

# Heligate Native Garden and Ecology Guide



The Hellgate Native Garden and this Ecology Guide would not have been possible without the generous support of the following organizations:

Hellgate PTA

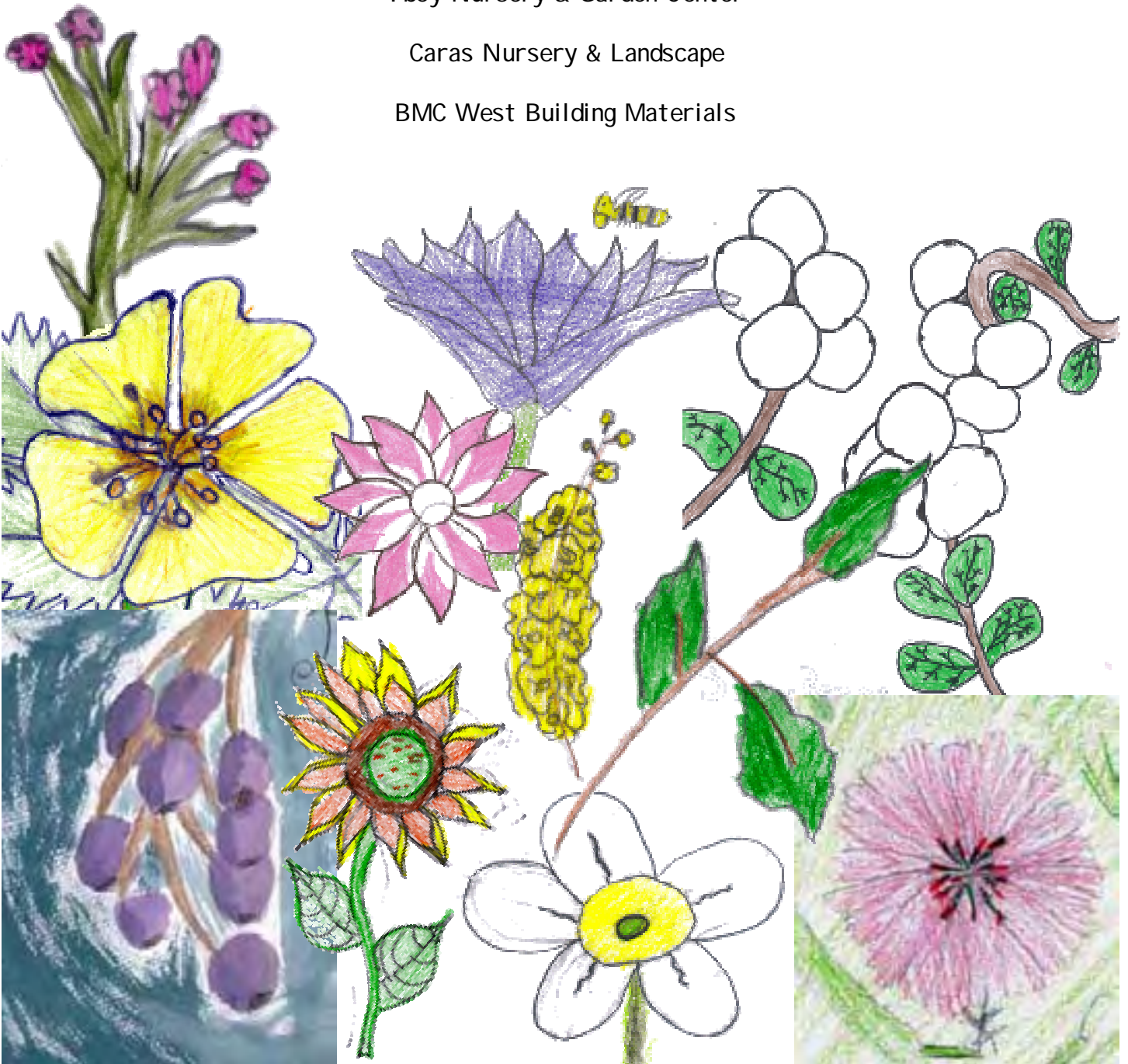
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# Bitterroot

## Plant description:

Scientific name: *Lewisia rediviva*

The flower doesn't have a stem, but has very small leaves. The natural colors are pink and white.

It grows from April to July, and flowers usually come up starting in May. It grows in rocky, dry areas. It is found from southwestern Canada to Southern California, in most western states. It is abundant in Montana.

## Uses:

The Flathead, Kootenai, and the Nez Perce tribes used the Bitterroot for food and medicine. To use the roots as food, they dried them, then boiled them and ate them in the winter.



An open Bitterroot flower and two buds.



Leaves of the Bitterroot with no flower yet. Look for the leaves starting in April.

## Other cool facts:

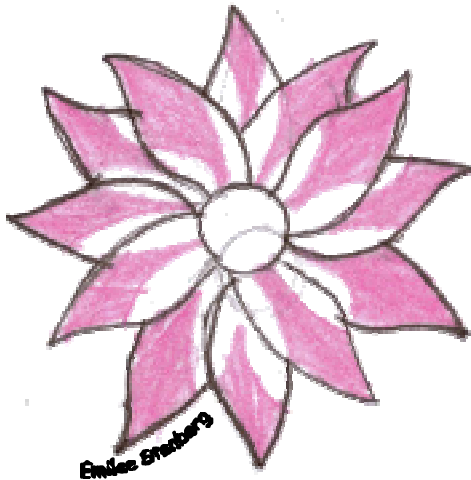
The Bitterroot is native to Montana, and is Montana's state flower. The roots are large and deep, and they were an important food for Flathead and Kootenai tribes.

## Where to find Bitterroot around Missoula:

Take a hike up Mt. Jumbo or Waterworks Hill and look for rocky, gravelly areas. You'll see Bitterroot blooming usually around the middle to end of May.



Alani Rippee



Emilee Embury



Jessie Maclay

## A special history:

Bitterroot got its scientific name, *Lewisia* because it was named for Meriwether Lewis, of the Lewis and Clark expedition. They collected a sample of this plant from near Lolo creek, at Traveller's Rest when they came through Montana. It was dried and taken back to Philadelphia as a pressed plant. After some time, the dried plant looked like it was starting to grow, and when it was planted, it grew and bloomed! The second part of the species name, *rediviva* means "revived" or "coming back to life" because the plant can grow again after looking quite dead and dried out.



Tyler



IaOng Vang



# Blanketflower

## Plant description:

Scientific name: *Gaillardia aristata*

The plant is 8 to 30 inches tall. It has large flowers that are orange in the middle, with yellow tips on the petals. It grows and flowers from June to August or September.

It grows in most of the Northern US and Canada. It is mostly found in dry areas, in open grasslands or in pine forests.



Lily McConnachie

## Uses:

The Blackfoot tribe made a tea from this plant to treat upset stomach. The tea was also put on sore eyes and on the skin to treat hair loss and saddle sores. Powder from dried plants was sniffed to treat stuffy noses.

## Other cool facts:

Blanketflower is easy to grow in gardens. There is a related kind that is grown in gardens that is not wild, and has darker red petals.



Blanketflower growing with other native plants in a dry grassland.

Bees and butterflies often come to this plant for nectar.



Blanketflower in the garden at Hellgate Elementary in September. This plant will usually be blooming when you come back to school in the fall.



Connor Campbell



Karenne Heinze

### Where to find blanketflower around Missoula:

Look for blanketflower on Mt. Jumbo, Mt. Sentinel, and in the Clark Fork Native prairie by the river trail in Missoula. You may also see it planted in lots of people's yards.

# Yarrow

## Plant description:

Scientific name: *Achillea millefolium*

Yarrow has a flat top, white flowers, and frizzy leaves. The leaves look like fuzzy pipe-cleaners. The flowers can be up to three feet tall (three times the size of a ruler).

It grows in dry areas, grasslands, alpine areas, and tundra. It flowers from May to September.

## Uses:

The Crow, Flathead, and Kootenai used this plant. The Crow mixed it with goose grease to use as a salve. The Flathead and Kootenai chewed the leaves and put them on wounds to stop bleeding and keep the wound from being infected.



Yarrow photos: Paul Alaback



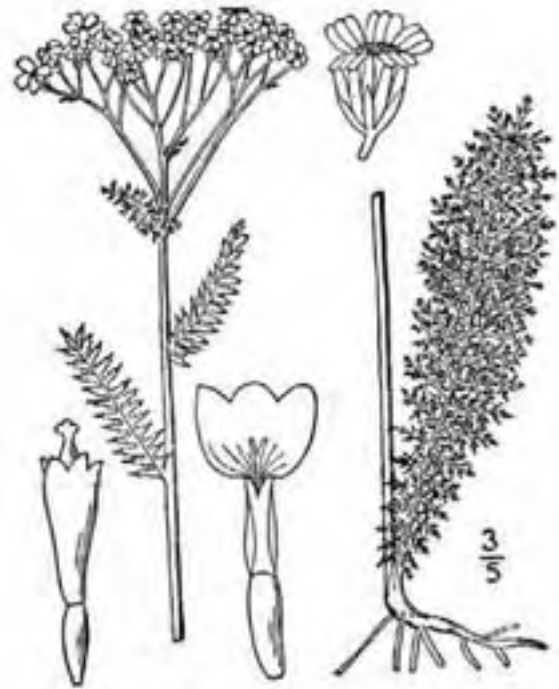
## Other cool facts:

Butterflies come to this plant in the spring and summer. This plant is good for planting in water-wise gardens. But it can become a fierce competitor and crowd out other plants in the garden.



### Where to see it around Missoula:

You can see both native yarrow and garden varieties of yarrow in many people's yards in Missoula. You will also find the native yarrow growing on Mt. Sentinel, Mt. Jumbo, and in lots of natural areas around town.



USDA Plants Database



Close up view of the seeds of yarrow. This plant is very easy to grow from seed.



# Pussytoes

## Plant description:

Scientific name: *Antennaria microphylla*

The flowers are white or pinkish in clusters. The leaves are grayish-green and soft and fuzzy on both sides. It grows in a circle shaped clump in the garden.



Dylan Baker

The leaves stay all year, but the flowers bloom from May or June to September.

It grows wild in open areas that are mostly dry. It grows at all elevations. It is found from western Canada to Colorado.



Photo copyright Jim Riley

## Uses:

The Lakota people of South Dakota used pussytoes externally to reduce swelling. The Blackfeet in Alberta chewed the leaves for their flavor. In some areas, the Thompson and Creek tribes used pussytoes to treat coughs and colds.

## Other cool facts:

This is a good native plant to use for gardens that don't use a lot of water. There are lots of species of pussytoes that look very similar.



Photo copyright Clayton J. Anteau



Alani Rippee



Kate Zimmer



The hairy leaves of pussytoes help keep it from losing water, and help it grow in dry, rocky places.

# Alumroot

## Plant description:

Scientific name: *Heuchera cylindrica*

The plant has whitish yellow or greenish flowers with five petals. Each flower is less than an inch in size. The flowers are on a long stem that can be up to two feet high.

The plant grows in the woods and on rocky hills. Its flowers are out from May through August.



Ben Legler



Kristina Simpson

## Uses:

The tribes that used this plant were the Blackfeet, Flathead, and Kootenai. They chewed the leaves or made them into tea to help treat stomach cramps and diarrhea. The Kootenai also made a tea from the roots to treat tuberculosis.



Ben Legler

Close-up of alumroot flowers.



Ben Legler

Alumroot leaves.

# Oregon Grape

## Plant description:

Scientific name: *Mahonia aquifolium*

The leaves are dark green, shiny, and have spines. The leaves look kind of like holly leaves. The leaves stay on the plant all year, and sometimes turn reddish in the fall.

It has yellow flowers in the spring (April to June) and purple or blue berries in the summer and fall.

Oregon Grape grows on open slopes and forests in the foothills of Southern British Columbia, Idaho, Montana, Oregon, and Washington.

## Uses:

The Flathead and Blackfoot tribes used this plant for medicine. The Flathead used it to help with childbirth by making a tea from the roots. The plants and roots were also crushed to help prevent infection and heal wounds. Various tribes, and also pioneers, used the berries for food.



Anni ka Sohl berg



Cady Lanzel

Oregon Grape berries



Mary Bricker

Flowers of Oregon Grape in the spring.



Mary Bricker

## Other cool facts:

The Oregon Grape is a fruit. The fruit can be used in cooking. It has edible berries that birds love. You can make jam or jelly with the berries.



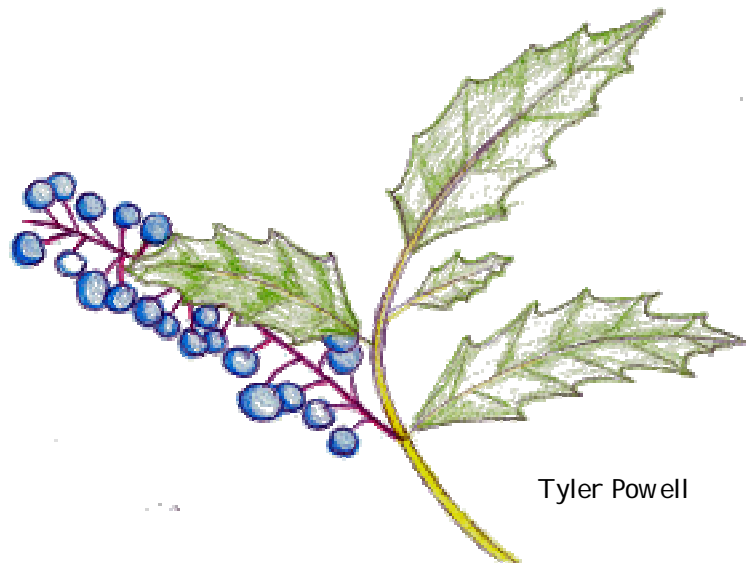
Eli zabeth McLaughlin



Mary Bricker

### Where to find Oregon Grape around Missoula:

You will see this tall Oregon Grape planted in lots of places around Missoula. If you go to Pattee Canyon or other wooded places nearby, you may also find a similar species of Oregon grape that is smaller and lower to the ground. But the flowers and berries and leaves are very similar.



Tyler Powell

# Thimbleberry



## Plant description:

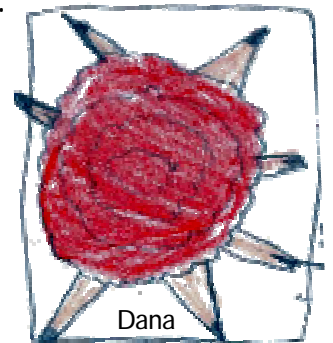
Scientific name: *Rubus parviflorus*

The thimbleberry can grow over 5 feet tall. It does not have thorns. The berries are red and edible. The berries look like raspberries. The flowers are white with five petals. They have large soft leaves. The leaves can be 10 inches across.

The plant grows naturally in Western North America, It can grow in moist or dry regions, but it grows best in moist shady areas.

## Uses:

The red berries are edible. Many tribes ate the berries fresh for food.



## Other cool facts:

Thimbleberry plants are shrubs. They are related to roses. There are other similar species. The leaves can be used as plates or to wrap things in. Bears and birds also eat the berries. Deer sometimes eat the stems of the plant.







# Snowberry



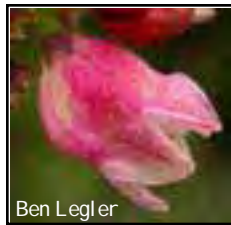
## Plant description:

Scientific name: *Symphoricarpos albus*

Snowberry is a small shrub that has very small pink or white flowers in the summer. It has white berries that sometimes stay on the plant all winter.

Snowberry has small oval-shaped leaves that are attached to the stem in pairs, with leaves on opposite sides of the stem.

The flowers are very small and are white or pink. They are shaped kind of like little bells.



## Uses:

The Flathead crushed the leaves, berries, and bark together to make a medicine to spread on burns. They also used that medicine to treat cuts and chapped skin. The Flathead made a tea with snowberry bark and wild rose to use as an eyewash. The Nez Perce made a tea from the twigs to treat fevers.



## Other cool facts:

The berries are bitter, and can be poisonous if you eat lots of them. Some tribes in the Northwest called these white berries "ghost berries" and did not think that they should be eaten by living people.



Ben Legler



Rylan Heist

The berries of the snowberry can stay on the plant through the winter.

The flowers of snowberry come out in the summer.

### Snowberry search!

There are several places where you can find snowberry growing around Hellgate School, besides the garden. Try looking for these small bushes in the hedges along the playground, and under trees near the fences.



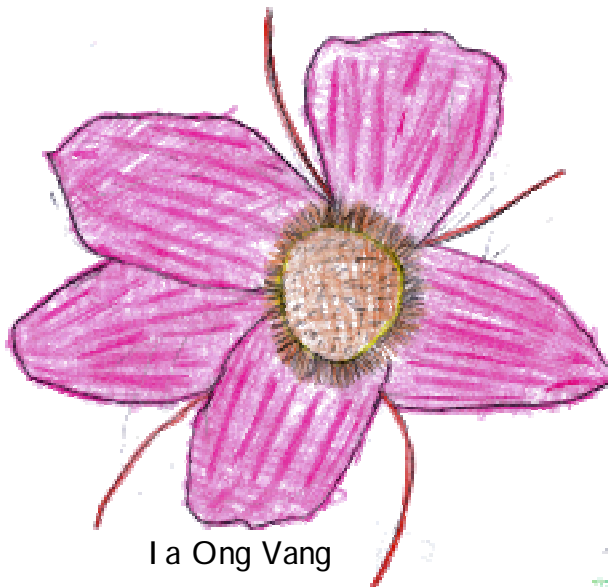
Ben Legler



Morgan Bean

# Student Researchers

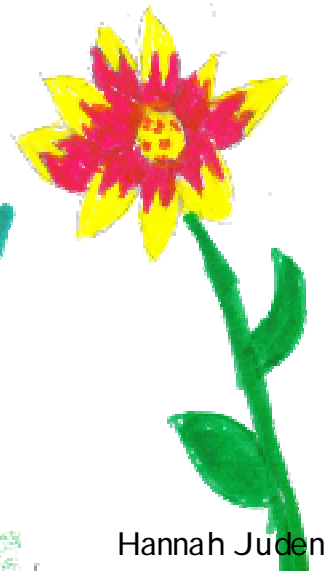
- Ashlyn Schatz..... Bitterroot, Thimbleberry
- Jessica Donahoo..... Bitterroot, Thimbleberry
- Lily McConnachie.....Blanketflower
- Karenne Heinze .....Blanketflower
- Connor Campbell .....Yarrow
- Chloe Huerta .....Yarrow
- Jessie Maclay .....Alumroot
- Cady Lanzel .....Alumroot
- Sandy Johnson ..... Oregon Grape
- Tori Somerlott ..... Oregon Grape



Ia Ong Vang



Stormy Johnson

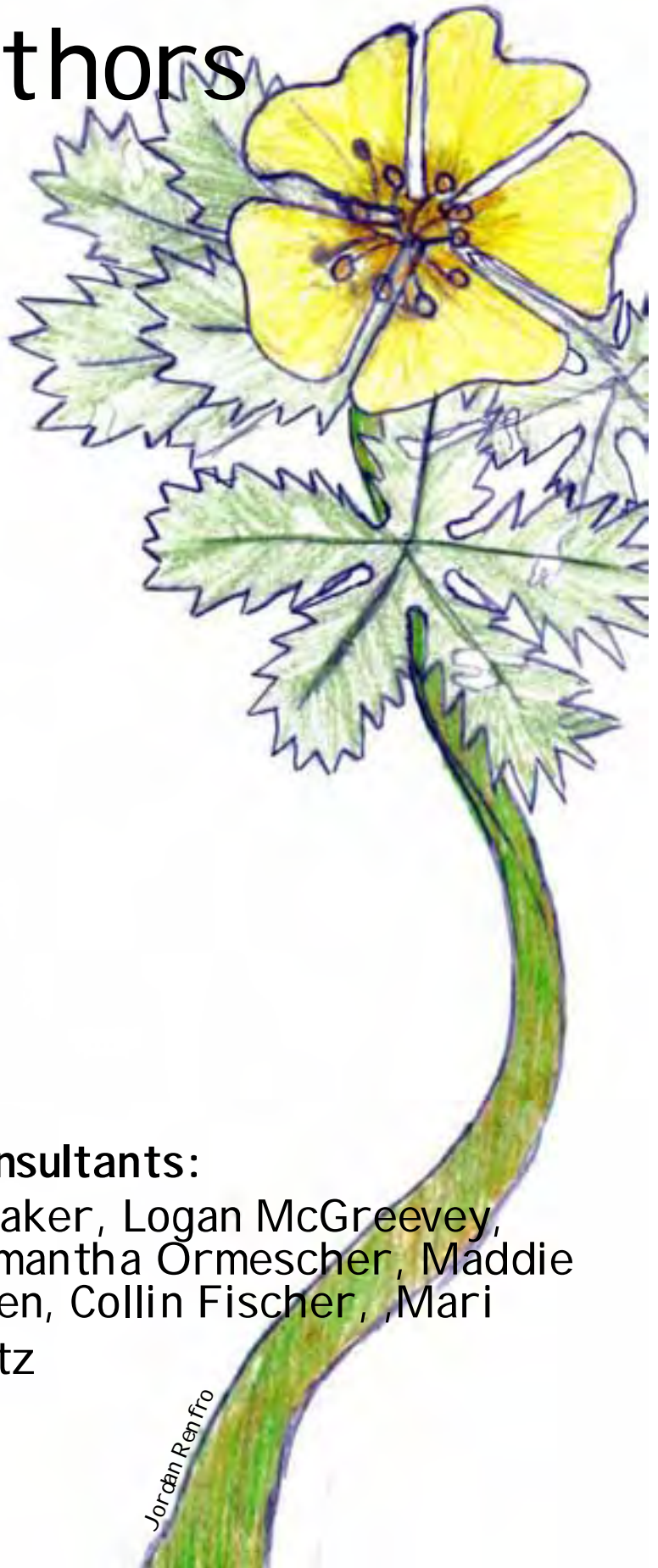


Hannah Juden

# Student Authors

## Fifth graders:

- Jessica Donahoo
  - Bitterroot
- Jessie Maclay
  - Pussytoes
- Sandy Johnson
  - Alumroot
- Connor Campbell
  - Yarrow
- Victoria Somerlott
  - Oregon Grape
- Cady Lanzel
  - Thimbleberry

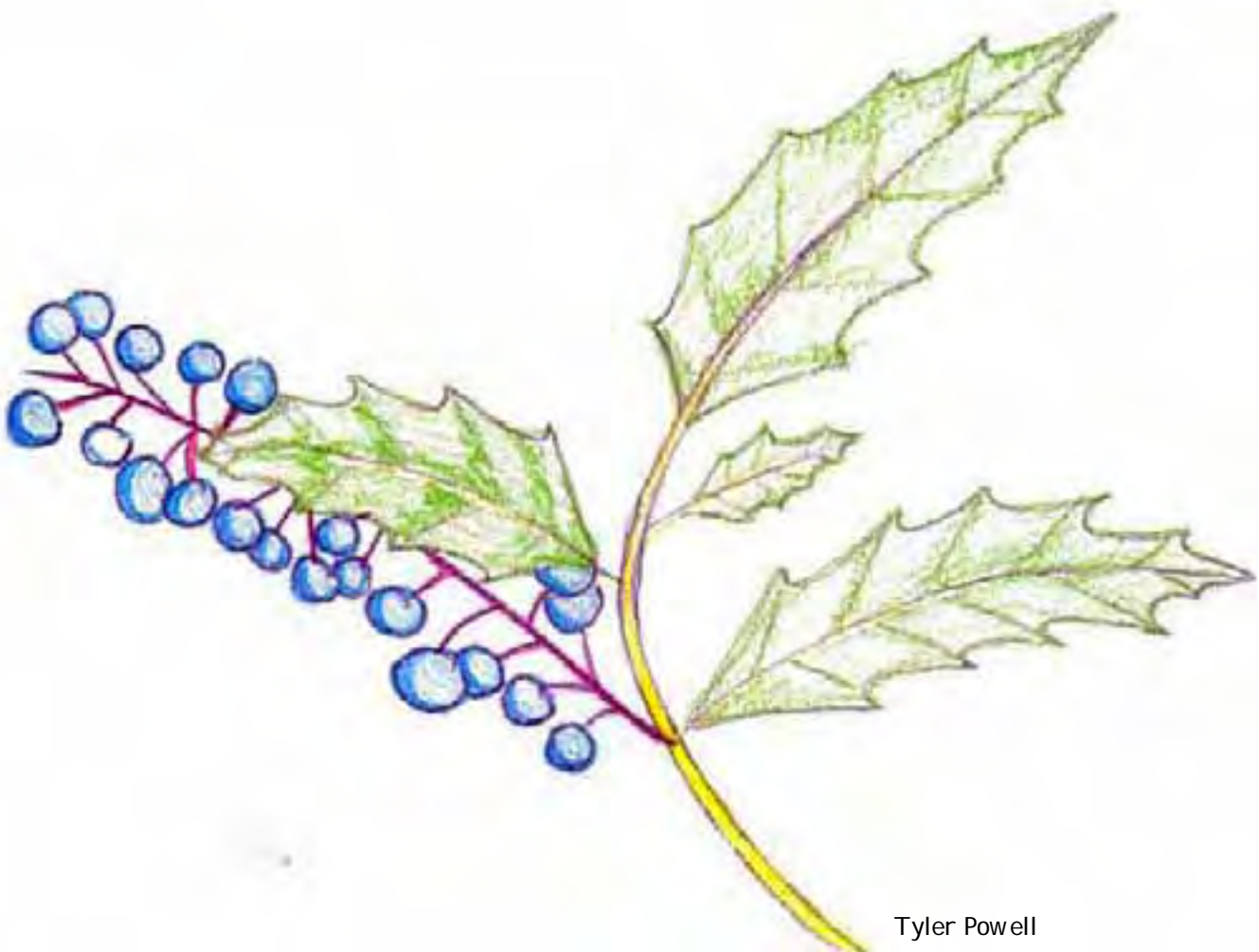


## Third grade writing consultants:

- Alani Rippee, Dylan Baker, Logan McGreevey, Kristina Simpson, Samantha Ormescher, Maddie Keiper, Nathan Dudden, Collin Fischer, Mari Lundin and Elijah Fritz

# Student Artists

Many students from Mrs. Meyers', and Ms. Cooper's fifth grade classes, and Ms. Fix's 3-rd grade class contributed their wonderful artwork to this plant guide. Artists names are listed with their drawings.



Tyler Powell

The fifth grade students in Mrs. Meyers and Ms. Cooper's classes during the 2006-2007 school year helped build this courtyard garden. It was a big project, and could not have happened without all of their hard work!

Cooper Class:

Morgan Bean  
Danielle Calcaterra  
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Michaela Edgar  
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Rylan Heist  
Chloie Huerta  
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Tyler Casas  
Jessica Donahoo  
Alyssa Harmon  
Karenne Heinze  
Austin Johns  
Stormy Johnson  
Patrick Kosena  
Lily McConnachie  
Elizabeth McLaughlin  
Azur Milburn  
Corbin Mock  
TJ Olson  
Tyler Powell  
Jason Sargent  
Ashlyn Schatz  
Maxwell Simpson  
Annika Sohlberg  
Victoria Somerlott  
Deon Ulrigg  
Mari Ward  
Jordan Winchester  
Kate Zimmer

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