

# TECHNICAL NOTES

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U.S. Department of Agriculture

Natural Resources Conservation Service

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TN – BIOLOGY - CA - 20

March, 2011

## WILDLIFE HABITAT APPRAISAL GUIDES FOR CALIFORNIA

Wildlife Habitat Appraisal Guides (WHAG) provide the NRCS planner with a relatively simple and objective procedure for determining the value of wildlife habitat on any Conservation Treatment Unit (CTU), which may consist of one or more fields or even an entire farm. The guides can be used on land where wildlife is a primary resource concern, or on land (such as farmland) where wildlife is a secondary resource concern. They can be used to evaluate habitat on planning units for rangeland, farmland, forest and woodland, or conservation planning units for wildlife. Planning unit boundaries for wildlife may coincide with those delineated for rangeland, farmland, or forest and woodland; or a wildlife planning unit may be delineated that includes two or more land uses or land types.

There is no minimum size for land to be appraised as wildlife habitat. However, tracts of less than 40 acres may be limited as habitat by their size alone.

The Guides are based on the following assumptions:

1. All land and waters provide habitat for wildlife.
2. The quality of habitat is variable depending on the quality, quantity, and interspersions of food, cover, water, and space.
3. Habitat elements can be measured and compared to optimal conditions. Elements were selected to provide a measure of habitat diversity.
4. Wildlife populations are proportional to the quality and quantity of habitat available. A 400-acre planning unit may have potential to provide more diverse habitat and thus a greater variety of wildlife than does a 40-acre unit. Wildlife use of an area is dependent upon the quality of habitats it supports and the area's size.

These Guides can be used to determine if a CTU meets the minimum quality criteria found in Field Office Technical Guide (FOTG), Section III, Plants and/or Animals, in a Resource Management System (RMS). Conservation practices and management measures can be identified to meet the minimum RMS standard, or to meet higher habitat quality objectives of the landowner. These Guides are not intended to be used to evaluate the potential for introducing wildlife species not presently found on the planning unit.

The WHAG's utilize a numerical rating to compare the value of existing wildlife habitat with the value of wildlife habitat under various alternatives. The Guides have been developed to consider the needs of a variety of species using a particular land-use/cover-type, a goal commonly referred to as management for species richness. They were not developed to evaluate the habitat

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quality for selected or featured species. The Guides may not reflect complete habitat needs or home range requirements for any particular wildlife species. They are intended to evaluate habitat richness or diversity of the planning unit. A planning unit that exhibits high habitat diversity is likely to have equally diverse fauna. When a landowner is interested in improving or managing habitat for a particular species, a species-specific habitat model may be used. To date, a limited number of species-specific habitat models have been developed. If you have need for a specific model, contact the State Biologist.

The Wildlife Habitat Appraisal Guide (WHAG) spreadsheet can be found at the CA eFOTG: <http://efotg.sc.egov.usda.gov/treemenuFS.aspx> Choose CA State, then any County. Navigate to Section 1, Technical Notes, Biology, Biology Tech Note 20

### Instructions for the Use of Habitat Appraisal Guides

1. Determine the landowner's objectives with regard to overall conservation program, interest in wildlife, and the specific practices to apply, etc. Is the land to be managed primarily for wildlife or cropland, or both? Do they wish to increase wildlife populations or maintain at present levels?
2. Based on your or the landowner's knowledge of the planning area, identify the wildlife species present and their seasons of use. Are threatened or endangered species present, or other species that require special attention?
3. Delineate the conservation planning unit to be evaluated on an aerial photo or other suitable planning map. Wildlife planning units should be delineated by the appropriate habitat (farmland, rangeland, and woodland) after considering the types of habitats that occur within the farm, ranch, or planning unit. Large or complex planning units may require the use of more than one guide to evaluate wildlife habitat suitability.
4. Refer to the Web Soil Survey, SSURGO Access Database, or Soil Data Viewer for soils/wildlife interpretations. Where soil surveys have not been conducted, use best available information for the establishment of plants for wildlife.
5. Rating habitat quality and quantity is best done in the field with the landowner. Enough of the planning area should be visited, referred to on the aerial photo and discussed with the landowner to accurately evaluate habitat condition. Keep in mind that these are guides. When encountering situations not specifically covered, use judgment to rate such elements. These Guides can be completed while collecting other resource information, such as rangeland health, woodland site index, or soil erosion information.

Rate only elements which are applicable to the planning unit. For example, when rating farmland, if no wetlands are present, do not rate this element. In areas where pastureland is the dominant land use and no cropland is present, you can drop cropland questions from the evaluation. Be sure to adjust the number of elements inventoried when calculating the final habitat value if no rating is given to one or more elements. Do not use this evaluation

to rate individual practices like shelterbelts. Include shelterbelts into the surrounding land cover types (i.e. cropland) when completing a wildlife evaluation.

6. After total habitat values have been determined, look back through individual scores to find those factors that are deficient that could be improved. Any habitat element(s) that scores less than 0.5 is considered a limiting factor. Habitat improvement efforts should be directed to overcome such limitations. Compare those deficient factors with the soils interpretation. For example, if on a cropland planning unit, a score of 0 to 0.4 for woody vegetation is indicated, refer to the soil survey data to find the potential for growing shrubs, hardwoods and conifers.
7. Calculating the Habitat Value:  
  
Follow guidance provided in each land use habitat type to determine the overall habitat value.
8. With the landowner, develop alternatives for improving deficient elements. A conservation cropping system may improve farmland habitat quality. A small clear-cut of merchantable timber may be used to create a forest opening. A planned grazing system will not only improve the score for that factor, but may in time, lead to improved range conditions. A stock pond will provide drinking water for wildlife as well as livestock. Shelterbelts may offset the lack of trees and shrubs.

For further planning guidance, refer to habitat management guides and Section IV of the Technical Guide, Practices 645 Upland Wildlife Habitat Management and 644 Wetland Wildlife Habitat Management.