

Part I. Data Analysis (may be completed as a group): For individual species/overall for canopy and understory

Follow Procedure steps 1-7 (as appropriate) on page 709 of your lab manual. However, you should realize that you **MUST** use MS Excel to emulate the data tables AND build calculations into your Excel spreadsheets. For ALL data collected by the entire class, do the following:

- ✓ Calculate dominance and relative dominance for **tree** species
- ✓ Calculate density and relative density for both **shrub** and **tree** species
- ✓ Calculate frequency and relative frequency for both **shrub** and **tree** species
- ✓ Calculate importance value for **tree** species
- ✓ Present results in graphical form (**11 graphs total**) – consult **Exercise 1.4, Lab Study A. Tables and B. Graphs** for guidance (note the differences between line and bar graphs)

Part II. Write-up: For ALL data (must be submitted individually)

- ✓ Write a qualitative description of the area that was sampled. Note any changes in the various biotic components calculated above across ALL quadrats analyzed.
- ✓ Answer the following questions based on your analyses above.
 - ❖ Which tree species was/were most dominant?
 - ❖ Which species were most frequent?
 - ❖ Compare plant density and frequency of tree and shrub species.
 - ❖ Keeping in mind both your own group's data and all class data, what were the possible sources of error regarding the:
 - plants you counted/measured?
 - plots/quadrats you surveyed?

All lab reports are due at the BEGINNING of lab during the week of May 31st