

Scaled Quail Habitat Evaluation¹

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

Nesting Cover – Nesting cover may consist of bunchgrasses (e.g., bush muhly), sod-forming grasses (especially tobosa), prickly pear, yuccas, or some shrubs depending on local availability. A minimum of 80 such sites per acre 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; ideally, you should be able to throw a softball in the air from one suitable brush clump to the next. Minimum amount of brush would be a suitable shrub at least every 100 yards.

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 shrubs (mesquite, lotebush, 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 scaled quail needs on a daily basis should be within about 80 acres, or a circle with radius of about 400 yards.

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

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

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

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 4 square yards (2 yd x 2 yd). Insects abundant during summer. 1.00
- Food is available at least every 16 square yards (4 yd X 4 yd). Insects common during summer. 0.67
- Food is available at least every 36 square yards (6 yd x 6 yd); insects sparse during summer. 0.33
- Food is not available every 36 square yards. Insects mostly absent. 0.00 _____

Water: What percentage of area is within ½ mile of permanent water? _____

Interspersion –

- a. Can I throw a softball in the air from 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 3 species visible from this point 1.00
 - At least 2 species visible from this point 0.67
 - At least 1 species visible from this point 0.33
 - No suitable species visible from this point 0.00 _____

Multiply each of the category values together to determine a total habitat evaluation value:

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

¹Developed originally by R. Linex, K. Mills, and D. Rollins for Desert QuailMasters (2010).

Items to consider when evaluating and troubleshooting scaled quail habitat:

1. Are desirable forbs present primarily (or only) in protected areas?
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:

Excellent Good Fair Poor

If you were to rate this site (based on a visual appraisal) on a scale of “0.00” (pitiful) to “1.00” (perfect), what would your score be? _____

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

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