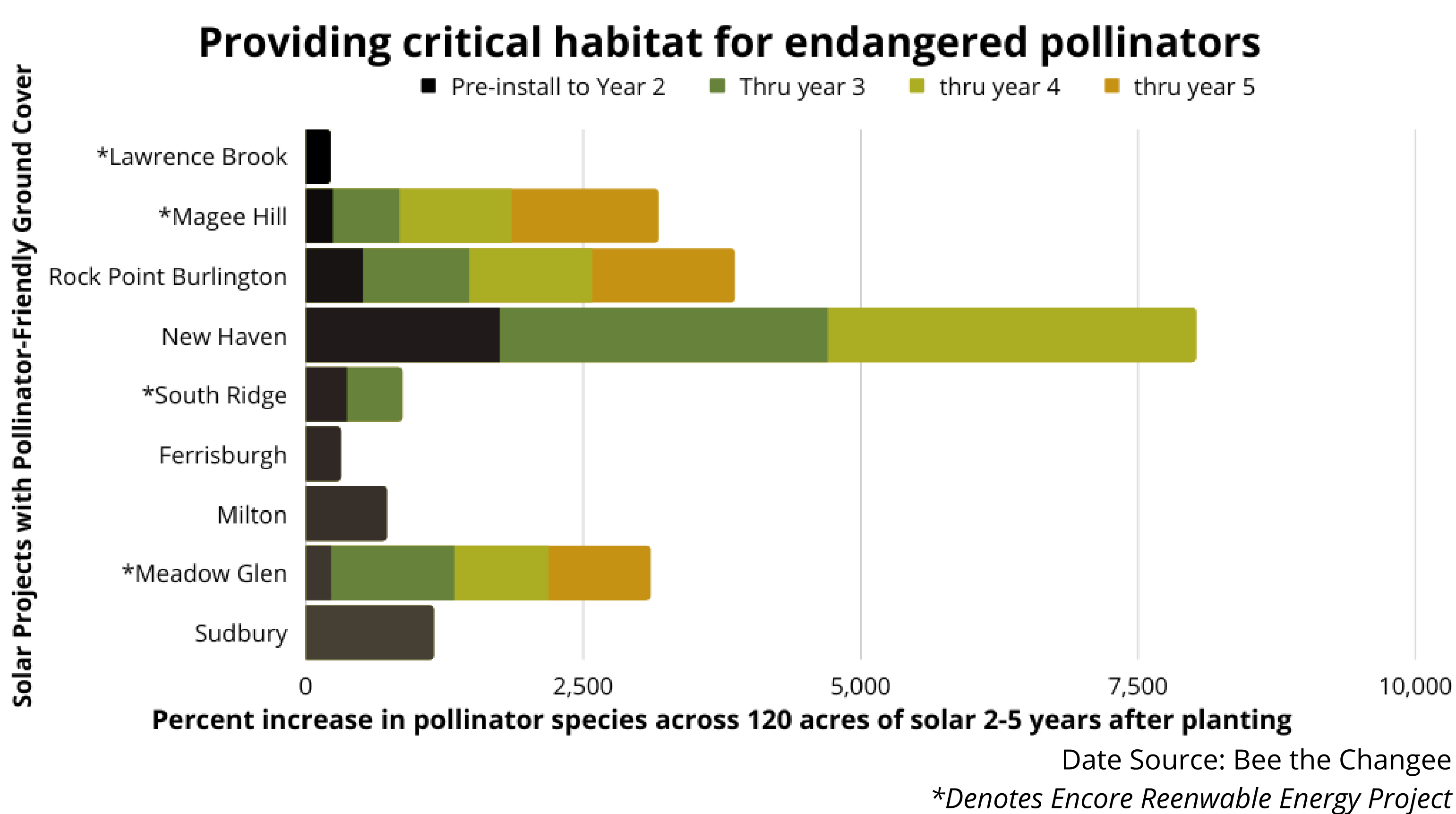


OPPORTUNITIES OF DUAL LAND USE SOLAR

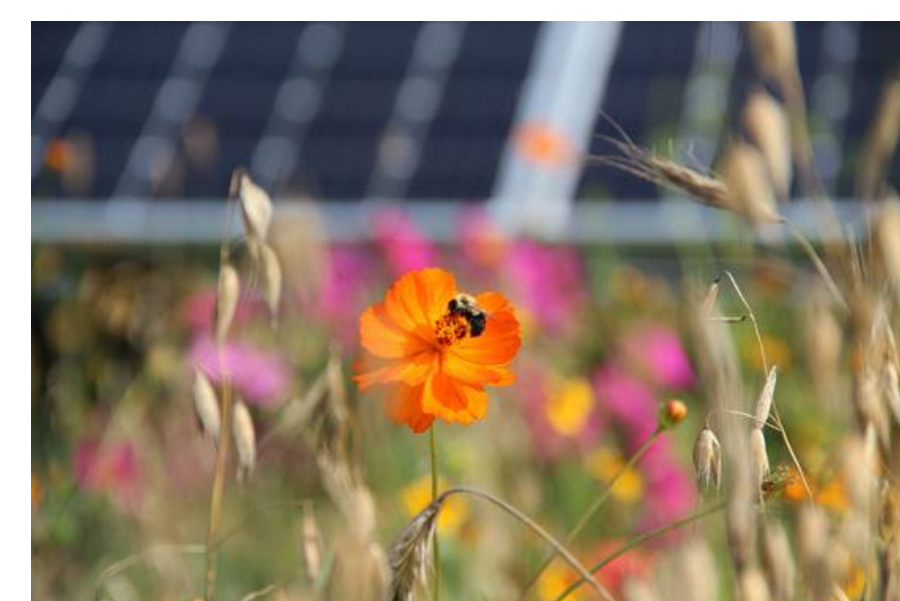
In order to meet a goal of 100% renewable energy by 2035, including the Biden Administration goal of having 40% of our nation's electricity coming from solar by that same date it is estimated that farmers and other landowners will lease more than 2 million acres of land in the U.S. for community and utility scale photovoltaic solar projects by 2030. As the footprint of solar facilities expands nationwide, there is a pressing need to understand how individual project sites can exist in conjunction with the agricultural economy and the benefits of agrivoltaics.

BENEFITS OF POLLINATOR-FRIENDLY GROUND COVER



- Better ecosystem service values than business as usual approaches to agricultural land management (hay, corn, etc.)
- Increased cost efficiency (less mowing)
- Pollination of surrounding land adds food security and resilience
- Increased solar PV production
- Added community value during permitting process
- Help restore declining pollinator populations

On average we saw a 612% increase in pollinator species during the first 2 years and 1174% increase for projects with solar friendly ground cover in 5 years.



BENEFITS OF SOLAR GRAZING

Solar grazing reduces or eliminates the need for fossil fuel-powered equipment like lawn mowers, reducing emissions and costs. Preliminary research finds that implementing managed sheep grazing at solar projects significantly increases soil carbon storage and other nutrients important for plant production.



MEET THE ELECTRIC SHEEP

- Sheep are the most common solar grazing animals.
- They are resourceful and discerning foragers, unlikely to chew on wires (like goats) and not large enough to damage racking (like cows).
- Their size also allows them to walk under the panels and in and around above ground equipment to search for vegetation that might otherwise become a shady nuisance for a solar array or be difficult to access via traditional mowers.

