

Greenhouse Management

What is a greenhouse

- A greenhouse is a structure used for growing plants in a heated environment.
- The environmental factors such as temperature, light, air quality and humidity can be controlled and enhance the growing environment by having a greenhouse.
- Greenhouses are made of fiber, glass polyethylene or and structural plastic.

Greenhouse management - Light

- In order to manage a greenhouse successfully, one should have good light intensity. A light meter can be used to measure the intensity of the light.
- Supplemental lighting can be used with the lighting is not sufficient in the winter months like in the North eastern United States, but in the Sunbelts states light intensity can be high and therefore supplemental lighting may not be necessary.
- Low light crops or foliage will not need the high intensity lighting because of the type of plant. You could decrease light intensity for these plants in the summer time by using a cheese cloth or saran or to put a shade cloth on top of the greenhouse.

Greenhouse management - Temperature

- Another factor that the greenhouse manager must manipulate the temperature.
- We can manipulate temperature by the heating system which is steam or hot water, unit heaters, and some solar heating can be used.
- Computer systems are used in monitoring the heating environment.
- A cooling system for the greenhouse is through a passive ventilation. The active ventilation uses fans and tubes to take the warm air out of the air.
- A pad and fan system (cooling pad). The water runs down the pad and it is taking out the hot air outside thus cooling the greenhouse.

Greenhouse Management – Relative Humidity

- This is the actual water vapor in the air relative to the greatest amount of water vapor the air can hold during a given temperature reading.
- As the air temperature rises, so does the amount moisture the air can hold.
- A device called a psychrometer can be used to measure the relative humidity.

Greenhouse management - safety

- Safety and maintenance should be considered when working in a greenhouse.
- The manager of the greenhouse should keep in mind that safety should be in the forefront of the management strategy.
- Floors should be kept clean and clear in the walkways.
- There should be no build up of algae to prevent slips and falls
- The equipment should be kept up and in working order at all times for optimal use.
- Plant debris must be moved to prevent disease.

Greenhouse Management – safety continued

- Pesticides should be used and stored safely.
- Read the labels when working with pesticides.
- Finally, a good manager should create a smooth running and safe environment for all that come in contact into the greenhouse.