WATERING CHEAT SHEET



by Greg Alder

Quantities:

- Big watering can holds 2.5 gallons
- Small watering can holds 0.4 gal / 6 cups
- Big plastic bucket holds 5 gallons
- Small plastic bucket holds 2 gallons

Drip emitter outputs:

A 0.5 gallon-per-hour (GPH) emitter . . .

- 60 minutes puts out 8 cups (a half gallon)
- 45 minutes puts out 6 cups
- 30 minutes puts out 4 cups (a quart)
- 15 minutes puts out 2 cups (a pint)

Water needs of vegetables:

- 6-inch diameter (spread hand) size plant needs 0.03 gallons / 0.5 cups per 0.10 inch ET
- 12-inch diameter (laptop computer) size needs 0.06 gallons
 / 1 cup per 0.10 inch ET
- 2-foot diameter (mature cauliflower) needs 0.13 gallons / 2 cups per 0.10 inch ET
- 4-foot diameter (mature zucchini or tomato) needs 0.25 gallons / 4 cups per 0.10 inch ET

* 0.10 inch ET is amount of water a vegetable uses on an average day in early November or early March; summer is approx. double (0.20 inch ET)

How much water comes from a garden hose on full volume? About 6 gallons per minute

Examples of successful watering frequencies in summer:

- Vegetable- drip (every 2 days); sprinkler/watering can (every 3 days)
- Avocado- drip (every 2 days); microsprinkler (3 days); full-coverage sprinkler (5 days)
- Citrus- drip (every 3 days); microsprinkler (5 days); full-coverage sprinkler (7 days)
- Deciduous- drip (every 5 days); microsprinkler (7 days); full-coverage sprinkler (10 days)
- * use these as references; not as prescriptions
- * new vegetable transplants usually need water more often for their first two weeks
- * adjust for other seasons by watering less often instead of reducing volume at each watering

Approx. volumes for fruit tree watering in summer:

Canopy diameter = water used per week

- 2 feet (shoulder width) = 2 gallons
- 5 feet (outstretched arms) = 10 gallons
- 10 feet (four footsteps) = 50 gallons
- 15 feet (six footsteps) = 100 gallons

Conversions:

- 1 inch of water/rain equals 0.623 gallons per square foot
- 1 gallon of water equals 1.6 inches of water per square foot
- 1 gallon of water equals 16 cups
- 1 cup equals 0.0625 gallons
- 1 millimeter (mm) equals 0.04 inches
- 1 inch equals 25 mm; 0.5 inches equals 13 mm; 0.25 inches equals 6 mm