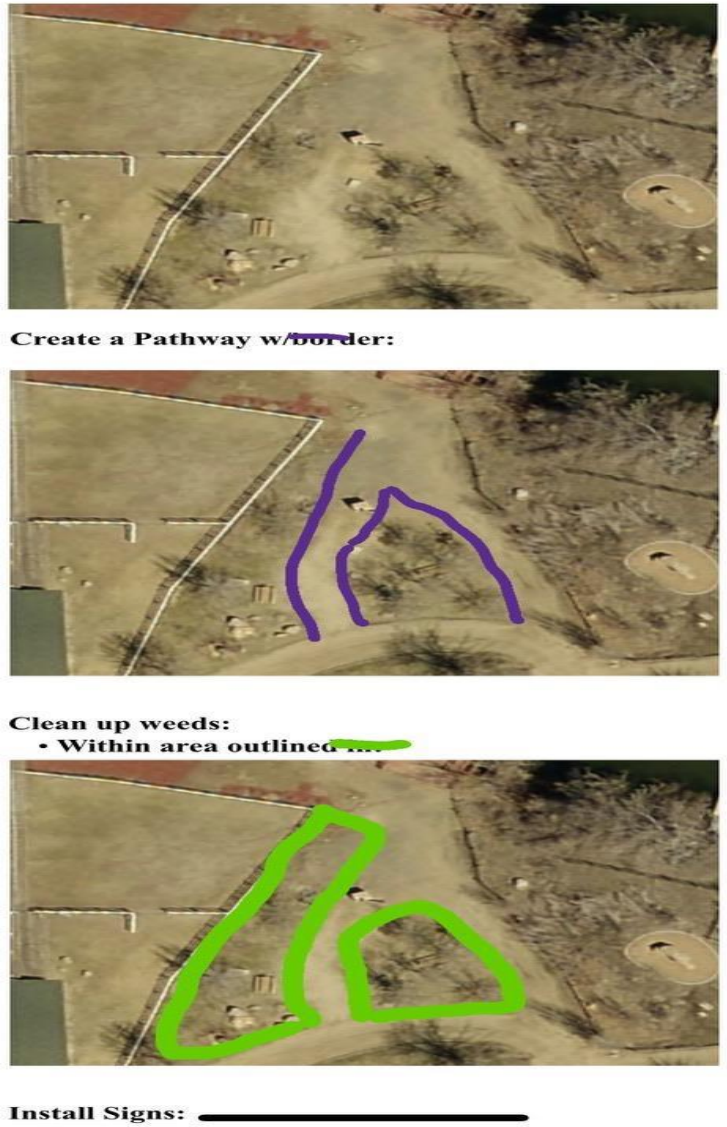
Eagle Project

Joseph Hawkins

Project Objective

- Clearing area of weeds for a picnic area
- Spreading pea gravel to make a path
- Installing educational signs
- Installing a Bee Hotel
- Adding split rail fencing around the Bee Hotel as funds allow



Project Outline

Red – Parking Area

Blue – Bathrooms

Purple – Project Area

Highlighted – Weeding

Orange - Sign

Green – Bee Hotel

INITIAL PROJECT IDEAS

Bee Hotel

- I am planning to install a bee hotel
- Look into getting bees for my project.
- I want it to look similar model it to the Galena Creek Regional Park Bee Hotel.

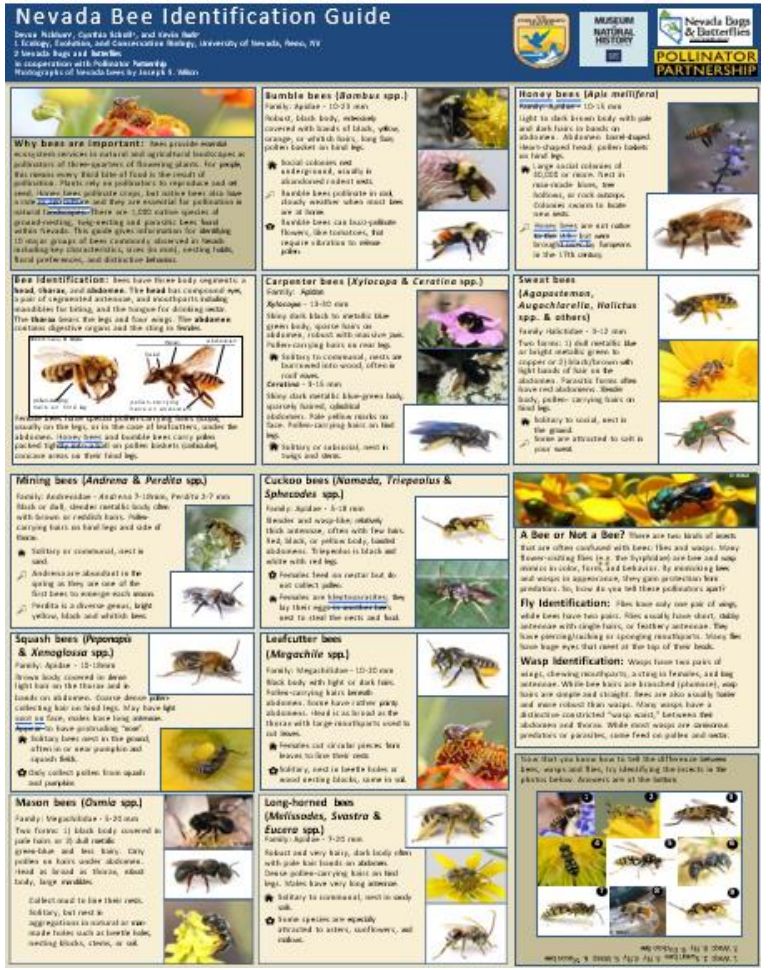
Photos of Galena Creek Regional Park Bee Hotel

Sign Design Idea

Photos from Red Hawk Golf Course

Pollinator Sign In Progress

Ants: Ants are not the best pollinators, but they do pollinate sometimes, not all ants pollinate and because they don't have wings they can not pollinate fast when they do.
Bees: Bees are the most well-known pollinators, and they spend most of their lives pollinating and use pollen as a source of food and to sustain their life.
Beetles: Beetles are one of the oldest pollinators to pollinate flowers and remain an essential pollinator today
Butterflies: when butterflies sit on flowers to drink nectar the flowers pollen becomes attached to them and as they move to different flowers
Hummingbirds: pollinating a variety of flowering plants. They do this with their long beaks whenever they fly by a flower.
Moths: Moths are not efficient pollinators for Northern Nevada. Because they visit a sheer number of flowers.



Pollinator Sign In Progress

Common Native Nevada Pollinating Plants, Which Ones Can You Spot In Our Pollinator Garden?

Catmint (Nepeta)

Western Aster (Symphyotrichum Ascendens)

Worm Seed Mustard (Erysimum)

Indian Rice Grass (Achnatherum Hymenoides)

Lilac (Syringa)

Desert Globemallow (Sphaeralcea Ambigua)

Golden Current (Ribes Aureum)

Rabbitbrush,green (Chrysothamnus Nauseosus)

Nine Bark (Physocarpus Alternans)

Purple Sage (Salvia Dorrii)

Showy Milkweed (Asclepias Speciosa)

Common Yarrow (Achillea Millefolium)

Sulphur-Flower (Erigonum-Umbellatum)

Firecracker Flower (Penstemon Eatonii)

Signs for Bees

- I found a lot of good information on Bees and a very good comprehensive sign with the organization: Nevada Bugs and Butterflies
- I was able to track down one of the leading members of this organization through some web sleuthing and emailing various emails asking for permission to use their sign.

Bees4vets

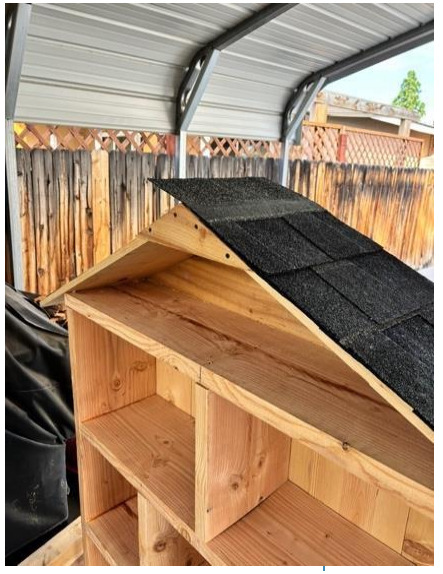
- My partner for this project is bees4vets and they are an organization dedicated to helping vets with PTSD and/or TBI by setting up a bee keeping area for them.
- Bees for vets provided an artificial bee hive for my project and I appreciate what they do for people and the bees.

Plant Showy Milkweed Seeds

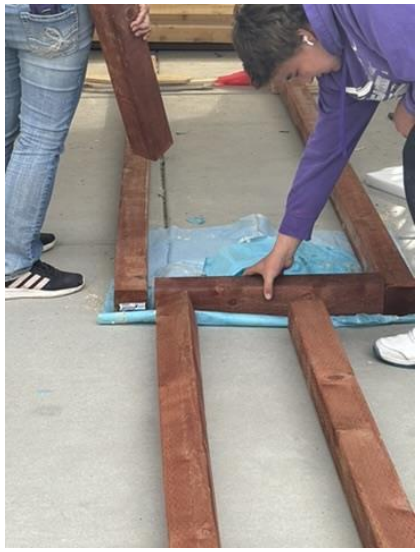
PROPOSAL APPROVED

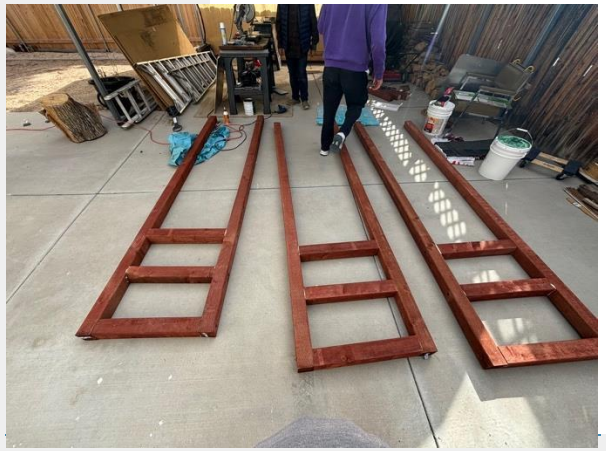
- Next Steps:
  - Finalize sign ideas
  - Permissions to use/reproduce signs made by other organizations
  - Finalize sign holder plans/bee hotel
  - Finalize layout of area
  - Put out emails for help
  - Food for volunteers
  - Get hive from Bees 4 Vets

Making The Bee Hotel



Making The Sign Holders



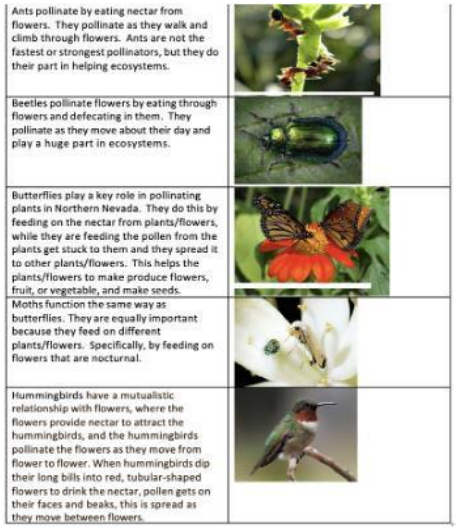


Creating the Signs

Aster Prairie (Symphyotrichum turbinellum): A shrub perennial that sprouts flowers in shades of lavender, yellow, or blue. These flowers attract hummingbirds, bees, and other pollinators. Bloom in late summer early fall.

https://www.washoecounty.gov/parks/files/Seed-Mix-Identifying-Guide.pdf; Page 6

Buckwheat, sulfur (Eriogonum umbrellatum): A flower that blooms in fall with golden yellow flowers. It loves the sun and requires little water. It attracts butterflies, moths, bees, and some birds.



Ants pollinate by eating nectar from flowers. They pollinate as they walk and climb through flowers. Ants are not the fastest or strongest pollinators, but they do their part in helping ecosystems.

Beetles pollinate flowers by eating through flowers and defecating in them. They pollinate as they move about their day and play a huge part in ecosystems.

Butterflies play a key role in pollinating plants in Northern Nevada. They do this by feeding on the nectar from plants/flowers, while they are feeding the pollen from the plants get stuck to them and they spread it to other plants/flowers. This helps the plants/flowers to make produce flowers, fruit, or vegetable, and make seeds.

Moths function the same way as butterflies. They are equally important because they feed on different plants/flowers. Specifically, by feeding on flowers that are nocturnal.

Hummingbirds have a mutualistic relationship with flowers, where the flowers provide nectar to attract the hummingbirds, and the hummingbirds pollinate the flowers as they move from flower to flower. When hummingbirds dip their long bills into red, tubular-shaped flowers to drink the nectar, pollen gets on their faces and beaks, this is spread as they move between flowers.

Showy Milkweed (Asclepias Speciosa): is perennial that blooms a pinkish white flower in May-August and can grow up to 4ft tall. It loves moist soil and lots of sun. It attracts butterflies, bees, and hummingbirds.

Purple Sage (Salvia Dorrii):a sturdy, woody perennial that blooms purple flowers in late spring. It thrives in full sun and little water. It attracts, bees, and butterflies.

Common Yarrow (Achillea Millefolium): a perennial that grow to 3+ft tall and produce flat flowers at the top. It blooms in late summer/fall, it prefers full sun/partial shade, and some water. It attracts birds, bees, and other pollinators.

Use the QR code below to help you identify native plants in our Pollinator Garden:

1. https://www.provenwinners.com/learn/how-to/catmint

2. https://www.carsonnow.org/story/10/08/2023/northern-nevada-backyards-and-gardens-allergies-aside-rabbitbrush-native-autumn-gold#:~:text=In%20late%20summer,%20rabbitbrush,%20a%20gorgeous%20plant%20despite%20its%20unflattering

3. https://www.nevadaaudubon.org/native-gardening/bird-friendly-annuals-perennials-of-northern-nevada#:~:text=Hummingbird-Trumpet%20(Epilobium%20canum)%20Also%20known%20as%20California%20Fuchsia%20and%20Zauschneria.

4. https://xerces.org/sites/default/files/2018-05/12-022_04_XercesSoc_NativeMilkweeds_Nevada_web.pdf

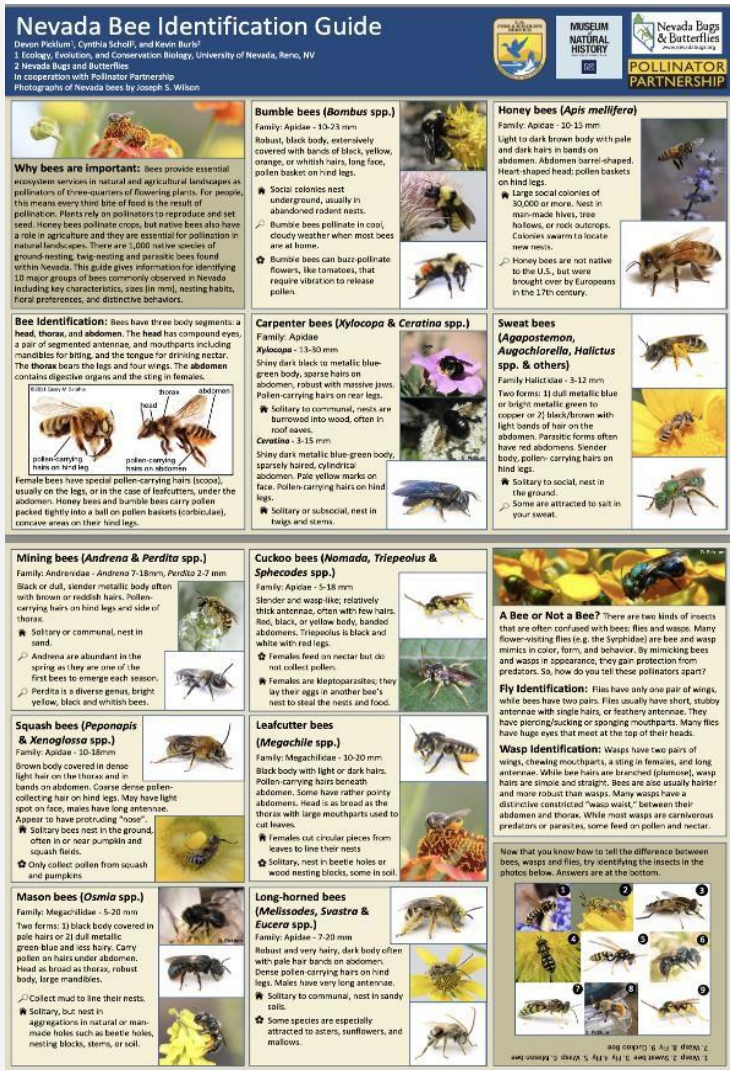
5. https://hidesertgarden.com/desert-purple-

Great Plants To Use To Start Your Own Pollinator Garden:

Catmint (Nepeta): a shrub perennial that sprouts flowers in shades of lavender, pink, or white. It thrives in any environment that it is planted. These flowers attract hummingbirds, bees, and other pollinators.

Rubber Rabbitbrush (Chrysothamnus Nauseosus): a shrub that blooms in late summer with golden yellow flowers. It loves the sun and requires little water. It attracts butterflies, moths, bees, and some birds.

Hummingbird Trumpet (Epilobium Canum): it is a vine that produces beautiful, bright cupping flowers late in the summer/early fall. It can grow in full sun or partial shade with little water. It attracts hummingbirds, bee, and butterflies.



Bees4Vets

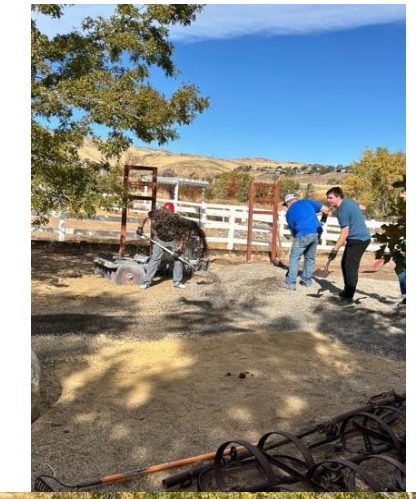
is a local Nevada 501C3 whose mission is to assist military veterans and first responders living with PTSD or TBI. Beekeeping experiences in the local community combine outdoor activity, education, and community outreach. These activities create an environment of support and training where veterans and first responders can develop the interest and skills necessary to participate in beekeeping as a vocation or hobby.

Honey bees play a critical role in America's food production. One out of every three bites of food can be attributed to the efforts of these tiny pollinators.

Signs Provided by Partners

Day 1- Installing Signs

Day 1- Installing the Walkway

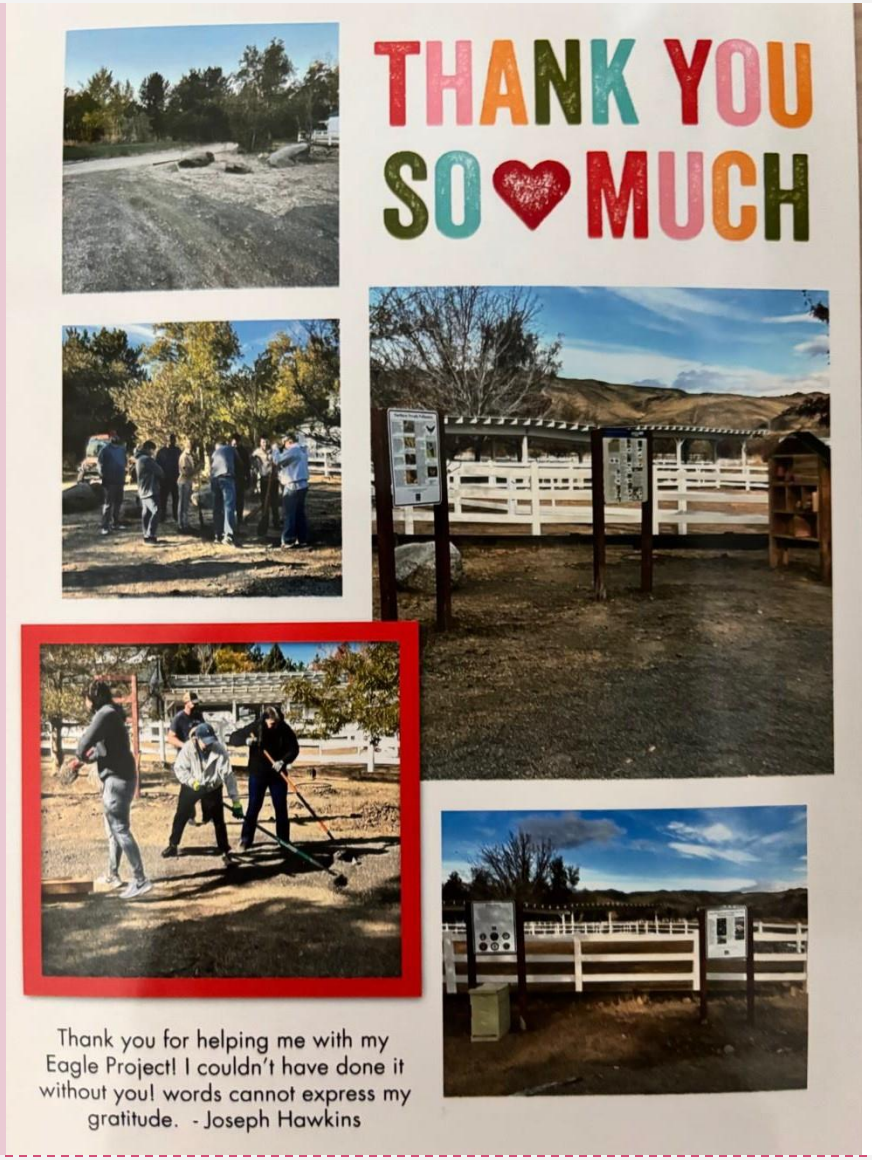


Day 2- Installing the Bee Hotel






Before and After



- Thank you all for your help and support!!!
  - -Joseph Hawkins