

Montezuma Quail

BY TERRY B. JOHNSON • ILLUSTRATION BY ZACKERY ZDINAK

SCIENTIFIC NAME: *Cyrtonyx montezumae*. The genus stems from the Greek for curved or bent (*kurtos*), and claw or nail (*onux*). The specific epithet is a Latin reference to the Aztec Emperor (1480-1520). Ornithologists and bird-watchers know this species as the Montezuma quail, although it is also known as the Mearns' quail, harlequin quail, and fool's quail. For now, the Department continues to call it the Mearns' quail because that name is embedded in State law (Title 17) and our rules and Commission Orders.

DESCRIPTION: Montezuma quail by any name are short, about 8 inches tall, and plump, with short wings. The gaudy male sports the bold harlequin markings associated with court jesters. The face is strongly marked in black and white. The female wears mottled brown (to pinkish below), with less distinct markings on the head. Juveniles are paler, with dark markings on the underparts.

DISTRIBUTION: The Montezuma quail occurs from central Arizona east to disjunct populations in south-central New Mexico and southwestern Texas, and south into the western and eastern Sierra Madres of Mexico.

HABITAT: A bird of evergreen oak-pine woodlands and adjacent grasslands, it occurs in open woodland areas in which perennial native grasses grow medium to tall, providing dense cover with moist pockets in which to nest. It typically roosts at night near canyon bottoms and side drainages.

BIOLOGY: In Arizona, Montezuma quail are perhaps most evident when the summer rains begin. Then, at dawn in the grassy swales of southern Arizona's oak-studded grasslands, a

soft owl-like *who* or a descending tremolo (whistle) reveals the presence of a bird that is among the most difficult to see in this area. Even patient bird-watchers become frustrated trying for visual contact, which usually results more from serendipity than skill.

The Montezuma quail's foraging habits are revealed by its strong nails. These birds scratch the ground for plant material, especially bulbs and tubers, but also seeds and insects and other invertebrates. Evergreen oaks occasionally produce bumper crops of acorns, and the Montezuma quail takes full advantage of those "fat" years.

Good grass cover is essential to this species for hiding from predators, for night roosts (overstory cover is also important) and nesting, for food, and to help soils retain the moisture that is key to nesting success. When disturbed, Montezuma quail tend to skulk down and rely on camouflage to avoid detection. When that technique is abandoned, the birds blast off explosively in powerful but short flight, usually scaring the bejeebers out of any human stumbling along nearby.

STATUS: The Montezuma quail is not threatened or endangered, but it is considered sensitive in Arizona and elsewhere because habitat issues typically keep its populations from thriving. In Arizona, take is regulated by Commission Order 16. Methods of take and possession limits are reviewed each year and revised as appropriate.

MANAGEMENT NEEDS: Montezuma quail management in the arid Southwest is anything

but simple, or noncontroversial. The grass cover on which it depends is subject to many pressures. Grazing can have substantial impact if not managed to ensure that sufficient perennial grass cover is retained. Urbanization of the oak-pine-grassland belt is fragmenting Montezuma quail habitat, although the impacts are not well studied; feral and free-roaming house cats may be a factor in such situations. Summer rains also play a major role in population dynamics. When the rains come, and the perennial grasses are allowed to flourish, Montezuma quail populations also flourish. In dry years with heavy grazing, the quail almost seem to disappear. Needless to say, the interplay between grazing advocates and Montezuma quail enthusiasts can be dynamic, and the Department, as a wildlife agency committed to multiple use on public lands, typically ends up squarely in the middle. 🦋

Terry B. Johnson, chief of the Department's Nongame and Endangered Wildlife Program, still remembers his first sighting of Montezuma quail, two birds exploding into flight virtually beneath his feet, in the oak-grass ecotone of the Chiricahua Mountains in the spring of 1974.

