



Planning Together Trails & Wetlands Can Co-exist

Distance
0.7 mi

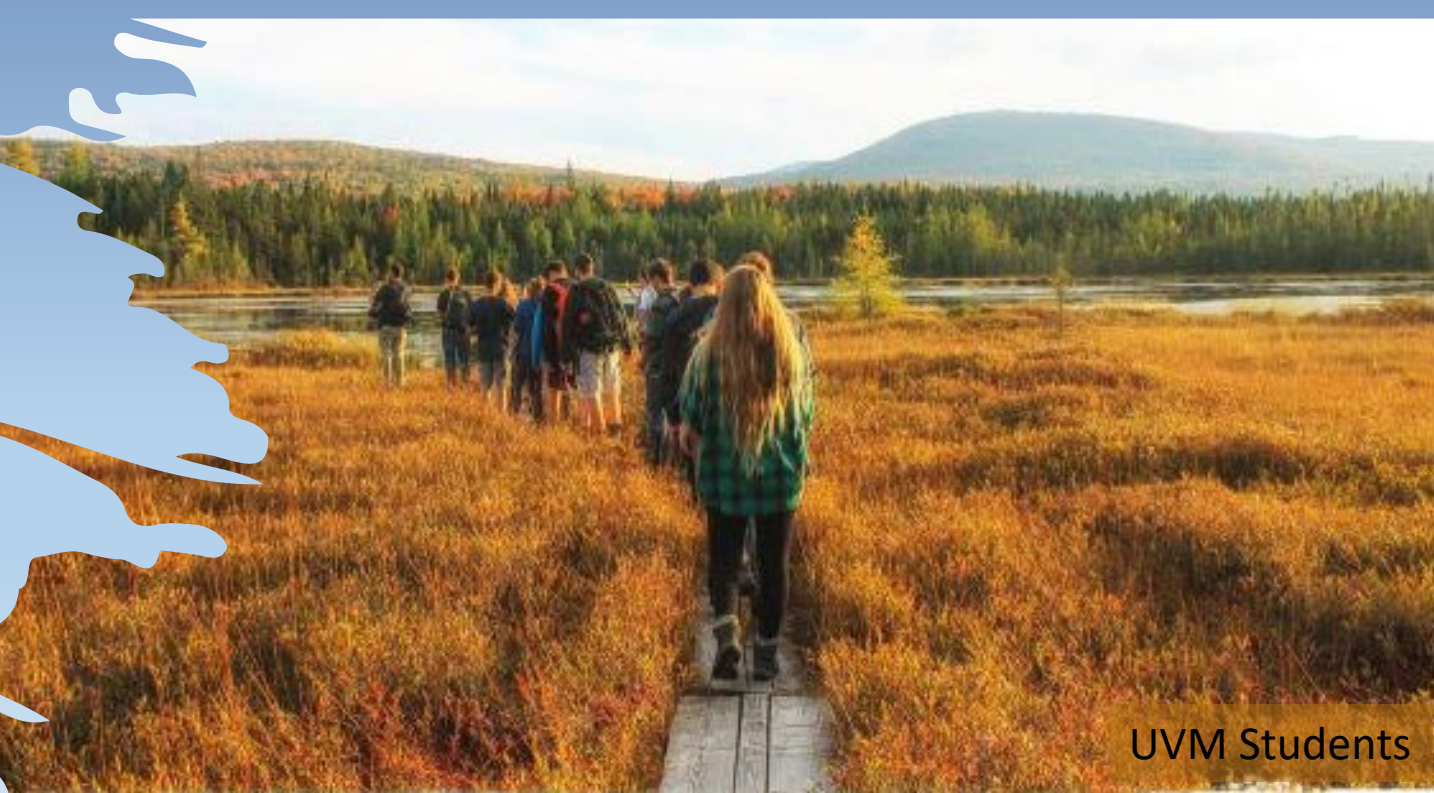
Elev. gain
82 ft

By: Zapata Courage
District Wetland Ecologist
State Wetlands Program

- Wetland ID
- Wetland Functions and Values
- Wetland Regulation
- Trails in Wetlands
 - Purpose
 - Types of Trails
 - Trail Structures
 - Location Challenges
 - Design Considerations
 - Allowed Uses/Permitting



P. Brian Machanic; NaturesEyeStudio



UVM Students

Wetland Identification: Three (3) Parameters



Hydrology: presence
of water



**Hydrophytic
Vegetation
(water-loving)**



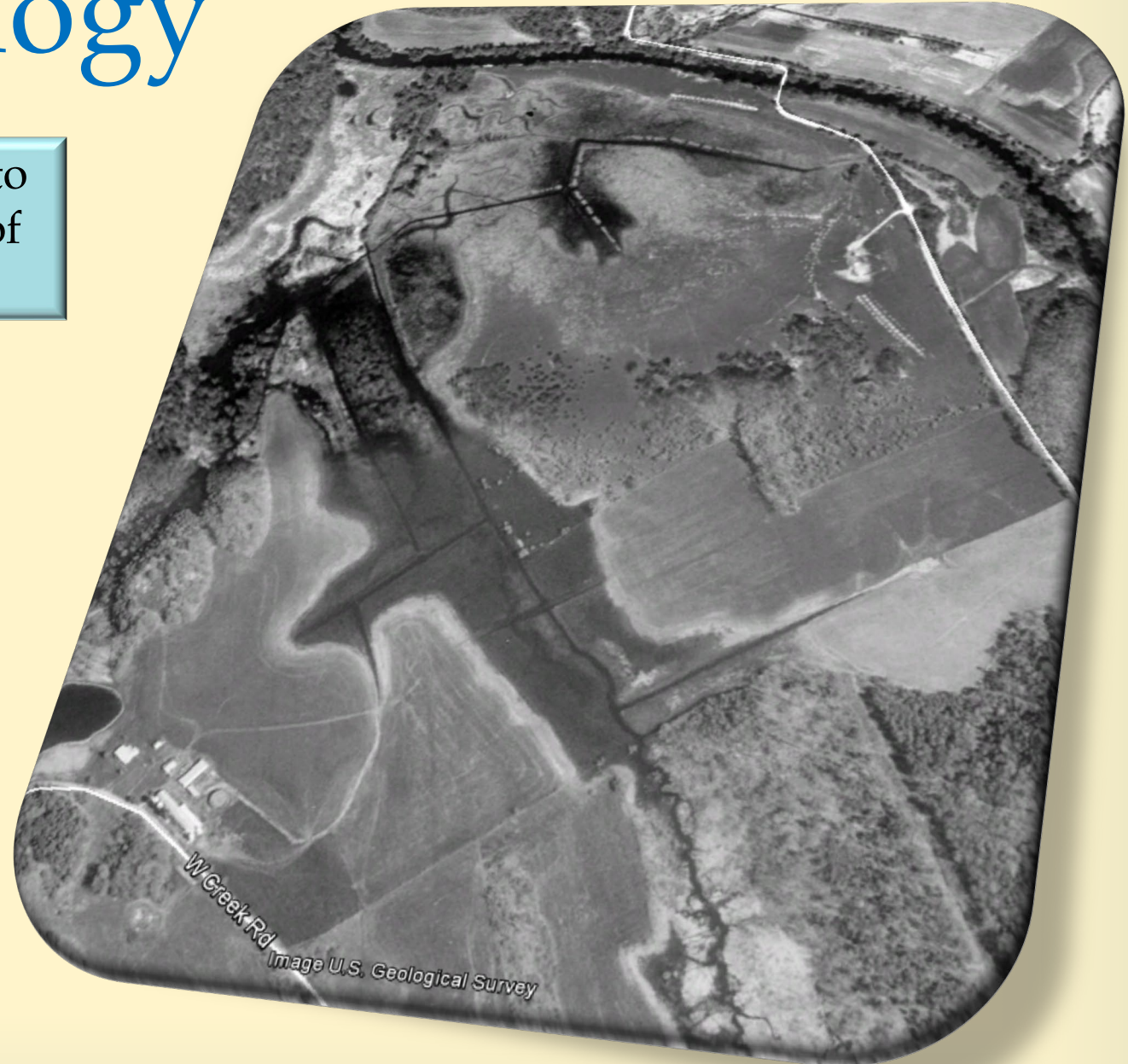
Hydric Soils: soils
showing evidence of
water presence-low
oxygen

Wetland Hydrology

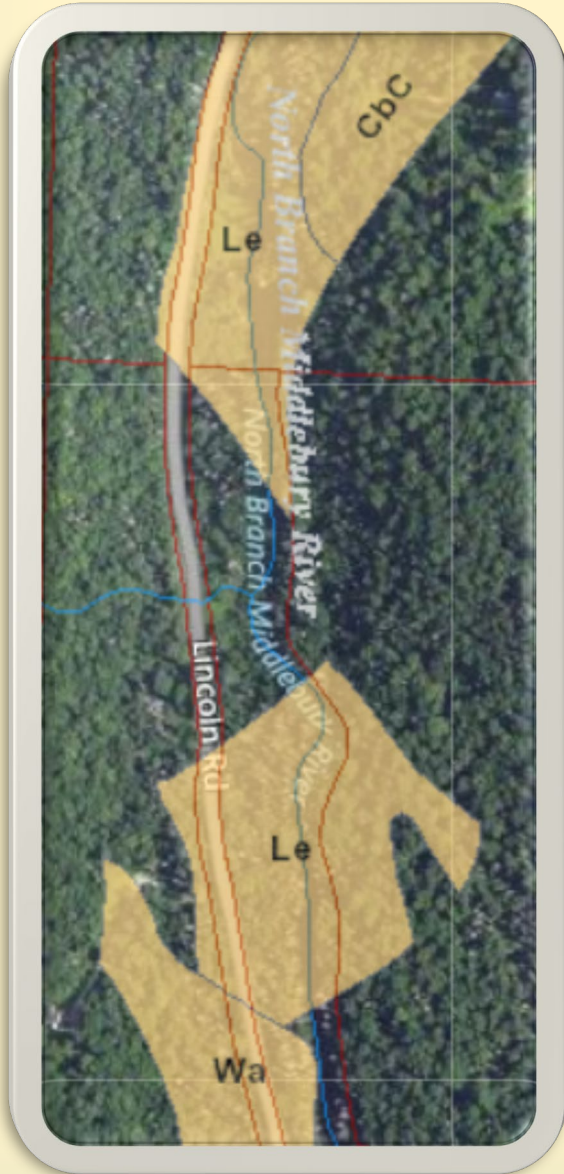
Criteria: Inundation or saturation to within soil surface for at least 5% of growing season in most years

~2 weeks in VT

- ☞ Primary indicator examples: actual observation of **surface water**, soil saturation, **high ground water table**, algal mat, oxidized root channels, hydrogen sulfide odor, or **inundation visible on aerial imagery**.
- ☞ Secondary indicator examples: water-stained leaves, **stunted or stressed plants**, geomorphic position, **drainage patterns**



Wetland Soil



Hydric mineral soils have gray colors with orange/red mottling



Hydric organic soils are very dark, almost black



Wetlands Types

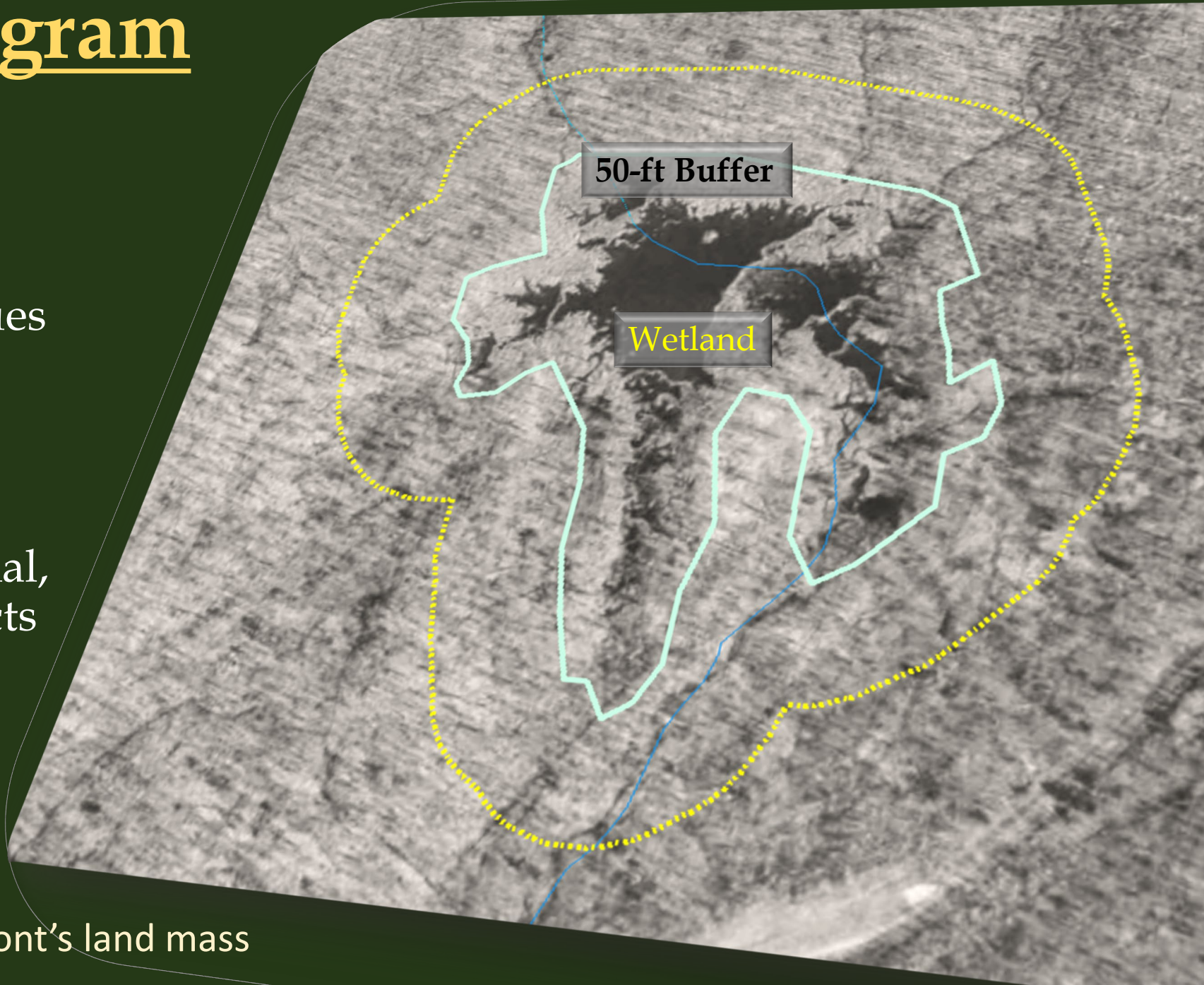
- Forested swamps
- Scrub/Shrub wetlands
- Emergent marshes
- Bogs & Fens
- Seeps
- Vernal pools
- Wet meadows



Wetlands Program

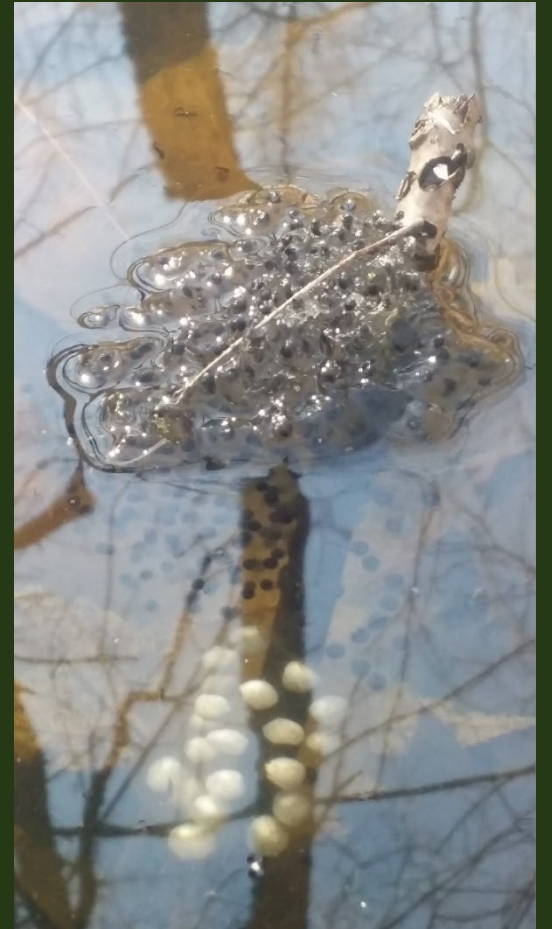
Mission

- No Net Loss
- Protect Function and Values
- Meet State Water Quality Standards
- If a wetland is jurisdictional, the State of VT also protects and regulates an upland buffer surrounding the wetland; typically, 50 ft.



Wetlands compose ~5% of Vermont's land mass

Jurisdictional Wetlands



Vermont's Wetlands Provide



10 Wetland Functions & Values



**Wetlands host 31% of the world's plants.
Over 50% of Vermont's plant species are found in wetlands.**

**Sandbar Wetlands, Class I protection
Colchester / Milton, VT**

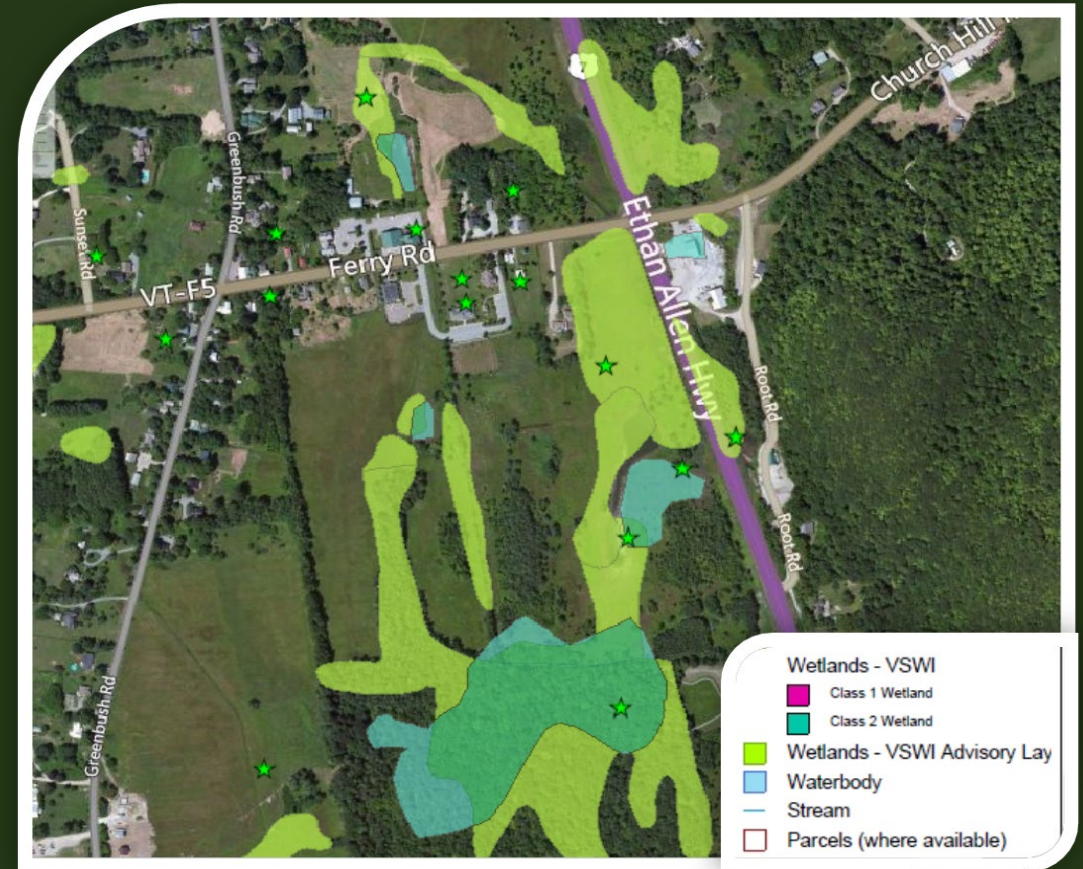


Wetland Classification

- ☞ *Class I Wetland:* Exceptional or irreplaceable (All are mapped)
- ☞ *Class II Wetland:* Merits protection (many mapped but not all are-categorical and presumptive wetlands)
- ☞ *Class III Wetland:* (currently not regulated by the State)

Categorical Class II Wetlands

- ☞ Any wetland on the VSWI map is Jurisdictional
- ☞ Any wetland contiguous or connected to the VSWI mapped wetland
- ☞ Any wetland that is the same type and size as what is on the VSWI maps (1/2 acre or larger)



- ☞ adjacent to a stream, lake, pond, or river
- ☞ headwaters above 2,500 feet elevation
- ☞ vernal pools
- ☞ special and unique wetlands like bogs or fens

Wetland Inventory Maps

Map Layers

- Wetland Map**
 - Wetland Inquiry
 - Wetland Inquiry (Status)
 - Fish and Wildlife
 - Watershed Protection
 - Vernal Pools Confirmed – AE/VCE
 - Vernal Pools Unconfirmed – AE/VCE
 - VT List of Priority Rivers and Streams
 - VT List of Priority Lakes and Ponds
 - Wetlands - VSWI
 - Wetlands - VSWI Advisory Layer
 - DFIRM Floodways
 - DFIRM Preliminary Floodways
 - Special Flood Hazard Areas (All Available)
 - Special Flood Hazard Areas (Preliminary)
 - Geology
 - Drinking and Groundwater Protection
 - ANR Basemap Data

Show Legend Filter..

[Disclaimer](#) [Map Layers](#)

Wetlands Inventory Map
VERMONT Vermont Agency of Natural Resources

Results (9) Wetland Tools...

View History View Selected >>

Refine Results Table View Charting View
Export to Shapefile Select All Select None

- RARE AND PROTECTED SPECIES**
 - ★ Element Occurrence ID: 392
 - State Protection:
 - Federal Protection:
- RARE AND PROTECTED SPECIES**
 - ★ Element Occurrence ID: 1068
 - State Protection:
 - Federal Protection:
- Significant Natural Community**
 - ★ Natural Community: Sugar Maple-Ostrich Fern Riverine Floodplain Forest
 - Element Occurrence ID: 4769
 - State Rank: S2
- Significant Natural Community**
 - ★ Natural Community: Silver Maple-Ostrich Fern Riverine Floodplain Forest
 - Element Occurrence ID: 3764
 - State Rank: S3
- Significant Natural Community**
 - ★ Natural Community: Silver Maple-Sensitive Fern Riverine Floodplain Forest
 - Element Occurrence ID: 5671
 - State Rank: S3
- WETLAND- VSWI**
 - ★ CLASS: 2
 - WETLAND TYPE: /
- WETLAND- VSWI ADVISORY**
 - ★ WETLAND CLASS: Presumptive Class 2
 - NOTES: By George Springston for the Middlebury Conservation Committee
- HYDRIC SOIL - LF**
 - ★ Limerick silt loam, very wet
 - HYDRIC: Y
 - SOIL FACT SHEET
- PARCELS**
 - ★ PARCEL NUMBER: 007021.000
 - SPAN: 387-120-11851
 - YEAR: 2013
 - ACRES: 0

[Disclaimer](#) [Map Layers](#) Results (9)

Disclaimer: NOT accurate and 39-46 % of VT wetlands are not mapped but may be jurisdictional.

Buffer Zone

Area of upland around a wetland which provides protection to function and values

50 foot buffer

Class II wetland

Hydric soils

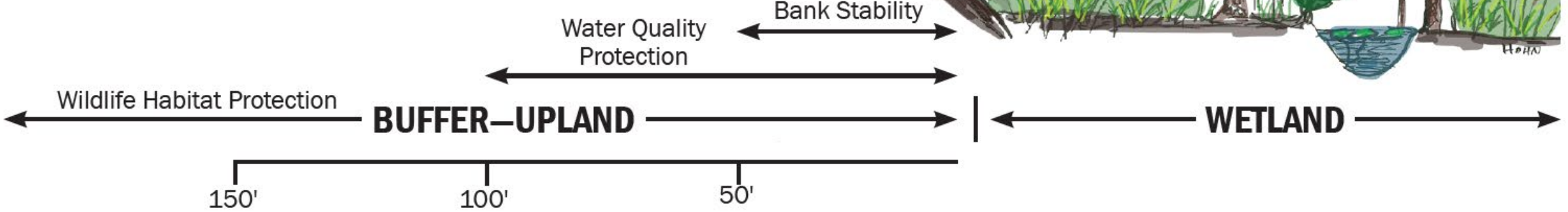
Buffer Functions:

- Filters pollution/nutrients
- Protects water quality
- Increases wildlife habitat
- Prevents the spread of invasive species
- Protects against other disturbances





Jurisdictional Buffer Zone





Wood Frogs rely on ***vernal pools*** for breeding, due to these pools being temporary and therefore lacks predators such as fish.

Wood Frog
(state-wide)



Northern Watersnake



Young Common Five-lined Skink



Spotted Salamander



Spiny Softshell Turtle





Wetlands provide nursery areas, feeding and refuge areas, and even for the brook trout, wetlands provide cold water recharge and overhanging wetland vegetation along streams help to keep water temps cooler.

VERMONT BIRDS

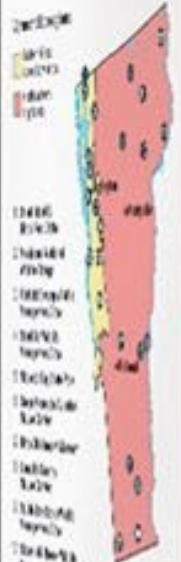


A Folding Pocket Guide to Familiar Species



VERMONT BIRDS - A Folding Pocket Guide to Familiar Species

Kavanaugh/Leung



- 1. Blue Jay
- 2. Downy Woodpecker
- 3. Field Sparrow
- 4. Golden-crowned Kinglet
- 5. Hermit Warbler
- 6. Kinglet
- 7. Magnolia Warbler
- 8. Parula Warbler
- 9. Red-bellied Woodpecker
- 10. Red-eyed Vireo
- 11. Ruby-cracked Kinglet
- 12. Spruce Parula
- 13. Yellow-rumped Warbler
- 14. White-throated Sparrow
- 15. Yellow Warbler
- 16. White-bellied Nuthatch
- 17. Black-billed Cuckoo
- 18. Black-throated Green
- 19. Black-throated Blue
- 20. Black-throated Green
- 21. Black-throated Blue
- 22. Black-throated Green
- 23. Black-throated Blue
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- 50. Black-throated Green

WATERBIRDS

 Common Loon <i>Ceryle alcyon</i> To 18 in. (45 cm)	 Hooded Merganser <i>Lophodytes cucullatus</i> To 18 in. (45 cm)
 Greater Scaup <i>Anas platyrhynchos</i> To 20 in. (50 cm)	 American Black Duck <i>Anas rubripes</i> To 18 in. (45 cm)
 Canada Goose <i>Branta canadensis</i> To 48 in. (120 cm)	 Wood Duck <i>Cairina melanotos</i> To 28 in. (70 cm)
 Blue-winged Teal <i>Wingya americana</i> To 16 in. (40 cm)	 Northern Pintail <i>Querquedula discors</i> To 20 in. (50 cm)
 Green-winged Teal <i>Querquedula discors</i> To 16 in. (40 cm)	 Canvasback <i>Aythya collaris</i> To 20 in. (50 cm)
 Common Goldeneye <i>Bucephala clangonia</i> To 20 in. (50 cm)	 Baldpate <i>Bucephala albeola</i> To 18 in. (45 cm)
 Hooded Merganser <i>Lophodytes cucullatus</i> To 18 in. (45 cm)	 Common Kingfisher <i>Ceryle alcyon</i> To 12 x 10 in. (30 x 25 cm)

NEARSHORE & WADING BIRDS

 Double-crested Cormorant <i>Phalacrocorax auritus</i> To 3 ft. (90 cm)	 Green Heron <i>Butorides virescens</i> To 22 in. (55 cm)
 Black-crowned Night-Heron <i>Nycticorax nycticorax</i> To 28 in. (70 cm)	 Killdeer <i>Chondestes vociferans</i> To 12 in. (30 cm)
 Common Gallinule <i>Gallinula galeata</i> To 14 in. (35 cm)	 Wilson's Snipe <i>Gallinago delicata</i> To 12 in. (30 cm)
 American Woodcock <i>Scolopax minor</i> To 12 in. (30 cm)	 Great Black-backed Gull <i>Larus marinus</i> To 32 in. (80 cm)
 Ring-billed Gull <i>Larus delawarensis</i> To 20 in. (50 cm)	 Common Tern <i>Sterna hirundo</i> To 15 in. (38 cm)
 Spotted Sandpiper <i>Actitis macularia</i> To 8 in. (20 cm)	 Upland Sandpiper <i>Arenaria ripens</i> To 12 in. (30 cm)
 Great Blue Heron <i>Ardea herodias</i> To 4.5 ft. (1.4 m)	 Herring Gull <i>Larus argentatus</i> To 26 in. (65 cm)
 Kildeer <i>Chondestes vociferans</i> To 12 in. (30 cm)	 Black Tern <i>Chalidon nigra</i> To 10 in. (25 cm)

IN THE FIELD



BIRDS OF PREY

 Turkey Vulture <i>Cathartes aura</i> To 32 in. (80 cm)		 Northern Harrier <i>Circus cyaneus</i> To 22 in. (55 cm)
 Sharp-shinned Hawk <i>Accipiter striatus</i> To 14 in. (35 cm)	 Cooper's Hawk <i>Accipiter cooperii</i> To 20 in. (50 cm)	 Northern Goshawk <i>Accipiter gentilis</i> To 27 in. (68 cm)
 Red-shouldered Hawk <i>Buteo lineatus</i> To 22 in. (55 cm)	 Broad-winged Hawk <i>Buteo platypterus</i> To 19 in. (48 cm)	 Red-tailed Hawk <i>Buteo jamaicensis</i> To 25 in. (63 cm)
 American Kestrel <i>Falco sparverius</i> To 12 in. (30 cm)	 Bald Eagle <i>Haliaeetus leucocephalus</i> To 48 in. (120 cm)	 Peregrine Falcon <i>Falco peregrinus</i> To 20 in. (50 cm)
 Eastern Screech-Owl <i>Screech owl</i> To 9 in. (23 cm)	 Great Horned Owl <i>Bubo virginianus</i> To 25 in. (63 cm)	 Barred Owl <i>Strix varia</i> To 2 ft. (60 cm)

Call it a hood - who cooks for you? who cooks for you - all?



More than 1/3 of North American bird species use wetlands for breeding, nesting, as a source of drinking water and for shelter, social interactions and rearing their young.

80% of US threatened or endangered bird species rely on wetlands.



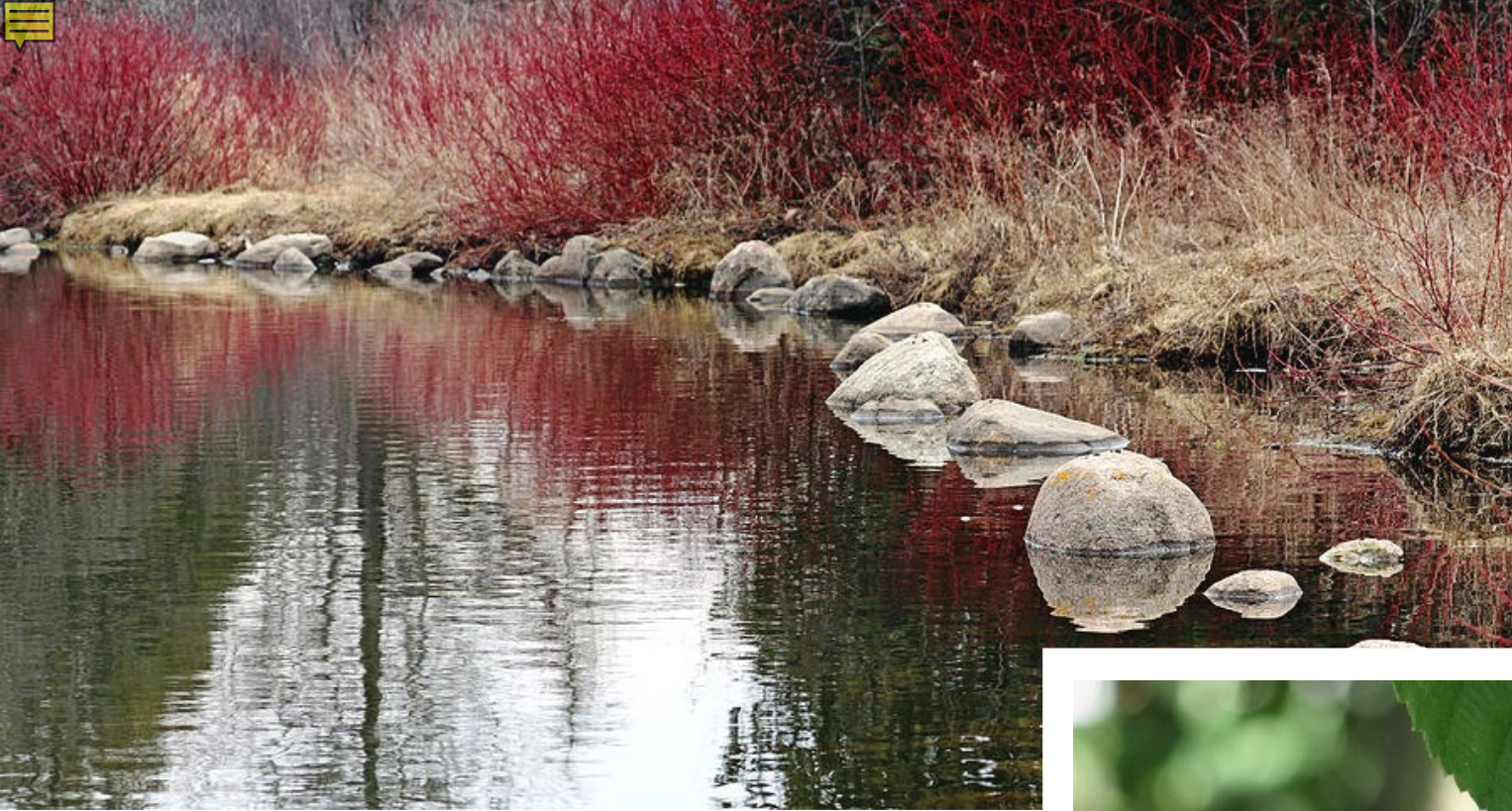




Photo: Enrique R. Aguirre Aves/Alamy







43% of rare, threatened, and endangered species (plant, animal, bird) in the U.S rely on wetlands for survival



Yellow Bogs, Lewis, VT



Trails that offer a glimpse into these unique ecosystems can be an exciting segment for nature lovers and wildlife enthusiasts.





- **Primitive walking/hiking trails**
- **ADA Accessible and Multi-Use Trails**
- **Mountain Biking**
- **Frisbee Golf**
- **Winter Trails (Nordic Ski Trails and VAST Trails)**
- **Horseback Riding Trails and/or VASA trails**





ADA compliant trails with boardwalks through wetlands

<https://www.greenmountainclub.org/hiking/accessible-trails/>

Smuggler's Notch Boardwalk, Barnes Camp Visitor Center on Route 108

Colchester Bog, Colchester

Raven Ridge, Monkton

Robert Frost Interpretive Trail, Ripton

Rutland Marsh, West Rutland

Mollie Beattie Bog, Brighton

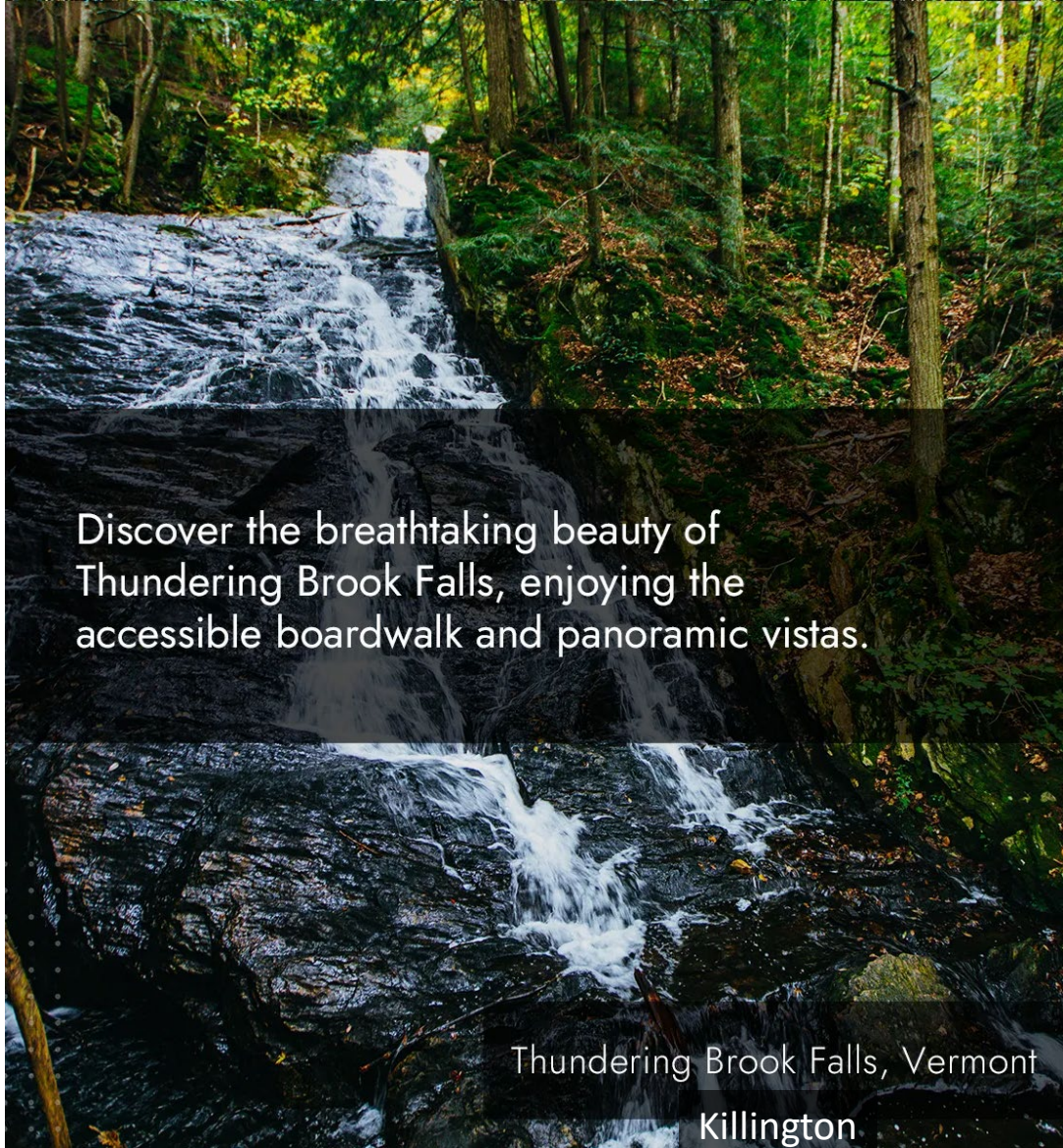
Eshqua Bog Preserve, Hartland

Thundering Falls Boardwalk, Killington

Otter View Park, Middlebury

Hildene Homestead, Manchester





Discover the breathtaking beauty of
Thundering Brook Falls, enjoying the
accessible boardwalk and panoramic vistas.

Thundering Brook Falls, Vermont
Killington





The West Rutland Marsh is more than a boardwalk, it is more than the birds that find sanctuary in the marsh, it is more than the marsh itself, it is an interdependent community of plants, animals and soils, and the waters that sustain them and we the people with our awesome potential to affect change.



Yellow Warbler

Yellow Warbler is one of the many species that uses the marsh for nesting.

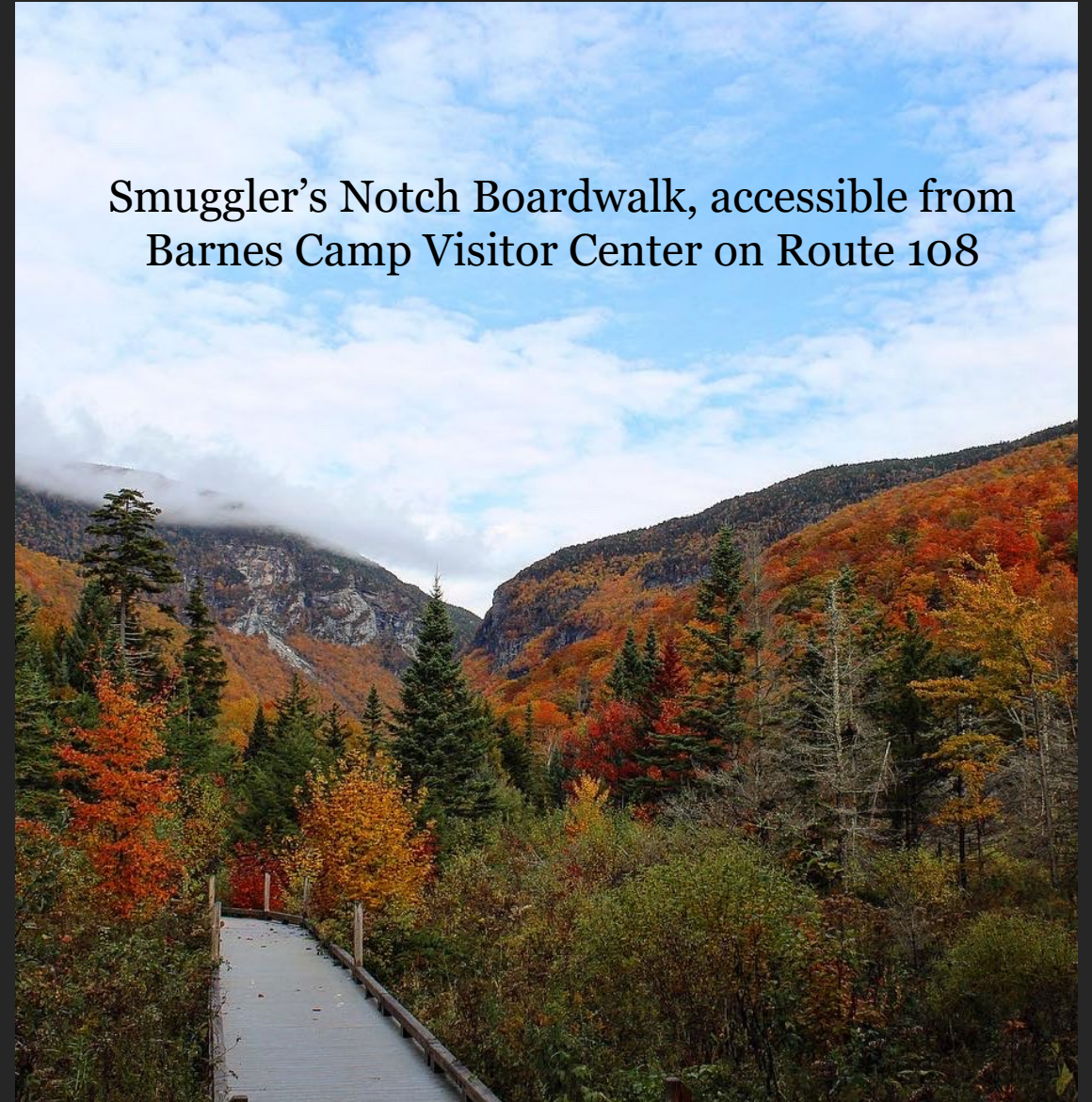
Marv Elliot

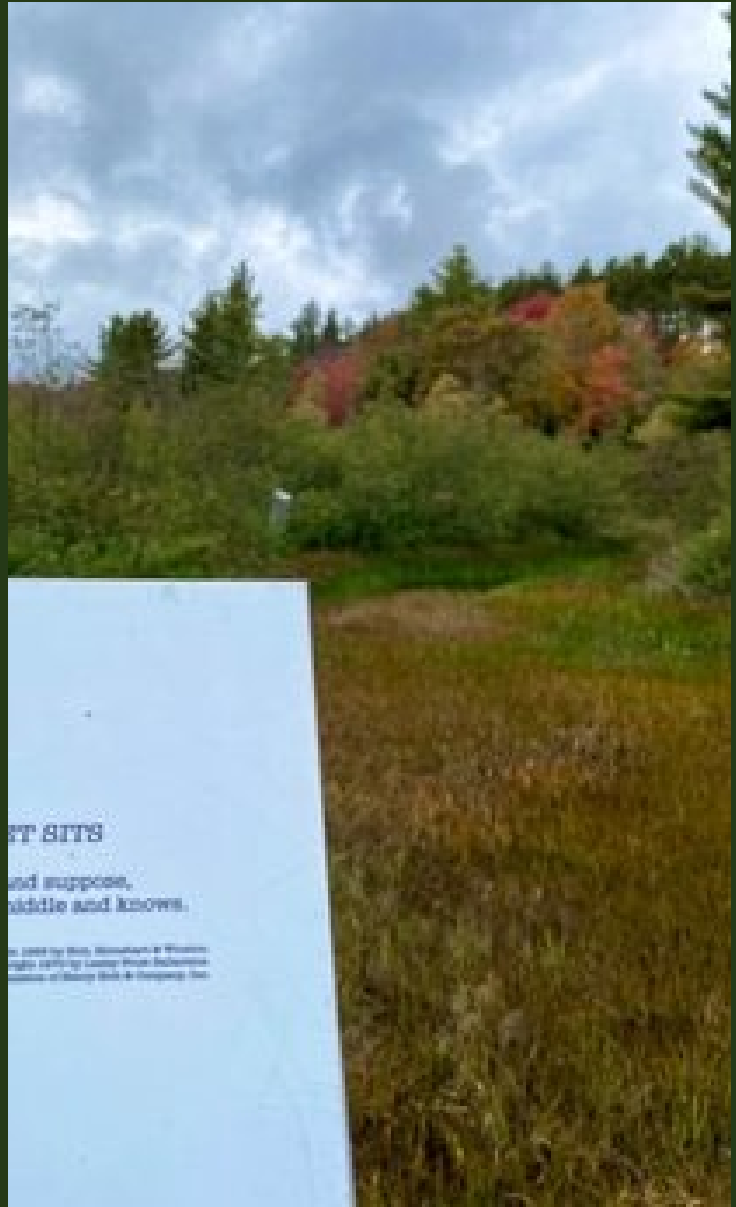
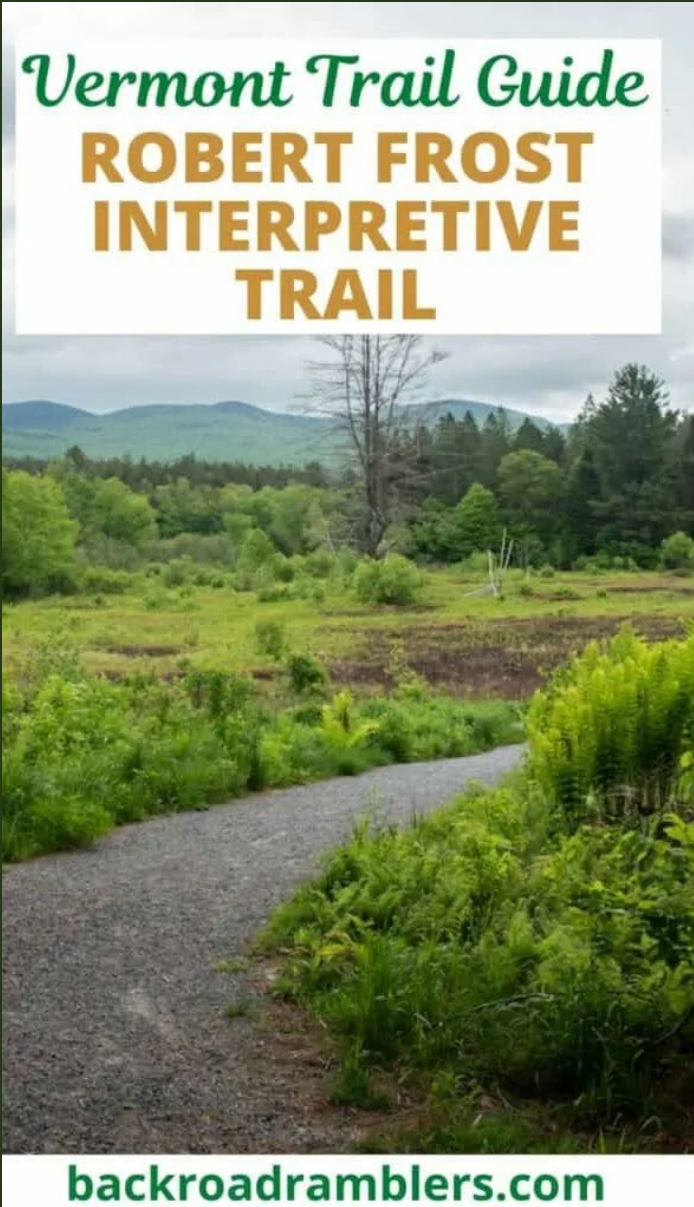
Raven Ridge, Monkton





Smuggler's Notch Boardwalk, accessible from Barnes Camp Visitor Center on Route 108

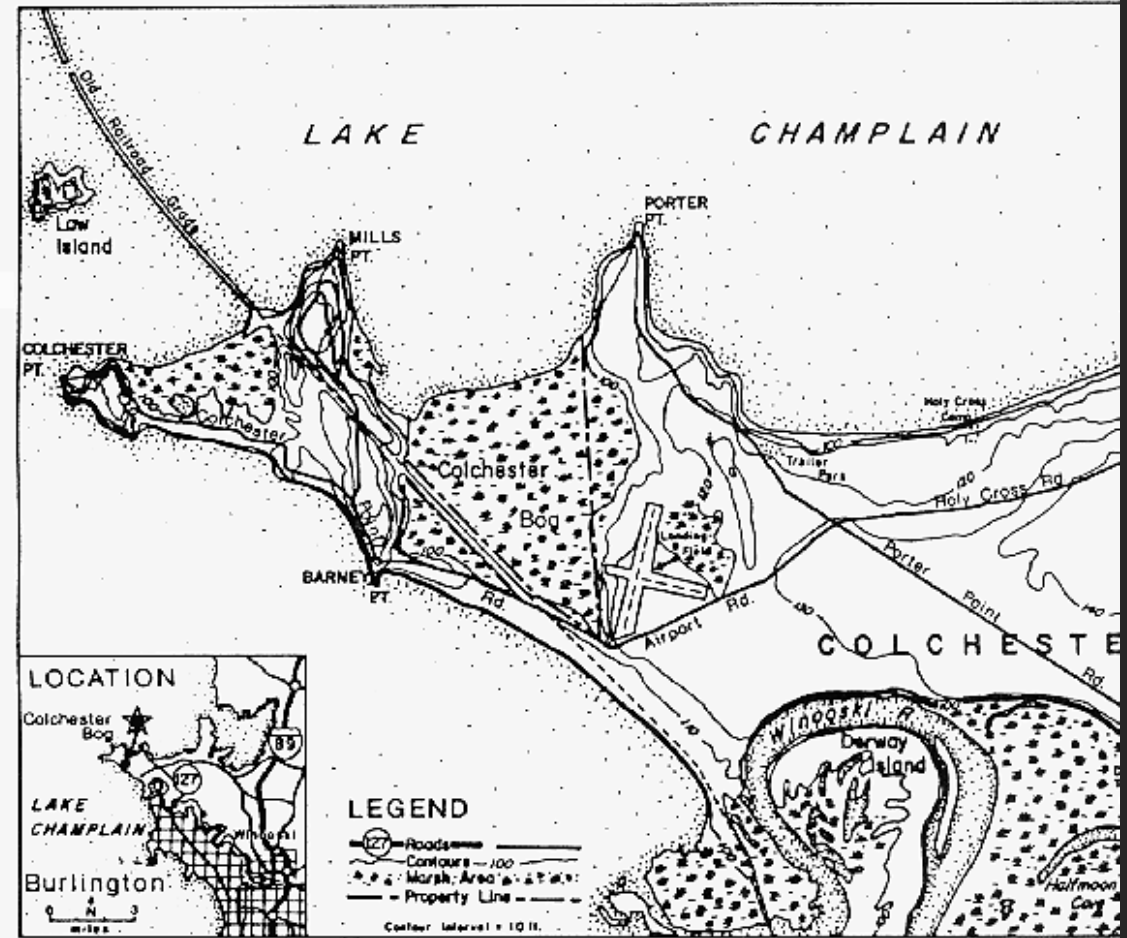




Robert Frost Interpretive Trail, Ripton

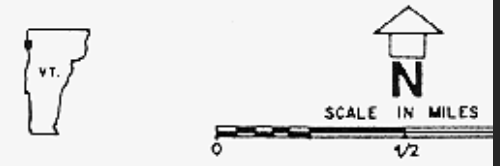
Experience the unusual and rare natural history of this plant community first-hand, without impacting its fragile ecology.





Colchester Bog

Natural Area



A boardwalk/floating deck lets visitors explore the bog without getting soaked or damaging the fragile wetland moss & sedge.



provided by Hannaford Career Center.

- ★ Parking is allowed only in the designated area and only during open hours. Parking is for park use only.
- ★ Pets on a leash are allowed according to town ordinances.
- ★ Please pick up after your pet.
- ★ All items carried in must be carried out. Please keep our park clean!
- ★ Fireworks, firearms and open fires are prohibited.
- ★ Children under the age of 12 should be accompanied by an adult.
- ★ Please respect your neighbors and keep volume at a reasonable level.



Middlebury

Otter View Park



<https://www.youtube.com/watch?v=yB9m51vQ2Ks>



All trails begin and end at the Welcome Center where guests get a glimpse of Hildene's mission "Values into Action"





Mollie Beattie Bog is a significant black spruce woodland bog. A fully accessible boardwalk include signs illustrating bog formation, the interesting rare plants, and the legacy of the late Mollie Beattie.









NEW THIS MORNING
ADAPTIVE MOUNTAIN BIKING
TRAILS UNDERWAY IN RICHMOND ACCESSIBLE FOR
NBT Bancorp. Inc. 46.60
BENNINGTON; WINDHAM | WIND ADVISORY



ALMOST FLOODED!



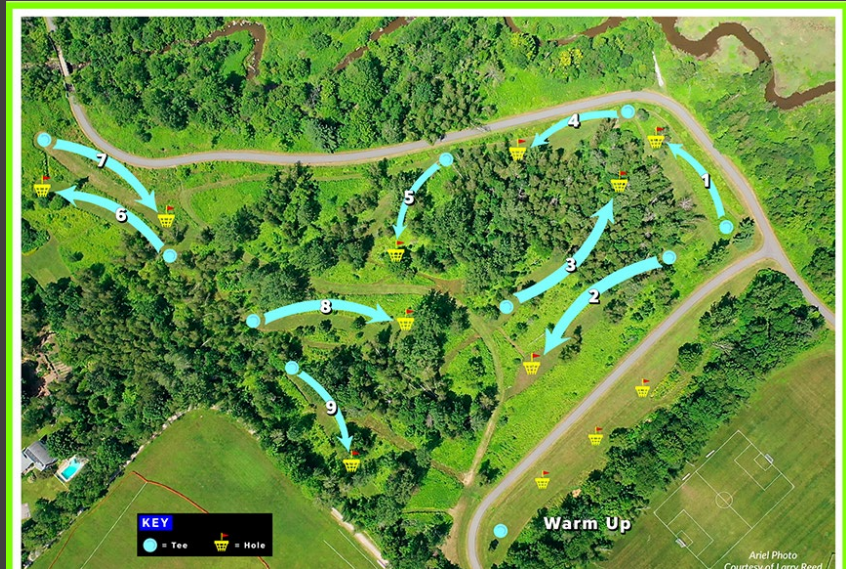






[https://dec.vermont.gov/sites/dec/files/wsm/wetlands/docs/WTLD Trail Guidance.pdf](https://dec.vermont.gov/sites/dec/files/wsm/wetlands/docs/WTLD_Trail_Guidance.pdf)





 | **Published 2022**



Alligator Kills Florida Man Retrieving Frisbees in Lake, Officials Say - The New York Times

Best Practices for The Development of Snowmobile Trails



https://fpr.vermont.gov/sites/fpr/files/doc_library/VAST-Best-Practices-for-the-development-of-snowmobile-trails.pdf

Landscape Considerations

One of the most unique and beautiful aspects of Vermont is its diverse landscape. When laying out a trail, there are many factors to consider.

Avoid Steep Slopes

Steep slopes require more and deeper waterbars to prevent erosion. The need for waterbars can be minimized (but not eliminated) with good trail planning. Gain or lose elevation gradually rather than traveling straight up and down a slope.



Look for Drainage Opportunities

Proper drainage will mean longer riding seasons and save your club money in maintenance. Follow the contours of the land as they will provide natural drainage opportunities. Decrease the need of deep waterbars. Avoid putting a trail through gullies, seeps, or any other places that hold water.



Avoid Wetlands

Wetlands are heavily protected by State and Federal agencies. In some cases, snowmobiles are permitted to cross these areas in winter conditions, but it is best to avoid them all together whenever possible.



Avoid Deer Wintering Areas

Stands of conifers could be critical deer wintering habitat and possibly protected. Check with agencies like FPR and F&W to see where these areas are and plan your trail around them.



Avoid Elevations over 2,500'


High elevations hold snow longer and can be desirable places for trails. However, any development over 2,500' elevation requires an Act 250 permit and should be avoided.



Do Not Alter Historic Sites

While cellar holes, stone walls, and cemeteries can be interesting features to highlight, it is important to stay away from the footprint and edges of visible historic sites. Do not disturb these sites by moving them, removing them, or altering them in anyway.





Logging occurs during
frozen conditions



They may not be suitable for use as part of a trail system
during other times of the year

Control points can be features that you want to highlight or features that you want to avoid.

Identify ways to connect to positive control points while avoiding the negative ones. This will give you a basic route to start with.



Negative

- Open bodies of water
- Wetlands
- Steep or rocky terrain
- Incompatible landowners
- Areas that won't hold snow







VERMONT MUD SEASON BEGINS

- ▶ Trails Are Wet & Muddy Due To Snow Melt, Thawing Ground & Seasonal Rain
- ▶ Avoid Muddy, Soft Trails
- ▶ Follow FPR Guidelines Like Check Trail Status, Seek Durable Surfaces, Check Weather Report, Etc.





Rutted and Ruined: ATV Damage



Trail Planning with an eye to Wetlands

The Vermont Significant Wetland Inventory (VSWI) Mapping: **VSWI, advisory mapping, and hydric soils.**

Look at the site in the wet seasons – early spring or late fall. Use the Landowners' Guide to Wetlands to help find these areas. Remember that both the wetland and the 50-foot buffer require protection.

Avoids wet areas and minimize stream crossings

Plan it right the first time and build a trail that suits your needs and takes the resources into account.

Use existing well placed upland old woods roads or skidder trails to minimize clearing of new trails. A change in use or improvement from a logging road or skid trails to a recreational trail may require a wetland permit.



Burlington Free Press

<https://www.burlingtonfreepress.com> › 2023/09/13 › f... ⋮

Flooding leaves Vermont hiking trails vulnerable to erosion ...

Sep 13, 2023 — One of the simplest ways to help **Vermont's** trail system recover from **flood** damage is to **hike** responsibly, Tierney said. That means not stepping ...



WCAX

<https://www.wcax.com> › 2023/07/19 › vermont-hiking-t... ⋮

Vermont hiking trails disrupted by flooding, heavy rain

Jul 19, 2023 — Recent **flooding** and ...



WCAX

<https://www.wcax.com> › 2023/07/28 › bike-trails-recove... ⋮

Bike trails recover from flooding, attract visitors to Vt.

Jul 28, 2023 — Bennette says most ...



Backpacker

<https://www.backpacker.com> › News and Events › News ⋮

Hikers Urged to Stay Off Appalachian and Long Trails ...

Jul 13, 2023 — “**Flood** waters brought catastrophic destruction to areas of New York and **Vermont**, and the condition of the Appalachian **Trail** in **Vermont** is ...



Living peacefully with our beaver friends — Mad River Path

[Visit](#)



Bolton installs beaver device to protect trails

[Watch](#)

Uploaded: May 31, 2023

The town of Bolton is working to battle beaver issues.



Co-thriving With Beavers | Vermont Family Forests

[Visit](#)

You can find the wetland screening tool at:
<https://dec.vermont.gov/watershed/wetlands/maps>

To get started, all you need is the 911 address or the SPAN number for an undeveloped property.

<https://www.youtube.com/watch?v=6lv5en0AB1o>

Restoring Vermont's Waters
Business and Operations
CAFO
Lakes and Ponds
Monitoring and Assessment
Rivers
Stormwater
Wastewater
Wetlands

Welcome to the Wetlands Program

The Vermont Wetlands Program is responsible for identifying and protecting wetlands and the functions and values they provide by the implementation of the [Vermont Wetland Rules](#). Activities to achieve these goals include education, project review, and enforcement.

UPDATE: Due to the coronavirus (COVID-19) we are now scheduling site visits with additional safety measures to protect our employees and customers. The growing season has begun and verification of wetland boundaries may commence. Please be patient in receiving a response as staff are in the field. To request a site visit, use our [inquiry portal](#). To complete an initial wetland screening for your property, use our new [Wetlands Screening Tool](#).

Address SPAN 0 garden street, south burlington, vt

Status:	13/13 queries completed... DONE!
Matching Address:	0 GARDEN ST. SOUTH BURLINGTON, 05403
Grand List Owner:	SOUTH BURLINGTON CITY CENTER LLC
SPAN:	600-188-14489
District Wetland Ecologist:	Tina Heath, Phone: 802-490-6202

[Link to Wetland Map](#)

In addition to the Wetland Inventory Map, the tool also screens for nearby hydric soils, wetland projects, wetland permits, wetland natural community types, and wetland advisory layers.

The results for a given property are listed for you to see, with explanations of each layer and recommended next steps. You can also produce a map of the results.

- Wetland Screening Result: Wetland Permit on the Property**
- Issued permit on property.
- Project on Property with Class I/II Designation
- Wetland Project within (500ft.)
- Issued Wetland Permit (within 1000ft.)
- Vermont Significant Inventory Map
- Vermont Significant Inventory Map (within 300ft)
- Wetland Advisory Maps
- Wetland Advisory Maps (within 300ft)
- Hydric Soils (OBL)
- Hydric Soils

Status:	13/13 queries completed... DONE!
Matching Address:	0 GARDEN ST. SOUTH BURLINGTON, 05403
Grand List Owner:	SOUTH BURLINGTON CITY CENTER LLC
SPAN:	600-188-14489
District Wetland Ecologist:	Tina Heath, Phone: 802-490-6202

[Link to Wetland Map](#)

Wetland Screening Result: Wetland Permit on the Property

There is a wetland permit associated with this property.

A map showing a wetland delineation and conditions associated with this permit will be located in the Wetlands Program's project

Tool tells you likelihood of wetlands on parcel



ADA Accessible and Multi-Use Trails - Because of their wider width, minor slope and firm and stable substrate requirements, these types of trails frequently require wetland permits when they intersect with Class II wetlands and their buffers.

CONSIDER WHEN PLANNING

- If a trail must go through a wetland, use a boardwalk.
- Trails are not required to be paved.
- Narrow trails to the minimal width of 3 feet and keep straight to avoid turn clearances.
- Build passing spaces or observation areas outside of the wetland and buffer.
 - *Creating a one-lane boardwalk with intermittent passing spaces to a width of 5 feet meets the allowed use standards without requiring a wetlands permit.

“Modern Trail Design Helped Save Vermont Singletrack From Flood Damage”



Vermont saw historic flooding a month ago. Most of their trails are still in good shape, thanks to sustainable trail design.

By [Cris Cadiz](#)

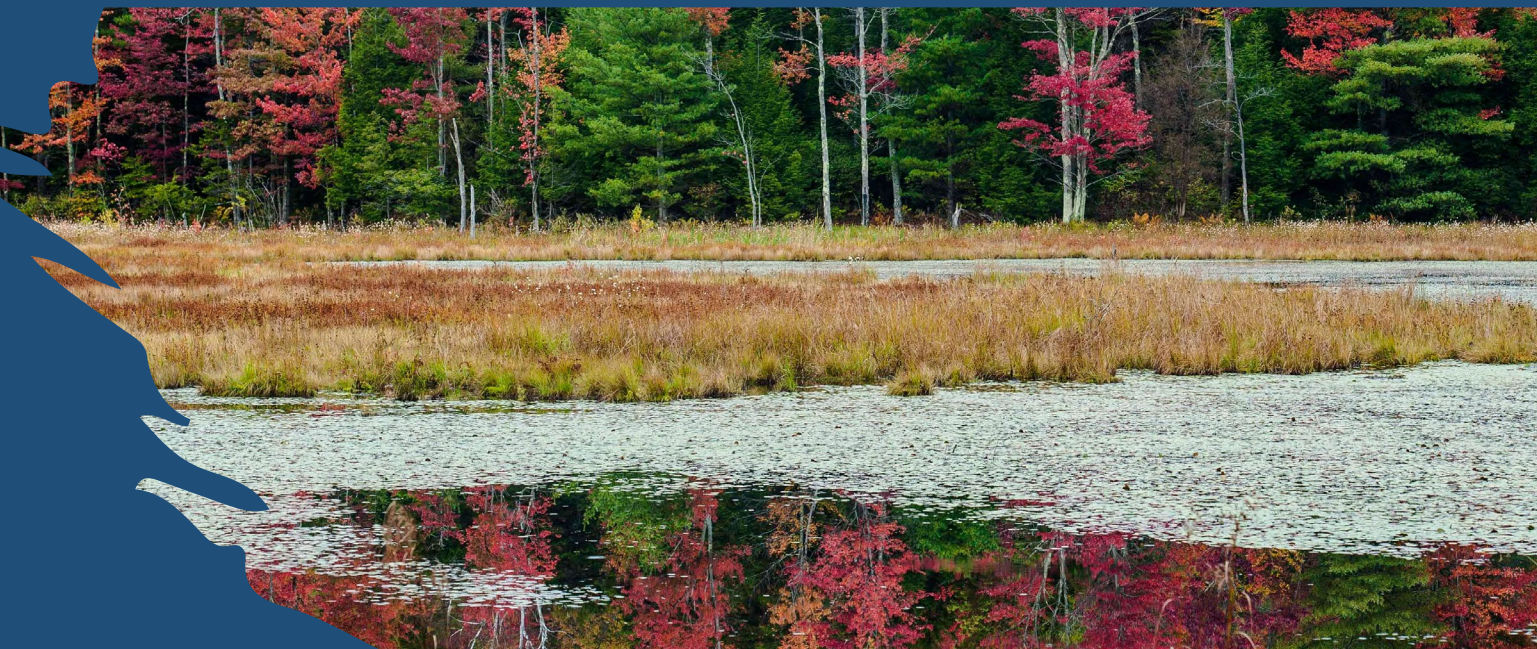
August 14, 2023


- “The vast majority of the 900 miles of trails that VMBA stewards in the state made out pretty well, mainly due to modern trail building techniques and water management,”
- “Our trail network was largely spared when it came to catastrophic flooding because most of our trails are at a decent elevation,”

Wetlands Providing Wildlife Habitat

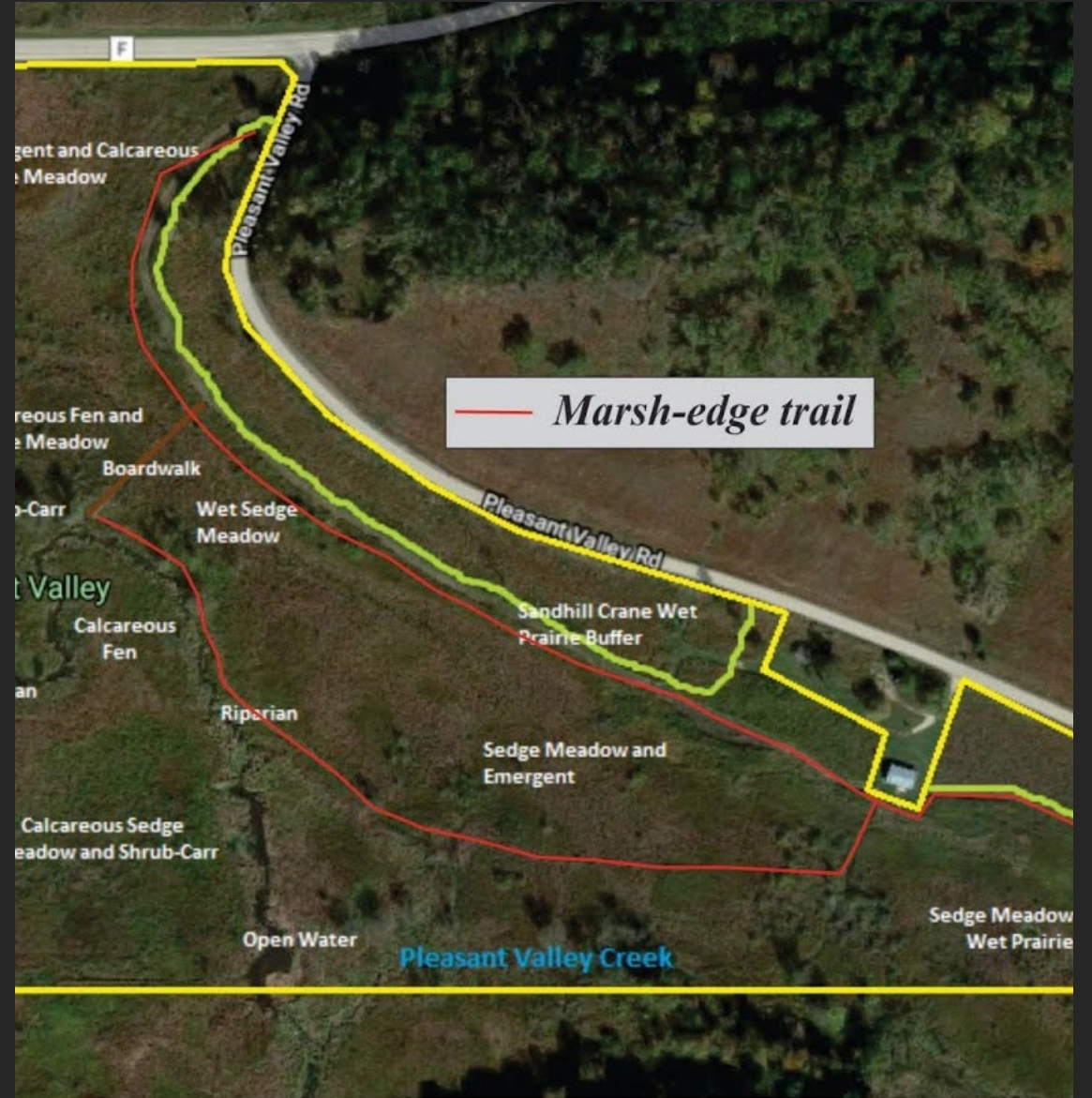
Of the many factors that influence wildlife response to trail recreation, the following variables were consistently represented as important across the literature. These are not specific to wetlands, but the considerations are the same across habitat types.

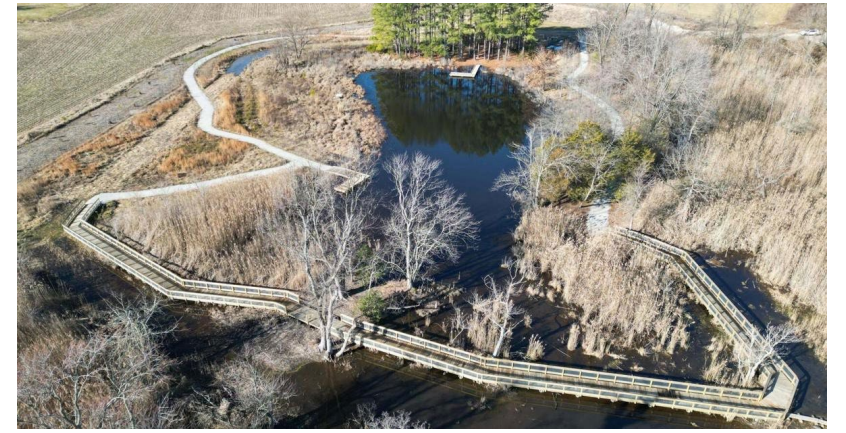
- Consolidation of trails
- Zone of influence
- Breeding seasons
- Trail use volume
- Recreation activity type
- Animal Species



A photograph of a forest stream. The water is dark and still, reflecting the surrounding trees and a fallen log. The log is partially submerged and spans across the stream. The trees are mostly bare, suggesting a late autumn or winter setting. The lighting is soft, with some highlights on the water and the log.

Locating new recreation trails away from unique landscape features and areas of high value to wildlife, in addition to consolidating trails on the landscape to leave large blocks of trail-free land, are effective ways to minimize the effect of trail recreation on wildlife.







NOW OPEN! WETLANDS UPDATE

If crossings are unavoidable, plan to minimize potential impacts by:

- Crossing in a very narrow location
- Using bridges, boardwalks and catwalks that follow [Best Management Practices](#)
- Choose the right trail surface and the right width of trail
- Consider water bars to direct water across the trail instead of extensive ditching and culverts
- Altering location of trail, minimize clearing, avoid sensitive areas or cumulative impacts

Trail Information

Cold Brook PATH

Cold Brook Path is a double track style multi-use trail that winds through the old town sand pit, then along an open meadow and across a scenic brook before climbing to the former route of the Montpelier - Wells River Railroad (which is now private property.)

This is an easy to moderate trail. Generally gradual, with a few short climbs. Some spots may be soft, rough or uneven.

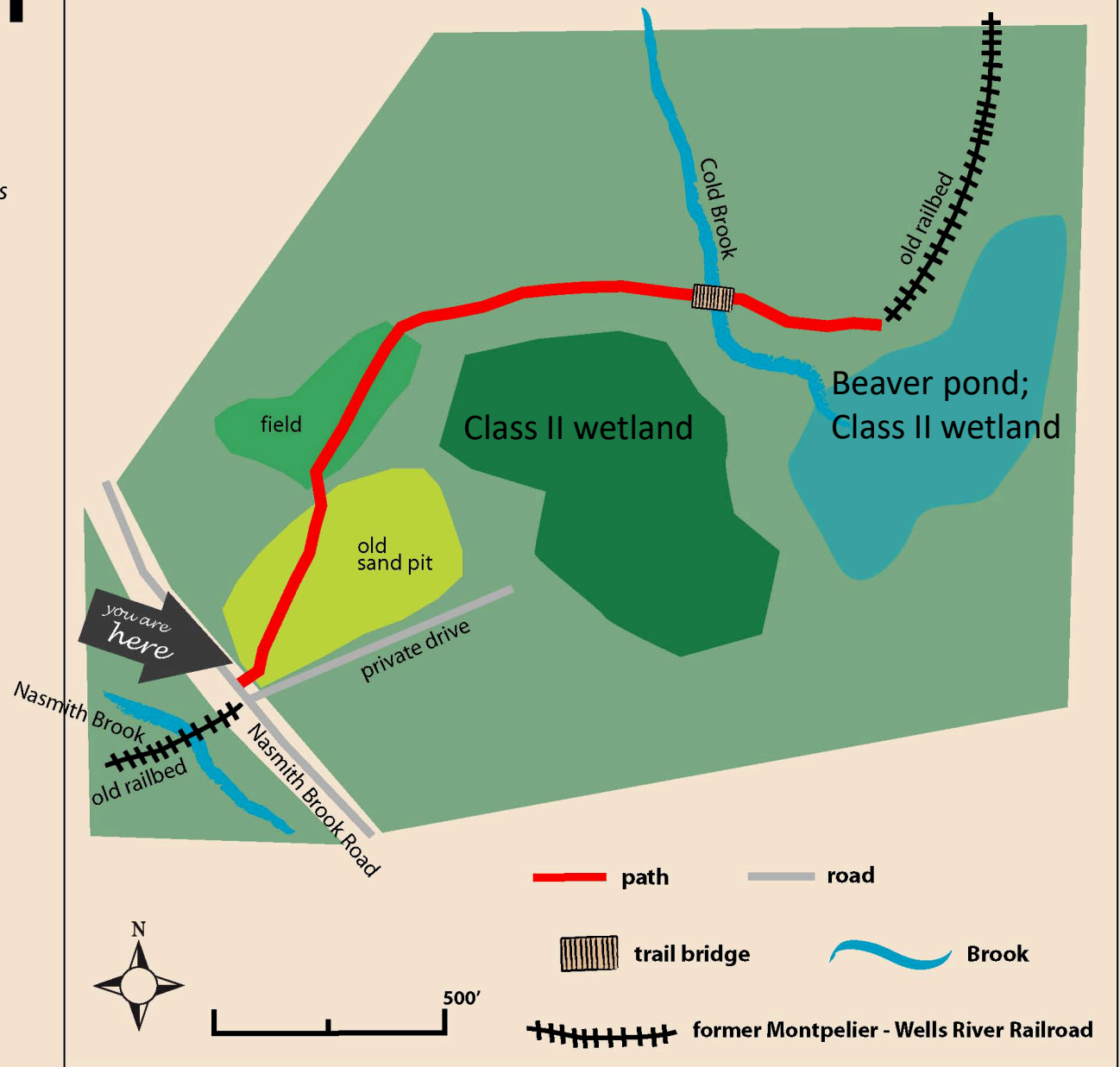


Four season, non-motorized use by the general public is welcome. Walking, bicycling, skiing and other non-motorized recreational travel is allowed on this trail year round. Trail is made possible through the generosity of private landowners and the Town of Marshfield. **To learn more or to report trail maintenance needs, contact Cross Vermont Trail Association at 802-498-0079 or www.crossvermont.org.**



This trail is open to snowmobile travel as a part of the Vermont Association of Snow Travelers trail network. For more information contact VAST at 802-229-0005 or www.vtvast.org.

AREA MAP





NO Wetland Permit:

- Use of boardwalks, bridges or catwalks that are in compliance with the Wetland Allowed Use BMP Section 6.16
- Repairing existing structures such as culverts or bridges when remaining in the existing footprint
- Raking away duff for trails
- Placing reinforcing stepping stones where work in wet area/waterway does not exceed 250 square feet for the wetland/buffer in question for existing trails
- Trimming branches within the trail
- Placing trail markers



Wetland Permit:

Any type of machine or hand- graded trail

- Filling for existing trails
 - o Fill through wet areas
 - o Fill to place culverts in any type of stream located within a wetland/buffer
 - o Cumulative fill totaling over 250 sq. ft for areas off and on bridges for the trail system
 - o Stones for forded crossings through streams or wet areas that exceed 250 sq. ft. for the trail system
- Cutting woody vegetation for new trails (clearing paths through trees and shrubs) or mowing a new path
- Placing any type of pavement, gravel or sure-mat, woodchips, and recycled materials in new areas where that type of treatment has not been used before
- Widening trail footprints by ditching or doing other “drainage work”
- Improving existing logging roads to include in a trail network.



<https://www.youtube.com/watch?v=npjTvXmI3RY&list=PLLXVJCF6Lbmxkg4ZPOiAg2YybklskikMQ&index=3&t=22s>





Happy Trails
Questions?

