ADDITIONAL INFORMATION FOR OFF-GRID PLOTS (WESTERN US)

USDA Forest Service

Plot #: _____

Date: _____

Directions to plot: _____

_____

_____

_____

1. **Location** (use mapping datum NAD 83)
    a. Latitude: _____ N
    b. Longitude: _____ W
    c. UTM Zone: _____
    d. UTM Northing: _____
    e. UTM Easting: _____
    f. Township/Range/1/4 section: _____
    g. Map name used to mark plot: _____

2. **Physiography** (use topographic map)
    a. Topographic position (circle one): _____
        i. Flat or rounded ridgetop or peak >37 m wide
        ii. Narrow ridge top or peak <37 m wide
        iii. Sidehill, upper 1/3
        iv. Sidehill, middle 1/3
        v. Sidehill, lower 1/3
        vi. Canyon bottom <200 m wide
        vii. Bench or terrace
        viii. Broad flat 200 m or more wide
        ix. Other, describe: _____
    b. Slope: _____ %
    c. Aspect: _____ degrees
    d. Elevation: _____ meters/feet (circle one)

3. **Trees/shrubs**
    a. Plant association: _____
    b. Largest size class with 8 or more trees (circle one):
        i. pole _____ 13-22.9 cm (5-9”) DBH
        ii. small _____ 23-52.9 cm (9.1-20.9”) DBH
        iii. med _____ 53-80.9 cm (21-31.9”) DBH
        iv. large_____ 81-122 cm (32-48”) DBH

v. giant_____>122 cm (>48") DBH

4. **Basal area of hardwoods and conifers** (Use a prism. Record direction walked from plot center to measuring point in degrees. Record the number of 'in' and 'borderline' conifers and hardwoods while turning 360° at each measuring point. Multiply tree number by the prism basal area factor (BAF; us. 5, 10, or 20) to calculate basal area (BA). Exclude shrubs.)

Measuring point	**# of conifer trees**	**# of HWD trees**	**Prism BAF**	**BA conifers (ft^2/acre)**	**BA hardwoods (ft^2/acre)**	**Remarks**
Plot Center						
57' uphill						
57' downhill						
57'sidehill (l)*						
57' sidehill (r)*						

*l= left, r = right when facing uphill at plot center.

5. **Age of oldest tree cohort** (collect tree core samples from 2-3 of the oldest trees, including remnants.)

Tree #	**Tree species**	**DBH (cm)**	**# of rings in core**	**Length of core (cm)**	**Estimated age ([# Rings / Length * DBH] + 5)**	**Bark thickness**
1						
2						
3						

6. **Photographs** (take 1-5 photographs to aid future attempts to relocate the plot)

Photo #	**Description**
1	
2	
3	
4	
5	

Abundance Values for Community Survey

1 = 1-3

2 = 4-10

3 = 11-40

4.1 = 40-100 individuals scattered evenly

4.2 = 40-100 individuals concentrated on a few trees

Over 100 individuals:

4.3 = “many trees have a few” <½ plot’s trees have <20 individuals

4.4 = “many trees have a lot” <½ plot’s trees have <20 individuals

4.5 = “most trees have a few” ½ the plot’s trees have <20 individuals

4.6 = “most trees have a lot” ½ the plot’s trees have >20 individuals

5 = >½ available substrate is covered

Target Tissue Species (collect up to ½ mile from plot center)

1. Always collect
    a. *Platismatia glauca*
    b. *Letharia vulpina*
2. Second choice
    a. *Evernia prunastri*
    b. *Hypogymnia enteromorpha/appinata*
    c. *Hypogymnia inactiva*
    d. *Hypogymnia imshaugii*
    e. *Letharia columbiana*
3. Third choice
    a. *Alectoria sarmentosa*
    b. *Bryoria fremontii*
4. Worst choice (avoid, unless nothing else available)
    a. *Usnea spp.*