



A COMPARISON BETWEEN TWO DESERT QUAILS

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The distinguishable black mask and plume of the male Gambel's Quail make it difficult to confuse with any other Texas quails. Female Gambel's Quail have similar appearances, less the black mask.



Scaled Quail are sexually monomorphic, that is, they are difficult to differentiate gender from a distance. Scaled Quail receive their name from the "scaling pattern" of feathers, as noted by the body feathers of this Scaled Quail.

Texas is one of the few states in the nation that boasts viable populations of four quail species (Northern Bobwhite Quail, Scaled Quail, Gambel's Quail, and Montezuma Quail) – all of which can be found in the Trans-Pecos region of West Texas. For over 15 years, researchers with the Borderlands Research Institute have been studying quail populations of West Texas, with special emphasis on the desert quail species (Scaled, Gambel's, and Montezuma). Based on our field studies, we provide below a comparison between the more popular of the quail quarry of West Texas sportsmen: Scaled and Gambel's.

Like white-tailed deer and mule deer, Gambel's and Scaled Quail are close relatives, both belonging to the genus *Callipepla*. Hybrids can occur between the species, but they are extremely rare. Scaled Quail can be found throughout Texas, New Mexico, eastern Arizona and northern Mexico. Gambel's Quail are found in the deserts of Arizona, Colorado, Utah, New Mexico, Nevada, southern California, northern Mexico, and Texas. However, the geographic range of Scaled Quail overlaps that of the Gambel's Quail here in the Trans-Pecos region of Texas.

Scaled Quail can be found throughout the Trans-Pecos below 6,500 feet, and they inhabit arid and semi-arid lowlands of sparse low-growing shrubs in relatively flat or rugged terrain. Scaled Quail prefer more open grasslands consisting of perennial bunchgrasses, scattered with low shrubs and cacti, and less shrub cover than that preferred by Gambel's Quail. Unlike Scaled Quail, the distribution of Gambel's Quail in West Texas is limited to the upper Rio Grande

habitats found in the Chihuahuan Desert and require significantly more woody vegetation than do Scaled Quail. Gambel's Quail roost in dense shrubs or small trees, and mast makes up a greater percentage of their diet, compared to that of Scaled Quail. Gambel's Quail roost sites vary by season but typically include netleaf hackberry, littleleaf sumac, mesquite, and various acacias. Gambel's Quail eat a variety of foods, depending on seasonal availability, but like Scaled Quail, they are primarily granivorous.

Both species eat a wide array of foods, including seeds, herbaceous vegetation, and grains. However, Scaled Quail typically utilize a larger proportion of insects in their diet than Gambel's Quail utilize. More than 90 percent of a Gambel's Quail diet can consist of plant materials. The most important of these are seeds of annual forbs and soft mast of woody perennials, which generally make up 60 percent of a Gambel's Quail annual diet. Consumption of forb seeds for both quail species are most important in the spring and summer months, while the consumption of vegetation (e.g., leaves, buds, flower parts, sprouts) becomes increasingly important in the winter months.

Scaled Quail nesting season may last from April through September but, generally, peaks in June. However, Scaled Quail may delay nesting activity until the onset of summer rains in late June, July, or even as late as August. The nesting season for Gambel's Quail can vary depending on rainfall, but usually begins in April and ends in June or July. The location and structure of Scaled Quail nests can be extremely variable. Common nest sites for Scaled Quail are generally located in a shallow depression in the ground, lined with grass or other stems, with an overstory of some sort that provides shade. Nests are often placed under plants such as tobosa grass, prickly pear, and various yuccas. Unlike Scaled Quail, Gambel's Quail nests are simply a depression in the litter near the base of a shrub. Gambel's Quail are more shrub-tolerant than Scaled Quail, and herbaceous cover is not as important to Gambel's Quail.

Home ranges for Scaled Quail coveys are generally larger than that of Gambel's Quail. In the Trans-Pecos region of Texas, Scaled Quail home ranges can average about 320 to 640 acres in size, whereas, Gambel's Quail home ranges typically average 45 to 235 acres. However, the home range of a quail can vary depending on availability of food, cover, and time of year. While neither quail is migratory, they can make periodic long-distance movements. Although not common, it is most likely to occur during spring dispersal (March and April).

from El Paso to southeastern Terrell County, where large numbers of Gambel's Quail can be found at elevations ranging from 2,500 to 3,900 feet along floodplains and bottoms of the Rio Grande tributaries and along the numerous intermittent streams.

Gambel's Quail are an arid-land species endemic to hot and dry

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