

PHEASANT CROWING SURVEY - 2008

PERFORMANCE REPORT STATEWIDE WILDLIFE RESEARCH AND SURVEYS

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KANSAS PHEASANT CROWING SURVEY – 2008

Federal Aid in Wildlife Restoration Grant W-39-R-14

Prepared by: Randy Rodgers, Wildlife Research Biologist

The survey period was from April 25 through May 20 and was extended 5 days later than the normal May 15 ending due to windy conditions. The results of the 2008 survey and comparisons to the 2007 data are presented in table 1. All of the 63 established routes were assigned for 2008 (routes in Osage and Coffee counties are run only in even-numbered years) and 59 were successfully run. Forty-eight of the routes were completed in both 2007 and 2008 by the same observers and 47 of these were comparable to 2007. Personnel assigned these surveys are noted in Table 2. Rangewide and regional trends since the survey's 1997 initiation are shown on page 5.

Rangewide: The 2008 Pheasant Crowing Survey (PCS) index was 18.4 crows per station and the comparable routes increased a mean of 35% over 2007. This was a significant increase ($P < 0.001$). Overall, 40 of the 47 comparable routes increased this year. **Northwest:** All of the 12 routes were run with 10 by the same observers as in 2007. The regional Northwest PCS index was 34.6 and the mean of the 9 comparable routes increased by 36%, a significant change ($P = 0.004$). Nine of the 10 routes run by the same observer in both years increased. The Sherman County route sharply decreased, but was not used to calculate regional change since this decrease was probably due to substantial irrigation-engine noise this year compared to no such noise in 2007. **Northcentral:** All of the 12 routes were run, yielding a PCS index of 13.5. Eleven of these routes were run by last year's observers. Ten routes increased, 1 decreased, and the average of those 11 routes increased 40% which was significant ($P = 0.005$). **Northeast:** Eight of the 10 routes were run and 7 were completed by the 2007 observers. The regional PCS index was 5.1. The mean PCS index for the 7 comparable routes was unchanged ($P = 0.458$). Four of the 7 comparable survey routes increased, 2 decreased, and 1 was unchanged. **Southwest:** Sixteen of the 18 routes were completed and 13 of those were run by the same observer as last year. The regional PCS index was 22.8. Eleven of the 13 comparable routes increased and 2 decreased yielding an average increase of 37%, a significant change ($P = 0.008$). **Southcentral:** All of the 9 survey routes were successfully run this spring and 7 of those had the same observers as in 2007. This yielded a regional PCS index of 7.2. The PCS index for the 7 comparable routes increased 32%, but this only approached statistical significance ($P < 0.118$). Five of the 7 comparable routes increased and 2 decreased.

This spring's increases in the PCS index appear to reflect the good production that occurred in 2007. Much of the state's 2007 wheat crop was set back about 2 weeks in development by a late hard freeze. This provided a longer window of time for nests to hatch and chicks to reach adequate size such that they could better evade harvest machinery. Although heavy late-May rains appeared to have hurt 2007 pheasant nesting in central Kansas, increases in the PCS index this spring, even in these areas, suggest the heavy cover that resulted from those rains provided good renesting opportunities last summer. Conditions during the winter of 2007–2008 did not appear to put unusual stress on pheasant populations. Some areas of western Kansas currently have excellent breeding populations. Highly-variable moisture conditions this spring will probably dictate 2008 production success. Parts of southwest Kansas are currently experiencing severe drought. At the opposite extreme, some areas in northwest and northcentral Kansas have had exceptionally heavy rains with large hail that have almost certainly hurt pheasant production on a local basis. Away from these extremes, most the 2008 wheat crop has had good moisture and temperature conditions and has developed relatively slowly, all of which are beneficial to pheasant reproduction. Wheat harvest will also occur late in most areas, further increasing the potential for good pheasant production.

Table 1. Kansas Pheasant Crowing Survey Results -- 2008.

Route	2007 Crows Per Station	2008 Crows Per Station	1-Year Change (%)
Gove NE	24.2	32.2	33
Gove SW	19.7	35.9	83
N Gove-Logan	24.3	36.4	50
O Graham	58.1	58.4	0
R Logan	36.1	54.0	50
T Logan SE	10.6	20.8	97
H Norton	37.8	48.7	29
W Rawlins-Thomas	19.0	23.5	23
E Sheridan	12.4	34.4	~
S Sherman	41.3	20.1	-51
T Thomas	29.9	31.0	~
Trego	12.9	19.8	54
Region Mean*	27.2	34.6	(+36)

Route	2007 Crows Per Station	2008 Crows Per Station	1-Year Change (%)
N Barton	10.2	8.8	-13
O Cloud	1.7	2.2	26
R Ellis	6.0	6.1	1
T Ellsworth	4.3	7.5	74
H Lincoln	15.0	15.6	4
C Mitchell	13.5	21.0	56
E Osborne	19.1	30.8	61
N Phillips	6.0	14.6	143
T Republic	14.2	19.1	35
R Rice	4.6	5.9	30
A Rooks	12.3	17.9	46
L Smith		12.1	
Region Mean *	9.7	13.5	(+40)

Route	2007 Crows Per Station	2008 Crows Per Station	1-Year Change (%)
N Brown-Nemaha	2.6	0.8	-68
O Dickinson-Clay	7.8	11.1	42
R Jackson-Jeffers.	0.6	1.4	113
T Marshall	5.4	3.5	-36
H Morris	0.7	0.8	12
E Ottawa		8.8	~
A Riley	4.8	4.8	0
S Shawnee	0.0		~
T Wabaunsee	0.1		~
Washington	10.2	9.8	-4
Region Mean *	3.6	5.1	(0)

Routes consist of 11 stations at approx. 2-mile intervals.
The listening interval at each station is exactly 2 minutes.

* **Means** are derived from **all completed** survey routes in the respective year. **Annual change** and **statistical significance** are computed **only** from survey routes **completed in both years** by the **same observer**.

** Denotes a significant change ($P < 0.10$) from previous year (1-tailed P , Wilcoxon Signed Rank Sums Test).

~ Indicates a different observer from previous year.

Route	2007 Crows Per Station	2008 Crows Per Station	1-Year Change (%)
Clark	11.1	16.4	48
Edwards	4.0	9.8	146
Finney	15.2	19.0	25
Ford	41.2	46.6	~
S Gray	48.5		
O Hodgeman	23.4	38.4	64
U Kearny-Hamilton	11.8	13.1	11
T Morton-Stanton		14.2	
H Ness-Lane	6.8	18.0	164
W Pawnee	14.3	38.5	169
E Pawnee (Irrig.)	8.4	17.2	106
S Pratt	7.3		
T Rush	8.0	14.9	86
Scott		40.7	
Seward-Haskell	21.9	15.9	-27
Stafford-Barton	10.3	10.8	5
Stevens	42.1	46.2	10
Wichita-Greeley	8.4	6.0	-28
Region Mean *	17.7	22.8	(+37)

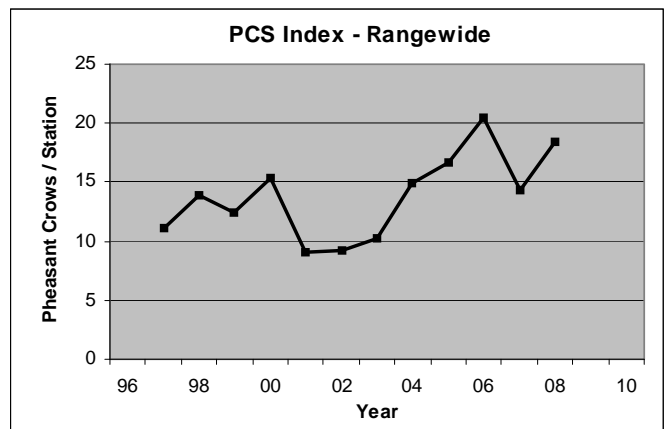
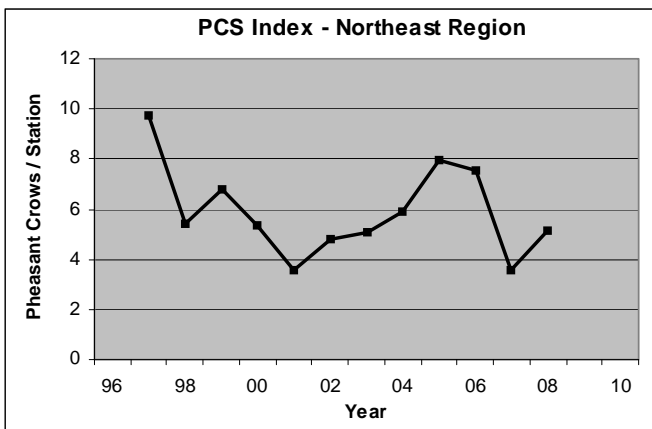
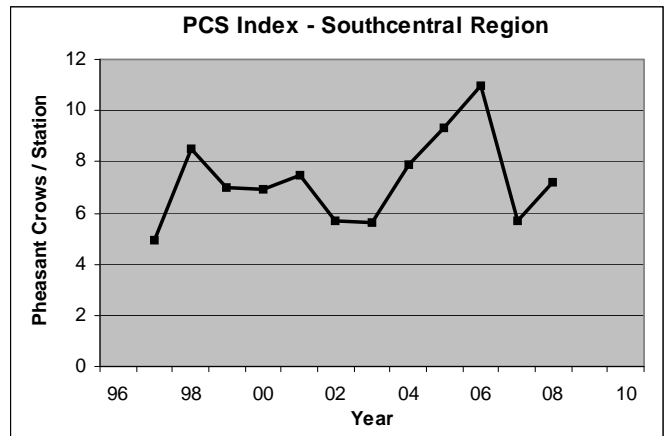
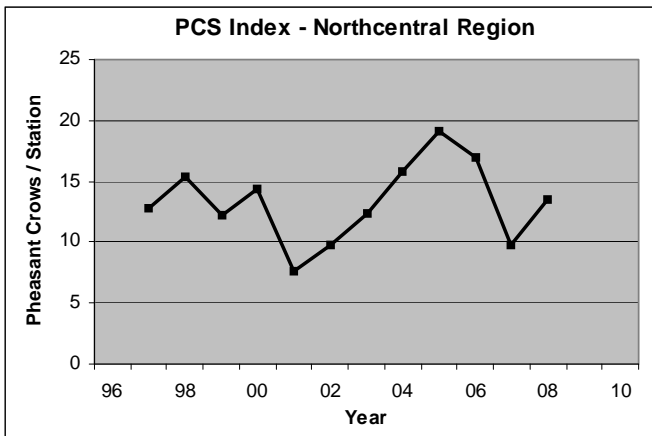
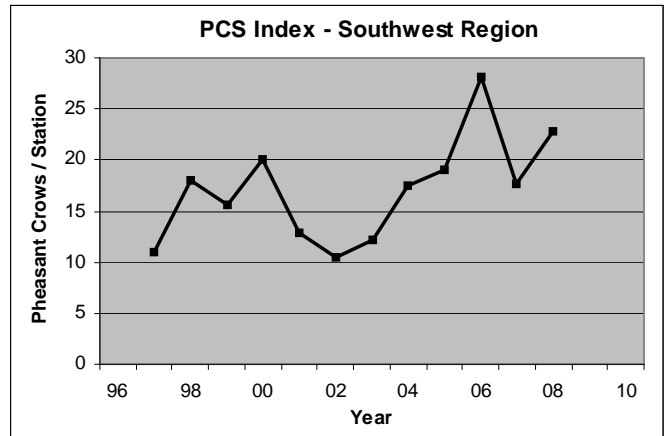
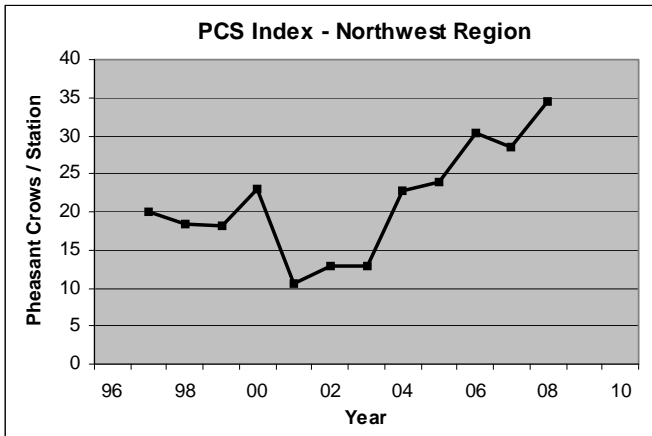
Route	2007 Crows Per Station	2008 Crows Per Station	1-Year Change (%)
S			
O			
U			
T Butler-Marion	2.0	0.9	-55
H Comanche	8.9	15.0	68
C Cowley-Sumner	3.8	8.4	119
E Harper		4.2	~
N Kingman-Reno	5.8	8.3	43
T McPherson		7.9	
R McPhers.-Marion	10.4	5.1	-51
A Reno	7.8	12.1	55
L Sedgwick-Harv.	1.2	2.8	139
Region Mean *	5.7	7.2	(+32)

Route	2006 Crows Per Station	2008 Crows Per Station	2-Year Change (%)
S			
O			
U			
T			
H Coffee	0.0	0.0	
E Osage	0.2	0.0	-100
A			
S Region Mean *	0.1	0.0	
T (SE routes run only in even years)			

Route	2007 Crows Per Station	2008 Crows Per Station	1-Year Change (%)
R			
A			
N			
G Range Mean*	14.3	18.4	(+35)
E (Excludes SE)			

Kansas Pheasant Crowing Survey Trends

(Note: Scales Differ)



Kansas Pheasant Crowing Survey Routes and Survey Regions

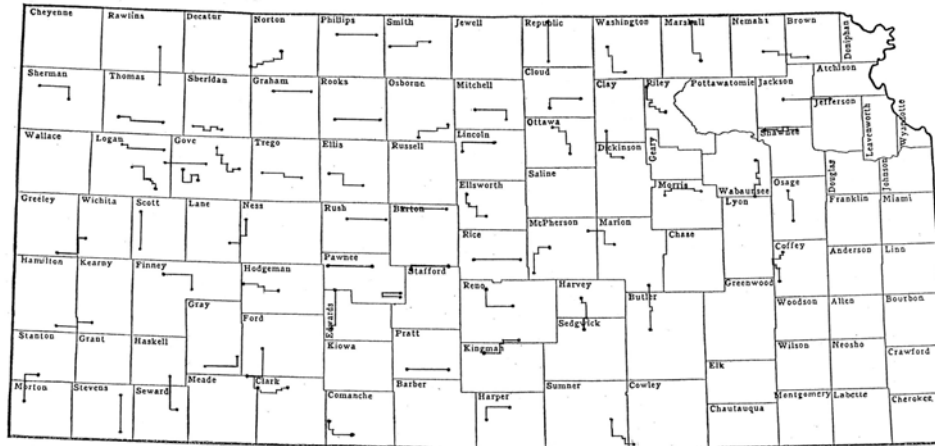


Table 2. Kansas Department of Wildlife and Parks personnel assigned pheasant crowing survey routes -- 2008.

Region	Route	Observer	Region	Route	Observer
NW	Gove NE	Steve Price	SW	Clark	Jon Zuercher
	Gove SW	Randy Rodgers		Edwards	Matt Stucker
	Gove-Logan	Randy Rodgers		Finney	Daryl Fisher
	Graham	Marc Gray		Ford	Aaron Baugh
	Logan	Matt Bain		Gray *	Lowell Aberson
	Logan SE	Randy Rodgers		Hodgeman	Craig Curtis
	Norton	Cris Mulder		Kearny-Hamilton	Mark Sexson
	Rawlins-Thomas	Matt Bain		Morton-Stanton	B.J. Thurman
	Sheridan	Josh Williams		Ness-Lane	Randy Rodgers
	Sherman	Mike Hopper		Pawnee	Charlie Swank
	Thomas	Josh Williams		Pawnee (Irrig.)	Helen Hands
	Trego	Kent Hensley		Pratt *	Brad Simpson
	NC	Barton		Gene Scheweis	Rush
Cloud		Aaron Deters	Scott	Manuel Torres	
Ellis		Bruce Taggart	Seward-Haskell	Aaron Baugh	
Ellsworth		Matt Smith	Stafford-Barton	Charlie Swank	
Lincoln		Shane Hesting	Stevens	Kraig Schultz	
Mitchell		Mike Nyhoff	Wichita-Greeley	Daryl Fisher	
Osborne		Toby Marlier	SC	Butler-Marion	Charlie Cope
Phillips		Brad Odle		Comanche	Craig Curtis
Republic		Rob Unruh		Cowley-Sumner	Kurt Grimm
Rice		Steve Adams		Harper	Chris Berens
Rooks		Mike Zajic		Kingman-Reno	Troy Smith
Smith		Brad Odle		McPherson	Brent Theede
				McPhers.-Marion	Matt Farmer
NE	Brown-Nemaha	Randy Whiteaker	Reno	Jeff Rue	
	Dickinson-Clay	Clint Thornton	Sedgwick-Harv.	Charlie Cope	
	Jackson-Jeffers.	Randy Whiteaker	SE	Coffee **	Bob Culbertson
	Marshall	Keith Salmans		Osage **	Mike McFadden
	Morris	Brent Konen			
	Ottawa	Kristin Weers			
	Riley	Corey Alderson			
	Shawnee *	Roger Wolfe			
	Wabaunsee *	Roger Wolfe			
	Washington	Clint Thornton			

~ New Observer

* Route not completed

** Southeast routes run only in even years.