

Grazing and Pollinators Research Project

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Have you ever wondered what kinds of insects are visiting the wildflowers that grow on your land? Ranches are home to so many bees, butterflies, etc., but we know very little about them. I am asking for your help with a research project about insect pollinator conservation. Ranches may provide large areas of pollinator habitat. However, we know very little about potential synergies or trade-offs between production and pollinator conservation. My lab at UNT is focusing on how grazing management affects insect pollinators and the flowering plants (including legumes) they depend on. We are looking for producer collaborators across a spectrum of management practices (and not limited to practices that you think will benefit pollinators). I'd love to talk with you!

Participation involves:

- *No changes* in how you manage your ranch.
- Initial visit to discuss where on your property we will work, your grazing management, site access, etc.
- Allowing access for us to survey insects, flowering plants, and ground cover during bloom periods in spring (April-May), summer (June), and fall (September-October). We spend one day at the site working in an area of approximately 8 acres. We identify flower-visiting insects and flowering plants, count flower abundance, and measure ground cover using quadrats (panel a) and netting (panel b). Additionally, we set out traps for flying insects that contain soapy water (panel c) for 24 hours. We take all collected insects to the lab for identification. (Monarchs and bumble bees get photographed and released alive.)
- Allowing access for us to measure biomass in December.
- We are happy to share photographs and lists of the plants and animals we find on your ranch.

We will use these data to compare vegetation and pollinator patterns under different management types, and to study what pollinators view as suitable habitat. Results will be shared via scientific publications and field days. No personally identifiable information will be released without your prior consent, and release of such information is not required to participate in the project.

