



# How to Help Quail on Your Farm or Ranch

A resource developed by USDA-NRCS, Marin County RCD, and PRBO



Photo Ian Tait

A male California Quail in a patch of lupine

## California Quail—*Callipepla californica*

**Identification:** 10". Both sexes have a black plume on forehead, scaled appearance to belly. Male has black chin, female has light chin. Adult female is duller brown overall.

**Food:** Seeds (e.g., legumes), acorns, fruits, and insects.

**Habitat:** Grassland and forest edges, dense meadows, open woodlands, areas with lots of shrubs near water.

**Voice:** A three-note call—*chi-CA-go*.

**Behavior:** Lives in coveys (social groups) of 10-200 birds in winter and in pairs during mating season (March - July). Nest is well concealed, lined with grasses & dead leaves, and placed in scraped depression near a log, rock or stump. Lay 12-16 eggs creamy white with dark marks.

## Provide Habitat for Cover, Nesting and Roosting Sites

Ideal quail habitat is characterized by dense shrubs for daytime shelter, dense trees for nighttime roosting, and open shrubby vegetation for nesting. The nesting season occurs between **mid March and late July**. Nests are placed in a shallow hollow or scrape on the ground often concealed by dense clumps of grasses and shrubs or overhanging logs and rocks. Good quail habitat can be established through the following practices:

- **Plant patches of thick brush and dense trees using native vegetation.** Native plants provide ideal habitat for native birds like quail. These patches provide both daytime shelter and nighttime roosting.
- **Practice rotational grazing.** Quail can coexist with livestock in lightly grazed fields that are interspersed with brushy vegetation. They will not nest in excessively grazed areas (6" or less).
- **Fence off livestock** from riparian (streamside) and brushy areas, especially during the nesting season (March-July). Cattle can trample nests and remove the vegetation needed for cover.
- **Create travel lanes or connected patches** of brushy cover (at least 10-30 feet wide) to facilitate movement between feeding sites. Example: vegetated field edges, windbreaks, hedgerows.
- **Leave brush piles after pruning.** Quail and other birds will utilize these for protection.
- **Provide artificial roost sites.** Build an elevated pile of tree limbs and brush on a raised platform for roosting quail. These piles need to be dense to provide refuge from predators.

Charles Webber, California Academy of Sciences



Good quail habitat: open, shrubby vegetation interspersed with tall trees.

## Provide Food Plants

Quail feed primarily on seeds produced by native annual forbs (herbs that are not grass or grass-like) such as clover, lupine, lotus, filaree, and fiddleneck. They also eat green foliage, fruits, berries, blossoms, acorns, waste grain, and insects.

- **In areas of dense grass, graze lightly or thin the vegetation to encourage forb growth.**
- **Plant or encourage native food plants within 50 feet of escape cover** (thick shrubs, trees).
- **Forbs grow better on drier, southern facing**

Society for Environmental Education



Coastal Bush Lupine

## Provide Drinking Water

Without water, quail cannot nest or sustain their young. Water is especially important in the spring and summer months when young quail are being reared and rain is scarce. Quail can obtain water from year-round streams, ponds, watering troughs, or other dependable sources that have surrounding vegetation.

Water sources must be:

- **Within 400 yards** of good nesting, cover, and roost habitat.
- **Dependable.** A year round source is important regardless of size. A small pond or even a puddle can be sufficient.
- **Fenced off to cattle** (if a pond or stream) or have limited cattle access, especially during the spring and summer.

If you already have a natural water source on your property, you do not need to create artificial sources. Natural sources such as streams and ponds must have good habitat around them to be used by quail. Livestock troughs work best if there are enough clumps of vegetation immediately surrounding them for quail to take refuge.

## Resources

### Books

*The California Quail*, by A. Starker Leopold. 1977, University of California Press.

*Gardening with a wild heart: Restoring California's Native Landscapes at Home*, by Judith Larner Lowry. 1999, University of California Press.

### Bird Questions

PRBO Conservation Science  
(707) 781-2555, 307  
www.prbo.org/birdinfo

### Native Plant Nurseries

Mostly Natives Nursery  
27235 Highway One, PO Box 258  
Tomales, CA 94971  
(707) 878-2009

North Coast Native Plant Nursery  
Chileno Valley, Petaluma  
(707) 769-1213

### Plant Questions

CA Native Plant Society · (916) 447-2677  
cnps@cnps.org · www.cnps.org

Natural Resources Conservation Service  
Petaluma · (707) 794-1242

## Beneficial Native Plant Species for Quail

Appropriate plant species change with climate, soil type, and hydrology. The list below is a sample of native species from Marin County. These plants can be obtained from local plant nurseries (see "resources"). Species should be planted in a mosaic design to promote structural diversity. This can be achieved by planting different groups of individuals of the same species in clumps rather than uniformly spaced stands. Avoid straight rows and single-species stands.

### TREES

Big-Leaf Maple  
California Bay Laurel  
California Box Elder  
Live Oak  
Oregon Ash  
Redwood  
Red & Yellow Willow  
White & Red Alder

### SHRUBS

California Blackberry  
California Wild Rose  
Creek Dogwood  
Hazelnut  
Honeysuckle  
Monkey Flower  
Salmonberry  
Snowberry  
Thimbleberry

### HERBS

Horsetail  
Clover  
Ferns