**PRACTICUM: USING DEGREE DAYS (DDs) AND PLANT PHENOLOGY
FOR MANAGING INSECT PESTS**

PART I: SAP-FEEDING INSECTS
Step 1: Calculate the **cumulative degree days (DD$_{50}$)** using the following daily maximum and minimum temperature data shown below for this site.

Step 2: Referring to the handout attached entitled *Using Degree Days to Predict Insect Pest Activity* by Dan Herms, **select two (2) sap-feeding insect pests and list two (2) indicator plants associated with your pests,** and explain how you would use your cumulative degree days in conjunction with plant phenology for predicting the proper timing of insecticide treatments for control of the two insect pests you have chosen.

Daily Maximum Temperature	Daily Minimum Temperature
57	45
82	51
65	42
87	50
75	52
60	60
78	59
57	54
70	45
69	43

Degree Day (DD50) formula = $\dfrac{Temp_{max.} + Temp_{min.}}{2} - 50°F$

Total Degree Days =

List two (2) indicator plants that would help in managing the above pests.
a.

b.

PART II: LEAF-FEEDING INSECTS
Step 1: Calculate the **cumulative degree days (DD$_{50}$)** using the following daily maximum and minimum temperature data shown below for this site.

Step 2: Referring to the handout attached entitled *Using Degree Days to Predict Insect Pest Activity* by Dan Herms, **select two (2) leaf-feeding insect pests** and **two (2) indicator plants associated with your pests,** and explain how you would use your cumulative degree days in conjunction with plant phenology for predicting the proper timing of insecticide treatments for control of the two insect pests you have chosen.

Daily Maximum Temperature	Daily Minimum Temperature
75	45
82	51
65	42
67	50
75	52
80	60
78	59
77	54
60	45
69	43

Degree Day (DD50) formula = $\underline{\text{Temp}_{max.} + \text{Temp}_{min.}}$ – 50ºF
$$2$$

Total Degree Days =

List two (2) indicator plants that would correspond with pest activity
a.

b.

PART III: WOOD-BORING INSECTS
Step 1: Calculate the **cumulative degree days (DD$_{50}$)** using the following daily maximum and minimum temperature data shown below for this site.

Step 2: Referring to the handout attached entitled *Using Degree Days to Predict Insect Pest Activity* by Dan Herms, **select two (2) wood-boring insect pests,** and **two (2) indicator plants associated with your pests,** and explain how you would use your cumulative degree days in conjunction with plant phenology for predicting the proper timing of insecticide treatments for control of the two insect pests you have chosen.

Daily Maximum Temperature	Daily Minimum Temperature
75	45
82	51
65	42
77	50
75	52
80	60
78	59
77	54
70	45
69	43

Degree Day (DD50) formula = $\underline{\text{Temp}_{max.} + \text{Temp}_{min.}}$ – 50ºF

Total Degree Days =

List two (2) indicator plants that would help in managing the above pests.
a.

b.