



Hosting Mason Bees

MASON BEE INFORMATION & RESOURCES





OUR MISSION

Conserve and care for vital lands, waters and wildlife of the Columbia River region through sound science and strong relationships.







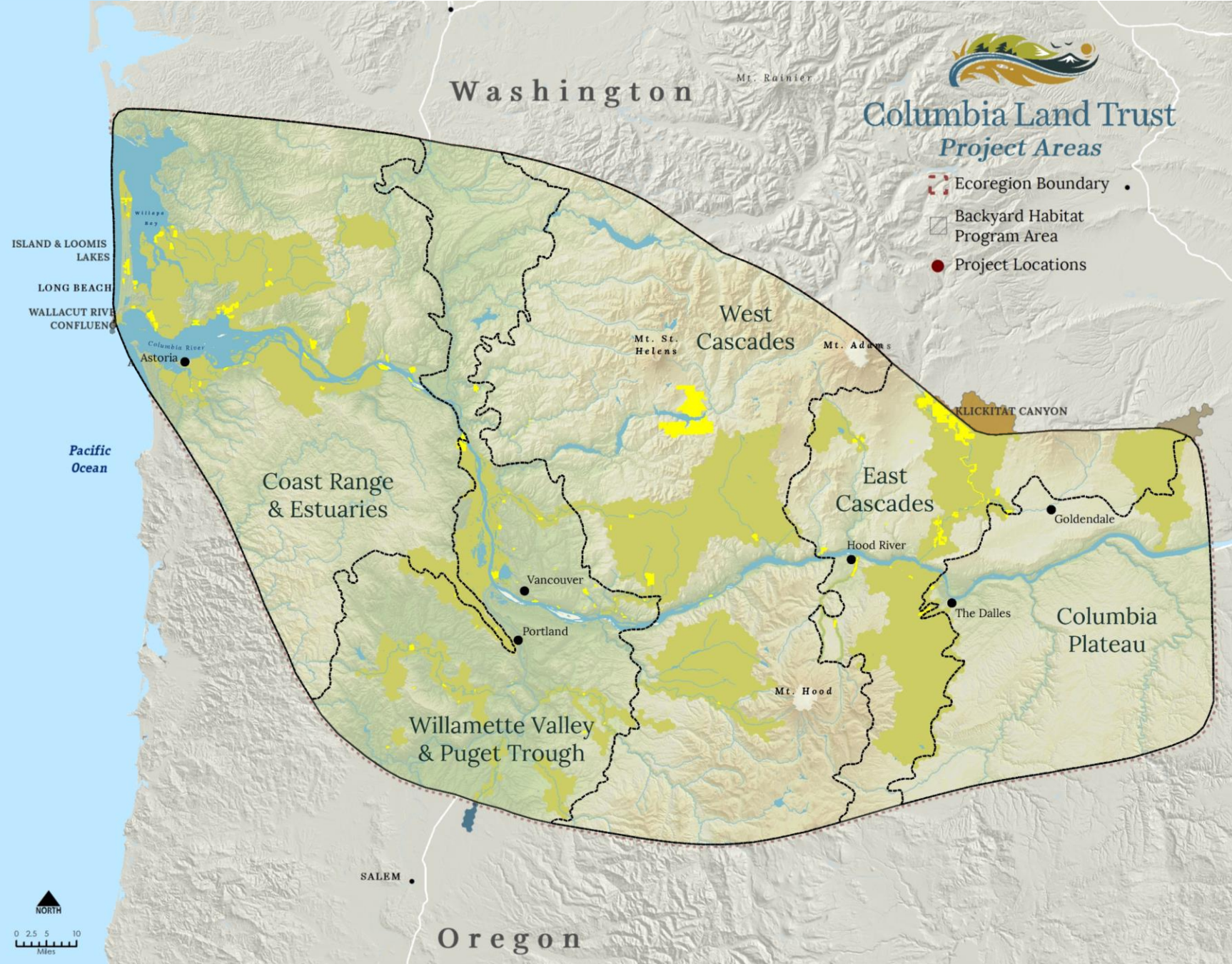
Where We Work

- Roughly 50 miles north and south of the Columbia River, from the high desert to the Pacific Ocean.
- 5 distinct ecoregions
- Conservation Opportunity Areas
- Over 50,000 acres conserved





-  **Conserved lands**
-  **Conservation areas**



Columbia Land Trust Project Areas





Columbia Land Trust

CONSERVING THE NATURE YOU LOVE

Backyard Habitat
Certification
Program



COLUMBIALANDTRUST.ORG

Backyard Habitat Certification Program

Plant Roots, Create a Habitat, Transform the World...One Yard at a Time

- Remove aggressive weeds
- Naturescape with local native plants
- Reduce or eliminate pesticide use
- Provide wildlife stewardship
- Manage stormwater on site



Partner Organizations



Community Partners

80+ community projects, including:

- Verde & Habitat for Humanity: Cully/NE PDX - free raingardens & naturescaping
- Asian Pacific American Network of Oregon: Harrison School, Division St Bridges Placemaking Project
- Centro Cultural: naturescaping at community center & Spanish language educational videos



Why raise Mason bees?

- One out of three bites of food we enjoy is pollinated by bees.
- Mason bees are active in cool weather when fruit trees and berries are blooming.
- Mason bees pollinate 95% of flowers they visit; honeybees pollinate 5%.
- Mason bees are gentle, and will stay on your property when habitat supports them.



*mason bee on dandelion
flower by Ronda Brady*



Meet your Mason bees

SCIENTIFIC NAME: *OSMIA LIGNARIA*

NATIVE TO PACIFIC NORTHWEST REGION

- Shiny, iridescent, green to blue-black
- Slightly smaller than a honey bee
- Gentle disposition
- Perfect pollinator's body
- Four wings & antennae
- Mandibles for mason work with mud
- Solitary and gregarious
- Observable at close range without fear
- A real bee that some mistake for house fly



Mason bee life cycle

- 1 Males emerge first; females 2-3 days later.
- 2 Females mate for one day; males continue mating other females for 10-14 days. Males die after mating ends.
- 3 Egg is laid into pollen-nectar ball.
Female lays 30 - 35 eggs in life span.
Females die after 6 - 8 weeks.
- 4 By summer, eggs have hatched into larvae, nourished by food stores set out by mother.
- 5 Larvae spin themselves into cocoons, bronze in color, that rest in chambers.
- 6 New adults hibernate through fall & winter.



Plants for healthy Mason bee habitat

CREATE A GARDEN THAT INCLUDES PLANTS THAT BLOOM IN MARCH TO JUNE



“There is growing evidence that our native bees prefer native flowers to non-native flowers.”

**BRINGING
NATURE HOME ***

*Douglas W. Tallamy, Bringing Nature Home, Timber Press, Portland & London.

Philadelphus (mock-orange) by E.O., Cluster of Oregon Grapes by Micah Watson, Salal flowers by Steve Estvanik, Blooming macro lupine flower by stock_studio, Aquilegia Canadensis by Akslocum, Great Camas (Camassia Leichtlinii) by Jennifer Bosvert



COLUMBIALANDTRUST.ORG

Mud is a must!

- Mason bees need wet clay soil within 50-100 feet from the nest.
- Lack of clay-like mud is the number one reason for failure.
- Remember the mud pies you made as a child?
- Mason bee mud: No gravel, grains of sand, or bark.



Mason bee homes

DESIGN • FUNCTIONALITY • LOCATION



Mount the house where it is protected from rain and gets the warmth of early morning sun.

Facing South or SE is best.



Mason bee nesting materials

PAPER, CARDBOARD, OR NATURAL REED TUBES | WOOD OR CORN NESTING TRAYS



Avoid using drilled blocks of wood and bamboo tubes. Difficult to open for cleaning and harvest of cocoons.



Mason Beekeeper's Calendar



Key to Mason bee health

OPEN



- Scissors/knife
- Chopstick/screwdriver
- Hand lens to examine cocoons.
- If holes: Discard

WASH



- Pan or bowl
- Water+.05%bleach
- Solution(2TBL/gal) to remove pollen mites.

DRY



- Kitchen strainer
- Blotting paper or cloth.

PROTECT



- Metal cookie/tea tins
- Hammer/nail or drill
- For air holes. Or
- Humidified container

STORE



- Store in dry, unheated, dark room below 45F.
- Or at constant 34-38F in humidified container.



*From Oct through Dec,
Mason bees will not
emerge, even if warmed to
room temperature.
Clean cocoons in lukewarm
water to remove predatory
pollen eating mites and
cocoons penetrated by
parasitic wasps.*



- **BACKYARD BIRD SHOPS**
- **PORTLAND NURSERY**
- **CROWN BEES**
- **HOME ORCHARD SOCIETY**
- **BEEDIVERSE**
- **BACKYARD HABITAT
CERTIFICATION PROGRAM**



Native plants for Willamette Valley yards,
regional guide to native plants

[HTTP://WWW.OREGONMETRO.GOV/NATIV
E-PLANTS-WILLAMETTE-VALLEY-YARDS-
BOOKLET](http://www.oregonmetro.gov/native-plants-willamette-valley-yards-booklet)

*Nurturing Mason Bees in Your Backyard in
Western Oregon*

Oregon State University Extension Service
[HTTPS://CATALOG.EXTENSION.OREGONSTATE
.EDU/EM9130](https://catalog.extension.oregonstate.edu/em9130)

GUIDE

Resources to support Mason bees





Thank You

CHECK OUT OUR UPCOMING VIRTUAL EVENTS:

columbialandtrust.org/news/tours-events



MAKE A GIFT TODAY

columbialandtrust.org/donate