Biodiversity of the Bog Forest, Richmond Nature Park

Field Trip

Be sure to bring:
- appropriate clothes including warm layers and rain gear
- water proof shoes (rubber boots) and rain pants
- lunch, snacks, water, drinks
- pencils, clipboards, plastic bags for vegetation samples

Transportation to the Park:
We will car-pool using the Geography van and two other cars.
As discussed in class, you may take your own vehicle if you wish,
but be sure to contact Dr. Daniels in class on Thursday if you plan
to drive to the park on your own.

To get to Richmond Nature Park:
South on Oak St Bridge (Hwy 99) to Richmond Centre Exit.
Take exit, follow to Shell Road.
Turn Left on Shell Road and follow to Westminster Highway.
Turn Left on Westminster Highway to Park entrance, just before #5 Road

Outline of lab work:
1. Natural history of the park and topics for the discussion of your report
2. Air photo interpretation of Richmond Nature Park
3. Identification of the major plant species

Materials will be provided in the lab including air photos, trail maps and plant lists.

1. Introduction to Richmond Nature Park

- map of trails and vegetation maps
- issues: community composition and structure and influences of disturbance and invasion of exotic species (p. 114-115 of text, plus additional references in the GIC)

2. Air photo interpretation
- interpretation of individual air photos
- compare with the vegetation classification
        - make preliminary notes on species you might expect to see
- review information on 4 community types

3. Species identification
- species check list
        - mosses and heath family are very important
        - other interesting species - unique to bogs
        - trees and ferns and some shrubs from Pacific Spirit Park (bring plant key)
        - invasive, exotic species

4. Sampling in the park during the field trip
- work in teams of 3 people, sample 2 quadrats per team - MULTITASK!!
- take notes on community physiognomy and site description
- 5m x 5m plot
        - trees: species, %cover
        - shrubs: species and % cover
- 1m x 1m plot in center of 5x5
        - all vegetation with height < 30cm
        - species, % cover
        - sample mosses for identification
        - *Sphagnum* mosses will be categorized:
                hummock top, hummock bottom, wet depression
- measure microenvironmental characteristics
- turn in your data at the end of the field trip