Pheasant News and Notes

May 2020

Trivia Question

When and where was the first North American pheasant protection law enacted?

Farm Bill and USDA News

USDA-FSA recently announced a request for new or modified State Acres for Wildlife Enhancement (SAFE) proposals under the Conservation Reserve Program. You'll recall that USDA moved grass- and tree-based SAFE practices out of the previous continuous signup and into the general signup, which worked much better for some states than others. Todd Bogenschutz (Management Board and Technical Committee, Iowa) did some analyses for AFWA's CRP Working Group to see what factors helped states get the most SAFE acres enrolled. Prominent among these was the ability of states to generate SAFE contract offers within national and state Conservation Priority Areas (CPAs).

On that subject, a new policy contained in the announcement required new and existing SAFE projects to be within established CPAs. This raised all sorts of questions from the states, and FSA issued another notice the next day that removed that requirement. Not sure what the mix-up was, but hopefully the more permissive policy will remain in force. There is still unanimity among the states that all SAFE practices should be available during continuous signups to maximize their enrollment and benefits.

FSA also clarified permitted uses on land enrolled in the Soil Health and Income Protection Program (SHIPP) available in the prairie pothole states. Enrolled land may be enrolled in a state's walk-in access program, or hayed or grazed outside the primary nesting season without a reduction in annual rental payment. Producers may harvest SHIPP acres for seed outside the primary nesting season in exchange for a 25% reduction in payment.

In other federal agency news, word has it that USGS is canceling the 2020 Breeding Bird Survey. I couldn't find an official announcement of this yet, however, so I'm not sure if the official decision has been made.

Notes from Around the Pheasant Range

In Technical Committee news, Stan McTaggart has taken a new position as Illinois' Wildlife Diversity Program Manager. Stan has been replaced as Agriculture and Grassland Wildlife Program Manager by Bob Caveny, who will take over for Stan on the Technical Committee. We thank Stan for his service on the TC and look forward to working with Bob. Welcome!

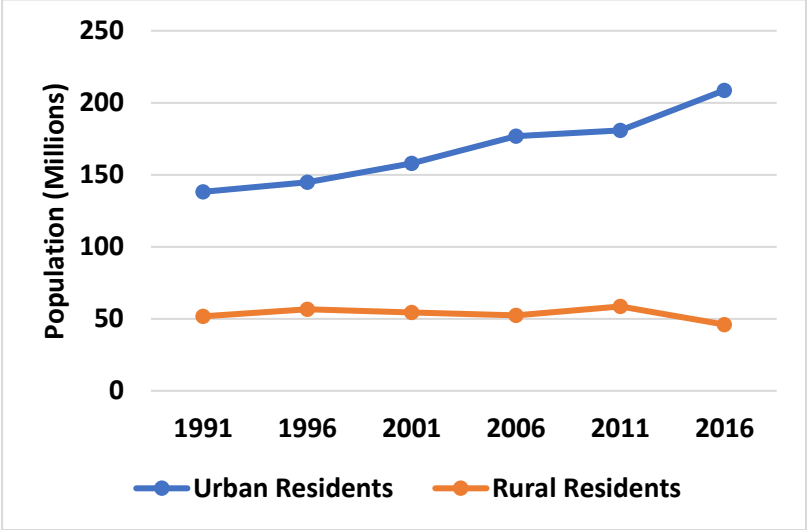
Speaking of Illinois, there has been some recent research on pheasant genetics that is now being published. Marlis Douglas and her colleagues have a new paper out describing genetic relatedness among local populations of pheasants, as well as those of bobwhites and greater prairie-chickens, and what it might mean for multi-species management in Illinois. The paper is interesting in its use of population genetic metrics to assess the sufficiency of current habitat conditions and make recommendations, which provides a different angle from our usual abundance and R3 contexts for these species. Similarly, John Laux (Technical Committee, Nebraska) passed along that Robert Zink and his

students have a *Wildlife Society Bulletin* paper in press detailing a study of genetic structure of pheasants in Nebraska. We'll look forward to see that one soon.

John Laux and I also talked about Nebraska's process to revise their state pheasant plan, as well as their primary research questions. One issue that Nebraska shares with several other states is that their best pheasant range is a half-day's drive from their largest population centers, making it difficult for hunters living there to squeeze a hunt "out west" into one day. That leads to some common questions: how much should we invest in restoring habitat in relatively poorer landscapes that are closer to where more people live? And how much habitat do we need to put into those landscapes before they produce enough birds to make it worthwhile?

We've captured these issues in our draft National Plan revision materials, and hopefully we can work on some cooperative projects in the future that will help answer those questions more precisely than we can now. In the meantime, I took a closer look at trends in the behavior of urban and rural hunters in the National Surveys of Fishing, Hunting, and Wildlife-Associated Recreation to see if anything relevant to these questions was apparent. Comparable surveys have been conducted every five years since 1991; the data below are from that source unless otherwise noted.

Figure 1. U.S. population ≥16 years of age by residence type.



First, most know the U.S. is a more urban nation than it used to be, but that is more a function of an increasing urban population than a marked reduction in rural residents (Figure 1). The Census Bureau's definition of "urban" is a "densely settled territory, consisting of core census block groups or blocks that have a population density of at least 1,000 people per square mile and surrounding census blocks that have an overall density of at least 500 people per square mile"; rural residents live in areas that don't meet this definition. (This map shows where the urban population lived as of the 2010 census.) The national numbers may not be indicative of what's going on in rural areas everywhere, of course; many rural counties have certainly lost population. The upshot is although rural populations don't appear to be growing, they're not declining much, either, at least on a national scale.

That is important because, as we know, rural residents are more likely to hunt than their urban counterparts. If our goal is to stabilize pheasant hunter numbers, stable rural populations work in our favor.

Urban versus rural residents' changes in participation rates by type of hunting are interesting in this context. In the hunting categories below, "big game" includes the usual species plus wild turkeys; "small game" includes upland game birds, squirrels, and rabbits; "migratory birds" is self-explanatory; and "other animals" are mostly the "three P's": pigs, predators, and prairie dogs. As a reminder, national losses of small game hunters far outstrip those of any other category (Figure 2).

Participation rates for urban residents have slipped for all hunting types, though the decline is a bit more pronounced for small game (Figure 3). In contrast, participation among rural residents was relatively stable for all hunting except for small game. Data are sparse for the "other animals" category, so it is not included in some comparisons.

Figure 2. Average annual change in hunter participation, 1991-2016.

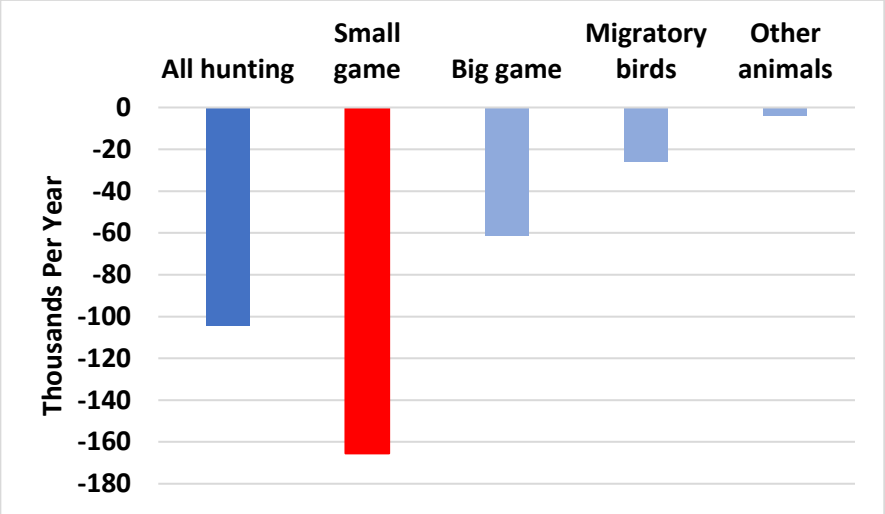
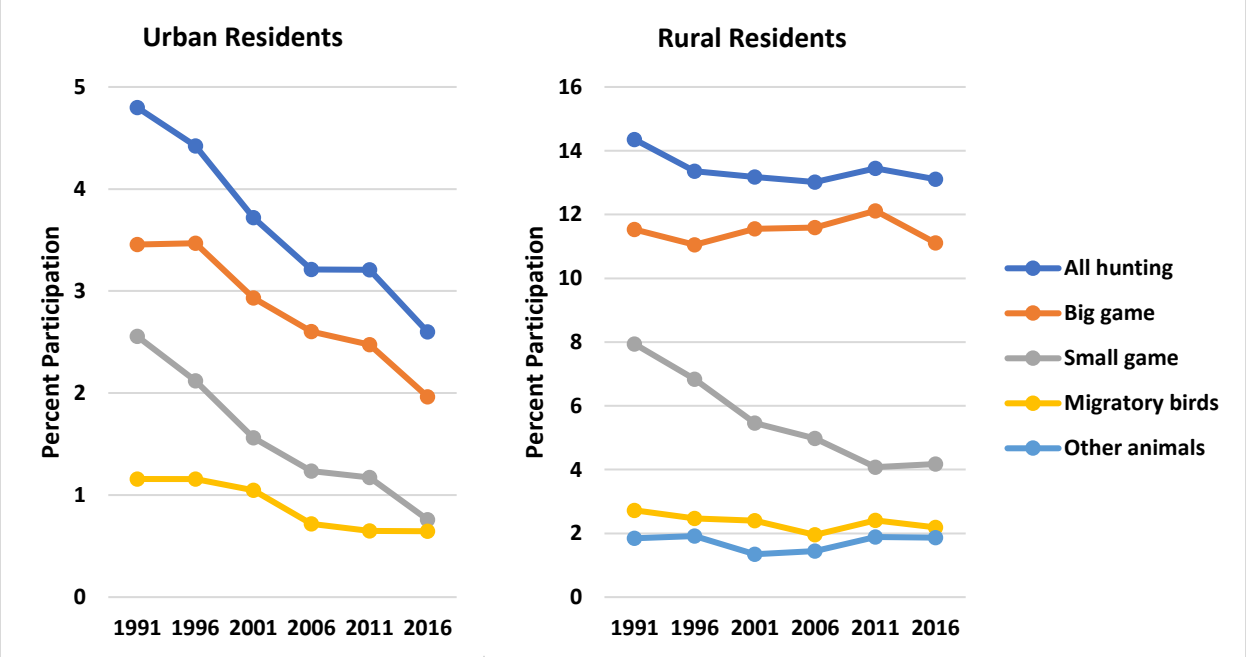
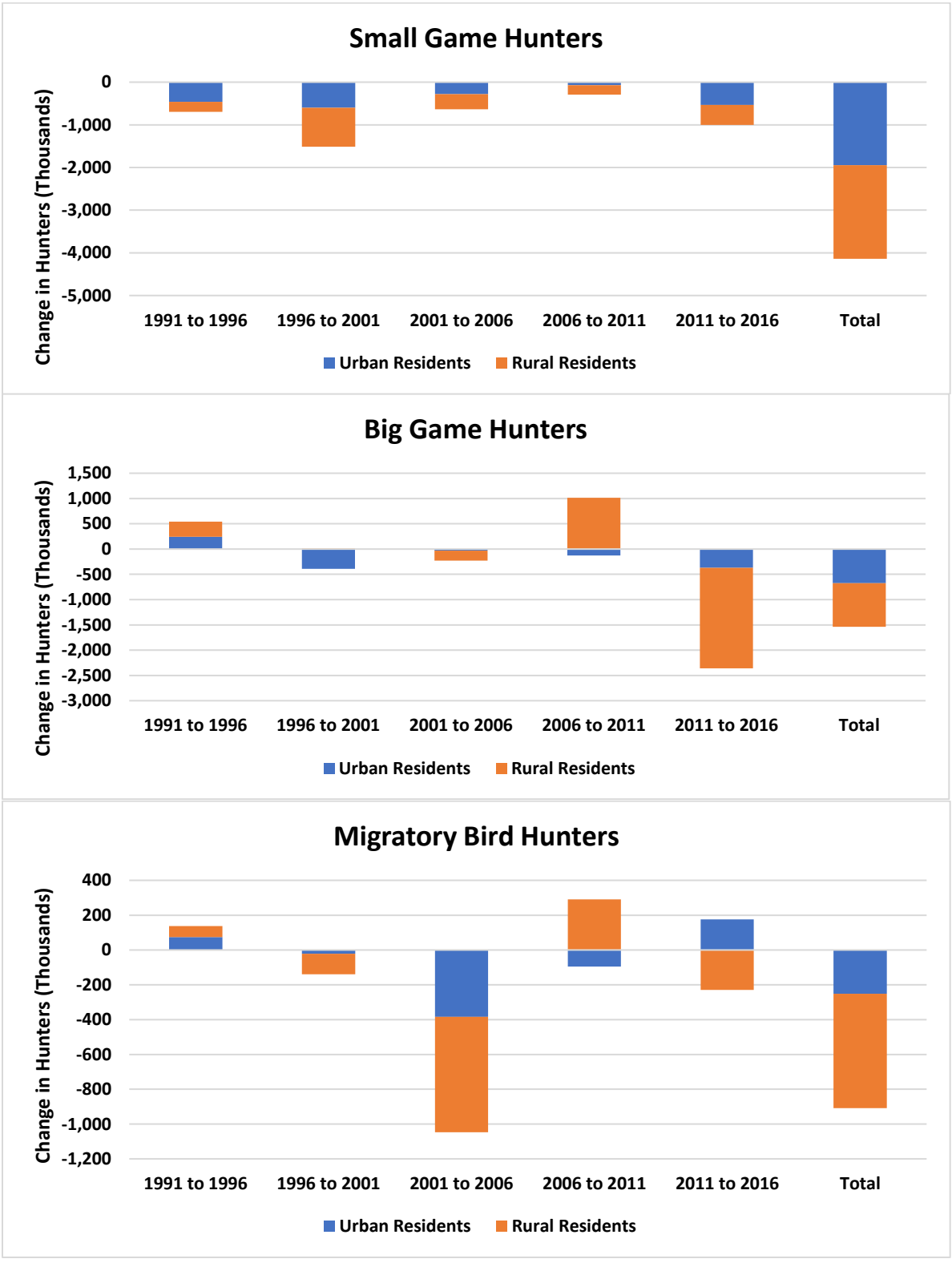


Figure 3. Percent of urban and rural residents hunting several categories of game, 1991-2016.



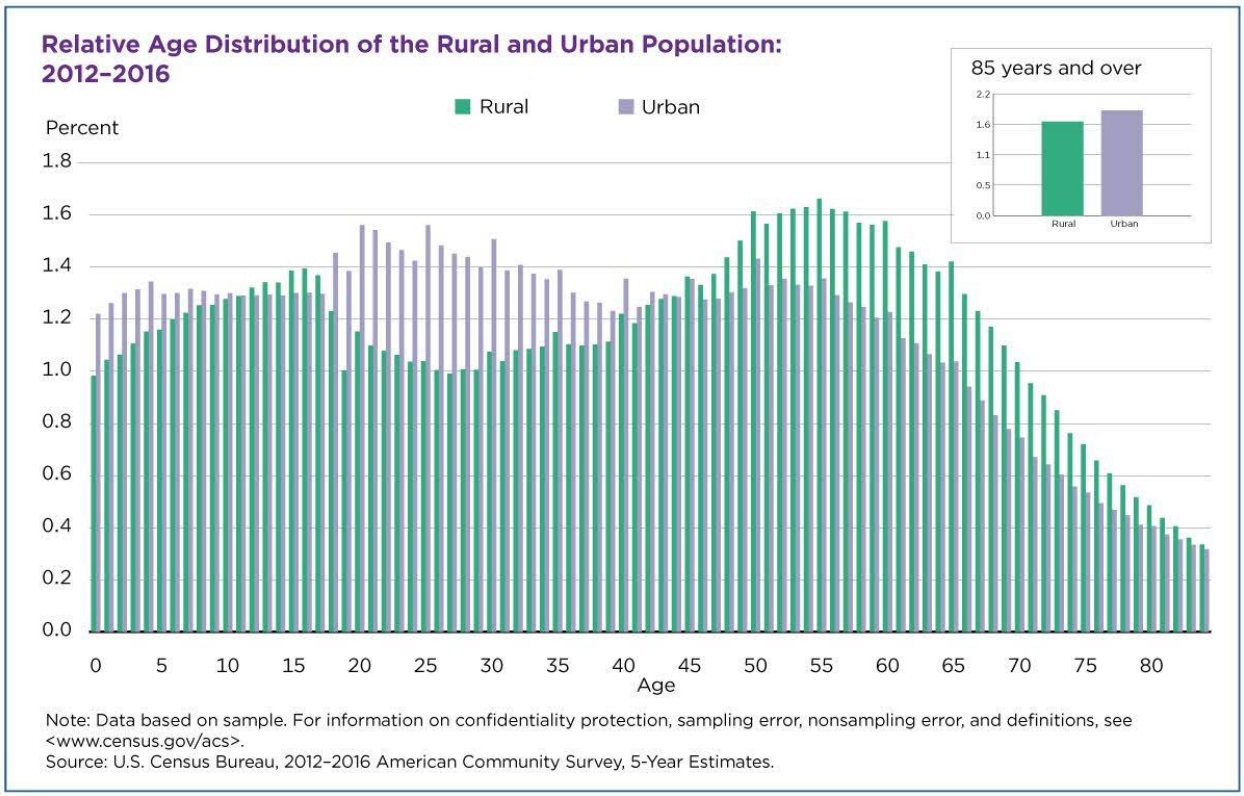
Since we're most interested in stabilizing hunter numbers rather than participation rates (although either would be great), it is instructive to look at how hunter numbers changed in the five-year increments between surveys (Figure 4). The biggest change in small game hunters occurred between 1996 and 2001, but losses were consistent in the other intervals, as well. Changes in big game and migratory bird hunters were much less consistent and were not synchronous with small game or each other. The primary change in big game hunters occurred between 2011 and 2016, whereas for migratory birds it happened between 2001 and 2006. For all hunting types, numeric losses of rural hunters were greater than those for urban hunters over the 25-year survey period.

Figure 4. Incremental changes in small game, big game, and migratory bird hunter numbers during 1991 through 2016, based on the National Surveys of Fishing, Hunting, and Wildlife-Related Recreation.



The asynchrony of losses among hunter types argues against some overriding factor such as an aging population being the primary driver overall, but we *would* expect age-related hunter declines to occur earlier in the rural population given their senior-skewed distribution (Figure 5). The data also suggest that agencies should take care not to put all their eggs in the basket of retaining urban hunters. As long as overall rural population sizes remain stable, recruiting and retaining rural hunters appears to be both necessary and perhaps more cost-effective than catering to their urban counterparts. Again, the national numbers may not reflect what's going on in each individual state, but they suggest these factors are worth a closer look locally.

Figure 5.



Pheasant-relevant Media

South Dakota starting nest predator bounty program again, with coronavirus-related changes
South Dakota habitat stamp passes
USFWS proposes historic expansion of hunting and fishing on Service lands
Ban wildlife markets to avert pandemics, says UN biodiversity chief

Recent Literature

Douglas, M. R., W. J. B. Anthonysamy, S. M. Mussmann, M. A. Davis, W. Louis, and M. E. Douglas. 2020. Multi-targeted management of upland game birds at the agroecosystem interface in midwestern North America. PLoS ONE 15(4): e0230735.

Kauth, H. R., R. C. Longsinger, A. J. Kauth, and A. J. Gregory. 2020. Low-cost DIY GPS trackers improve upland game bird monitoring. Wildlife Biology 2020(1).

Krieg, J. A. F. 2019. Evaluating scenarios using an agent-based model for pheasant populations and biomass harvest strategies. Thesis, University of Tennessee-Knoxville.

Hinrichs, M. P., N. B. Price, M. P. Gruntorad, K. L. Pope, J. J. Fontaine, and C. J. Chizinski. 2020. Understanding sportsperson retention and reactivation through license purchasing behavior. Wildlife Society Bulletin (early view).

Geaumont, B. A., and D. L. Graham. 2020. Factors affecting sharp-tailed grouse brood habitat selection and survival. Wildlife Biology 2020(1).

Schummer, M. L., J. Simpson, J. B. Davis, B. Shirkey, and K. E. Wallen. 2020. Balancing waterfowl hunting opportunity and quality to recruit, retain, and reactivate. Wildlife Society Bulletin (early view).

Zemanova, M. A. 2020. Towards more compassionate wildlife research through the 3Rs principles: moving from invasive to non-invasive methods. Wildlife Biology 2020(1).

Trivia Answer

The earliest known protection law was linked to the earliest known North American introduction, which occurred in New York. According to A. T. Studholme and D. Benson in Durward Allen's *Pheasants in North America* (1956), "The earliest known record for introduction of the pheasant in North America is contained in Chapter 601 of the Colonial Laws of New York, passed November 1, 1733 and entitled, 'An Act to preserve the breed of English Pheasants in This Colony.'" The penalty for disturbing or destroying pheasants or their eggs was 10 shillings (about $2,700 in today's money) or five days in jail. The pheasants in question were released by the former Governor of New York, which probably didn't hurt the law's prospects of being passed.

This update is brought to you by the National Wild Pheasant Conservation Plan and Partnerships. Our mission is to foster science-based, socially-supported policies and programs that enhance wild pheasant populations, provide recreational opportunities to pheasant hunters, and support the economics and social values of communities. You can find us on the web at http://nationalpheasantplan.org.