Your Climate Your Garden

Insights into Gardening 2011
Presented by
Mindi Thornton MG 2006
Topics to Cover

- Climate Zones: USDA v. Sunset Magazine
- Tools for personal weather station
- Creating a weather log for your property
- Best sources for weather info
- Plant selection and your climate
- Managing your irrigation based on weather info
- Plants and freezing weather
- Winterizing your irrigation system
- Glossary of weather terms
CLIMATE ZONES

■ USDA Zones
  - Corvallis: 8a (annual low 10º to 5º F)
  - Adair Village, Newport: 8b (low 15º to 20º F)

■ Sunset Zones
  - Willamette Valley: 6 (mild marine influence)
  - Northwest Coast: 5 (“English garden”)
Tools for personal weather station

- Install an Indoor/outdoor weather monitoring station, placing the remote sensor in a protected location
- Have a Wind direction flag (on highest point)
- Soil Thermometer
- Soil Probe
- Rain Collection Gauge
Best Web Sources for Weather Info

- Web based data from **National Weather NOAA**
  
  - [http://forecast.weather.gov/MapClick.php?lat=44.54154764174371&lon=-123.26797485351562&site=pqr&smap=1&unit=0&lg=en&FcstType=text](http://forecast.weather.gov/MapClick.php?lat=44.54154764174371&lon=-123.26797485351562&site=pqr&smap=1&unit=0&lg=en&FcstType=text)

- [http://www.srh.weather.gov/srh/jetstream/web/weather/pinpoint_max.htm](http://www.srh.weather.gov/srh/jetstream/web/weather/pinpoint_max.htm)

More Web Weather sites

- **Weather Underground**
  - [http://www.wunderground.com/cgi-bin/findweather/getForecast?query=44.514992,-123.234844&wuSelect=WEATHER](http://www.wunderground.com/cgi-bin/findweather/getForecast?query=44.514992,-123.234844&wuSelect=WEATHER)

- **The Weather Café by Rufus**
  - [http://www.ovs.com/weather_cafe.htm](http://www.ovs.com/weather_cafe.htm)

- **Rufus’ barometric chart**
  - [http://ovs.com/wxcafe/barometric_chart.htm](http://ovs.com/wxcafe/barometric_chart.htm)
Additional Weather sites

- http://squall.sfsu.edu/crws/jetstream.html
- http://www.ovs.com/weather_cafe.htm
- http://www.wunderground.com/cgi-bin/findweather/getForecast?query=97330-Corvallis, OR&wuSelect=WEATHER
- http://oregon.gov/ODA/NRD/docs/dlongrange.ppt
- http://www.wrh.noaa.gov/pqr/
Creating a Simple Weather Log

- What is the likely first day of frost? What is the last day of frost? (Corvallis: 1st = 10/26; last = 4/29 [per davesgarden.com])
- Track bloom data for one of each flowering tree/plant type
- Track two or three data points i.e. temp, rainfall, wind and compare to online site.
- Record soil temp in Spring, use seed packages for planting dates.
Plant selection and your climate

- Consider the harvest date of your vegetables and the ability to store them, e.g., if a root vegetable must be stored cold, an August harvest may be a problem without root cellar.
- Use local nurseries and seed companies to match your climate with the most suitable varieties.
- Ask farmers at local markets what varieties they are planting.
  - MATCH THE SEED WITH THE CLIMATE
Managing your irrigation based on weather info

- Understand wind, sun, and shade on your plants.

- Irrigate early in the morning. Your "evaporation rate" is much lower compared to the hot mid-day sun, thus saving water. Don't irrigate at night, this promotes various turf diseases.

http://www.clemson.edu/extension/hgic/plants/pdf/hgic1804.pdf
Plants and freezing weather

- Watering a plant prior to a freeze protects the roots and leaves from drying out.
- Do not water the leaves of a plant prior to a freeze. When freezing temperatures are imminent, prepare plants by giving them as much protection as possible, e.g., extra mulch, along with that drink of water
Freezing weather

- Covers protect from frost more than extreme cold.
- Make sure coverings extend to ground and **do not** touch the foliage.
- The foliage will transfer the heat from the plant to the covering.
- Good coverings include: cloth sheets, quilts or black plastic.
- Coverings protect more from frost than from extreme cold.
- Make sure to remove plastic covers during sunny days and provide ventilation from the solar radiation.
- A light bulb under a cover is a simple method of providing heat to ornamental plants in the landscape.
Winterizing your irrigation system

- Use insulation on pipes and a heater or light bulb in pump houses.
- Turn off pump (if well serves only irrigation)
- Open valves to drain pipes. *Close valves that day.*
- Drain and store all drip lines, sprinklers
- Update your irrigation map with any changes you made during the growing season
- Take batteries out of controllers, cover all controllers with tarps.
WEATHER TERMS

- LOWs ("L") on a weather map = low pressure
  - Winds move inward & upward in L areas
  - Upward movement cools the air
  - Cold air condenses, forming clouds
  - Clouds cause rain (*natch*)

- Low pressure = cloudy & wet
WEATHER TERMS

- HIGHs ("H") on map = high pressure
  - Winds move outward & downward in H areas
  - Air warms as it descends
  - Warm air is too thin to create clouds
  - No clouds, no rain (duh)

- Low pressure = clear & dry
WEATHER TERMS

- FRONTS are boundaries between air masses of different densities (and temperatures), e.g., between H and L areas
  - Weather associated w/ fronts = cloudy & wet

- PROBABILITY OF PRECIPITATION ("POP") is the likelihood 1/100th of an inch of rain will fall in a given spot. Often, distance from a forecasted LOW (where rain likely has a POP of 100%) is used in this calculation.
http://www.weather.com/glossary/?role=

- The L's on surface weather maps stand for Low air pressure. In the Northern Hemisphere...winds flow counter-clockwise and are directed in and up toward the center of all Low pressure centers. This upward moving air cools to the point that condensation occurs. We see this as clouds. If the air continues to rise... then precipitation can occur. So...the weather usually associated with Low pressure is cloudy and wet
Glossary of weather terms

- The H's on surface weather maps stand for High air pressure. In the Northern Hemisphere...winds flow clockwise and are directed out and down away from the center of High pressure centers. This downward moving air actually warms up as it is descending which is the opposite needed to create any clouds and precipitation. The weather usually associated with High pressure is clear and dry.
Glossary of weather terms

- **Fronts** are boundaries or fences between High air pressure systems. The weather associated with fronts is **cloudy and wet**.
- The probability of precipitation, POP is one of the more confusing terms.
- Expected coverage of precipitation near the center of the Low Pressure System is 70 to 90 percent. As you move away from the center and down the fronts the "area of expected coverage" reduces to 50 percent.
Questions??

My contact info: Mindi Thornton
mindithornton@yahoo.com
541-752-0787

Hope you enjoyed Insights into Gardening, and hope to see you next year