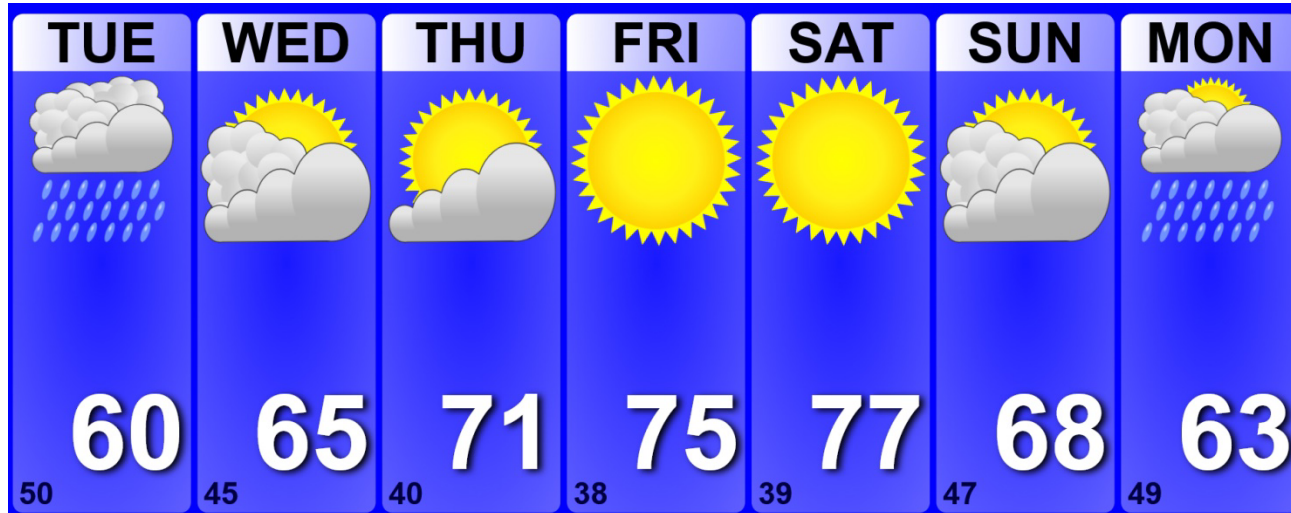


Weather-wise Gardening



Mark Luterra
Adaptive Seeds
Wild Garden Seed
Luterra Enterprises LLC

It's a dance!

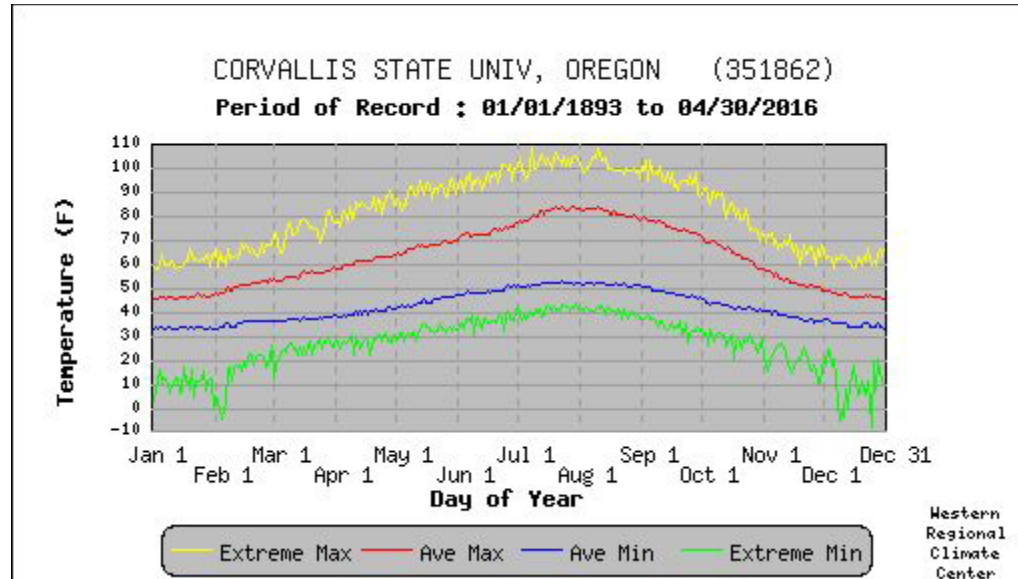
- We can fight the weather to garden by the calendar, or the moon, or we can go with the flow.
- I'm a weather buff by nature, and this is part of what makes gardening and farming fun for me.



Sources of weather info

- NOAA forecasts, Wunderground, etc.
- Big picture, 90+% accurate 3 days, 75% 7 days.
- Climate Prediction Center 6-10 day and 8-14 day outlooks: <https://www.cpc.ncep.noaa.gov/>
 - About 50% accurate
 - Helpful when deciding whether to wait out an unfavorable pattern

Know your climate



<https://wrcc.dri.edu/cgi-bin/cliMAIN.pl?or1862>

Know your microclimate

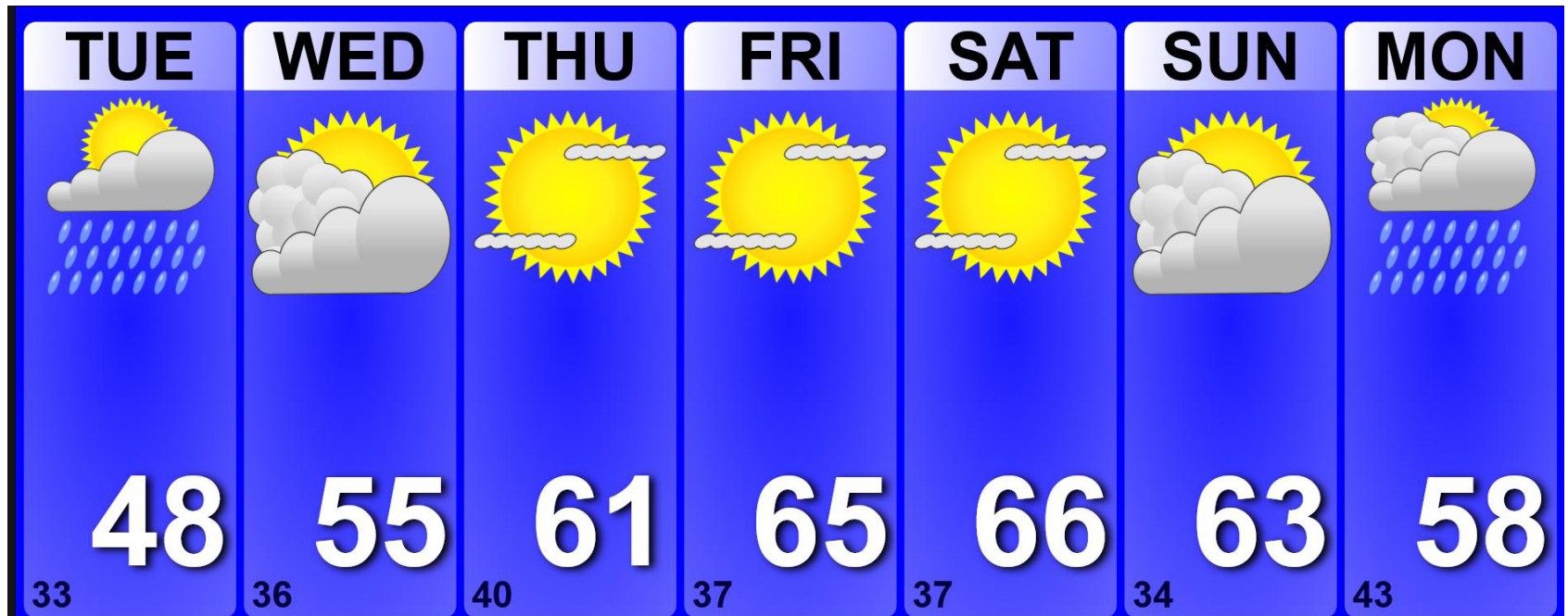
- Personal weather station or [Wundermap](#) – compare to official forecasts
- Valleys near hills: can be 5-10 degrees colder at night
- Higher terrain (but less than 1000 feet): typically warmer nights, fewer frosts
- Valley flatlands: forecasts more accurate

Weather windows and weather events

- Windows: patterns to watch for to guide garden actions
- Events: extremes to prepare for/respond to

Early spring (March-April)

- Window to watch for: 4+ dry days with highs in 60s



Window actions

- Day 2: hoe (allowing weeds time to dry out)
- Day 2: direct seed cool-season crops (if no hard freezes ahead) – lettuce, radishes, peas, carrots, beets, etc.
- Day 4+ (depending on soil type): bed prep for next round of planting
- Ahead of rain: transplant early starts




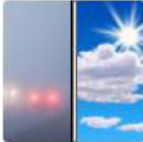







Early spring weather events

- Hard freeze (<25°F)
 - Cover peas, young crops with tarps/blankets
 - Orchard/vineyard buds/blossoms may be damaged
 - Avoid planting crops with a hard freeze or cold pattern ahead

Late spring (May-June)

- Window to watch for in May: 5-7+ days with highs in 70s and lows above 40

Extended Forecast for
2 Miles SW Corvallis OR

Tonight	Tuesday	Tuesday Night	Wednesday	Wednesday Night	Thursday	Thursday Night	Friday	Friday Night
								
Mostly Cloudy then Patchy Fog	Patchy Fog then Mostly Sunny	Mostly Clear	Sunny	Partly Cloudy	Mostly Sunny	Partly Cloudy	Mostly Sunny	Mostly Clear
Low: 44 °F	High: 65 °F	Low: 43 °F	High: 71 °F	Low: 45 °F	High: 72 °F	Low: 47 °F	High: 81 °F	Low: 54 °F

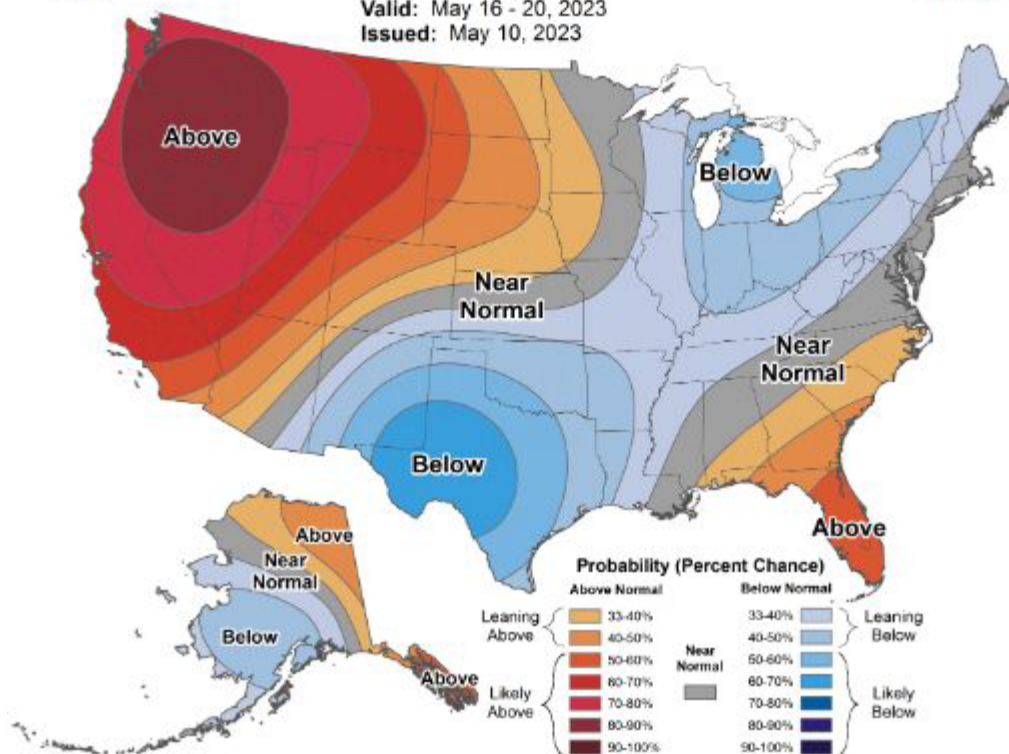
Temperature Probability



6-10 Day Temperature Outlook

Valid: May 16 - 20, 2023

Issued: May 10, 2023



Window actions

- Day 1: direct seed beans, quinoa, corn, cucumbers, squash, melons
- Transplant tomatoes (if no <40°F ahead)
- Transplant peppers (if after May 15 and no <45°F ahead)

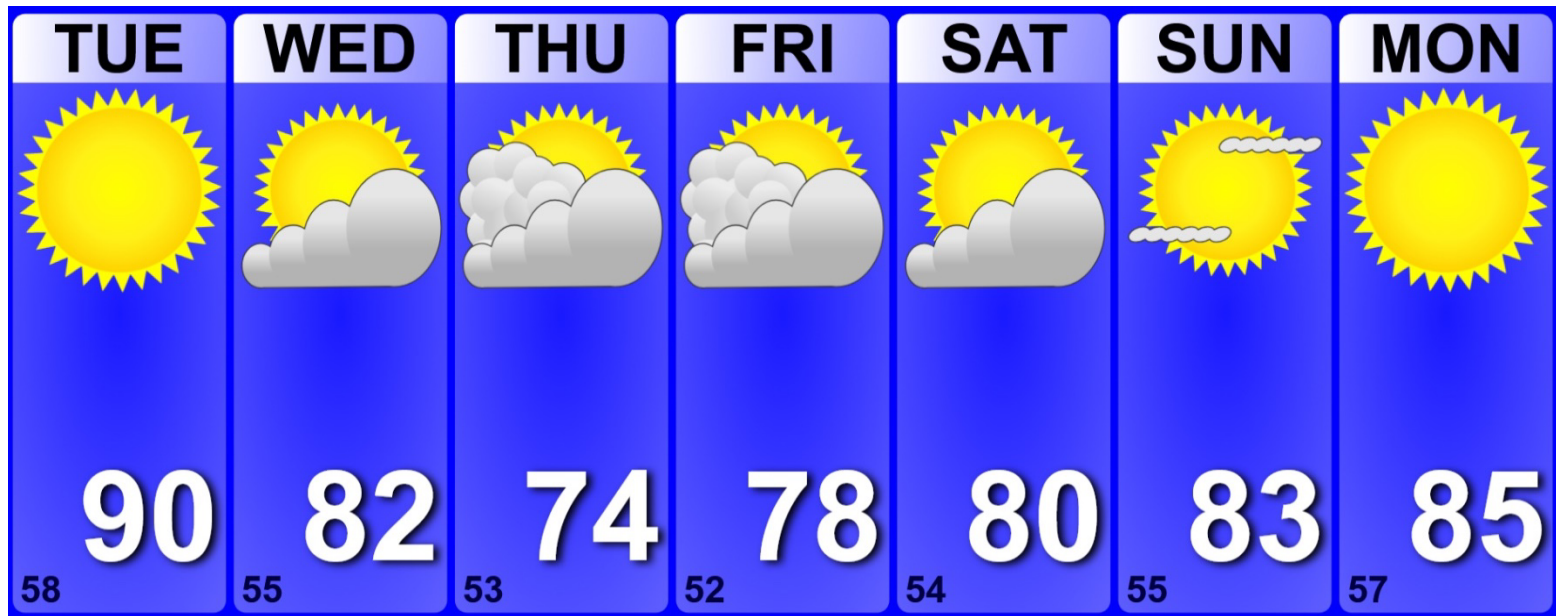


Late spring weather events

- Late frost (<35°F predicted)
 - Cover tender crops already in the ground
- Early heat (>90-95°F predicted)
 - Harvest greens, radishes, brassicas ahead of heat
 - Harvest in early morning on hot days
 - Water in early morning, not at peak heat

Summer (July – Sept. 15)

- Window to watch for: 5-7 days of cooler temps (highs <85°F)



Window actions

- Direct seed and transplant succession plantings and fall crops
 - Early July: fall beets, carrots, brassicas, radicchio
 - Early August: fall/winter kale, lettuce
 - Early September, fall/winter mustards, arugula





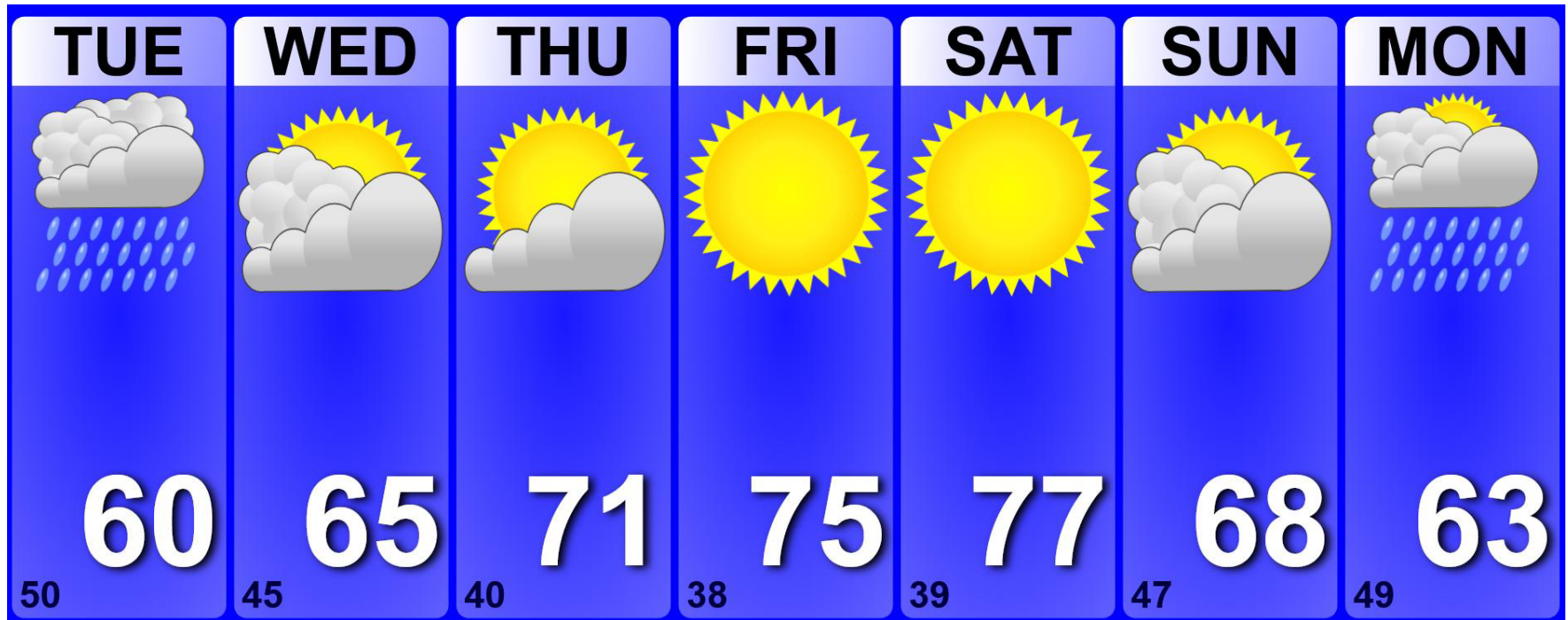
Summer weather events

- Extreme heat (>95-100°F)
 - Harvest berries, greens, peas ahead
 - Keep adequate water but don't water at peak heat
- Rain (more than a sprinkle)
 - Harvest and cover ripe grains, dry seed crops
 - Harvest ripe/near-ripe tomatoes (they will split)



Fall (Sept. 15 – Nov. 15)

- Window to watch for: dry after wetting ($>1/2''$) rain



Window actions

- Prep beds for cover crops, garlic
- Hoe germinating winter weeds/grass

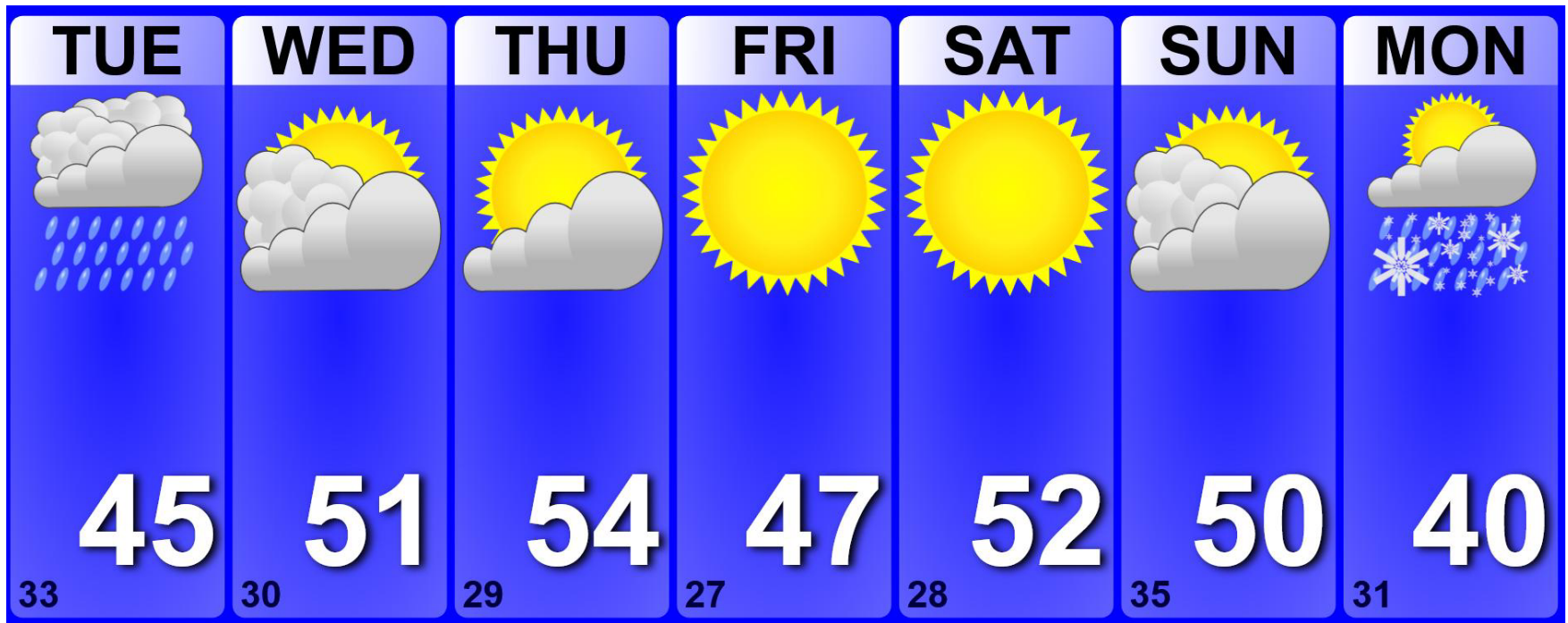


Fall weather events

- First frost/freeze (<34°F predicted)
 - Harvest all winter squash, melons, ripe tomatoes/peppers
 - If it's early (before Oct. 10) it may be worth it to cover tomatoes and especially peppers for a few more weeks of ripening
- Pattern switch to continuous rain
 - Plant cover crops (earlier is better) and garlic
 - Finish all weeding and ground work

Winter (Nov. 15 – Feb.)

- Window to watch for: dry spell (5-7 rain-free, mostly sunny days)



Window actions

- Manage weeds
- Harvest carrots and root crops
- Late winter: prep ground for first peas/radishes (not possible every year)

Winter weather events

- Extreme cold (<23°F)
 - Harvest or protect crops if hardiness limit will be reached
 - Insulate with snow (if available) or mulch/leaves (but beware of voles!)
 - The same temperature is more damaging if it occurs early, or suddenly after warm temps



Some hardiness limits

- 20-25°F: Damage to lettuce, Asian greens, some chicories. Most winter crops survive. (Almost 100% chance.)
- 15-20°F: Damage to most chicories/radicchios, brassicas, exposed shoulders of beets and carrots. Most winter crops survive. (~50% chance)
- 10-15°F: Likely loss of unprotected favas, phacelia cover, chicory/radicchio, carrots, beets. (~30% chance)
- 0-10°F: Only parsnips, garlic/onions, cereal grains, and some exceptional kale/cabbage will survive unprotected. Typically these temperatures coincide with snow cover which will insulate less hardy crops if deep enough. (~15% chance)
- -3.4°F: Lowest temperature I have observed in Corvallis (December 2013).

Keep a journal

- Record weather events and garden activities.
- What worked well? What will you change next year?
- If you're a real weather nerd, consider getting a personal weather station that keeps a record for you.

Don't sweat it!

- Despite judgmental Facebook comments gardening is not really about “right” and “wrong.”
- Experiment, learn, go with the flow of the weather, don't be afraid to buck conventional wisdom and see what happens.

Questions?

