











## Welcome Volunteers! Trail Building Training & Orientation

May 7, 2022

9:00 - 10:30 a.m.

Kate Kitchell, BATs Chair; Will Krift, Trails Anonymous



## Agenda



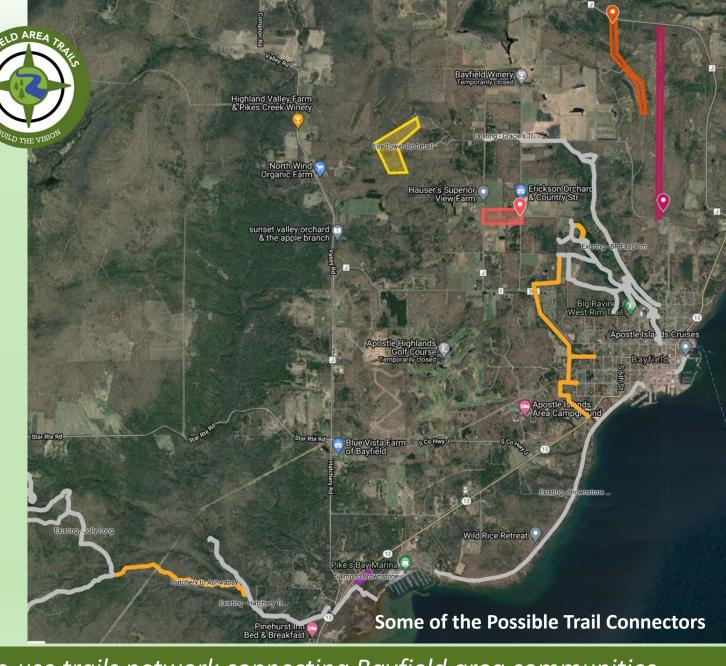
- Bayfield Area Trails Update
- 2022 Project Plans
- Trail Planning, Building & Maintenance
- Volunteer Program: Safety & Procedures
- Moving forward: Projects & Adopting Trails
- Q & A discussion: use chat room
- Wrap up





### **Trail Network Vision**

From Ashwabay...
to Frog Bay...
to Siskiwit Bay





#### The Committee



#### **Committee Members:**

- Apostle Islands National Lakeshore: Julie Van Stappen
- Ashwabay Outdoor Educational Foundation: Chuck Finn
- Bayfield County: Jen Bratsch
- City of Bayfield: Kate Kitchell (BATs Committee Chair)
- Landmark Conservancy: Erika Lang
- Town of Bayfield: Carol Fahrenkrog
- Red Cliff Band of Lake Superior Chippewa: Chase Meierotto
- Town of Bell: Peter Rothe

\*Ad Hoc Member: Bayfield Chamber & Visitor Bureau





### Subommittees!



## **Trails:** Volunteer project planning & implementing

- 1. Sue Aiken
- 2. Jeff Garrett
- 3. John Ipsen & Kris Wegerson
- 4. Genevieve Johnson
- 5. Paul & Brenda Kaese
- 6. Ted May
- 7. Julie Ann Phillips
- 8. Peter Rothe
- 9. Leo Stern
- 10. Tracey Snyder & Jeff Olsen
- 11. John Welch

#### Communication: Website,

social media, community outreach, signs, online maps

- 1. Kurt Dicke
- 2. Neil Howk
- 3. Liz Fentress
- 4. Tony Jeannette
- 5. Mark Peterson

#### **New Trails Scoping\*:**

- 1. Matt Carrier
- 2. Jon & Jennifer Crump
- 3. Ted May
- 4. Sherree Peterson
- 5. Kathleen Russell





<sup>\*</sup> working with willing landowners

## **Maintaining & Building Trails**



2022

Planning Trails & Securing Access

Maintaining & Building Trails

Communications

Building & Sustaining Organizational Capacity

- Projects will engage volunteers.
- Some projects will be led by a professional contractor.





### **2022 Project Plans**



- Project <u>schedule posted on website</u>
- Volunteer recruitment on each project
- Trails Forum in the fall
- Develop new long-term plan winter of 2022 - 2023

PROJECT	TARGET DATES
MAY	Š.
East Rim Trail Boardwalk installation (with Vols.)	4/30-5/12
Virtual training and volunteer sign up	7-May
Big Ravine: Pull forget-me-nots (combine w/Iron Bridge planting)	14-May
Big Ravine: Planting in Iron Bridge viewshed (with Vols)	14-May
Big Ravine: Planting on school trail hillside (with Vols.)	May 21 - 29
Big Ravine: Stabilize lower end of School Trail (Contractor with Vols.)	May 21 - 29
Big Ravine: rebuild rock steps near platform (Contractor with Vols.)	May 21 - 29
JUNE	8
City of Bayfield: Rain Garden Training Workshop	11-Jun
Brownstone Trail: if feasible, implement new temporary re-route to avoid curve on Hwy 13 (with Vols.)	TBD
Develop trails on Pratt's Peak (CTC with Vols.)	TBD (6/3 - 17?)
Big Ravine West Rim Trail Maintenance: fix rough sections (with Vols.)	June 24 - 30
JULY	
Pikes Creek Jerry Jay Jolly Trails: maintain trails with a focus on those into and around the Overlook (update signage) (with Vols.)	July 8 - 16
AUGUST	
Initiate construction of the Pikes Creek hatchery connection to Jolly Long @	TBD
Possibly expand Siskiwit Falls Trails (Vols. – CTC with County)	TBD
SEPTEMBER	4
Initiate trails on Big Ravine Wetlands (depends upon land purchase)	TBD
Big Ravine: rebuild boardwalk above waterfall (Contractor with Vols.)	a.
Bayfield <b>Shoreline Trail</b> : obtain landowner permission; construct first section from North Beach (with Vols.)	TBD
OCTOBER	
Trails Forum & Celebration (initiate long-term planning)	9
NOVEMBER	2
End of season wrap up assessment & report	3



### **Fundraising**

#### **2022 Priority Projects**

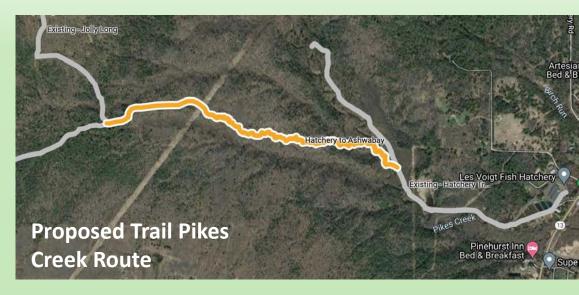


#### Big Ravine Headwaters: Reached target!

- Complete land purchase
- Initiate trails

#### Pikes Creek Trail (Hatchery to AWB): \$75,000 goal

- Two-year project: 2022 2023
- Construct trail in 2022: \$22,000
- Purchase and install bridge in 2023: \$53,000
- Funding from grants & private donations
  - Several grants submitted
  - Making progress toward goal
- Fundraising campaign forthcoming







# The Fundamentals of Trail Planning, Building and Maintenance

Will Krift Owner/Operator Trails Anonymous



## Tools of the Trade

## Rogue Hoe



Used to scrape or cut away the organic soil, revealing the mineral soil underneath. It is also a useful tool in maintenance applications, such as deberming trail tread.

## Pick Mattock



A useful tool for cutting backslope on a benchcut once the duff (organic soil) has been removed. This tool comes in handy especially when it is rocky terrain.

## Pulaski



If you are in a densely forested area, and the roots are everywhere, this tool will be your best friend. It can tackle almost any sized root a tree can throw at it.

## McLeod



Useful in just about any situation, but especially when moving large amounts of cut duff, or raking out heavy mineral soils.

### Other Useful Tools

- 1. Rock Bar
- 2. Spade
- 3. Wheelbarrow
- 4. Finish Rake
- 5. Loppers
- Leaf Rake

- 1. As the name implies, useful for moving large rocks.
- 2. When you need some extra dirt, a shovel is always handy.
- 3. When more than a shovel full is necessary.
- When you want things to look perfect, it's time to get out the finish rake.
- Great for getting leftover roots once the tread is built, or for taking out any branches that may be within the trail corridor.
- 6. To make your new trail look like it's always been there, give it a once over with the leaf rake.

## Tools You Might Have at Home

- 1. Pruning shears
- 2. Loppers
- 3. Pick axe
- 4. Axe
- 5. Spade
- 6. Flat shovel
- 7. Hand saw
- 8. Hard tine metal rake
- 9. Leaf rake
- 10. Chainsaw
- 11. Battery operated drills
- 12. Battery operated circular saw.

## The Basics of Building and Maintaining Trail

#### References:

Forest Service Trail Construction and Maintenance Notebook (the Park Service also uses this handbook):

https://www.fs.fed.us/t-d/pubs/pdfpubs/pdf07232806/pdf07232806dpi72.pdf

California State Parks Trails Handbook (this has quite a bit of useful information that is not covered in the FS manual):

https://www.parks.ca.gov/?page\_id=29674

Trail Solutions: IMBA's Guide to Building Sweet Singletrack' AMC's Complete Guide to Trail Building & Maintenance

## Trail Design

- Water is the enemy
  - Water will do more damage to a trail than any other type of erosion
- Use the landscape to help manage the flow of water
- Where that is not possible, consider alternative means of construction
  - Boardwalk
  - Steps
  - Retaining walls

## Trail Design (con't)

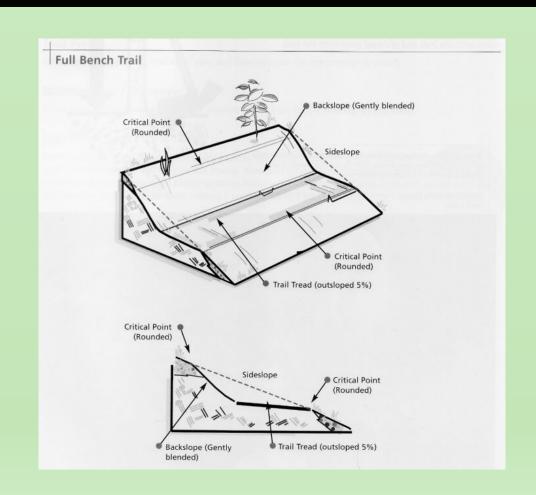
- Slope grade is important. Typically less than 10%, unless terrain does not allow for it. Clinometer is useful for measuring slope grades.
- Different soil types will affect how trail tread is built and what, if any, special features need to be constructed.
- Learn to look for natural anchors, such as trees, rocks, etc.
  - erosion control
  - keep people on trail

## Last Thoughts on Trail Design

- Planning for switchbacks
  - not stacked
  - look for areas that show signs of stability
- Utilize the many trail construction manuals to help find answers to problems you may encounter while scoping out new trails. Many of which can be found online.

## Building New Trail

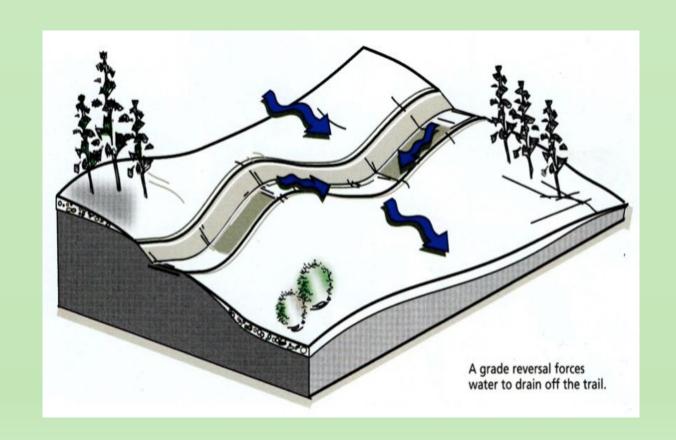
- Rake leaves from proposed trail route
- 2. Cut duff (organic soil) from tread width; about 24"-36"
- 3. Cut the backslope and scrape mineral soil down to full tread width.
- 4. Disperse the duff and excess mineral soil away from cut tread



## Building New Trail Con't

When building new trail it is important to construct it in a way that it helps remove water from the trail, and this can be done with what is called a "grade reversal"

As the name implies, it changes the grade of the trail, thus stopping the flow of water from continuing down the trail.



## Other Construction Techniques: Steps

#### **Interlocking Steps**

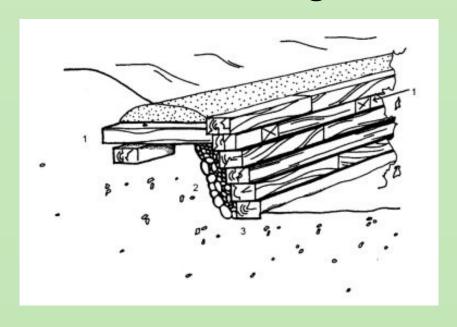


#### **Rock Steps**



## Other Construction Techniques: Retaining Wall

#### **Wooden Retaining Wall**



#### **Rock Retaining Wall**



## Basics of Trail Maintenance

- 1. Clearing the trail corridor from debris and obstacles.
  - a. Cutting downed trees
  - b. Leaf blowing
  - c. Cutting encroaching branches
  - d. String trimming/brushing trail corridor
- 2. Repairing erosion problems.
  - Deberming tread to maintain outslope and drainage
  - b. Repairing/creating new drainage
    - i. Knicks
    - ii. Grade Reversals
    - Raised trail tread



## Volunteer Trails

Be proud of what you have done!



- 1. Gil Larsen Extension (2020 2021)
  - a. Modifying drainage
  - b. Boardwalk
  - c. Rock stairs and armoring
  - d. Stepstone creek crossings
- 2. Iron Bridge Connector (2020)
  - a. Interlocking steps
- 3. Sweeny Switchback Connector (2020)
  - a. Interlocking steps
  - b. Grade reversals
  - c. Retaining wall
- 4. Pine Bluff (2020)
  - a. Switchbacks
  - b. Rock staircase & armoring
- 5. Hemlock Heights (2021)
  - a. Cable steps
  - b. Interlocking steps/crib steps
  - c. Rock armoring
  - d. Rock crib walls
  - e. Wooden crib walls
- 6. School Trail (2021)



## TOP TIPS for FIELD SAFETY Start All Sessions with Safety Briefing

#### 1. Come prepared:

- Dress for the weather conditions.
- Proper personal protection (e.g. boots, gloves, hat, bugs, etc.)
- Bring ample water and food.
- Pack it in, pack it out.

#### 2. Put first aid first:

- Identify the 1<sup>st</sup> aid designee, along with location of 1<sup>st</sup> aid kit.
- Volunteers encouraged to maintain Red Cross First Aid and CPR certification, which can be obtained online: <a href="https://www.redcross.org">www.redcross.org</a>

### 3. Know your limits:

- Don't be afraid to say no. Rest when you need to.
- Maintain proper body mechanics
- Know and address the signs of heat exhaustion/stroke, and hypothermia.



## TOP TIPS for FIELD SAFETY Start All Sessions with Safety Briefing

#### 4. Practice proper tool safety:

- Certified chainsawyers don't work alone; wear proper PPE
- Keep adequate spacing while walking; carry tools with sharp points down.
- Maintain safe working distance between workers using tools.
- Keep tools from underfoot, sharp edges/points facing down.

#### 5. Maintain situational awareness:

- Watch out for tripping hazards, slippery footing, low hanging branches, etc.
- Keep an eye on each other.

#### 6. Stay in touch:

- Cell phones and/or radio/walkie should be available.
- Let the crew leader or someone else know if you have to leave.



## Volunteer Release Form Informed Consent

- Understand that any activity has inherent risks.
- Could result in harm or loss to the volunteer.
- Accept all such risks of injury, damage or loss connected with volunteering.
- Take responsibility for conducting oneself within physical and mental abilities;
- Refrain from tasks that may exceed one's abilities.
- Agree to indemnify and hold harmless the Bayfield Area Trails Committee organizations.



#### BAYFIELD AREA TRAILS AND PARKS 2020 Volunteer Release Form

INFORMED CONSENT\*: By signing this Volunteer Release Form, I understand that any activity has inherent risks, which could result in harm and/or losses to myself or my child (if appropriate) whether or not known or readily foresceable at this time; and which might result not only from my own act or omission, but also from the actions, inactions, or negligence of others, or the condition of the premises or equipment used. By signing this form, I fully accept all such risks of any injury, damage or loss, regardless of severity that may be sustained and all responsibility for losses, costs, and damages incurred in any and all activities connected with volunteering.

I agree to indemnify and hold harmless the Bayfield Area Trails Committee member organizations listed below, including their officers, employees and agents from and against all claims, demands, loss of liability of any kind or nature for any possible injury or damage incurred during volunteer service.

BAYFIELD AREA TRAILS ORGANIZATIONS FOR WHICH I AM VOLUNTEERING INCLUDE: City of Bayfield, Town of Bayfield, Bayfield County, Ashwabay Outdoor Education Foundation (Mt. Ashwabay), Landmark Conservancy, Red Cliff Band of Lake Superior Chippewa, and National Park Service.

I grant permission for my photo to be used for official public information purposes associated with the volunteer activities.

I understand that my services are being offered on a voluntary basis without anticipation of financial remuneration. I am not an employee or independent contractor of any organization that I am volunteering for, and nothing in the work that I perform shall create any employer-employee relationship. I have read and accepted the "Top Tips for Field Safety" provided along with this form. I understand that these volunteer activities may require frequent bending, standing, walking, picking up objects with hands and tools, using a variety of tools, painting and conducting other minor maintenance type activities. I take responsibility for conducting myself within my physical and mental abilities; and I will refrain from tasks that may exceed those capabilities. The same applies for my child. No accident or other insurance is provided: it is my responsibility to obtain my own medical/health insurance coverage.

Print Name of Participant (Age, if a minor)	Print Name of Parent/Guardian	
Signature of Participant or Parent/Guardian	Print Emergency Contact Name	
Phone Number	Emergency Contact Phone Number	
Street Address	City, State, Zip	
Start Date (ma./daw/sr.)	Find Date (mn /dau/ur )	

\*This form must be completed prior to performing volunteer work. Before signing this informed consent, read this entire document carefully. If an accident were to occur, you may be giving up legal rights that you might otherwise have by signing this. If you do not understand this document, you should not sign it.

<sup>\*</sup> Form will be posted on website by 5/14/22



## Moving Forward Trail Work Begins in the Big Ravine

- New Volunteers: Sign up via bayfieldareatrails.com <u>"Participate" page</u>
- May 14: Gil Larsen planting & restoration (start at trailhead)
  - Bird walk @ 8 a.m.; Project starts @ 9 a.m.
- May 21 29:
  - Fine-tune School Trail
  - Rebuild rock steps on Gil Larsen Trail
- June: Pratt's Peak & Big Ravine West Rim Trail
- Email recruitment in advance, crew schedule sent week prior
- General practice: 5 person crews scheduled for a.m. & p.m. shifts
  - \*Website & social media notifications in advance





## Adopt - a - Trail Program! Become an Adopter

- Help maintain a safe high-quality experience for trail users and keep the land managers informed about trail condition and use
- Stewards and advocates for adopted trail section
- "Eyes and ears" for the entities that own/manage the trails and lands
- May adopt multiple sections; Multiple individuals may share sections
- Visit and maintain trail sections at least 3x during snow-free season: spring by May 15<sup>th</sup>, summer by August 1st, fall by October 1<sup>st</sup>.
- Perform basic maintenance (picking up litter, removing brush, raking leaves from the tread, and clearing encroaching vegetation, etc.).
- If they identify work that requires substantial action or that they are unable to perform themselves, they will notify Bayfield Area Trails at bayfieldareatrails@gmail.com.
- Submit a brief a Trail Condition Report form after each visit (available in June)





# Sign Up on Bayfield Area Trails website under "Participate"

Adopt-a-Trail link

ADOPT-A-TRAIL - TRAIL NAME	ADOPTERS (May have >1)	GEOREF. MAP (Y/N)
ASHWABAY NORDIC TRAILS (AOEF & County)	AOEF	Yes
BIG RAVINE TRAILS (City & Town)	***************************************	Not GPX
Lower Gil Larsen: Trailhead to 2 <sup>rd</sup> Creek Crossing	Jeff Garrett	
Upper Gil Larsen: 2 <sup>nd</sup> Creek Crossing to base of Pine Bluff	Terr duri ett	
School Trail		
Sweeny Switchback	Mike Kinnee & G. Johnson	
Hemlock Heights	Kate Kitchell	
Pine Bluff	Mike Kinnee & G. Johnson	
East Rim: Lynde Ave. to S. Finn Loop intersection	Bill Bland	
East Rim: Meyers-Olson Rd. to S. Finn Loop intersection	Chuck & Mary Finn	
Finn Loop	Chuck & Mary Finn	
West Rim	Jon Crump	
Flying Squirrel		
Chipmunk	JulieAnn Philips?	
Striped Skunk	Paul Kaese	
Overlook		
Martin	Phil & Sheree Peterson	
Bear Cub		
BROWNSTONE TRAIL SEGMENTS (Landmark & Town)		Yes
Bayfield City Limits to Seagull Bay Motel		
Highway 13 Re-route	Landmark Conservancy	No
End of Lakeshore Drive to Blue Wing Bay Rd.		35/30/1
Blue Wing Bay Rd. to N. end of Chequamegon Rd.		
S. end of Chequamegon Rd. to Waterford Condo complex		
CAMBA ASHWABAY TRAILS	CAMBA	Yes
FROG BAY (Red Cliff Band of Lake Superior Chippewa)	Red Cliff Natural Resources	Yes
GRACIE'S TRAIL (Town)		No
Betzold to County J	Kate Kitchell	No
PIKES CREEK/HATCHERY (DNR & Town)		Yes, existing trail
Pikes Creek trail (to AWB trails)	Sue Aiken (future), Ted May	
JERRY JAY JOLLY TRAILS		Yes
Star Route Trailhead to Pike's Creek Bridge	John Welch	Yes
Meadow Loop	Jeff Garrett	Yes
Pike's Creek Bridge to Oppendahl's Alley	Jeff Garrett	Yes
Overlook Trails		Yes
LOST CREEK FALLS (County)		Yes
Co. C Trailhead to Falls	Sue Aiken	
PRATT'S PEAK (County, Towns of Bayfield & Bell)	стс	No
RASPBERRY RIVER TRAILS (County)	TBD, need feasibility study	Yes
SALMO TRAIL (Town of Bayfield)		No



#### **Contacts & Resources**

Kate Kitchell	katepkitchell@gmail.com	541-452-3079
Will Krift	trailsanonymous@gmail.com	715-544-8954
Erika Lang	erika@landmarkwi.org	715-575-5595
Jen Bratsch	jbratsch@bayfieldcounty.org	715-373-6114
Chuck Finn	cfinn688@gmail.com	518-209-5511
Carol Fahrenkrog	Fahrenkrog5@gmail.com	715-797-3372
Peter Rothe	peterrothe1@gmail.com	651-245-1926
Julie Van Stappen	julie_van_stappen@nps.gov	715-779-3398

#### **North Country Trail Association Resource Center:**

https://northcountrytrail.org/volunteer/volunteer-resource-center/

#### **Superior Hiking Trail:**

https://superiorhiking.org/join/

Red Cross First Aid and CPR certification, which can be obtained online:

www.redcross.org



Questions? Concerns? Discussion? Input?

## **THANK YOU!**