Pheasant News and Notes

October 2021

Trivia Question

What state opens its regular wild pheasant hunting season the earliest this year?

Farm Bill and USDA News

USDA continued to release figures from its FY2021 CRP signups. Last month's announcement was that more than 2.5 million acres of Grassland CRP offers were accepted, which is on top of the 1.9 million acres accepted in the general signup. We will perhaps get a number on the continuous signup results this month or next.

The Grassland signup is about double that of last year, so the modifications to the program obviously were successful in attracting more applicants. Almost half of the new acres are in the two National Grassland Priority Zones (one in the Greater Yellowstone region and the other in the southern High Plains), and we would guess that most of the rest is elsewhere in the western half of the country where the $15 per acre minimum would be most attractive.

While more acres under conservation planning is a good thing, it is getting harder to look at the national CRP enrollment figure and have a good idea what it means for pheasants. A general signup with few applicants (like this last one) means poorer practices get accepted, as do more productive croplands, leading to more angst among competing producers and hence political pressure to limit the program. Larger Grasslands CRP enrollments make the national acreage total look better, but they don't really add new habitat to the landscape like converted cropland does. "Traditional" CRP also typically produces 4-5 times more of pheasant chicks per acre than grazed grassland (as per our National Plan analyses), so spending more "cap space" on Grassland enrollments is not a good tradeoff for us. Finally, more continuous practice acres often mean fewer large-block (whole field) contracts, which may lead to lower overall value for pheasants.

In short, pheasants seem to get the most benefit from largeish blocks of idle grassland within cropland-oriented landscapes. The more CRP drifts away from that model, the less good it does for our flagship bird.

Notes from Around the Pheasant Range

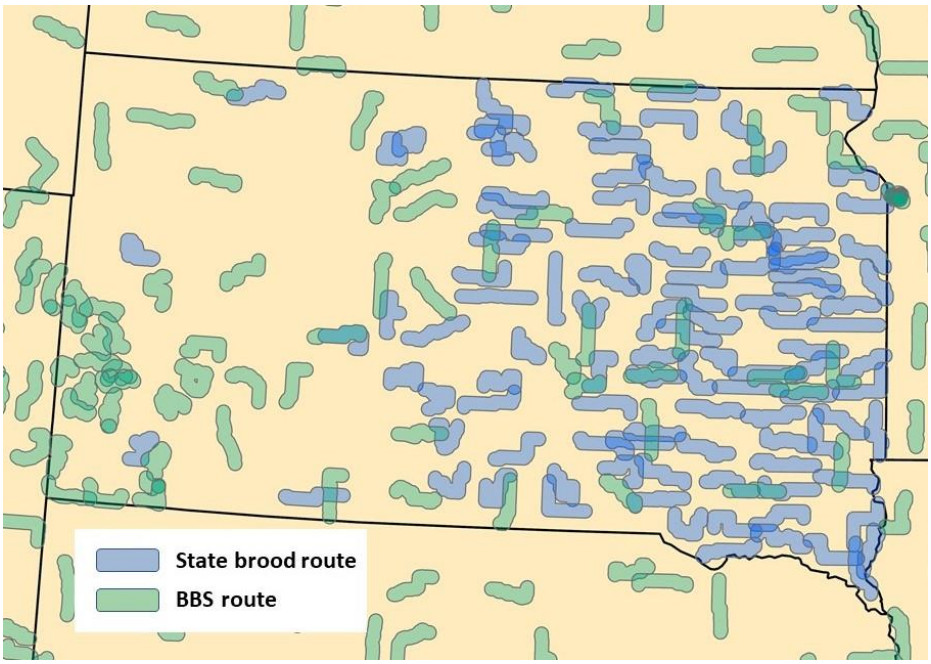
The rolling sequence of opening days begins this month, with the northern states up first. Here's wishing everyone a safe and memorable season – after nearly two years of Covid, drought, and fire/smoke, we deserve it.

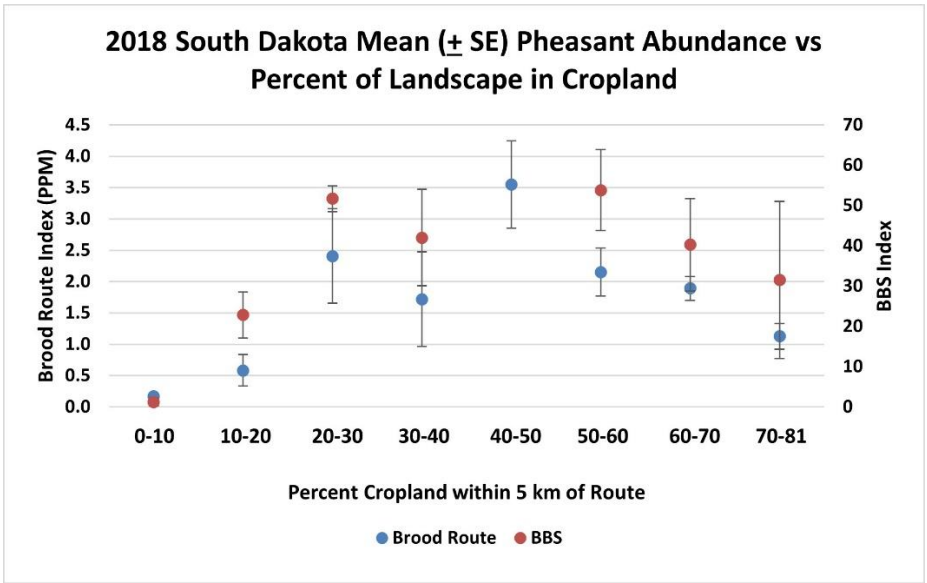
Jared Wiklund and the crew at PF always do a good job rounding up information about upcoming hunting prospects on a tight deadline. Thanks to both the writers and content contributors across the country for producing this great resource.

I have started assembling some of the pieces we will need to construct our "range-wide, spatially explicit (i.e., GIS-based) mathematical model and decision support tool to estimate multiscale pheasant

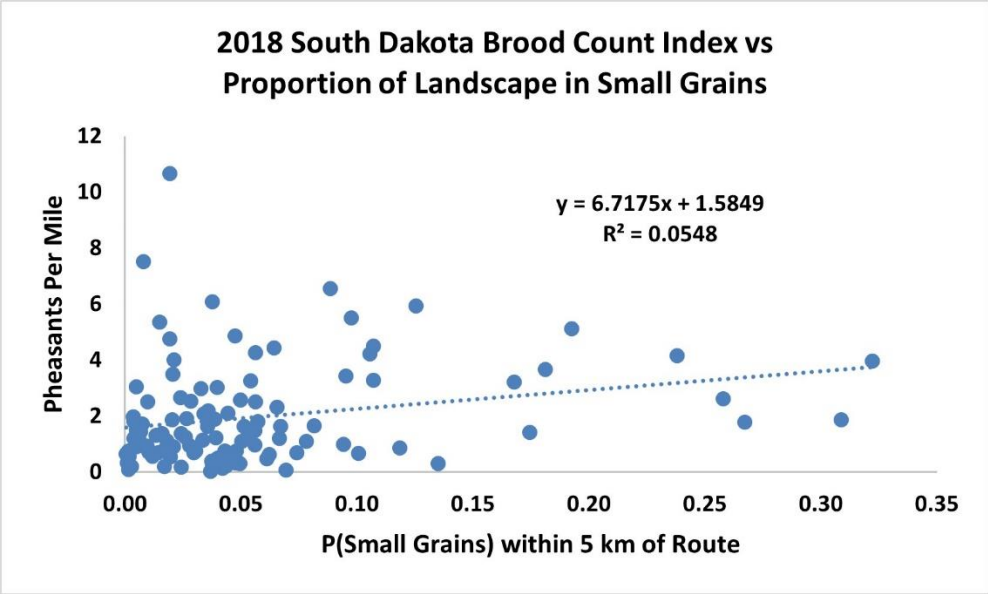
abundance associated with habitat/land cover conditions," as the National Plan describes our highest priority new work item. To help familiarize myself with current ArcGIS Pro functionality, I used 2018 brood count and North American Breeding Bird Survey (BBS) data and route locations for South Dakota, along with USDA's Cropland Data Layer for that year. The CDL was preferred over other possible layers because it distinguishes between row crops and small grains, which will be necessary test our National Plan model at smaller scales.

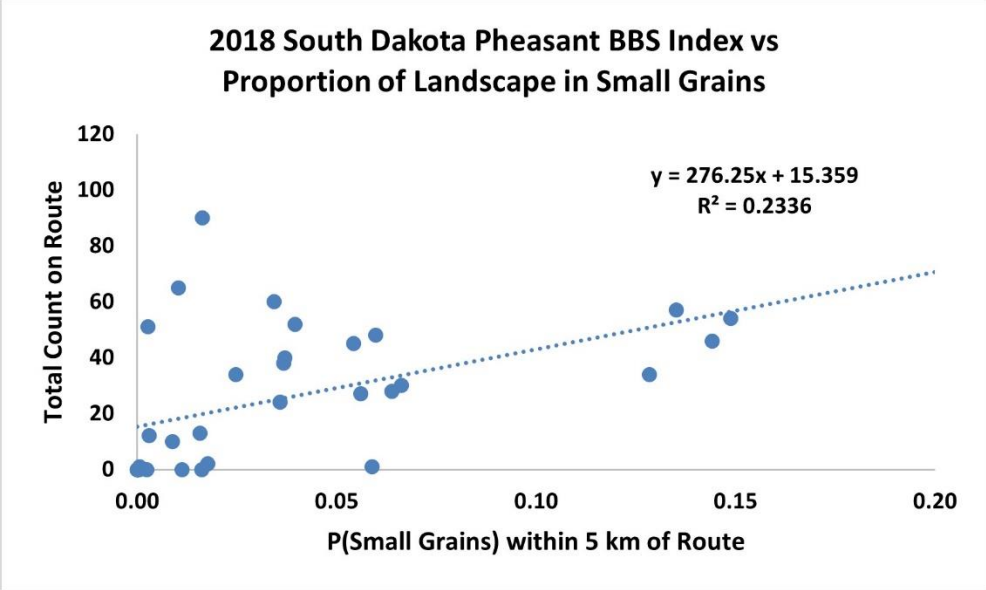
One assumption we made in the "Pheasant Economics" section of the National Plan was that pheasant populations peak when landscapes hit about 50% cropland, so I looked at land use within 5 km of both sets of survey routes (brood and BBS routes are generally 30 and 25 miles long, respectively) to see if that was true. At this scale and range of data, the assumption seemed to hold up pretty well.





Small grains have also been suggested as a determinate of abundance in some previous models. For both data sets at this scale, that relation appears positive but weak. Regardless, small grains certainly did not appear to be a prerequisite for high counts.





These results are preliminary – obviously we'll want to look at more years, states, and scales before drawing any broad conclusions, and the spatial data sets I am creating need more scrutiny before they are trusted. There is also a considerable gap between this kind of descriptive work and the more complex multi-scale modeling we want to do in the future (especially involving spatial CRP data, which I don't yet have access to). That said, I'm beginning to feel more optimistic about being able to complete at least some work on this project internally, which hopefully will help minimize what we need to contract out. I'll keep plugging away and see what I can come up with.

Finally, Technical Committee member Joseph Lautenbach (Ohio) coauthored a new publication this month on lesser prairie-chicken ecology, and former member Robert Perez (Texas) coauthored a new Montezuma quail paper (see below). Congrats to both!

Pheasant-relevant Media

Mild winter, hot summer creates a mixed bag for Idaho upland bird hunters
Minnesota's drought conditions are proving challenging for pheasants, observers
Pheasant numbers down 25% in Minnesota
Pheasant hunters can expect a good season in Iowa this year
Pheasant outlook is especially good here in northwest Iowa
South Dakota retools to boost pheasant and hunter participation numbers
South Dakota pheasant preview: wildlife officials expect big numbers
South Dakota media group hosts "The Future of Pheasants" panel discussion
Wildlife officials express strong stances for and against S.D. pheasant predator bounty program
Coyotes never have been the culprit of South Dakota's pheasant decline
North Dakota drought taking toll on prime pheasant areas
North Dakota's pheasant population down; grouse and partridge remain steady
An evolving path to declining US crop acres

Recent Literature

Hall, A., R. A. Sage, and J. R. Madden. 2021. The effects of released pheasants on invertebrate populations in and around woodland release sites. Ecology and Evolution (early online version).

Stander, R., D. J. Walker, F. C. Rohwer, and R. K. Baydack. 2021. Drone nest searching applications using a thermal camera. Wildlife Society Bulletin (early online version).

Kubecka, B. W., T. M. Terhune, and J. A. Martin. 2021. Brood success of northern bobwhite is biased by incomplete detectability during flush-counts. Wildlife Biology (early online version).

Kubecka, B. W., T. M. Terhune, and J. A. Martin. 2021. Temporal and scalar variations affect resource use of northern bobwhite broods. Ecology and Evolution (early online version).

Lassiter, E. V. et al. 2021. Northern bobwhite occupancy patterns on multiple spatial scales across Arkansas. Journal of Fish and Wildlife Management (early online version).

Harmange, C. et al. 2021. Linking personality and health to use of space in the gray partridge: perspectives for management. European Journal of Wildlife Research 67:81.

Milligan, M. C., and L. B. McNew. 2021. Does researcher activity impact nest survival of sharp-tailed grouse? Wildlife Biology (early online version).

Stewart, K. G., F. Hernandez, E. D. Grahmann, D. B. Wester, R. M. Perez, L. A. Brennan, and H. L. Perotto-Baldivieso. 2021. Influence of juniper on Montezuma quail habitat use in Texas. Journal of Wildlife Management (early online version).

Lautenbach, J. D., D. A. Haukos, J. M. Lautenbach, and C. A. Hagen. 2021. Ecological disturbance through patch-burn grazing influences lesser prairie-chicken space use. Journal of Wildlife Management (early online version).

Olsen et al. 2021. Reversing tree encroachment increases usable space for sage-grouse during the breeding season. Wildlife Society Bulletin (early online version).

Rabon, J. C., P. S. Coates, M. A. Ricca, 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.

Trivia Answer

Oregon, Idaho (north zone), Montana, and North Dakota all open on October 9th.

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.