

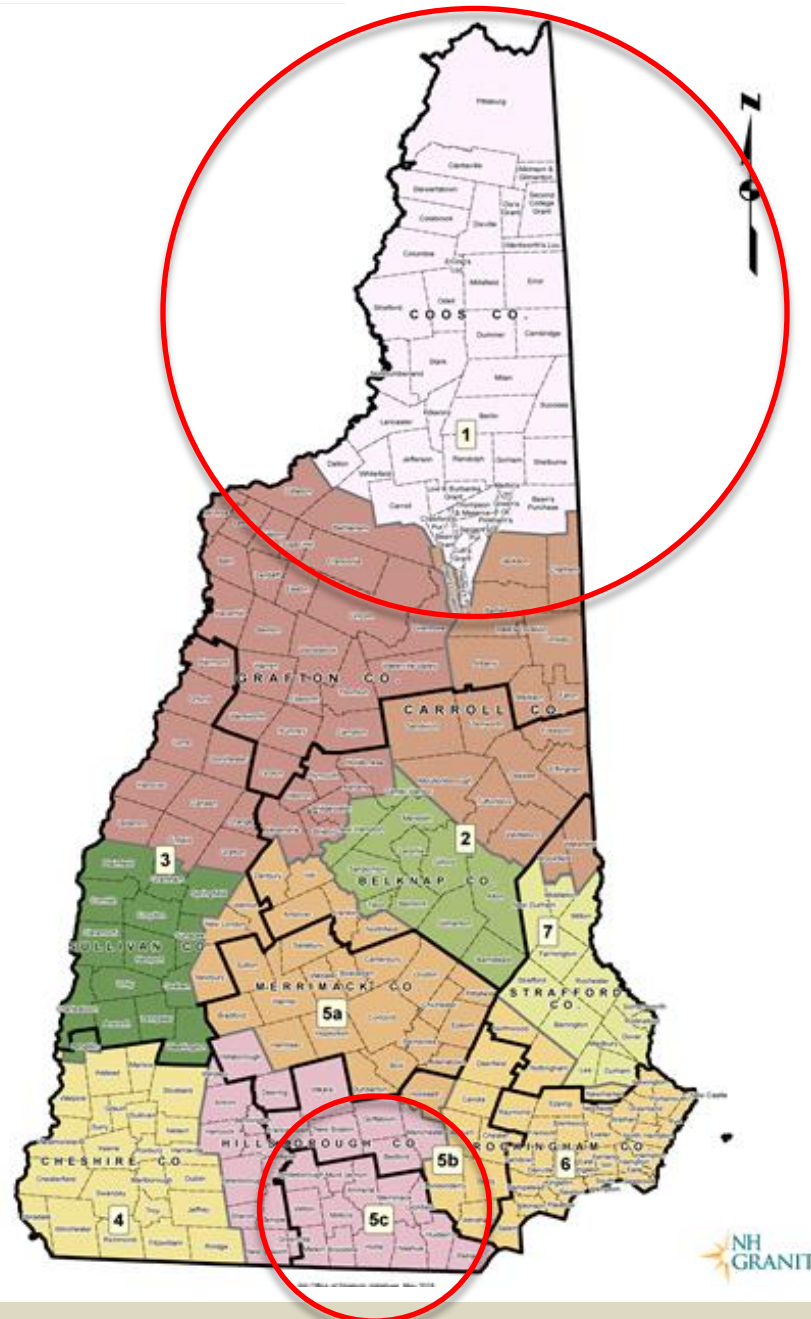
PLANNING FOR PARKS AND PLAYGROUNDS

25th Annual Spring Planning and Zoning Conference
Grappone Conference Center
70 Constitution Ave, Concord, NH 03301

June 1, 2019

NH Regional Planning Commissions

- Prepare a comprehensive regional master plan
- Prepare a regional housing needs assessment
- Review developments of regional impact
- Advise, e.g. *orderly development*
- Conduct special studies
- Assist local planning efforts



Project Overview

- Public Health Problem
- Planning Challenges
- Past Successes
- New Solutions
 - Inventory of Assets
 - Analysis of Existing Conditions
 - Map Products
 - Planning Guidebook
 - Case Studies





Photo: Mine Falls Park, Nashua, NH

The Public Health Problem

Weight

28%

of NH 3rd Graders
are Overweight or Obese

35%

of Nashua's 3rd Graders
are Overweight or Obese

exercise

23%

Of NH Adolescents meet
Physical Activity Guidelines

50%

Of High School Students in the
Region Meet Exercise Goals

Photo: Emerson Park, Milford, NH

Planning Challenges

Resources CONSTRAINTS

- Up-to Date Data
- “How to” Guidance
- Funding Sources
- Volunteer and Staff Capacity



CONVENTIONAL Policy Framework

- Fragmented Development
- Subdivision and Site Plan Incentives
- Play Friendly Policies



Access ISSUES

- Pedestrians and Bicyclists
- Parking and Vehicle Traffic

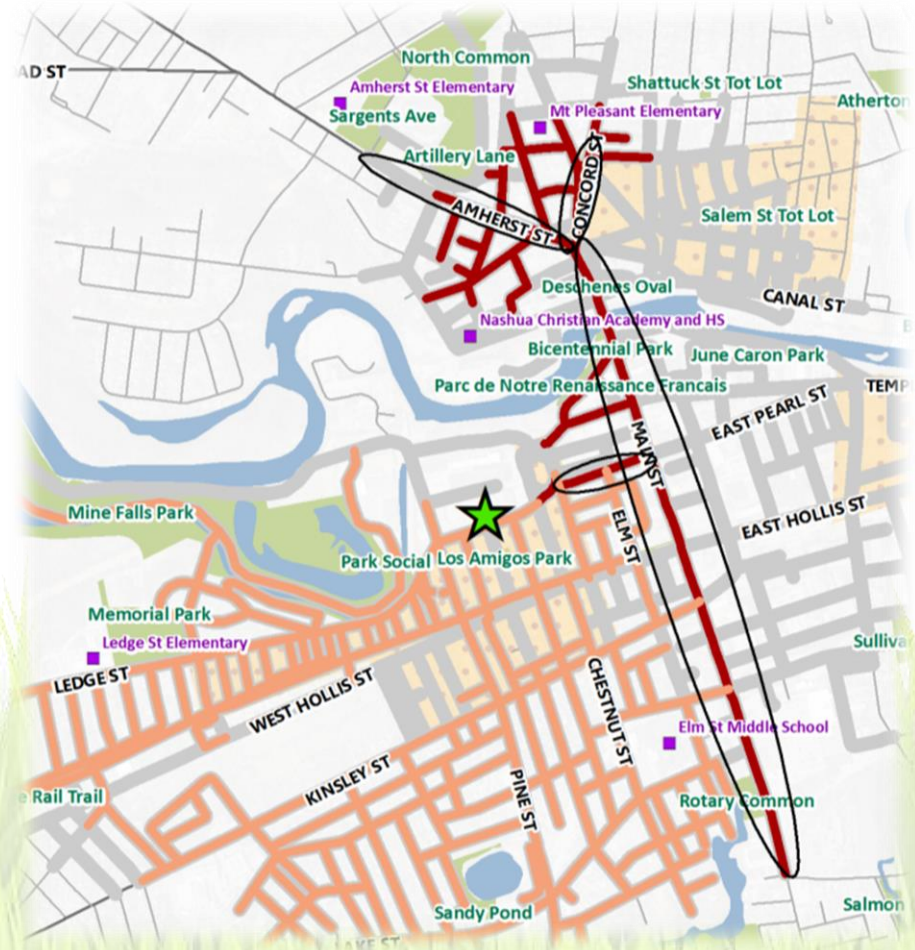


Photo: Purgatory Falls, Mont Vernon, NH

past successes

Building on Existing Success



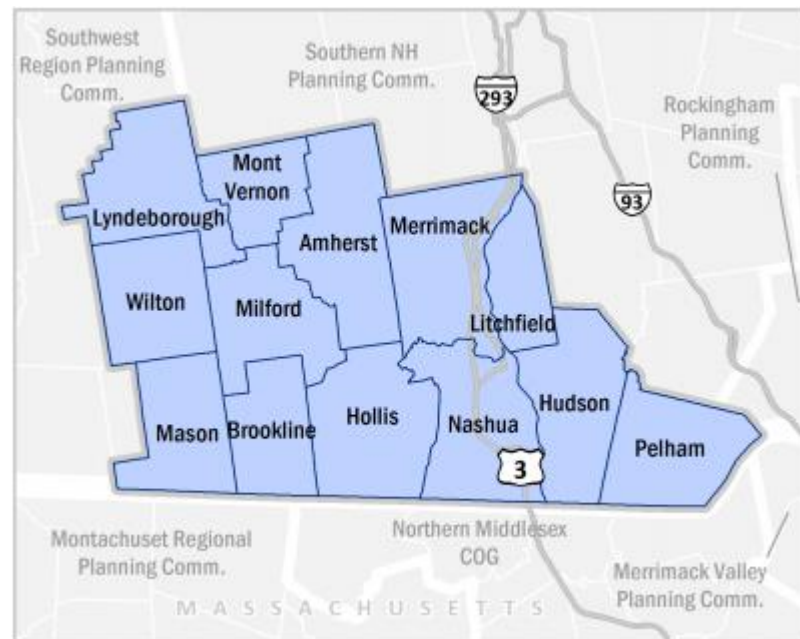
Healthy People
Healthy Places

Photo: Atherton Playground, Nashua, NH

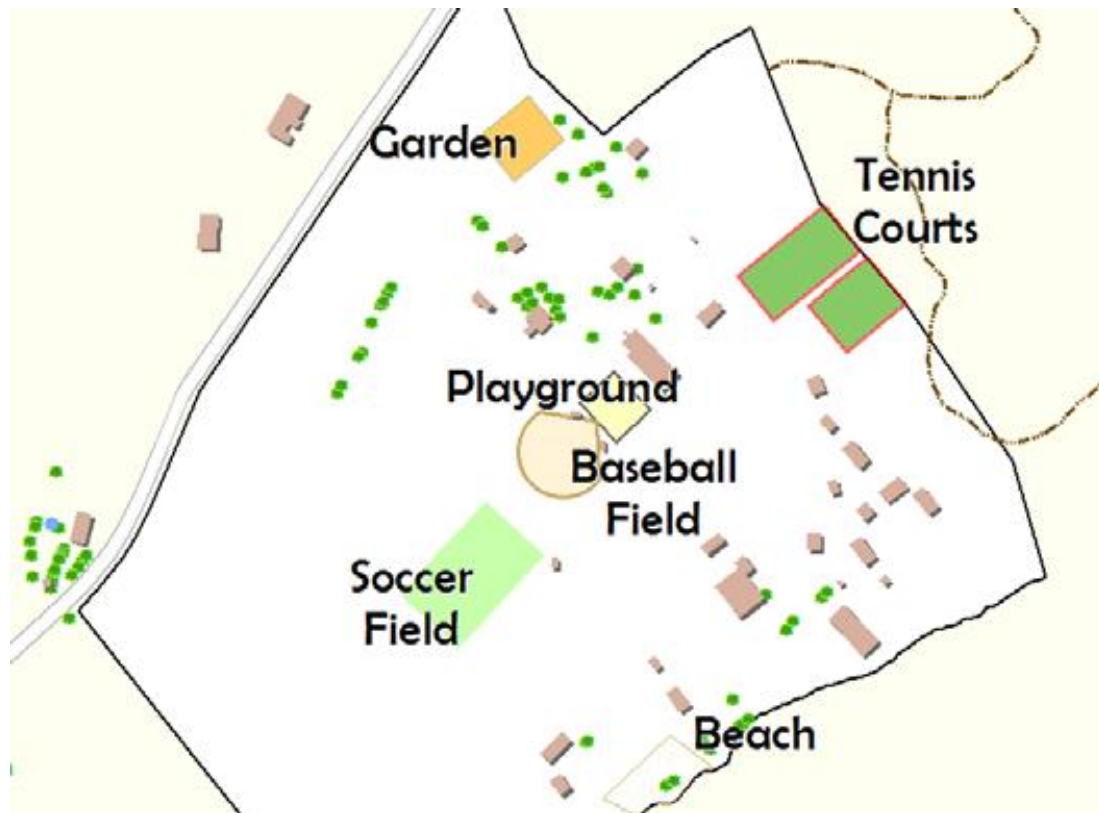
Inventory of Recreational Assets

Data Gathering

- Sources
 - Municipal Recreation Departments
 - Existing GIS Datalayers
 - Advisory Committee
 - Authoritative Websites
- Compilation: In-person meetings, map markup



Mapping Approach



- Polygon Delineation
- ESRI Event Layer for Points
- References:
NHDOT, NAIP
Orthoimagery,
Commercial Oblique
and Streetviews

Data Model

- Facility Name
- Facility Type
- Address
- Centroid Coordinates
- Managing Organization
- Drinking Water and Bathrooms
- Hours and Operating Season
- Website URL



Photo: Birch Park, Amherst, NH

Analysis of Existing conditions

At a Glance

- Common Denominators:
 - School Playgrounds
 - Baseball or Multi-Use Fields
 - Open Space/Trails
- Many Unique Assets





By the numbers



153 Ballfields



shutterstock · 45027844

67 Playgrounds



8 Pools, 8 Beaches



4 Sledding Hills, 3
Rinks



3 Dog Parks



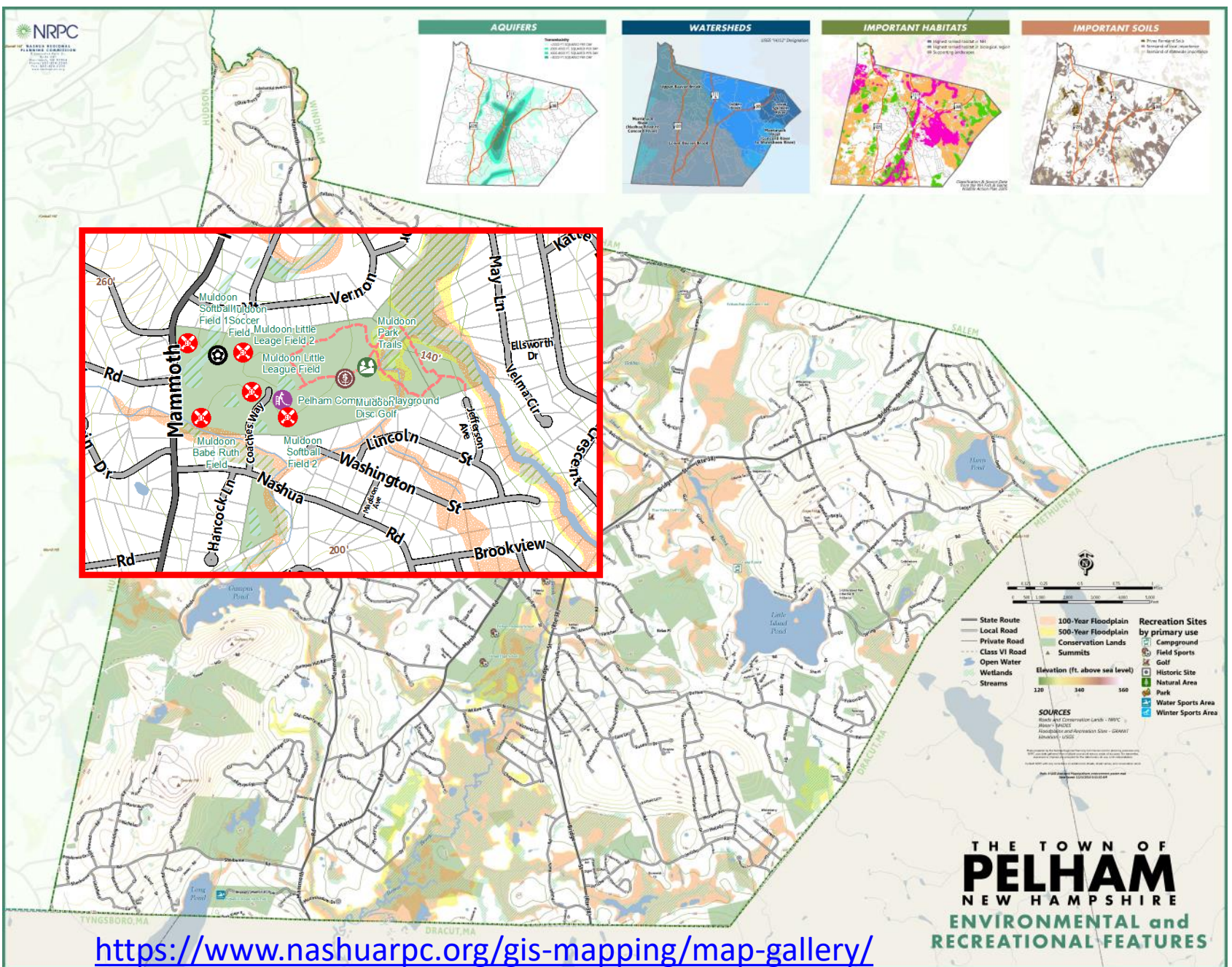
56 Open Space
Areas with Trails

~35% of children in NRPC region under 10 live within a half-mile of a playground

~55% of children in NRPC region under 10 live within a half-mile of any facility

Photo: Keyes Field, Milford, NH

Map Products



Story Map

Active Recreation in the Nashua Region

A story map by the Nashua Regional Planning Commission

Looking to get moving and have fun too? This hand-picked list represents a variety of free and low-cost outdoor destinations in the Greater Nashua, NH region that are open to the public and appropriate for all ages. Select a tab



Parks

Playgrounds

Trails & Open Space

Unique Amenities

Water Fun

Winter Recreation



1 Goss Park



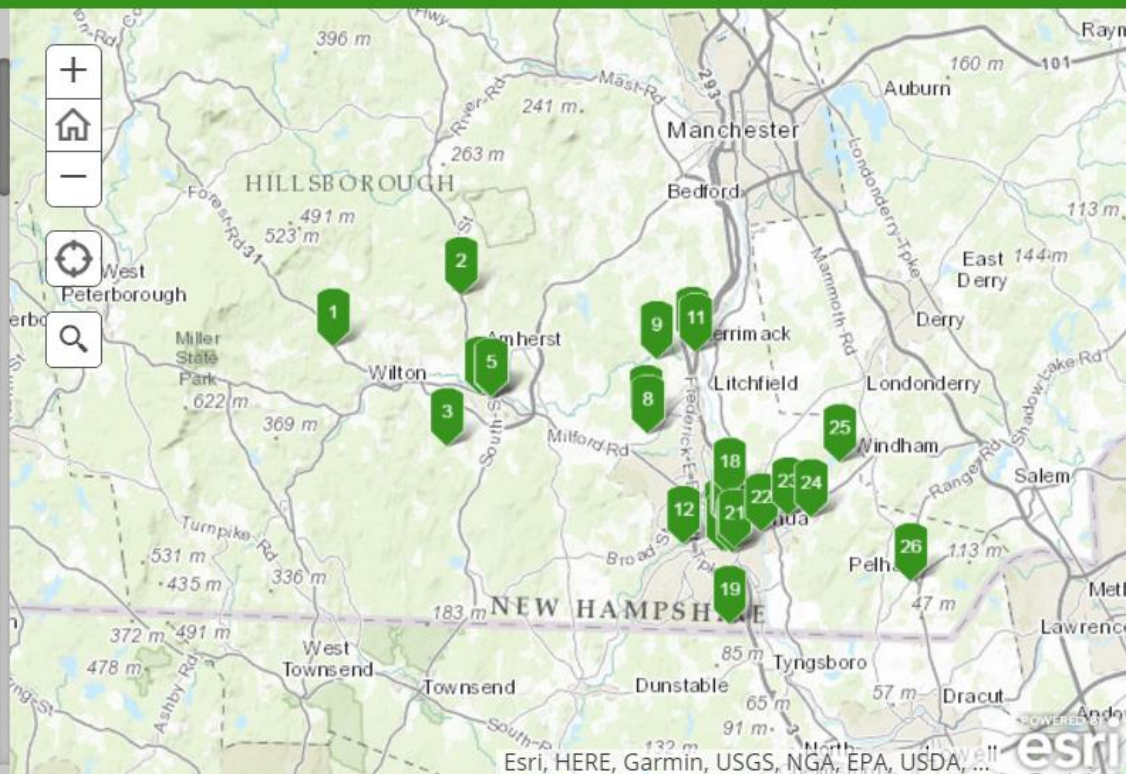
2 Village Green



3 Hitchiner Town Forest



4 Keyes Memorial Park



URL: <http://arcg.is/2qT0JpD>

Story Map

Active Recreation in the Nashua Region

Looking to get moving and have fun too? This hand-picked list represents a variety of free and low-cost outdoor destinations in the Greater Nashua, NH region that are open to the public and appropriate for all ages. Select a tab to get started.

Parks

Playgrounds

Trails & Open Space

Unique Amenities

Water Fun

Winter Recreation

4 Keyes Memorial Park



One of the largest parks in the NRPC region featuring a variety of recreational opportunities.

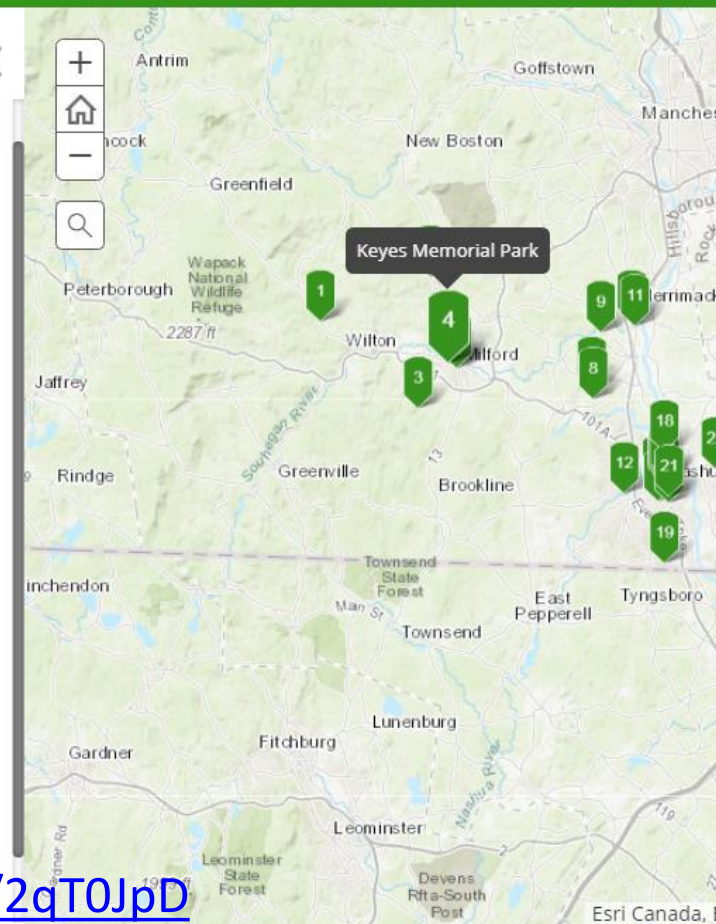
Photo by Milford Rec Dept; Used with permission

127 Elm St, Milford

Hours: Dawn to Dusk

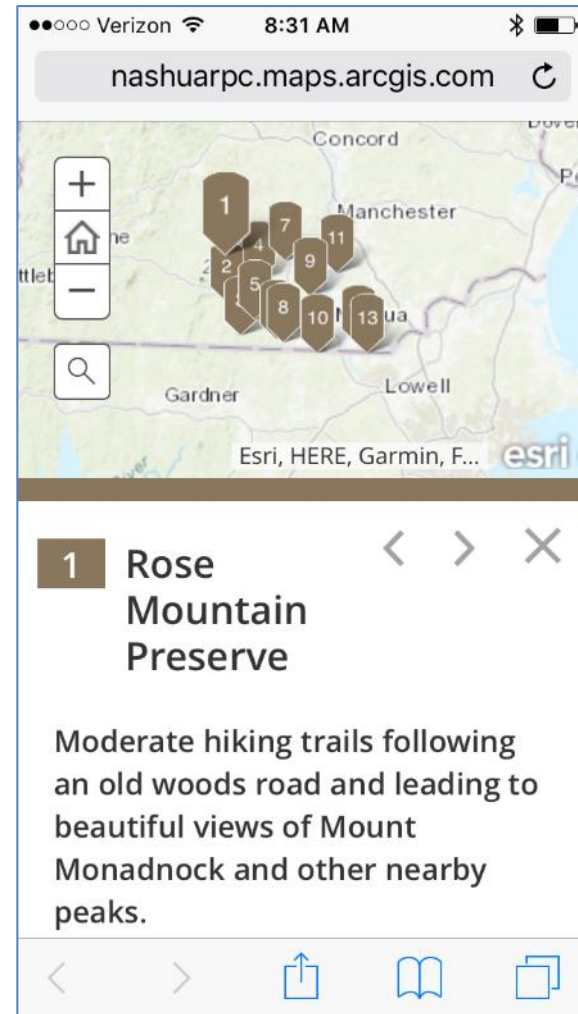
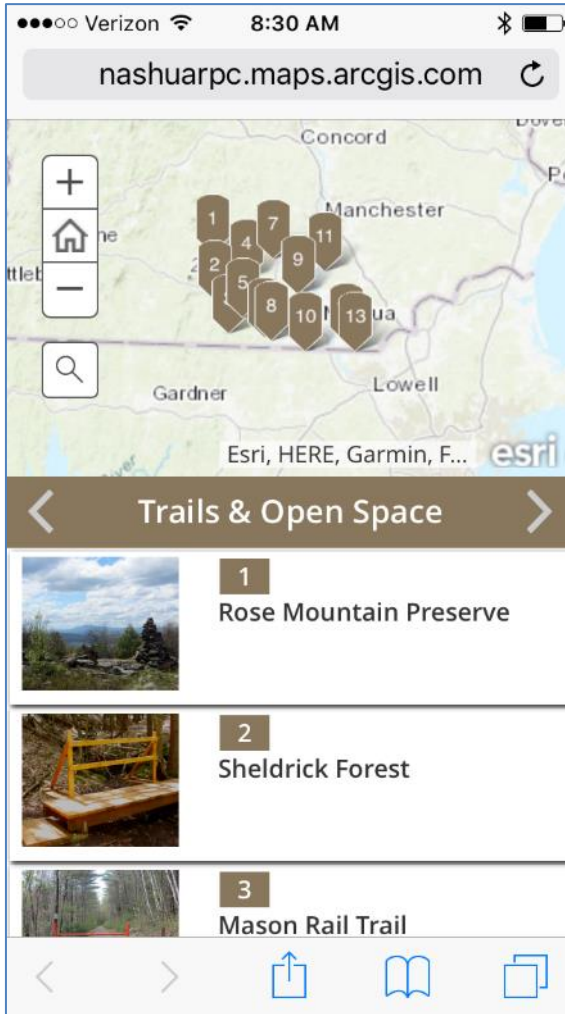
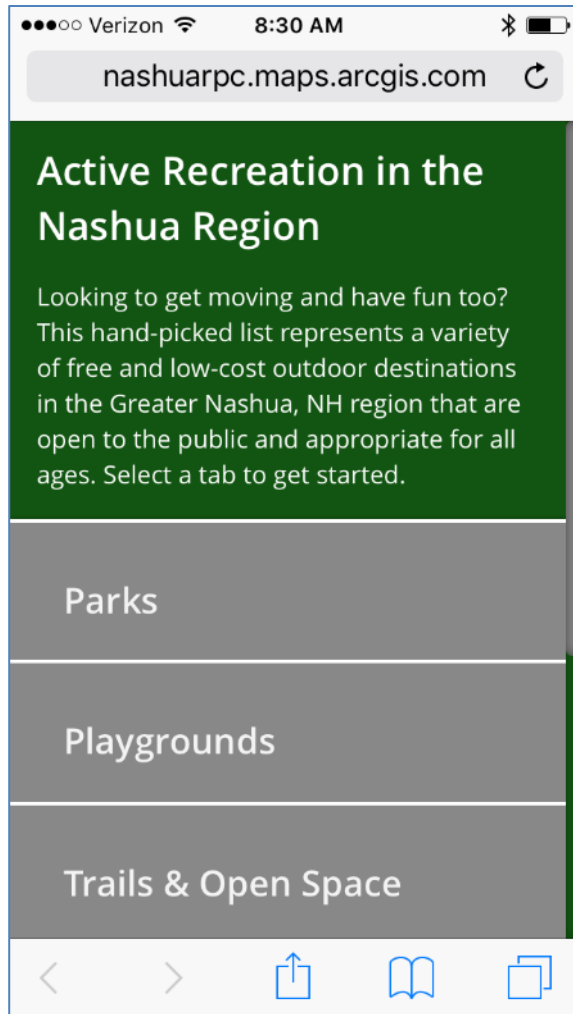
No Fee

At Least Basic Sanitary Facilities Available



URL: <http://arcg.is/2qT0JpD>

Story Map



URL: <http://arcg.is/2qT0JpD>

Planning guidebook

Webpage: <https://www.nashuarpc.org/hot-projects/parksplaygrounds/>

Document:

[https://www.nashuarpc.org/files/2015/1379/0460/Full Guide book FINAL 12.18.17.pdf](https://www.nashuarpc.org/files/2015/1379/0460/Full_Guide_book_FINAL_12.18.17.pdf)

Master Plans

- Outline Needs, Priorities, & Opportunities
- Utilize a Neighborhood Perspective
- Environmental Justice Considerations



Regulations and Ordinances

- Subdivision Regulations
- Site Plan Regulations
- Impact Fees
- Cluster Development
- Density Incentives
- Transfer of Development Rights

Play Friendly Policies

- Promote “Play Along the Way”
- Policy Statements and Resolutions



Funding

- Public Funding
- Private Fundraising
- Partnerships
- Grants



Kiwanis
CHILDREN'S FUND



Playground Siting

- Infrastructure Needs
- Safe Routes to Parks and Playgrounds
- Parking Requirements
- Acreage Tied to Facility Types



Playground Layout & Equipment

- Shade
- Sightlines
- Age Separation
- Connectivity
- Accessibility
- Conflicting Activities
- Ground Surfaces
- Materials



Safety and Maintenance

- Best Practices
- Maintenance Plans Equipment
- Tick and Mosquito Prevention



Photo: Joshua's Park, Amherst, NH

Case Studies



Safe Routes to Play

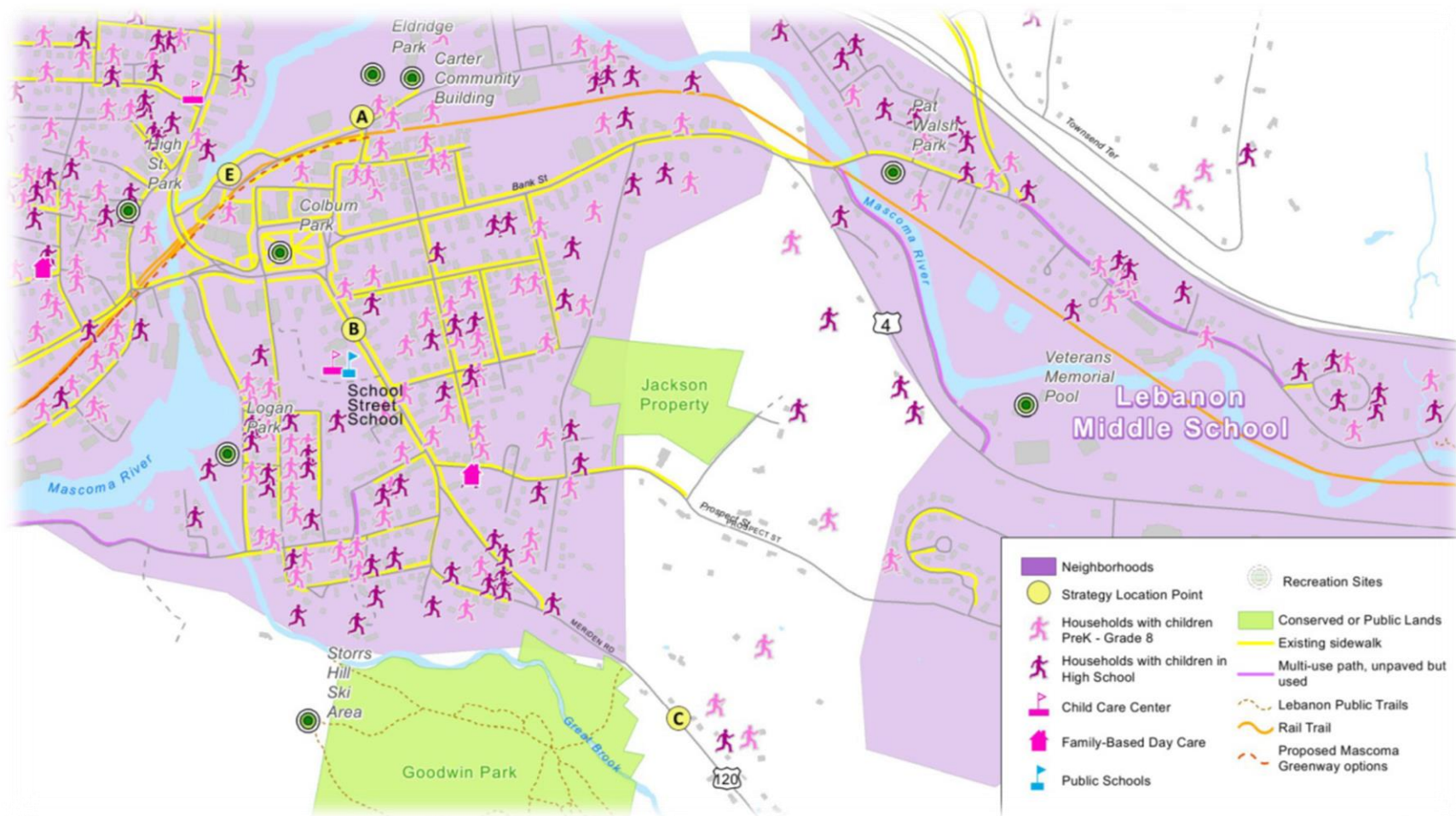


Image Source: UVLSRPC

Legacy Playground



Sargent Avenue Playground



Photo: Moore's Falls, Litchfield, NH

Thank You!

Sara Siskavich, GISP saras@nashuarpc.org

DEVELOPING A SCOPE OF WORK FOR THE COÖS COUNTY TRAILS PLAN



The North Country Council Region

Our Geography:

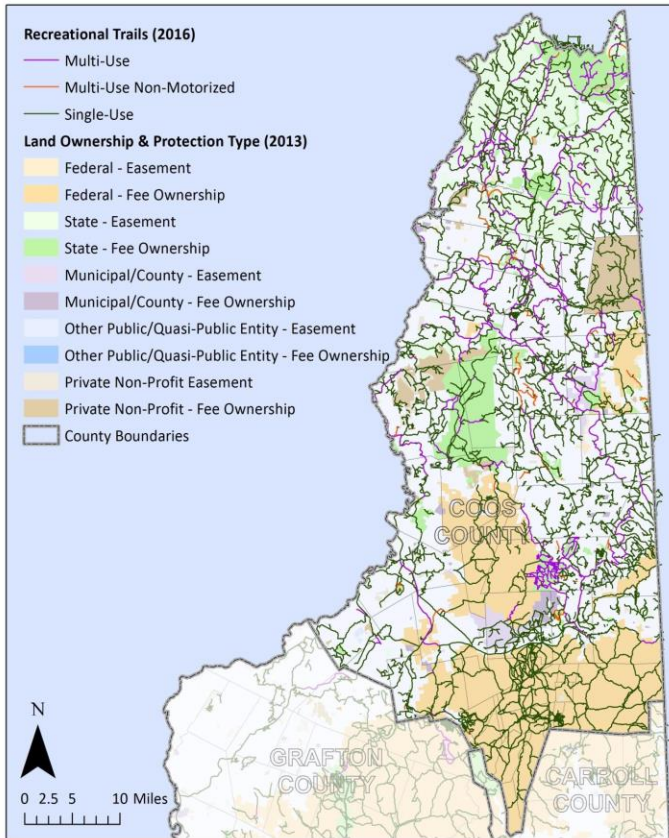
- Coös County
- Northern Carroll County
- Northern Grafton County



Geographic Area	Percent of State Population	Percent of Total Land Area of the State
NCC RPC Region	6.8%	36.8%
Coös County	2.4%	19.6%
Northern Carroll County	1.4%	4.6%
Northern Grafton County	3%	12.6%

Source: U.S. Census, ACS, 5-year estimates, 2012-2016

Geography of the Coös County Trails



Ownership – Protection Type	Acres (2013)
Federal – Fee Ownership	263,124
Federal – Easement	2,392
State – Fee Ownership	92,456
State – Easement	156,642
Municipal – Fee Ownership	8,699
Municipal – Easement	16,933
Private Non-Profit - Fee Ownership	44,166
Private Non-Profit Easement	9,319
Other Public/Quasi-Public Entity - Fee Ownership	0
Other Public/Quasi-Public Entity - Easement	538
TOTALS	594,267

Our Formula for Producing a Successful, Large-Scale Trails Plan

1. COLLABORATING with regional stakeholders, organizations, and residents
2. Producing an ECONOMIC IMPACT ASSESSMENT of trail uses
3. ANALYSIS OF EXISITING TRAIL NETWORK

1. Collaborating with Regional Stakeholders, Organizations, and Residents

- Bringing together all parties interested and/or impacted to collaborate on their ideas, opinions, concerns, and more.
 - ENGAGE STAKEHOLDERS EARLY AND OFTEN throughout all development
 - Involve an ENGAGEMENT SPECIALIST when deemed necessary
 - CREATE A CENTRAL PLATFORM to post development information such as schedules, meetings, and draft recommendations

1. Collaborating with Regional Stakeholders, Organizations, and Residents

Encourage understanding of all pertinent laws and regulations

➤ **RSA 212:34 Duty of Care**

- States that landowners are not responsible for the maintenance of their premises in order to be used for recreation

➤ **RSA 508:14 Landowner Liability Limited**

- Protects landowners from liability of personal injury or property damages

➤ **BICYCLING REGULATIONS**

- RSA 265

➤ **U.S. Code of Federal Regulations**

➤ **EQUESTRIAN**

- State of New Hampshire - Department of Agriculture:

- Law 265:5

- Law 265:104

- Law 436:95

➤ **HIKING & BOATING**

- See U.S. Forest Service, Wilderness hiking Regulations, Thru-Hiking Permits & Regulations, NH Hike Safe Program, Rail Trail Regulations, and NH Paddling and Boating Regulations

➤ **OHRV & SNOWMOBILE REGULATIONS**

- Including regulations that restrict operating on private/public property by age

2. Producing an **Economic Impact** Assessment of Trail Uses

- Should help to quantify tourism dollars spent, new jobs created, and indirect effects to related services



3. Analysis of Existing Trail Network

- A. Assess the adequacy of existing trails including their facilities and services
- B. Identify barriers and opportunities such as connectivity of trails
- C. Identification of high volume areas
- D. Evaluation of the effectiveness of signage and information provided
- E. Need for upgrades and changes
- F. Identification of priorities for investment

Priority Needs, Issues, & Concerns for the Trails Plan

1. Upgraded MAPPING of trails system
2. VOLUNTEERISM
3. Diversified and greater FUNDING sources
4. Enhanced SIGNAGE and CONSUMER EDUCATION
5. Improving CONNECTIVITY
6. Fostering LANDOWNER RELATIONSHIPS
7. Recognizing COMPATIBLE USES of multi-use trails
8. Prioritizing and managing TRAIL NETWORK CONFLICTS

1. Upgraded Mapping of Trails System

- **Need for a centralized, online depository of maps**
 - Maps would be produced with CONSENT FROM LANDOWNERS,
 - Provide an accurate DESCRIPTION OF ALLOWED TRAIL USES, and,
 - LOCATION of trail and trail parking
- **HOWEVER,**
 - Maps are often a main source of revenue to many organizations and finding an alternative funding source to replace this revenue will be needed in the case of any changes to the current network

2. Volunteerism

- **Encouraging volunteerism helps to**
 - REDUCE COST of maintenance,
 - Helps to BROADEN PERSPECTIVES of about the trail network and various trail uses, and,
 - Improve overall trail SAFETY
- ***Recommendations:***
 - Host a series of events at schools or other community gatherings to educate and expand knowledge on trails use and available opportunities for volunteering
 - Draft marketing/educational materials to be released county-wide

3. Diversified and Greater Funding Sources

- **As trail use increases, there is an increasing need for:**
 - Enhanced funding for all trail uses
 - Increased funding opportunities, and,
 - "Pulling together" of resources

4. Enhanced Signage and Consumer Education

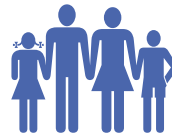
- Users need improved access to rules, regulations, trail uses, and etiquette
- Signage and trail characteristics vary across the region.
- Uniformity among signage on the trail network can improve user experience, awareness, and safety.
- ***Recommendation:***
 - Trail Entry Point Sign Consistency which would highlight allowable uses, regulations, trail difficulty, safety, and use information.

5. Improving Connectivity

- **Improved connectivity of the trails system offers:**
 - High potential for nearby business success
 - Facilitates the trail industry by connecting services such as food, fuel, lodging, and other retail services
 - Links into communities

6. Cultivating Landowner Relationships

- Continuing to foster positive relationships with landowners is essential to the existence of the trails network



7. Recognizing Compatible Usage of Multi-Use Trails

- **The compatibility of trail usage is variable and based on:**
 - Type of trail use
 - Location of trail use
 - Volume of type of trail use
- **Considering compatibility of trail uses on a multi-use trail helps to mitigate conflict**

8. Prioritizing and Managing Trail Network Conflicts

- Utilize early engagement with users, businesses, local officials, and residents to MITIGATE and MINIMIZE CONFLICTS

Questions? Comments?

Danica Melone

Associate Planner

North Country Council

dmelone@nccouncil.org

(603) 444-6303 ext. 2025

TRAILS FOR PEOPLE AND WILDLIFE



Getting Out to Enjoy Nature!



New Hampshire

FISH AND GAME

Connecting you to life outdoors

Guardian of the state's fish, wildlife, and marine resources.

Impacts of Trails on Wildlife



Impacts of Recreational Trails on Wildlife



Physiological

Changes in an animal's heart rate, temperature, or stress hormones.



Impacts of Recreational Trails on Wildlife



Physiological

Changes in an animal's heart rate, temperature, or stress hormones.



Behavioral

Changes in foraging, vigilance or fleeing from perceived predators.

Impacts of Recreational Trails on Wildlife



Physiological

Changes in an animal's heart rate, temperature, or stress hormones.



Behavioral

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Reproductive Success

Reduction in the number of nests built, eggs laid or young born and successfully raised.

Impacts of Recreational Trails on Wildlife



Physiological

Changes in an animal's heart rate, temperature, or stress hormones.



Behavioral

Changes in foraging, vigilance or fleeing from perceived predators.



Reproductive Success

Reduction in the number of nests built, eggs laid or young born and successfully raised.



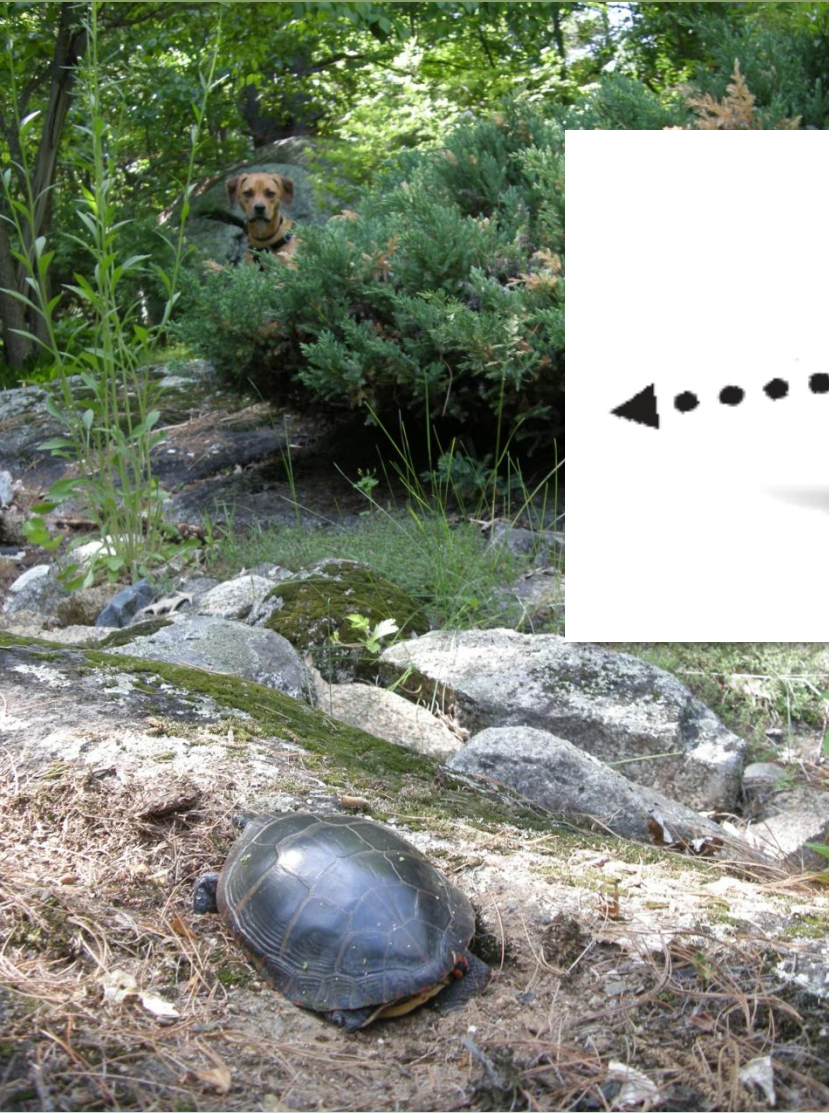
Predation

Scaring an adult away leaves young vulnerable to predation. Adults may be preyed on directly.

Trail Impacts on Protected Land in NH



“Corridor of Influence”



OUR PRESENCE CAN BE
DETECTED BY WILDLIFE ON
EITHER SIDE OF A TRAIL.
THIS IS ITS *“CORRIDOR OF
INFLUENCE”*

Corridor of Influence “Alert” and “Flight” Distances

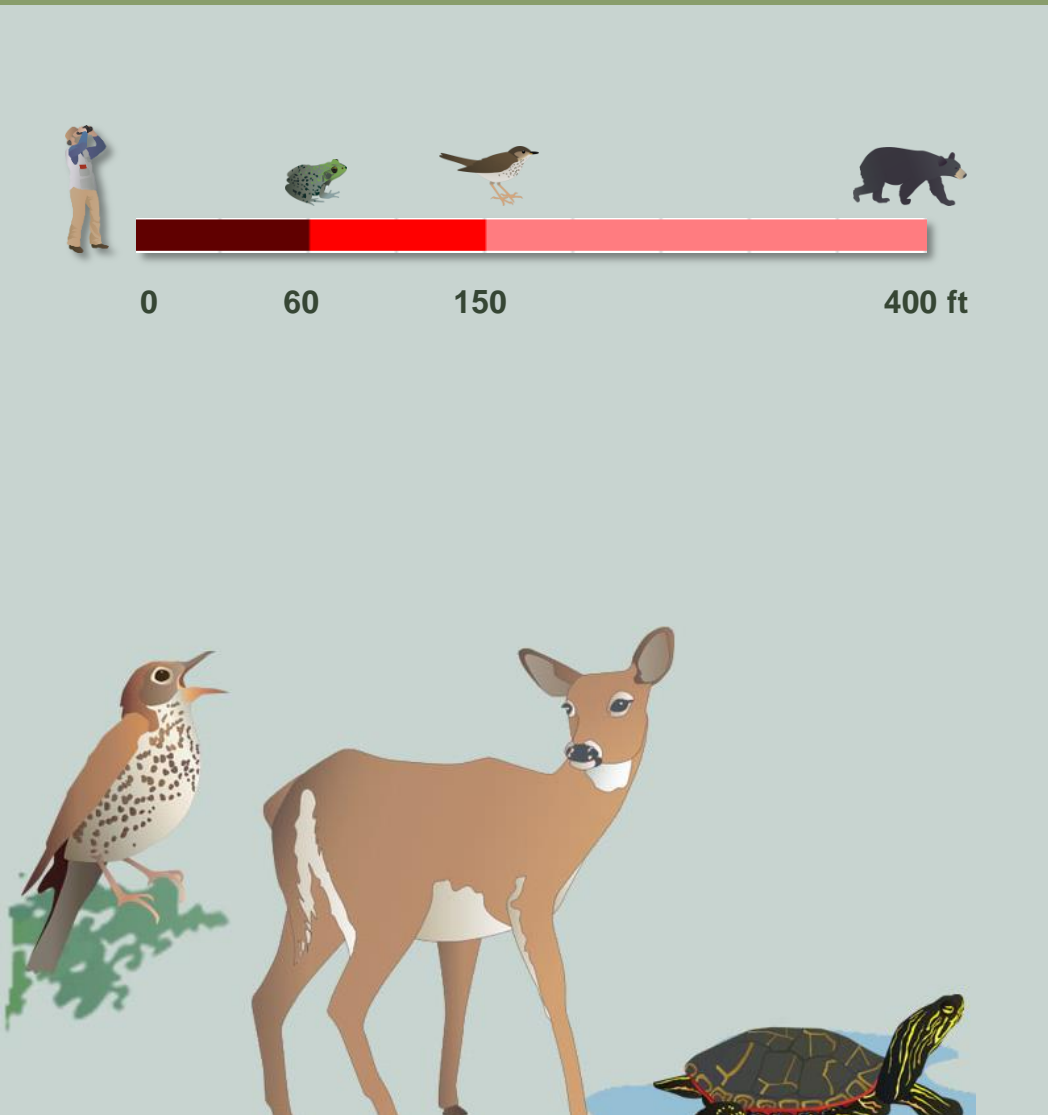
- Reviewed 67 articles.
- New England based, or as close to New England as possible.
- Distances for birds, mammals plus amphibians and reptiles.



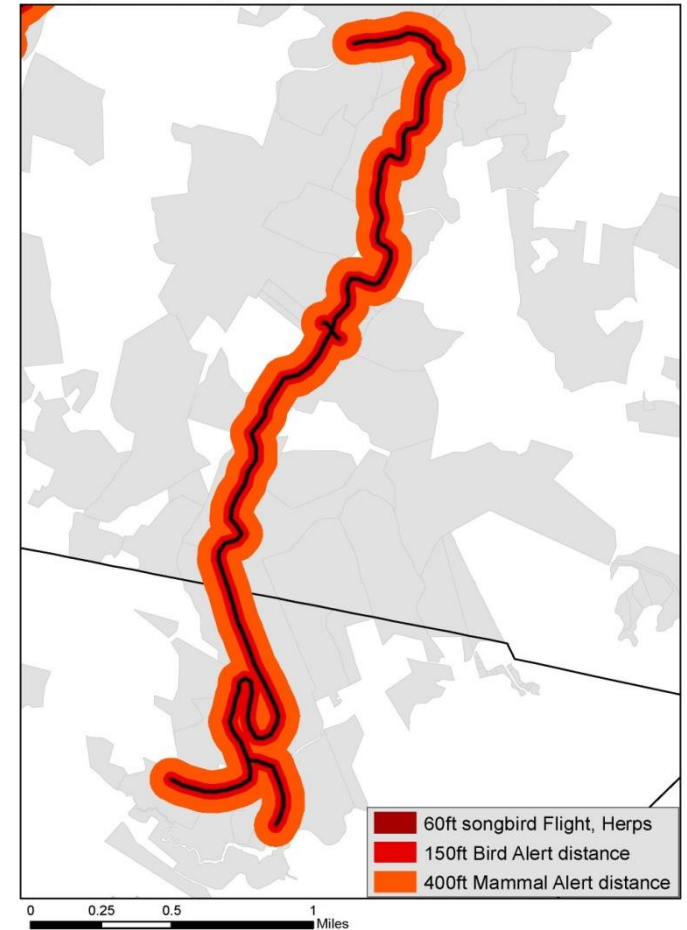
Average Alert and Flight Response Distances (birds, herps, mammals)



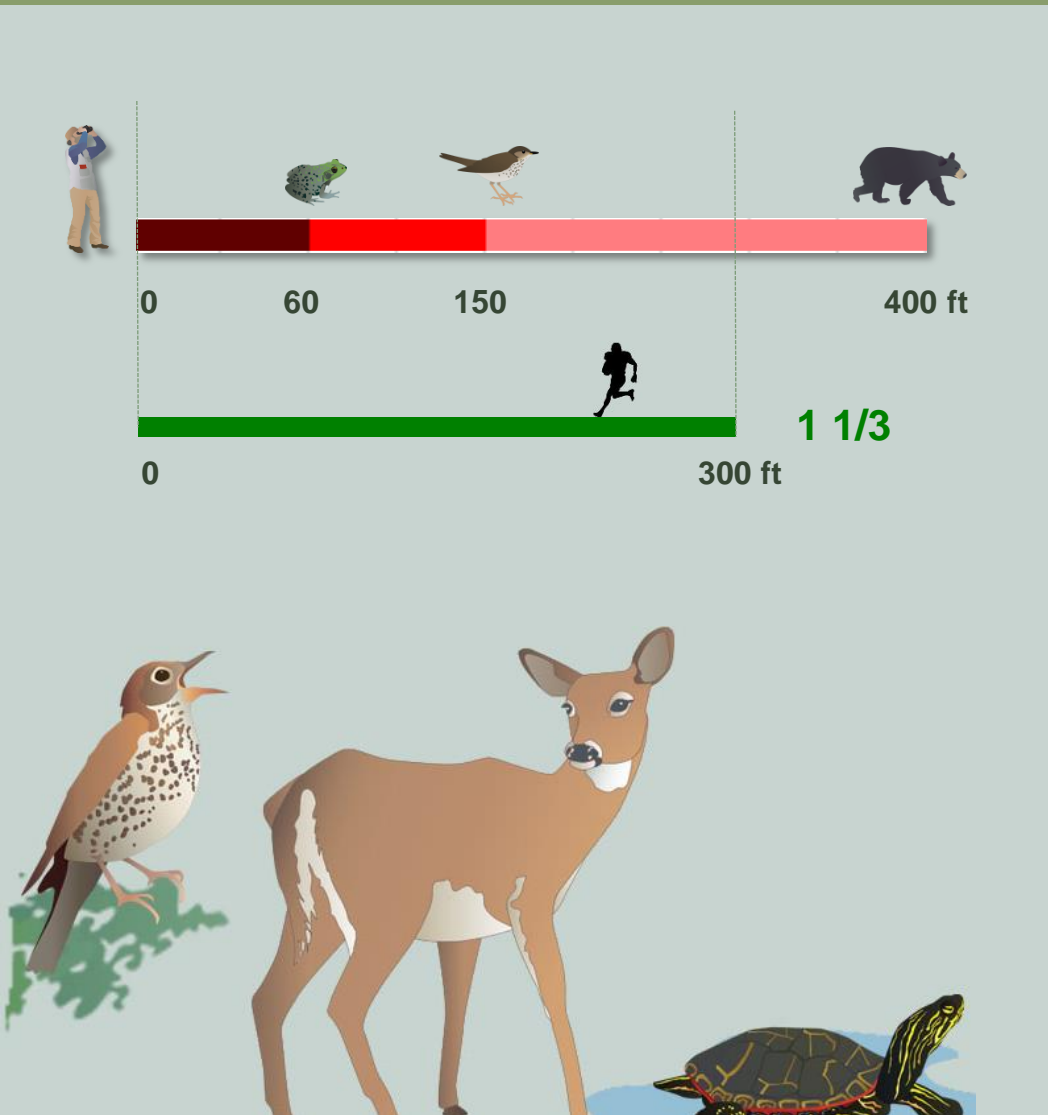
Corridor of Influence “Alert” and “Flight” Distances



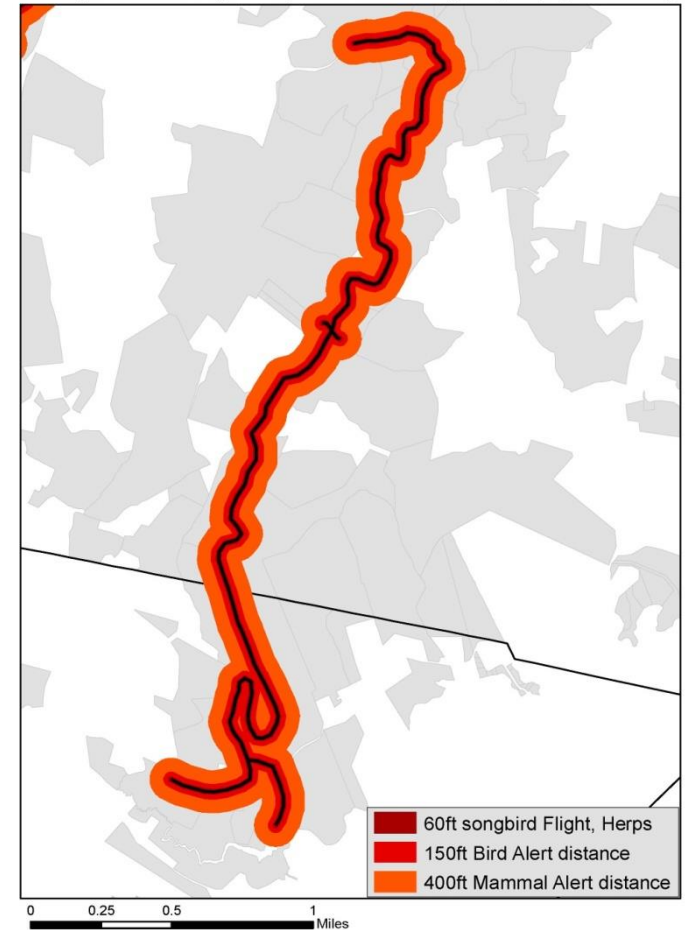
Average Alert and Flight Response Distances (birds, herps, mammals)



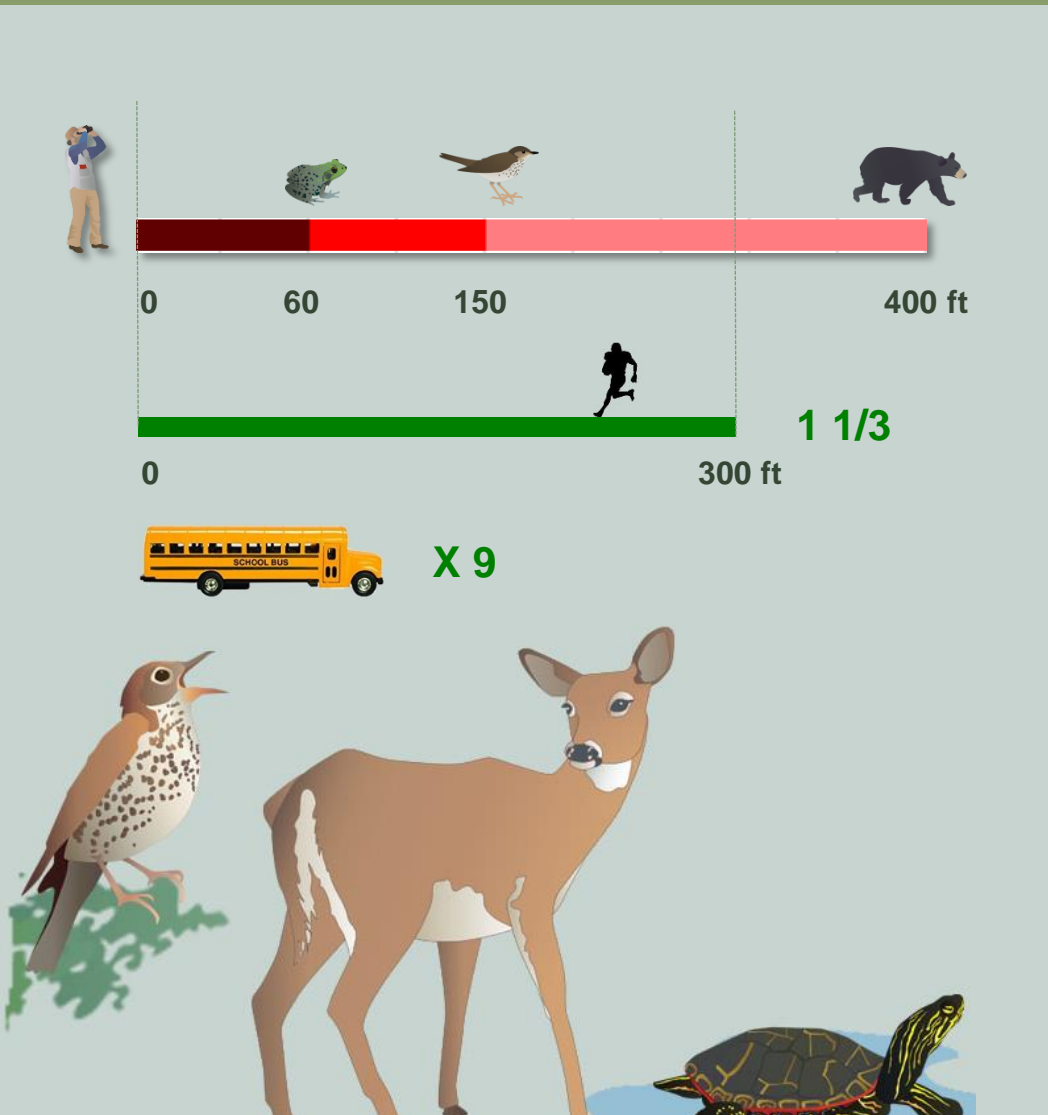
Corridor of Influence “Alert” and “Flight” Distances



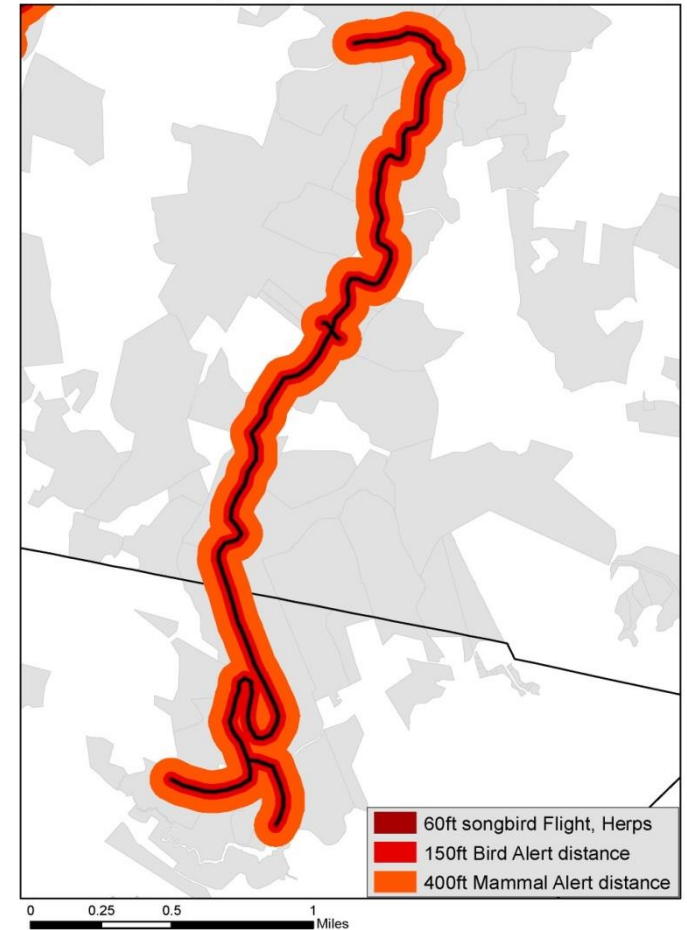
Average Alert and Flight Response Distances (birds, herps, mammals)



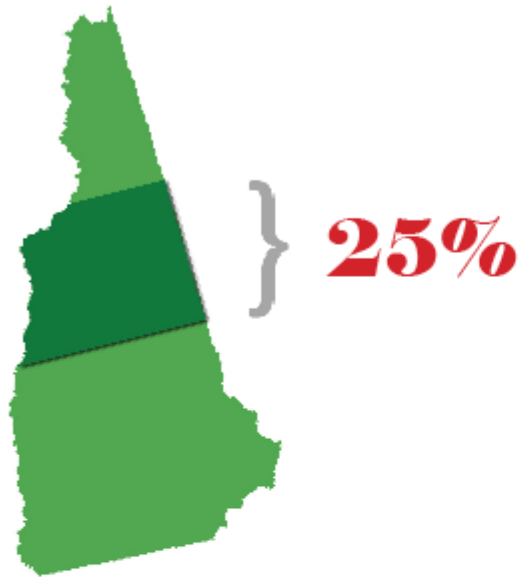
Corridor of Influence “Alert” and “Flight” Distances



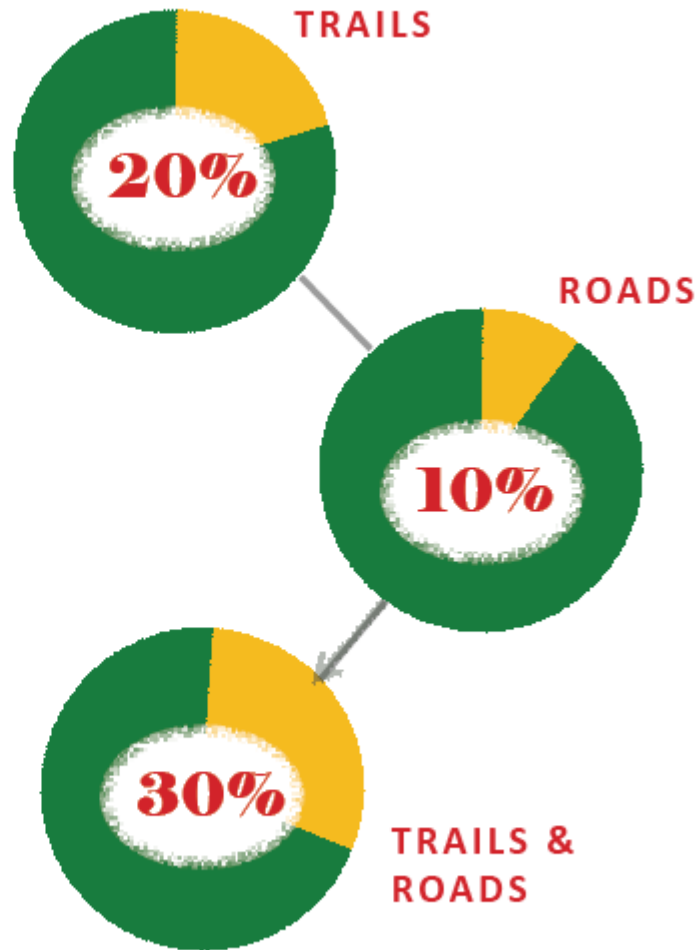
Average Alert and Flight Response Distances (birds, herps, mammals)



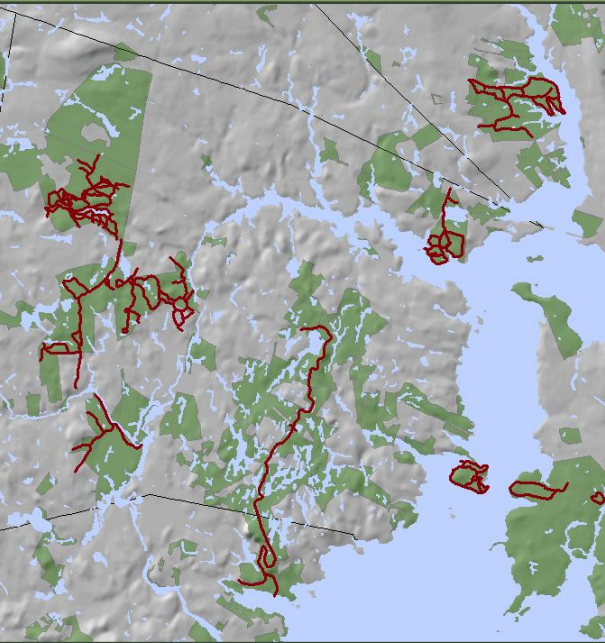
Current Trails on Protected Land



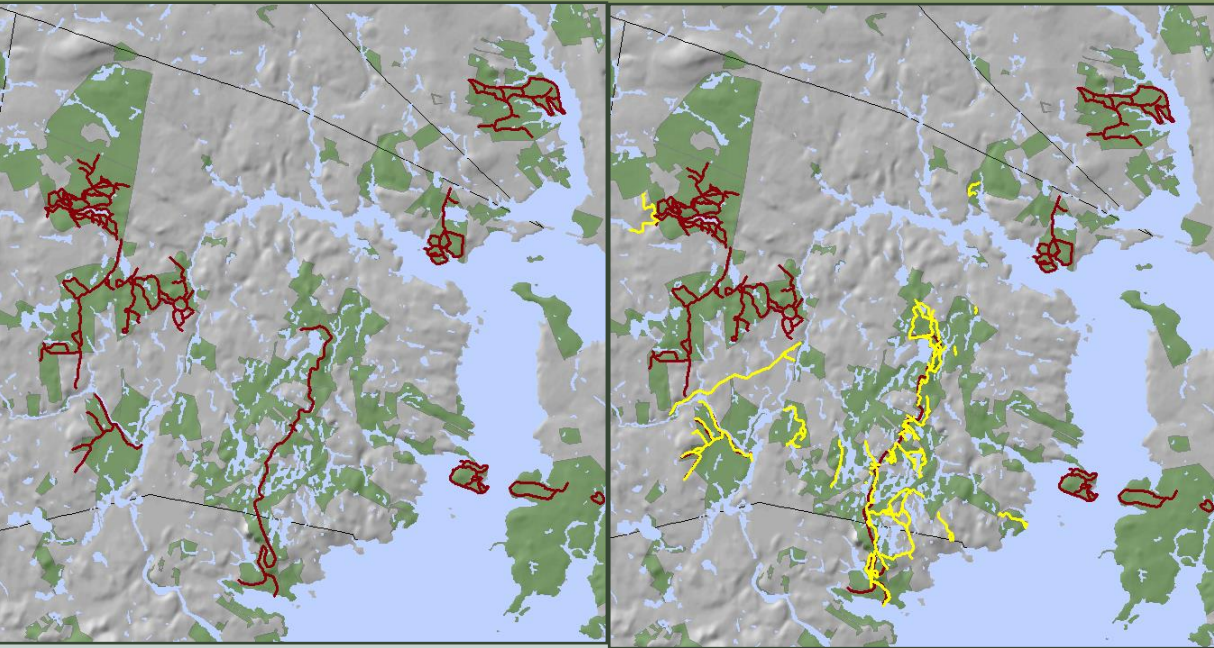
ONE QUARTER OF LAND
IN NEW HAMPSHIRE
IS PROTECTED. OF
THIS, ABOUT 30%
IS INFLUENCED BY
EXISTING TRAILS AND
ROADS.



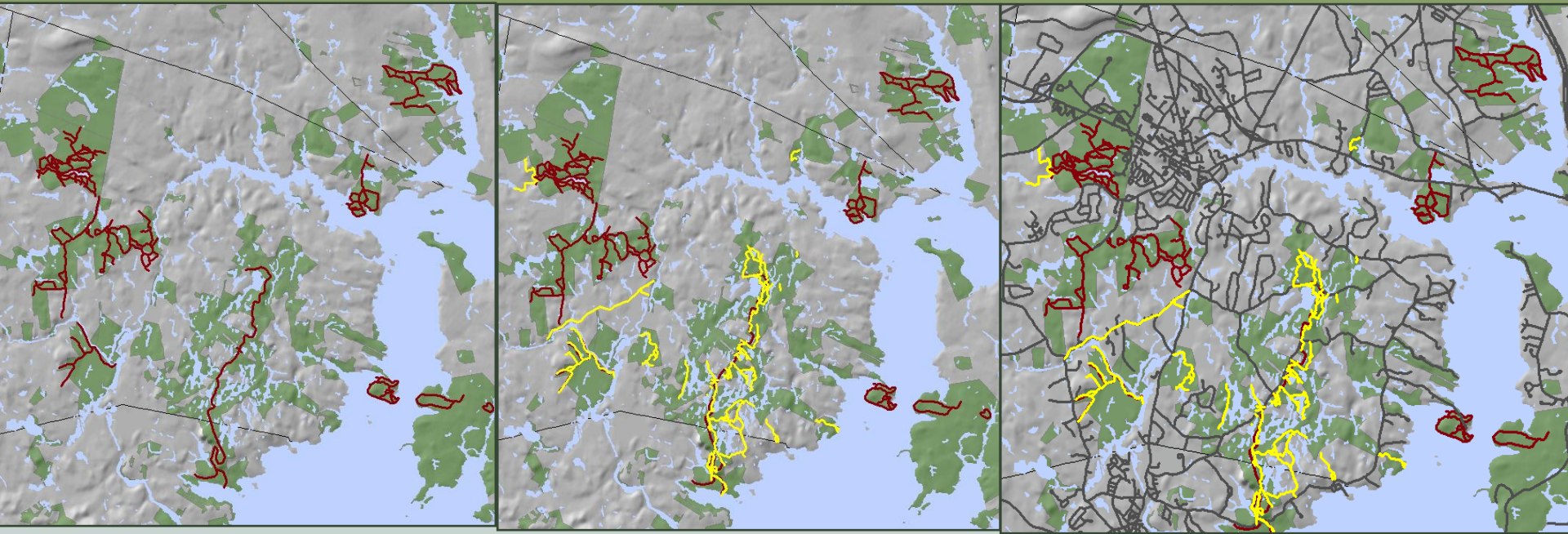
Trail and Road Impacts – Present Day Reality



Trail and Road Impacts – Present Day Reality



Trail and Road Impacts – Present Day Reality



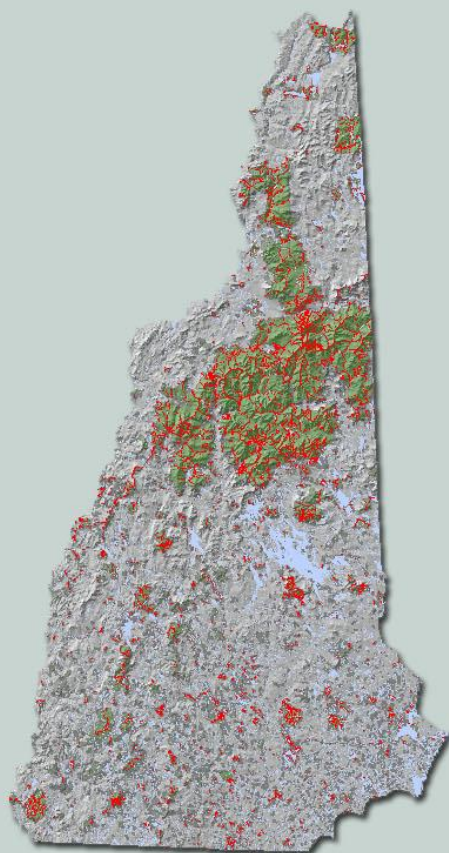
Trail and Road Impacts – Present Day Reality



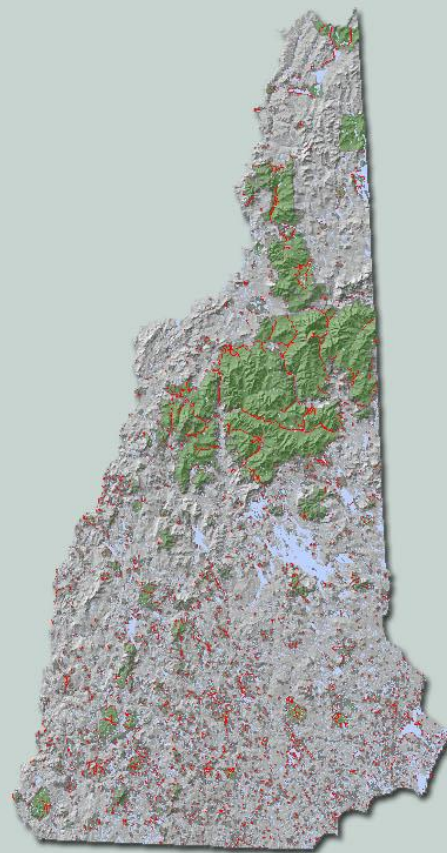
Statewide Distribution (Protected Land Only)



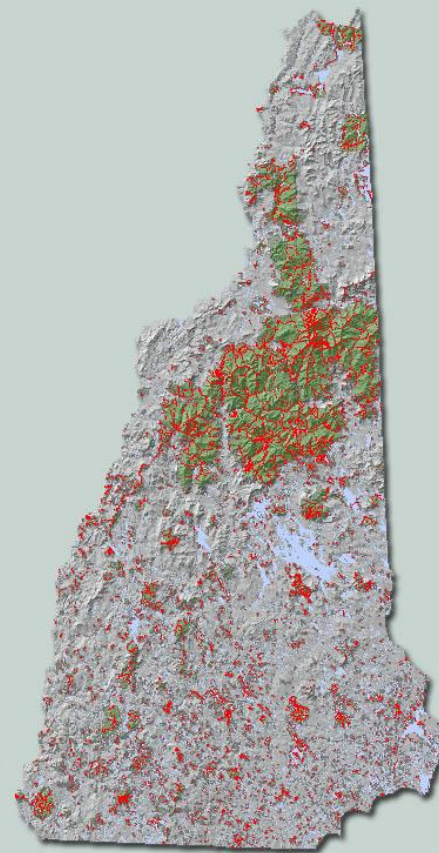
CONSERVATION LAND



TRAILS



ROADS



TRAILS & ROADS

Planning Trails with Wildlife in Mind



Where Best to Locate New Trails



GREAT BAY
NATIONAL
ESTUARINE
RESEARCH
RESERVE

The Nature
Conservancy



NRCS



EPA



Evaluate Existing Trails

Existing versus New

In some cases there may be an existing road or trail you can use. However, just because it already exists doesn't mean it's in a good location. Some trails and old roads were never designed for the use they are receiving. Many trail problems and landowner conflicts are the result of use of trails that weren't designed for uses they are receiving today and have very wet soils.



BEST MANAGEMENT PRACTICES

For Erosion Control During Trail Maintenance and Construction

NH Trail Construction and Maintenance Manual

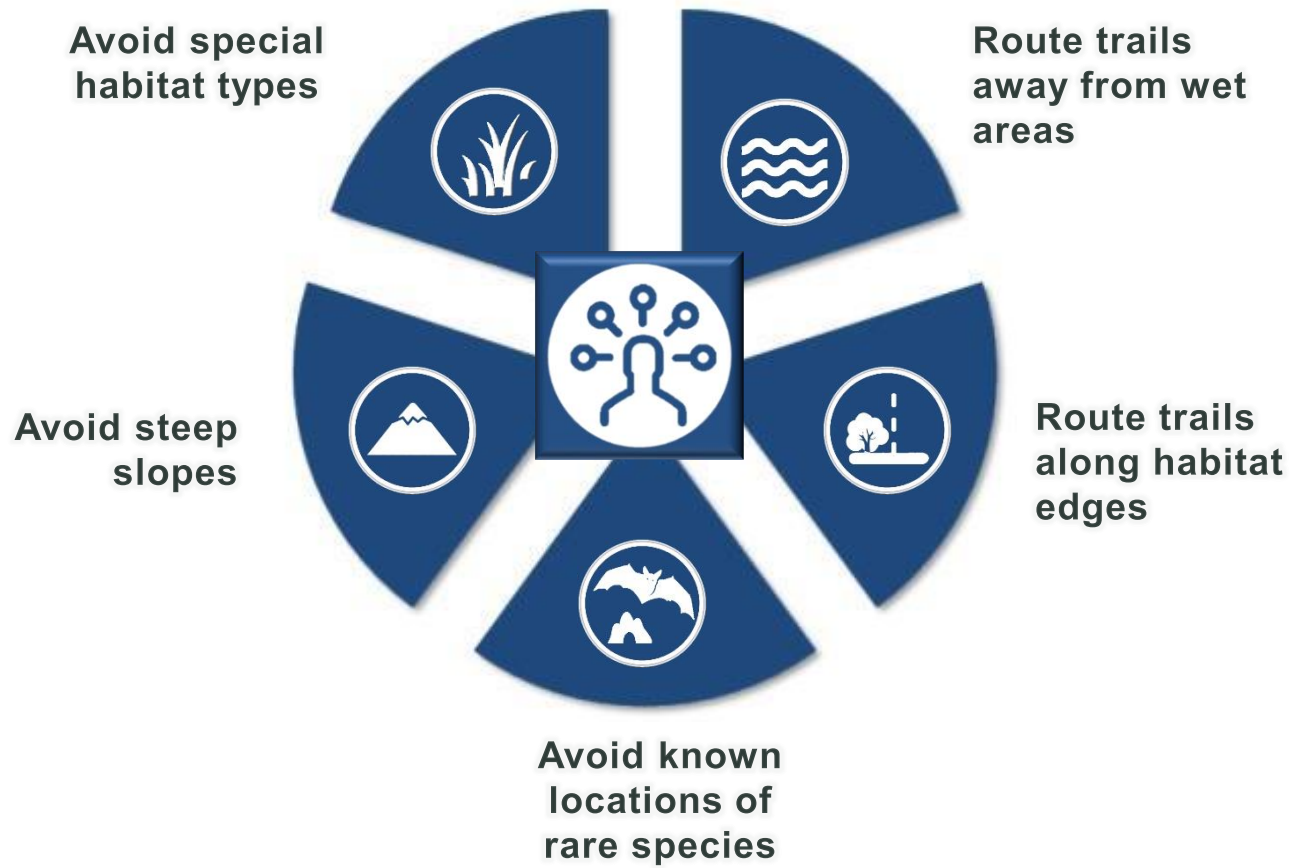


*Keep trails out of the water;
and water out of the Trails*

STATE OF NEW HAMPSHIRE
Department of Resources and
Economic Development
Division of Parks & Recreation
Bureau of Trails

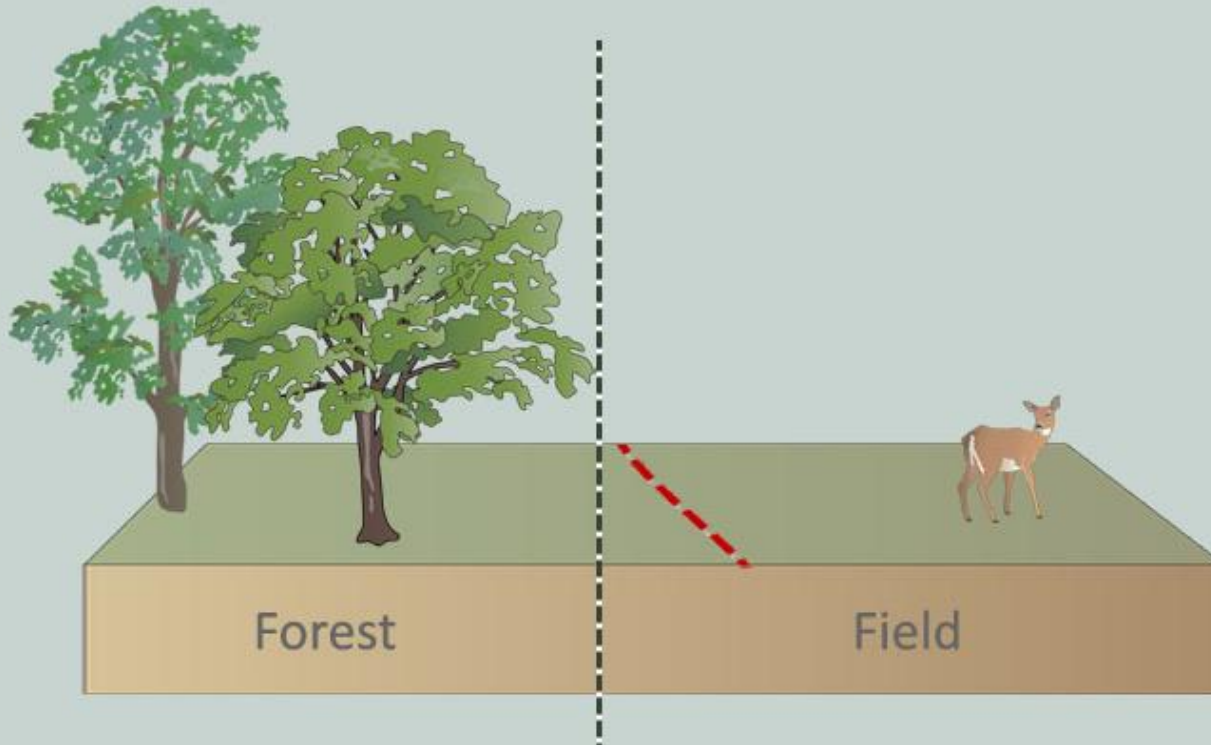


Key Principals for Minimizing Trail Impacts to Wildlife





Locate Trails Along Habitat Edges



Minimizes habitat fragmentation



Locate Trails Along Habitat Edges



Minimizes habitat fragmentation



Locate Trails Along Habitat Edges



Minimizes habitat fragmentation

Impacts of Recreational Trails on Wildlife



ROUTING TRAILS ALONG HABITAT EDGES PREVENTS FRAGMENTATION OF LARGE BLOCKS IMPORTANT TO SPECIALIST, AND SO LESS COMMON, SPECIES.

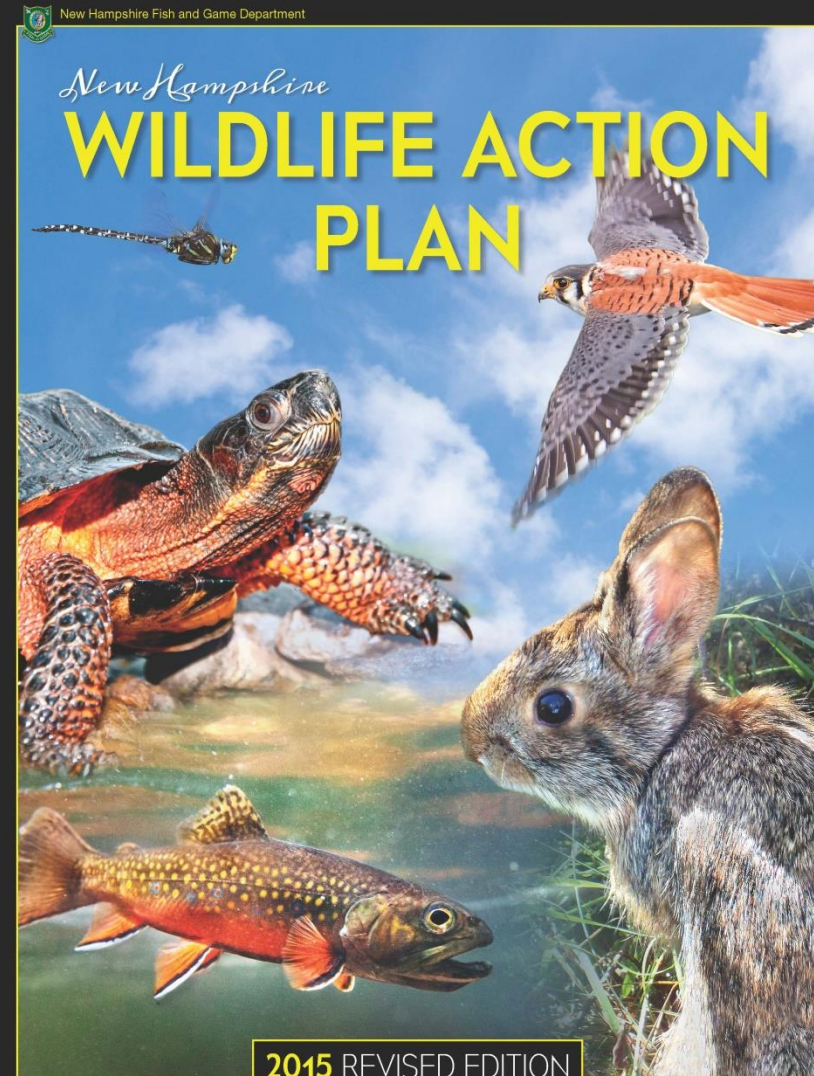
AREN'T HABITAT EDGES HOT SPOTS FOR BIODIVERSITY?

Traditionally it has been recognized that habitat edges are where we are likely to find the greatest diversity of species. This is correct as there is a chance we will run across wildlife associated with either of the abutting habitats. However, it is important to recognise that these are likely to be more generalist species that can make use of a diversity of habitats and are so are less sensitive to disturbance. Routing trails along edges will protect the less common habitat specialists such as bobolinks and eastern meadow larks in grassland and New England cottontails or whip-poor-will in shrubland.



Avoid Special Habitats Sensitive to Disturbance

- Pine barrens
- Shrublands
- Gravel pits
- Wetland/aquatic
- Rocky ridges/talus slopes and alpine
- Exemplary natural communities
- Very poorly drained soils





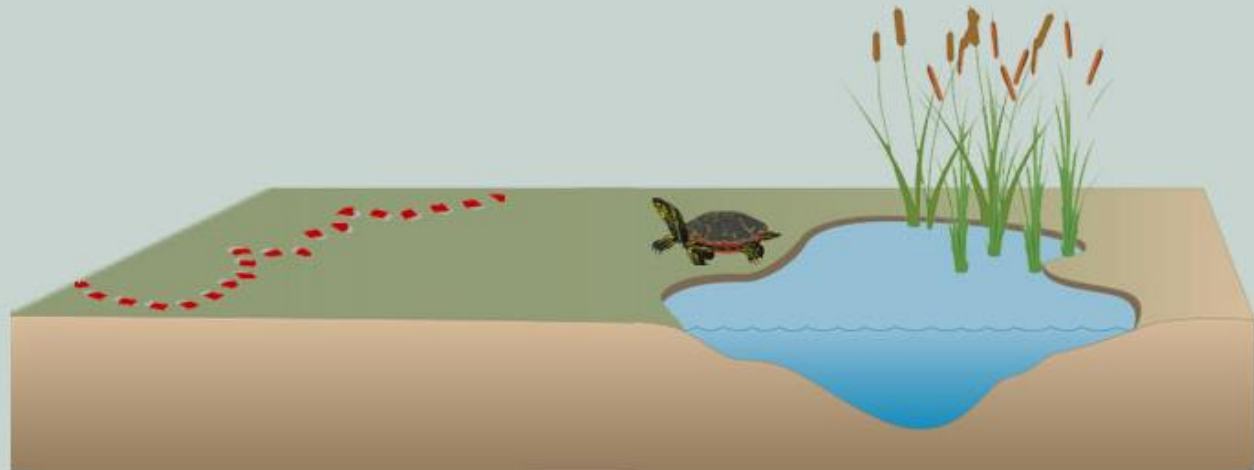
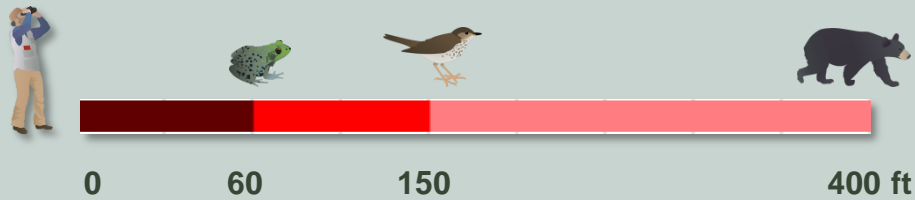
Avoid Known Locations of Rare Species



Animal species in Natural Heritage database. Plus great blue heron rookeries and cliffs with current or historic peregrine nest.



Route Trails Away From Riparian Areas



NH amphibians and reptiles average 60 ft flight distance (not just alert)



Avoid Steep Slopes

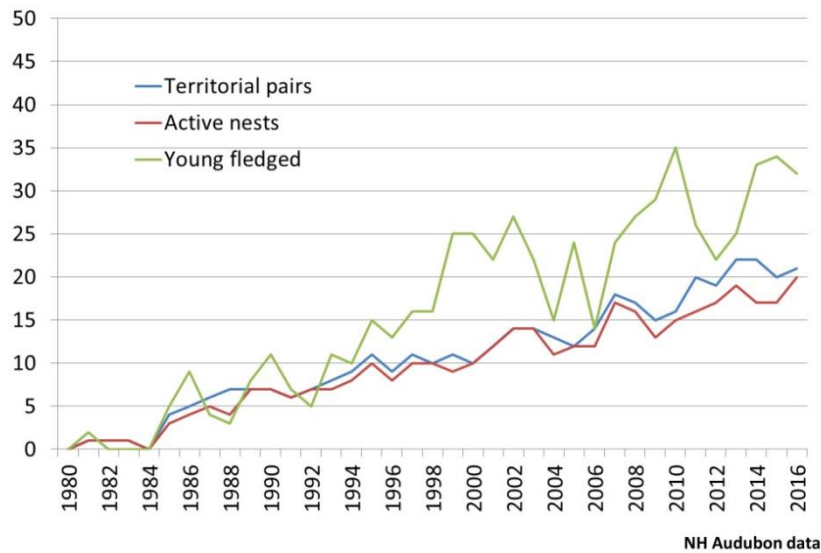


Chris Martin photo



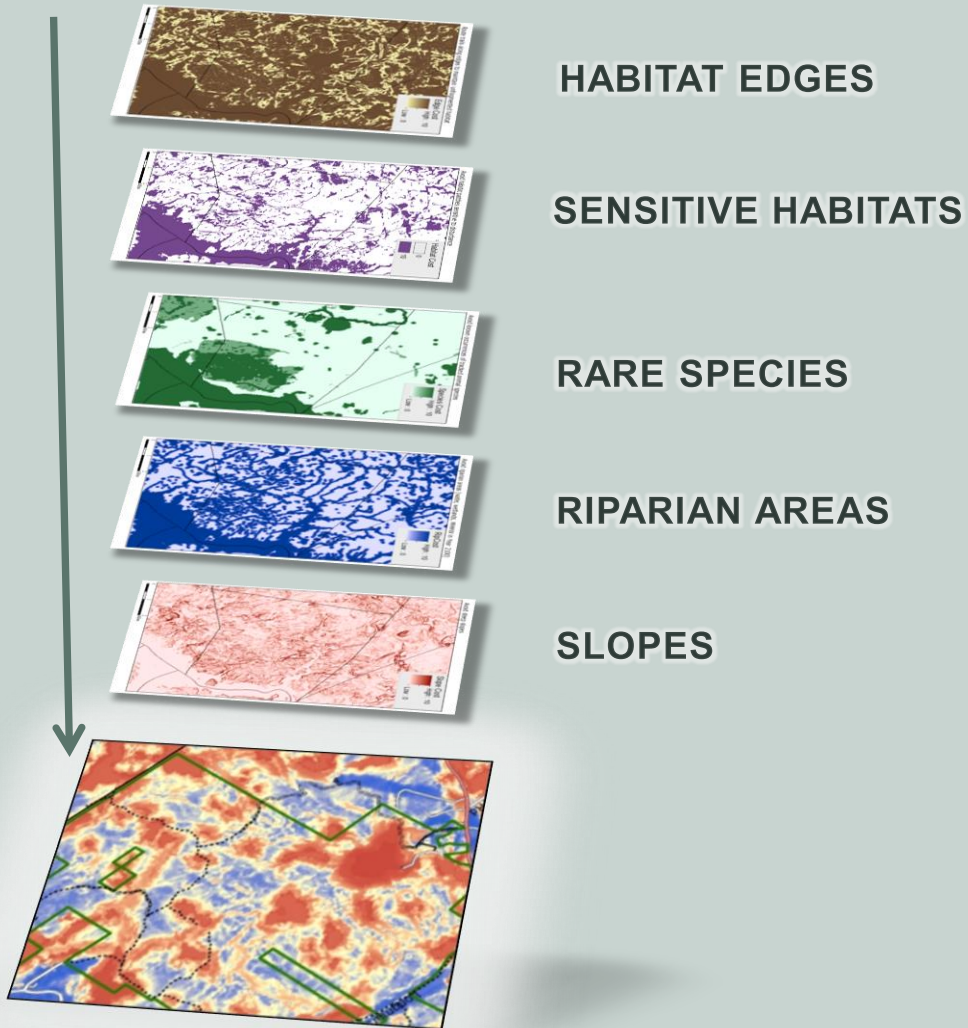
Jeff Wendorff photo

NH Peregrine Falcon Productivity, 1980-2016

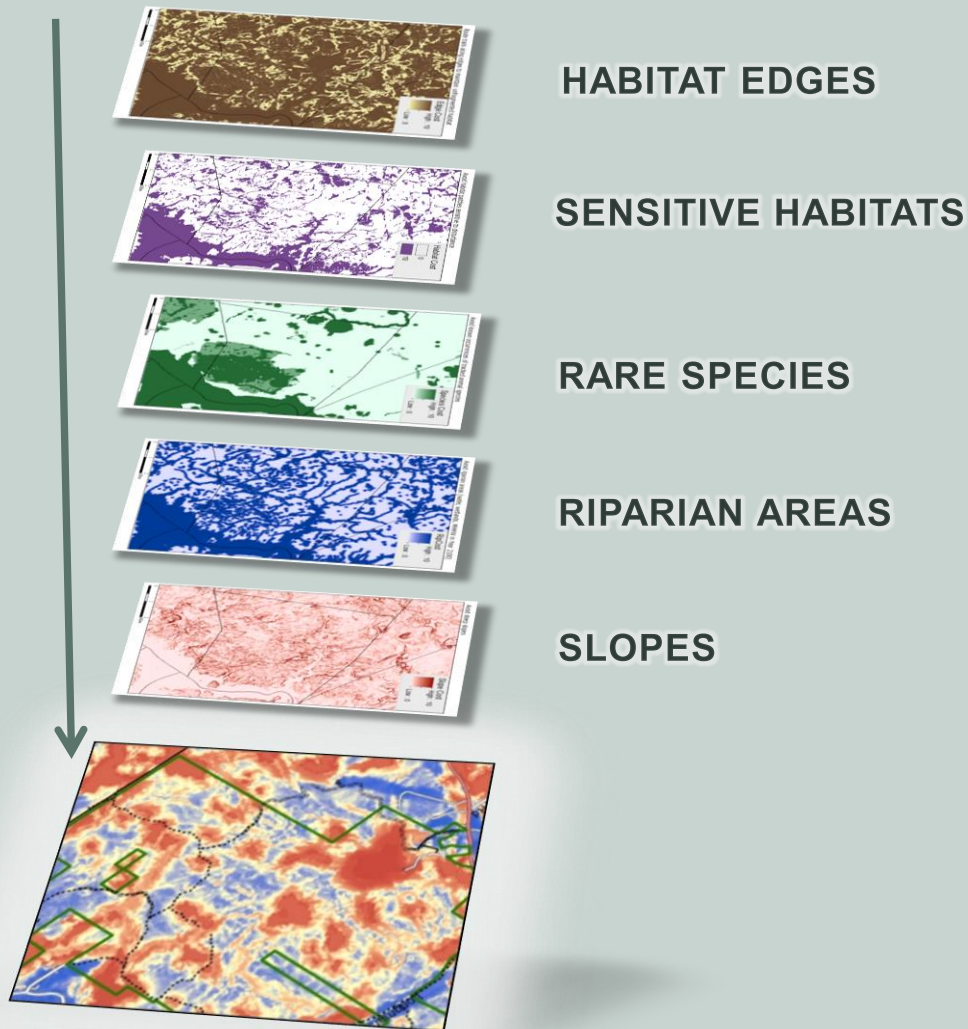


KY Department of Fish and Wildlife photo

Locate Trails with Wildlife in Mind



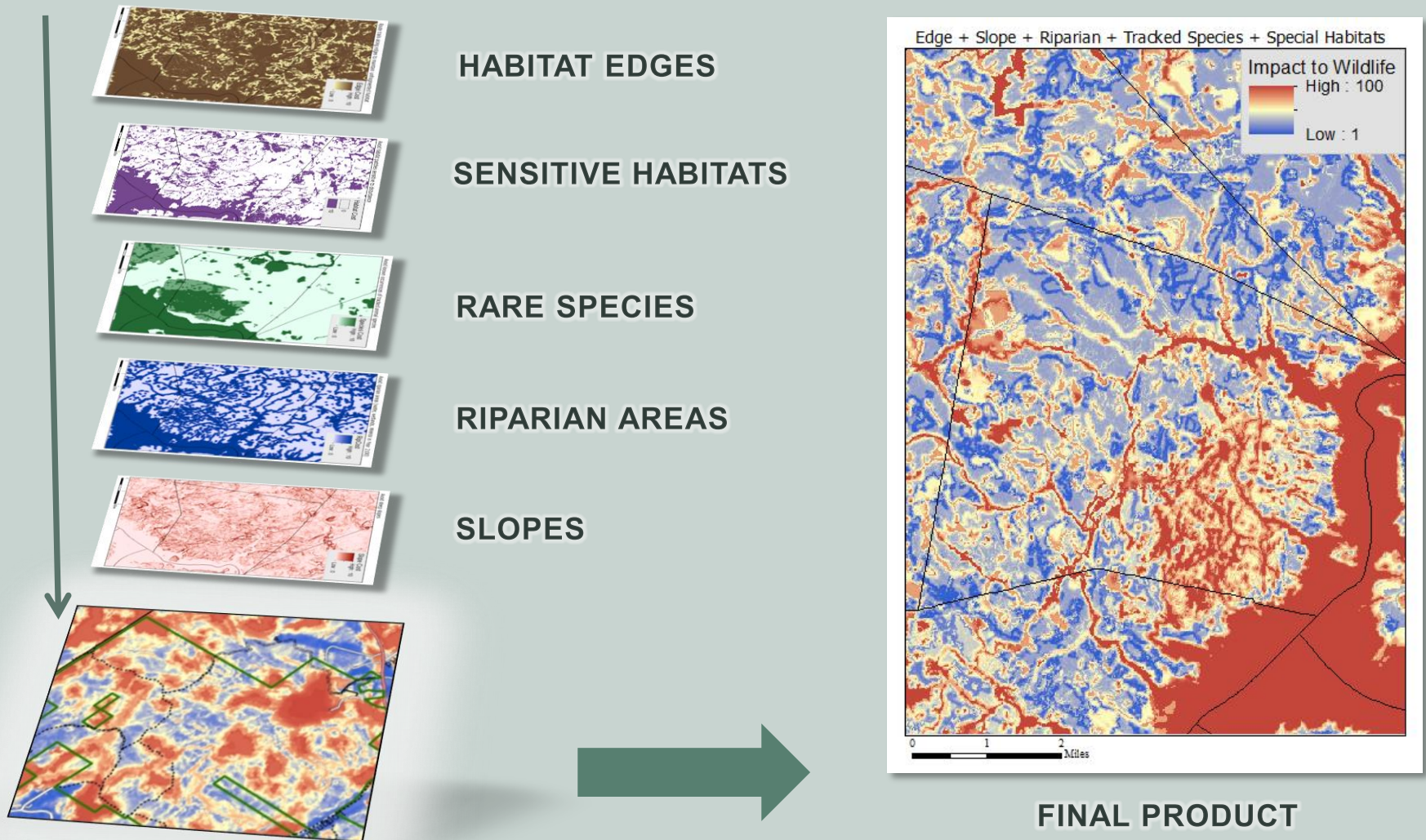
Workshop to Review Draft Model



Trail & Wildlife Experts

Ibis Wildlife Consulting
Lakes Region Conservation Trust
Monadnock Conservancy
National Park Service
NH Audubon
NH DOT
NH Fish and Game Department
NH Trails Bureau
Society for the Protection of NH Forests
Southeast Land Trust of NH
UNH Cooperative Extension
US Forest Service
Upper Valley Trails Alliance
Washington Conservation Commission
White Mountain National Forest

Workshop to Review Draft Model



Where Can
We Find
The Tool?



Trails for People and Wildlife: Outreach

In This Section

- » Habitats
- » Creating a Backyard Wildlife Habitat
- » Habitat Management
- » Habitat Management Guide
- » Habitat Stewardship Series Brochures
- » Habitat Types and Species
- » Managing State Lands for Wildlife
- » Wildlife Management Areas

Trails for People and Wildlife

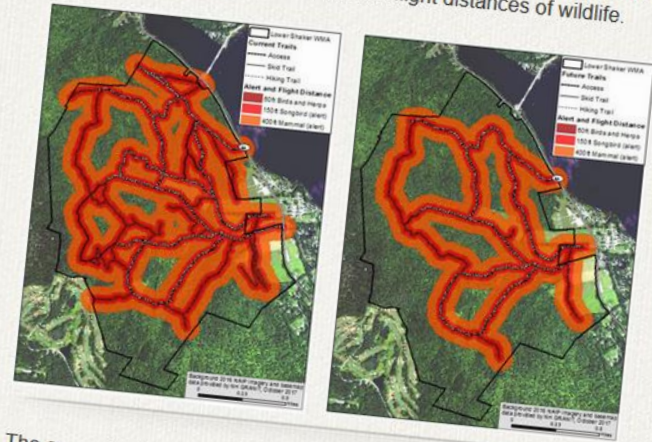
Hiking, mountain biking, bird watching, horseback riding, snowmobiling -- these are just some of the ways we get outside to enjoy nature and unwind from our day-to-day activities. However, even these seeming innocuous activities can have impacts on wildlife including reduced abundance, reproduction, and survival. Thoughtful trail location allows us to get outside to enjoy nature and also minimize disturbance to wildlife.



Funded by the US Fish and Wildlife Service, the New Hampshire Fish and Game Department developed a statewide tool that can be used to assess existing trails and site new trails in the most wildlife-friendly way. This mapping tool highlights areas particularly important for wildlife and areas that would be more suitable for trail development. Accompanying documents will explain how to use the

Evaluating Existing Trails

Wildlife hears and sees you coming and can be impacted even though they may be quite a distance from a trail. You can evaluate how much habitat is being impacted by existing trails or a new draft trail layout by looking at the alert and flight distances of wildlife.



The example above (select images for larger view) illustrates what portion of the Lower Shaker Wildlife Management Area in Enfield is being impacted by recreational trails (orange-red shading). There were 10 miles of trails on this 1,056 acre property with 73% of the property being impacted (left). After Fish and Game decommissioned some of the trails, that impact diminished by 21% while still providing plenty of recreational access and reducing conflict between different recreational activities.

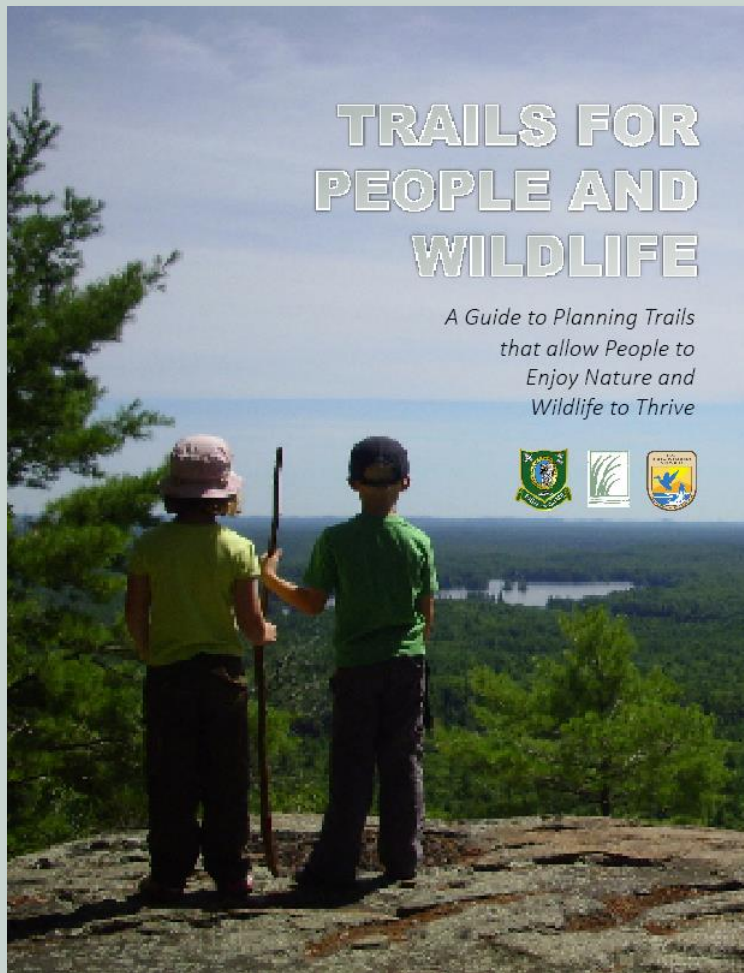
wildnh.com/trails

periodically for more information on how best to use this tool to site new trails and evaluate existing ones, and for town-based assessments of existing trails.

Own Maps

be the ability to make your own custom maps to use with the online map tool, MapItView.

“How To” Guide for this Tool




wildnh.com/trails


GIS Layers Available

ArcGIS® for Desktop

Tips and Shortcuts



NH GRANIT
NEW HAMPSHIRE'S STATEWIDE GIS CLEARINGHOUSE




News Projects Resource Library
1 Download Free Data Order Data Online Maps & Services Map Library

GRANIT Data Discovery Tool

Data Download Compression & Storage Type
☒ Zip ☐ Tar ☐ Compressed Tar (gzip)
[Download All Datasets](#) [Download Marked Datasets](#)


1 records match your search criteria

Dataset	Metadata	Sample Image	Download	
			Format	Mark / Download
TrailsImpact - Planning Trails for People and Wildlife	"Lite" Record Full Record		<input checked="" type="radio"/> grid	Download Now <input type="checkbox"/> Mark as part of set

www.granit.unh.edu

Online Mapping Tool




☐ ☒  Environment and Conservation

☐ Conservation and Public Lands

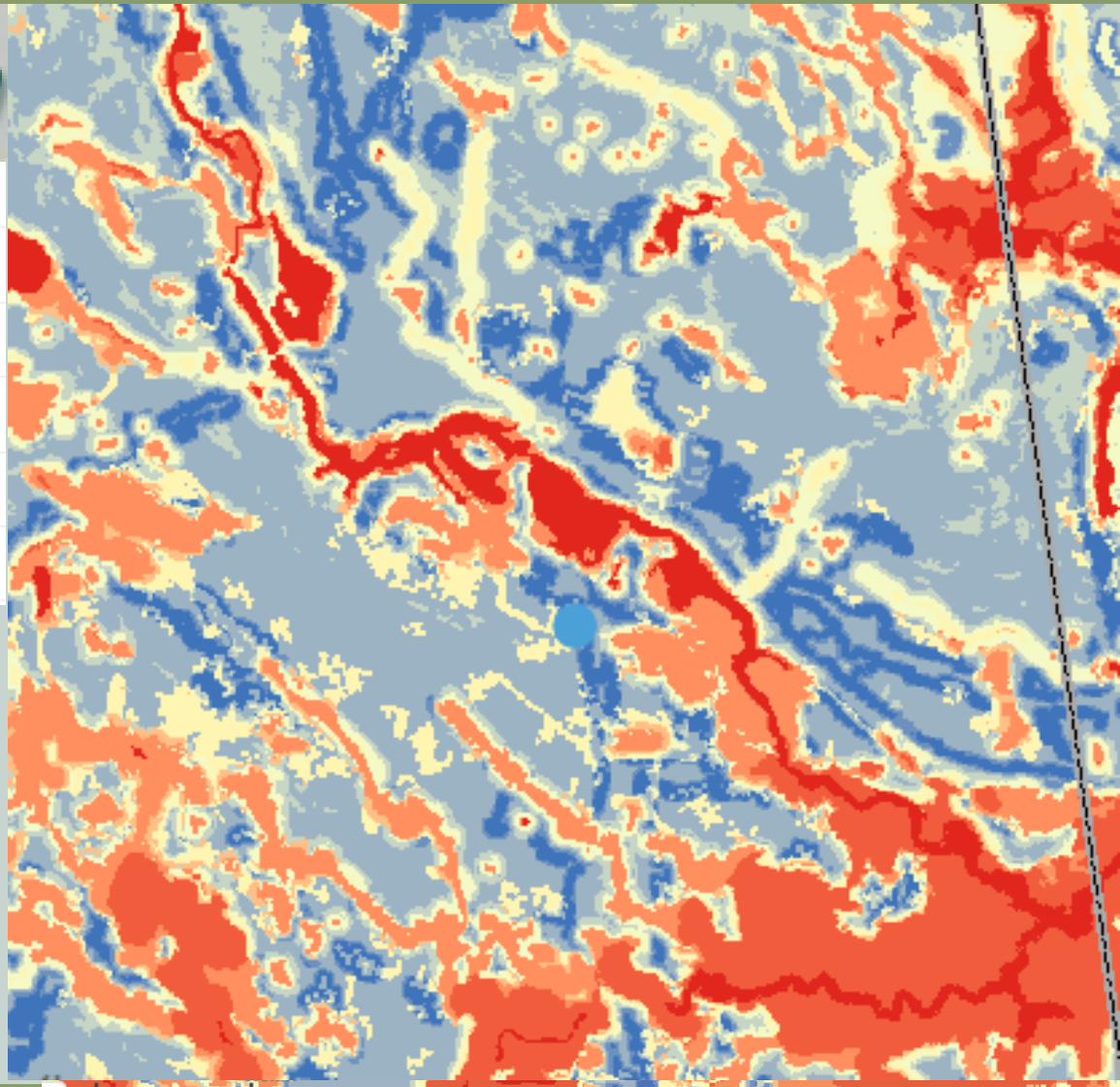
☐ ☒ Wildlife

☐ ☐ Wildlife Action Plan

☐ ☒ Wildlife Impacts

☒  Planning Trails for People and Wildlife

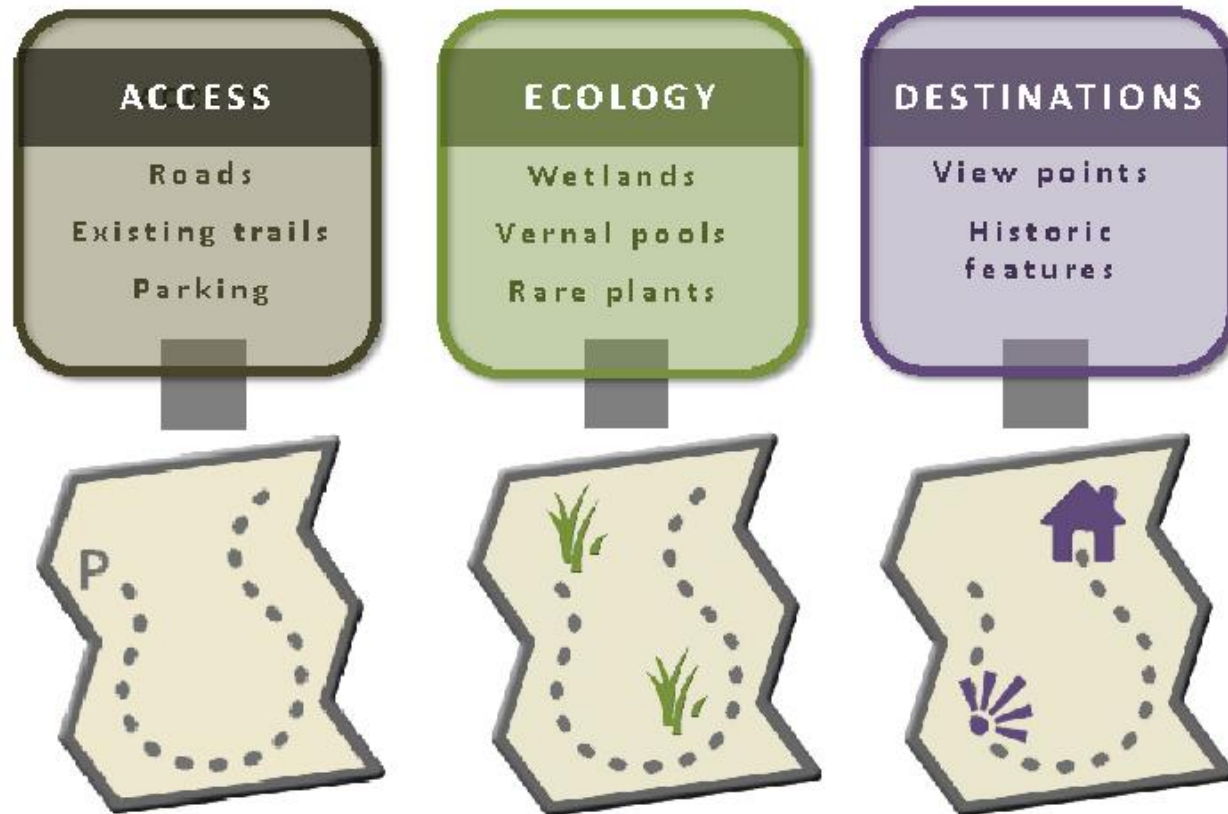
granitview.unh.edu



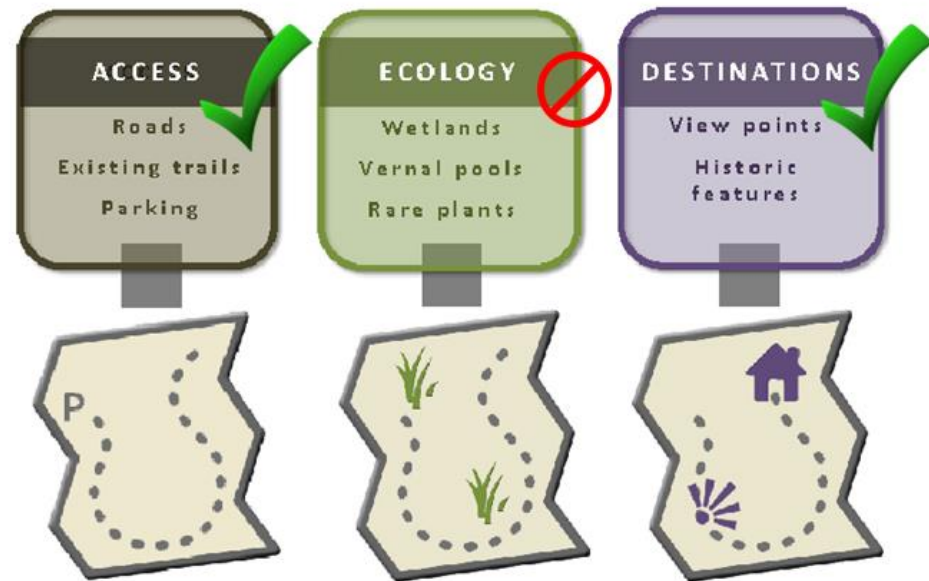
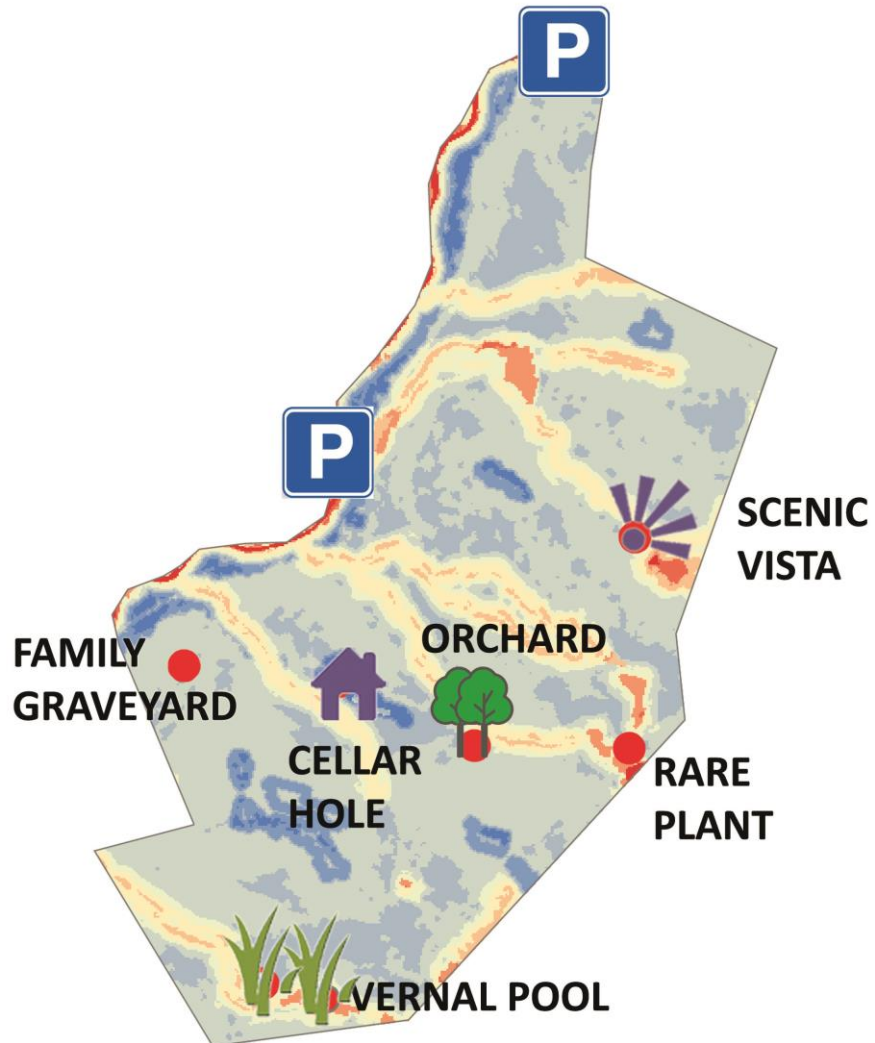
How to Use the Tool



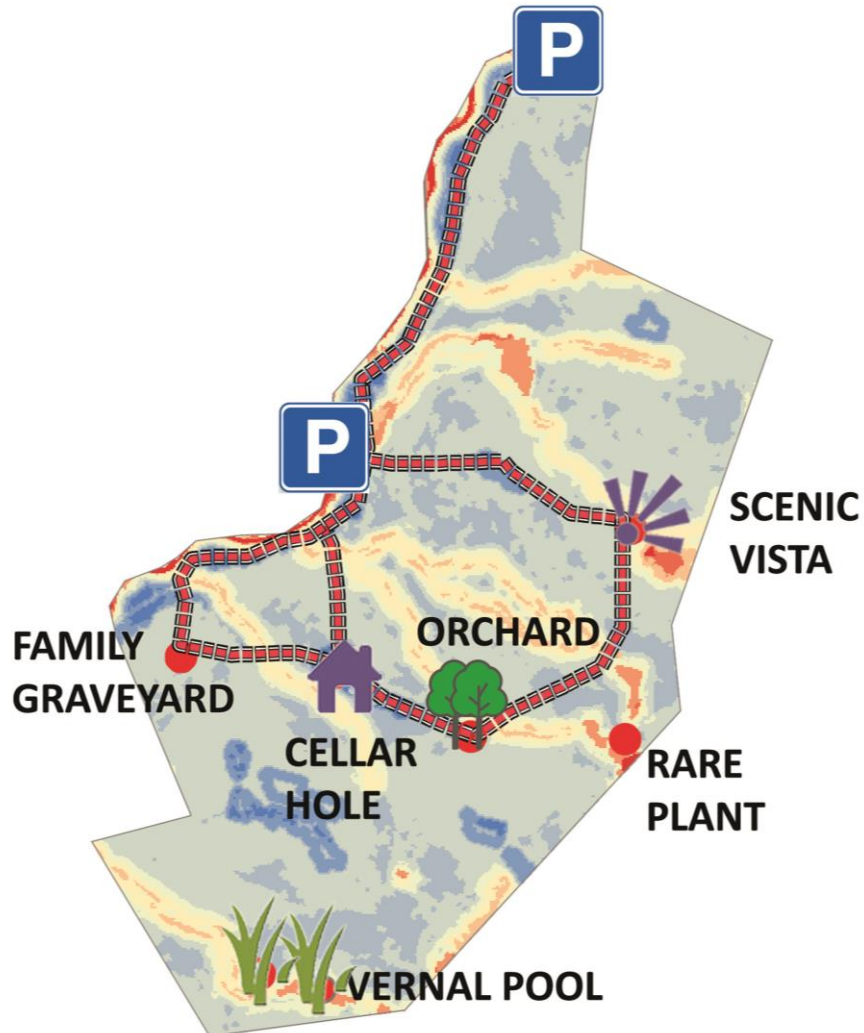
1. Map Existing Features of the Property



2. Apply Tool: New Trails



2. Apply Tool: New Trails



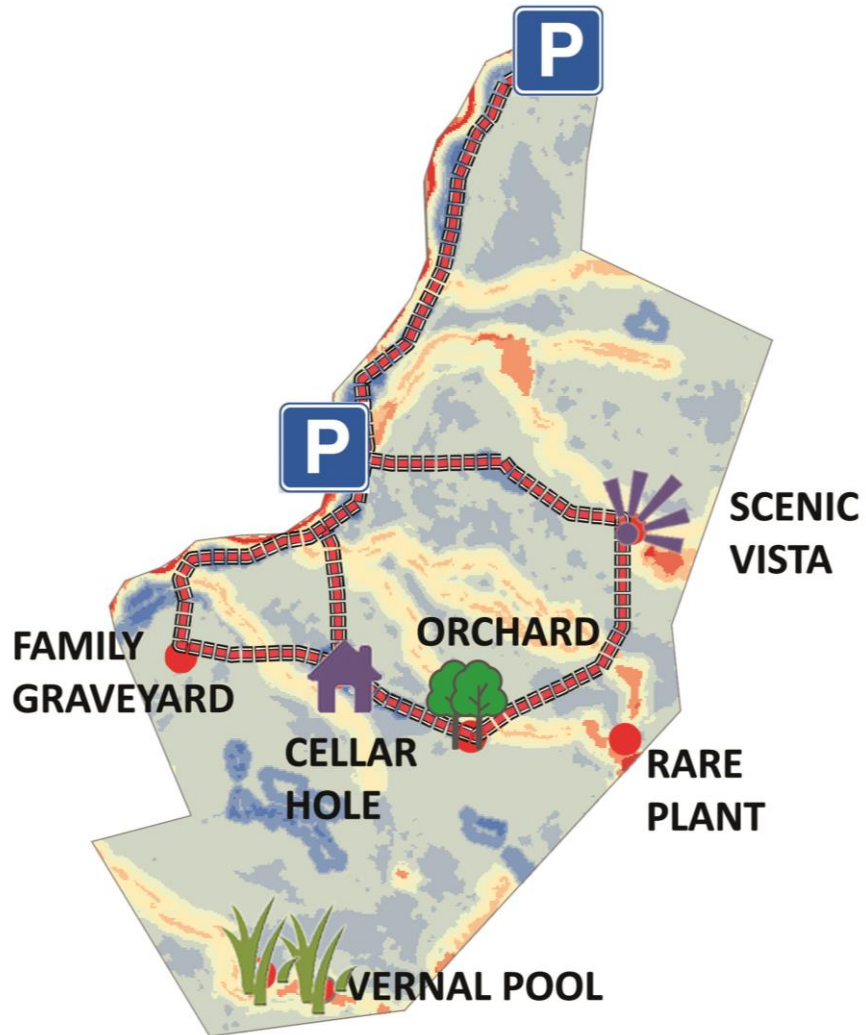
Whenever possible “follow the blue”



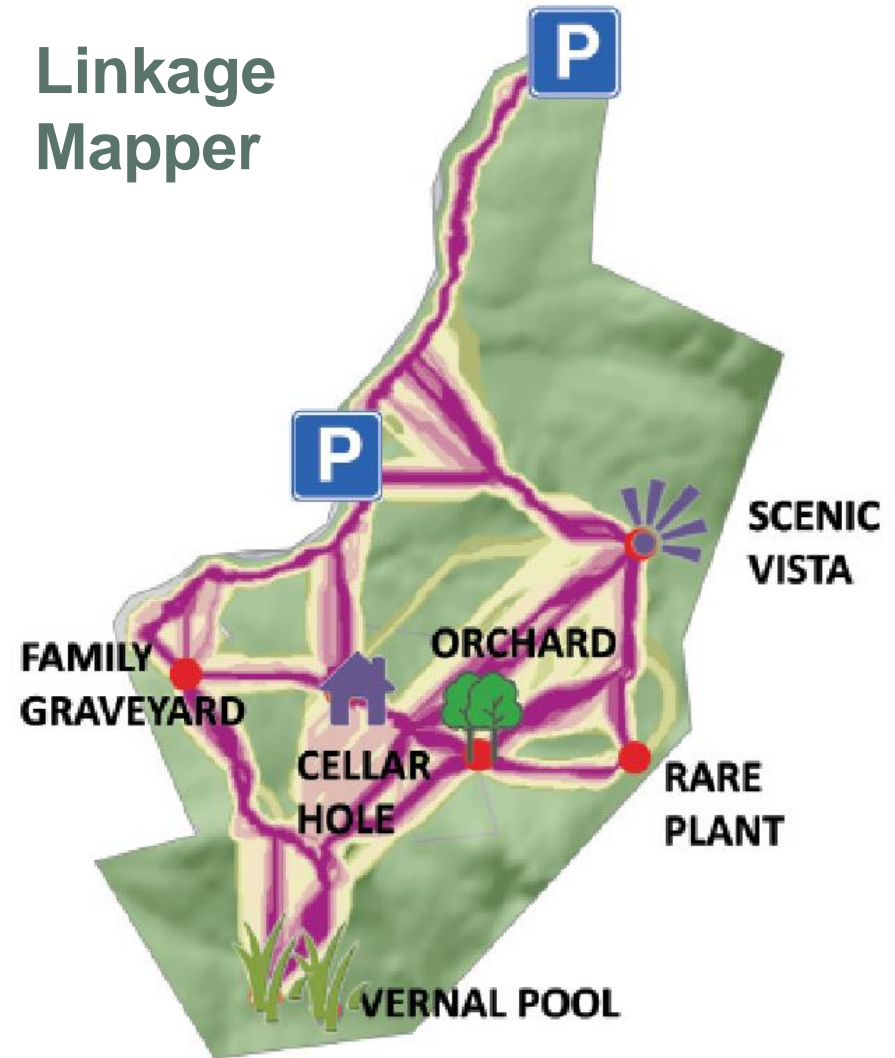
Best route to minimize impacts to wildlife while getting people outside to enjoy and interact with nature



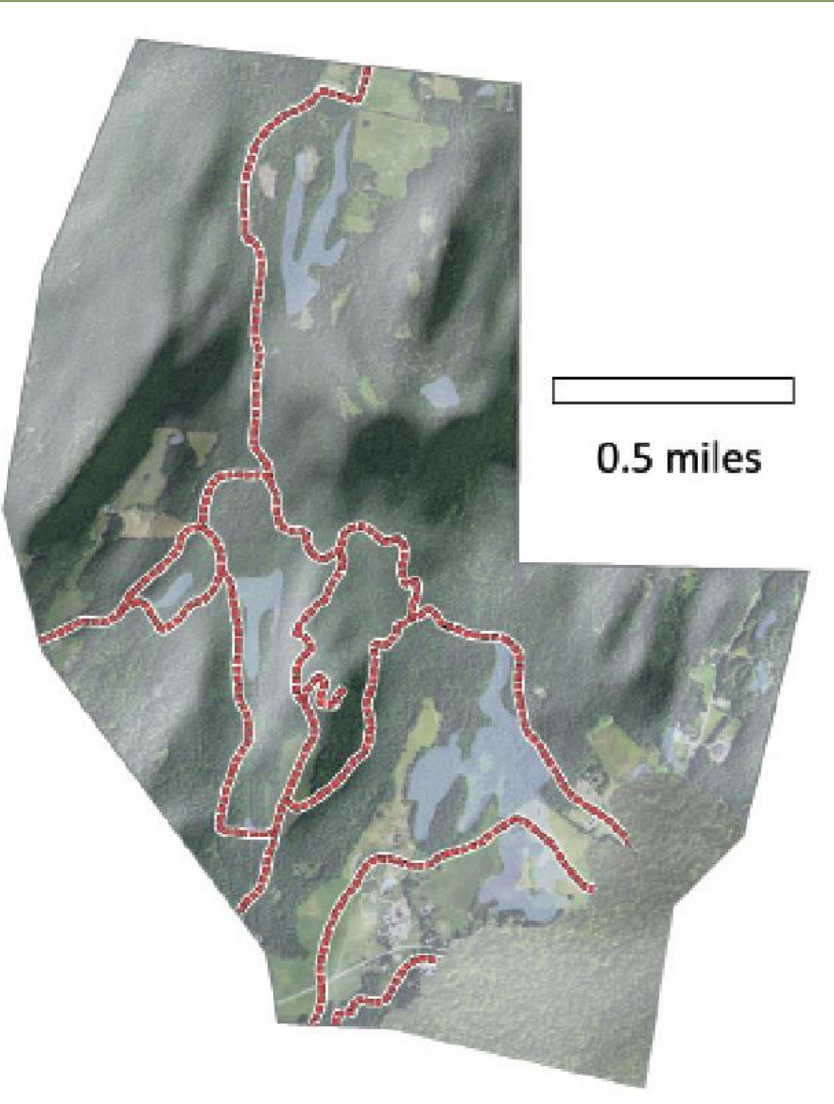
2. Apply Tool: New Trails



Linkage Mapper



2. Apply Tool: **Existing Trails**

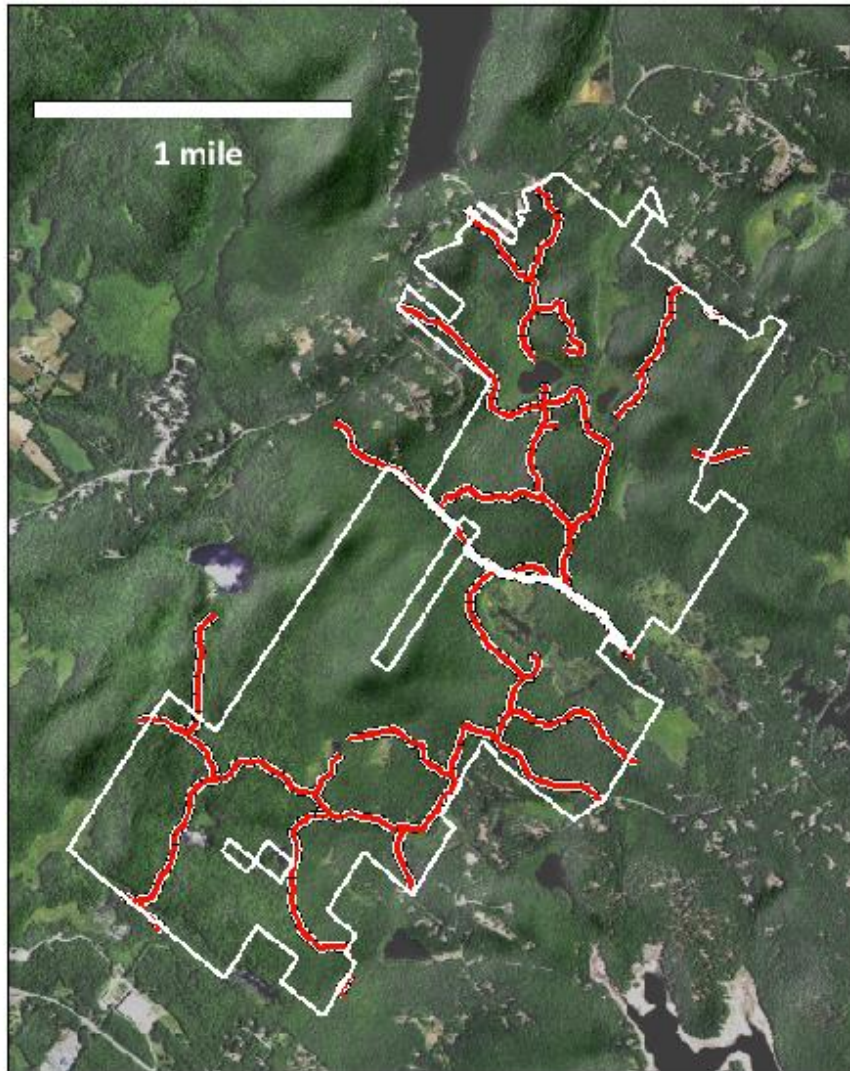


Whenever possible “follow the blue”



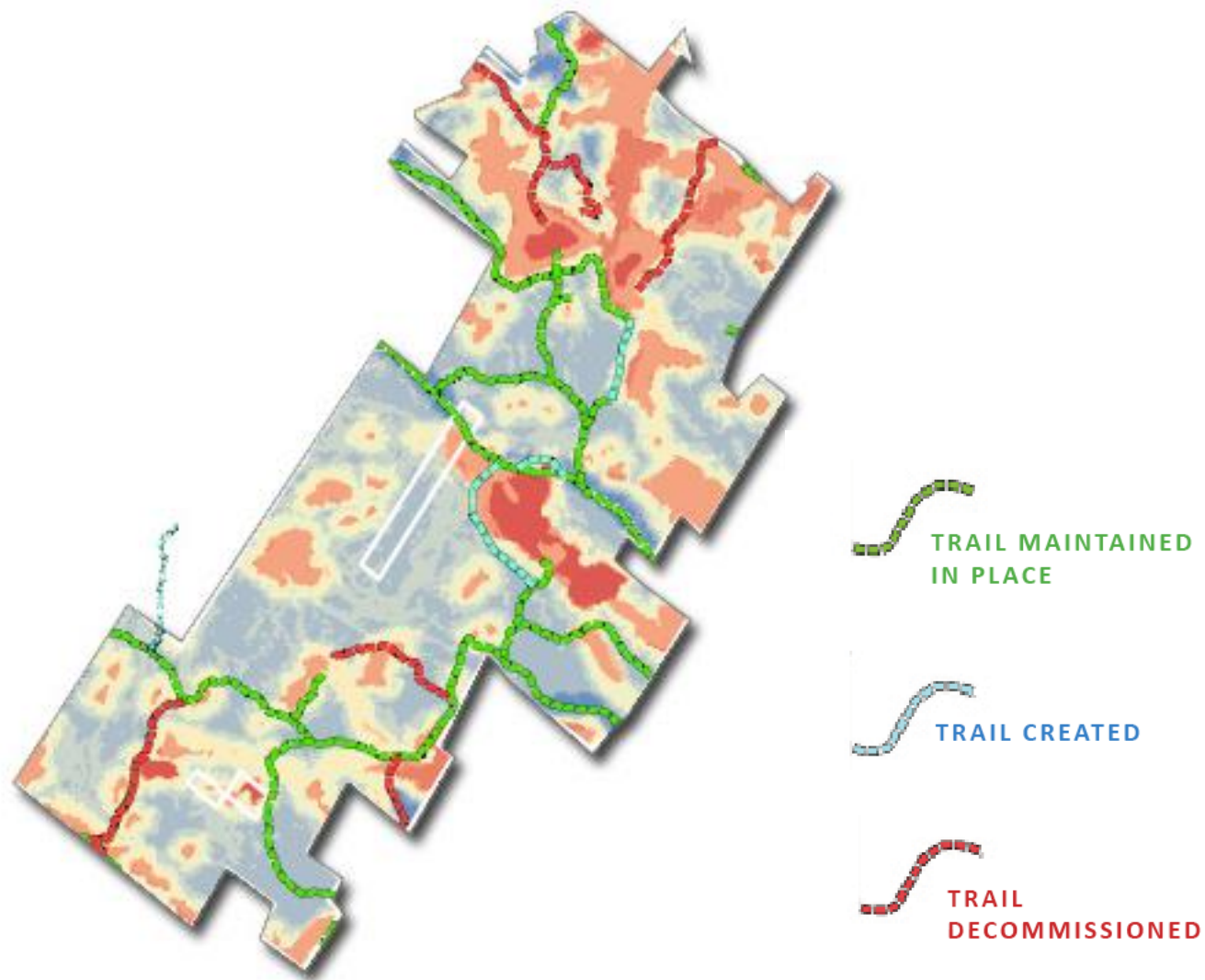
Best route to minimize impacts to wildlife while getting people outside to enjoy and interact with nature

Case Study: Stonehouse Forest

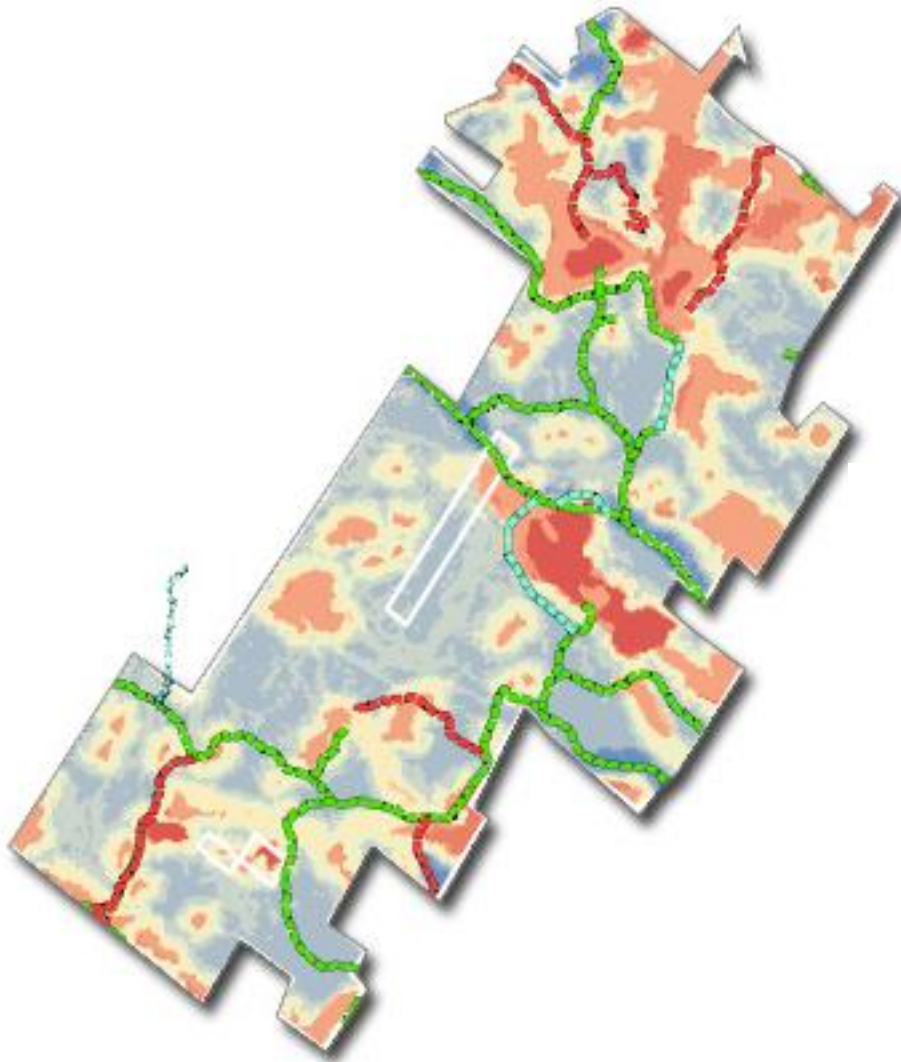


**STONEHOUSE FOREST
IS THE LARGEST
UNDEVELOPED TRACT
IN BARRINGTON.
WHEN PLACED INTO
CONSERVATION 10.4
MILES OF EXISTING
WOODS ROADS AND
TRAILS WERE PRESENT.**

Case Study: Stonehouse Forest



Case Study: Stonehouse Forest



Sections that crossed large wetlands or ponds in order to protect water quality

Stretches that were in high value wildlife habitat

Trails without specific destinations or multiple trails that led to the same destination

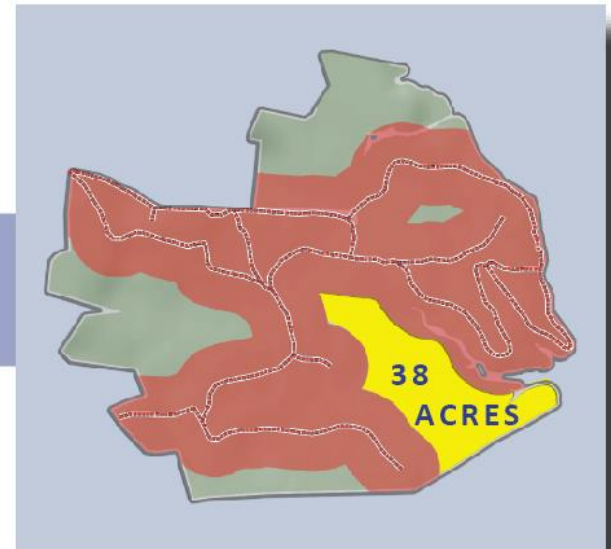
Protecting significant peatland and a oak-mountain laurel community,

Avoiding proximity to neighboring properties



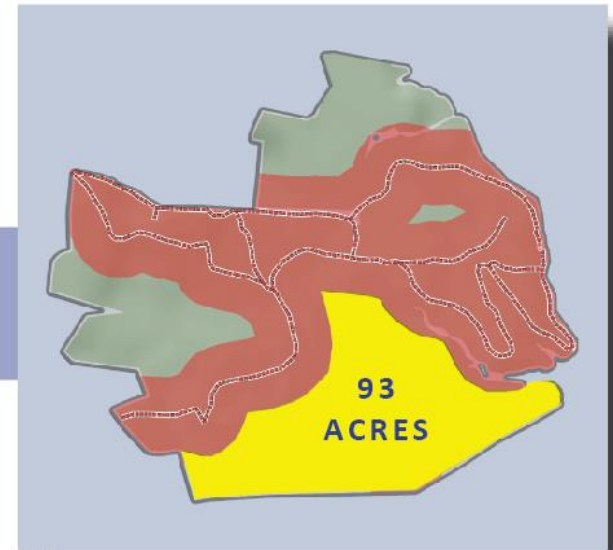
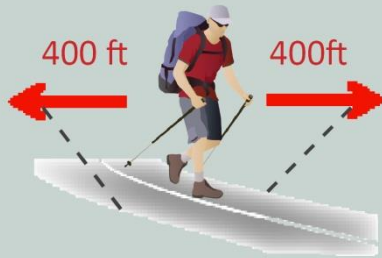
**TRAIL
DECOMMISSIONED**

3. Overlay “Corridor of Influence”



There are 4.6 miles of existing trails on this example property. These influence 267 acres, or 68 %, of the entire property. The largest uninfluenced area, shown in yellow, is 38 acres.

3. Overlay “Corridor of Influence”



The two spur trails highlighted are together 0.5 miles long, just 10 % of the entire trail network. If these are closed, it would expand the area largely uninfluenced by trail traffic to 93 acres, almost 2 1/2 times the original.

4. Verify Your Plan with Field Visit



**ALL THE PLANNING IN THE WORLD
DOESN'T BEAT "BOOTS ON THE
GROUND". REMEMBER TO VERIFY
YOUR PLAN WITH A FIELD VISIT.**



How to Use the Tool: Overview

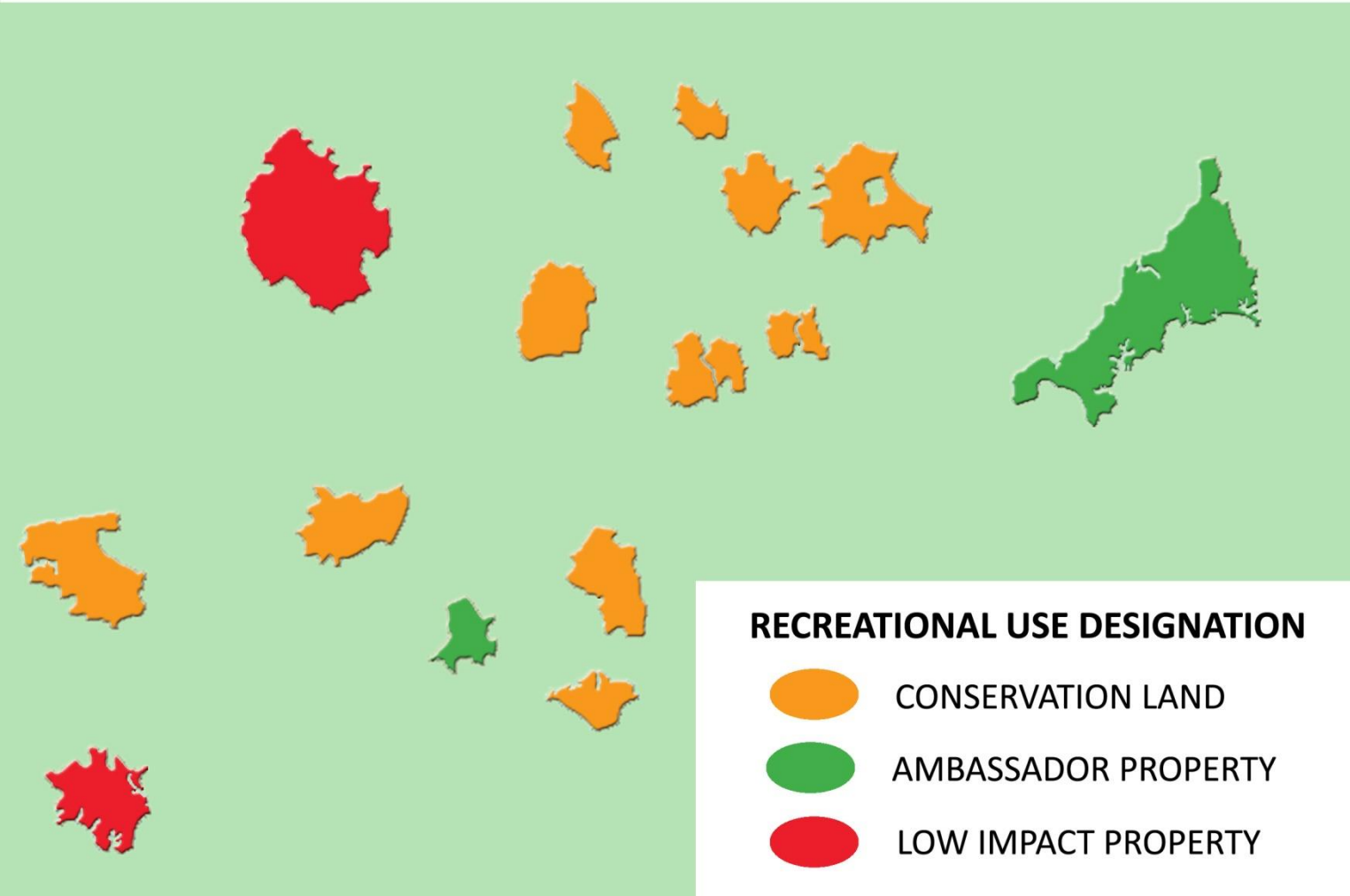


Trails from A Community Perspective



Plan Your Trail Network Over All Properties Under Single Ownership

ALL THE PROPERTIES WE OWN & MANAGE






Plan Your Trail Network Over All Properties Under Single Ownership

ALL THE PROPERTIES WE OWN & MANAGE



RECREATIONAL USE DESIGNATION

-  CONSERVATION LAND
-  AMBASSADOR PROPERTY
-  LOW IMPACT PROPERTY



PROPERTIES THAT ARE MAINLY BLUE ARE GOOD CANDIDATES TO BECOME HIGHLY PUBLICIZED "AMBASSADOR" PROPERTIES.



THOSE THAT ARE MAINLY RED WILL IDEALLY BE LEFT AS UNDISTURBED AS POSSIBLE.

Identify “Ambassador Properties”



NH FISH AND GAME
“AMBASSADOR” PROPERTIES
AROUND GREAT BAY.



Match Trail Network with Resources Available



A targeted network of frequently used trails allows land managers to focus available resources.

This can be the volunteer time, funding, equipment or infrastructure needed to create trails and maintain them in the long-term

Publicize Existing Trails



Deerfield: Standard CE Language

14 Jul 2019 V.3 Deerfield Cons Comm. P.
recreational trails:

LOCATING TRAILS:

Trails: Trails may be located, cleared, co
consistent with the Purposes of this Easem
and managing "Trails for People and Wild
science based methodology, including:

- a) Keep unfragmented trail-free areas
- b) Avoid small patches of high quality
- c) Avoid riparian areas and permanent
wildlife corridors
- d) Avoid locations of rare wildlife

Recreation Trail Management Plan Require
maintenance and relocation shall follow a
with this Easement, items (a)-(d) above, a

Construction and maintenance shall conform to best practices recommended by:

- a) Appalachian Mountain Club or similar trail-maintaining organization (for reference, see *The Complete Guide to Trail Building and Maintenance*, C. Demrow, D. Salisbury, Appalachian Mountain Club, or similar successor publication)
- b) NH State Parks Best Management Practices manual
<https://www.nhstateparks.org/uploads/pdf/BMP-Manual.pdf> or similar successor publication

and shall be constructed and maintained consistent with requirements of the Management Plan.

Trail making and management activities shall be carried out in accordance with all applicable local, state and federal laws and regulations, and in accordance with current, generally accepted best management practices for the sites, soils and terrain of the Property. Trail design and construction shall be supervised by a licensed professional forester, a certified wildlife biologist, or other qualified person approved in advance and in writing by the Grantee.

LOCATING TRAILS:

Trails: Trails may be located, cleared, constructed, and maintained, provided these trails are consistent with the Purposes of this Easement and NH Fish and Game methodology for planning and managing "Trails for People and Wildlife" (www.wildnh.com/trails) or other equivalent science based methodology, including:

- a) Keep unfragmented trail-free areas as large as possible
- b) Avoid small patches of high quality or special habitats
- c) Avoid riparian areas and permanent features in the landscape that serve as important wildlife corridors
- d) Avoid locations of rare wildlife



Consideration of Wildlife: One of Several Possibilities



Enjoying
wildlife is
just one
piece of the
puzzle

Consideration of Wildlife: One of Several Possibilities



**Enjoying
wildlife is
just one
piece of the
puzzle**

**Using the
planning
principals
can enhance
wildlife
viewing on
trails built
for other
purposes**



Get Outside, Appreciate Nature, and *Have Fun!*



wildnh.com/trails

Jim Oehler

♦ james.oehler@wildlife.nh.gov

Katie Callahan

♦ catherine.callahan@doit.nh.gov

Rachel Stevens

♦ rachel.stevens@wildlife.nh.gov

Getting Your
Project on
the Ground



NH Trails Bureau



Pay a Citation / P

Trails Bureau

Grants

Laws

Clubs

Trail Maintenance

Trail Etiquette

Trail Tips

BEST MANAGEMENT PRACTICES

For Erosion Control During Trail Maintenance and Construction

NH Trail Construction and Maintenance Manual



*Keep trails out of the water;
and water out of the Trails*

STATE OF NEW HAMPSHIRE
Department of Resources and
Economic Development
Division of Parks & Recreation
Bureau of Trails

[www.nhstateparks.org/
about-us/Trails](http://www.nhstateparks.org/about-us/Trails)

NH Fish and Game Landowner Relations



New Hampshire

FISH AND GAME

Connecting you to life outdoors

Guardian of the state's fish, wildlife, and marine resources.

Lindsay Webb

271-1137

Lindsay.webb@wildlife.nh.gov

PARKING
Please Park in This Area

Access to this property is a privilege provided through the generosity of the landowner who has granted that all vehicles be parked in this area.

















Please respect the landowner's request.

Remember your actions represent all outdoor use and inappropriate behavior may result in a loss of access for everyone.

Please work in partnership with us to maintain access to and future generations.

Landowner _____
Address _____

Landowner Relations Program
New Hampshire Fish and Game Department
in partnership with

NO VEHICLES
BEYOND THIS POINT

Foot Traffic Only

Access to this property is a privilege provided through the generosity of the landowner who has granted that foot traffic only take place beyond this sign.













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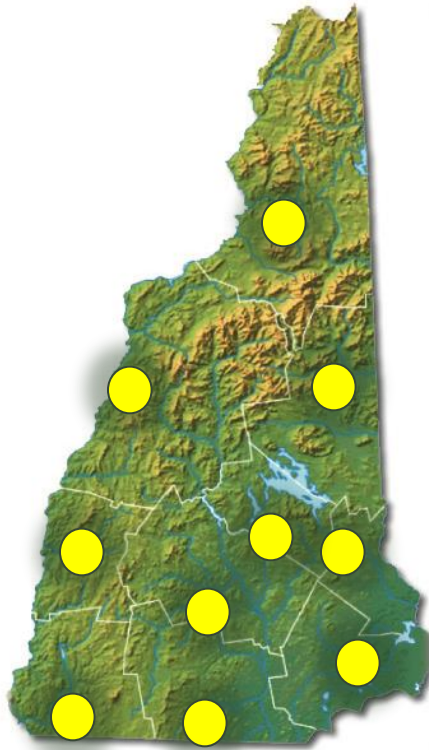
Please work in partnership with us to maintain access to and future generations.

Landowner _____
Address _____

Landowner Relations Program
New Hampshire Fish and Game Department
in partnership with

UNH Cooperative Extension



UNH Cooperative Extension



OUTDOOR VOLUNTEERS
IN NEW ENGLAND

Trail Maintenance for Volunteers: Training Guide



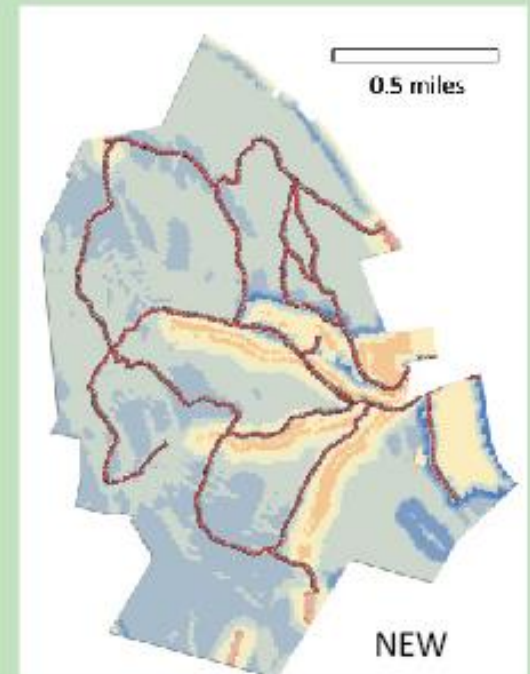
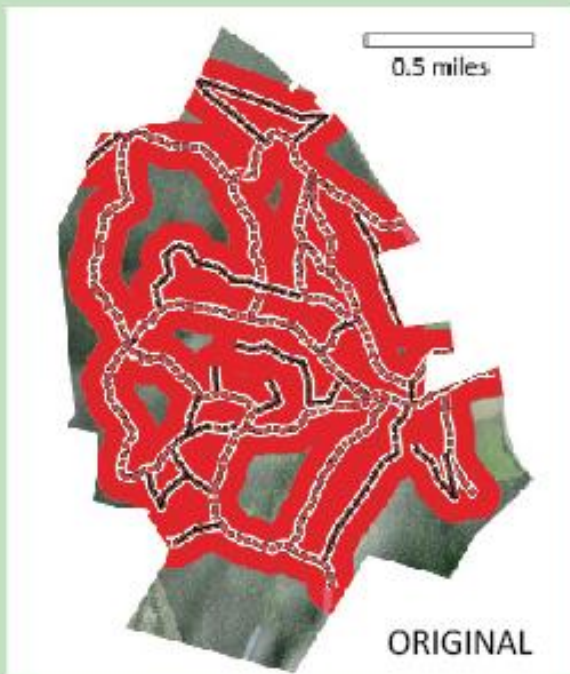
**Gain confidence working on New England trails
with this 30-page guide**

- Skills, tips, and advice for working on New England trails
- Learn why trails need help
- Best practices for the top things volunteers can do for trails
- Important safety considerations

[Download the Guide](#)

2. Apply Tool: Existing Trails

REALITY CHECK: SOME TRAILS, EVEN IN HIGH IMPACT AREAS, DON'T MAKE SENSE TO MOVE



Trails covered 73% property Reduced network's influence by 21%

Impacts of Recreational Trails on Wildlife

A Review of the Impacts of Nature Based Recreation on Birds

Pickering & Castley (2011) Journal of Environmental Management

- 69 papers
- US, England, Argentina, New Zealand



88% of Studies
- Negative
Impacts!

Impacts of Recreational Trails on Wildlife

Effects of Rec. on Animals Revealed as Widespread thru Global Systematic Review

Larson, Reed, Merenlender, Crooks (2016) PlosOne

- 274 papers
- North America + Europe
- All taxa – not just birds



Impacts of Recreational Trails on Wildlife

