name $\qquad$

## Leaf Margins as Climate Indicators: Pre-Lab Exercises

1. Print, read, a nd bring to class a copy of the lab ha ndout a nd post-lab exerc ise.
2. Complete Table 1 by locating the data for our area for mean a nnual temperature (MAT) and mean annual precipitation (MAP). These data can be obtained from a variety of web-based sources such asthe Midwest Regional Climate Center (http://mcc.sws.uiuc.edu/; click on: Climate of the Midwest/Climate Summa ries). If you need to convert unit, there are many that can help.

| Table 1. Climate Data forCentral Minnesota |  |
| :--- | :--- |
| MAT | $\operatorname{deg}$ F |
| source: |  |
| if web site, date <br> accessed: |  |

3. Complete Table 2 by calc ulating the predicted percentage of leaves of deciduous woody trees in our area with entire leaves using the three temperature models. Then, calculate the mean predicted percentage of leaves with entire margins.

Table 2. Predicted \% of woody species in central Minnesota with entire leaf margins

| Model | Predicted \% with entire <br> leaves |
| :--- | :--- |
| Equation 1 |  |
| Equation 2 |  |
| Equation 3 |  |
| Mean |  |

4. Calculate the predicted mean percentage of woody species with serrate margins
$\qquad$ .
