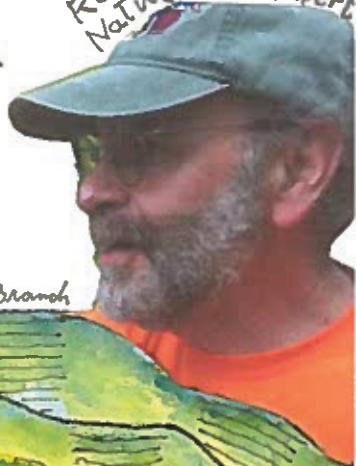


RIVERWALK

The Eco Restoration

Russa Cohen
Native Plant Expert



Dorset Mountain - Origin of the West Branch



Homage to Tallie Pericli & Milt Glaser

Eileen points the way

May 2011



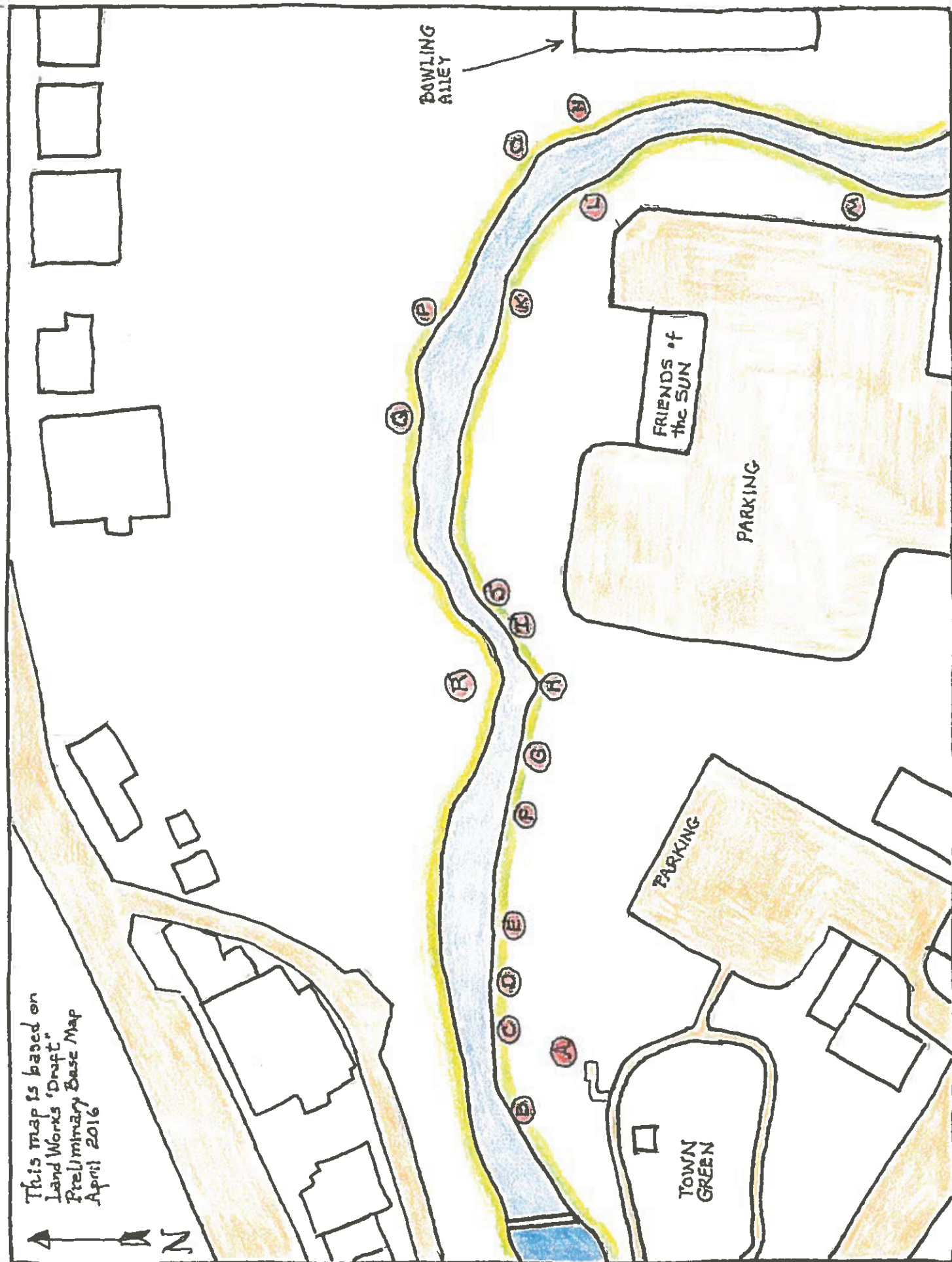
Russ Cohen leading the first botanical survey of Riverwalk (May 28, 2017). Cohen has been leading edible wild plant and mushroom workshops for more than 40 years. He has degrees in landscape planning (Vassar) and Natural Resources and a Law Degree (Ohio State University).

This workbook reveals his thoughts and observations.

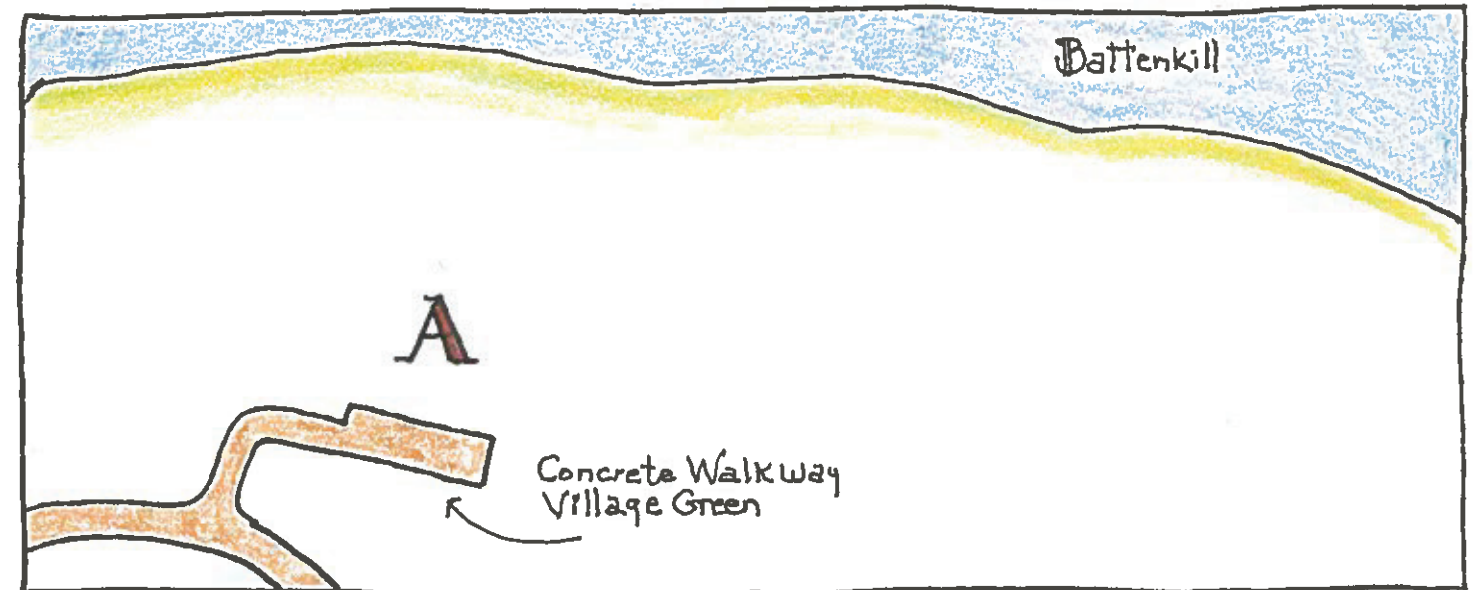
ACKNOWLEDGEMENTS

Martha Heilemann & Dana LaRose for recording Cohen's commentary, Carl Bucholt for marking each area on the map, Lisa & Bill Laberge for photos, Kathy Stewart for video.





AREA A



LOCATION: BELOW THE TOWN GREEN, OVERLOOKING THE RIVER, JUST BEFORE THE PROPOSED MARBLE STEPS LEADING DOWN TO THE RIVER.



NOTES:
WILD LETTUCE: This is a native plant. It is edible; it will add a bite to salads





EVENING PRIMROSE: A native plant with lemon-yellow flowers.



EVENING PRIMROSE



GARLIC MUSTARD: A major invasive. Hand pull before it goes to seed; put in a black plastic bag. Do not compost. Hard to eradicate but persevere. Pull before June 1.



GARLIC MUSTARD



LESSER CELANDINE: Not native but not invasive. Yellow flowers.



LESSER CELANDINE

PLANT ADDITIONS:

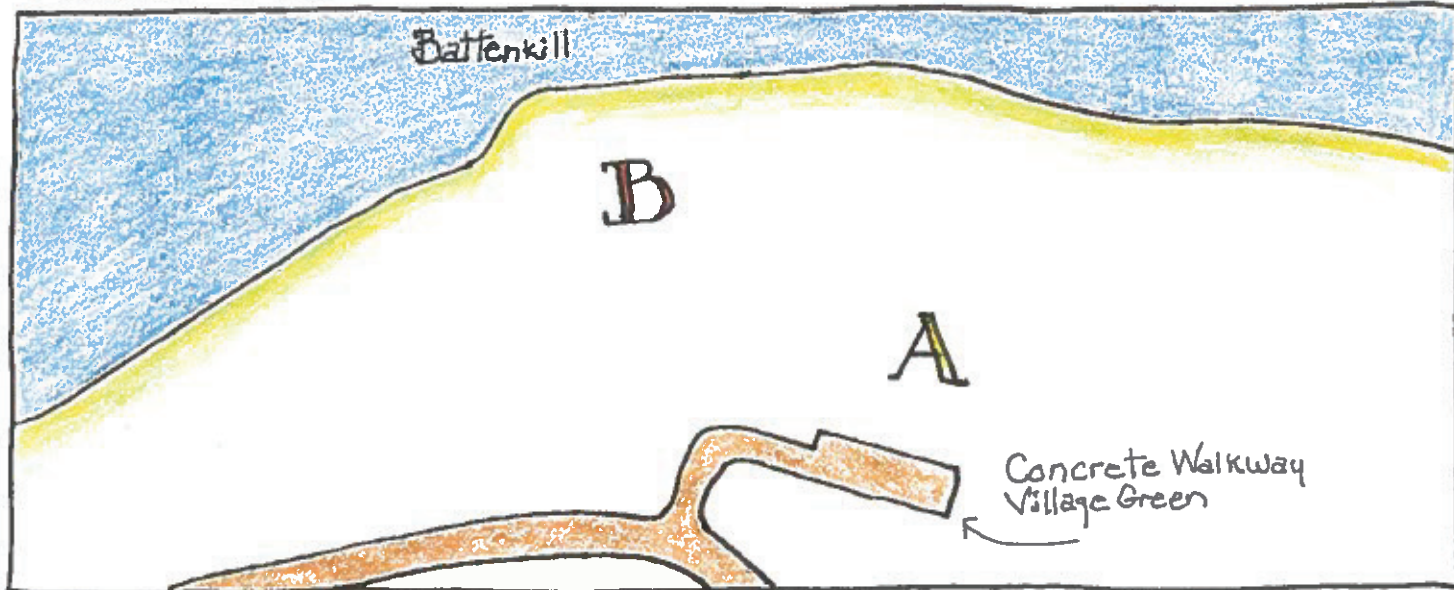


COLUMBINE

Native columbine (red flowers) could be added to this area (A). Plant 6-12 plants. They will self sow and proliferate.

NOTE: THIS AREA (A) SHOULD BE ASSESSED AFTER THE MARBLE STEPS ARE INSTALLED. CONSTRUCTION WILL IMPACT THE TERRAIN. HOWEVER, IT IS IMPORTANT THAT IMMEDIATELY AFTER CONSTRUCTION THE AREA BE ASSESSED AND PLANTED TO PREVENT AN INFUX OF WEEDS.

AREA B



LOCATION: At the base of the proposed marble steps; in front of the stone retaining wall.



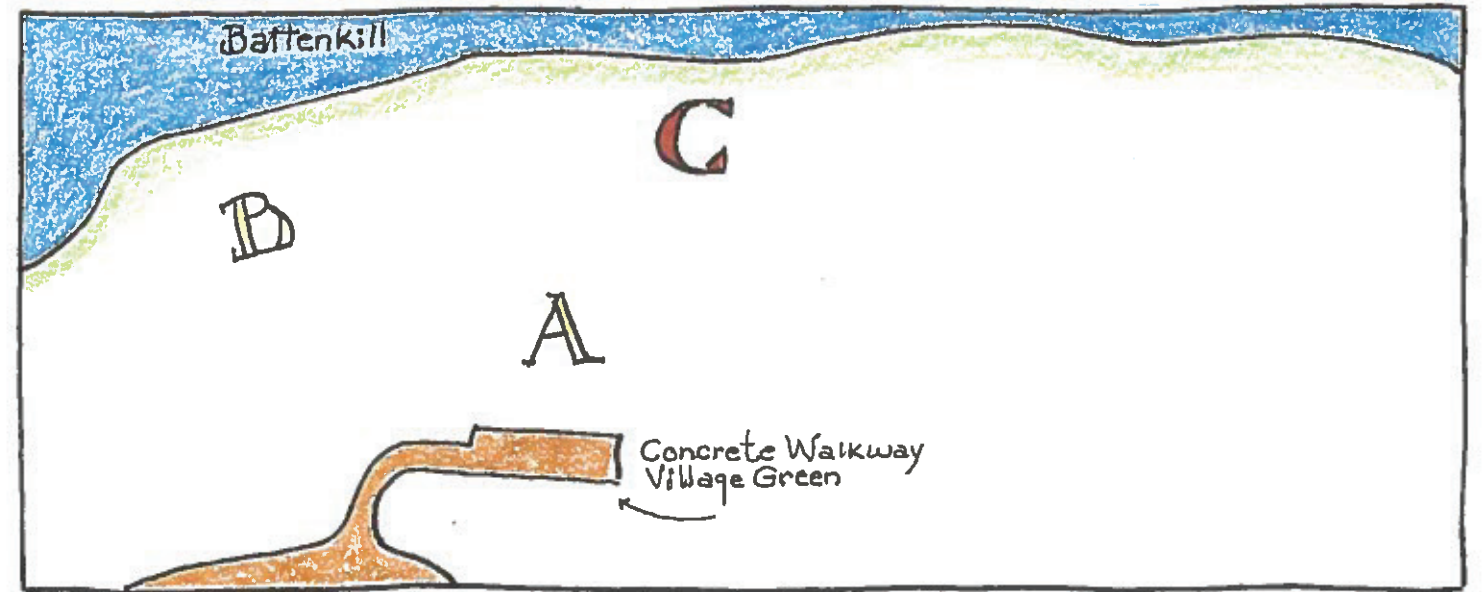
FERNS IN THE WALL

NOTES:

In the rocky area in front of the wall, plant ferns and columbine. Add ferns to those already growing in the wall in interstices. This planting will need to be demarcated for walkers.

Closer to the water (alluvial flood plain soil), plant the edible ostrich fern.

AREA C



LOCATION: Moving downstream toward Friends of the Sun. Walkway narrows.

NOTES:

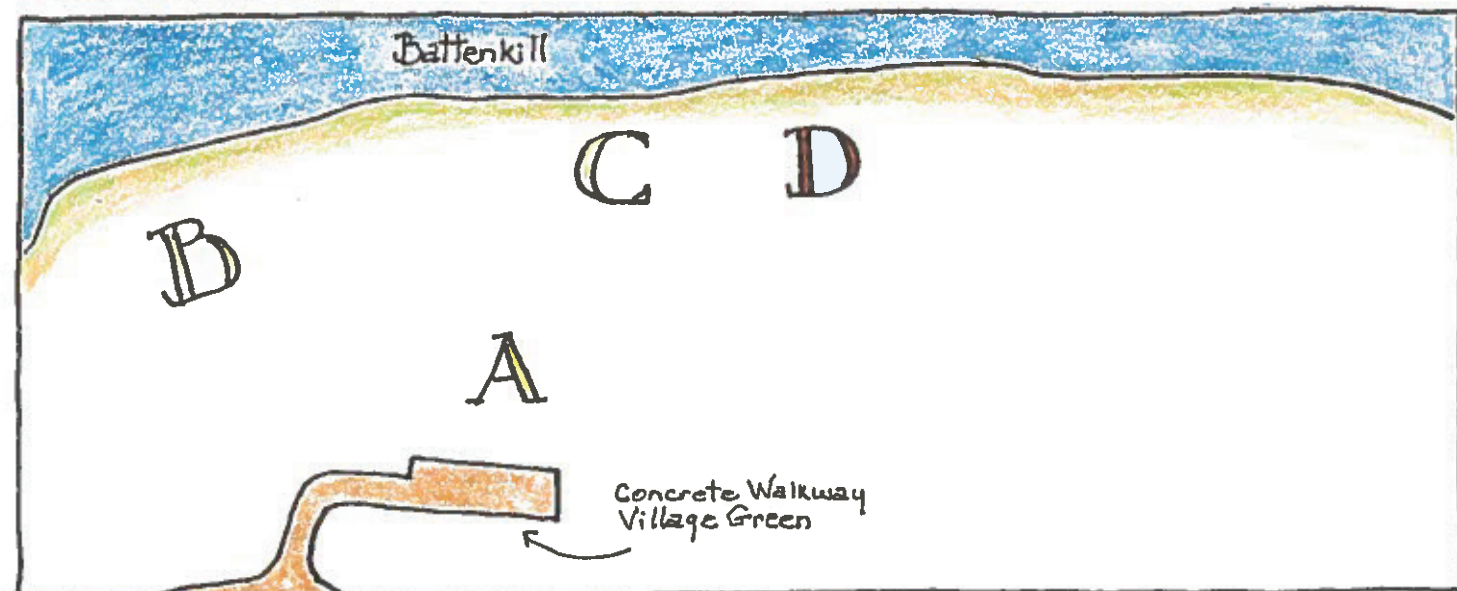
Because of changing water levels and changing water velocity, this will be a difficult area to plant.

It will require well anchored plantings.

PLANT ADDITIONS:

“... herbaceous plants and rhizomes.”

AREA D



LOCATION: Down stream from Area C; before the wood planks

NOTES:

A "swale" area; safer for planting and development.

Pointed out in this area:

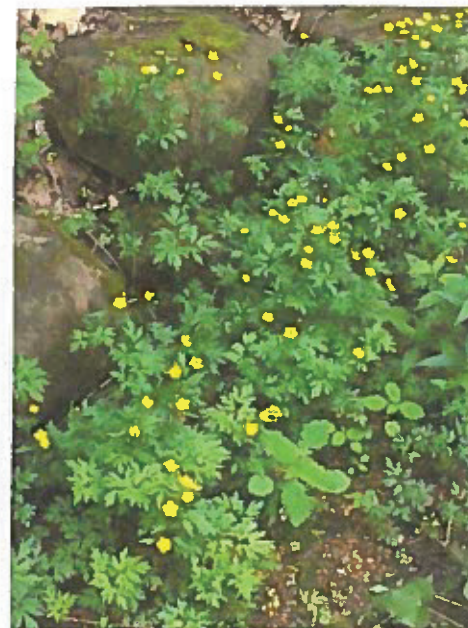
- Black Raspberry
- Dogwood
- Maple (native)
- Watercress
- Nightshade
- Buttercups

The nightshade should be removed.

The buttercup is not native; it could go or stay.



BLACK RASPBERRY



BUTTERCUP



WATERCRESS

PLANT ADDITIONS:

Saxifrage and Flowering Raspberry.
Plant to the right of the trail (damp slope with some sun).
The raspberry is low growing.

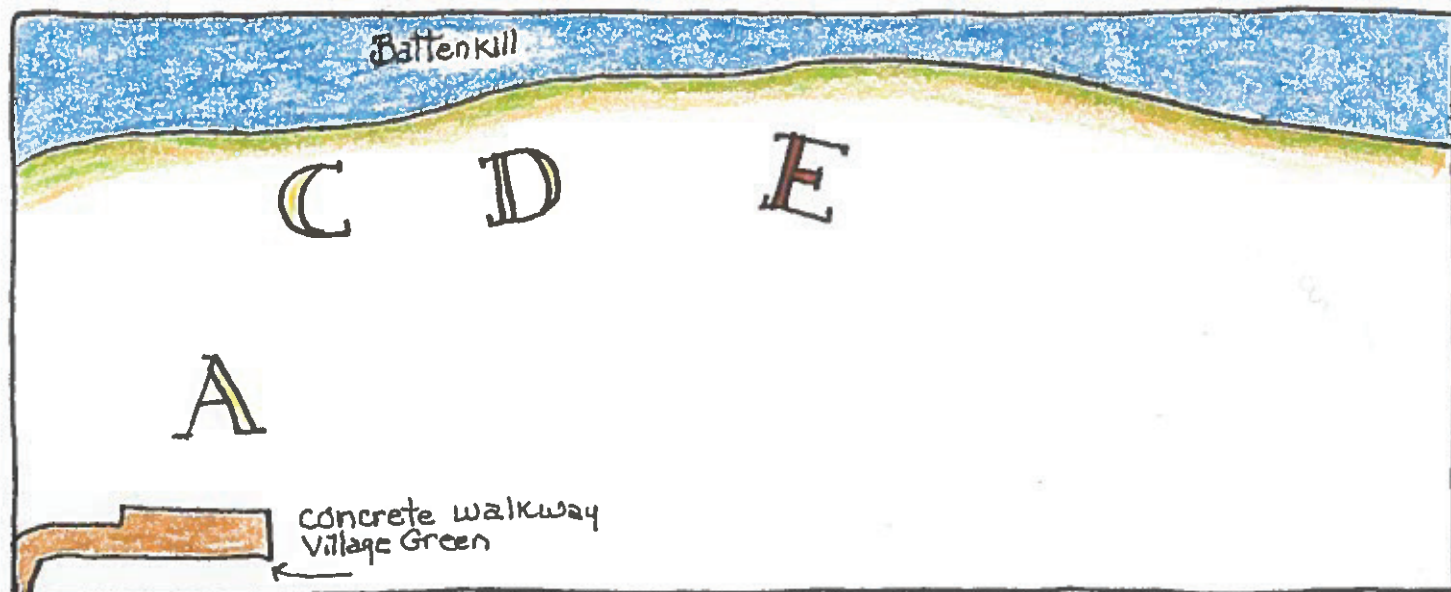


FLOWERING RASPBERRY

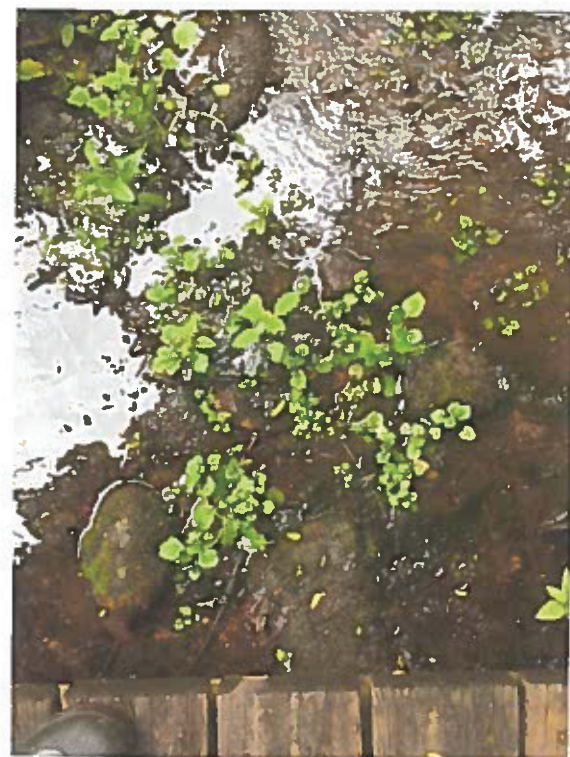


SAXIFRAGE

AREA E



LOCATION: The area of the wood plank walkway.



WATERCRESS

NOTES:

More watercress.

Two invasives are in this area:

Garlic Mustard

Colts foot

Remove the garlic mustard.

Coltsfoot has a yellow flower and a puff ball. It is not edible. It is incredibly difficult to remove. It will require great effort and time and then you might not be successful.

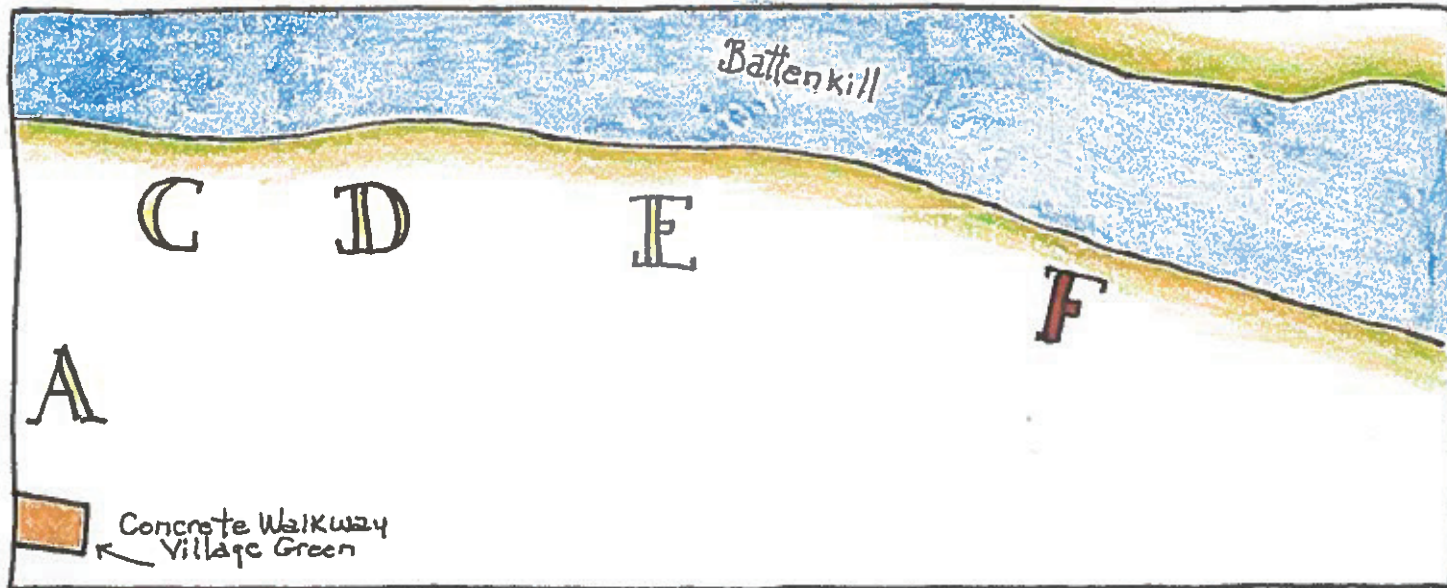


COLTSFOOT

PLANT ADDITIONS:

- o Elderberry
- o Angelica (not in water)
- o Flowering Raspberry

AREA F



LOCATION: By the concrete slab abutment, to the right of the trail.



GOUT WEED/BISHOPS WEED

NOTES:

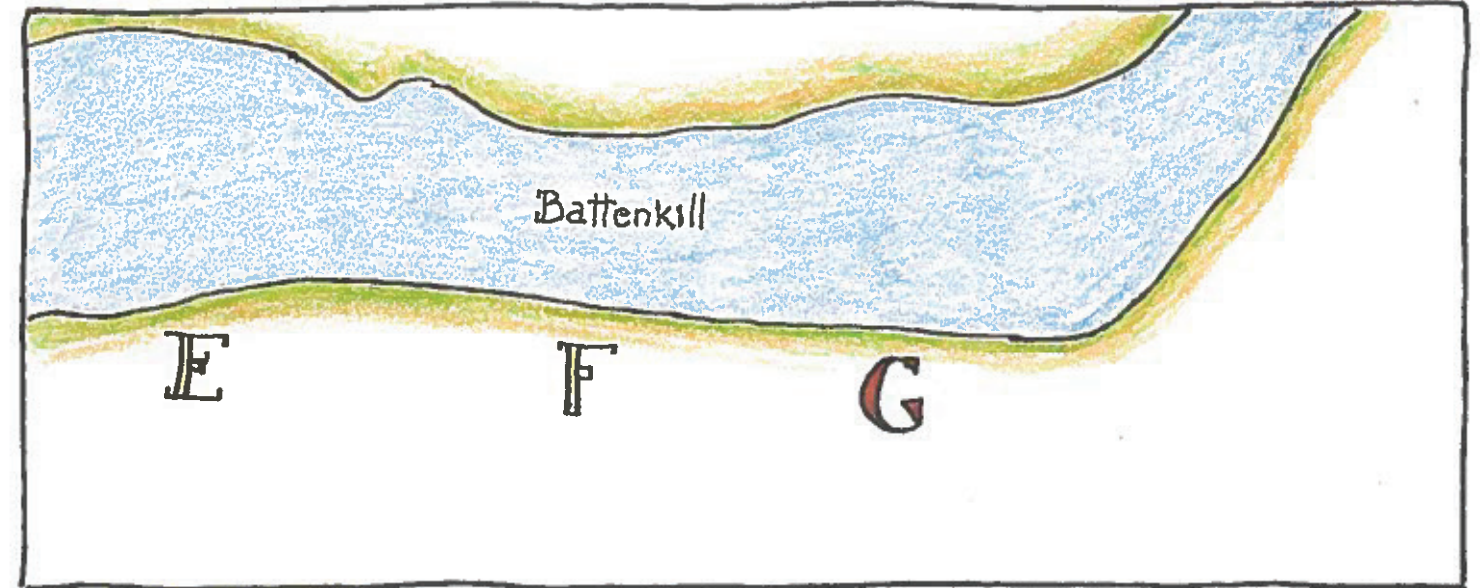
Gout Weed/Bishops Weed is an invasive; it should be removed.

PLANT ADDITIONS:

Replace the gout weed with spring ephemerals:

- Trillium
- Bloodroot
- Trout-Lily
- Wild Ginger

AREA G



LOCATION: Down stream from the old bridge abutments.

NOTES:

Dame Rocket is in this area. It's non-native and its not invasive. White purple flowers. Nice plant; no need to remove.

DAMES ROCKET



DAMES ROCKET



ADDITIONS

AREA H

These plantings were made on May 13, 2017. They are located on either side of the Friends entrance, along the river bank and opposite (upstream) from the turbine and the canal bed.



BOTTON BUSH: Spreading Shrub (12'ht.)
Flowers tiny white. Bloom June-Aug.

Tiny, white, densely compacted pincushion like balls

10 Planted



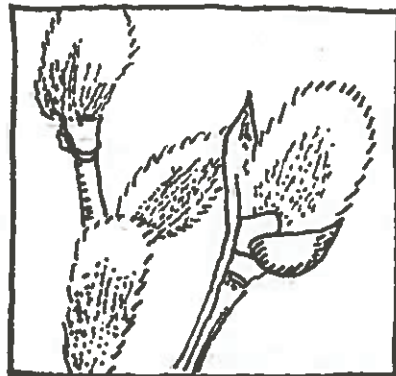
ARROW WOOD:
Thicket forming Shrub (7'). White Flowers; Dark Blue Berries

7 Planted



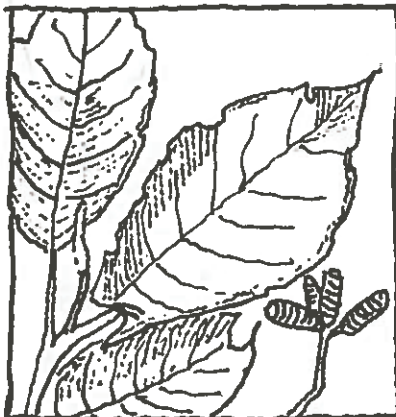
WINTERBERRY HOLLY: Rounded Shrub (7'). Red Berries.

15 Planted



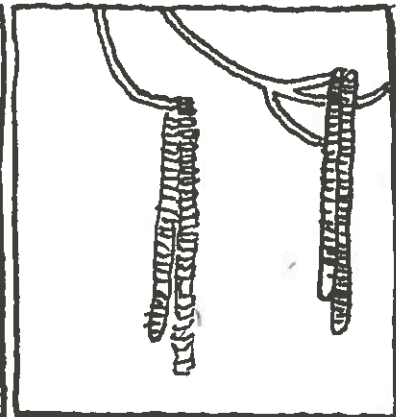
PUSSY WILLOW:
Shrub or small tree (10')
Blooms Feb.-Apr.

8 Planted

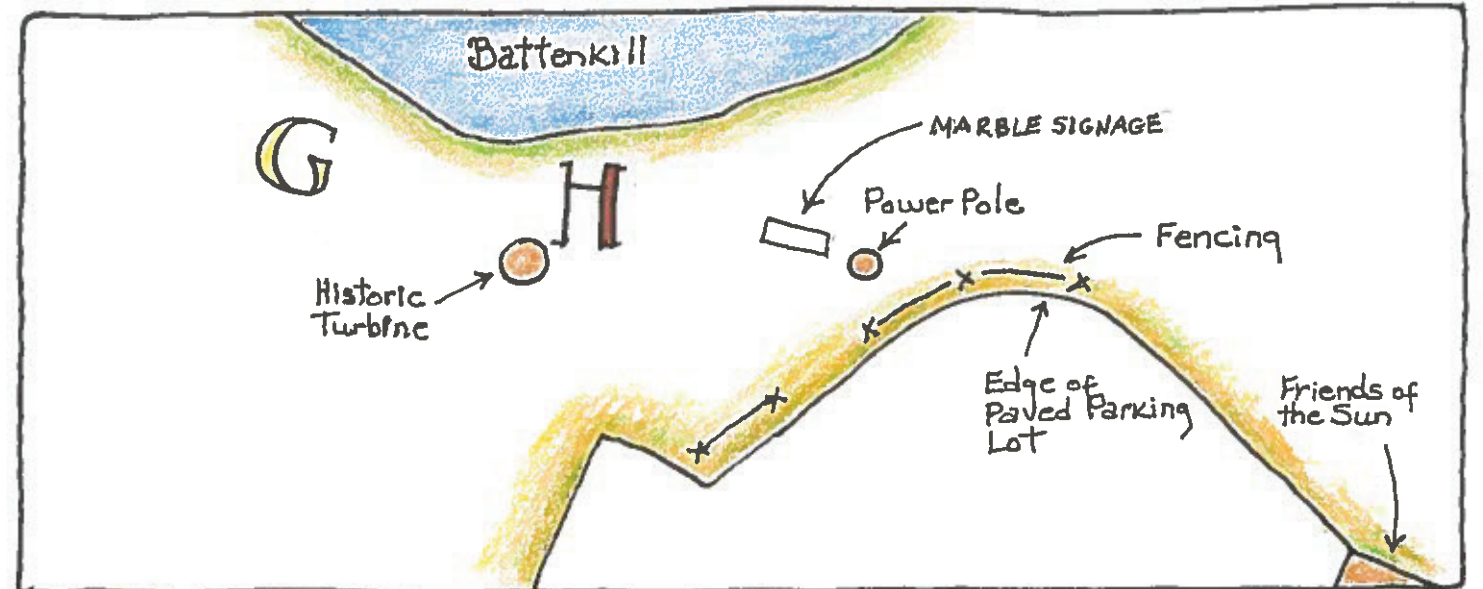


SMOOTH ALDER:
Thicket-Forming Shrub or Small Tree.
Catkins bloom Mar.-May (Shrub Size - 10')

10 Planted



AREA H



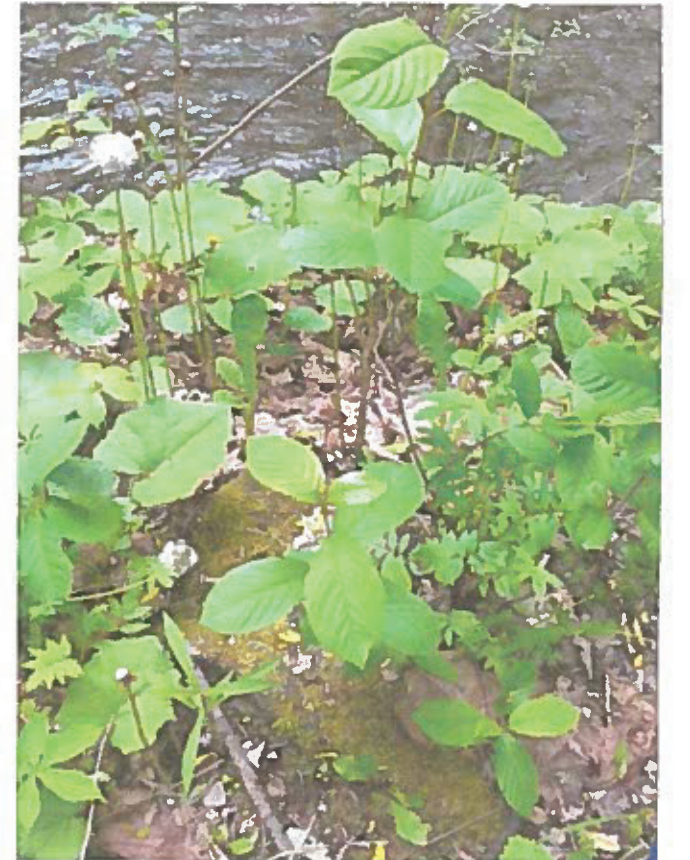
LOCATION: Behind the Friend-of-the-Sun entrance.

NOTES: Virginia Creeper is a native. Not edible. Probably stabilizing the bank. Leave it.

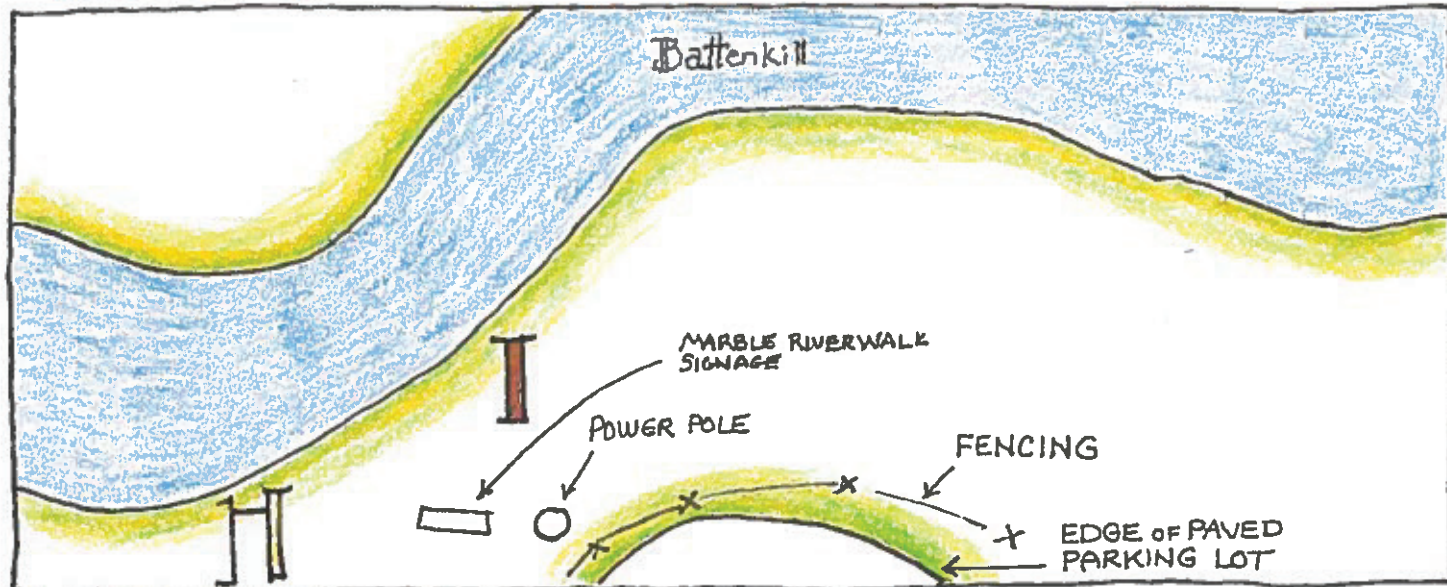
VIRGINIA CREEPER



VIRGINIA CREEPER



AREA I



LOCATION: Moving down stream from the Friends of the SUN.

NOTES: Two invasives, Japanese Knotweed and Asiatic Bittersweet, are in this area. They should be removed.

ASIATIC BITTERSWEET



JAPANESE KNOTWEED



GLOSSY BUCKTHORN

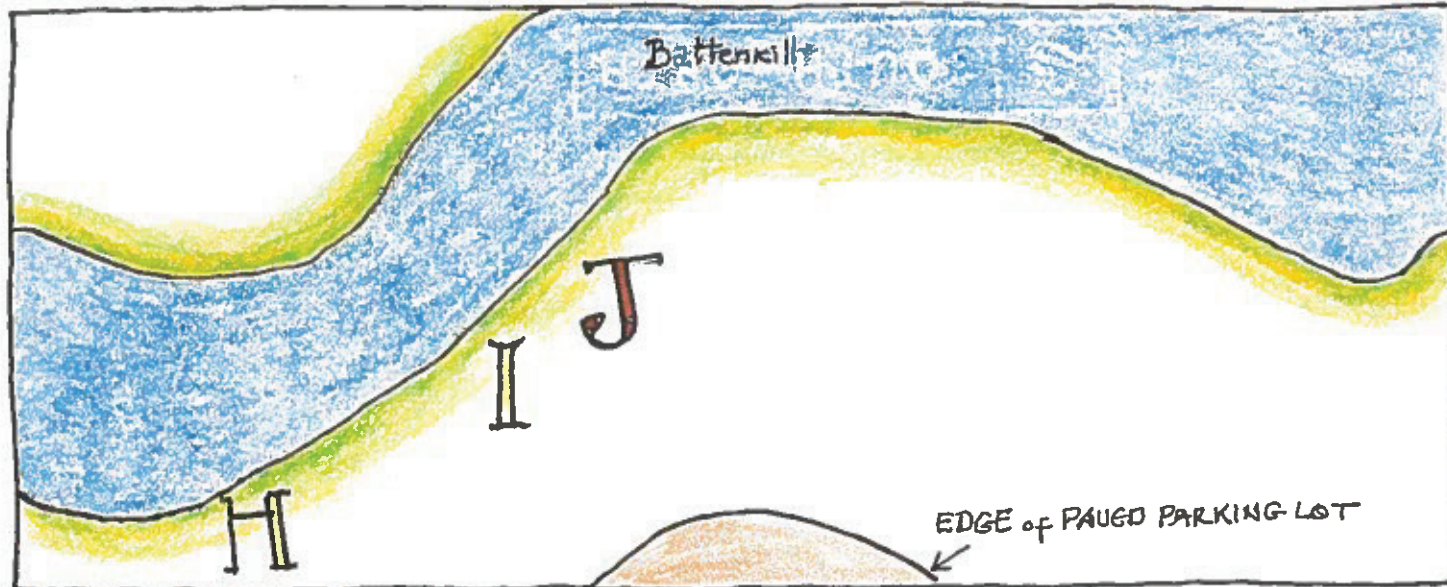


Glossy Buckthorn is non-native. Remove it. Do not cut. Remove it by its red roots.

PLANT ADDITIONS:

Possible introductions: Black and Red Elderberries (6'). The black will show white flowers; the red will show pink flowers. Both berries will attract birds which are sorely missing from Riverwalk.

AREA J



LOCATION: A short distance downstream from Area I.

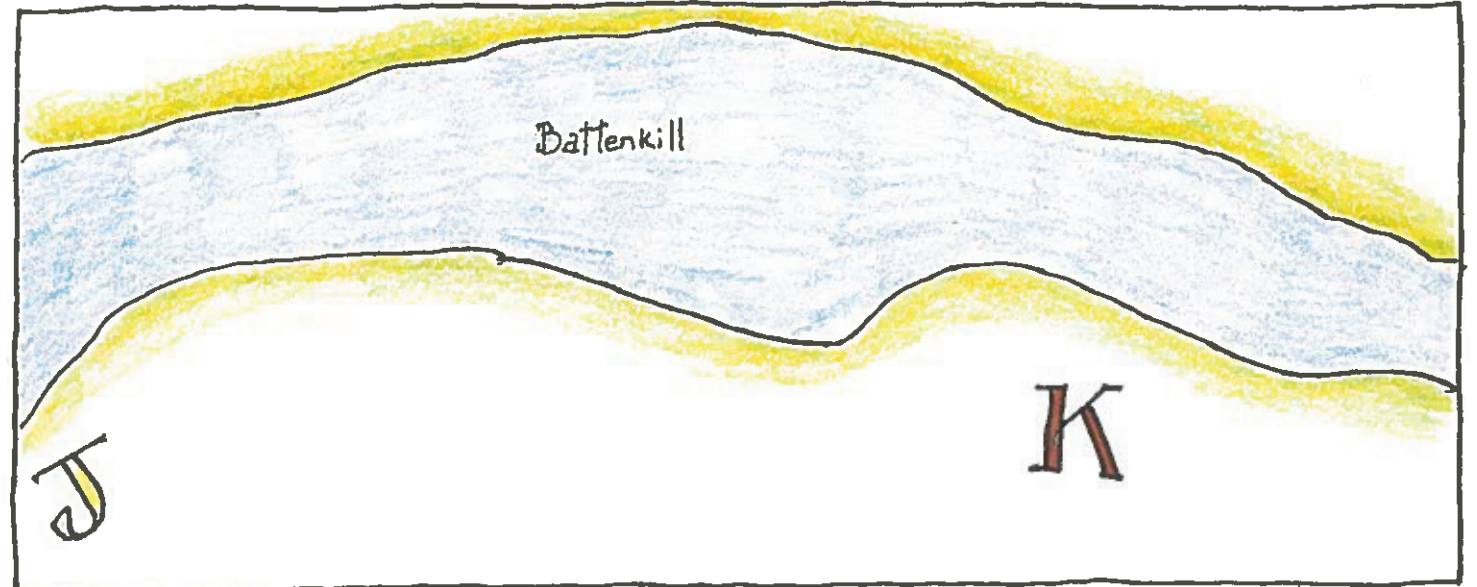


VALERIAN

NOTES:

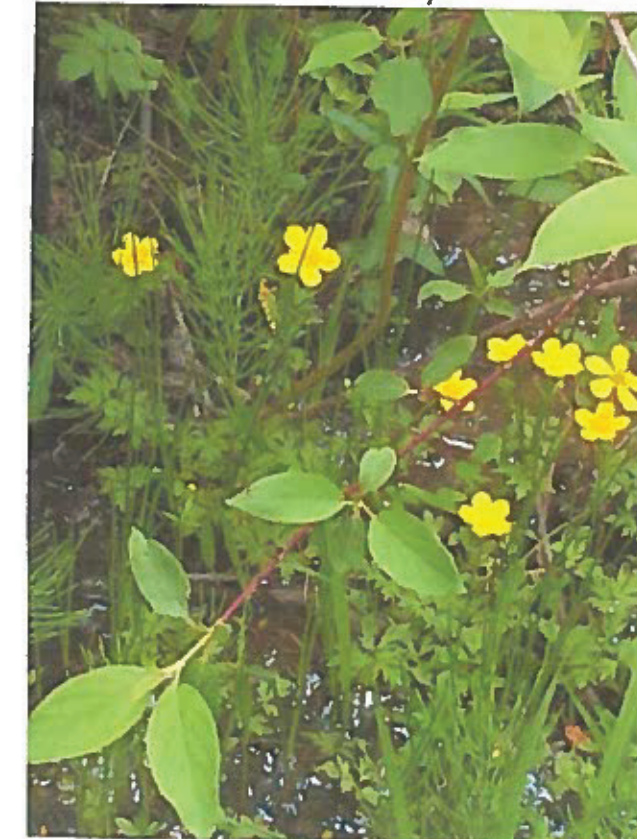
Valerian is non-native. If you choose to remove it, do it before it goes to seed.

AREA K



LOCATION: Where the Battenkill begins to angle south.

NOTES: Marsh marigold grows in this area. They are native and edible (gather leaves before flowers; cook to remove toxins, several changes of water; tastes like spinach. Do not pick all leaves.) Consider planting more marsh marigolds.

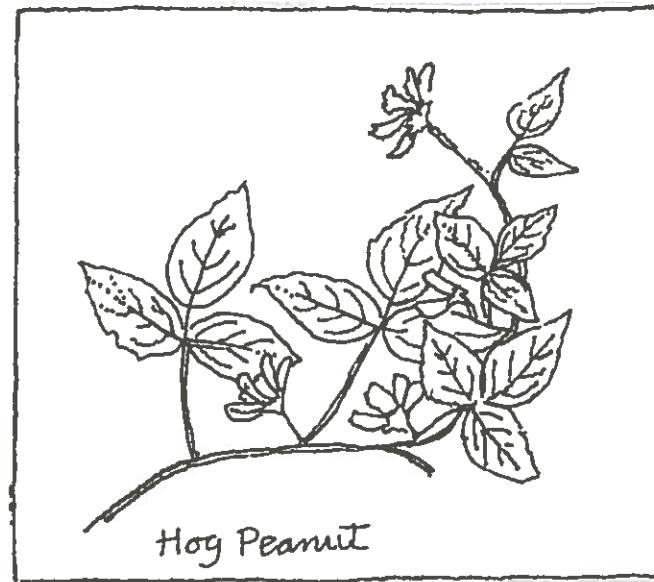


MARSH MARIGOLD

AREA K CONTINUED

PLANT ADDITIONS:

In shade areas plant Hog Peanuts. (Moist woods)



Hog Peanut

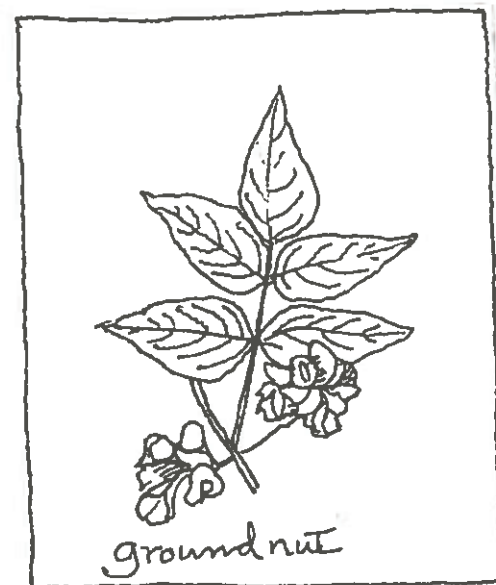
Hog Peanuts are delicate twining vines with light green leaves.

Two flowers:

1. short drooping clusters of pea-like lilac flowers.
2. flowers without petals at the base of the plant.

No 1 produces curved pods with 3 or 4 mottled beans.

No 2 produces fleshy 1-seeded pods.



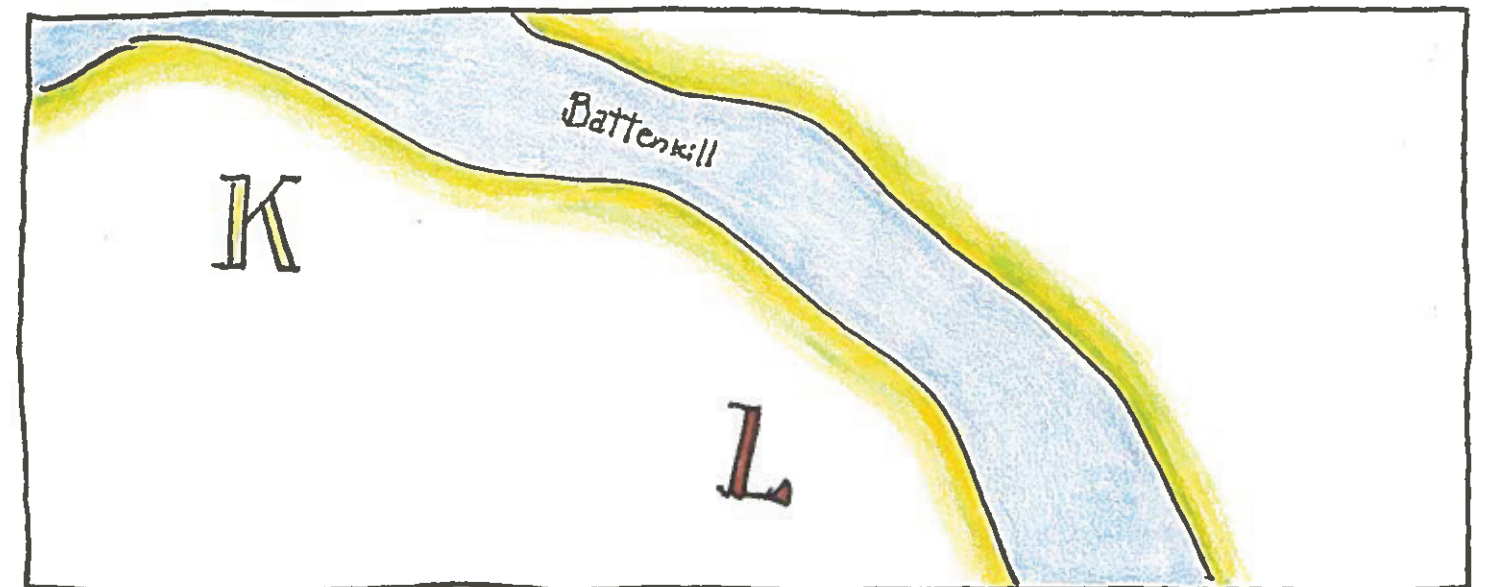
groundnut

In areas with some sun, plant Groundnut.

This is also a vine. Leaves are divided into 5 to 7 leaflets.

Maroon or chocolate flowers; Very fragrant

AREA L



LOCATION: This area marks where the Battenkill turns South.

NOTES:

Red currant is present in this area. It offers edible red berries. Consider planting more. **IMPORTANT:** Check with the Department of Agriculture as red currants can be a host for white pine blister.

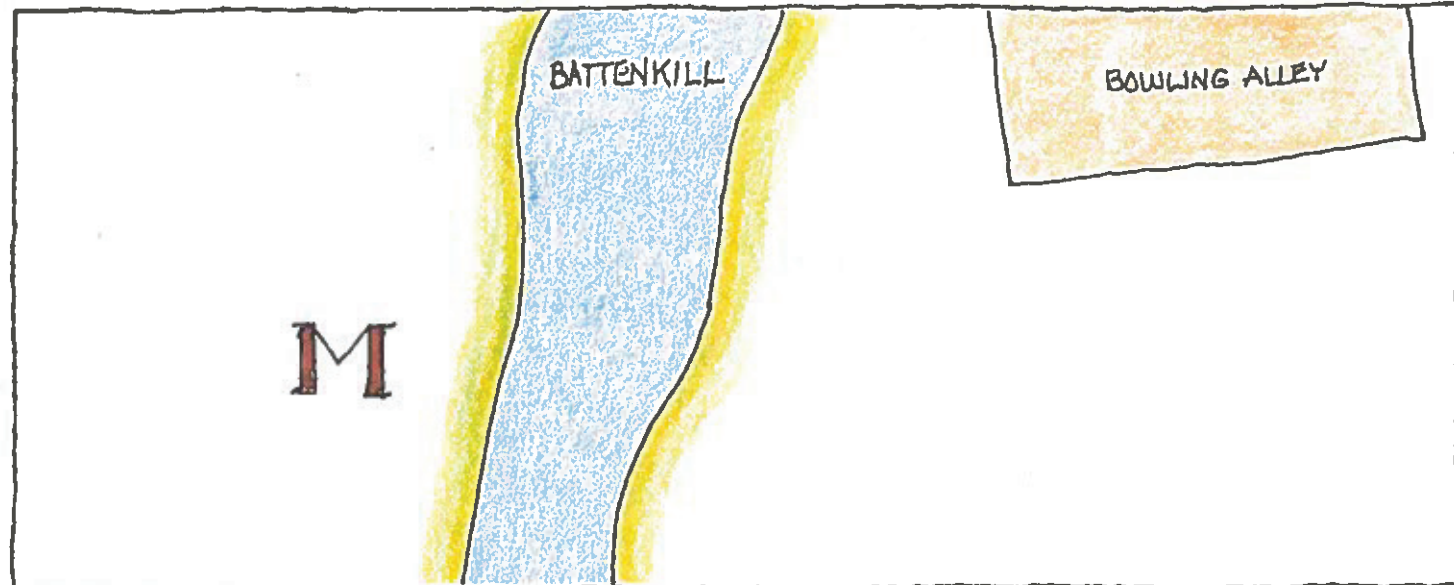


RED CURRANT



Dry Edge Saddle Mushroom.
On a fallen Box Elder.

AREA M



LOCATION: The Meadow Area is on the west bank of the Battenkill; behind Manchester Woodcrafts storage barn.

NOTES: This meadow area has milkweed (pollinator plant)



PLANT ADDITIONS:

WILD BERGAMOT (*Monarda fistulosa*)
Similar to Bee-balm but pinkish or pale lilac.

MOUNTAIN MINT (*Pycnanthemum*) There are several varieties (e.g. Virginia, Torrey's, Short-Toothed, etc.)

Add other sunny meadow pollinator wild flowers.



MILKWEED

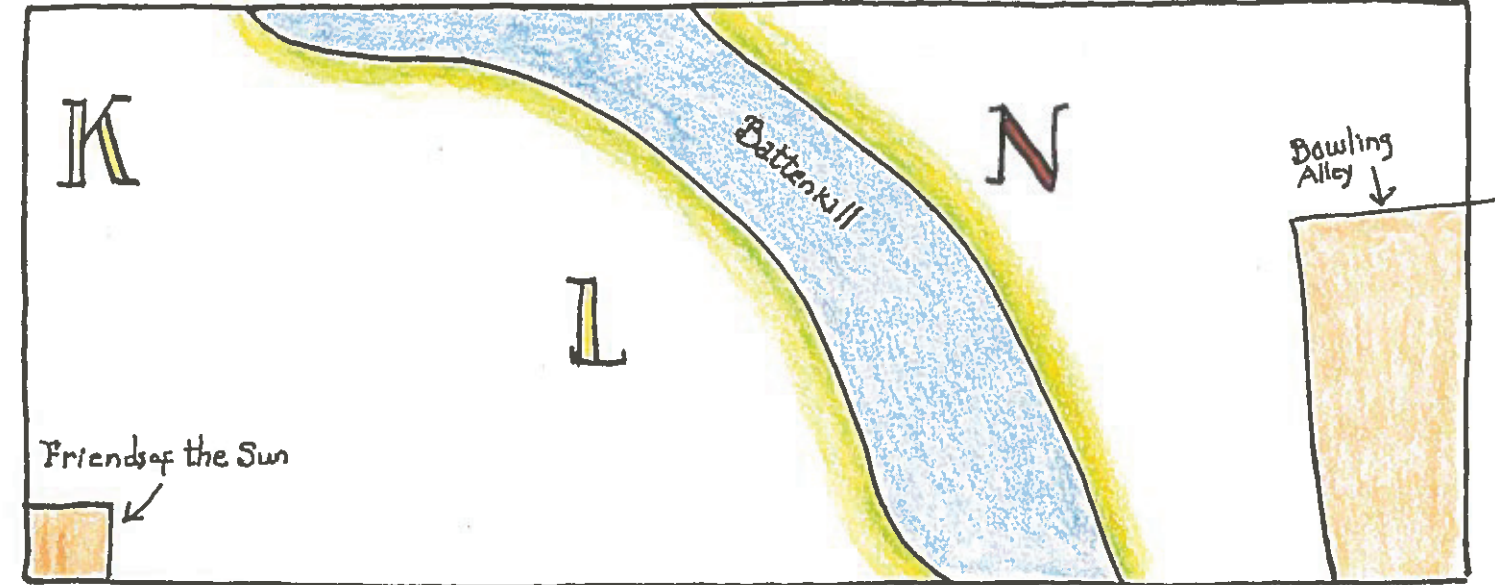


Wild Bergamot

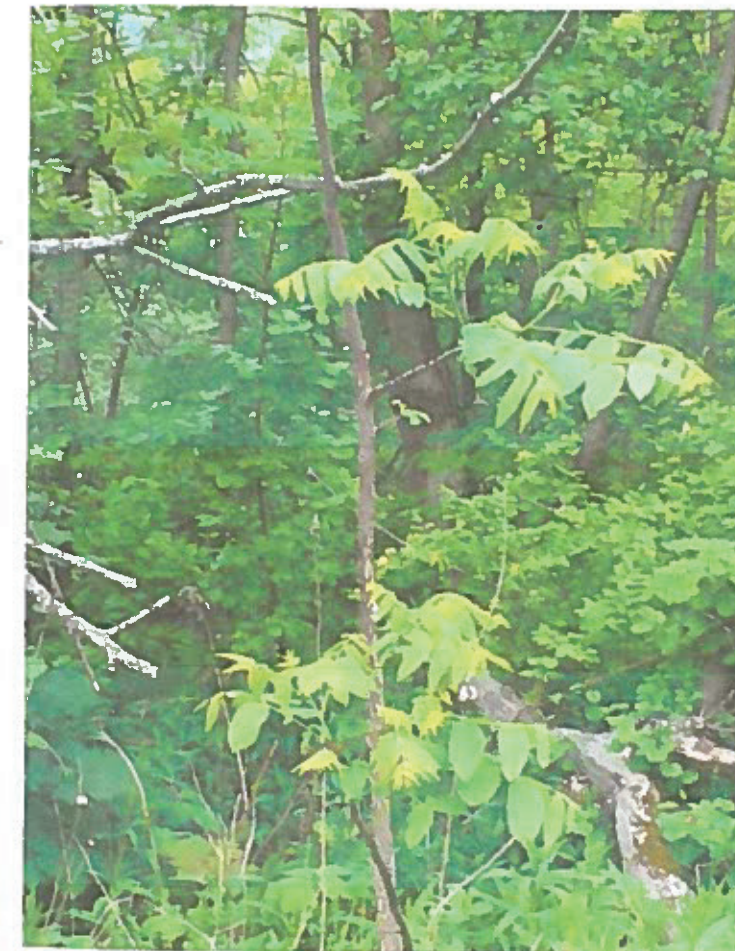


Mountain Mint

AREA N



LOCATION: East side of the Battenkill (The Plaza side) Beyond the bowling alley.

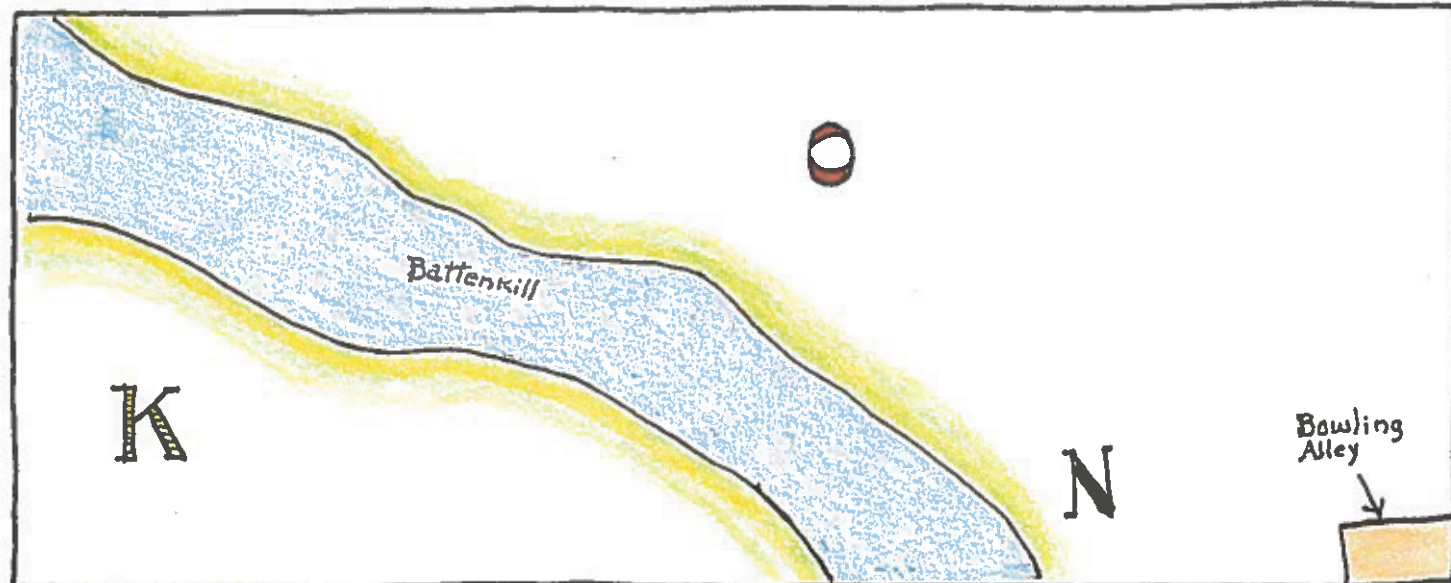


NOTES:

A young Butternut or Black Walnut. A native. In either case, definitely keep it.



AREA O



LOCATION: The side of the Battenkill (North). On the opposite side of the River is the Friends of the Sun storage and parking (right side of the building when facing it).

NOTES: Location of Autumn Olives. It is an invasive. It has aromatic flowers and edible fruit. Birds will feed on it. It can be left or removed.

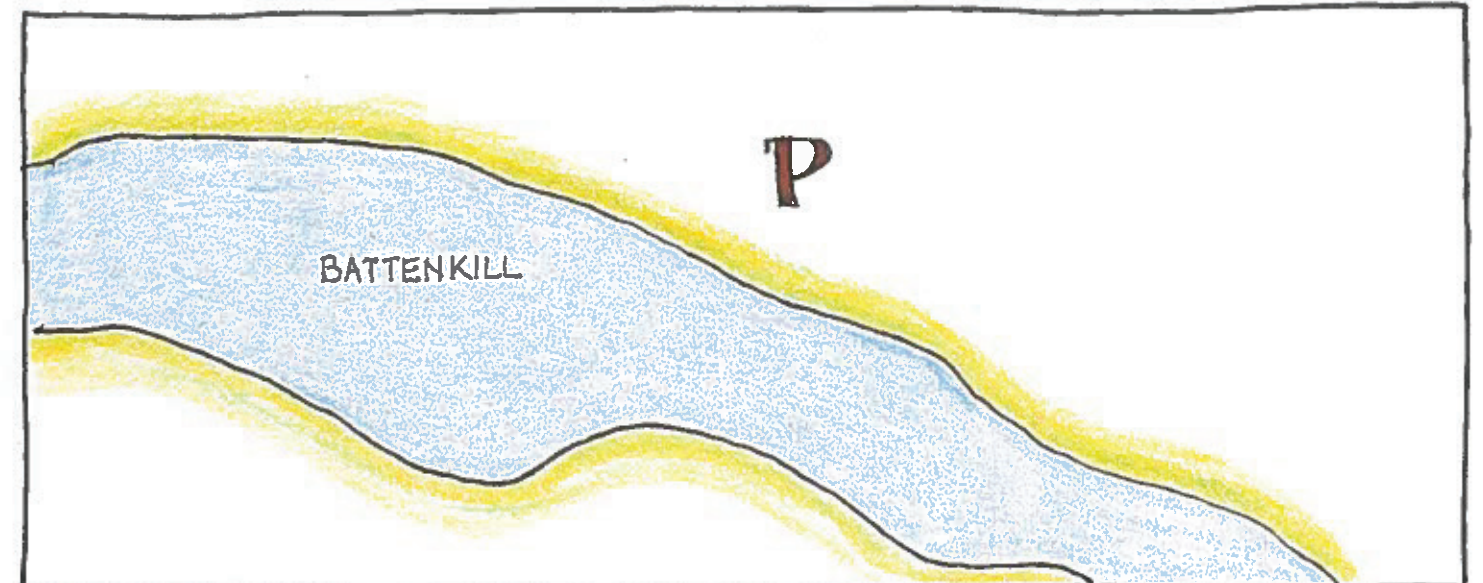


AUTUMN OLIVE



Close Up

AREA P



LOCATION: North bank of the Battenkill (opposite Friends of the Sun). At the beginning of the trail.

NOTES: Location of Basswood Trees (American Linden/Lime Tree). A native. Its young leaves are edible (mild flavor). You can also make a tea from the leaves (lemon-honey flavor). A bee magnet!

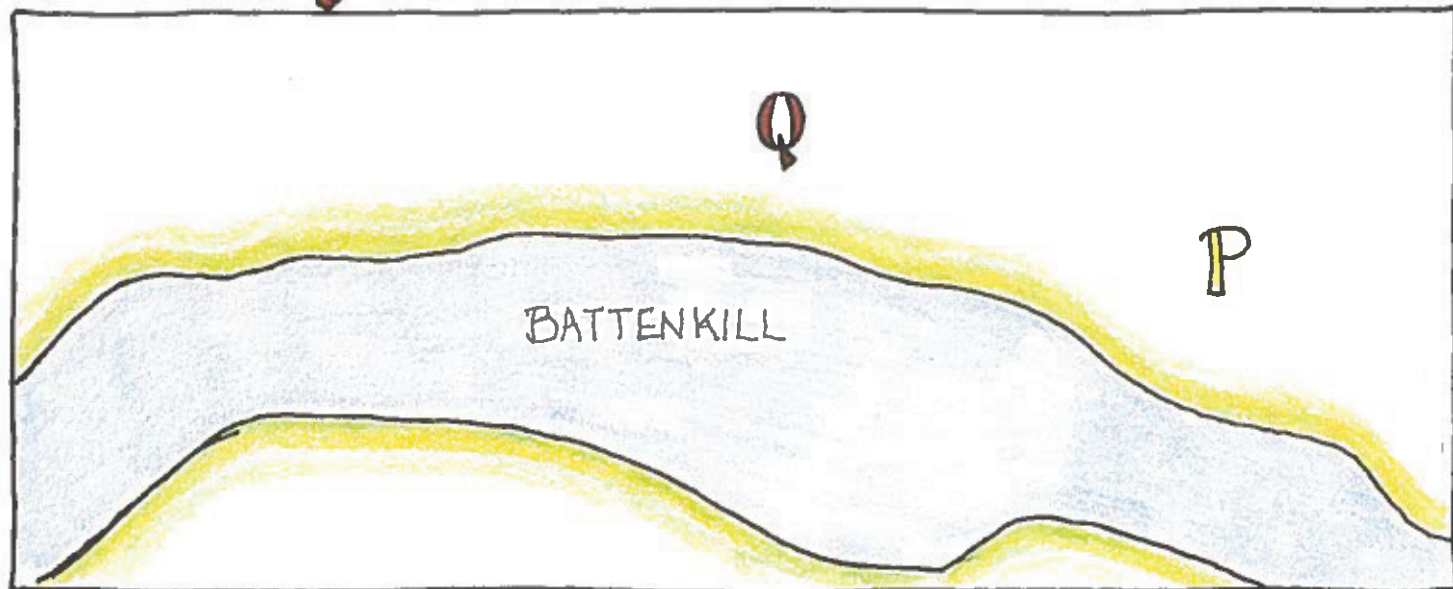


BASSWOOD

PLANT ADDITIONS:

Wild Strawberries. There are several that need less sun.

AREA Q



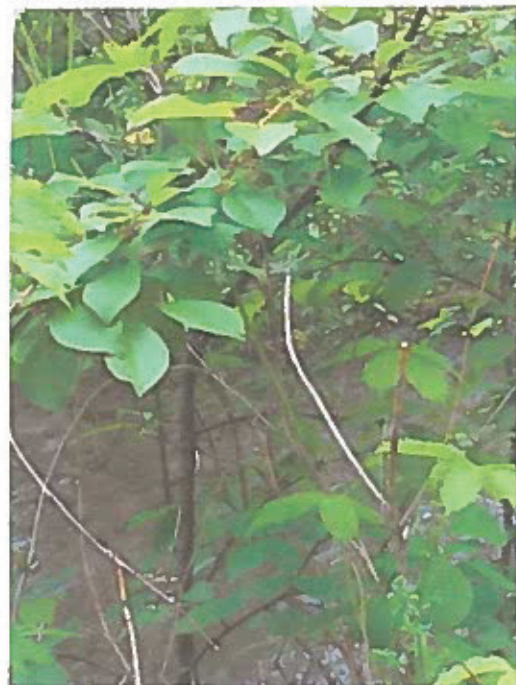
LOCATION: Walking further West on the path; the North side of the Battenkill.

NOTES: The Golden Alexander is a native (parsley-carrot family). It is not edible. Keep it.
The Choke Cherry can reach 15 feet. Its leaves are rounder than the Black Cherry! It has a sour flavor but makes a good jelly.



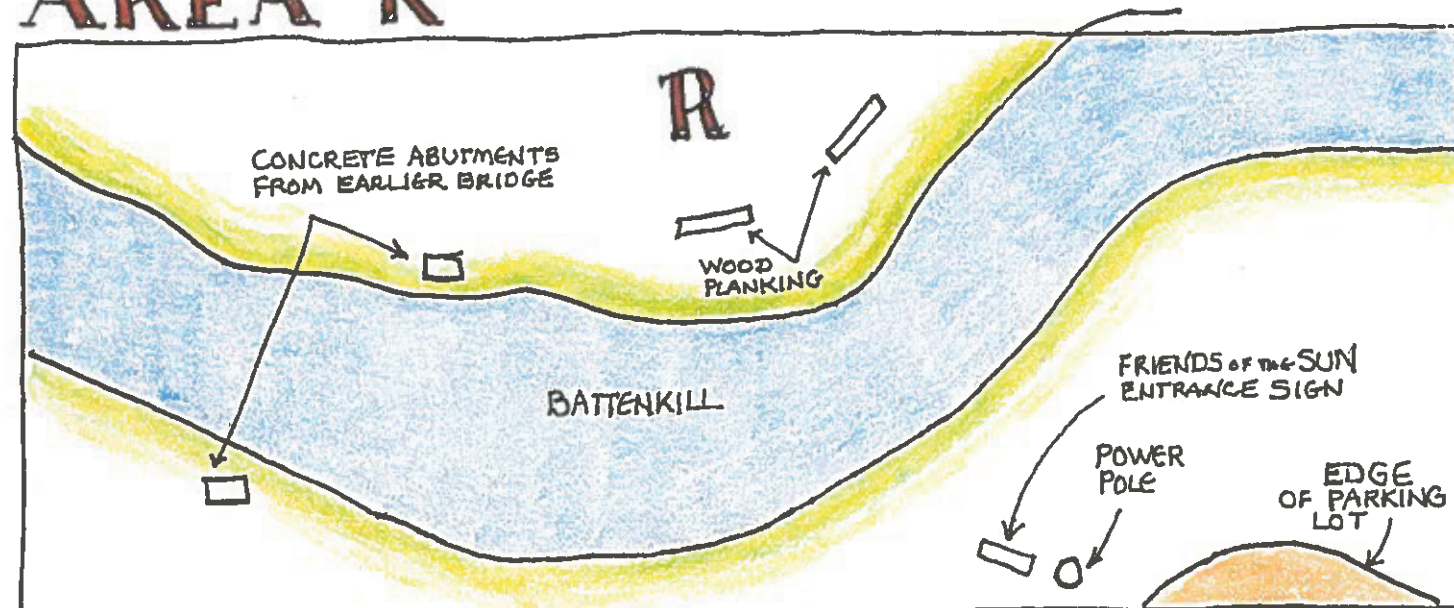
GOLDEN ALEXANDER

PLANT ADDITIONS:
Add more Choke Cherries



CHOKO CHERRY

AREA R

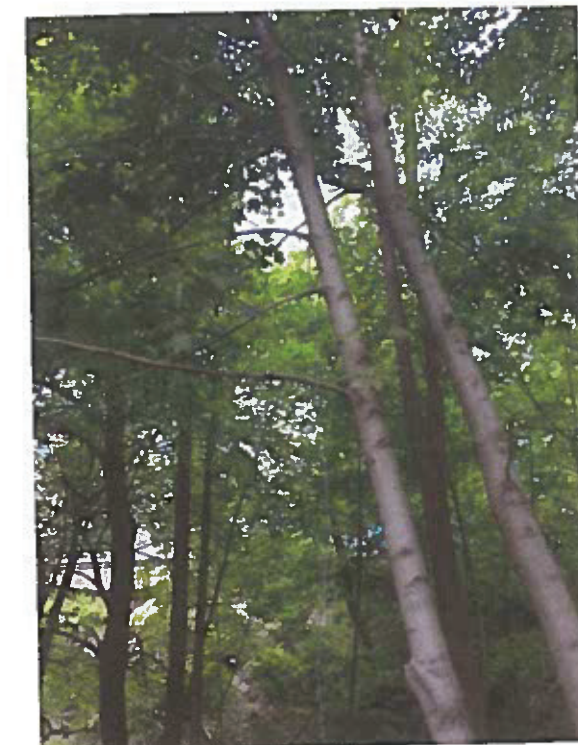


LOCATION: This area is easily recognized by its key feature — a small grove of Norway Maples.

NOTES: Norway Maple is an invasive. The thick canopy suppresses undergrowth. There are other Norway Maples along Riverwalk but this is a major concentration.
Russ Cohen cautions against automatically taking out



NORWAY MAPLES



Canopy

this grove without immediately implementing a comprehensive replanting.

Russ Cohen points out that their removal will open a large area to sunshine and drastically change the vista. This could be an open invitation to weeds and invasives.

Instead, he suggests planting several test plots to see what would work under the existing canopy.

DRY AREAS:

Blood Root, Maidenhead, Trillium

WET AREAS:

Hog Peanut, Angelica, Elderberry

NOTE: As with all new plantings it will be necessary to demarcate them (logs, stones) from the trail/path.

FINAL THOUGHTS

□ INITIAL PROJECTS

Focus on two removals (e.g. Bishops Weed, Japanese Knotweed)

Focus on several plantings (e.g. test plots under the Norway Maples, replant and/or new plantings). Consider plantings around both entrances.

□ RECORD KEEPING

This workbook should not be a static document; it should record removals, plantings, what's working and not working. Ultimately it should be a botanical history of Riverwalk, a record of our caretaking.

□ REFERENCE BOOKS

The Peterson Field Guide to Wildflowers

Wildflowers of Vermont, Kate Carter

The Peterson Field Guide to Ferns

The Audubon Society Field Guide to N.A. TREES

□ PLANT SOURCES

Contact Russ Cohen, he has a wild flower nursery and he donates plants to community groups. He can also recommend other sources.