

Federal Aid in Wildlife Restoration Project №: W-15-R

Title of Job: 2024 October Rural Mail Carrier Survey



Bryan O'Connor, Upland Game Program Manager
 Dr. Jeffrey J. Lusk, Data & Biometry Program Manager
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The 2024 October Rural Mail Carrier Survey was conducted 1-4 October 2024. We received 365 cards by 30 October 2024, of which 334 cards contained information needed for analyses (Tables 1-3). Rural carriers made observations of wildlife while traveling 137,763 miles of rural roads in 90 of Nebraska’s 93 counties.

Caveats. Interpretations of the percent change from previous year’s indices and longer-term means are only meaningful in relation to the indices themselves. That is, when an index value is low, insignificant changes in the index can translate into large percent changes, but result in no observable difference in abundance within the region. For example, an increase in a species’ index from 0.01 animals observed per 100 miles to 0.02 animals per 100 miles is a 100% increase, but would not likely be noticeable to hunters afield. Further, survey methodology does not allow the estimation of population size or density, but only trends in relative abundance through time. At a statewide scale, these indices are correlated with annual harvest and are, therefore, useful for forecasting conditions hunters may encounter in the fall, particularly when combined with results from other surveys.

Interpretations. Relative abundance for most species was generally better compared to 2023. Regional indices were mixed, but mostly higher. For pheasants, regional indices were higher in all regions except the Panhandle, but was similar to 2023 indices in the Northeast and Southeast. Regional indices for prairie grouse were higher in all regions except the Central compared to 2023. For bobwhites, regional indices were mixed compared to 2023, with indices higher in the West Platte, Northeast, East Central, and North Central zones; and lower elsewhere. Wild turkey indices were mixed compared to 2023, with higher indices everywhere except for the Northeast and Southeast regions. For Cottontails, indices were higher in all regions in 2024, except in the Northeast and Southeast regions. Regional indices of abundance for jackrabbits were higher in 2024 compared to 2023, with lower indices in the Panhandle and Southeast regions. Finally, indices of deer abundance were generally higher compared to 2023, with a slightly lower index observed only in the Southwest.

Take-Home Message. Indices were higher for most species, potentially signaling some regional population increases compared to 2023.

TABLE 1. Raw counts of pheasants, prairie grouse, wild turkey, cottontail, and jackrabbits from the 2024 October Rural Mail Carrier Survey by pheasant management region (Figure 1).

Region	Carriers	Miles	Pheasant	Grouse	Turkey	Cottontail	Jackrabbit
Central	49	21,324	60	56	742	90	8
Northeast	71	31,167	123	27	455	117	22
Panhandle	35	12,220	97	45	502	55	8
Sandhills	37	15,911	29	74	890	17	1
Southeast	92	48,442	60	8	373	143	3
Southwest	50	22,170	224	80	1,339	78	6
Statewide	334	151,234	593	290	4,301	500	48

TABLE 2. Raw counts of deer (bucks, does, and fawns) by pheasant management region (Figure 1) from the 2024 October Rural Mail Carrier Survey.

Region	Carriers	Miles	Buck	Doe	Fawn	Total
Central	49	21,324	41	141	23	205
Northeast	71	31,167	5	47	15	67
Panhandle	35	12,220	25	88	18	131
Sandhills	37	15,911	14	103	18	135
Southeast	92	48,442	24	154	57	235
Southwest	50	22,170	36	150	32	218
Statewide	334	151,234	145	683	163	991

TABLE 3. Raw counts of bobwhite by bobwhite-management zone (Figure 2) from the 2024 October Rural Mail Carrier Survey.

Region	Carriers	Miles	Bobwhites
East Central	56	21,859	28
North Central	48	21,784	58
Northeast	62	28,200	71
Republican	22	9,779	44
Southeast	34	24,533	13
West Platte	77	31,519	55
Not Quail Range	35	13,559	0
Statewide	334	151,234	269

FIGURE 1. Pheasant management regions.

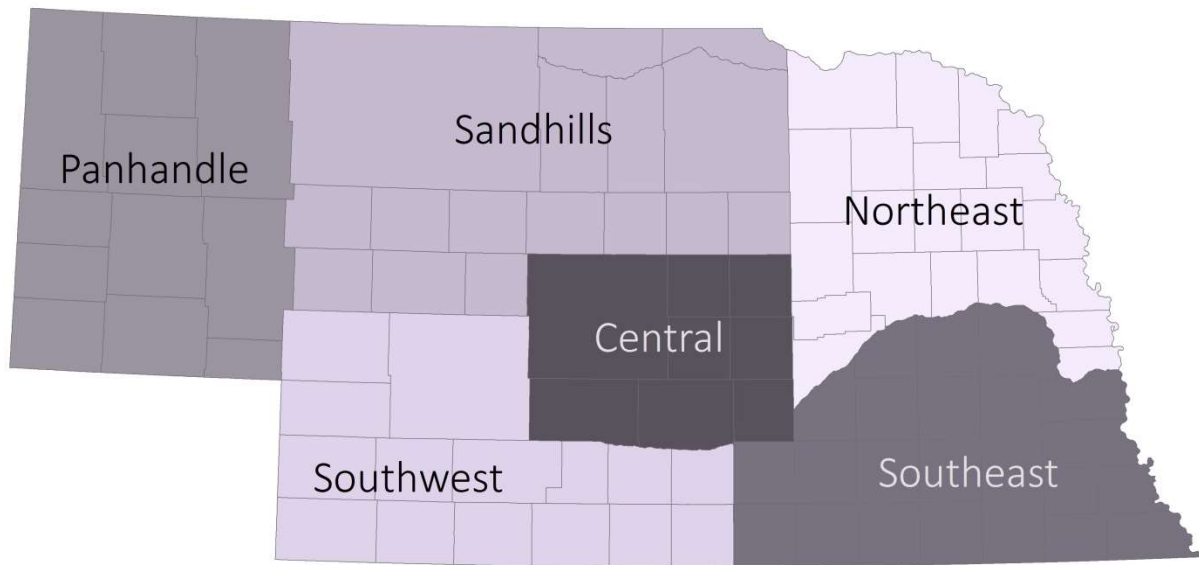
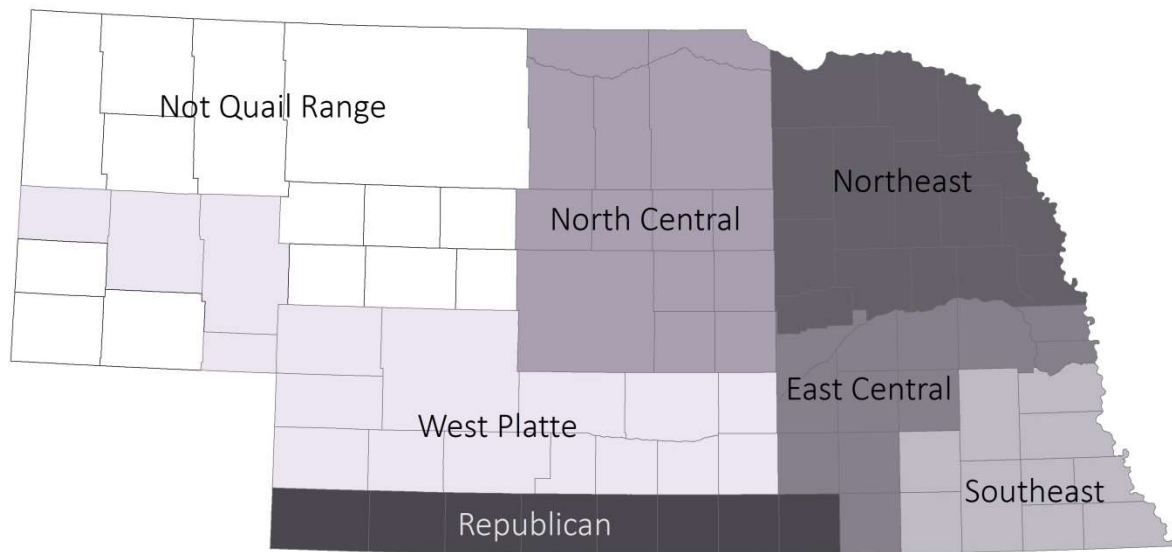


FIGURE 2. Bobwhite management zones.



Results. Relative abundance for most species was generally better statewide compared to 2023 (Tables 4-10, Figures 3-9). Regional indices were mixed, but mostly higher. For pheasants, regional indices were higher in all regions except the Panhandle (Table 4, Figure 3), but was similar to 2023 indices in the Northeast and Southeast. Regional indices for prairie grouse were higher in all regions except the Central (Table 5, Figure 4) compared to 2023. For bobwhites, regional indices were mixed compared to 2023, with indices higher in the West Platte, Northeast, East Central, and North Central zones; and lower elsewhere (Table 6, Figure 5). Wild turkey indices were mixed compared to 2023, with higher indices everywhere except for the Northeast and Southeast regions (Table 7, Figure 6). For Cottontails, indices were higher in all regions in 2024, except in the Northeast and Southeast regions (Table 8, Figure 7). Regional indices of abundance for jackrabbits were higher in 2024 compared to 2023, with lower indices in the Panhandle and Southeast regions (Table 9, Figure 8). Finally, indices of deer abundance were generally higher compared to 2023, with a slightly lower index observed only in the Southwest (Table 10, Figure 9). Of the 334 usable cards returned, 48 (14.4%) had no observations of any wildlife. The number and percentage of the total usable cards received for each species is provided in Table 11.

TABLE 4. Pheasant indices and percent change by pheasant management region (Figure 1) from the 2024 October Rural Mail Carrier Survey. Carrier means are weighted by miles traveled per carrier.

Region	Mean pheasants per 100 miles & 95% Confidence Limits	Percent Difference from:			
		2023	Mean 2019-2023	Mean 2014-2023	Mean 2004-2023
Central	0.28 (0.11-0.45)	27	92	34	-2
Northeast	0.39 (0.18-0.61)	5	2	8	-17
Panhandle	0.79 (0.42-1.17)	-14	-18	-41	-30
Sandhills	0.18 (0.00-0.47)	20	-49	-55	-66
Southeast	0.12 (0.07-0.18)	0	-18	-43	-66
Southwest	1.01 (0.55-1.47)	77	28	-3	-23
Statewide	0.39 (0.29-0.49)	18	1	-19	-33

FIGURE 3. Regional and statewide time series (1983-2024) of pheasant population indices by pheasant management region (Figure 1) from the October Rural Mail Carrier Survey.

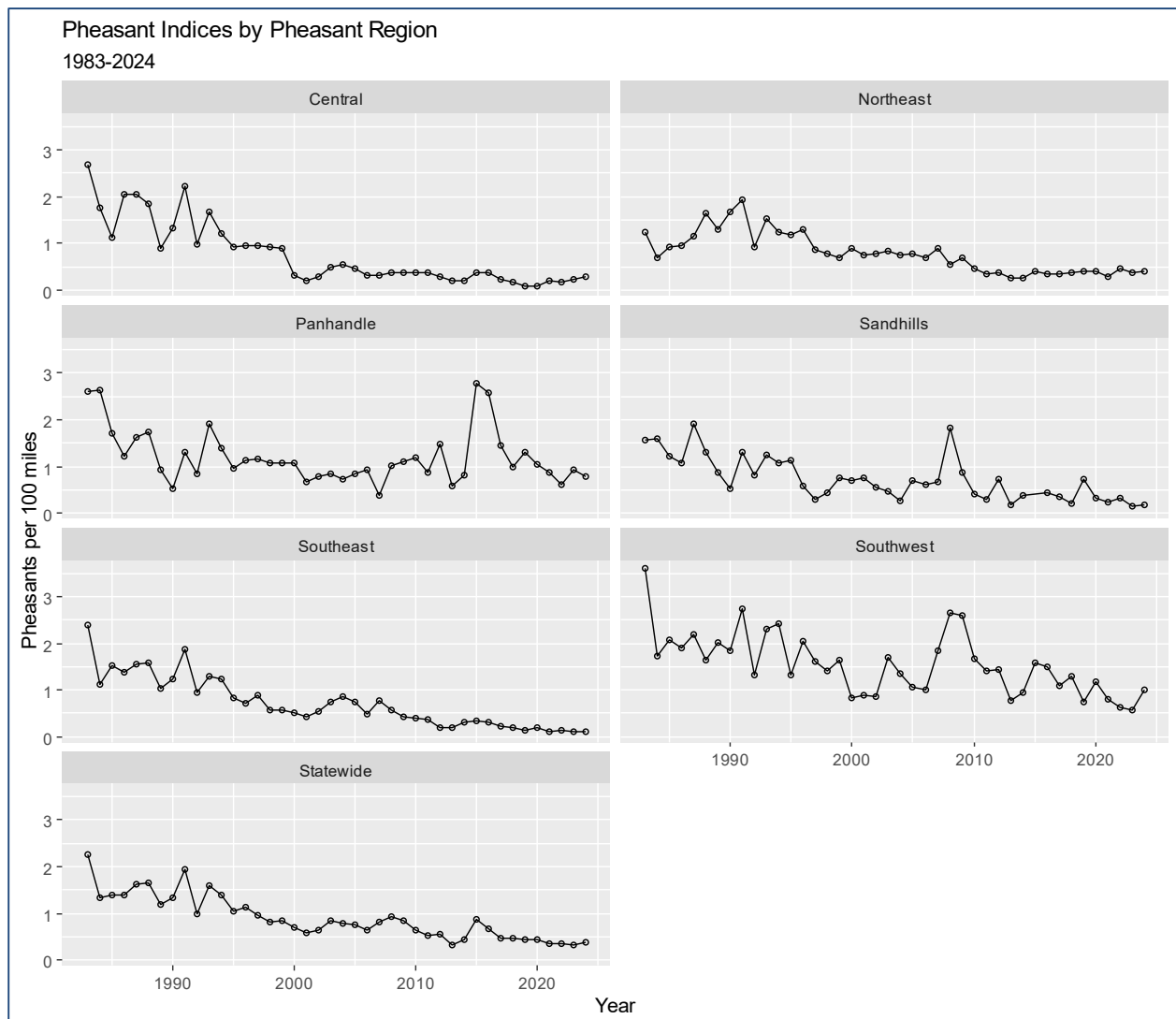


TABLE 5. Prairie grouse indices and percent change by pheasant management region (Figure 1) from the 2024 October Rural Mail Carrier Survey. Carrier means are weighted by miles traveled/carrier.

Region	Mean Grouse per 100 miles & 95% Confidence Limits	Percent Difference from:			
		2023	Mean 2019-2023	Mean 2014-2023	Mean 2004-2023
Central	0.26 (0.00-0.53)	-13	-2	-38	-61
Northeast	0.09 (0.00-0.26)	12	-25	27	58
Panhandle	0.37 (0.05-0.69)	147	49	39	10
Sandhills	0.47 (0.05-0.88)	47	-39	-54	-69
Southeast	0.02 (0.00-0.04)	100	-71	-57	-64
Southwest	0.36 (0.00-0.80)	260	13	10	34
Statewide	0.19 (0.09-0.29)	58	-12	-23	-38

FIGURE 4. Regional and statewide time series (1983-2024) of prairie grouse indices by pheasant management region (Figure 1) from the October Rural Mail Carrier Survey.

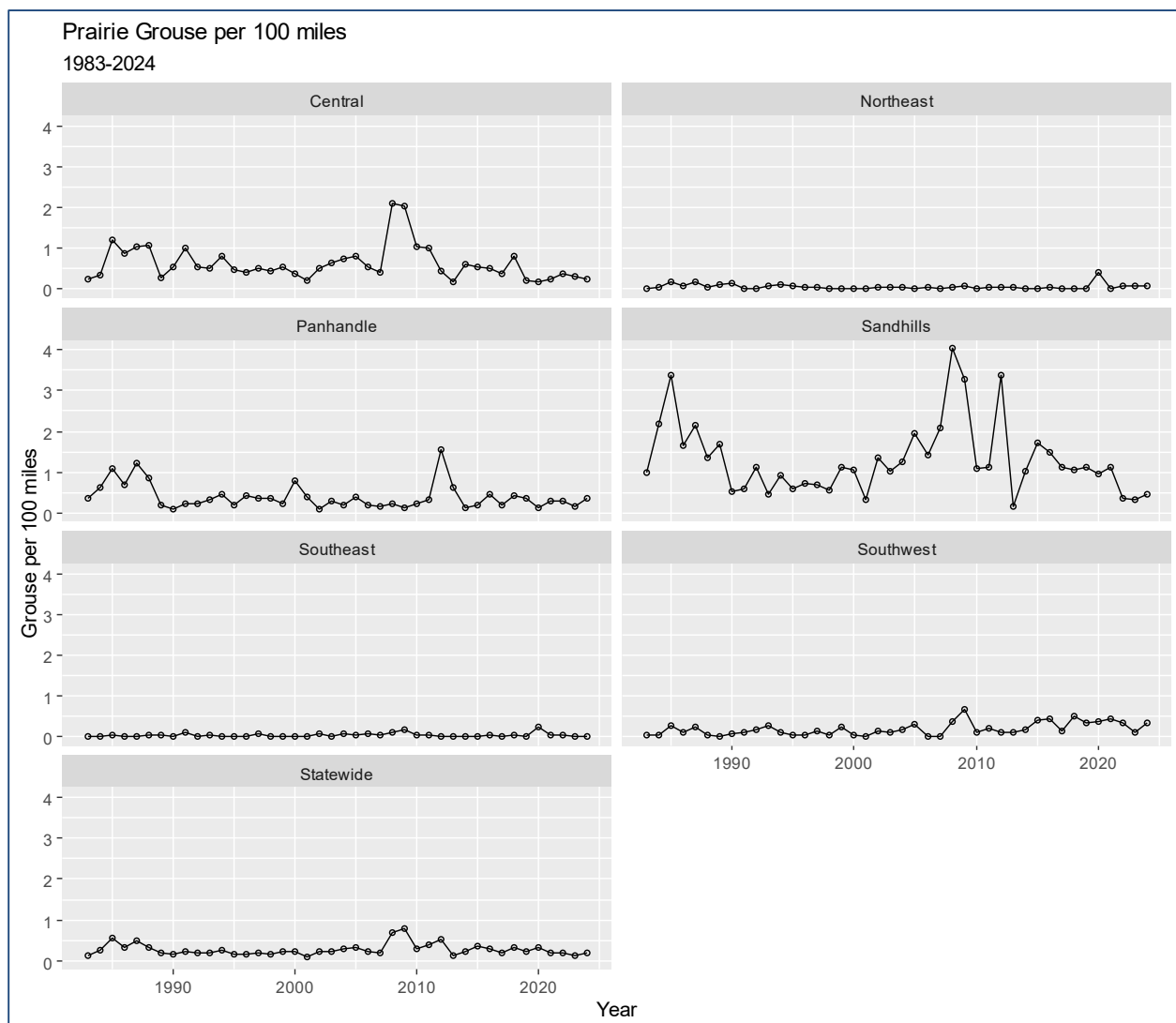


Table 6. Bobwhite indices and percent change by bobwhite management zone (Figure 2) from the 2024 October Rural Mail Carrier Survey. Carrier means are weighted by miles traveled per carrier.

Zone	Mean Bobwhites per 100 miles & 95% Confidence Limits	Percent Difference from:			
		2023	Mean 2019-2023	Mean 2014-2023	Mean 2004-2023
East Central	0.13 (0.04-0.21)	30	-43	-61	-49
North Central	0.27 (0.01-0.52)	13	13	-25	-16
Northeast	0.25 (0.02-0.48)	108	145	178	119
Republican	0.45 (0.08-0.82)	-27	3	-23	-2
Southeast	0.05 (0.00-0.15)	-64	-70	-86	-87
West Platte	0.17 (0.05-0.30)	143	118	37	39
NQR	0.00 (NA)	NA	NA	NA	NA
Statewide	0.18 (0.11-0.25)	20	10	-25	-19

Figure 5. Regional and statewide time series (1983-2024) of bobwhite indices by bobwhite management zone (Figure 2) from the October Rural Mail Carrier Survey.

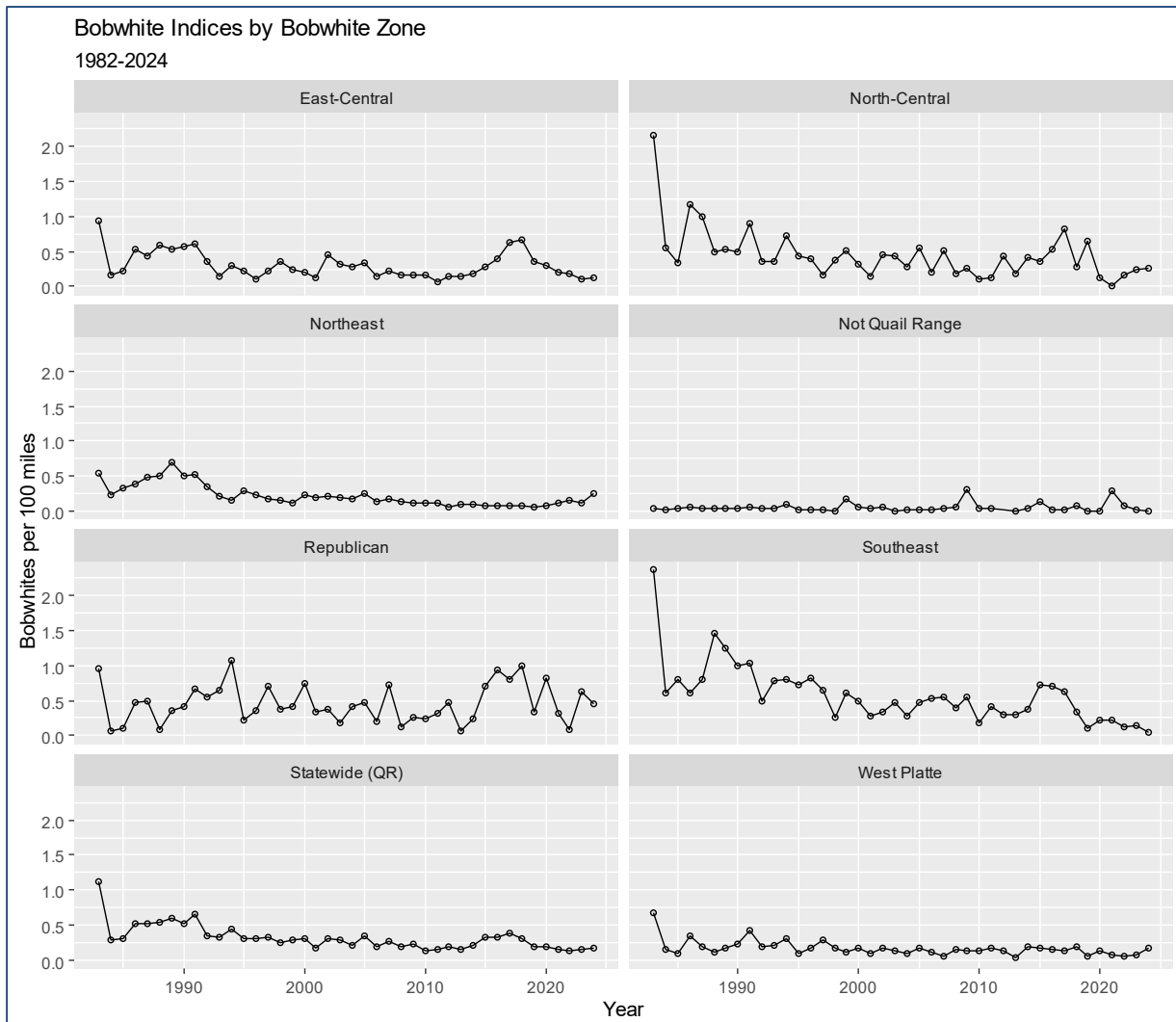


Table 7. Wild Turkey indices and percent change by pheasant management region (Figure 1) from the 2024 October Rural Mail Carrier Survey. Carrier means are weighted by miles travelled/carrier.

Region	Mean Turkeys per 100 Miles & 95% Confidence Limits	Percent Difference from:			
		2023	Mean 2019-2023	Mean 2014-2023	Mean 2004-2023
Central	3.48 (2.00-4.96)	17	-13	-26	-32
Northeast	1.46 (0.69-2.23)	-2	-14	-27	-22
Panhandle	4.11 (2.10-6.12)	97	59	80	63
Sandhills	5.59 (1.19-9.99)	103	26	18	-10
Southeast	0.77 (0.46-1.08)	-44	-45	-59	-62
Southwest	6.04 (3.44-8.64)	7	-11	-23	-23
Statewide	2.84 (2.12-3.56)	21	-3	-17	-19

Figure 6. Regional and statewide time series (2000-2024) of wild turkey indices by pheasant management region (Figure 1) from the October Rural Mail Carrier Survey.

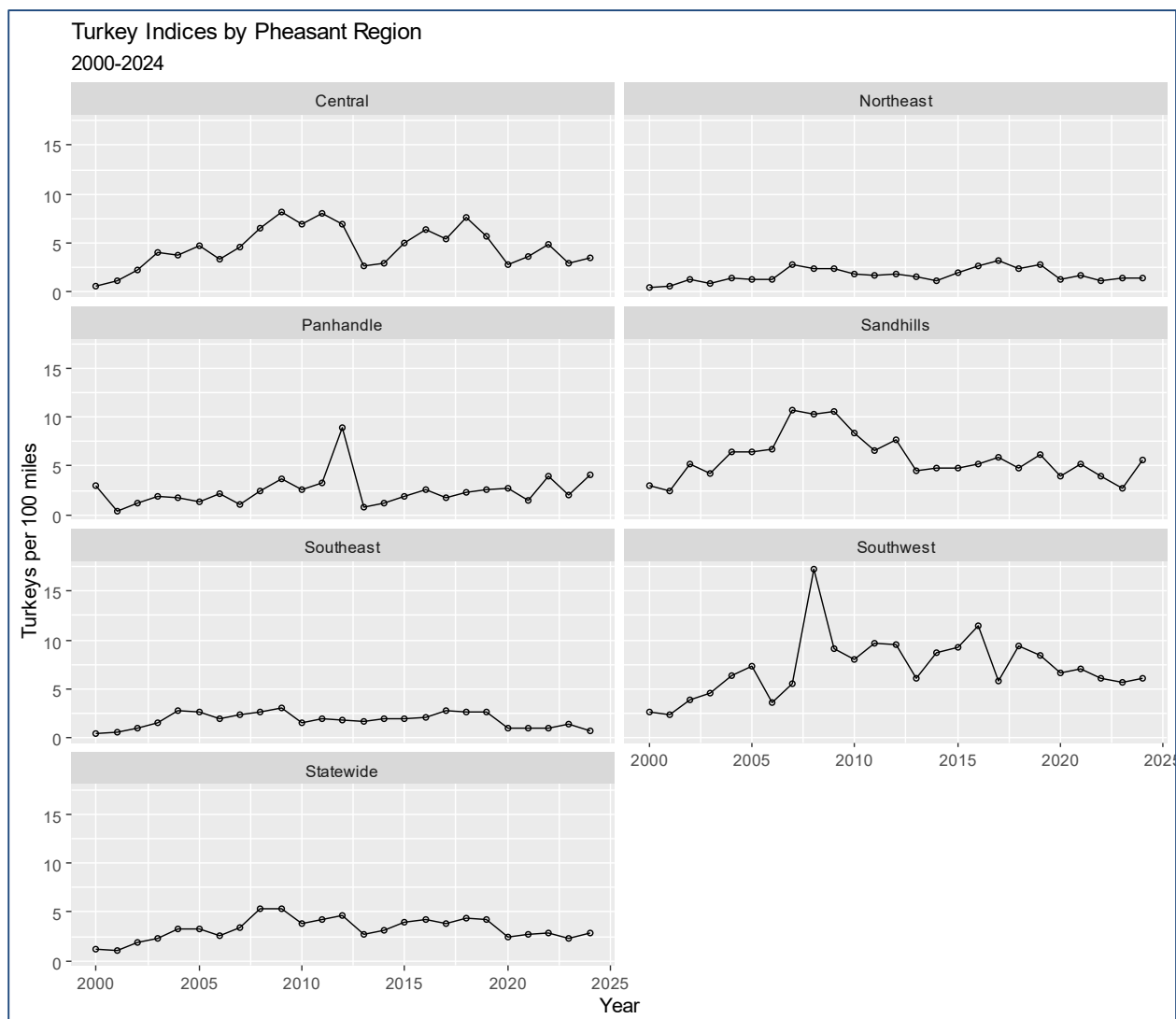


Table 8. Cottontail indices and percent change by pheasant management region (Figure 1) from the 2024 October Rural Mail Carrier Survey. Carrier Means are weighted by miles traveled per carrier.

Region	Mean Cottontails per 100 miles & 95% Confidence Limits	Percent Difference from:			
		2023	Mean 2019-2023	Mean 2014-2023	Mean 2004-2023
Central	0.42 (0.19-0.65)	56	41	28	-6
Northeast	0.38 (0.06-0.69)	-10	4	7	-14
Panhandle	0.45 (0.14-0.76)	32	36	44	58
Sandhills	0.11 (0.00-0.25)	175	20	-21	-30
Southeast	0.30 (0.00-0.62)	-14	-13	-22	-27
Southwest	0.35 (0.17-0.53)	9	9	-10	-5
Statewide	0.33 (0.21-0.45)	3	4	-5	-15

Figure 7. Regional and statewide time series (1983-2024) of cottontail indices by pheasant management region (Figure 1) from the October Rural Mail Carrier Survey.

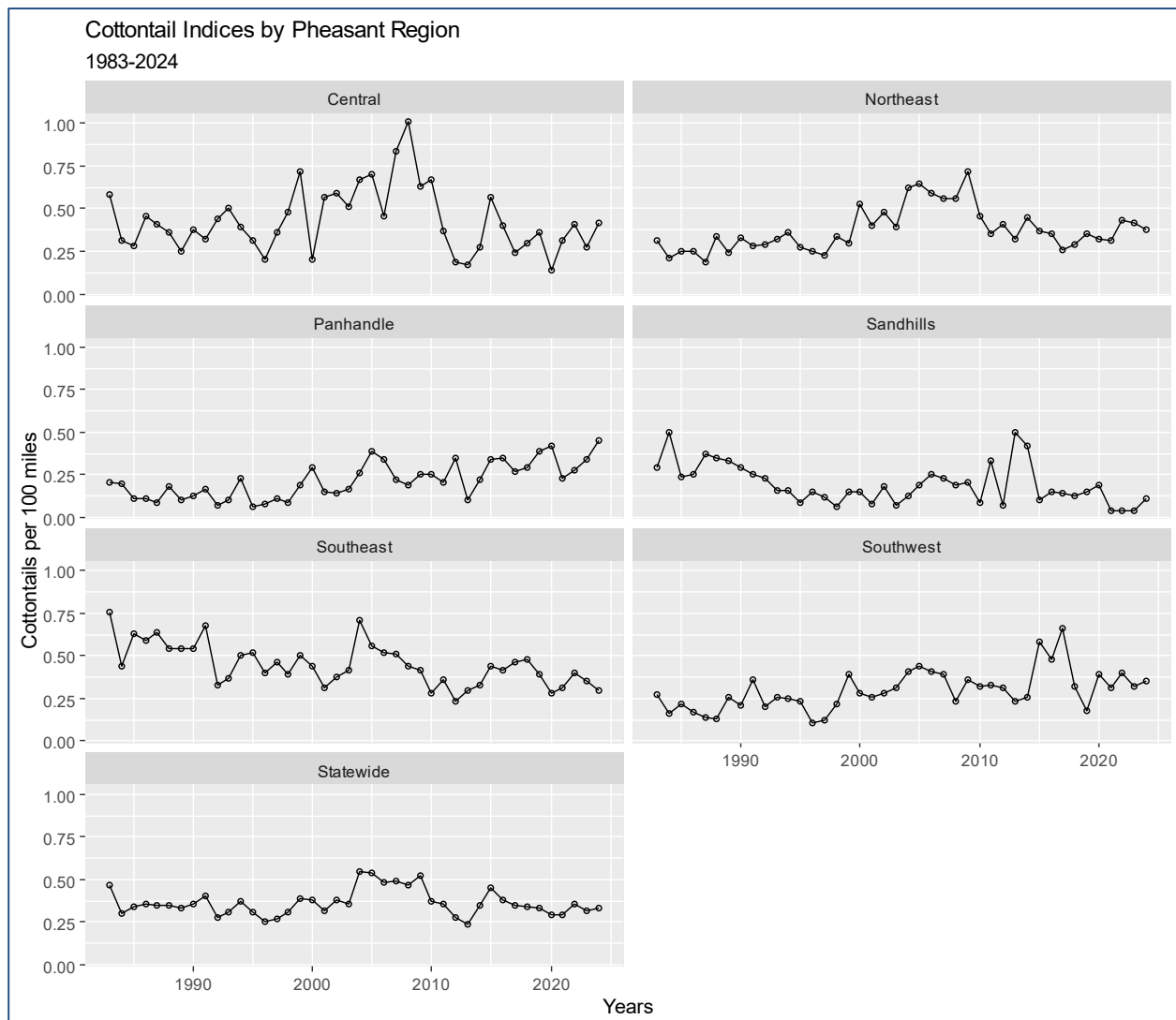


Table 9. Jackrabbit indices and percent change by pheasant management region (Figure 1) from the 2024 October Rural Mail Carrier Survey. Carrier means are weighted by miles traveled per carrier.

Region	Mean Jackrabbits per 1000 miles & 95% Confidence Limits	Percent Difference from:			
		2023	Mean 2019-2023	Mean 2014-2023	Mean 2004-2023
Central	0.38 (0.00-0.84)	660	296	177	185
Northeast	0.71 (0.00-1.47)	689	914	640	409
Panhandle	0.65 (0.00-1.42)	-18	28	-23	-17
Sandhills	0.06 (0.00-0.15)	NA	-59	-75	-81
Southeast	0.06 (0.00-0.16)	-14	-21	-28	-54
Southwest	0.27 (0.00-0.57)	13	18	-16	-39
Statewide	0.32 (0.12-0.52)	113	122	46	22

Figure 8. Regional and statewide time series (1983-2024) of jackrabbit indices by pheasant management region (Figure 1) from the October Rural Mail Carrier Survey.

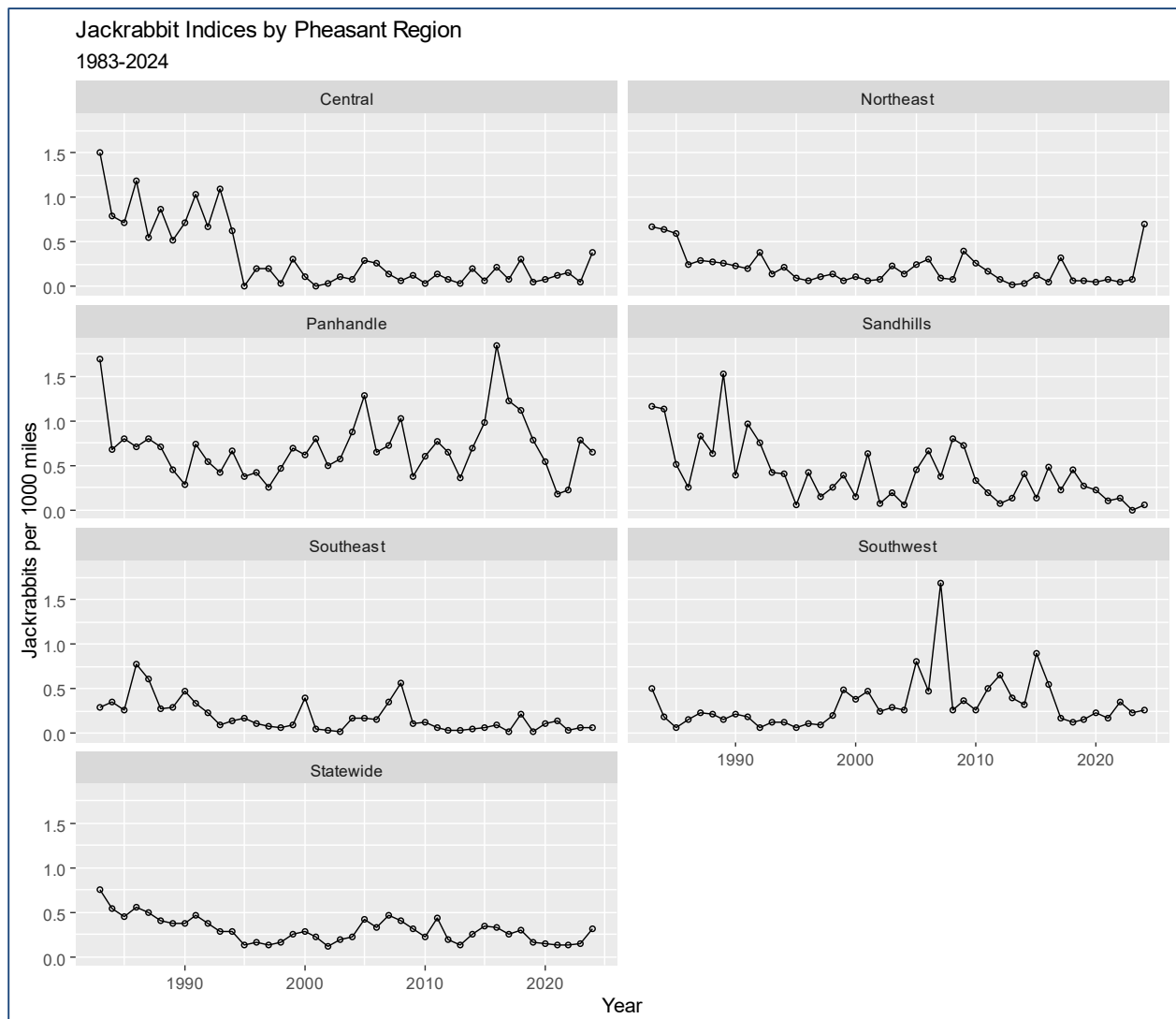


Table 10. Deer indices and percent change by pheasant management region (Figure 1) from the 2024 October Rural Mail Carrier Survey. Carrier means are weighted by miles traveled per carrier.

Region	Mean Deer per 100 miles & 95% Confidence Limits	Percent Difference from:			
		2023	Mean 2019-2023	Mean 2014-2023	Mean 2004-2023
Central	0.96 (0.61-1.31)	75	34	17	19
Northeast	0.21 (0.10-0.33)	17	-40	-43	-51
Panhandle	1.07 (0.48-1.66)	49	-31	-26	-12
Sandhills	0.85 (0.17-1.53)	166	-33	-31	-39
Southeast	0.49 (0.19-0.78)	17	13	6	-9
Southwest	0.98 (0.56-1.40)	-4	-34	-43	-38
Statewide	0.66 (0.51-0.81)	40	-15	-19	-19

Figure 9. Regional and statewide time series (2003-2024) of deer indices by pheasant management region from the October Rural Mail Carrier Survey.

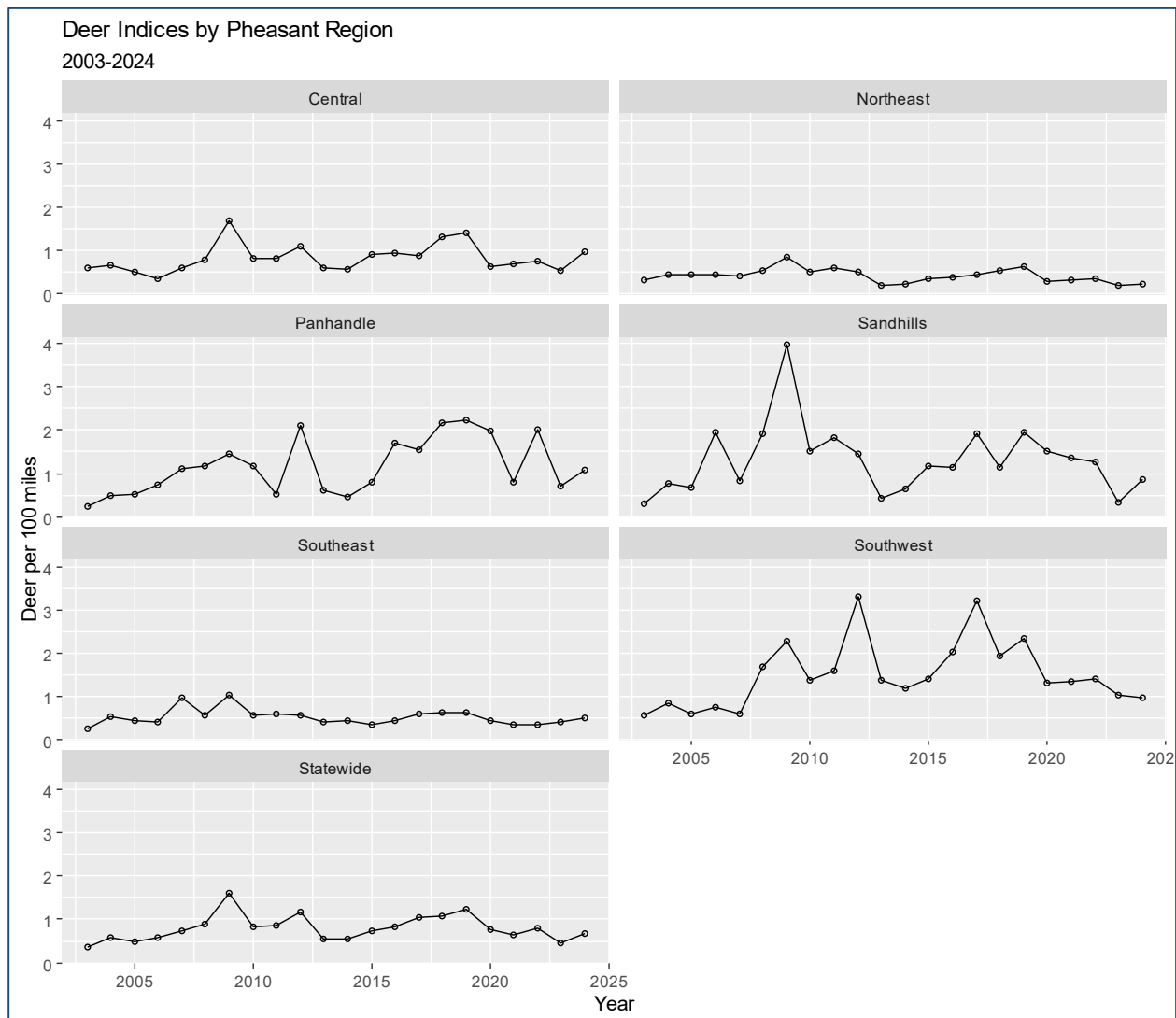


Table 11. Number of cards and the percent of total cards ($n = 334$) that contained zero observations of each wildlife species. Overall, 14.4% of October 2024 cards contained zero observations of all species (48 cards).

	Pheasant	Deer	Quail	Grouse	Turkey	Cottontail	Jackrabbit
Zero Counts	199	155	292	292	147	203	313
Percent Zero	59.6	46.4	87.4	87.4	44.0	60.8	93.7

For more information, contact Bryan O'Connor, Upland Game Program
 Manager, bryan.oconnor@nebraska.gov