

AIN'T NO SUNSHINE WHEN THEY'RE GONE: POLLINATORS IN A SOLAR PRAIRIE



WHY DOES IT MATTER?

- ↓ As the climate crisis continues, pollinators are decreasing in abundance and a need for renewable energy technology is increasing
- ↻ Solar prairies are a way to combine solar arrays with native, restorative prairies to utilize the space under the panels
- 🔋 If solar panels prove not to disrupt pollinator habitats and the prairies under them continue to thrive, solar prairies will become a vital way of fighting climate change

HYPOTHESIS

- 🐝 Honey bees would be the most abundant instead of native pollinators because they are invasive
- + Pollinators would be more abundant outside of the panels instead of inside, but inside the solar panels would still provide a habitat for pollinators

METHODS

- 🕒 Collect insects using pan traps in UD's solar prairie
- 🔍 Sort insects based on order
- 🔍 Sort Hymenoptera and Lepidoptera to morphospecies
- 📊 Data analysis to determine significant differences

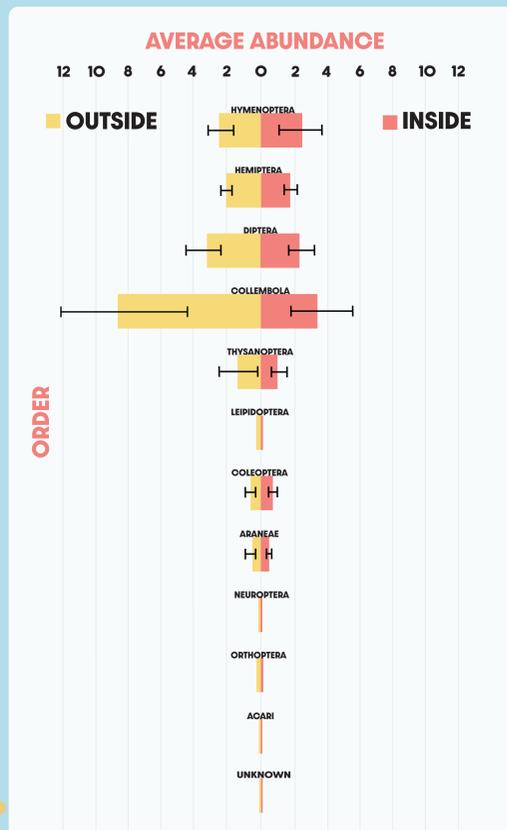


RESULTS

There is no significant difference between pollinators inside vs. outside of the solar panels

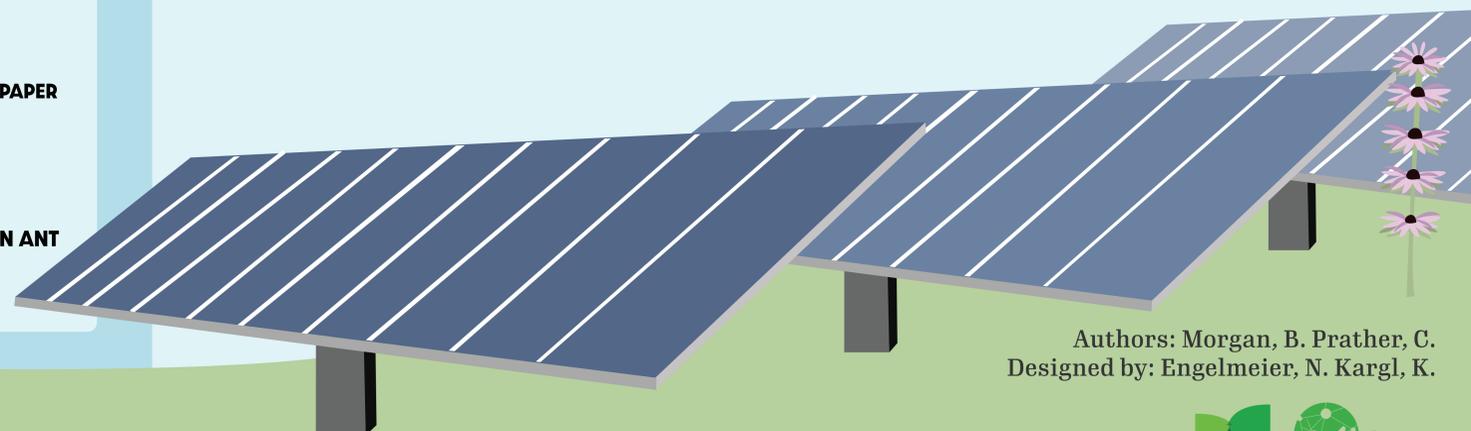
IMPORTANCE

- ↻ Solar prairies create an ecosystem to help native plants and pollinators while increasing use of renewable energy
- 🐝 The solar panels don't take away deter pollinators from using the habitat
- 🐝 Invasive species are impacting native pollinator abundance and by creating areas containing native flowering plants, it increases pollinator numbers
- ☀️ Solar energy can help combat climate change
- 🔋 The solar prairie is a much better use of the area outside of Curran Place



TOP POLLINATORS FOUND:

- SWEAT BEE**
FAMILY HALIOTIDAE
- BUMBLE BEE**
FAMILY APIDAE, GENUS BOMBUS
- CARPENTER BEE**
FAMILY APIDAE, MANY GENUS
- EUROPEAN PAPER WASP**
POLISTES DOMINULA
- HIGH NOON ANT**
FORELLUS PRUNICUS



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