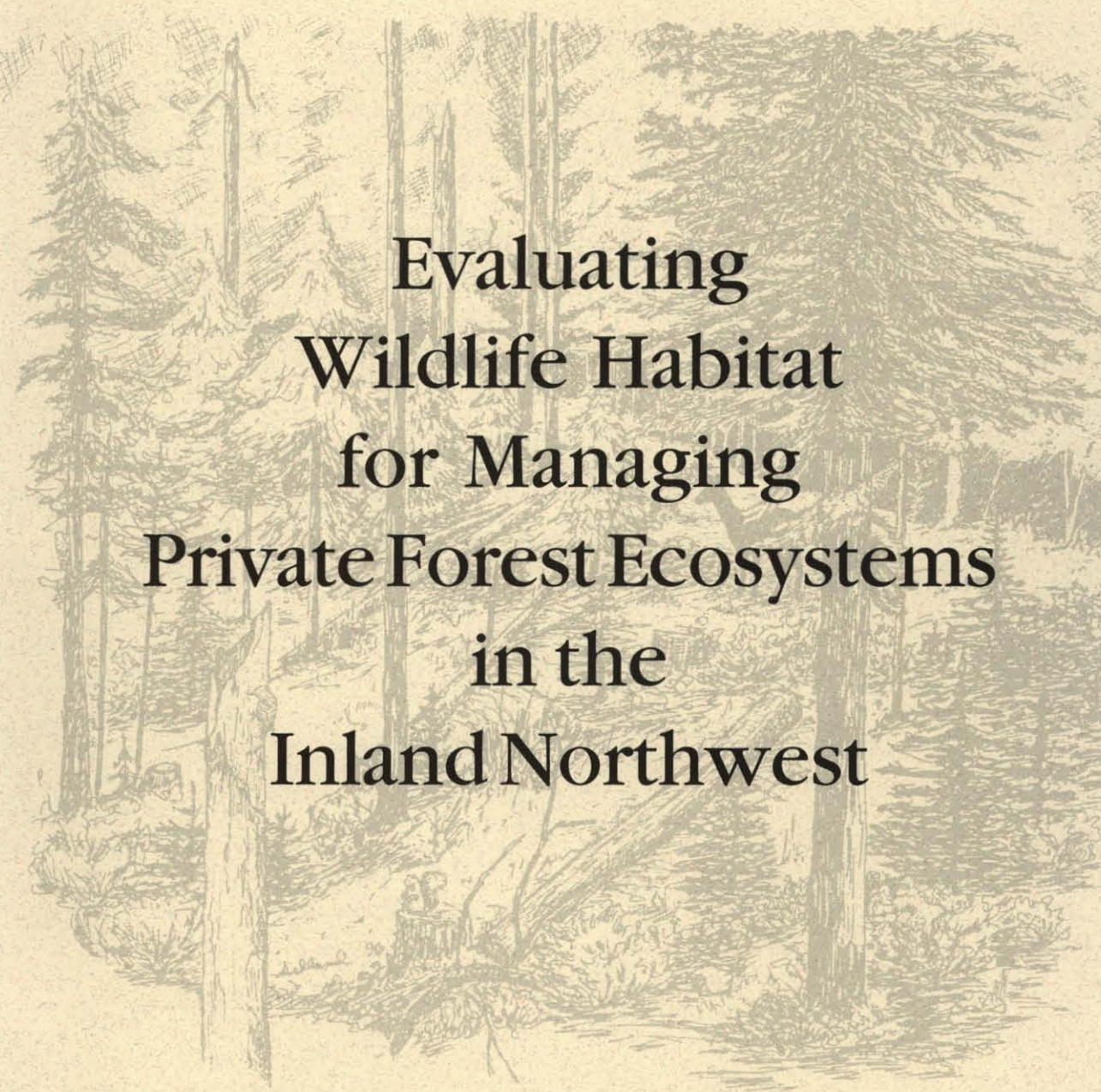


May, 1996

Bulletin No. 60

University of Idaho College of Forestry, Wildlife and Range Sciences



Evaluating
Wildlife Habitat
for Managing
Private Forest Ecosystems
in the
Inland Northwest

Pamela Town and Ronald L. Mahoney

IDAHO FOREST, WILDLIFE AND RANGE EXPERIMENT STATION

Director

Charles R. Hatch

SD
12
I2
U47
no.60

Private Forest Ecosystem Management Series:

- Bulletin No. 59 *Evaluating Private Forest Ecosystems for Silvicultural Prescriptions and Ecosystem Management Planning.*
- Bulletin No. 60 *Evaluating Wildlife Habitat for Managing Private Forest Ecosystems in the Inland Northwest.*
- Bulletin No. 61 *Are Your Streams Healthy? Stream Quality Survey for Managing Private Forest Ecosystems.*
- Bulletin No. 62 *Calculating Timber Removal Costs Under Ecosystem Management.*
- Bulletin No. 63 *Contracting for Timber Harvest Under Ecosystem Management.*

Bulletins are available for \$1.50 each, or \$6.00 for the entire series from:

Extension Forestry, Room 211, College of FWR, University of Idaho, Moscow, ID 83844-1140.
Make checks payable to Extension Forestry.

About the Authors:

Pamela Town is a Wildlife Biologist and is currently working as an Extension Assistant in a graduate program at the University of Idaho. Ronald L. Mahoney is a Professor of Forest Resources and the Extension Forester at the University of Idaho.

Acknowledgments:

Preliminary versions of the inventory were evaluated and field tested in a number of forests by the following natural resource professionals: Ernie Ables, Professor of Wildlife Biology, University of Idaho; Vincent Carrao, Private Forestry Consultant, Northwest Management, Inc.; Yvonne Carree, Extension Associate-Forestry, University of Idaho; Myron Hotinger, Private Forestry Specialist, Idaho Department of Lands; Mark Lusko, Resource Manager, Idaho Department of Lands; Mary Nedema, Private Forestry Specialist, Idaho Department of Lands; Harold Osborne, Associate Professor of Forest Resources and manager of the UI Experimental Forest, University of Idaho; James Peek, Professor of Wildlife Biology, University of Idaho; Jason Pettigrew, Chair - Student Chapter of Society of American Foresters, University of Idaho; Karen Robinson, Resource Manager, Idaho Department of Lands; Chris Schnepf, Area Extension Educator - Forestry, University of Idaho; and Bill Wall, Wildlife Biologist, Potlatch Corporation. We appreciate their valuable time and suggestions for revision.

Art work: Lorraine Ashland

Production: Yvonne Carree



University of Idaho
Cooperative Extension System

Supported by RREA Ecosystem Management Project
Implementing Ecosystem Management on NIPF Lands in the Pacific Northwest

University of Idaho Library



Evaluating Wildlife Habitat for Managing Private Forest Ecosystems in the Inland Northwest

Pamela Town and Ronald L. Mahoney

While many silvicultural plans are primarily concerned with timber production, manipulation of the forest through logging, prescribed burning, grazing, or doing nothing can effect wildlife habitat. Incorporating wildlife habitat management into a silvicultural prescription can provide income for the landowner, habitat for various wildlife species, and increase the diversity of the forest.

Forests are complex and dynamic and can provide diverse wildlife habitat if properly managed. Landowners and managers must consider an array of information to meet management objectives. Holistic management plans may require the involvement of a qualified natural resource professional who can correctly interpret forest and wildlife habitat conditions and recommend a course of action. Professionals can assess existing conditions and assist in selecting forest management practices which meet the landowner's objectives, satisfy regulatory requirements, and assure biologically sound management, while considering landscape-level ecosystem impacts. The best land management involves a partnership of the landowner with appropriate professional assistance.

An itemized unit and site evaluation form for general silvicultural prescriptions and ecosystem management planning, including timber information, is available from your local Extension Office and is titled "*Evaluating Private Forest Ecosystems for Silvicultural Prescriptions and Ecosystem Management Planning*" (FWR Station Bulletin No. 59). The attached itemized inventory form examines wildlife habitat within an area. It can be completed in conjunction with or instead of Bulletin No. 59. This form is intended to assure that various wildlife habitat components are considered when developing management plans, and to provide a record of current habitat conditions.

Wildlife species are typically associated with specific habitat components. Identification of these habitat characteristics can provide important information without the expense and difficulty of gathering on-site wildlife population information. Many habitat components, as they relate to animal interactions, are considered important in wildlife habitat management and landscape-level ecosystem management planning. This inventory provides baseline data on the types and extent of habitat the property offers.

This itemized form is designed to be used by wildlife biologists, foresters, and natural resources professionals in the Inland Northwest, as well as by others with knowledge of wildlife habitat, vegetation, and other land characteristics. A Pacific Northwest publication titled "*Forest Stewardship Planning Workbook -- An Ecosystem Approach to Managing your Forestland*" (PNW 490) has recently been completed by Washington State University and is available from Extension Offices in the Pacific Northwest. This workbook, either alone or offered with a forest stewardship planning course, provides excellent background information on ecosystem management for private landowners, and explains how to incorporate this inventory in management planning.

No specialized equipment is necessary to complete this inventory as the components are evaluated by visual observations. The completed field form should become a permanent record, to be updated periodically to assist in monitoring wildlife habitat over time, determine if management objectives are being accomplished, and provide information to future owners and managers.

Itemized Explanation of Unit Inventory for Wildlife Habitat

NOTE: This section explains each step on the field form that follows. We recommend reading through this section and the field form prior to use. The observer should use this section as a reference as needed. Once the user is familiar with the form, they may not need this section. The field form is located at the end of the publication to make it easier to photocopy for additional inventories.

1. Name of field observer(s).
2. Date of evaluation.
3. Legal description of the property location, including landowner's name and meridian. (Example: Town's property, Anywhere, Idaho - NW 1/4, SE 1/2, Sec 9 T41N R3W BM.)
4. Identify the boundaries of the unit to be inventoried; the unit may be based on total ownership or on a stand-level. Interpretation will be simplified if the boundaries include a similar forest stand, land form, or habitat type. Complex, large ownerships may require separate general and specific unit evaluations.

*The following questions apply to the **inventoried unit** and may be answered using aerial photography, topographical maps, soil surveys, and/or vegetation classification systems, then verified in the field.*

5. Map names and numbers (include both aerial photos and topographical maps).
6. Size (identify in acres).
7. Elevation (include the minimum, maximum, and average elevation in feet).
8. Describe the localized landform in terms of landscape contour and percent slope.
9. Record the overall aspect of the slope (if variable indicate dominant aspects).
10. Record the dominant soil type(s) using USDA soil survey book. Identify the type of bedrock and surficial deposits if present. Many Inland Northwest soils are underlain by granite or basalt for example, and overlain by loess or alluvial soils. Record the habitat type(s) using familiar vegetation classification schemes. Be sure to field verify and recognize significant areas of difference.
11. Record the type and condition of access to and within the inventoried unit. Also include the type of access to and within the surrounding landscape (may include neighbors' property). Indicate the amount of traffic on each type of road/trail (heavy, moderate, or light use).
12. Record the current dominant land uses of the inventoried unit and surrounding landscape (may include neighbors' property).
13. Estimate the distance of the property to a water source and indicate whether it is a temporary or permanent source. A *temporary water source* includes surface water that is temporarily available to wildlife (vernal pools, intermittent streams). A *permanent water source* includes any surface water which continues to be available to wildlife year-round (streams, lakes, ponds).
 - A. State the type of the water source and indicate whether it is protected or unprotected. If protected, describe the type of protection (legal, fencing).
14. Estimate the distance of the inventoried unit to a different vegetative structure(s) and identify the structure(s). A *different vegetative structure* includes areas with a different plant community (ie: species composition, successional stage, age/size class, residential areas, or agricultural lands).

15. Sketch a location and physical features map of the inventoried unit and the surrounding landscape. Show the scale and orientation of the map. Indicate landmarks and land uses such as roads, permanent water sources, agricultural lands, cover types, or buildings.
16. Record the topographical position relative to local topography.
17. Estimate the air drainage conditions using topography as the main criteria.
18. Record evidence of past fires, including year(s) and evidence (ie: charred boles).
19. Record the successional stage(s).
20. Record the forest canopy structure(s).
21. Estimate the average tree density.
22. Estimate the level of current and historic foraging (including grazing and browsing). Do ***not*** include foraging in riparian zones. [*Severe* foraging includes soil displacement and compaction, erosion of heavily used trails, bare areas, browsed trees, and shrub browsing past the current year's growth through a majority of the unit. *Heavy* foraging includes patchy distribution of severe foraging characteristics, or less deteriorating soil and vegetation conditions. *Moderate* foraging includes sites where the vegetation is fully utilized with little apparent degradation. *Light* foraging occurs in sites infrequently utilized for a short time (seasonally) with little impact on soils or vegetation.] Indicate the animal species foraging.

Special Wildlife Habitat Components

*Non-riparian snags and cavity trees are trees with internal cavities which are **not** within a riparian zone - these trees may be live cavity trees or dead snags.*

NOTE: For simplicity, snags and cavity trees will be referred to as "snags" for the remainder of this publication.

23. Estimate the number of existing snags. Record as the number of snags per acre.
24. Estimate the average diameter at breast height (dbh) of existing snags. If there is a range of diameters in all three classes, record "mixture of diameters".
25. Estimate the average height of existing snags in feet. If there is a range of heights in all four classes, record "mixture of heights".
26. Recruitment snags - Count the number of trees which have been designated as trees to be left as future snags.
 - A. If no trees have been designated but some trees "could be", provide notes on possible recruitment snags (ie: larch has mistletoe, bark beetles, heart-rot).

*Non-riparian **large organic debris** are large logs (at least 12 inches in diameter and 10 feet long) on the forest floor which are not within a riparian zone.*

27. Estimate the number of large organic debris per acre on the forest floor.

Rock habitats include cliffs, talus slopes, rocky outcrops, and caves.

28. Identify any rock habitats. Railroad tunnels and mines may be classified as caves.
 - A. If a rock habitat is present, describe its characteristics (ie: height of cliff, size of talus slope, cliff with talus slope at the base, size of cave, and indicate whether it is natural or man-made).
29. Indicate the amount of human disturbance each rock habitat is subject to.

Non-riparian vertical stratification is the layering of vegetation in the forest, excluding riparian areas.

30. Estimate the average thickness of the duff layer, in inches.
31. Estimate the ground vegetation density, distribution, and list the dominant species. Ground vegetation includes all non-woody plants (ferns, forbs, grasses).
32. Estimate the shrub density, distribution, and list the dominant species. Shrub vegetation includes woody shrubs and seedlings less than 5 feet tall.
33. Estimate the sub-canopy density, distribution, and list the dominant species. Sub-canopy includes tall shrubs (ie: Rocky Mountain maple, alders), and tree saplings.
34. Estimate the percent canopy cover, distribution, and list the dominant species. Canopy cover includes the overstory trees.

Riparian zones are the areas bordering bodies of water with moist soils and plants adapted to moist conditions.

35. Record the type of water occurring within the riparian zone.
36. Estimate the average width of the riparian zone. If the riparian zone vegetation is *narrow*, briefly describe (#36A) and skip to question #41. If the riparian zone vegetation is *intermediate* or *wide*, go to question #37. There is no set footage on narrow vs. wide, the field observer must decide the width which impacts the resilience of wildlife habitat for the specific area.
37. Snags within the riparian zone. Estimate the number of existing snags per 1,000 linear feet of riparian zone. For questions #37B - 37E see explanations #24 - 26.
 - F. Estimate the number of large organic debris per 1,000 linear feet, which are or could eventually fall across the water channel. This will include standing live trees and snags which could fall across the water channel.
38. Large organic debris within the riparian zone - see question #27 for explanation.
39. Foraging in riparian zone - see question #22 for explanation.
 - A. Describe foraging impacts on the water banks (ie: heavy erosion, lack of vegetation).
40. Vertical stratification within the riparian zone - see questions #30 - 34 for explanation.

Edges are created when 2 different plant communities or structural types come together.

41. Describe the type of the edge. *Inherent* edges occur naturally [through abrupt soil type changes, topographical differences, or changes in microclimate (ie: wet meadow vs. forest, north vs. south slopes)], whereas *induced* edges are created through various land use practices (ie: clearcut vs. dense forest).
 - A. An *abrupt and narrow* edge is when 1 vegetation type abruptly turns into the adjacent vegetation type with a narrow transition zone (ecotone). A *gradual and wide* edge is when the plant communities are broken into patterns of vegetation islands and peninsulas, usually providing a more diverse plant structure, and wider ecotone.
42. Record the 2 different plant communities along the edge (ie: meadow and forest) and contrast between them. A *high contrast* edge occurs when 2 very different plant communities come together (ie: a clearing and mature forest). A *low contrast* edge occurs when the plant communities are similar, yet an edge is formed (ie: pole/sapling and mature forest).

43. If an opening has created the edge, describe the shape of the opening, the vegetative type within the opening, and the average distance from the center of the opening to the edge.

Interior forests are tracts of continuously forested areas.

*** Interior forests are generally at least 330 feet from an opening ***

44. Estimate the distance of the interior forest from the nearest opening. This may measure outside your inventoried unit.
- A. Indicate whether the opening(s) are natural (ie: root-rot pocket) or human-induced (ie: 5 acres logged).
45. Record the size of the interior forest. This may include land outside your inventoried unit or ownership.
46. Estimate the distance of this interior forest to another interior forest.

Summary

47. List any special habitat or unique features found within the inventoried unit (ie: heron rookeries, elk wintering grounds, pileated woodpecker nests, beaver ponds, aspen stand).
48. List any threatened and endangered species, or species of special concern within the inventoried unit.
49. Record the wildlife species and wildlife signs observed in the inventoried unit. Estimate the amount of use (ie: indicate presence of tracks, heavy browse, worn game trails, nests, gopher mounds, owl pellets).
50. List the wildlife species which could benefit from the existing habitat. These species may not be utilizing the area, but could.
51. List the wildlife species the landowner would like to manage for.
52. Sketch a map of the inventoried unit and verbally describe. This map should be a larger scale of the inventoried unit than the map in question 15. Include the location of rock habitats, riparian zones, openings, and limiting factors to active management (ie: no roads, high water table). Show the scale and orientation of the map.
53. List any additional habitat/unit evaluation which should be reviewed by a specialist (ie: soils, water, silviculture, protected species, range, forest engineers, etc) and state why such an evaluation is needed.
54. Include any notes and comments (including possible management improvements) which could be completed on the unit. Use additional paper if necessary.

Unit Inventory for Wildlife Habitat Field Form

1. Observer(s): _____ 2. Date: _____

3. Owners Name(s): _____

Property Legal Description: _____

_____ Sec. _____ T _____ R _____ M

4. Inventoried Unit Boundary Identification: _____

5. Aerial Photo #s: _____ Topographical Maps: _____

6. Size (acres): _____ 7. Elevation: Min: _____ Ft Max: _____ Ft
(Average: _____ Ft)

8. Slope Conformation: _____ Concave _____ Flat _____ Uniform _____ Convex _____ Rolling

Average Percent Slope: _____ %

9. Aspect: _____ Varies from _____ to _____

10. Soil Type(s): _____

Habitat Type(s): _____

11. Accessibility of Inventoried Unit and Surrounding Landscape:

<i>Inventoried Unit</i>	<i>Surrounding Area</i>	<i>Accessibility</i>	<i>Usage (I = Inventoried, S = Surrounding)</i>		
_____	_____	Main Road (1st class)	_____ Heavy	_____ Moderate	_____ Light
_____	_____	Hauling Road (2nd class)	_____ Heavy	_____ Moderate	_____ Light
_____	_____	3rd Class Road	_____ Heavy	_____ Moderate	_____ Light
_____	_____	Foot Trails/Skidder Roads	_____ Heavy	_____ Moderate	_____ Light
_____	_____	ATV/Snowmobile	_____ Heavy	_____ Moderate	_____ Light
_____	_____	Gated	_____ Year Round	_____ Seasonal Closure	

12. Current Land Use of Inventoried Unit and Surrounding Area (1 = Primary, 2 = Secondary, etc.):

<i>Inventoried Unit</i>	<i>Surrounding Area</i>	<i>Land Use</i>
_____	_____	Timber Production
_____	_____	Recreation - Foot Traffic
_____	_____	Recreation - Vehicle Traffic
_____	_____	Wildlife Management
_____	_____	Agriculture - Crops
_____	_____	Agriculture - Idle (Fallow, CRP, etc.)
_____	_____	Grazing
_____	_____	Aesthetics
_____	_____	Residential and Urbanization
_____	_____	No Active Management
_____	_____	Other: _____

13. Distance to Temporary Water Source: _____ Distance to Permanent Water Source: _____

A. Type of Water Source: Lake Pond Spring Stream River

Other: _____

Class of Water Source: Protected - Describe Protection: _____
 Unprotected

14. Distance to and Type of Different Vegetative Structure(s):

15. Sketch a Map of the Inventoried Unit and the Surrounding Landscape (include north arrow and scale):

16. Topographical Position: Low Flat Stream Bottom Narrow Ridge
 Draw Flat Ridge Saddle Other: _____

17. Air Drainage: Severe (Windy) Good Fair Frost Pocket

18. Fire Evidence: No Yes (Evidence): _____
Year(s): _____

19. Successional Stage(s):

Grass-Forbs Pole Sapling Mature
 Shrub Seedling Young Old Growth

20. Forest Structure(s): Uneven-Age (Multi-Storied) Even-Age (1 Story)
 Even-Age (2 Story) Plantation Other: _____

21. Tree Density: Extremely Dense Dense Moderate Light Very Light

22. Foraging (C = Current, H = Historic): Severe Heavy Moderate Light None
Animal: Cattle Sheep Horses Big Game Other: _____

Special Wildlife Habitat Components

Non-Riparian Snags and Cavity Trees

23. Number of Existing Snags (per acre):

None (go to #27) Few (0.1 - 1 snag/acre) Some (1 - 3 snags/acre)
 Many (3 - 10 snags/acre) Lots (> 10 snags/acre)

24. DBH of Existing Snags:

4 - 10 Inches 11 - 19 Inches > 20 Inches Mixture of Diameters

25. Height of Existing Snags:

< 5 Feet 5 - 7 Feet 8 - 30 Feet > 30 Feet Mixture of Heights

26. Recruitment Snags (number of trees designated as future snags):

Trees/Acre have been Designated as Future Snags
 No Trees have been Designated as Future Snags

A. Notes on Potential Recruitment Snags:

Non-Riparian Large Organic Debris

27. Number of Large Organic Debris on the Forest Floor:

No Large Organic Debris
 Some Large Organic Debris (1 - 3 pieces/acre)
 Many Large Organic Debris (4 or more pieces/acre)

Rock Habitats

28. Indicate Whether the Following Rock Habitats are Present:

Caves Cliffs Talus Slopes Alpine Talus Slopes None
(above 6,000 ft) (go to #30)

A. If Present, Describe the Characteristics of the Rock Habitat:

29. Indicate the Amount of Human Disturbance each Rock Habitat is Subject to:

Never Disturbed Avoided During Winter and Early Spring
 Moderate Year-Round Disturbance Heavy Year-Round Disturbance

Non-Riparian Vertical Stratification

30. **Duff Layer Thickness:** _____ Inches
31. **Ground Vegetation** - Ferns, Grasses, Forbs:
- A. Ground Vegetation Density: _____ Heavy (>90%) _____ Moderate (50% - 90%)
_____ Light (<50%) _____ None (go to #32)
- B. Ground Vegetation Distribution: _____ Consistent _____ Patchy
- C. Dominant Ground Vegetation Species:
32. **Shrub Vegetation** - Woody Shrubs and Seedlings:
- A. Shrub Vegetation Density: _____ Heavy (>50%) _____ Moderate (25% - 50%)
_____ Light (<25%) _____ None (go to #33)
- B. Shrub Vegetation Distribution: _____ Consistent _____ Patchy
- C. Dominant Shrub Species:
33. **Sub-Canopy** - Tall Shrubs and Saplings:
- A. Sub-Canopy Density: _____ Heavy (>50%) _____ Moderate (25% - 50%)
_____ Light (<25%) _____ None (go to #34)
- B. Sub-Canopy Distribution: _____ Consistent _____ Patchy
- C. Dominant Sub-Canopy Species:
34. **Canopy Cover** - Overstory Trees:
- A. Canopy Cover: _____ >70% _____ 50% - 70% _____ 25% - 50%
_____ <25% _____ No Canopy Cover (go to #35)
- B. Canopy Cover Distribution: _____ Consistent _____ Patchy
- C. Dominant Overstory Canopy Cover:

Riparian Zones

35. **Type of Water:**
- _____ None (go to #41) _____ Year-Round Flowing Stream _____ Intermittent Stream
_____ Pond _____ Lake _____ Spring _____ River _____ Other: _____
36. **Width of Riparian Zone:**
- _____ Narrow (answer #36A) _____ Intermediate (go to #37) _____ Wide (go to #37)

A. Briefly Describe the Riparian Zone and Skip to Question #41.

37. Snags Within the Riparian Zone:

A. Number of Existing Snags per 1,000 Linear Feet:

___ None (go to #38)

___ Average Number of Snags per 1,000 Linear Feet of Riparian Zone

B. DBH of Existing Snags:

___ 4 - 10 Inches ___ 11 - 19 Inches ___ > 20 Inches ___ Mixture of Diameters

C. Height of Existing Snags:

___ < 5 Feet ___ 5 - 7 Feet ___ 8 - 30 Feet ___ > 30 Feet ___ Mixture of Heights

D. Recruitment Snags:

___ Trees/Acre have been Designated as Future Snags

___ No Trees have been Designated as Future Snags

E. Notes on Potential Recruitment Snags:

F. Large Organic Debris in Water Channel (per 1,000 linear feet):

___ Estimate the Number of Large Organic Debris in the Water Channel

___ Estimate the Number of Large Organic Debris which could fall into the Water Channel

___ No Large Organic Debris is Available

38. Large Organic Debris in the Riparian Zone:

___ No Large Organic Debris

___ Some Large Organic Debris (1 - 3 pieces/acre)

___ Many Large Organic Debris (4 or more pieces/acre)

39. Foraging in Riparian Zone (C = Current, H = Historic):

___ Severe ___ Heavy ___ Moderate ___ Light ___ None

Animal: ___ Cattle ___ Sheep ___ Horses ___ Big Game ___ Other: _____

A. Describe Foraging Impacts on the Banks:

40. Vertical Stratification within the Riparian Zone:

- A. Duff Layer Thickness: _____ Inches
- B. Ground Vegetation Density: _____ Heavy (>90%) _____ Moderate (50% - 90%)
_____ Light (<50%) _____ None (go to #E)
- C. Ground Vegetation Distribution: _____ Consistent _____ Patchy
- D. Dominant Ground Vegetation Species:
- E. Shrub Vegetation Density: _____ Heavy (>50%) _____ Moderate (25% - 50%)
_____ Light (<25%) _____ None (go to #H)
- F. Shrub Vegetation Distribution: _____ Consistent _____ Patchy
- G. Dominant Shrub Species:
- H. Sub-Canopy Density: _____ Heavy (>50%) _____ Moderate (25% - 50%)
_____ Light (<25%) _____ None (go to #K)
- I. Sub-Canopy Distribution: _____ Consistent _____ Patchy
- J. Dominant Sub-Canopy Species:
- K. Canopy Cover Density: _____ >70% _____ 50% - 70% _____ 25% - 50%
_____ <25% _____ No Canopy Cover (go to #41)
- L. Canopy Cover Distribution: _____ Consistent _____ Patchy
- M. Dominant Overstory Canopy Cover:

Edges

41. Edge Type:

- _____ Inherent _____ Induced _____ No Edge (go to #44)
- A. _____ Abrupt and Narrow _____ Intermediate _____ Gradual and Wide

42. Adjacent Vegetative Structures:

- Edge is Between: _____ and _____
- Edge Contrast: _____ High Contrast _____ Moderate Contrast _____ Low Contrast

43. Opening Shape:

No Opening (go to #44) Round Square Rectangular Irregular

A. Vegetative Type in the Opening:

Bare Ground Grass Short Shrub Tall Shrub Some Trees

B. Distance to Forested Edge from Center of Opening: _____ Feet

Interior Forest

44. Average Distance from Opening:

No Interior Forest (go to #47) Approximately 330 Feet

330 - 660 Feet > 660 Feet

A. Opening is: Human-Induced Natural Opening

Briefly Describe:

45. Size of Interior Forest: _____ Acres

46. Distance to Another Interior Forest: _____

Summary

47. Miscellaneous Special and Unique Habitat:

48. Presence of Threatened and Endangered Species, or Species of Special Concern:

49. List the Wildlife Species Utilizing the Unit and Include Amount of Use:

50. Indicate the Wildlife Species which now or could Benefit from Existing Habitat Conditions:

51. Indicate the Wildlife Species the Landowner Would Like to Manage:

52. Sketch Map of the Unit and Describe the Overall Habitat (include limiting factors):

53. Recommended Additional Habitat/Unit Evaluation or Review by a Specialist(s):

Specialty: _____

Why: _____

54. Notes and Comments (include possible management improvements):

The University of Idaho provides equal opportunity in education and employment on the basis of race, color, religion, national origin, gender, age, disability, or status as a Vietnam-era veteran, as required by state and federal laws.

Printed on recycled paper



1,000, 5/96

Bulletin No. 60

\$1.50