

Irrigation applications

- Overhead sprinkling
 - Pros: Good for keeping soil moist while seeds germ and emerge
 - Cons: Results in more weeds; inefficient water use; larger plans do not like wet leaves, takes more pressure to run sprinkler line
- Drip irrigation
 - Pros: Efficient water use, reduced number of weeds, simple set up
 - Cons: Requires specific fittings, parts, pieces and tools; drip pieces are expensive.
- Soaker hoses
 - Pros: Cheap and easy
 - Cons: Waters more weeds; hoses clog
- Nella Mae's Farm uses overhead sprinklers on 18" risers to get seeds started and then switches to drip line/tape

Components of irrigation system

- Header or main line- this is the hose, tubing or pipe that delivers water to drip tape or sprinklers.
 - It should be sufficiently large to carry enough water to feed your system. If your sprinklers seem wimpy, the header may be too small to supply them
 - Headers can be thick walled PVC pipe or 1/2" Toro tubing. Tubing is easiest because drip tape can be fitted directly into the tubing. It is flexible and can withstand some freezing.
- Drip tape and tubing
 - Consider pressure rating, thickness, emitter spacing
 - 1/4" "spaghetti" tubing is flexible and durable; it can be laid out in S patterns
 - 1/2" "t-tape" lasts a few seasons; cheap; it must be laid out straight
- Filter
 - Even if you're not using ditch water, sediment can clog delicate sprinkler heads. Adding a filter is a good idea. Clean it regularly to ensure adequate pressure.
- Pressure regulator
 - These ensure you don't blow out your drip tape with too much pressure.
 - 10 PSI regulator is good for a garden spigot to 1/4" drip line system. 25 PSI is standard for 1/2" drip tape. They can be fitted on easily to a garden spigot.
- Timers
 - Simple timers can be purchased at garden centers. This is highly recommended for drip systems. These must be set every time (not automatic.)
 - More complex systems for lawn irrigation can be used for garden irrigation. GrandeScapes sets these systems up well. They can be expensive, but it is worth it to be able to leave and know your garden will be watered automatically.

Other considerations

- Irrigation systems must be drained or blown out in the fall to prevent freezing and breaking. Filters are very susceptible to this
- All irrigation parts we use at the farm can be purchased at KIE supply or dripworks.com. KIE has knowledgeable people who can help you design your system.
- It is good to set up your system in "zones" so you can water crops appropriately. Lettuce wants water every day, but tomatoes will split if they get too much. Consider designing your system with valves on the main line so you can shut off sections as needed.