# Pheasant News and Notes

## November 2021

### Trivia Question

How were pheasants involved in a nascent Great Plains political movement in the 1990s?

### Farm Bill and USDA News

Not a lot of splashy news on the Farm Bill front this month. At last check, USDA has not released their final continuous signup numbers from FY2021, so we don't have a total enrollment number yet for FY2022.

The Biden Administration's America the Beautiful initiative continues to garner attention. Here are the sporting conservation community's recommendations for the project.

USDA recently published a story on one of its Conservation Innovation Grant recipient's promotion of small grains in Midwest crop rotations. In 2020, the project enrolled over 120 farmers who planted almost 12,000 acres of small grains. It's not a lot, but every little bit helps.

### Notes from Around the Pheasant Range

First, a correction from last month's issue. As much great work as Jared Wiklund does in PF/QF's PR team, compiling the upcoming hunting prospects piece is not his job, it is Tom Carpenter's. My apologies to Tom and Jared for the misattribution.

Belated congratulations to Management Board member Jeb Williams, who was named Director of the North Dakota Game and Fish Department back in August. Our lack of a fall meeting removed the opportunity to congratulate Jeb in person, so our virtual best wishes will have to do for now.

As we mentioned a few issues ago, Management Board member Jim Douglas is retiring this week as Director of the Nebraska Game and Parks Commission after 47 years of service there. Jim was instrumental in raising funds for the Pheasant Plan Coordinator position and creating the partnership we enjoy today. Many thanks again to Jim, and we wish him a long, fish-filled retirement!

PF recently hired Dr. Brent Rudolph as its new Director of Sustainability Partnerships. Those in the north and east will recognize Brent as a long-time leader with the Ruffed Grouse Society – we're very happy to have him on Team Pheasant now!

In other state news, South Dakota's Habitat Stamp program is paying more dividends for pheasants in its second year since adoption. Using stamp funds as match, USDA and the South Dakota Game, Fish and Parks Department are creating a new, 25,000-acre Conservation Reserve Enhancement Program (CREP) project for the Big Sioux watershed. This will be modeled after the 100,000-acre CREP in the James River watershed. All acres enrolled in South Dakota's CREPs are open to public access.

On the R3 front, I call your attention to PF's Hunter Mentor Challenge Program. The premise is simple – take a new or lapsed hunter to the field with you this fall, snap a picture, send it in with your contact information, and receive gear discounts and a chance to win some cool stuff. Colby Kerber (PF's Hunting Heritage Program Manager) has a great blog post on the program – check it out.

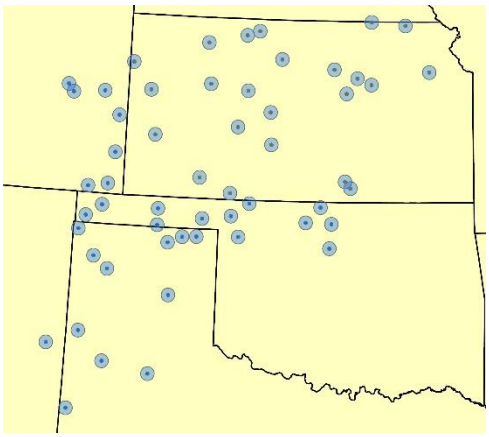
In the spirit of that promotion, Jim Inglis (PF Director of Governmental Affairs) sent the below photo of participants and mentors after their chapter's ladies pheasant hunt. Birds chased, friendships enhanced, local economies stimulated – this is what success looks like!


Last month you might remember I was starting to explore the USGS's North American Breeding Bird Survey (BBS) dataset with a little more intensity. The BBS consists of somewhere between 3,000 and 5,000 routes run each year since 1966, with each route consisting of 50 3-minute listening points spaced about a half mile apart (so the standard route is 24.5 miles long). Most routes are run in early June, and observers count the number of birds of each species they see or hear within a quarter mile of their survey stop.

The question I tried to answer this month was how much information might be contained in the point-level data (as opposed to the route-level totals) that could be applied to our habitat modeling problem. The BBS folks make the stop-level ("50-stop") data available back to 1997 or so for 5,737 routes, and they also provide a GIS file of most of the routes (lines) themselves, but otherwise don't particularly

encourage point-level analyses. Point locations (x-y coordinates) themselves are not made available, so they must be estimated.

I'll spare you the boring details for now, but I figured there were 1,569 routes for which we could make some reasonable estimates of stop coordinates; these are associated with about 1.8 million individual point counts through 2019 (23 years x 50 stops). Pheasants were detected on 671 unique routes, 6,856 route x year combinations, and 74,043 individual point counts.

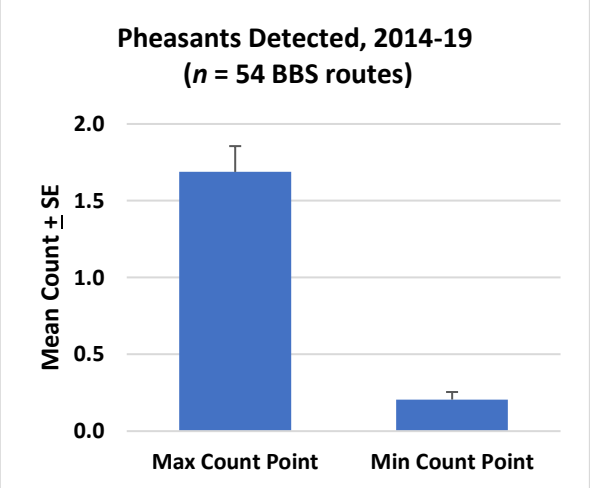


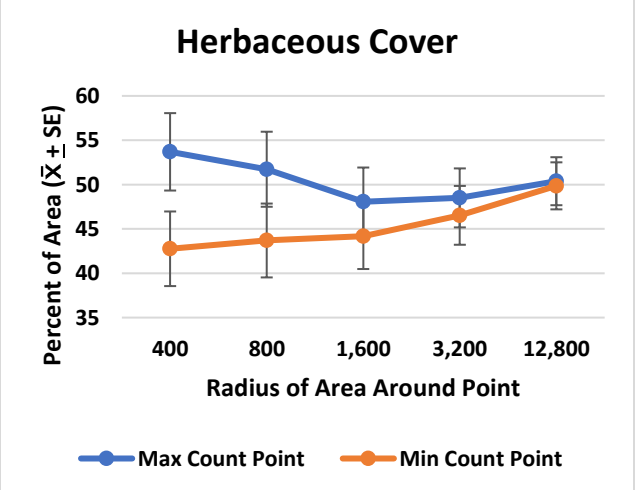
Smoke comes out of my little laptop's metaphorical ears if I give it too big a GIS job, so I pared things down to 54 routes in Kansas and points southwest. I asked the question, what are the habitat differences between each route's best point (in terms of pheasant abundance) and its worst point? I defined best and worst by taking each point's average count during 2014 through 2019, and because detections drop noticeably during the course of the morning, constrained the worst point to be picked within the first 10 stops of each route. That produced 54 pairs of points to compare.

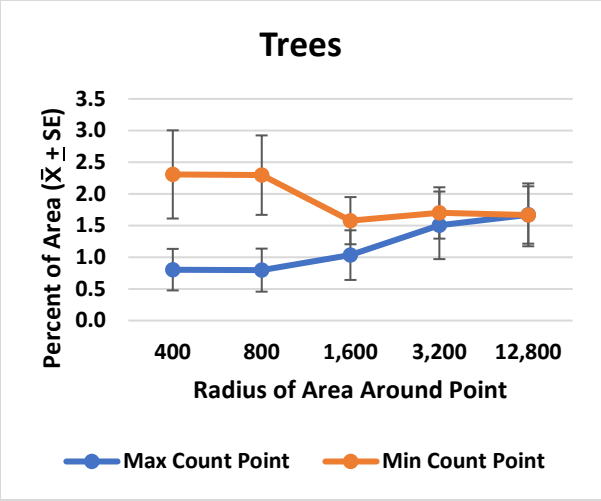
For the habitat data, I used the 2016 LandFire land cover layer, and consolidated the habitat types down to percent cropland, herbaceous cover, trees, open water, and "other." These were evaluated at five non-exclusive scales defined by radii of 400, 800, 1,600, 3,200, and 12,800 meters from each estimated point, yielding circular areas of 124, 497, 1,987, 7,949, and 127,190 acres, respectively.

Averaged over the 54 routes, there was an 8-fold difference in the average maximum count and minimum count. Even so, the average maximum count was a less-than-impressive 1.6 pheasants detected. The top five points of the 54 averaged 5.4 birds detected – better but still less than I expected. It is likely that by early June, crowing activity has dropped off considerably, yet another detection probability issue that needs to be kept in mind.

Despite all the "noise," there was a signal that found its way through. Points with maximum mean counts were surrounded by more herbaceous cover and less trees than points with low counts at the smallest two scales. This comes as no surprise, it is basically what every other habitat modeling exercise






has shown. At the 400-m scale, the difference equates to, on average, 14 more acres of herbaceous cover around the maximum points, and 40 more acres at the 800-m scale.

Two shortcomings make these results less than actionable. First, "herbaceous cover" is an overly broad category – we'd really like to know if different types of cover produce different results, and based on the literature, they should. More importantly, we don't know what the dependent variable (pheasants detected in early June) means in terms of predicting local-scale hunting quality. I know I'd rather hear 1.6 roosters per stop than 0.02, but I don't know what that level of abundance means to hunters. Is 1.6 roosters per stop enough to motivate most people to get off the couch and hunt, (and then, if you're in Ohio on a Saturday, stop to have some post-hunt nachos in a bar and watch the game)? This is a big gap in our literature – translating local-scale measures of pheasant abundance into relevant hunter perceptions and behavioral responses. It is hard to make local return-on-investment decisions when you don't have a well-defined goal.

Regardless, the purpose of the exercise was to see if the point-level BBS dataset contains information of value to us, and I would argue that it does, provided we understand and try to account for its limitations. If a Technical Committee member would like me to generate some similar numbers for their state or region, let me know.

**Pheasant-relevant Media**

Evolving Pheasants Forever increases birds, habitat, while helping corporations reach sustainability goals
The Pheasant Hunter's Prayer
Putting the ring in ring neck
Royalties from Pheasant State collection to fund SDSU scholarships
Upland game: the swings and misses of the status of Illinois pheasants, rabbits, quail and habitat
Positive pheasant season so far in North Dakota
Pheasant hunters choosing Iowa, DNR says
Iowa's hunters prepping for another good pheasant season
Minnesota pheasant numbers down with hunting season approaching
Drought stopped a 'boom year' for SD bird population, but Pheasants Forever official encouraged by habitat interest
South Dakota pheasant opener success depended on location
Jets and pheasants in Winner
Pheasant season impact on South Dakota small town businesses
Idaho Fish and Game scrambles to find replacement pheasant supplier
NYSDEC asking public for assistance identifying hunter involved in hunting-related shooting
Princess Anne's favourite dinner dish is not to everyone's taste
University of Illinois' 2021 CRP sign up dashboard
Managed grazing of former cropland can increase profits, improve environment

**Recent Literature**

Lassiter, E. V., M. Asher, G. Christie, C. Gale, A. Massey, C. Massery, C. R. Middaugh, J. T. Veon, and B. A. DeGregorio. 2021. Northern bobwhite occupancy patterns on multiple spatial scales across Arkansas. Journal of Fish and Wildlife Management (early online version).

Henry, B. J., M. Z. Brym, C. Henry, and R. J. Kendall. 2021. Supplemental feeding of northern bobwhite (*Colinus virginianus*) and dietary requirements: a review. Wildlife Research WR20105.

Iknayan, K. J., M. M. Wheeler, S. M. Safran, J. S. Young, and E. N. Spotswood. 2021. What makes urban parks good for California quail? Evaluating park suitability, species persistence, and the potential for reintroduction into a large urban national park. Journal of Applied Ecology (early online version).

Godin, S., F. Reitz, L. Bacon, and E. Bro. 2021. Recent changes in the reproductive success of farmland birds: conservation and management implications: the declining grey partridge *Perdix perdix* as a case study. Wildlife Biology (4):wlb.00806 (2021).

Rabon, J. C., P. S. Coates, M. A. Ricca, and T. N. Johnson. 2021. Does reproductive status influence habitat selection by female greater sage-grouse in a sagebrush-juniper landscape? Rangeland Ecology and Management 79:150-163.

Mathews, S. R., P. S. Coates, B. G. Prochazka, S. P. Espinosa, and D. J. Delaney. 2021. Offspring of translocated individuals drive the successful reintroduction of Columbian Sharp-tailed Grouse in Nevada, USA. Ornithological Applications 123:duab044.

**Trivia Answer**

According to Ted Cable and co-authors in 1996's *Birds of Cimarron National Grassland*,

"Citizens from southwest Kansas, southeast Colorado, the Oklahoma panhandle, and north Texas have initiated a movement to break away from their current states and become a separate 51st state. At a recent convention delegates selected Ring-necked Pheasant as their State Bird. The selection of this introduced species was undoubtedly influenced by the positive economic impact this region receives from the fall influx of pheasant hunters."

*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.*