

THE VANISHING MASKED BOBWHITE

By J. STOKLEY LIGON

For a long time the status of the Masked Bobwhite (*Colinus virginianus ridgwayi*) has been uncertain. Information about it has been confusing and to some extent contradictory. More than twenty-five years ago writers reported that the bird was practically extinct. It was, however, still fairly numerous locally as late as 1937 in central and southern Sonora, Mexico.

Considering how difficult of access the inhospitable desert habitat of the species has been to competent observers, it is not surprising that information has been scant. Enough recent dependable data have been obtained, however, to warrant the conclusion that this interesting race of the bobwhite is now practically extinct in the wild. The main hope for its survival lies in its restoration on former range in southern Arizona and possibly through establishment on promising habitat in southwestern New Mexico, by propagation and carefully managed area stocking.

So far as reliable records indicate, this quail never had an extensive distribution. Its ancestral range, however, extended far south of that generally recorded in southern Sonora, Mexico. Herbert Brown (*Auk*, 16, 1904:207-213) apparently the first to supply definite information about the bird, gives its former range in Arizona as being from the Baboquivari Mountains on the west, eastward to the San Pedro Valley, east of the Huachuca Mountains, a distance of approximately 100 miles, east and west. Its deepest penetration northward in the state was recorded as approximately 50 miles, in the Altar Valley, southwest of Tucson.

The writer's intense interest over a decade in the history and preservation of this quail prompted him to take part in three expeditions deep into Sonora in search of the bird. A cooperative plan on the part of the New Mexico Game Department and the Arizona Game Department has at last resulted in prospects for saving the birds from extermination.

As far back as 1937, through the efforts of the United States Forest Service and the New Mexico Game Department, a permit was obtained from Mexico City to take 200 Masked Bobwhite for experimental stocking in Arizona and southwestern New Mexico. Notwithstanding discouraging reports on their presence, the writer and David M. Gorsuch, who had just completed a study of the Gambel Quail in Arizona, spent most of December of 1937 in Sonora, east and southeast of Hermosillo, with the hope of finding the birds in numbers.

After a careful investigation of the Tecoripe section, some eighty miles southeast of Hermosillo, two small coveys of the quail were located and netted. By a coincidence, contact was there made with a ranchman from Old San Marcial. Following his suggestion, the writer and Mr. Gorsuch went to San Marcial and were taken by the rancher to the "Llanos," where he advised that the Masked Bobwhite would be found. This lead proved to be profitable as the birds were quite numerous over a limited area that was still in practically primitive state. More than a hundred were obtained.

Although the birds were present in considerable numbers on the "Llanos" segment of the wide Yaqui Valley (not to be confused with the Yaqui River Valley) their doom was already foreshadowed by the upsurge in the cattle business which was resulting in the development of ranches where previously the land had been practically unused. This quail is definitely a dweller of a deep-grass-weed habitat, a type of cover incompatible with heavy use by livestock. Subsequent visits sustained our most extreme fears—the face of the land had deteriorated into a state of desolation.

Most of the birds taken in 1937 were released in what was believed to be the best habitat in Arizona and New Mexico. Unfortunately, no advance preparation had been made for their protection, nor was follow-up care provided. Excessive range use by livestock and recurrent drought, direct cause of the bird's final extirpation from Arizona, seemingly prevented success of the experiment. While it is generally conceded that the experiment was a failure, reports of birds being observed still persist.

With a hope of securing at least a brood stock of the birds for propagating purposes, a second expedition was arranged by the Arizona and New Mexico game departments. The writer, George Peterson, and Louis Lawson of the Arizona Federal Aid Service,



Fig. 1. A pair of Masked Bobwhite. Photograph by J. Stokley Ligon.

spent almost a month in November and December of 1949, searching much of central and southern Sonora without locating any of the quail. Ranchmen who had formerly known of the presence of the birds advised that they seemed to have vanished overnight. Practically all former range of the bird was desolate as a result of excessive numbers of livestock and drought, while coyotes and raccoons had reached almost the saturation point. Even the Benson and Gambel quails, which are favored by their habit of roosting in bushes above ground, were extremely scarce on the same range type. Some hunting of quail by the more prosperous citizens and the trapping of the birds by peons about ranches and villages is now taking place.

Not satisfied to leave the Masked Bobwhite to its apparent doom, it was decided, after receiving some clues from several Sonora ranchmen in widely separated areas in 1950, to make a third trip with the hope of obtaining at least a few birds. This expedition, taken in November, 1950, included the same persons that participated in the previous year. After exhaustive searching afoot and by jeep, in which thousands of acres

were covered in widely separated areas, it began to look as though no more Masked Bobwhites would be taken out of Mexico. No stone was left unturned; even the faintest clue was followed. Knowing that the Cactus Wren uses feathers of resident birds for nest lining, abandoned nests were carefully examined to determine if bobwhite feathers were present. It was reasoned that if the Masked Bobwhites were present in the vicinity of the nesting sites of the Cactus Wren, its feathers should show up in their bulky grass nests. The assumption proved to be correct. No evidence of the presence of the bobwhite had been found in such nests the previous year. On this occasion, in a small area where a semblance of proper habitat persisted, some 60 miles east of Hermosillo, a nest

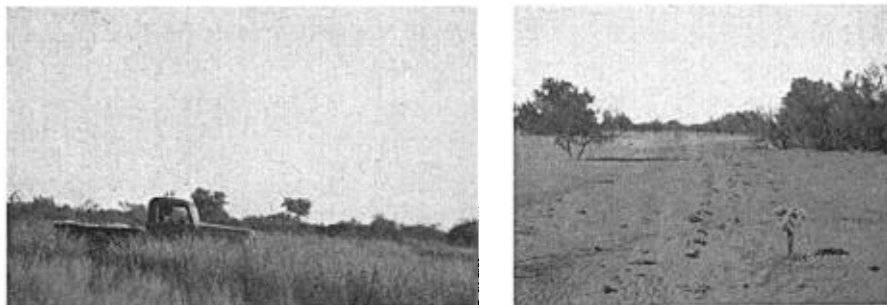


Fig. 2. Left. Typical habitat of Masked Bobwhite in Yaqui Valley, Sonora, Mexico, in 1937 before water was developed for livestock.

Right. Same locality ten years later, after devastation by cattle.

finally yielded the tell-tale evidence. Further confirmation of the presence of bobwhites was provided by the finding of ground roosts.

After two days of extensive searching a covey of seven of the birds was located of which five were netted. As far as could be determined, this covey was the remnant of a former extensive population in that section.

The five birds obtained served as an impetus to further effort. On hearing a rather doubtful account of five of the quail seen in the past summer approximately 100 miles south of the point of capture, it was decided to search for a few more of the quail. This second area was near where the birds were found in numbers in 1937, but where they were totally absent in 1949.

After a long, tortuous trip, a Cactus Wren's nest and a ground roost again supplied the clues to the presence of a few birds. Four small coveys, totalling 27 individuals, were located on approximately a one-half section of valley land, which because of remoteness from watering places for cattle, had miraculously escaped devastation by livestock. Twenty of these quail were secured. This, in itself, was a fortunate discovery at a critical time for this vanishing bird.

The 25 birds brought out of Sonora, it is hoped, will prove to be the difference between perpetuation and extermination of this handsome and interesting strain of the bobwhite.

Carlsbad, New Mexico, July 16, 1951.