

Supporting Native Pollinators with Bee Hotels at Wildcat Farm

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Introduction

Solitary native bees are critical pollinators that contribute to biodiversity and food systems, but they are facing population declines due to habitat loss, pesticides, parasites, and lack of public awareness. Unlike honeybees, wild bees receive limited conservation support despite suffering similar threats. This project addresses the lack of suitable nesting habitat and public engagement by providing safe, elevated nesting structures at Wildcat Farm along with educational materials. It aims to support pollinator health while inspiring the CWU community to participate in ecological stewardship and pollinator conservation efforts.

Study Area

CWU Wildcat Farm – a student and faculty operated farm in Ellensburg, WA, that practices sustainable agriculture and engages the campus community in environmental stewardship.

Project Description

Twelve bee hotels will be installed at the farm using non-toxic, sustainable materials like untreated birch or maple, or prefabricated options. Each hotel provides shelter, larval space, and food storage for solitary bees. Educational signage will be added to explain pollinator roles and how the public can support native species.

Objectives

- Enhance habitat for native solitary bees (e.g., mason, leafcutter, carpenter bees)
- Educate the CWU community through on-site signage
- Support campus biodiversity and ecosystem resilience

Figure 1. Example of a prefabricated bee hotel



Figure 2. Educational signage

WHAT AM I?

BEE HOTELS

This box provides habitat for wild bees. The material inside is used for shelter, larval rearing, and food storage.





MASON BEES

These bees are highly efficient pollinators. Mason bees are also stingerless, and nest in tubular structures.

LEAFCUTTER BEES

These bees collect pollen on their abdomen to pollinate. They build their nests from small pieces of leaves. They generally leave the plants unharmed.





CARPENTER BEES

Nonaggressive and the size of bumblebees, these bees create nests and additional habitat for other species by burrowing into hard materials like wood.

Figure 3. Map of hotel installation sites



Figure 4. Western Bumble Bee, currently listed as vulnerable.



Anticipated Benefits

- Increased pollinator presence at the farm
- Hands-on sustainability engagement for students
- Greater community awareness of native bee conservation

Conclusion

By fostering habitat for solitary pollinators and educating the campus community, this project strengthens CWU's environmental mission and contributes to a sustainable future. The bee hotels offer a visible and lasting resource for biodiversity and outreach.

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Sustainable Development Goals



References

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