

Utah 2022 Chukar Partridge Update

Utah Division of Wildlife Resources

19 September 2022



Beginning in 2019 the Utah Division of Wildlife Resources (DWR) implemented a chukar survey methodology to evaluate chukar numbers and production using game cameras set on water sources throughout the state. The camera survey allows data to be captured in a wide geographic area and provide 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 flight.



Chukar production is highly variable year to year. Here is an example from the 2022 camera survey showing a high proportion of juvenile birds to adults. This area had good production which should result in larger and more abundant coveys available this year relative to last.

During the initial year, cameras were placed at 20 trend sites throughout the state. The project has added cameras each year and now has 45

active camera sites, although only 41 were available for review this year due to memory card errors and theft. Volunteers from the Utah Chukar and Wildlife Foundation and the DWR Dedicated Hunter program were critical for processing photos and summarizing chukar visits to water sources.

Habitat conditions throughout the state have suffered due to ongoing drought. However, Utah had a mild winter, relatively wet spring and some summer monsoon moisture. More favorable conditions likely resulted in improved nutrition for breeding adults, growth of grasses and forbs, and high protein insects critical to chick growth and survival. However, 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. Overall production was good this year, with many brood coveys visible at water sources. Chukar hunters can expect to see an average year in many areas, with better production in the Central and Northern regions. Although production was good, limited populations going into the breeding season limit overall production.

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 this year's production. This year production was much better than 2021, and similar to 2019.

	2019	2020	2021	2022
Northern	2.5	1.3	0.1	2.4
Central	4.8	1.0	0.1	3.5
Southern	1.9	0.6	0.0	1.5
Southeastern	3.0	1.5	0.0	0.7



One adult and four juvenile chukar heading out after a morning drink. Juvenile birds are more dependent on water sources than adults. Utah's chukar season is designed to start when water source visitation is less than 10% of peak use.

Northern Region:

There were seven cameras deployed in the Northern Region on the Grouse Creek Mts., Pilot Mts., Hogup Mts., Silver Island, and Wildcat Hills. Overall, five out of seven cameras were visited by chukar during the survey period, and three of those that were visited had chicks. The number of chicks per adult was up substantially from 2021, with 2.4 chicks per adult seen at water sources, similar to production in 2019.

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 21 active cameras in 2022 deployed on the Cedar, Deep Creek, Desert, Dugway, Grassy, Lake, Lakeside, Long Ridge, Oquirrh, Silver and Stansbury Mountains. Of those 21 cameras, 18 were reviewed (two were stolen and one had a bad memory card). Of the 18 that were visited, 12 were visited by chukar, all of which had juvenile birds present. This is much better compared to last year, when only half of the cameras with chukars had any chicks. Along with more guzzlers being visited by juvenile birds, the juvenile per adult ratio is up significantly, with 3.5 juveniles per adult relative to a dismal 0.1 chicks per adult in 2021. Overall hunting conditions likely will be good, with more birds available relative to last year.

Southern Region:

The Southern Region contains much of the West Desert ranges south of the Millard-Juab county line. Eleven cameras were placed on the Beaver, Crickets, Drum, Gray Hills, House, and Mineral Mountains. Of those 11, eight were visited by chukar during the survey period this year, and of the guzzlers visited by chukars, seven had chicks present. Overall production is still low this year with 1.5 chicks per adult, however, it is considerably better than last year and similar to 2019. Overall hunting conditions will likely be better than last year, however populations may still be at a relatively low level relative to 2019.

Southeastern Region:

The Southeastern Region cameras are located along the Book Cliffs and Manti east slope. Of the five active cameras, four were visited by adult chukar, and three were visited by juvenile chukar this year. Average chick per adult remains low at 0.7 juveniles per adult, indicating poor production, however, production is up from last year.

Summary:

Production is generally good throughout the state, and hunters will likely see larger coveys with more young birds this year. Chukar populations can be spotty throughout the state, with some areas receiving more water or getting water at more opportune times. There are plenty of birds, it is just a matter of finding them. Keep food in mind and search those areas. What is presented here are averages, so there are always areas doing considerably better (but also areas doing worse). Chukar are resilient, and tolerant of poor desert conditions and persisting despite the drought, with rebounds in areas with favorable conditions.

Figure 1. Regional Boundaries and Monitored Locations

Regional boundaries referenced in this document with approximate locations of monitored water sources.

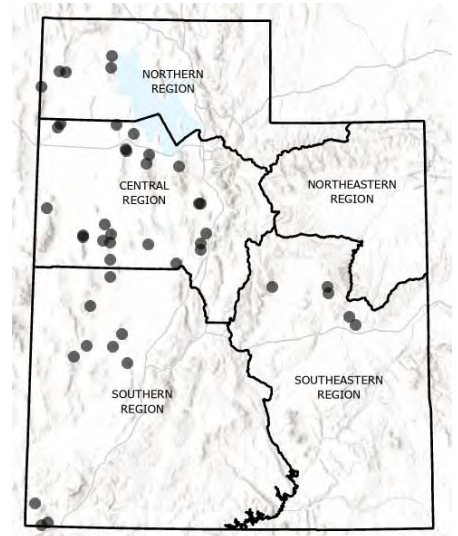


Table 2. Water Site Visitation by Region

The number of cameras set up on water in each DWR region. Note the Northeast Region does not have significant populations of chukar available to sample. The number of sites visited by juvenile chukar was up substantially from 2021.

	Active Cameras				% Visited by Chukar				Visited Cam. w/ Juv. Chukar			
	2019	2020	2021	2022	2019	2020	2021	2022	2019	2020	2021	2022
Northern	2	5	5	7	75%	40%	80%	71%	100%	100%	50%	60%
Central	8	20	20	18	71%	65%	60%	67%	50%	92%	50%	100%
Southern	7	10	11	11	80%	80%	36%	73%	60%	100%	25%	88%
Southeastern	3	5	4	5	80%	60%	75%	80%	100%	100%	33%	75%