Student's Name _______________________________________________  FORESTRY AND WILDLIFE MANAGEMENT      AG 0350

Directions: Evaluate the trainee using the rating scale below and check the appropriate number to indicate the degree of competency achieved. The numerical ratings of 3, 2, 1, and 0 are not intended to represent the traditional school grading system of A, B, C, D, and F. The descriptions associated with each of the numbers focus on level of student performance for each of the tasks listed below.

Rating Scale:  0 - No Exposure - no information nor practice provided during training program, complete training required.
              1 - Exposure Only - general information provided with no practice time, close supervision needed and additional training required.
              2 - Moderately Skilled - has performed independently during training program, limited additional training may be required.
              3 - Skilled - can perform independently with no additional training.

01.0  Introduction to Forestry
The student will be able to:

0  1  2  3

01.01 Match historical events with their major dates and people involved

01.02 List the federal and state agencies involved in management of forests

01.03 Describe how the forest industry operates in Idaho

01.04 Identify the location of National Forests in Idaho

01.05 Describe how private sector forestry plays its part in Idaho forestry

01.06 List the steps necessary to enter forestry training at the university level in the Northwest

01.07 Identify the size relationship of forestry to other agriculture industries in Idaho

01.08 List various types of forest products processed and manufactured in Idaho

01.09 Identify uses that a forest has other than the production of timber

01.10 Describe other cultural and environmental influences of forests

01.11 Describe the duties and responsibilities of one forestry related career

01.12 Select the types of Cedar products that are produced in Idaho

01.13 Identify types of forestry career training programs in the northwest

02.0  The Forests
The student will be able to:

0  1  2  3

02.01 Match terms associated with tree growth and forests

02.02 List the main parts of a tree including crown, trunk and root system

02.03 Describe the photosynthetic process of a tree

02.04 List the 2 kinds of wood formed in an annual ring of diameter growth

02.05 Classify trees according to size, crowns, and stands

02.06 Identify the six forest regions of the United States

03.0  Identify Idaho Trees and Forest Plants
The student will be able to:

0  1  2  3

03.01 Match terms associated with identifying trees and plants to their correct definition

03.02 Distinguish between the characteristics for angiosperms and gymnosperms

03.03 Label the parts of a simple leaf

03.04 Name the types of veins in a leaf

03.05 Label leaf shape and margins

03.06 Identify leaf arrangements

03.07 Identify evergreens based on needle, cone, and bark

03.08 Identify various species of forest plants

03.09 Identify the various reproductive systems as to sexual or asexual
04.0 Forest Surveying
The student will be able to:

0123

04.01 Identify common forest surveying tools and equipment
04.02 Match terms and definitions associated with forest surveying
04.03 List the methods to find horizontal distance
04.04 List the types of tapes used in forest surveying
04.05 Arrange the steps in chaining horizontally and along slopes
04.06 Describe how to measure around obstacles with a tape
04.07 List the essential parts and accessories of a compass
04.08 Use a compass to obtain directions
04.09 Describe how to find magnetic declination
04.10 Find true azimuths and bearings for magnetic angles
04.11 List the guidelines to follow when reading a compass
04.12 Demonstrate pacing skill
04.13 Demonstrate ability to use a clinometer to measure slope
04.14 Demonstrate how to set magnetic declination on a compass
04.15 Convert slope distance to horizontal distance
04.16 Demonstrate the proper use of a hip chain

05.0 Forest Land Location
The student will be able to:

0123

05.01 Match terms and definitions associated with land location
05.02 Select the methods of land survey systems
05.03 Match subdivisions of a rectangular survey to a map
05.04 Determine the number of acres from a legal description
05.05 Locate and label the principle base line and meridian for Idaho
05.06 List the types of witness markings
05.07 List items of entry found in survey notes
05.08 List the locations where survey notes can be found
05.09 Locate points from a given legal description
05.10 Write the legal description for a given point

06.0 Tree Measurements
The student will be able to:

0123

06.01 Classify trees as to form
06.02 Match terms associated with tree measurements
06.03 Classify tree diameters correctly when given exact measurements

07.0 Log Scaling
The student will be able to:

0123

07.01 Match terms and definitions associated with log scaling
07.02 List commonly used log rules
07.03 List the parts of a scale stick
07.04 List the steps in scaling a log
07.05 Identify the types of defects for logs
07.06 Demonstrate the use of the Scribner decimal C log rule to determine the gross and net volume of logs

08.0 Remote Sensing in Forestry
The student will be able to:

0123

08.01 Identify the uses of aerial photographs for forestry
08.02 Identify the different types of aerial photographs
08.03 Identify equipment used with aerial photograph interpretation
08.04 Use aerial photograph stereo pairs to determine land formations, cover types, and tree heights

09.0 Pine Tree Grading
The student will be able to:

0123

09.01 Match terms and definitions associated with pine tree grading
09.02 Choose the reasons trees are graded
09.03 List the common tools used to find upper stem diameters
09.04 List the procedure to establish tentative log grades
09.05 List the defects that degrade a log
09.06 Demonstrate ability to measure log height, measure upper stems, and grade trees
10.0 Plot Cruising
The student will be able to:

0  1  2  3
0.01 Match terms and definitions associated with plot cruising
0.02 Select the commonly used plot forms and sizes
0.03 State commonly used plot sizes based on plot radii
0.04 List the methods of determining cruise intensity
0.05 Select the methods of planning a sampling layout
0.06 List the steps for conducting a plot cruise
0.07 Distinguish between advantages and disadvantages of plot cruising
0.08 Demonstrate the ability to complete a plot cruise layout
0.09 Demonstrate the ability to determine sawtimber and pulpwood volumes per acre using the plot cruising method

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11.0 Point Sampling
The student will be able to:

0  1  2  3
11.01 Match terms and definitions associated with point sampling
11.02 Select other names for point sampling
11.03 Diagram an illustration of point sampling
11.04 Identify the tools used for point sampling
11.05 Select the principles used to determine BAF
11.06 Match commonly used BAF's to the correct angle size
11.07 State the rule to use PRF
11.08 Match commonly used BAF to the correct PRF
11.09 Select the proper uses of a prism
11.10 State the rules for determining the number of points to use in a point sampling cruise
11.11 Demonstrate the ability to complete a point sample layout
11.12 Demonstrate the ability to determine sawtimber volume per acre using the point sampling method

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12.0 Silvicultural Systems
The student will be able to:

0  1  2  3
12.01 Match terms and definitions associated with silvicultural systems
12.02 Name the types of reproduction methods that can be used
12.03 Select the principles of selection method
12.04 Name the characteristics used in selecting harvest trees
12.05 Identify various species of Christmas trees

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13.0 Marking Timber
The student will be able to:

0  1  2  3
13.01 Identify equipment used for marketing timber
13.02 Match terms and definitions associated with marking timber in thinnings
13.03 Match methods and definitions for thinning
13.04 Select the most commonly used methods of marking timber
13.05 Arrange the priorities for marking trees in a thinning
13.06 Select the correct factors for crown spacings
13.07 Select the reasons for removing diseased trees and snags

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14.0 Seeding and Planting
The student will be able to:

0  1  2  3
14.01 Match terms and definitions associated with seeding and planting
14.02 Name the sources for seed and seedlings
14.03 Name the types of seedling packaging
14.04 Select the correct procedures for the care of seedlings for transport
14.05 Describe the ways of storing seedlings for long and short term periods
14.06 Select the factors for seedling spacing
14.07 Identify the tools and methods used in hand planting
14.08 Describe the time to collect conifer cones
14.09 Describe the procedures for seed treatment before seeding
14.10 Match seeding applications to methods of seeding
14.11 Identify the planting zones for each tree species
14.12 Identify the requirements needed for certified tree seed

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15.0 Timber Stand Improvement
The student will be able to:

0  1  2  3
15.01 Match terms and definitions associated with timber stand improvement
15.02 Select the correct classifications of intermediate cuttings

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15.02 Select the correct classifications of intermediate cuttings
15.0 Select the correct methods of cleaning, liberation, and recommendations for improvement

15.04 List the agents of damage that require salvage cutting

15.05 Select the factors influencing pruning

15.06 Identify tools and equipment for herbicide application

15.07 Describe the needs and uses for sanitation cutting

16.0 Harvesting Timber

The student will be able to:

16.01 Match term and definitions associated with harvesting timber

16.02 List factors associated with location and accessibility of a timber stand

16.03 Identify correct procedures used in felling and bucking timber

16.04 Identify tools and equipment associated with harvesting timber

16.05 Select the correct uses of various types of equipment

16.06 Identify safety procedures for harvesting timber

16.07 Describe the correct procedures for skidding, loading, and hauling timber

16.08 Demonstrate the ability to design skid trails, access roads, and skyline corridors

16.09 Demonstrate the proper use and maintenance skills for a chainsaw

17.0 Fire Fighting

The student will be able to:

17.01 Match terms and definitions associated with fire fighting

17.02 Name the elements of the rare triangle

17.03 Name the purposes of fire control organizations

17.04 Select the means of fire prevention

17.05 Name the classes of fire

17.06 Name the methods of fire attack

17.07 Name the methods of crew organization using hand tools

17.08 Identify the tools used in fire righting

18.0 Prescribed Burning

The student will be able to:

18.01 Identify the tools used for prescribed burning

18.02 Match terms and definitions associated with prescribed burning

18.03 Select the reasons for prescribed burning

18.04 Select the most desirable wind direction and velocity

18.05 List the range of preferred relative humidity and the effects of temperature change on humidity

18.06 Name the desired range of temperatures for prescribed burning

18.07 Identify an anemometer and a psychrometer

18.08 List the steps of a pruning plan

18.09 Select the factors that determine the type of fire techniques to be used in a prescribed burn

18.10 Demonstrate the ability to determine weather factors related to burning

18.11 Demonstrate the ability to determine the prescribed pruning technique to be used

19.0 Forest Protection

The student will be able to:

19.01 Match terms and definitions associated with forest protection

19.02 List the reasons for identifying pest damage

19.03 Match the symptoms and causes for damage

19.04 Identify common insect pests in Idaho forests

19.05 Identify diseases prevalent in northwest forests

19.06 Match the problems with the control factors for pests such as insects, diseases, livestock, big game, and rodents for Idaho forests

20.0 Forest Business Methods

The student will be able to:

20.01 Match terms and definitions associated with forest business methods

20.02 List the categories of records necessary in a forestry business

20.03 List the basic items necessary in a timber sale

20.04 Arrange the steps in a bidding procedure

20.05 Select the elements of an offer
20.06 Select the items that might result in the termination of an offer
20.07 Identify the parts of a contract compliance
20.08 Inspect a timber sale for contract compliance
20.09 List the components of a timber sale appraisal

21.0 Importance of Wildfire Management
The student will be able to:

21.01 Understand the ecological benefits of wildlife
21.02 Understand the economic benefits of wildlife
21.03 Identify the aesthetic benefits of wildlife

22.0 History of Wildlife and Fish Management
The student will be able to:

22.01 Identify historical aspects of wildlife management
22.02 Identify the historical development of fish management

23.0 Ecological Concepts
The student will be able to:

23.01 Understand ecosystems
23.02 Understand carrying capacity and population effects

24.0 Identify Wildlife and Fish Species
The student will be able to:

24.01 Examine animal species, including fur bearers
24.02 Identify rash species (fresh and salt water)
24.03 Identify fowl species
24.04 Identify exotic game

25.0 Management of Wildlife and Fish Populations
The student will be able to:

25.01 Explore water, food and cover requirements of wildlife
25.02 Examine and develop habitats for wildlife production
25.03 Discuss the management of wildlife populations
25.04 Discuss the management of fish populations

26.0 Natural Resources for Outdoor Recreations
The student will be able to:

26.01 Identify recreational enterprises
26.02 Identify methods of developing recreational enterprises
26.03 Discuss the management of recreational enterprises
26.04 Review state and federal policies concerning recreational activities

27.0 Career Opportunities
The student will be able to:

27.01 Identify career opportunities in wildlife management
27.02 Identify career opportunities in outdoor recreation management