

Introduction to Small Game Birds and Bird Hunting

Arizona is home to a wonderful variety of game-bird species. Each winter, the Grand Canyon State is a destination for upland bird hunters from all across the United States, and justifiably so. On those rare occasions when the elements conspire to produce ideal conditions, our wing-shooting opportunities are unparalleled. But even in poor or average years, a hunter can pursue several species of birds.



Though Arizona is not located on a major flyway, a good number and variety of waterfowl pass through or winter here each year. Arizona has five species of quail and is the only state where Montezuma quail can consistently be encountered, making it a mecca for quail-hunting enthusiasts. Add some of the most robust mourning-dove numbers in the nation, dusky grouse, chukars, pheasants, band-tailed pigeons, several thousand sandhill cranes each winter, and white-winged doves, and you have a wing-shooter's paradise.

Arizona game birds are primarily hunted by four methods: pass-shooting, walk-up shooting, jump-shooting, and decoying. All methods offer their own challenges, and can vex even the most seasoned hunter.

- Pass-shooting is done by selecting a location where birds fly by and taking them as they pass. Doves typically are hunted in this manner. Pass-shooting can be tremendously challenging, and weather conditions such as high winds, which allow the birds to fly and maneuver more quickly, can humble the most adept shotgunner.
- Walk-up shooting is most often employed for hunting quail, grouse, and other flushing birds. The hunter takes to the field, walking into areas where birds are likely to be found. Dogs are a popular addition to this style of hunting, and can assist greatly in locating some species. Once birds are located, they are flushed from cover and taken on the wing.
- Jump-shooting generally is used when taking waterfowl from smaller bodies of water. Birds are located from a distance with the use of binoculars. Once a pond is determined to be holding birds, a stalk is planned. The quarry generally is approached from behind cover such as brush or the dike of a stock tank. Once the hunters have moved well within range, they emerge, jumping the fowl from their location and shooting them on the wing.
- Decoying can be done with a surprising variety of birds. It works well with most species that fly to and from feeding, roosting, and watering sites. Ducks and geese are most commonly associated with this style of hunting, but many other birds can be taken with the use of decoys. Regardless of the bird species being pursued, using decoys to attract game birds is executed much the same way. First, decoys are deployed in a location being used or frequented by the species sought. Hunters then conceal themselves nearby, within shotgun range of the decoys, and take birds as they approach the decoy spread. Use of decoys often is coupled with calls or other means of attracting birds.

Quail, Grouse, Partridges, Pheasants: Galliform Game Birds, Family Galliformes



Dusky grouse.

Gallinaceous birds are those species that resemble chickens in general shape and form. Their legs are typically short or of modest length, and their toes are well-clawed. These birds possess broad, rounded, powerful wings that can quickly remove them from danger. The sexes of many species are strongly dimorphic.

Due to their terrestrial proclivities, these birds are usually encountered on the ground, either alone, in pairs, or in groups called “coveys” or “flocks.” Many species perch or roost in trees, while others essentially never perch in vegetation, and roost on the ground. All these birds typically would rather walk or run than fly. Nests usually are constructed on the ground under the cover of shrubs, grass, or other shelters.

Arizona is home to nine species of gallinaceous game bird. The wild turkey, masked bobwhite, Gambel's quail, scaled quail, Montezuma quail, and dusky grouse are all native to Arizona. One of these, the turkey, is classified as a big-game species,

so it is not covered in this book. The masked bobwhite, which is an endangered species, is not open to take by hunters. Three more species have been introduced to the state: ring-necked pheasant and chukar (a species of partridge), both from Asia; and the valley or California quail, from the western United States.

Quail

Quail reproduction is largely governed by habitat conditions preceding the breeding season. The most important factor is rainfall of sufficient amount to produce green feed and subsequent vitamins for maximum egg production. This green-up also allows insects to proliferate, which enhances the survival of quail chicks. Other important parts of the equation are the number of birds that survive the winter to breed the following season (carry-over birds) and, of course, the amount of cover for the birds to use for nesting and protection from predators.

Interestingly, all of our quail species, with the exception of the masked bobwhite (which pairs in June and breeds the following month), follow the same covey breakup and pairing pattern. In late winter and early spring, the covey breaks up and males begin advertisement calls to attract mates. Eggs are laid in a nest that may be simple or elaborate. One egg a day is laid until the full complement is attained. The pair and their young form the nucleus of a new covey. Family groups are joined later by individuals or pairs of birds that did not breed successfully. Covey sizes vary considerably among species.

In all of our quail species, males are more abundant than females. This disparity between the number of males and females varies between species as the plumage differences between the sexes increase. In Montezuma quail, our most sexually dimorphic species, this male-to-female gap is highest. This sexual disparity allows female quail the latitude to select from among many males for those traits that best suit the needs of the species, thereby promoting survival of their offspring.

Three species of Arizona quail belong to the genus *Callipepla*. This genus's name was coined by German herpetologist Johann Georg Wagler in 1832 by combining the Greek word *kalos* (beautiful) and the Latin word *peplum* (robe or tunic). *Callipepla* means "beautiful coat."



Gambel's Quail (*Callipepla gambelii*)

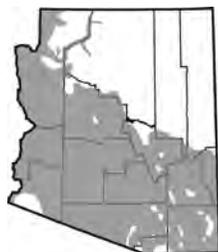
Other Names: Arizona quail, desert quail, Gambel's

Name: The species *gambelii* was described in 1843 by naturalist William Gambel and named for him by Thomas Nuttall. The story is a bit complicated, but essentially, Gambel forwarded the observations from his western expedition to his mentor Nuttall, who encouraged the Academy of Natural Sciences to publish them. This quail was described in the report and was likely unnamed. Nuttall probably filled in the missing pieces and named this bird in honor of Gambel. The subspecies found in Arizona is the western Gambel's quail (*C. g. gambelii*).

Description: At about six ounces, the Gambel's is our smallest quail. Both sexes are gray, with red-brown patches streaked with white on the flanks, and gray legs. The belly is buff-colored. Both sexes sport a rusty cap with a black plume or topknot protruding from it. Females have a smaller topknot. Males have a black mask bordered by white and a black patch on the stomach just forward of the legs.

Habitat and Distribution in Arizona: Gambel's quail are birds of deserts, low-elevation grasslands, and scrublands, typically below 5,500 feet elevation. They are

found in the Sonoran, Chihuahuan, and Mojave Deserts, in addition to many chaparral and pinyon-juniper habitats. Common plants they may be associated with are saguaro, mesquite, paloverde, creosote, bursage, grasses, hackberry, juniper, manzanita, cholla, pricklypear, burroweed, scrub oak, and wolfberry. Gambel's quail are found over much of Arizona below the Colorado Plateau, sweeping northward around the west edge of the plateau and following the Mojave Desert north of the Colorado River.



Biology: Gambel's quail resemble and are closely related to California quail.

Gambel's quail first appeared as a distinct species around the beginning of the Pleistocene, roughly 1 million years ago.

Gambel's quail reproduction is largely driven by the amount and timing of the rainfall that occurs between October and March, our winter rainy season. These rains, when sufficient, provide important green feed containing vitamin A and phytoestrogens, which bring the birds into breeding condition. Understandably, breeding periods following wet winters are the most productive. Despite popular belief, there is no proof that Gambel's quail lay more than one clutch of eggs per year when conditions are optimal.

Nesting typically occurs in the spring and is signaled by the mating call of unpaired males. This single-note "caw" call is usually given from an elevated perch. In the best years, calling may start as early as January, but it generally commences in late February. Calling males run regular routes, visiting the same perches at roughly the same time of day. They usually call for several minutes from each perch.

Peak calling activity occurs in the morning and again in the afternoon. A nest is constructed beneath vegetation or other sources of shelter, and the eggs hatch in just over 20 days. More than one female has been documented to lay eggs in a single nest. Sometimes, "nest dumping" occurs. This is when only one hen rears the young and the others go off and do who knows what, resulting in hens with exceptionally large broods. But generally, both parents attend a nest, and the male takes over incubation should something happen to the female. The peak hatching period typically occurs in late April or early May. A hen may lay more than 20 eggs in a good year, but less than half that number in a bad one. The average clutch size for Gambel's quail is 12. In years with poor breeding conditions, Gambel's quail may postpone nesting or prolong the nesting season, resulting in birds nesting

throughout the summer. Gambel's quail nesting late in the season, June through September, is a bad sign and bodes poorly for the number of birds the following winter. Young birds are nearly indistinguishable from adults by about 20 weeks of age. Banded wild birds have attained ages in excess of five years, but research indicates most birds live less than two.

The diet of the Gambel's quail varies throughout the year but includes succulent plants such as winter grasses and heron's bill (redstem stork's bill), seeds, pricklypear fruit (in the late summer and fall), mesquite leaves and flowers, and insects. These quail acquire most of their water from food. Though they do not need free water, they use it when it's available, especially when conditions are dry.

Habits: For quail, the well-being of the individual depends on group cooperation. When the covey is together, there are many eyes watching for potential danger. The covey flush is a confusing event that makes it difficult for predators, including the hunter, to select a single target. When a covey flushes, the birds make every effort to stay together. It is only when the covey is fragmented that the individuals stick tightly to cover until the group can reassemble. One theory about this behavior is that when a bird lands and can see other members of the covey, as happens when covey members land in a close group or an area with sparse cover, it has the confidence to keep fleeing, remaining in the safety of its peers. However, when a bird



The male Gambel's quail is more colorful than the female.

lands and does not see its covey mates, as often happens in dense cover, it becomes frightened and confused and instinctively hides until it can reunite with the others.

The Gambel's quail covey is fully formed by the early fall. Coveys are composed largely of family groups joined by adults who failed to successfully breed. These coveys may number from six to rarely more than 100 birds in exceptional years. Typical covey size, which depends on reproduction, ranges from 15 to 30 birds.

Large coveys are more commonly encountered late in the winter, when several groups of quail may converge on favorable feeding grounds and form “super coveys.” Coveys are fairly sedentary, spending their lives in a relatively small area. Home ranges recorded for this species run from 19 to 95 acres. Gambel’s quail roost in trees and large shrubs. The thorny branches and dense cover of mesquite, hackberry, and wolfberry are favored sites. Roosting often takes place along washes or ravines, where vegetation is heavier. Gambel’s quail typically feed in the morning starting just after first light, and again in the mid- to late afternoon before roosting. Midday is generally spent loafing in sheltered areas such as beneath heavy vegetation, especially on hot days. These birds often can be found near stock ponds, rivers, creeks, and other water sources. However, it is not uncommon to find them far away from any water.

When feeding, birds spread out and forage by scratching and pecking at suitable items. Individuals usually remain close enough to maintain contact with their peers. A variety of soft chips, clucks, squeals, and purrs keep the covey in contact at these times. A sentinel bird may watch for danger from a suitable perch nearby. Birds typically scurry for cover at first alarm or may attempt to outrun danger. These birds usually take wing only when pressed.

Gambel’s quail are capable of a variety of vocalizations. It is not unusual for the flush of a startled bird to be accompanied by a rapid cackle as it takes wing. One of the most commonly heard calls is the three-part assembly call, one that has graced the soundtrack of many a Western. Often given from a perch, it is a series of “ha” sounds with the emphasis on the middle note, which is the highest: “ha HA ha.”

Hunting Tips: It behooves the Gambel’s quail hunter to learn to recognize the various calls they make. These birds can often be located by listening for their calls. Start hunting early in the morning, when quail are most active and vocal. While walking in the field, stop frequently to listen for birds. An often-employed trick for locating Gambel’s quail is to imitate their calls to induce them to answer. Using a homemade or commercially available quail call and listening for coveys to answer can save lots of walking and time. Quail calls may be purchased at sporting-goods stores for a nominal cost.

Once quail are found, attempt to split up the covey and work cover for single birds. This is where you’re likely to get most of your shooting. Estimate the number of birds seen on a covey rise, and keep a close count of the number of quail flushed

while working the area for single birds. This way, you can make sure you’ve worked the covey thoroughly. In other words, if you have searched through the area where the scattered birds settled and have only gotten up half the number of birds counted on the covey rise, you know birds are still in the



area and can work the surrounding cover accordingly. In years of poor reproduction, you are faced with pursuing older, “educated” birds, which tend to run more, flush at greater distances, and generally be a pain in the neck.

Once flushed, Gambel’s quail often fly uphill or downhill (usually opposite the direction you are heading). When flushing uphill, Gambel’s quail generally land just over the top on the opposite side of the hill from the pursuer. They also may fly over a hill and land at the bottom or near the bottom on the other side of the drainage. Occasionally, they fly much farther, even out of sight. Gambel’s quail have the frustrating and uncanny ability to at times “magically” disappear. This can be quite puzzling, and no amount of effort by either man or dog will find these birds. There is really no defense against this cruel trick, and it is best, after sufficient effort has been made to locate the vaporized covey, to push on in hope of finding a more cooperative group of birds.

A common problem Gambel’s quail hunters encounter is when these birds choose to outrun danger rather than hide and fly away from it when closely approached. Though this problem can never be totally resolved, there are a few tricks that will increase your odds of success. First, avoid hunting areas where the ground cover is so open that birds find few places to hide. Such habitat encourages the birds to run and flush at excessive distances. Second, keep pressure on the birds in hopes of splitting up the covey. Do this by unloading your firearm and trotting after the covey until you have flushed the covey enough times for the birds to be sufficiently scattered to hold. Then work the area for singles.

Once the birds are scattered and holding, you will flush more birds if you walk in a zigzag pattern through the cover, occasionally pausing for a few seconds. Waiting

can be as important as walking, in areas where there is good cover and where you know birds are hiding. It is not uncommon to walk into an area, stop for a few seconds, and have a bird flush right behind you after you resume walking. Be ready for this. Attempt to read the cover and terrain to predict where birds may be hiding. Groups of closely growing shrubs, shallow draws lined with dense vegetation, or low thickets should be investigated. If you have a partner, develop a game plan and move through an area about 20 to 30 yards apart, covering the area thoroughly. If birds are holding tightly, it is not unusual to cover the same ground many times and still flush birds. Quail also often hold closely in inclement weather. I especially look for snowfall in Gambel's country. Over much of their distribution, this is a rare event. On occasion, Gambel's quail hunting can be quite productive when these conditions prevail.



A hunter with a mixed bag of Gambel's quail and cottontail.

When a bird is knocked down, stay at the ready for a second or two to make sure the quail is not crippled and does not run off. Also, mark downed birds carefully, walk directly to the spot, and retrieve the bird. If the downed bird is not found immediately, take the time to carefully search the surrounding area within a radius of about 15 to 30 yards. Gambel's quail are remarkably tough. Crippled birds will run down mammal burrows or into packrat nests, or hide in almost any suitable cover. Resist the temptation to shoot at additional birds once a bird has

been downed. This will translate to fewer lost birds and more game in the bag.

Gambel's quail can be hunted easily without dogs, but dogs can be very helpful. Dogs are particularly useful for locating downed birds, especially ones that have secreted themselves in packrat nests or rodent holes. Dogs also can smell birds at great distances and lead you to quail you had no idea were around.

Gear: Good boots and a light gun: That pretty much sums up the primary needs of the Gambel's quail hunter. Shotguns (with open chokes such as improved cylinder and modified) in 28- to 12-gauge sizes work well for hunting these birds. Most shots presented by Gambel's are within 30–40 yards, though uncooperative quail can flush far out of range of any shotgun. Shot size No. 7½ works well in 12-gauge, 16-gauge, and 20-gauge shotguns, but hunters who prefer smaller guns such as 28-gauge will have greater success if they step up to No. 6 shot. A one-ounce load is not needed with this larger shot size, but it is difficult to find lighter loads in No. 6 shot. A .410-bore shotgun is largely unsuitable for Gambel's quail due to the often long shots, tough nature of the birds, and light charges of the ammunition. However, if the birds are holding tightly, this small gun can be quite effective on this species. The ideal shotgun for quail hunting should be light, point quickly, and be easily carried for miles through rough terrain. A bird-hunting vest to carry bagged birds, shotshells, spent ammunition, water, and sundry gear is important, also. Good Vibram-soled leather boots will be appreciated, as much Gambel's-quail country is rough and cactus-strewn. A broad-brimmed hat wards off the intense desert sun.

Other Species: Hunts for Gambel's quail naturally lend themselves to multi-species bags. Doves can often be hunted while afield for quail. It is not uncommon to have mourning doves flush within gun range from brushy flats or trees where they are feeding or loafing. Desert cottontails and black-tailed jackrabbits are frequently encountered in Gambel's quail habitat and can be taken opportunistically by hunters. Gambel's quail hunters may also want to check stock ponds for resting and feeding ducks. This can be especially productive after winter storms that bring ducks down from the high country. Remember that nontoxic shot is required for waterfowl.

With a little planning, the Gambel's quail hunter can take other quail species on the same trip. Euphemistically known as the "quail slam," taking all three species of huntable Arizona quail is a challenging effort. Scaled quail overlap with Gambel's quail over much of their southeastern Arizona distribution, and mixed bags of these two species are not uncommon. However, bagging the third species, Montezuma quail, takes much more forethought, as this bird's habitat preferences have little in common with those of either Gambel's or scaled quail. Generally, the hunter will have to travel to oak woodlands to take Montezuma quail. That being said, tenacious hunters can bag all three species on a single outing.

Whether you're new to the hunt or an old hand looking for a fresh challenge, this book will guide you into Arizona's great outdoors and bring you home with a healthy harvest.

Hunting Small Game in the Grand Canyon State

The pursuit of Arizona's small game birds and mammals rewards the hunter with time afield and treats for the table. This lavishly illustrated book provides expert tips for hunting Arizona's small game, from quails and doves to squirrels and rabbits. It includes detailed descriptions of small game animals and specialized information about their behavior and habits. It will help you select the right firearm, gear up for the hunt, and care for the harvest. Recipes are included to help hunter-cooks take their game all the way from the field to the table.

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About the Author

Randall D. Babb is a biologist and naturalist whose extensive knowledge of wildlife keeps him in demand as a writer, photographer, illustrator, speaker, and tour leader. He grew up hunting and fishing in Arizona and has chased his share of big game, but his passion is the pursuit of small game animals.

US \$16.95



Arizona Game and
Fish Department
www.azgfd.gov

ISBN: 978-0-917563-57-7

