Two important factors impact availability of upland game during the fall hunting season: number of breeding adults in the spring and the reproductive success of the breeding population. Reproductive success consists of both the number of hatched nests and chick survival. For pheasant and quail, annual survival is relatively low; therefore, the fall population is more dependent on summer reproduction than spring adult numbers.

For prairie chickens, reproductive success is still the major population regulator, but higher adult survival helps maintain hunting opportunities during poor conditions.

In this forecast, breeding population and reproductive success of pheasants, quail, and prairie chickens will be discussed. Breeding population data were gathered using spring calling surveys for pheasants (crow counts), quail (whistle counts), and prairie chickens (lek counts). Data for reproductive success were collected during late-summer roadside surveys for pheasants and quail, which quantify both adults and chicks observed. Reproductive success of prairie chickens cannot be easily assessed using the same methods because they do not associate with roads like pheasants and quail.

**SEASON DATES**

**Youth Pheasant**  
Nov. 6-7, 2021

**Youth Quail**  
Nov. 6-7, 2021

**Pheasant**  
Nov. 13, 2021 - Jan. 31, 2022

**Quail**  
Nov. 13, 2021 - Jan. 31, 2022

**Prairie Chicken**  
Sep. 15, 2021 - Jan. 31, 2022
OVERALL OUTLOOK: “GOOD”

Kansas should have good upland bird hunting opportunities this fall. Kansas has almost 1.7 million acres open to public hunting (wildlife areas and WIHA combined). This is only a small portion of the more than 52 million acres of private land that also provides ample opportunity where permission can be obtained. The opening date for pheasant and quail seasons is November 13, and youth season is November 6-7. The youth age was increased this year to allow hunters 17 years of age or younger to participate. Youth must still be accompanied by a nonhunting adult age 18 or older.

HABITAT CONDITIONS

Kansas has a dramatic rainfall gradient from more than 50 inches of average annual rainfall in the far east to less than 14 inches in the far west. The amount and timing of rainfall plays a major role in reproduction for upland birds. In the west, wet years typically improve the available cover and increase insect availability for chicks. In the east, dry years are typically more optimal, as heavy rains during spring and summer can reduce survival of nesting birds and young chicks. In 2021, Kansas had above-average spring precipitation across much of the state, resulting in good nesting habitat. Summer transitioned into a hotter and drier period which had the potential to impact chick survival. However, Kansas received enough rainfall through summer to stay relatively drought free. This, paired with ample insects and cover produced from spring moisture, appears to have sustained chicks as production indices improved.

PHEASANT

Above average spring rainfall created good nesting cover across most of the primary pheasant range. Some areas in far west Kansas had better nesting conditions than observed in a decade. While spring conditions were good and there didn’t appear to be problems with overwinter survival, poor production last summer left fewer birds in the breeding population this spring. Hot and dry conditions from mid-July through August was well after the peak hatching period when most birds were of considerable size and unlikely to be impacted. This did, however, create challenging survey conditions. Estimates for the summer brood survey did not show significant change; however, most regional estimates trended down. The western extent of the High Plains generally showed improvements, with the Northern High Plains having the highest regional roadside estimates. Measures of reproductions were greatly improved across most regions this year. This, combined with several opportunistic reports from farmers and staff of improved numbers, suggests that the poor survey conditions may have impacted counts. Kansas continues to maintain one of the best pheasant populations in the country and the fall harvest will again be among the leading states.

QUAIL

Kansas continues to support above-average quail populations with spring densities remaining similar to last year. This includes significant increases in spring densities in the north-central Smoky Hills region and the Flint Hills. The peak nesting for quail is later than pheasants, which has led to concern about chick survival with late summer conditions. However, reproduction measures remained high and improved across most regions on the brood survey. Despite improved production, the brood survey estimates a decrease in statewide densities of quail fueled largely by large decreases in estimates in the Smoky Hills. Disagreement between these estimates and the estimates of production may again suggest that poor survey conditions impacted counts. Kansas maintains one of the premier quail populations in the country and harvest will again be among the highest this year. The best opportunities will be in the Flint Hills and central regions, with plenty of quality hunting opportunity scattered in the remaining regions.

PRAIRIE CHICKEN

Kansas is home to both greater and lesser prairie-chickens. Both species require a landscape of predominately native grass and benefit from a few interspersed grain fields. Lesser prairie-chickens are found in west-central and southwestern Kansas in native prairie and nearby stands of native grass established through the CRP. Greater prairie-chickens are found primarily in the tallgrass and mixed-grass prairies that occur in the eastern third and northern half of the state. Greater prairie-chickens have recently expanded in numbers and range in the Northwestern portion of the state while declining in the eastern regions. Hunting opportunities will be best in the Northern High Plains and Smoky Hills Regions this fall, where populations have been either increasing or stable, and public access is more abundant. The Southwest Prairie Chicken Unit, where lesser prairie-chickens are found, will remain closed to hunting this year. Greater prairie-chickens may be harvested during the early prairie chicken season and the regular season with a two-bird daily bag limit in the Greater Prairie-Chicken Unit.
REGIONAL SUMMARIES

Northern High Plains (Northwest)
Public Land: 12,849 acres WIHA: 386,709 acres

PHEASANT – Regional bird indices remained similar to last year and the region boasts both the highest regional index from the summer brood survey and spring crow survey this year. While some routes in the eastern region indicated large decreases, the western and southern portion of this region showed marked improvements. The highest densities will be found in the southwestern portion of the region. QUAIL – Quail are limited and are typically harvested opportunistically by pheasant hunters. Recent weather patterns have facilitated a population expansion into the area where appropriate habitat exists, providing hunters with a welcomed additional opportunity in recent years. Densities on the summer roadside survey increased. Opportunity will remain the best in the eastern-most counties of the region.

PRAIRIE CHICKEN – Prairie chicken populations continue to expand in both numbers and range within the region. Only portions of this region are open to hunting (see map for unit boundaries). Lesser prairie-chickens occur in the southern and central portions of the region within the closed zone. Production in the region should be improved with above average spring precipitation across the area. Within the open area, the best hunting opportunities will be found in the northeastern portion of the region in native prairies and CRP grasslands.

Glaciated Plains
Public Land: 51,469 acres WIHA: 72,856 acres

PHEASANT – Opportunities will remain poor with pheasants occurring only in pockets of habitat, primarily in the northwestern portion of the region or areas managed for upland birds. Spring crow counts decreased from 2020. While roadside surveys trended up, this can be attributed to slight improvements on a single route.

PHEASANT densities across the region are typically low, especially relative to other areas in central and western Kansas. QUAIL – Spring densities trended up and summer estimates trended down, but neither were significant changes this year. Like many regions, the last five years have provided above average opportunity for quail. While densities will still be lower than western regions, the above average densities will provide better opportunities for those spending time in northeast Kansas this winter. With the limited amount of nesting and roosting cover throughout much of this region, targeting areas with or near native grass is key for success.

Roadside counts were highest in the northeastern portion of the region.

Smoky Hills
Public Land: 106,558 acres WIHA: 317,754 acres

PHEASANT – Due to poor production last summer, spring calling surveys decreased. Despite reduced production, the region maintained the highest regional harvest last year. Roadside survey estimates trended down this summer. With reduced densities, success rates may decrease. Given its size and variability, this region will still be a major contributor to overall harvest. The northcentral portion of the region had the highest roadside densities. QUAIL – This region has enjoyed several years of well above average quail densities. The spring whistle survey increased, maintaining above average spring densities. However, brood survey estimates decreased substantially across the region.

Total regional harvest in 2020 was the highest in the state with good hunter success rates. Hunters in the area are becoming accustomed to the high densities the past few years, making birds relatively easy to find; however, targeting edge habitat and weedy areas with nearby shrubs will be most productive. Densities appear best in the south-central region but several other areas maintained good estimates as well.

PRAIRIE CHICKEN – Hunting opportunities should remain good. Production was likely improved with good spring moisture. This region offers some of the greatest densities and access. Greater prairie chickens occur throughout the Smoky Hills, where large areas of native rangeland are intermixed with CRP and cropland. The best hunting will be found in the central region, but several other areas support huntable densities of birds.

Lesser prairie chickens occur in a few counties in the southwestern portion of the region within the closed zone (see map for unit boundaries).

Osage Cuestas
Public Land: 109,883 acres WIHA: 36,092 acres

PHEASANT – This region is outside the primary pheasant range and very limited hunting opportunities exist. Pheasants are occasionally found in the northwestern portion of the region at very low densities.

QUAIL – Opportunities will be poor this year. While roadside estimates trended up, the improved production was not enough to recover from three consecutive years of poor production. Roadside surveys remained low, with this region having the lowest regional density for quail. While hunting will be slightly improved, the best opportunity will be on areas specifically managed for upland birds, and in western counties in grasslands extending east off the Flint Hills.

PRAIRIE CHICKEN – Greater prairie chicken populations have consistently declined in this region. Fire suppression and loss of native grassland has gradually reduced the amount of suitable habitat. Hunting opportunities are limited, but chickens can be in large blocks of native rangeland along the edge of the Flint Hills.
REGIONAL SUMMARIES

Flint Hills
Public Land: 196,901 acres WIHA: 79,336 acres

PHEASANT – This region is on the eastern edge of the primary pheasant range in Kansas and offers limited opportunities. Pheasant densities have always been relatively low throughout the Flint Hills, with the highest densities found on the western edge of the region. The spring crow counts and summer roadside survey both remained stable. The best opportunities will be in the northwest portion of the region along the Smoky Hills.

QUAIL – After a significant increase in the spring calling survey and upward trend in the roadside brood counts, this region has above average quail densities and the highest regional density heading into fall. Quail production can be impacted in the core of the Flint Hills with annual burning practices limiting nesting cover. Hunters will find the best success in areas that maintained nearby nesting cover and have retained shrub cover that has been removed from large areas of the region during invasive species control. High roadside estimates were scattered throughout this region this year.

PRAIRIE CHICKEN – The Flint Hills is the largest intact tallgrass prairie in North America and has been a core habitat for greater prairie chickens for many years. Management changes resulting in both areas of too little and too much prescribed fire have gradually degraded habitat quality and prairie chicken numbers have declined as a result. Burning was higher than average in 2021, resulting in less nesting cover. Hunting opportunities will likely be similar to last year throughout the region.

Southcentral Prairies
Public Land: 411.125 acres WIHA: 65,801 acres

PHEASANT – Roadside survey estimates were very similar to last summer. While roadside estimates are lower than the other major pheasant regions, this region boasted the highest hunter success rates last year. The northeast portion of the region saw declines where a localized area suffered an extended period without precipitation. The highest pheasant densities will be found in the west central portion of the region this year.

QUAIL – The spring whistle survey and summer brood survey both trended down; however, neither saw significant declines. Harvest rates for quail were also higher in the region last year and opportunities should remain strong this year with marked improvements in key areas. The intermixing of quality cover types in the region provides more consistent opportunities across the Southcentral Prairies compared to other regions. The roadside counts were highest in the central portion of the region.

PRAIRIE CHICKEN – This region is almost entirely occupied by lesser prairie-chickens and areas included in their range are closed to prairie chicken hunting (see map for unit boundaries). Greater prairie chickens occur in very limited areas in the remainder of this region and will occur in very low densities with encounters most likely in the few remaining large tracts of rangeland in the northeastern portion of the region.

Southern High Plains
Public Land: 116,821 acres WIHA: 172,486 acres

PHEASANT – The pheasant crow index declined this spring after drought conditions in 2020 limited production. Roadside brood survey estimates trended down for this region, but regional production indices were much improved and the best they have been this year. Roadside brood survey estimates showed improvements in the western portion of the region this year. The highest pheasant densities will be in the southcentral portion of the region.

QUAIL – The quail population in this region is highly variable and dependent on weather. The roadside estimates trended down but were greatest in the northwest portion of the region. The highest densities in this region are found along riparian corridors or where adequate woody structure exists. This association with riparian corridors makes surveying the region for an accurate density of quail challenging, and opportunities can be better than roadside surveys suggest at times. Scalled quail can also be found in this region but make up a small proportion of total quail.

PRAIRIE CHICKEN – This region is entirely occupied by lesser prairie-chickens; therefore, prairie chicken hunting is closed in this area.

CRP UPDATE & W.I.H.A.

Under the 2018 Farm Bill, the Conservation Reserve Program (CRP) acreage cap will gradually increase each year. Kansas currently has 1.7 million acres of CRP statewide.

There was an enrollment period in 2021; however, with 368,672 acres expiring and only 242,932 acres offered, there will be a net decrease in acres again this year.

Lower interest is currently attributed to reduced rental rates and incentives. In addition to loss of acres, the quality of habitat on the remaining acres may also be impacted.

There were 30 counties in Kansas that were released for emergency haying and grazing of CRP. A large portion of properties enrolled in the WIHA program include CRP and expirations can reduce habitat quality or exclude properties from the program.

However, the Kansas WIHA program remains strong, with nearly 1.14 million acres enrolled.

To enroll your land in WIHA, contact the Pratt Operations Office at (620) 672-5911.

Kansas Hunting Atlases are available on ksoutdoors.com/wiha and wherever licenses are sold.