2025 Annual Report

Utah Chukar Partridge Update

Utah Upland Game Program

Prepared by the Utah Division of Wildlife Resources Salt Lake Office

UTAH DNR WILDLIFE RESOURCES

Executive Summary

Beginning in 2019, the Utah Division of Wildlife Resources (UDWR) has implemented a survey methodology to evaluate chukar numbers and production using game cameras set at water sources throughout the state. The camera survey allows data to be captured in a wide geographic area and provides data on the year's production and a year-to-year index of abundance. Helicopter surveys were discontinued due to increasing cost and safety concerns related to low-level helicopter flights.

During the initial year, cameras were placed at 20 trend sites throughout the state. Since then, the project has added and removed cameras, resulting in 31 active camera sites, of which 21 produced photos. Last year, we utilized new Artificial Intelligence technology through Brigham Young University (BYU) to assist with the photo processing, and biologists and dedicated hunters verified the data. We continued this process in 2025, The work of volunteers from the Utah Chukar and Wildlife Foundation and BYU was invaluable to completing photo processing and summarizing chukar visits to water sources.

2025 Overview

Habitat conditions throughout the state have suffered due to ongoing drought, though this has improved for two years. Utah experienced heavy snowfall during the 2022-2023 winter, and optimal winter conditions in most of the state during the 2023-2024 winter. Those two years of precipitation patterns likely resulted in improved nutrition for breeding adults, growth of grasses and forbs, and increased insect abundance, yielding the protein critical for chick growth and survival. Although precipitation in the West Desert is spotty and conditions can differ significantly from one range to another, or even between areas on the same mountain range, the amount of snowfall from two winters ago contributed to an increase in overall quantity and quality of brood-rearing habitat.

However, last year's precipitation patterns were not as favorable. Production was down this year, resulting in fewer brood coveys, or none, visible at water sources. Chukar hunters can expect to see a below average year in many locations, and decreased production in many places in each region. While some populations experience factors of density-dependence that stifles brood production, the dry conditions of 2024-2025 may indicate lower populations, some areas with a substantial number of adults but not much production.

Chicks per adult by region							
	2019	2020	2021	2022	2023	2024	2025
Northern	2.5	1.3	0.1	2.4	0.72	2.98	0
Central	4.8	1.0	0.1	3.5	2.23	2.13	0.1
Southern	1.9	0.6	0.0	1.5	1.85	1.16	0.04
Southeastern	3.0	1.5	0.0	0.7	6.61*	0.34	0

Table 1. Chicks per Adult by Region - *The average number of juvenile birds per adult birds in the four sampled DWR regions. The number of chicks per hen is an index of yearly production. Artificial Intelligence (AI) was utilized for the first time this year to assist with chukar detections in photos. Biologists and volunteers verified the data manually.*

**Due to a substantial amount of data being unavailable, this is an unusually small sample size.*

Northern Region

There were three cameras deployed in the Northern Region on the Pilot, Hogup, and Hogup South Mountains. The SD card in the Grouse Creek camera became corrupt, and steps will be made to rectify this (new camera, new SD card, etc.). Three cameras contributed to the dataset, with a decrease in production from 2.98 in 2024 to 0 in 2025. It's likely that last winter's dry conditions coupled with the mostly dry spring have contributed to a decline in brood-rearing habitats in many locations. Anecdotally, broods have been observed in various locations in the Northern Region, but the verification done with AI software did not yield any chicks in the photos. Biologists are still seeing a fair amount of adult chukars in Box Elder County, and expect hunting to be decent this year, despite our low survey numbers. Cache County will likely be more difficult, with fewer chukar observations.

Figure 1. *Chukar visitation to guzzlers may be highly variable year to year. Here is an example from the 2025 camera survey showing how the AI detected chukars at the guzzlers. These photos were reviewed by BYU to help train the AI software, and to decipher the correct number of total chukars, as well as the number of juvenile vs. adult chukars. The average AI detections per region were: NR = 9.53 , CR = 72, SR = 100.2, SER = 0.59. As the software is trained via manual review, the AI detections will become more accurate. This photo is from a guzzler in the Central Region*

Central Region

Much of Utah's chukar habitat is within the Central Region, and the area also receives the majority of the camera monitoring effort with 11 active cameras in 2025 deployed on the Cedar, Deep Creek, Desert, Dugway, Fish Springs, Gilson, Grassy, Lakeside, Long Ridge, Silver Island and Thomas Mountains. Nine of those 11 cameras contributed to the dataset. Of the data reviewed, the juvenile per adult ratio slightly decreased significantly from 2.13 to 0.10 juveniles per adult. Despite this recruitment decline, Tooele and Juab counties still have above average chukar numbers in the West Desert, and anecdotes from the Wasatch area indicate more brood production than other locations. Hunting conditions will be comparable to less desirable than last year.

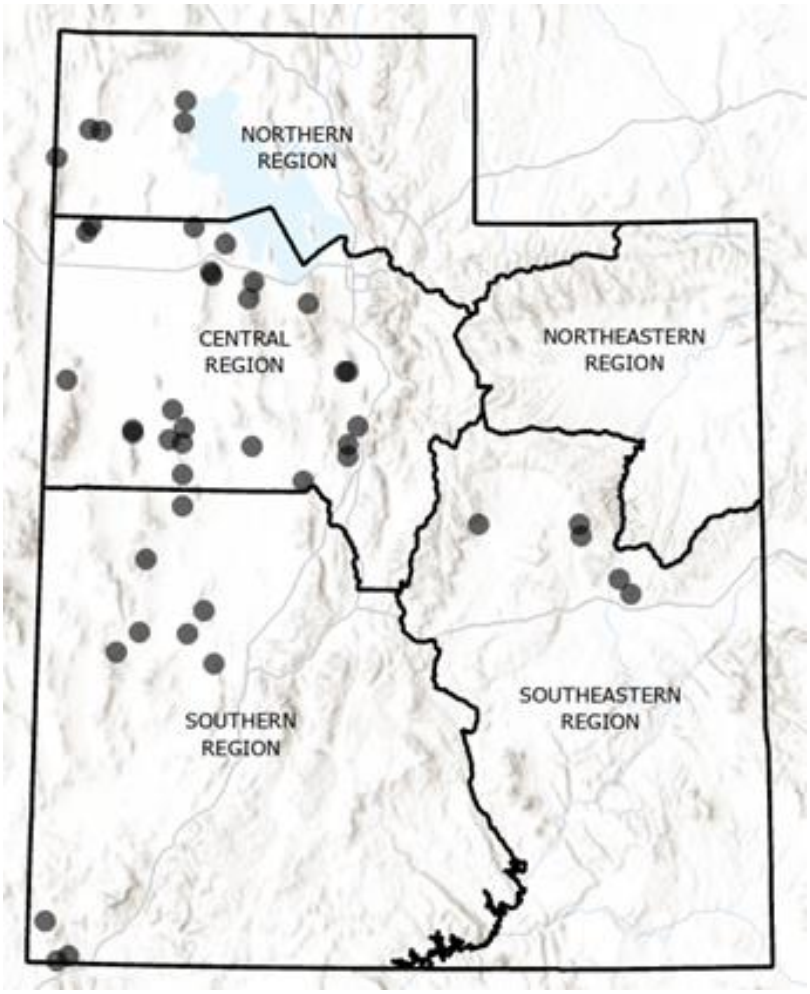

***Figure 2. Regional Boundaries and Monitored Locations**:*
Regional boundaries referenced in this document with approximate locations of monitored water sources.

Southern Region

The Southern Region encompasses the West Desert ranges south of the Millard-Juab County line. Ten cameras were placed on the Beaver Dam, Crickets, Drums, Grey Hills, House, Minerals and Oak Creek Mountains. All cameras contributed to the dataset. Overall production decreased significantly this year from 1.61 to 0.04 chicks per adult in these areas. While other locations in the southern region (outside of this dataset) have shown a significant increase in production in the past two years, we expect that some locations will still provide decent hunting opportunity. For example, reports of average brood numbers have occurred for the east and west portions of the Sevier Valley area in the Southern Region. Overall hunting conditions will likely be less favorable than the last two years.

Figure 3. *Adult chukars at a guzzler in the Northern Region*

Southeastern Region

The Southeastern Region cameras are located along the Book Cliffs, Nine Mile, and Manti East Slope Mountains. Of the five active cameras, two cameras contributed to the dataset this year. Due to another small sample size this year, the data may be skewed at the low end of production; this year no production was detected, while 0.34 juveniles per adult were documented last year. Three cameras did not receive any chukar visits, with the other two only detecting adults. Outside of this sample area, broods have been observed, just fewer in number of broods and number of chicks in each brood. Fair hunting conditions can be expected in the Southeastern Region.

Summary

Production has declined drastically throughout the state, and hunters will likely encounter smaller coveys with less young birds this year. Chukar populations can be spotty throughout the state, with some areas receiving more desirable precipitation patterns, or just more water volume in general. Because averages are presented here, there are always places performing considerably better or worse than the average of the camera locations. There are still areas with production and decent adult populations. Just remember to search for areas that provide food and cover during the hunting season. Steep, rocky slopes with brush and grass can be a great place to start, and if you haven't hunted chukar before, visit our wildlife.utah.gov for more tips, view our hunt forecast here, or go to learnhunting.org to find a mentor.

Figure 4. *Production at a guzzler in the Central Region*