## NEVADA CHUKAR FORECAST 2023-2024

During the summer of 2023, Nevada Department of Wildlife (NDOW) regional biologists conducted a series of chukar brood surveys across central and northern Nevada. These surveys do not represent a complete cross section or index of chukar populations across Nevada but instead are meant to provide upland game hunters with general information on chukar productivity in various areas, thereby offering suggestions of more promising counties to hunt.

During late July and throughout August, 44 areas were surveyed throughout western and eastern Nevada counties. Condensed results are presented below in Table 1. Survey routes conducted within individual Hunt Units were further pooled by counties to obtain adequate sample sizes and a general representation of production by region. Some surveys were compromised and delayed due to severe monsoonal thunderstorms that appeared in early to mid-August across central Nevada. Overall, the calculated statewide average production value was 6.0 chicks per adult. This represented a 62% increase in production compared to the 2022 value of 3.7 chicks per adult. From a statewide perspective, this year's production value now represents that which is necessary to increase chukar populations. For the 2023 season, some areas of Pershing County, much of Churchill County, Mineral, Eureka, and many areas in northeastern Nevada, will provide quality chukar hunting opportunities. Overall, base populations of chukar appear above average and production was promising. Seven out of the 8 counties this season showed production values over the 4.5 threshold; only Pershing County was below with 4.1 chicks per adult.

Starting in 2022 and carrying through 2023, NDOW approved the Southern Nevada Chapter of Quail Forever to begin conducting small game surveys using trail cameras to establish an additional methodology and data collection baseline for Gambel's quail, mountain quail and chukar. Data collection sites were aimed at small game guzzlers and natural springs identified by NDOW Game Division biologists. The protocol and general methodology were developed for chukar counts by the Utah Division of Wildlife. In total, 40 cameras were placed at water sites across the southern region and over 1 million photos were taken. Photos were

identified and counted within 30-minute windows and both adult and juvenile chukar were recorded. As expected, count data densities were lower when compared to the western and eastern region surveys, however, overall production proved to be good. Chicks per adult values showed 6.3 for northern Clark County, 5.5 for southern Clark County, 7.0 for southern Nye County, 8.5 in southern Lincoln County and 4.9 for Esmeralda County. Although chukar densities remain lower for the southern region, these numbers do highlight additional opportunities to hunt chukar for folks in the southern region, especially when coupled with a Gambel's quail hunt. NDOW would like to thank the Southern Nevada Chapter of Quail Forever for the hard work and countless hours that went into data collection and looks forward to continuing partnering on this study project.

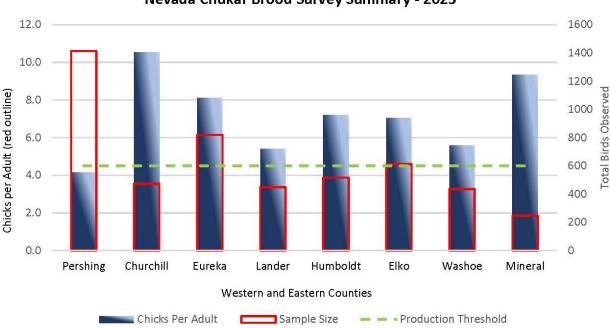
## Hungarian Partridge:

Biologists in the Eastern Region recorded encounters with Hungarian Partridge during the summer months. A total of 12 adults and 62 chicks were classified for a chicks per adult ratio of 5.2:1. Although surveys number are down from 2022, this is encouraging and represents additional upland game bird opportunities. Folks interested in hunting this species should look to the Independence and Tuscarora Ranges and public lands around the flanks of the Ruby Mountains.

## **Chukar Brood Survey Results Summary for 2023**

County	Adults	Young	Total Birds	Young/Adult
Churchill	41	432	473	10.5
Elko	76	536	612	7.1
Eureka	90	729	819	8.1
Humboldt	63	454	517	7.2
Lander	70	378	448	5.4
Mineral	24	224	248	9.3
Pershing	275	1139	1414	4.1
Washoe	66	369	435	5.6
Totals:	705	4261	4966	6.0

The results of these surveys should be tempered by the total number of birds observed. A sample size exceeding 100 birds is likely reasonable to estimate production with confidence while bird totals within the 50-100 realm should be viewed with caution. Anything less than 50 birds observed is considered merely anecdotal. Generally, a production value that exceeds 4.5 chicks per adult should yield sustainable to slightly increasing populations. Production and the total number of birds observed is graphically depicted and summarized in Figure 1 below by counties.observed is graphically depicted and summarized in Figure 1 below by counties.observed is graphically depicted and summarized in Figure 1 (page 2) by hunt unit or hunt unit groups.



Nevada Chukar Brood Survey Summary - 2023

Figure 1. Birds observed and estimated production during the 2023 chukar brood survey. Ideally, total birds (sample size, blue column) would extend beyond the sample threshold of 100 birds and production values would exceed the production threshold of 4.5 chicks per adult.



## The following provides some general descriptions of what to expect for chukar hunting this fall for several Nevada Counties:



Churchill County: Survey results this year continue to paint a positive picture and chukar hunters should be pleased with what they find in most mountain ranges in Churchill County. Above average monsoonal moisture was received throughout the county during the mid-to

late summer months of 2023, which improved habitat conditions and will likely increase their distribution.

Elko County: Even with 2022-2023 winter's having substantially higher snow depths and colder temperatures, most hunt units or unit groups still exceeded the sample and production thresholds. Although chukar occupying mountain ranges close to Elko could have experience higher than normal over winter mortality. For less experienced chukar hunters and those hunters that don't know the county well, Elko can be a challenge as birds can be distributed widely across the landscape, and August rains this summer causing a flush of green-up could spread birds out farther.

> Eureka County: Portions of Eureka County will offer some good chukar hunting while others can be considered fair. Sample sizes were much more robust than last season for western and eastern portions of the county. Good hunting opportunities should exist,

particularly during the winter months if ample snowfall is received to push birds to lower elevations. Heavy rainfall during the summer improved habitat conditions along with cooler temperatures.

Humboldt County: Chukar numbers are up from last season along with one extra hunt unit being surveyed. Good chukar hunting during the season should be found across Humboldt County. August rains have caused a flush of green-up, which could spread birds

out a bit but also make for some fat birds.



Lander County: Look for mountain ranges in this county to be better than last season. Chicks per adult values here went from an estimated 2.6 in 2022 to 5.4 for 2023, with sample size densities being higher as well. Hunting across the county should prove better than last season. In addition to formal surveys, anecdotal observations indicated good distribution and numbers throughout the county as well.



Pershing County (West): A few western mountain ranges in Pershing County should provide decent chukar hunting this season but overall production did not improve substantially.



Pershing County (East): This year proved more fruitful than last season for several eastern Pershing County ranges, however, overall production was still not great at 4.1 chicks per adult. High numbers of wild horses are having a negative impact on habitat

conditions in southeastern Pershing County and portions of northeastern Churchill County.

Washoe County: Survey results increased this season, thus shining a bit of a brighter light in the central portion of the county. This should also be a more fruitful year for mountain ranges in northern Washoe County for chukar. With above average winter snowfall and spring precipitation, habitat conditions improved and received a reprieve from the extreme drought conditions over the past few years. However, other limiting habitat factors remain such as poor livestock grazing practices and high numbers of wild horses.

