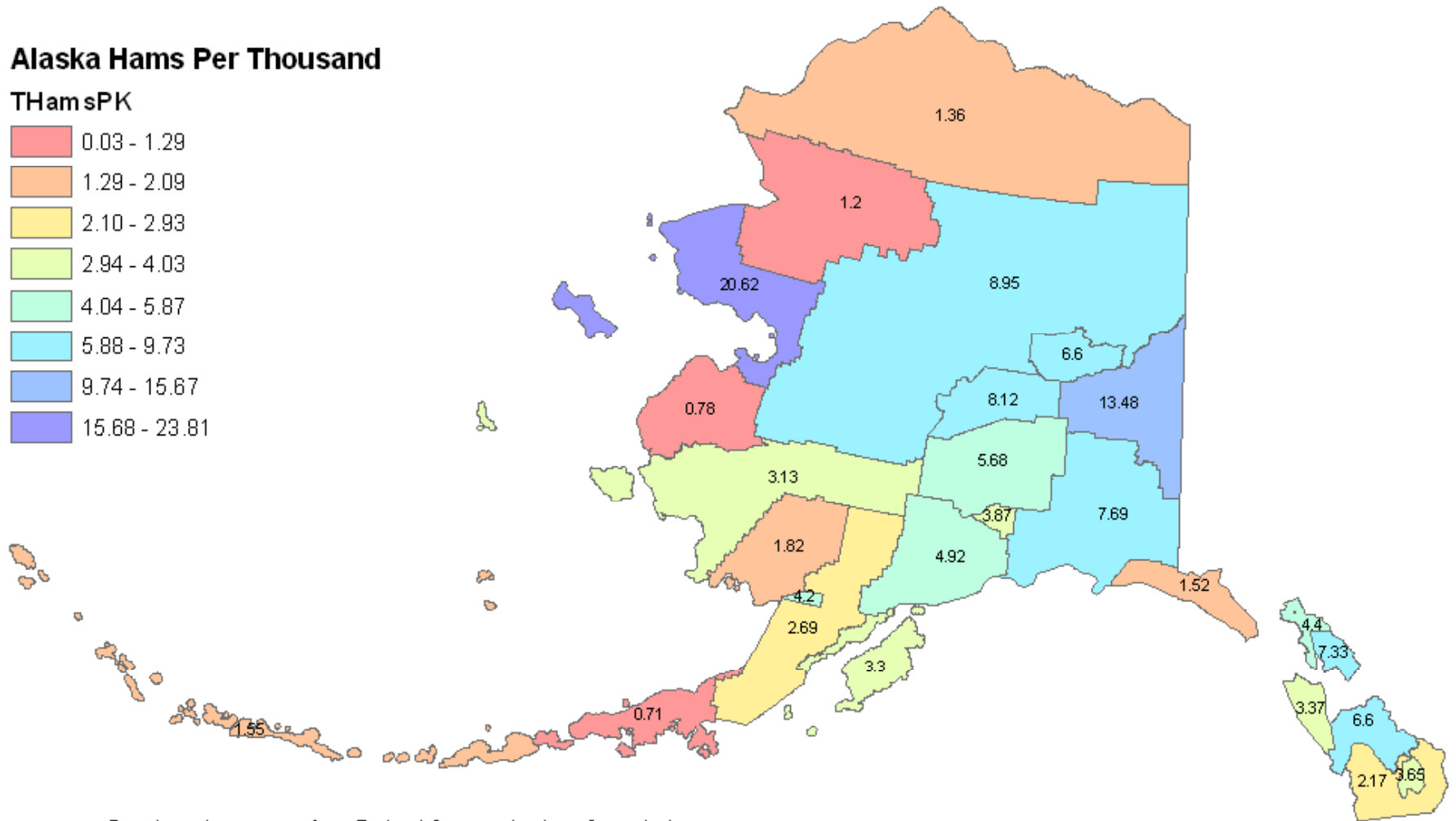
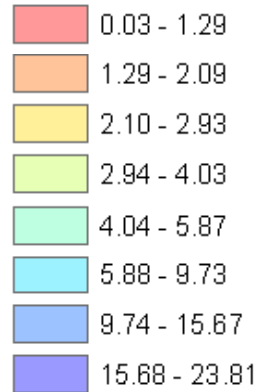
THams



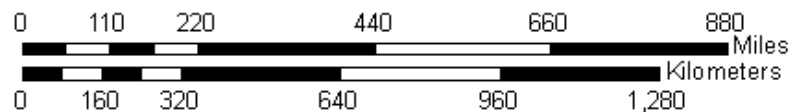
Hams Per Thousand of General Population by Alaska County Equivalents,

Alaska Hams Per Thousand

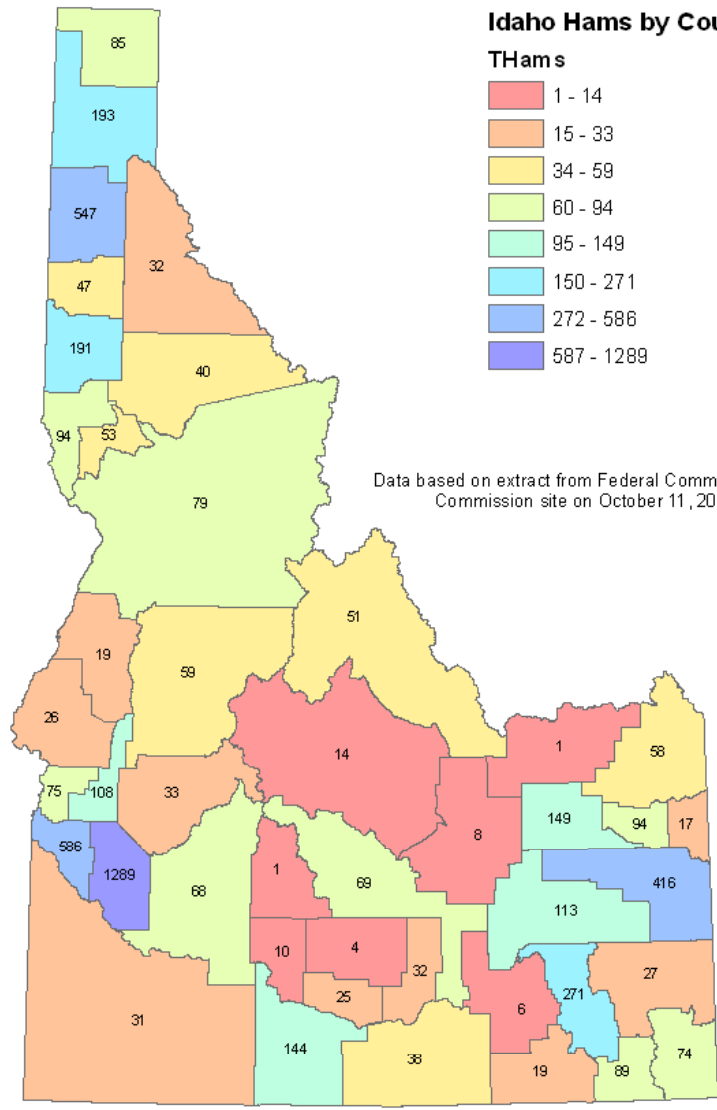
THamsPK



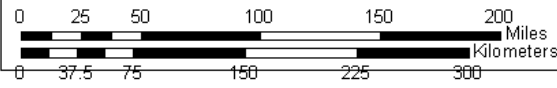
Data based on extract from Federal Communications Commission site on Oct 11, 2009



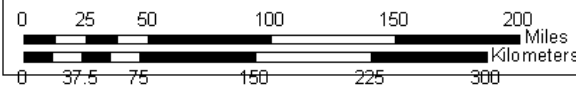
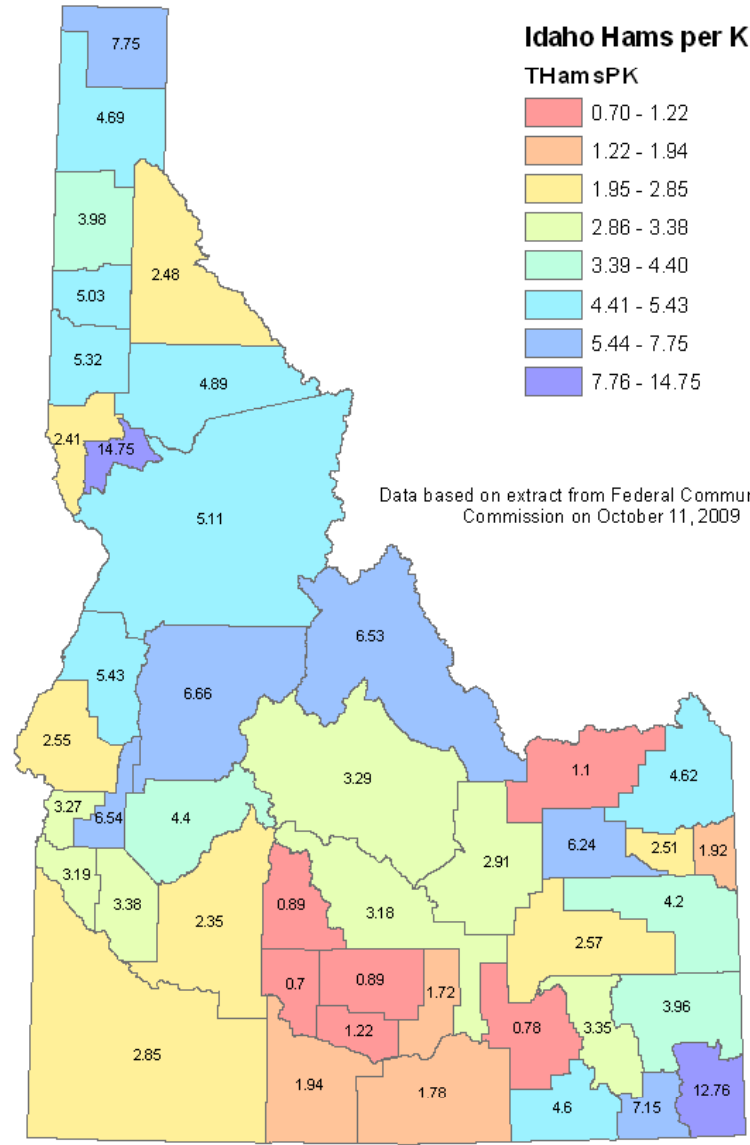
Ham Population by Idaho County



Data based on extract from Federal Communications Commission site on October 11, 2009

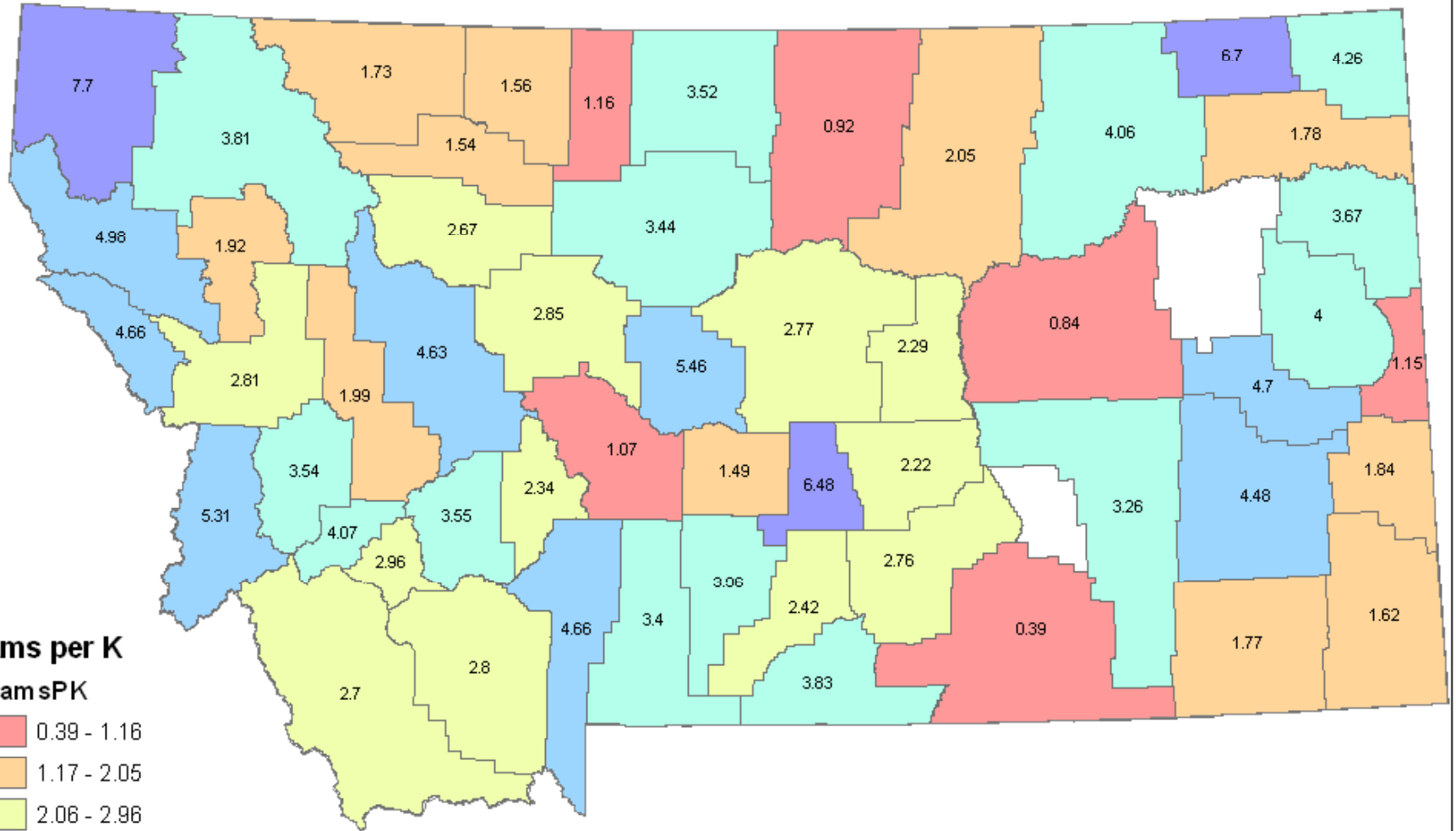


Hams per Thousand of General Population by County



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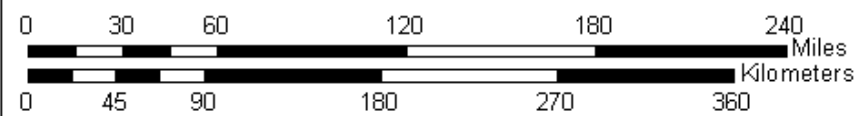
Hams per Thousand of General Population



Hams per K

THam sPK

- 0.39 - 1.16
- 1.17 - 2.05
- 2.06 - 2.96
- 2.97 - 4.26
- 4.27 - 5.46
- 5.47 - 7.70



Ham numbers based on FCC extract on October 11, 2009.
 Only individual licensees are counted.

Wrap-up

- 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 will move ahead of New York to 5th place in 2010
- Washington will move ahead of Ohio to 4th place in late 2010 or early 2011
- Oregon will move ahead of Indiana to 15th place late in 2010
- Oregon could move to 14th or 13th place in 2011 with an increase in ham classes throughout the state

