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# HISTORIC DISTRIBUTION OF MOUNTAIN QUAIL IN THE PACIFIC NORTHWEST

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# ABSTRACT

Mountain quail (*Oreortyx pictus*) are among the least studied of the North American quails. The prehistoric and early historic distributions of this bird are uncertain. In the Pacific Northwest, mountain quail were first recorded by Lewis and Clark in 1806 near the Columbia River adjacent to the Cascade Range in Oregon. Written evidence relating to the original distribution of mountain quail in this area indicated that the birds were found from the Oregon Coast Range to the Cascades along the Columbia River and southward. Translocations of birds into this region began in 1860 and continued for several decades, which further confused the historic status. Eventually, mountain quail were distributed from southern British Columbia throughout Washington and into western Idaho and eastern Oregon by the early 20th century. Archeological evidence revealed it is possible that mountain quail existed in west-central Idaho, likely as refugia populations, 700 to 1000 years ago. Populations in Idaho and the interior Columbia River Basin have declined substantially during the past several decades. Similar declines have not been observed in the Pacific Northwest (western Oregon) or in the humid coastal region of western California.

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## INTRODUCTION

Mountain quail (Oreortyx pictus) currently range from extreme southwestern British Columbia south to Baja and eastward to Idaho and Nevada (Johnsgard 1973:345-347). Although introductions have been made in the southern portion of their range (Linsdale 1951), most translocations took place in northerly areas, such as British Columbia (Guiguet 1955), Washington (Dawson and Bowles 1909:564-568), Idaho (McLean 1930, Bent 1932:42-43), and Oregon (Baird et al. 1874, Aldrich and Duvall 1955). There are numerous written sources of information about the range of mountain quail in the Pacific Northwest, which begin with the notes of Lewis and Clark in 1806 (see Strong and Strong 1995:270). The history of translocations of this species dates to the mid-19th century (Cooper 1860, Baird et al. 1874, Merrill 1898, Guiguet 1955). Nevertheless, much of the information from the 1800's is anecdotal. Because of the relatively long history of translocations, the native, recent range of mountain quail in the Pacific Northwest (defined herein as British Columbia, Idaho, Oregon, and Washington, all north of 42° north latitude) is unclear.

The objective of this paper was to compile historic information from a 200 year (1800–2000) period, and use this information to clarify the native and introduced ranges of this species in the Pacific Northwest.

#### Early Historic Distribution

The earliest written comment relating to mountain quail in the Pacific Northwest is from the journals of Lewis and Clark (Strong and Strong 1995:270) for 1806 wherein this species is first noted at "The Breakers" (near what is now known as Rooster Rock State

Park in Multnomah County) in Oregon, situated 30 km east of Portland (Figure 1). Subsequently, Douglas (1829:143), who obtained a specimen from the Umpqua drainage in Douglas County, Oregon in 1829, commented that the range of mountain quail extended northward to near 45° north latitude within a few miles of the Columbia River. Audubon (1844:69-70) recounted information from J. K. Townsend that indicated mountain quail were found in dense woodland habitats from the tributaries of the Columbia River south through the Willamette Valley to California. Further, he stated that Townsend considered these birds rare and that he had not actually observed any during his travels throughout Oregon. A specimen of an albinotic bird, now in the National Museum in Washington, D.C., was taken in November 1860 in the Willamette Valley near the area of Mount Hood (see Crawford 1978).

#### Translocations During the 19th Century

Translocations of mountain quail in the Pacific Northwest began as early as 1860 (Cooper 1860). Suckley (in Cooper 1860:225) stated that all mountain quail in the Willamette Valley of Oregon resulted from introductions (Figure 2). The extensive grasslands of the Willamette Valley in prehistoric times (Franklin and Dyrness 1973:120) may not have provided suitable habitat. Translocations of birds into British Columbia began during the 1870's (Guiguet 1955) with populations established eventually on Vancouver Island and in the Fraser Valley (Bent 1932:42–43). Without citing a source, the American Ornithologists' Union (1957:144) noted that mountain quail were probably native to Vancouver Island. Dawson and Bowles (1909:564–568) commented that mountain

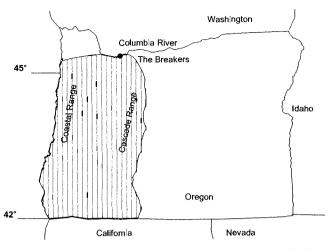


Fig. 1. Early historical distribution of mountain quail in the Pacific Northwest (from Lewis and Clark in Strong and Strong 1995, Douglas 1829, Audubon 1844), showed by hatched area.

quail, perhaps, were indigenous to a portion of Washington and then, confusingly, went on to state that mountain quail were not native to Washington and that the distribution of birds in the state at that time (Figure 2) resulted from repeated introductions of birds from California between 1880 and 1890. Jewett et al. (1953: 225-227) commented about extensive transplants of mountain quail in Washington, and Taylor (1923) noted that mountain quail were repeatedly translocated into various places in Washington. McLean (1930) noted these transplants took place in both western and southeastern Washington and made a vague reference to mountain quail possibly being indigenous to the southwestern portion of the state. Bent (1932:42) noted that quail were introduced to Whidbey Island, San Juan Island, and elsewhere in Washington. Johnsgard (1973:347) commented that the birds translocated into Washington apparently were O. p. palmeri, but Jewett et al. (1953:225-227) indicated multiple sources of birds from several races were introduced, which resulted in racial mixing.

Mountain quail also were translocated successfully into Idaho where populations were established during the 1800's; for example, Merrill (1898) stated that 10 pairs were obtained from the Puget Sound area and released near Mica Peak in Kootenai County in 1897 (Figure 2). Introductions took place near Nampa (Ada County), Silver City (70 km south of Nampa) in Owyhee County, and near Shoshone in Lincoln County (Phillips 1928). McLean (1930) likewise noted introductions of mountain quail into Idaho.

#### Late Historic Distribution

Naturalists, biologists, and others published reports on the distribution of mountain quail (Figure 3) during the early part of the 20th century that provide insight into mountain quail distribution in relation to earlier records. In Washington, Dawson and Bowles (1909:564–568) commented that the birds were rather broadly distributed by the early 20th century. An early mention of mountain quail in eastern Oregon was

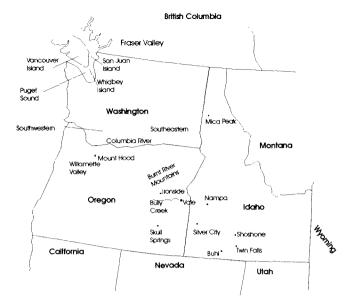


Fig. 2. Locations of early records of mountain quail in Oregon, (from Suckley in Cooper 1860; Anthony 1911,1912), sites of translocations of mountain quail in Washington and British Columbia (from Dawson and Bowles 1909, McLean 1930, Bent 1932, Guiguet 1955), translocations of mountain quail (from Merrill 1898, Wyman 1912, Phillips 1928) and locations of archeological evidence of mountain quail (from Gruhn 1961, Murphey 1991) in Idaho.

made by Ridgway (1896:191) in the late 1800's. Anthony (1911) noted the appearance of 12 mountain quail near Vale, Malheur County, Oregon and suggested that their presence was accounted for by severe winter weather that year. Anthony (1911) commented that the nearest known population resided in the Burnt River Mountains (Figure 2), approximately 120 km northwest of Vale. Subsequently, Anthony (1912) reported the occurrence of mountain quail along Bully

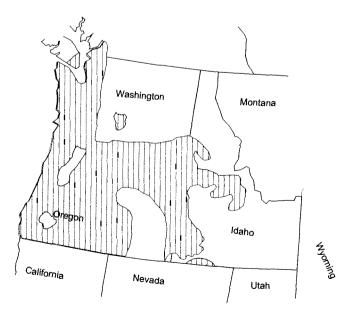


Fig. 3. Early 20th century distribution of mountain quail in the Pacific Northwest (from McLean 1930, Bent 1932, Guiguet 1955).

#### Crawford: Historic Distribution of Mountain Quail in the Pacific Northwest CRAWFORD

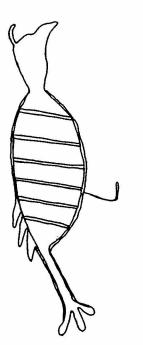


Fig. 4. Pictograph of gallinaceous bird resembling a mountain quail from approximately 800 to 1000 years ago (redrawn from Murphey 1991).

Creek (24 km northwest of Vale), near Skull Springs (80 km southwest of Vale), and near Ironside (70 km northwest of Vale). Evidently, these observations were sufficiently unusual to warrant publication and Anthony (1912) concluded that mountain quail were expanding their range eastward in Oregon. Van Rossem (1937) took a type specimen near Ironside, Oregon in 1919, and Willett (1919) noted the presence of mountain quail along streams west of the Warner Valley in Lake County, Oregon. Translocations into eastern Oregon are poorly documented, but McLean (1930) and Aldrich and Duvall (1955) both indicated that mountain quail were introduced into that part of Oregon. In contrast to the comments of Anthony (1912) about eastward expansion of mountain quail distribution, Wyman (1912) stated that mountain quail were long established at that time in Idaho. He noted that they were becoming plentiful near Shoshone, and commented that they had recently appeared near Twin Falls (Figure 2). Wyman (1912) considered mountain quail in the area of Nampa "explorers".

#### Archeological Evidence

Archeological evidence for the occurrence of mountain quail in the Pacific Northwest is scant. Gruhn (1961) identified one specimen from remains dating to within the past 700 years in a cave, located in Jerome County, Idaho, approximately 24 km north of the Snake River and 24 km southeast of Shoshone (Figure 2). In addition, Murphey (1991) described a pictograph of a bird (identified by the author as a grouse) that bears resemblance to a mountain quail (Figure 4). The pictograph portrays a gallinaceous-like bird with prominent barring on the side of the body, heavy bill and feet, and a top-knot, which is quite short

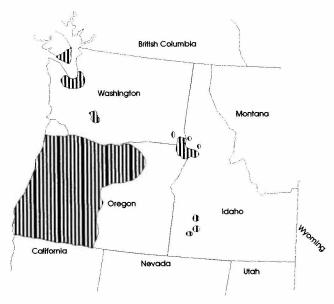


Fig. 5. Current distribution of mountain quail in the Pacific Northwest (from Johnsgard 1973; Vogel and Reese 1995; M. Pope, personal communication).

and curved over the top of the head as in California (*Callipepla californica*) or Gambel's (*C. gambelii*) quail. This figure was found in an area, located south of Buhl, Jerome County, Idaho, near the Nevada border and was dated 800 to 1000 years ago.

### Current Distribution

Mountain quail in the Pacific Northwest (Figure 5) currently range from Vancouver Island, British Columbia through portions of western, south-central, and extreme southeastern Washington to scattered areas of western Idaho, and throughout western, north-central, and northeastern Oregon into the humid belt of northwestern California (Johnsgard 1973:345–347, Vogel and Reese 1995, M.D. Pope, personal communication). Populations have declined substantially in number and distribution in Washington, Idaho, and central and eastern Oregon (Vogel and Reese 1995). As a consequence, reintroduction efforts are underway in Oregon.

#### Conclusions

From the early historical data, I concluded that the native distribution of mountain quail in the Pacific Northwest during the early 19th century ranged from the Coast Range of Oregon eastward to the Cascade Range along the southernmost part of the Columbia River and, thence, southward. Mountain quail were probably not present in the Willamette Valley but, undoubtedly were found along foothill regions of both mountain ranges. Translocations of birds in this region began by, at least, 1860 and continued through the turn of the century. The geographic extent of mountain quail distribution was probably largest during the early 1900's as a function of translocations and natural expansion of these populations. Seemingly, the distribution.

bution of mountain quail remained relatively constant during mid-century, but within the past 25 years, populations outside of the early historic distribution suffered substantial declines, whereas populations in the Coast and Cascade Ranges of Oregon remain abundant.

The archeological evidence for mountain quail in Idaho is particularly intriguing. Bones and a possible pictograph of mountain quail, both dating from a relatively similar time period and from locations within approximately 50 km, may indicate the presence of mountain quail in the south-central part of Idaho 700 to 1000 years ago. Perhaps, these birds represented remnant populations of Pleistocene glaciation. Gutiérrez (1975) commented that mountain quail once apparently had a broader distribution in the southern part of their range because three investigations revealed the occurrence of these birds throughout southern New Mexico (Wetmore 1932, Howard and Miller 1933, Howard 1962). An analogous situation may have occurred in the Pacific Northwest.

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