

PHEASANT CROWING SURVEY - 2007

PERFORMANCE REPORT STATEWIDE WILDLIFE RESEARCH AND SURVEYS

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KANSAS PHEASANT CROWING SURVEY – 2007

Federal Aid in Wildlife Restoration Grant W-39-R-13

Prepared by: Randy Rodgers, Wildlife Research Biologist

The survey period was from April 25 through May 22 and was extended 7 days later than the normal May 15 ending due to muddy or impassible road conditions that were common through much of the central part of the state. Table 1 indicates the results of the 2007 survey and compares them to 2006. Sixty-one of the 63 established routes were assigned for 2007 (routes in Osage and Coffee counties are run only in even-numbered years) and 55 were successfully run. Flooding prevented completion of several routes. Fifty of the routes were completed in both 2006 and 2007 by the same observers. 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 2007 pheasant crowing survey (PCS) index was 14.3 crows per station and the comparable routes declined by a mean of 32% from 2006. This was a significant decrease ($P < 0.001$). Overall, 47 of the 50 comparable routes decreased this year. **Northwest:** All of the 12 routes were run by the same observers as in 2006. The regional Northwest PCS index was 27.2 and the mean of the 11 comparable routes decreased by 17%, a significant change ($P = 0.010$). Ten of the 11 routes run by the same observer in both years decreased. The Sherman County route sharply increased, but was not used to calculate regional change since this increase was probably due to a lack of irrigation-engine noise this year compared to heavy noise in 2006. **Northcentral:** Ten of the 12 routes were run, yielding a PCS index of 9.7. All of these 10 routes were run by last year's observers. One route increased, 9 decreased and the average of those 10 routes decreased 41% which was significant ($P = 0.003$). Note that the Russell County route was permanently dropped this year because of excessive oil pump noise and the new Ellsworth County route was added. Matt Smith ran both routes last year. **Northeast:** Nine of the 10 routes were run and 7 were completed by the 2006 observers. The regional PCS index was 3.6. The mean PCS index for the 7 comparable routes decreased 46% which was statistically significant ($P = 0.009$). All of the 7 comparable survey routes decreased. **Southwest:** Sixteen of the 18 routes were completed and all of those were run by the same observer as last year. The regional PCS index was 17.7. Fifteen of the 16 comparable routes decreased yielding an average decline of 34%, a significant change ($P = 0.001$). **Southcentral:** Seven of the 9 survey routes were successfully run this spring and 6 of those had the same observers as in 2006. This yielded a regional PCS index of 5.7. The PCS index for the 6 comparable routes decreased 58% which was significant ($P < 0.001$). All 6 comparable routes decreased.

Last year was one of the driest that most of us have ever witnessed during the spring and summer reproductive period. Further exacerbating the situation was the approximately 2-week period in July when temperatures daily topped out between 100–110° F. That there were sharp declines in this spring's breeding population *throughout* the Kansas pheasant range attests to the strong negative impact of the statewide drought on last year's pheasant production. To be sure, the severe winter conditions that gripped 12–15 counties in far western Kansas this past January and February also took a toll on pheasants in those areas. Nevertheless, the decline in the PCS index in these hard-hit areas was more moderate than we had feared, despite winter conditions being the worst in memory. With excellent wheat and soil moisture conditions in western Kansas this spring and with the projected wheat harvest expected to be 2 weeks later than normal, pheasant production prospects look very good. Repeated heavy rains and flooding, however, have probably caused some nest abandonment, somewhat dimming pheasant reproductive prospects in central Kansas.

Table 1. Kansas Pheasant Crowing Survey Results -- 2007.

Route	2006 Crows Per Station	2007 Crows Per Station	1-Year Change (%)
Gove NE	28.9	24.2	-16
Gove SW	20.8	19.7	-6
N Gove-Logan	32.8	24.3	-26
O Graham	50.5	58.1	15
R Logan	42.6	36.1	-15
T Logan SE	16.4	10.6	-36
H Norton	41.9	37.8	-10
W Rawlins-Thomas	31.6	19.0	-40
E Sheridan	20.8	12.4	-41
S Sherman	18.2	41.3	-
T Thomas	34.4	29.9	-13
Trego	24.3	12.9	-47
Region Mean*	30.3	27.2	(-17)

Route	2006 Crows Per Station	2007 Crows Per Station	1-Year Change (%)
N Barton	12.6	10.2	-19
O Cloud	7.5	1.7	-77
R Ellis	5.0	6.0	20
T Ellsworth	10.1	4.3	-58
H Lincoln	28.3	15.0	-47
C Mitchell	33.6	13.5	-60
E Osborne	31.2	19.1	-39
N Phillips	10.5	~	~
T Republic	18.6	14.2	-24
R Rice	6.6	4.6	-31
A Rooks	16.7	12.3	-27
L Smith	22.1	~	~
Region Mean *	16.9	9.7	(-41)

Route	2006 Crows Per Station	2007 Crows Per Station	1-Year Change (%)
N Brown-Nemaha	3.0	2.6	-15
O Dickinson-Clay	18.7	7.8	-58
R Jackson-Jeffers.	2.6	0.6	-76
T Marshall	10.0	5.4	-46
H Morris	0.8	0.7	-11
E Ottawa	14.6	~	~
A Riley	8.6	4.8	-44
S Shawnee	1.0	0.0	~
T Wabaunsee	0.3	0.1	~
Washington	15.8	10.2	-36
Region Mean *	7.5	3.6	(-46)

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	2006 Crows Per Station	2007 Crows Per Station	1-Year Change (%)
Clark	20.3	11.1	-45
Edwards	9.8	4.0	-59
Finney	27.7	15.2	-45
Ford	53.9	41.2	-24
S Gray	60.2	48.5	-19
O Hodgeman	32.8	23.4	-29
U Kearny-Hamilton	33.3	11.8	-64
T Morton-Stanton	35.4	~	~
H Ness-Lane	21.2	6.8	-68
W Pawnee	37.5	14.3	-62
E Pawnee (Irrig.)	17.4	8.4	-52
S Pratt	14.0	7.3	-48
T Rush	10.1	8.0	-21
Scott	39.9	~	~
Seward-Haskell	14.0	21.9	57
Stafford-Barton	14.5	10.3	-29
Stevens	47.6	42.1	-11
Wichita-Greeley	16.2	8.4	-48
Region Mean *	28.1	17.7	(-34)

Route	2006 Crows Per Station	2007 Crows Per Station	1-Year Change (%)
S Butler-Marion	3.3	2.0	-39
H Comanche	22.2	8.9	-60
C Cowley-Sumner	11.2	3.8	-66
E Harper	6.3	~	~
N Kingman-Reno	7.7	5.8	-25
T McPherson	11.0	~	~
R McPhers.-Marion	~	10.4	~
A Reno	22.8	7.8	-66
L Sedgwick-Harv.	3.1	1.2	-62
Region Mean *	10.9	5.7	(-58)

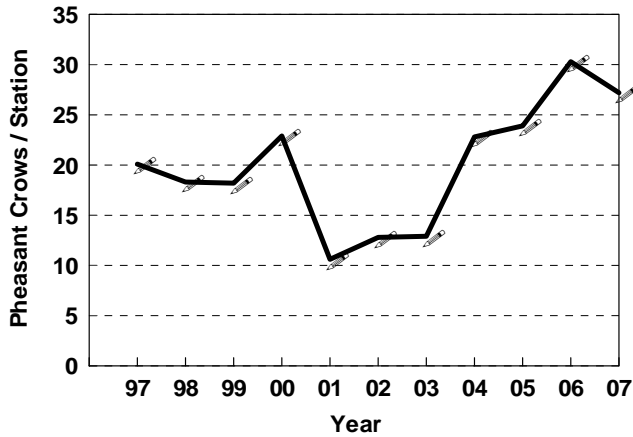
Route	2006 Crows Per Station	2007 Crows Per Station	2-Year Change (%)
H Coffee	0.0	~	~
E Osage	0.2	~	~
A Region Mean *	0.1	~	~
T (SE routes run only in even years)	~	~	~

Route	2006 Crows Per Station	2007 Crows Per Station	1-Year Change (%)
R Range Mean*	20.6	14.3	(-32)
A (Excludes SE)	~	~	~

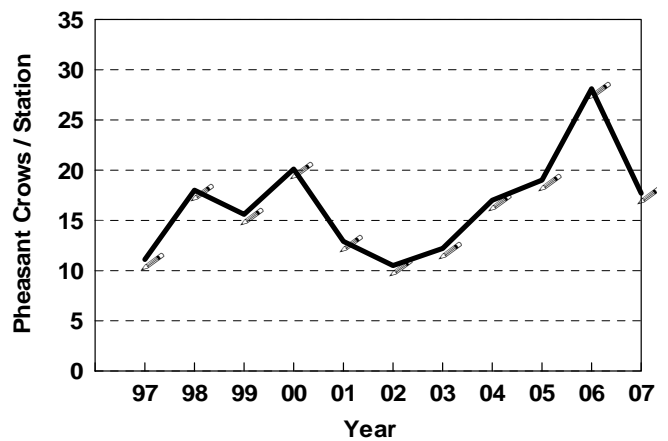
Kansas Pheasant Crowing Survey Trends

(Note: Scales Differ)

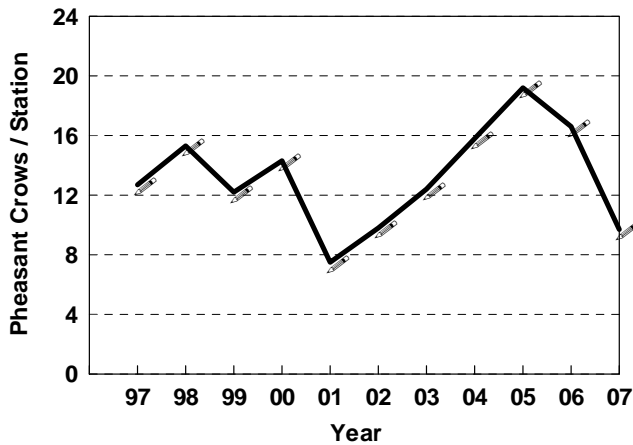
PCS Index - Northwest Region



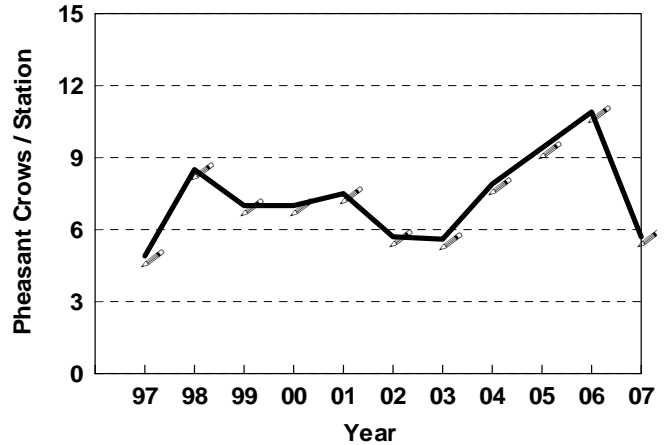
PCS Index - Southwest Region



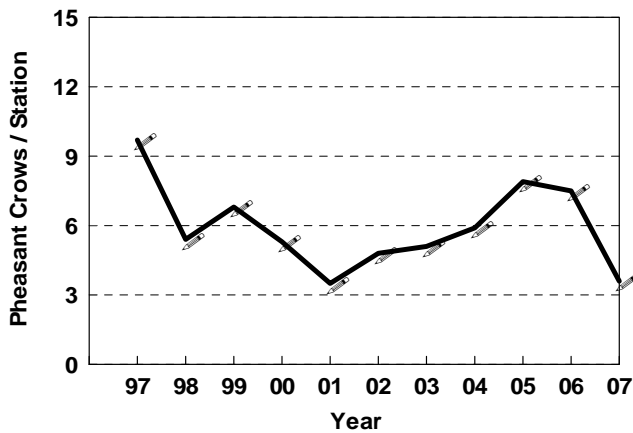
PCS Index - Northcentral Region



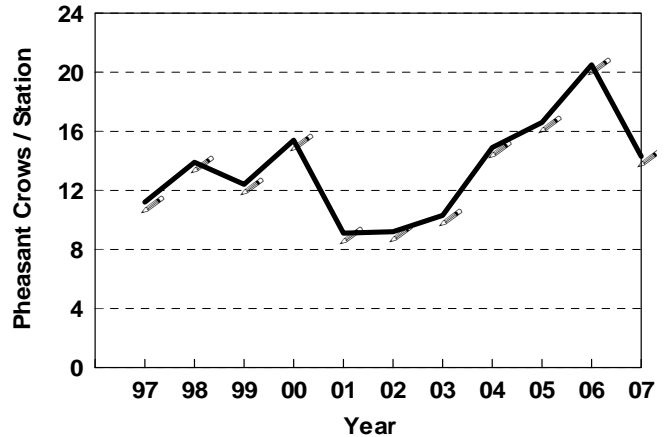
PCS Index - Southcentral Region



PCS Index - Northeast Region



PCS Index - Rangewide



Kansas Pheasant Crowing Survey Routes and Survey Regions

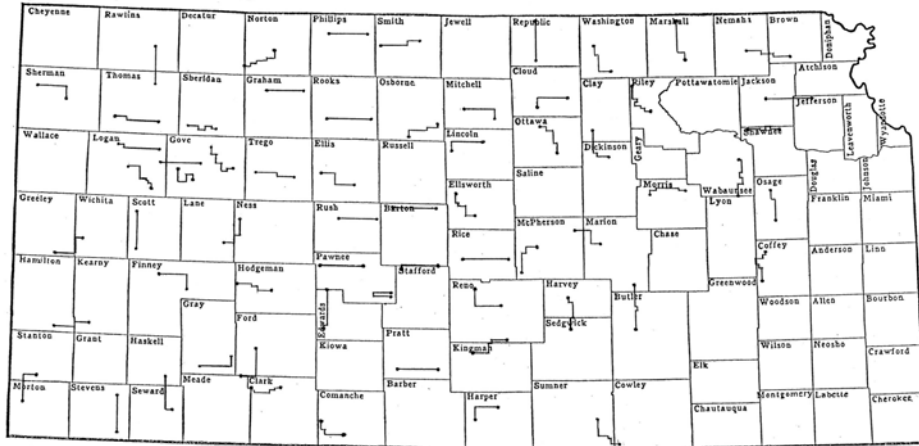


Table 2. Kansas Department of Wildlife and Parks personnel assigned pheasant crowing survey routes -- 2007.

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	Scotty 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	Chris Berens		Ness-Lane	Randy Rodgers
	Sherman	Mike Hopper		Pawnee	Charlie Swank
Thomas	Chris Berens	Pawnee (Irrig.)	Helen Hands		
Trego	Kent Hensley	Pratt	Brad Simpson		
NC	Barton	Gene Scheweis	Rush	Brian Hanzlick	
	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			
	Phillips	Brad Odle	SC	Butler-Marion	Charlie Cope
	Republic	Rob Unruh	Comanche	Craig Curtis	
	Rice	Steve Adams	Cowley-Sumner	Kurt Grimm	
Rooks	Mike Zajic	Harper *	Sam Allred	~	
Smith *	Brad Odle	Kingman-Reno	Troy Smith		
NE	Brown-Nemaha	Randy Whiteaker	McPherson *	Brent Theede	
	Dickinson-Clay	Clint Thornton	McPhers.-Marion	Matt Farmer	~
	Jackson-Jeffers	Randy Whiteaker	Reno	Jeff Rue	
	Marshall	Keith Salmans	Sedgwick-Harv.	Charlie Cope	
	Morris	Brent Koen			
	Ottawa *	Eli Makings	SE	Coffee **	Bob Culbertson
	Riley	Corey Alderson	Osage **	Mike McFadden	
	Shawnee	Scott Thomasson			
	Wabaunsee	Scott Thomasson			
	Washington	Clint Thornton			

~ New Observer
 * Route not completed
 ** Southeast routes run only in even years.

