Bi 213 (2010) Instructions for Exercise #27: Ecology I

Today you will collect data on Trees and Shrubs from the McDonald-Dunn Research Forest.

There will be several survey teams each focusing on **either** Trees or Shrubs from a particular area(s).

I will provide you with a brief introduction on plant identification once we are in the field (especially POISON OAK!). Please be certain to let me know if you are especially sensitive/allergic to any plants or animals.

We will be using different methods for establishing our survey plots and gathering data than those described in your manual. The changes in protocol are outlined below.

Tree surveyors will:

- establish a transect line (a straight line running through the general survey area)
- "lay down" a 100 m transect line (if available, use a 100 m tape measure, otherwise you'll have to use a 30 m tape multiple times)
- take the first 20 m of your transect line and use it as one side of a 20 X 20 m quadrat (400 m²)
- identify and measure circumference (circumference > 32 cm) for all trees in your quadrat (record your results in Table 27.3 see separate sheets provided)
- following measuring all trees, move to the next 20 m of your transect line and establish your next quadrat
- identify and measure circumference (circumference > 32 cm) for all trees in your quadrat (record your results in Table 27.3 – see separate sheets provided)
- continue until you have completed 5 quadrats or until time runs out

Shrub surveyors will:

- establish a transect line (a straight line running through the general survey area)
- "lay down" a 25 m transect line (use a 30 m tape measure)
- take the first 5 m of your transect line and use it as one side of a 5 X 5 m quadrat (25 m²)
- identify and count (tally) all shrubs (woody plants with a circumference < 32 cm) in your quadrat (record your results in "Sampling Results for Shrubs ..." see separate sheets provided)
- following the counting of all shrubs, move to the next 5 m of your transect line and establish your next quadrat
- identify and count (tally) all shrubs (woody plants with a circumference < 32 cm) in your quadrat (record your results in "Sampling Results for Shrubs ..." see separate sheets provided)
- continue until you have completed 5 quadrats or until time runs out

PLEASE REMEMBER: WE ARE GUESTS! TRAMPLING VEGETATION <u>WILL NOT</u> BE TOLERATED!!!