How Irrigation Helps Pollinators

PLANNING FOR WATER SOURCES TO INCREASE POLLINATORS: PART 2 OF 2



Pond Water For Pollinators





 Creating a pond is one of the best things you can do for wildlife – they provide habitats, breeding grounds, food, water and shelter for a wide variety of wildlife, from invertebrates and amphibians to birds. Many pond plants attract pollinators when in flower, including bees, hoverflies, wasps, moths and butterflies.

• <u>https://www.gardenersworld.com/</u> <u>plants/pollinator-pond-plants/</u>





On the Edge of Water



- Marginal lands such as field edges, hedgerows, roadsides, sub-irrigated areas, and drainage ditches offer both nesting and foraging sites. Plan native plants where left-over water may already be present. Be aware of potential insecticide overspray or drainage that may kill pollinators.
- <u>https://efotg.sc.egov.usda.gov/refer</u>
 <u>ences/public/MI/Biol_TN_20_Pollinato</u>
 <u>r-Biology-and-Habitat_v1-</u>
 <u>1_honey_bee_preferences.pdf</u>







Bees Use Water



Many insects can obtain the water they need from their food. Bees, however, need to drink water.
 https://ucanr.edu/blogs/blogcor

e/postdetail.cfm?postnum=1371 5







Water That Attracts Bees

 Bees pick the most fragrant, nutrient-rich water they can
 find. Puddles, ponds, brooks,
 irrigation systems, bird baths,
 hose bibs, and pet dishes all
 attract bees – so do saltwater
 pools and even pools with
 chlorine.

• <u>https://honeybeesuite.com/w</u> <u>ater-sources-for-bees/</u>







Some Bees Need Mud

- Mason bees are named after masonry for a reason since
 female mason bees protect each
 nesting chamber with a wall of
 clayey mud.
- <u>https://crownbees.com/blog/</u> <u>makingmud/</u>







Keep A Moist Mud Source



- To build a mason bee mud source, dig a hole in the ground and line it with waterproof material such as polythene paper. After lining the hole, return the soil you dug up back into the hole and add water. A drip irrigation system can easily be adapted for this purpose. Simply allow the hole to capture the water from the drip irrigation sprinkler or emitter.
 - <u>https://beekeepclub.com/the-beginners-</u> <u>guide-on-how-to-attract-mason-bees/</u>







Bees Like Safe Water Edges

- Bees prefer water with edges—water with safe places to stand where they won't drown or get swept away.
- <u>https://honeybeesuite.com/w</u>
 <u>ater-sources-for-bees/</u>







Bees Get Chilled

• On cool days in the spring and fall, warm water has an advantage over cold water since a bee can quickly become chilled from a small drink. If you want to provide a water source for your bees, keep it shallow, provide stepping stones or rafts, and wait for the slime to appear. Drip irrigation emitters can be adapted for this purpose, with a small collection receptacle to retain a portion of the release.

• <u>https://honeybeesuite.com/water-</u> <u>sources-for-bees/</u>







Butterflies In Your Garden





- Brightly colored butterflies

 can be a welcome addition to
 your wildlife garden, not only
 because of their beauty, but also
 because of their usefulness in
 pollinating flowers.
- <u>https://www.nwf.org/Garden</u>
 <u>-for-</u>
 <u>Wildlife/Wildlife/Attracting-</u>
 <u>Butterflies</u>







Butterflies Live On Liquid Diets





- Butterflies are picky about their diets and different types of butterflies have different preferences, but in general, they require a liquid or semi-liquid diet.
- <u>https://www.gardeningknow</u>
 <u>how.com/garden-how-</u>
 <u>to/beneficial/butterfly-garden-feeding.htm</u>







Butterflies Don't Need To Drink Water





- Butterfly water feeders really aren't necessary to supply water and butterflies don't need bird
 baths or ponds because they get the liquid they need from
 nectar.
- <u>https://www.gardeningknow</u>
 <u>how.com/garden-how-</u>
 <u>to/beneficial/butterfly-garden-feeding.htm</u>







Butterflies Need Water For Puddling

- Butterflies need muddy or moist places to "puddle," as "puddling" provides the critical minerals that butterflies require.
- <u>https://www.gardeningknow</u>
 <u>how.com/garden-how-</u>
 <u>to/beneficial/butterfly-garden-feeding.htm</u>





Butterflies Like Wet Sand Spots

- Butterflies often congregate on wet sand. Place coarse sand in a shallow pan and then insert the pan in the soil of your habitat. Make sure to keep the sand moist. A simple drip irrigation system can be designed or small adjustments to current irrigation systems can easily accommodate wet sand locations.
- <u>https://www.nwf.org/Garden-for-</u> <u>Wildlife/Wildlife/Attracting-</u> <u>Butterflies</u>







Drip Irrigation for Butterflies





Create a damp salt lick for butterflies and bees. Use a dripping hose, drip irrigation line, or place your bird bath on bare soil to create a damp area.
Mix a small bit of table salt (sea salt is better!) or wood ashes into the mud.

<u>https://www.fs.fed.us/wildflow</u>
 <u>ers/pollinators/documents/simple</u>
 <u>truthbrochure.pdf</u>







Utilizing Water Features For Butterflies

Butterflies like moving water.
Burbling fountains and
waterfalls are good choices, as
is a sprinkler. Installation of
landscaped water features can
be accomplished as part of an
entire irrigation system or as
independent units.

<u>https://www.storey.com/articl</u>
 <u>e/water-for-butterflies/</u>



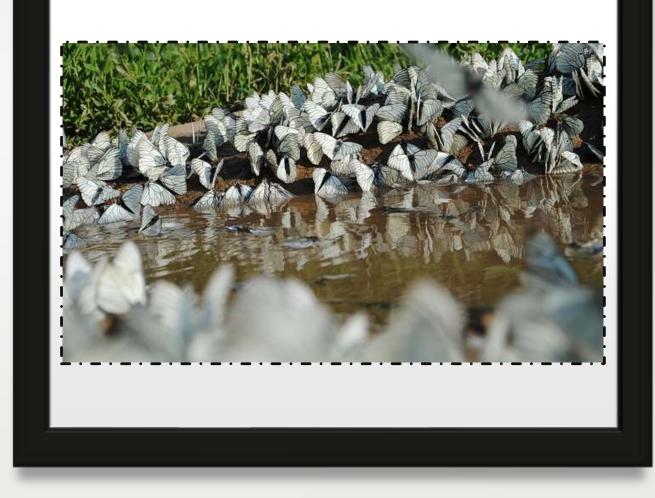




Butterflies Play In Sprinklers

Butterflies sometimes float
through the mist of a waterfall or
garden sprinkler. They seem to
enjoy taking showers and can be
seen swaying through light
summer rains. Attaching specific
butterfly attracting drip irrigation
sprinklers to existing irrigation
systems is not difficult.

 <u>https://www.storey.com/article/</u> <u>water-for-butterflies/</u>







When Dew Is Sparse





- Shallow pools will attract pollinators, especially if you're in a dry climate or there hasn't been much morning dew.
 Irrigation systems can have simple adjustments made to accommodate a small amount of pooling.
- <u>https://www.nrdc.org/stories/</u>
 <u>8-ways-attract-bees-and-</u>
 <u>butterflies</u>





Irrigate ToPollinate





- As vital as irrigation is to crop growth, providing sources of native vegetation for pollinators is becoming urgent. Water for native plants and pollinators must be planned. Pesticide free water sources and plants need to be established to keep a healthy pollinator population.
- <u>https://www.fs.fed.us/wildflowers/</u> pollinators/BMPs/documents/Pollinat orFriendlyBMPsFederalLands0515201 <u>5.pdf</u>





Drip Irrigation Supplies and Parts

• Drip irrigation is a simple way to plan for providing a variety of water sources for pollinators and plants with different water requirements.

<u>https://www.irrigationsupplyparts.</u>
 <u>com/product-category/drip-</u>
 <u>irrigation/sprinklers-drip-irrigation/</u>







Drip Irrigation Supplies and Parts

 IrrigationSupplyParts.com is a privately owned company based in Michigan. Our parent company is Triple K Irrigation, who has been serving the agricultural community for over thirty years.



