



## Irrigation

*Read on for tips on proper irrigation for your habitat projects!*

Providing plants with adequate irrigation, particularly during the establishment stage, is a critical part of project success. Below are some recommendations on what type of irrigation to provide, how often to irrigate, and what quantity of water you should provide. Please keep in mind that these are general recommendations, and will vary depending on your specific site conditions. We recommend checking on your plants regularly and adjusting your irrigation regime accordingly. Underwatered plants will show browning of the leaves, particularly the newer leaves. This browning will usually start at the leaf margins, and the affected leaves will be 'crispy'. Plants may also droop or show other visible signs of wilting. Overwatered plants will show yellowing of leaves, and affected leaves are supple, not 'crispy'.

Generally speaking, drip irrigation is the most effective type of irrigation to use for habitat projects. Emitters should be placed carefully at the base of each plant, approximately 2" from the stem/trunk of the plant. Do not provide emitters in between plants, as this will exacerbate weed pressure. We recommend using anywhere from a ½ - 2 GPH (gallon per hour) emitter per plant. Lower flow rate emitters are best for areas with heavy soil or slow drainage, while higher flow rates are good for loamy or sandier soils. If you are planting forbs and shrubs together in the same area (e.g. a hedgerow kit), use lower flow rates on the forbs and higher flow rates on the shrubs. That way, you can keep them on the same line together and irrigate at the same frequency and duration, resulting in a larger quantity of water for the plants that need it. Each plant should get between 2-4 gallons of water during each irrigation event, with forbs getting closer to 2 gallons and shrubs getting closer to 4 gallons.

The frequency of irrigation will be dependent on the maturity of your habitat, weather conditions, soil type and other site specific factors. We recommend keeping plants generally moist for the first 2-4 weeks after planting, which generally means watering every couple of days, depending on the weather. Irrigation can be gradually tapered off to once every 7-14 days. As a general rule, younger plants in the first couple of years of establishment need more frequent watering, while more mature plants thrive on less frequent watering. After the first 3-5 years, irrigation can be decreased to monthly or stopped altogether. However, we recommend leaving irrigation installed permanently, as even mature habitats may need occasional watering during severe drought. It is also important to keep in mind that habitat will be more fire-resilient and less flammable if given occasional irrigation during dry months in the long-term. Do not over-water your plants. Generally speaking, native plants need much less water than non-native landscape plants or crops.

For projects where the infrastructure to install drip irrigation is lacking, other methods, such as using a water truck or hand watering with a hose, may be necessary. The general recommendations for quantity and frequency of irrigation for these methods are the same as for drip irrigation. Be careful to use low pressure when using these methods, especially on young plants.

Overhead watering is not recommended, as it tends to exacerbate weed problems and can also lead to disease problems.

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