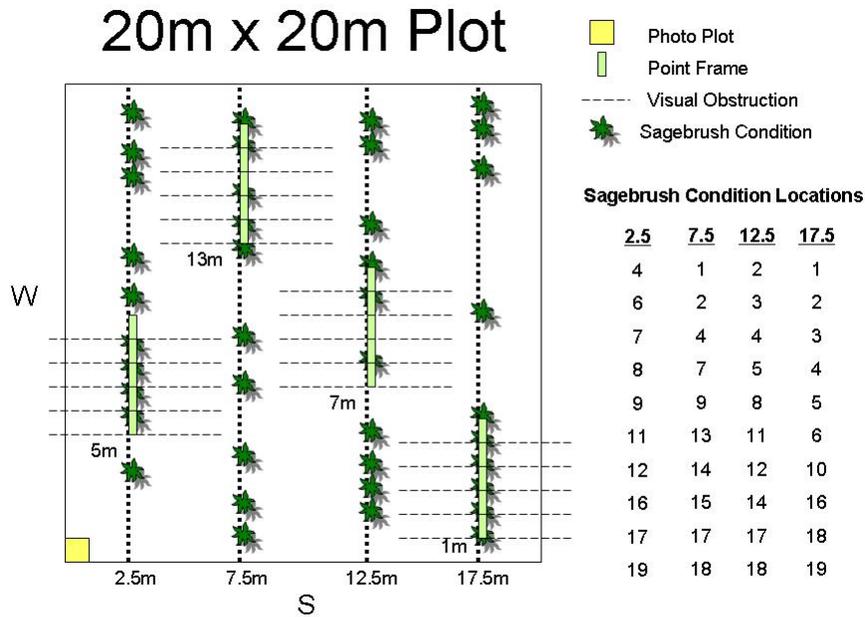


Appendix A

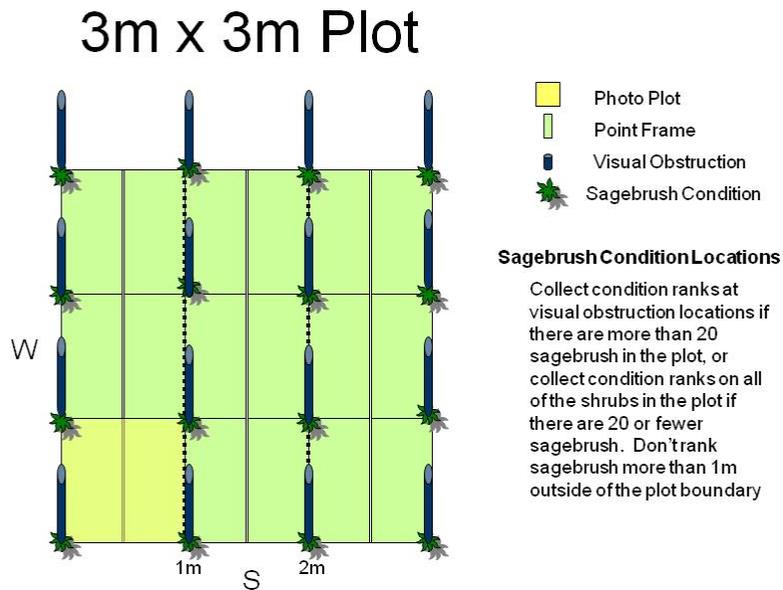
Plot Schematics and Sampling Directions

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PLOT SCHEMATICS

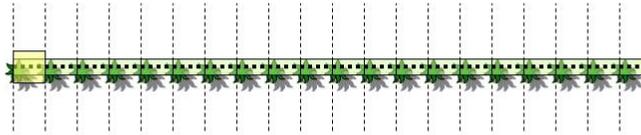


Plot layout for the 20m x 20m sample unit.



Plot layout for the 3m x 3m sample unit

Linear Plot



<ul style="list-style-type: none"> Photo Plot Point Frame Visual Obstruction Sagebrush Condition 	<p>Sagebrush Condition Locations</p> <p>Collect condition ranks at visual obstruction locations if there are more than 20 sagebrush in the plot, or collect condition ranks on all of the shrubs in the plot if there are 20 or fewer sagebrush. Don't rank sagebrush more than 1m away from the transect line.</p>
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Plot layout for the linear sample unit.

SAMPLING DIRECTIONS

Establish Plot

1. Determine the plot size
 - a. The 20m x 20m plot is the preferred plot size and should be used for the majority of the plant communities sampled.
 - b. The 3m x 3m plot should be used for plant communities that don't occupy a relatively homogenous area of at least 400 m² (i.e. lava outcrops and small playas).
 - c. The linear plot should be used for linear features that don't exceed a few meters in width (i.e. remnant riparian corridors)
2. For square plots (20m x 20m or 3m x 3m):
 - a. Locate the plot in a stand that is as homogenous as possible within the context of the surrounding terrain. Make sure the plot doesn't cross abrupt boundaries in soils, vegetation physiognomy, species compositions, etc.
 - b. Select a point for the SW corner of the plot and establish the baseline transect, from west to east, using a compass bearing of 110°, magnetic. Establish a perpendicular plot boundary from south to north using the 3, 4, 5 triangulation method.
3. For linear plots:

- a. Establish a 20m transect down the center of the linear feature. Locate the plot in a stand that is as homogenous as possible within the context of the surrounding terrain. The transect may wind or curve, within reason. Make sure the transect doesn't cross abrupt boundaries in soils, vegetation physiognomy, species compositions, etc. The transect should begin to the south and/or west and end toward the north and/or east.
4. Record the plot type selected in the electronic data sheet.

GPS Location

1. The GPS units will be set up using the following guidelines:
 - a. Datum: NAD 83
 - b. Projection: UTM Zone 12N
 - c. Logging intervals:
 - i. For square plots – every second with static collection for 2 minutes (total of 120 points).
 - ii. For linear plots - every meter
 - d. PDOP: as low as possible (4 to 6 range preferable).
 - e. Elevation mask: 15°.
 - f. SNR: around 40.
2. A GPS position should be collected at each plot.
 - a. A point feature should be collected on the SW and SE corner of square plots.
 - b. A line feature should be collected along the length of linear plots.

Photographs - Using Nikon Coolpix L1

1. The camera will be setup according to the following guidelines:
 - a. Download SD Card.
 - b. Install SD Card.
 - c. Spare batteries in the camera case.
 - d. Mode Selector is set to **Scene**.
 - e. Scene mode is set to **Landscape**.
 - f. Flash is turned **Off**.
 - g. Lens is zoomed out such that the maximum area possible is visible in the frame.
2. Two photos will be taken at each plot, a photo-plot photo and a landscape photo.
 - a. The photo-plot photo will be taken by placing the 1m x 1m photo frame at the appropriate location within the plot (the SW corner of the square plots and centered on the transect at the zero mark on the linear plots).
 - i. The photographer should stand 12" behind the SW corner of the photo frame on the square plots or 12" behind the center of the photo frame on the linear plots.
 - ii. The height of the camera will be determined by using the sighting pole attached to the Robel pole (approximately 1m).
 - iii. Hold the camera at the appropriate height along the sighting pole and rotate the lens downward so that the entire photo frame is within the camera's viewing frame.

- iv. Depress the shutter-release button about half way to auto focus. The letters **AF** and a green circle will appear on the screen when the lens is focused.
 - v. Depress the shutter-release button the rest of the way to release the shutter and take the photo.
 - vi. Review the photo and retake if necessary.
 - b. The landscape photo will be taken with the photographer standing in the same location as was used for the photo frame.
 - i. The camera should be held at the appropriate height along the sighting pole.
 - ii. Rotate the camera lens upward and compose the photo such that as much of the plot as possible and at least some of the sky is visible in the frame.
 1. The NE corner of the plot should be centered in the frame on the square plots.
 2. The transect should be centered in the frame on the linear plots.
 - iii. Depress the shutter-release button about half way to auto focus. The letters **AF** and a green circle will appear on the screen when the lens is focused.
 - iv. Depress the shutter-release button the rest of the way to release the shutter and take the photo.
 - v. Review the photo and retake if necessary.
3. Record the photo file names in the electronic datasheet.

Species List and Ranks

1. Record a complete, but not exhaustive, list of species on the electronic data form.
 - a. For the square plots, restrict the list to individuals occurring within the plot boundary.
 - i. If an individual is on the boundary line, count it as occurring within the plot if more than $\frac{1}{2}$ the biomass of the plant is within the plot.
 - b. For linear plots, restrict the list to within one meter of either side of the transect line.
2. Rank the abundance of each species using the following scale:
 - (1) Dominant or co-dominant.
 - (2) Abundant; comprising a substantial portion of live plant cover, but not dominant.
 - (3) Common; easily found but not contributing a large portion of plant cover.
 - (4) Rare, only a few individuals found within the plot.

Key Plant Community

1. Use the plant community key to assign a vegetation class to the lowest possible level in the key.
 - a. Key to the Association level when possible
 - b. Key to the Alliance level if the plant community cannot be keyed to the Association level, or there is not an appropriate Association class listed.
2. Record the appropriate vegetation class in the electronic data form.
3. If the key doesn't have an appropriate vegetation class, at either the Association or Alliance level, select the "other" category in the electronic data form and make some notes about the closest appropriate class and how the plot in question differs from that class.

Surface Characteristics

1. Select the most appropriate description of the surface of the ground within the plot in the electronic data form.
2. More than one category may be selected, but select only the categories that describe the majority of your immediate visual impression of the ground surface.
3. If none of the categories apply, select "other" and make a note of the surface conditions.

Visual Obstruction – Robel Pole

1. Place the Robel pole at the appropriate location along the transect within the plot.
 - a. For the 20m plot and the linear plot, the Robel pole locations (20) correspond to placement of the point frames.
 - b. For the 3m plot, the Robel locations (16) are arranged on a grid.
2. Pull the cord taught and place the sighting pole such that the cord is perpendicular to the transect.
3. Sight to the Robel pole from the appropriate height along the sighting pole (1m) and record the lowest half-decimeter mark visible above the vegetation.
4. Record the number in the electronic data form.
5. Stretch the cord 180° in the opposite direction and repeat the sighting procedure and data recording procedure.
6. Repeat the procedure at all visual obstruction sampling locations within each plot.
7. Minimize plot trampling to the extent possible.

Plant Cover by Species – Point Frame

1. Position the point frame according to the plot diagram.
2. Make sure that the point frame is level.
3. Read the point frame and record vegetation "hits" at the species level using foliar cover rules.
4. Record data in the electronic data form using standardized INL species codes.
5. Repeat the procedure at all point frame sampling locations within the plot.

Sagebrush Condition Rank

1. Sample sagebrush condition for big sagebrush if more than 10 shrubs are present within the plot.
2. Locate sagebrush condition sampling locations according to the plot diagram.
 - a. Sampling locations were placed randomly along the transects in the 20m plot.
 - i. If fewer than 40 shrubs are present, sample all the big sagebrush in the plot.
 - b. Sampling locations were placed systematically in the 3m and linear plots.
 - i. If fewer than 20 big sagebrush shrubs are present, sample them all (this will most likely be the case on the 3m plots).
3. Find the sagebrush individual closest to the sample location and rank the individual according to the following scale:
 - (1) Shrub is completely dead but still rooted
 - (2) Approximately $\frac{1}{4}$ of the shrub's biomass is alive
 - (3) Approximately $\frac{1}{2}$ of the shrub's biomass is alive
 - (4) Approximately $\frac{3}{4}$ of the shrub's biomass is alive
 - (5) Shrub is completely alive
4. Don't assess shrubs outside the plot boundary
 - a. For 20m plots, the center of the shrub must be located within the plot boundary.
 - b. For 3m plots, the center of the shrub must be located within 1m of the plot boundary.
 - c. For linear plots, the center of the shrub must be located within 1m of the transect.

Soil Texture

1. Collect a small soil sample from the center of the plot.
2. Use the soil texture key to determine the texture of the soil.
3. Record the appropriate category in the electronic data form.

Sensitive Animal Sign

If sign (scat) of sensitive animal species, sage grouse or pigmy rabbits, is present on or around the plot, record it in the appropriate category on the electronic data form. More than one category may be selected.