# Pheasant News and Notes

March 2022

Trivia Question

A new paper on the evolution of mating displays in Galliformes classified each species as a "frontal" displayer (i.e., the male typically faces the female with spread wings or tail and tends to do so symmetrically), a "lateral" displayer (spreading wings and the tail in such an unsymmetrical way that the bird appears more significant when viewed from the side; usually the wing close to the female is dropped and the farther wing is stretched above the body), or some combination of both. In what category is our own *Phasianus colchicus*?

Farm Bill and USDA News

USDA announced the 2022 CRP average county soil rental rates in effect for the upcoming signups. Not a lot of dramatic changes in the pheasant range east of the Rocky Mountain states, but it was a mixed bag in the west. It looks like Oregon suffered the most consistent rate declines. The map below shows the percent change in the 2022 rate from the previous one.
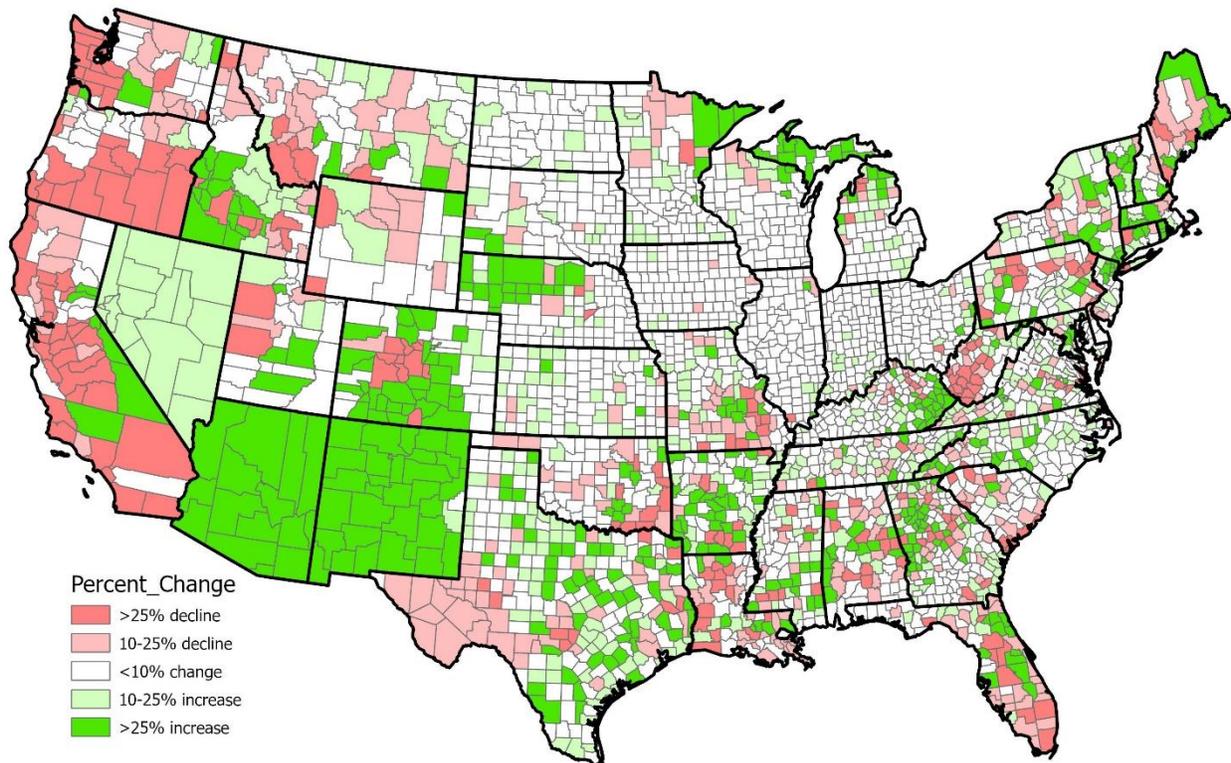
Matt Rinella and Lauren Porensky of USDA's Agricultural Research Service presented a webinar on factors affecting presence and abundance of seeded flowering plants in 120 new CRP plantings in Colorado and Montana. The best establishing forbs were annual sunflower, alfalfa, small burnet, sanfoin, and Maximilian sunflower. Use of sulfonylurea herbicides up to 90 days before seeding reduced the chances of a seeded forb appearing by 25%, which was the greatest manageable effect observed.

Grass seeding rate had a negative effect on forb establishment and abundance, but its impact was relatively small.

Finally, USDA's Economic Research Service put out an interesting report on CRP practice costs, landowner adoption factors, and the interplay between the two. It is densely packed with information and I haven't got my head around it yet, but it should help illuminate the trade-offs among improved practice standards, acreage offered for enrollment by landowners, and costs to FSA. Thanks to Todd Bogenschutz (Technical Committee, Iowa) and Mark Norton (South Dakota Game, Fish and Parks Farm Bill Coordinator) for passing the link along.

Notes from Around the Pheasant Range

As many of you are keenly aware, Pheasant Fest in Omaha is fast approaching this month. Thanks to everyone involved in making this event the success it always is.

Our spring Management Board meeting is also coming up on March 29th at noon Central Time. I look forward to talking to everyone at (hopefully) our last Covid-imposed virtual meeting.

I spent most of last month following up on topics that arose during January's Technical Committee meeting, primarily concerning data dashboards and tools derived from the National Plan model. A prototype of a National Pheasant Plan goal and data viewer is available here, and a tool estimating the pheasant production change associated with CRP acreage changes is here. The best way to see how they work is to just play around with the inputs, and I recommend reducing the size of the browser

window they are opened in for easier viewing. I've focused on function rather than aesthetics to this point, so hopefully with time they can become more appealing to look at. Both (and a few others I've started) are works in progress, so I would appreciate any feedback you might have regarding improvements.

Joseph Lautenbach (Technical Committee, Ohio) sent me the code he used to develop his pheasant population prediction model using their state crow counts and the most recent National Land Cover Database map. This uses an R-based GIS analysis rather than running the land cover extraction work through Esri software, which may not be in everyone's price range (whereas R is free). I was able to get my version of the NLCD loaded using Joseph's work as a guide but haven't yet dipped a toe into the actual habitat modeling work.

I paused because Joseph also sent me a data set containing GPS'ed locations of Ohio's North American Breeding Bird Survey (BBS) sample points compiled by former Tech Committee member Nathan Stricker. You'll recall that the BBS provides a large portion of the site-level pheasant abundance data available for our modeling work, so the noise in those data is important to assess and account for.

I compared Nathan's points to my estimated locations, which were based on publicly available route lines and survey protocols (i.e., I estimated where the points *should* be, whereas Nathan compiled where they actually were). The figure above shows how the two sets lined up for one survey route –

mine are the solid dots, Nathan's are the open ones, and according to the protocols the points in both are supposed to be about a half mile apart. Most of my estimates are close but not quite close enough for comfort, and some routes are better and some worse than this example. These errors wouldn't matter much if we were just analyzing habitat at large radii (>1 mile) around the sample points or the entire route, but they matter more as the scales get smaller. Although several peer-reviewed publications have used the "estimated point location" approach to model habitat effects using BBS data, the upshot is that we might be better off sticking with the survey points for which we have a ground-truthed coordinate, meaning the state-run crow counts and some subset of the BBS points, at least for analyses we want to run at smaller spatial scales.

Speaking of state count data, Sarah Garrison (Technical Committee, Washington) jumped through the necessary administrative hoops to send me nine years of data from about 160 crow count points. I know others are still working on getting their data packaged up – keep it coming!

I also attended a day-long webinar last month on soil health and regenerative agriculture co-sponsored by the South Dakota Grassland Coalition. Gabe Brown was the featured speaker, and it was easy to see why he is considered a leader in this space. His presentation was a mix of agronomy, soil science, One Health, religion, and a lot of first-hand experience on his North Dakota ranch. I can't necessarily recommend spending a whole day on it, but those interested in the subject can find shorter commentaries of his on YouTube.

Pheasant-relevant Media
Montana wildlife commission keeps Jan. 1 end to pheasant season
Avian flu detected in New York captive pheasants
Tame pheasants, bad biology
Heroes of Ohio's wildlife habitat
Conservation in Nebraska reaches new heights through Pheasants, Quail Forever
Gov. Noem unveils new state services website with 'pheasant' chat
Pennsylvania Game Commission delivers annual report to legislature, including pheasant release info
Minnesota man to stand trial for shooting at pheasant hunters
Wyoming politicians hatch a plan to continue sage grouse game farms
Voluntary UK ban on killing birds with lead shot has had 'no detectable effect'
A conservation report card for the 2018 Farm Bill
Conservation Reserve Program's evolving mission
USDA, DOI, and Western Governors launch collaborative Conservation Task Force
At bioenergy crossroads, should corn ethanol be left in the rearview mirror?
How corn ethanol for biofuel fed climate change
Is hunter recruitment really hurting hunting opportunity in the West?
Unpheasant encounter! Moment postman tries to fend off crazed pheasant who terrorises him every day

Recent Literature
Pratt, B., and S. Wallander. 2022. Cover practice definitions and incentives in the Conservation Reserve Program. USDA Economic Research Service, Economic Information Bulletin 233.

Brookes, S. M., et al. 2022. Incursion of H5N8 High Pathogenicity Avian Influenza Virus (HIAIV) into gamebirds in England. Epidemiology and Infection (early online version).

Volfova, M., et al. 2022. Translocation stress is reflected in corticosterone metabolites in pheasant (*Phasianus colchicus*) droppings. Acta Veterinaria Brno 91:51-58.

Wightman, P. H., D. W. Henrichs, B. A. Collier, and M. J. Chamberlain. 2022. Comparison of methods for automated identification of wild turkey gobbles. Wildlife Society Bulletin (early online version).

Bisht, M. S. 2021. Diet of Chukar Partridge *Alectoris chukar* (Gray): histological analysis of the droppings. Journal of Mountain Research 16:189-199.

Guan, X., X. Rao, G. Song, and D. Wang. 2022. The evolution of courtship displays in Galliformes. Avian Research (early online version).

Trivia Answer:

The paper categorizes the common pheasant as a frontal displayer, though I'm pretty sure that's wrong. I've watched courting males turn their backs to a hen, drop their closest wing to the ground and spread their tail feathers to form a "wall" of color and pattern that is tilted toward her (you can see that behavior here, although this particular male isn't too enthused; to see a lateral displayer with more vigor, check this one out).

For what it's worth, I'm pretty sure they also got bobwhite wrong. I've seen dozens of males approach captive females in decoy traps and have never observed a lateral display (this, aside from happening in someone's bedroom, is typical, including a nice "caterwaul" call). So much for peer review, although to be fair, categorizing the behavior of 131 species all over the world is a daunting task.