

Bobwhite Quail Habitat Evaluation

The aspiring quail manager must be able to visually assess the suitability of a given piece of land as quail habitat. The things that must be evaluated include:

Nesting Cover - Quail need nesting cover consisting of large bunch grass clumps about the size of a basketball or prickly pear colonies at least 3 feet wide (the size of a hula hoop). A minimum of 250 large bunch grass clumps is recommended for ideal nesting cover.

Woody Cover - Protective cover of brush and shrubs that are thick enough to conceal quail from raptors and low enough to the ground to give thermal and visual protection, or about 10 feet in diameter and 3 feet high. Brush cover should occur in scattered fashion across the landscape; at the least, you should be able to throw a softball in the air from one suitable brush clump to the next.

Food - Habitat that provides a stable and reliable food supply will have a variety of both desirable forbs and grasses that produce seed for quail, mast producing brush (sumacs, lotebush, plums, hackberry, etc.) and insects. Remember that plant diversity translates into insect diversity and that insects are the “perfect” quail food (especially for broods). A quail needs about 0.05 lb. of food/ day.

Water - Quail do not necessarily need to have access to permanent water, but access is a plus in habitat evaluation.

Interspersion – Quail need a “crazy quilt” arrangement of various habitat needs because they don’t have the ability to exploit large distances on the landscape. Everything a quail needs on a daily basis should be within about 25 acres.

Rate each category between 0.0 (Poor) to 1.0 (Excellent)

Nesting Cover: What percentage of area supports suitable bunch grass clumps of basketball size, prickly pear in colonies at least three feet across, or other suitable nesting sites? _____

Woody Cover: What percentage of area is has brush that can provide effective thermal and visual cover for quail? _____

Area of cover - 20% to 40%	1.00	
Area of cover – 5% to 19%	0.67	
Area of cover – Less than 5% or greater than 40%	0.33	

Food: Evaluate the abundance, variety and availability of desirable forbs and browse and large seeded grasses. (See attached list)

Abundance & Variety:

At least 5 species from list are present and available and well distributed across general area.	1.00	
At least 5 species from list are present, but distribution and availability may be limited.	0.67	
Plants from list are scarce, unavailable or poorly distributed across general area.	0.33	
No species beneficial for quail are available in the general area.	0.00	_____

Availability:

Food is available approximately every 1 square yard1 (1 yd x 1 yd). Insects abundant during summer.	1.00	
Food is available at least every 4 square yards (2 yd X 2 yd). Insects common during summer.	0.67	
Food is available at least every 16 square yards (4 yd x 4 yd); insects sparse during summer.	0.33	
Food is not available every 16 square yards. Insects mostly absent.	0.00	_____

Water: What percentage of area is within 1/4 mile of permanent water? (minimum score = 0.30) _____

Interspersion –

a. Can I throw a softball in the air form one brush thicket to another?	Always	1.00 – 0.76	
	Half of the time	0.75 – 0.51	
	One-quarter of the time	0.50 – 0.26	
	Rarely	0.25 – 0.00	_____

b. Is there a diversity of woody plants that provide shade, food and screening cover?	At least 7 species visible from this point	1.00	
	At least 5 species visible from this point	0.67	
	At least 3 species visible from this point	0.33	
	No suitable species visible from this point	0.00	_____

Add each of the category values together and divide the sum by seven to determine a total habitat evaluation value:

<u>Cover</u>	<u>Food</u>	<u>Interspersion</u>	<u>Evaluation</u>
Nesting	Woody	Abundance	Availability
Water	S/B Throw	Diversity	Value
_____	+	_____	+
_____	+	_____	+
_____	+	_____	+
_____	+	_____	+
_____	+	_____	+
_____	+	_____	+
_____	+	_____	+
/ 7 = _____			

If any of the categories score a “0”, the Evaluation Value should be “0”

Items to consider when evaluating and troubleshooting quail habitat:

1. Are desirable forbs present only (or primarily) in protected areas from grazing?
2. Are desirable perennial forbs heavily grazed?
3. Are there more than five species of potential seed-producing plants?
4. Is pasture grazed too short to provide adequate nesting cover?
5. Would additional grass cover *degrade* or *enhance* this site for quail? For quail hunting?
6. Would additional brush management *degrade* or *enhance* this site for quail? For quail hunting?
7. Can brush management be accomplished in a manner to maintain adequate cover?
8. Are artificial structures (e.g., old farm equipment, post piles) present to function as loafing coverts?
9. Is additional water development needed and feasible?
10. Can “water harvesting” be used to enhance habitat quality?

Based on the evaluation, what appears to be the weak link(s) in quail habitat?

Water Protective Cover Nesting Cover Food

Notes: _____

Based on this evaluation, the overall habitat rating is (circle one):

Excellent Good Fair Poor
(0.75 – 1.00) (0.74 – 0.50) (0.49 – 0.25) (0.24 – 0.01)

As a quail hunter, based on your experiences, how would you rate this site on a scale of “0.00” (pitiful) to “1.00” (perfect)? _____

What management actions would you recommend to improve this site? (Check all that apply)

- Selective Brush Control
- Prickly Pear Control
- Rest from Livestock Grazing
- Prescribed Burn
- Water Development
- Water Harvesting
- Discing or Other Mechanical Soil Disturbance
- Heavier Livestock Grazing
- Food Plots
- Feeders
- Construct Artificial Loafing Coverts
- Other (explain) _____

For additional thought: The question asks how to improve “habitability” for quail . . . which of these practices might be employed to enhance “huntability”?