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**Lake Placid/North Elba Trail Mapping
Analysis and Recommendations
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Table of Contents

Table of Contents	i
1. Executive Summary	1
2. Literature Review	2
2.1 Background of Lake Placid and Lake Placid/North Elba Development Commission	2
2.2 Previous Study on Lake Placid Trail Connection Project.....	3
2.3 Current Study Background	3
2.4 Market Strategies based on other communities.....	4
2.4.1 Hike Ontario Case Study.....	4
2.4.2 Champlain Area Trails (CATS) Case Study.....	5
2.5 Consumer Map Design	6
3. Data and Methodology.....	7
3.1 Case Study	7
3.2 Stakeholder Interview	7
3.3 GIS data	8
4. Case study Analysis	10
4.1 Case Study 1: Hike Ontario	10
4.2 Case Study 2: Champlain Area Trails (CATS).....	12
5. Stakeholder Analysis	14
Don Mellor	14
James McKenna.....	14
Steve Guglielmi.....	15
6. GIS Analysis	16
7. Recommendations	19
7.1 Map Matrix Recommendations.....	19
7.2 Mapping Recommendations	20
<u>Appendix</u>	a
Appendix 1	a
Appendix 2	d
Appendix 3	e
Appendix 4	f

Appendix 5g

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1. Executive Summary

The student consulting group from Cornell Institute for Public Affairs was engaged by the Lake Placid and North Elba Development Commission to develop maps of the walking trails in the region. These user-friendly maps of selected trails benefit visitors and local residents interested in hiking, running, and other outdoor activities.

In order to develop the maps, the team needed to address three main questions: 1) How have other communities developed trail maps and how can we learn from their work? 2) Which trails to incorporate into the maps and what features in Lake Placid need to be included? 3) What is the most appropriate method for displaying our findings in the created maps?

After the team conducted a comprehensive literature review for best practices, we selected three methodologies to address the stated research questions. To answer these questions, the team analyzed two case studies (Hike Ontario and Champlain Area Trails), conducted three stakeholder interviews with local trail experts, and used a combination of Geographic Information System (GIS) mapping and Photoshop design to create the actual maps. The team made a matrix framework to guide the creation of trail descriptions, using that selected nine walking trails then maps for each trail which is the basic deliverables in the project. The matrix identifies all of the pertinent information categories included in the maps, such as trail length, difficulty, parking, and trailhead location, etc. The team developed the maps by modifying the GIS data and drawing each trail on a base map. The team also provides recommendations for trail mapping, formatting, and proposes future projects.

2. Literature Review

2.1 Background of Lake Placid and Lake Placid/North Elba Development Commission

“The Village of Lake Placid was incorporated in 1900 and is located in the Town of North Elba in the Adirondack Mountains in the northwestern corner of Essex County, New York.”¹ Rumney (2005) highlights that Lake Placid remained undeveloped until the 1840s. In 1852, the Nash House opened to cater to tourists, and by the 1870s a number of hotels were established. The most prominent establishment was the Lake Placid Club (1895-1980), which initiated a winter-tourist season based on skiing and skating in 1904. The village is well-known for hosting the 1932 and 1980 Winter Olympics and has used its national reputation to attract athletes and tourists since then. Tourism is one of the key economic drivers for Lake Placid’s economic and community development. The Olympic Training Center, operated year-round to develop Olympic-class athletes, continues the village's involvement in Olympic competition. In the early 21st century Lake Placid remained a renowned resort and center for winter sports.² According to the United States Census Bureau, the population of Lake Placid is 2,465 in the year of 2015.

The Lake Placid / North Elba Development Commission was created by the Village of Lake Placid and Town of North Elba municipal boards in the August of 2014. The purpose of the Development Commission is to implement the Lake Placid /North Elba Comprehensive Plan. The plan sets the to meet three challenges: meet the needs of a growing senior population, meet growing technology needs, and respond to community’s growing interest in the natural environment. This map project addresses goals set in the 2014 Comprehensive Plan.

Another resource in Lake Placid the Olympic Training Center. The Olympic Training Center has a goal of developing recreational facilities and sports venues to better serve tourism, and national and international competitions³. Lake Placid should also be a suitable destination for athletes in training, residents, and visitors of all ages throughout the year. Finally, Lake Placid should promote and support a healthy, vigorous lifestyle in the community.⁴ As part of

¹ Village of Lake Placid NY. Gov. website. <http://villageoflakeplacid.ny.gov/content>

² Rumney, Thomas A. "Lake Placid." Encyclopedia of New York State, edited by Peter R. Eisenstadt and Laura-Eve Moss, Syracuse University Press, 2005, p. 860. Academic

³ Team USA, <http://www.teamusa.org>

⁴ 2014 Lake Placid Comprehensive Plan. <http://www.futurelakeplacid.com/2014-comprehensive-plan/>

their strategic plan for reaching this objective, the commission has pursued measures that include identifying walking routes into and out of the Village, designing an up-to-date mapping system that delineates routes and access points, and developing and publicizing the new Chub River Trail Plan.

2.2 Previous Study on Lake Placid Trail Connection Project

In 2015, a previous Cornell consulting team studied the land use practices within Lake Placid. Their project focused on using land-use classifications as a tool to evaluate the locations of possible trail networks and potential connection points. The total area was summed for each individual land class, converted into acreage, and divided by the total land area to get the percentage area of each land class. Wilderness is the most common land class in the region, as about 60% of the land is designated wilderness which will not allow trail development and should not be considered for trail connections. The rest of the land in the Lake Placid/North Elba region is eligible for trail development to varying degrees, as described in the aforementioned classification descriptions.

2.3 Current Study Background

The major task of the current Cornell consulting team is to map the primary walking trails in Lake Placid. In this report, the term walking trails refers to paths or sidewalks that are mainly designed for hiking and walking. Walking trails benefit people in the community by improving community facilities and services and attracting hikers and tourists as well.

A study by Reed demonstrates the value in trails with the “awareness and use of community walking trails...in the United States”.⁵ Through telephone survey and statistics analysis, Reed found that the “development of recreational trails may impact pedestrian activities and has been identified as a useful environmental and policy intervention to promote regular activity. Those who reported being trail users were more likely to be physically active as compared to other county population” (Reed, 2004). However, the awareness of existing trails among the community and level of trail use remained low. Therefore, it is very important to “promote awareness and use of trails” among community members especially “among older

⁵ Reed, Julian A., Barbara E. Ainsworth, Dawn K. Wilson, Gary Mixon, and Annette Cook. “Awareness and Use of Community Walking Trails.” *Preventive Medicine* 39, no. 5 (November 2004): 903–8.2004.03.013.

adults and irregularly active adults” (Reed, 2004). One of the strategies can be marketing local trail system.

GIS is a useful software package for analyzing walking trail data and mapping walking trail networks. Olafsson studied the importance of GIS data in recreational trail planning in Denmark. The study acknowledges that GIS is a skill set required of planners and policymakers and there is a significant learning curve.⁶ Despite this, their research has shown that the increased use of GIS and geo-information enhances the planning basis of multiple spatial aspects of recreational trail management. An additional study by Flink concludes that GIS analysis of an area’s sub-grade, including topography, soils, and watersheds, is necessary to determine if the area is “suitable for trail development”. “The sub-grade must accommodate the trail’s intended uses” without overly expensive or severe alterations. A highly suitable sub-grade has moderate slopes, good drainage, and firm dry soils.”⁷ The Lake Placid region takes environmental considerations seriously; they are of high priority in protected forest regions such as the Adirondacks. Trails around rivers and creeks often require a complete water-quality certification and need to gain authorization from the State Department of Natural Resources and Department of Wildlife Resources.⁸

2.4 Market Strategies based on other communities

2.4.1 Hike Ontario Case Study

Hike Ontario is a non-profit organization that encourages walking, hiking and ongoing trail development in Ontario, Canada. In 2007, they developed a “Manual of Best Practices to Increase Trail Use by Hikers and Walkers in Ontario.”⁹ The manual, which is based on the collective experience of professionals and volunteers working in this field, identifies best practices to increase walking, hiking and pedestrian trail across five different dimensions:

⁶ Olafsson, A. S., & Skov-Petersen, H. (2013). The use of GIS-based support of recreational trail planning by local governments. *Applied Spatial Analysis and Policy*, 7(2), 149–168.

⁷ Flink, C. A., Olka, K., Searns, R. M., & Rails-to-Trails Conservancy (Eds.). (2001). *Trails for the twenty-first century: planning, design, and management manual for multi-use trails* (2nd ed). Washington, DC: Island Press.

⁸ Eyler, A., Brownson, R., Evenson, K., Levinger, D., Maddock, J., Pluto, D., ... Steinman, L. (2008). Policy Influences on Community Trail Development. *Journal of Health Politics, Policy and Law*, 33(3), 407–427.

⁹ Hike Ontario. (2007). “Manual of Best Practices to Increase Trail Use by Hikers and Walkers in Ontario.” <http://hikeontario.com/wp-content/uploads/2015/11/HO-BestPractices-Web.pdf>.

1. Collaborate
2. Enhance the trail experience
3. Target specific population groups
4. Market the experience
5. Evaluate and modify the program

2.4.2 Champlain Area Trails (CATS) Case Study¹⁰

Champlain Area Trails (CATS) is a non-profit organization that creates and maintains hiking and cross-country ski trails in the Champlain Valley. Their actions serve as an excellent example of trail marketing strategies. Based on its practices, we can learn from four aspects:

1. Trail maps and descriptions need to be accessed easily on an official website (see Figure 1 & 2)
2. Trail information is comprehensive in terms of different categories (users, season) (See Appendix 2, 3 & 4)
3. Community engagement
4. Brand-building including mission and brand logo



Figure 1: Champlain Area Trails Official Website

¹⁰ Champlain Area Trails official website. <http://www.champlainareatrails.com>.

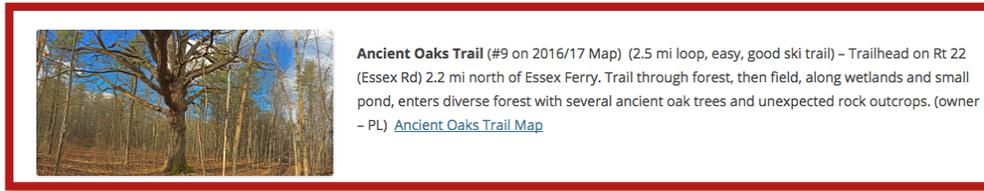


Figure 2: Ancient Oaks Trail Description

2.5 Consumer Map Design

Siti et al. researched the relationships between hikers' assessment of pull-factors, satisfaction and revisit intentions.¹¹ Their study found that, compared to overall satisfaction, pull-factors such as mountain landscape, accessibility, the role of an organizing company, and perceived risk have a strong influence on hikers' revisit intentions. This result indicated that hikers' revisit intentions were determined more by the features that they were attracted to. The study proposes that "the development of positive indicators of hikers' revisit intentions depend on tourism marketers' ability to establish favorable hiking attributes" and "marketers should work to help hikers value the attributes of the hiking experience." Besides, it suggested that "tour packages should be designed to suit different requirements such as duration of the tours, budgetary concerns, age and group size."

Considering these suggestions from Siti et al.'s study, we intend to include clear information about landscape, accessibility, perceived risk, tour duration, and suitable types of groups for each trail, with special emphasis on the attractive attributes of trails in their descriptions.

¹¹ Taher, Siti Hajar Mohd, Salamiah A. Jamal, Norzuwana Sumarjan, and Norliza Aminudin. "Examining the structural relations among hikers' assessment of pull-factors, satisfaction and revisit intentions: The case of mountain tourism in Malaysia." *Journal of Outdoor Recreation and Tourism* 12 (2015): 82-88. Web.

3. Data and Methodology

The data collection part of this project is based on three questions:

- How other communities market their local trail systems and make trail maps?
- What is the feature of the Village of Lake Placid?
- How to create the walking trail map and develop marketing strategies for walking trail system in Lake Placid?

3.1 Case Study

The purpose of conducting case study is to identify communities comparable to Lake Placid who have successfully presented their trail system and implemented marketing strategies, and then use these successful practices as references. The case studies chosen were those that designed and marketed local trail system as a method of tourism promotion. Suggestions given by the Lake Placid/North Elba Development Commission were also taken into account. The following were chosen for the case study analysis:

- **Hike Ontario**, Ontario, Canada
- **Champlain Area Trails (CATS)**, Champlain Valley, NY, US

These case studies are supposed to provide Lake Placid with insights as how to display and market local walking trail system.

3.2 Stakeholder Interview

Stakeholder interviews allowed the consulting team to confirm trail information, acquire data such as GIS data, and seek approval of trail selection for the customer trail map. Stakeholders consisted of selected trail owners, trail mapping experts, and selected trail foresters. During the project, our group conducted three qualitative interviews with stakeholders in the community. We also got input from one of our major stakeholders, Raymond Curran, who was unable to attend an interview due to time conflicts. Mr. Curran provided GIS data for the two newly cut trails, Heaven Hill Trails and Henry's Wood Trail.

Stakeholders that have attended the interview are shown as follow:

- **Don Mellor**, outdoor education teacher at the Northwood School. Northwood School is the owner of the Cobble Hill Trailhead parking area.
- **James McKenna**, Vice Chairman of the Uihlein Foundation in Lake Placid. The foundation is the owner of Heaven Hill Trail and Henry's Woods Trail.
- **Steve Guglielmi**, Forester in charge of trails owned by New York State Department of Environmental Conservation in Lake Placid.

3.3 GIS data

We classified the GIS data for this report into 4 categories: Trails data, Boundary data, Attribute data, and Public Service data. The Trails data consists of the 11 trails we are planning to include in the consumer walking trail maps. The boundary data marks the location of Lake Placid and North Elba so that it can clearly show the trails and towns on the map. We are using the attribute data to analyze the land use and population in Lake Placid. The attribute data and boundary data includes parking lots and public transportation information.

We have three online GIS data repositories. The GIS analysis used data from the Cornell University Geospatial Information Repository (CUGIR), US Census Bureau Tiger/Line Shapefile, and US Census Bureau American Fact Finder. CUGIR is a repository for all New York State datasets regarding land use planning, and also has the Adirondack Park Agency designations built into the dataset.¹² US Census Bureau Tiger/Line Shapefile are the US Census Bureau geographic database and provide geographic entity codes (GEOIDs) that can be linked to the Census Bureau's demographic data including boundaries and streets of a specific area¹³. US Census Bureau American Fact Finder is a database for the attribute data where we can find population, income and other data represented in geographic way and can be add into the boundary of a shapefile.

The consulting team collected the GIS data for the Heaven Hill trail and Henry's Wood through interviews and GPS tracker app. Additionally, we relied on the 2015 team's data

¹² Cornell University Geospatial Information Repository, <http://cugir.mannlib.cornell.edu>

¹³ U.S. Census Bureau, <https://www.census.gov/geo/maps-data/data/tiger-line.html>

because some of their work was relevant to our project.

4. Case study Analysis

4.1 Case Study 1: Hike Ontario

Our Lake Placid Trail Mapping Project uses this Hike Ontario’s manual as model for reference since the best practices are summarized from cases that have successfully increased trail use in varying locations. The following discusses how we use this resource to guide our research.

Collaboration

The first practice focuses on collaboration among key stakeholders. It is important to ensure open and continued dialogue with the community, regional management organizations, and trail users. The selected trails in Lake Placid are owned by different stakeholders. Therefore, it is important and necessary to build collaboration between the different trail owners. Establishing mechanisms to receive feedback from track users will also be beneficial for promoting the local trail mapping project. Due to the time and resource limitations, the team was only able to interview several targeted leaders of trail management organizations and trail experts to gather information and seek suggestions for a consumer user friendly map. We recommend that future projects include a broader range of stakeholders in order to conduct more comprehensive research on the needs and characteristics of the target market.

Enhance the trail experience

The second practice focuses on enhancing the trail experience. The Ontario manual mainly recommends providing “a diversity of trail lengths, difficulty, proximity and landscape to appeal to a wider range of users”¹⁴. Based on this practice, this project purposely chose nine different walking/hiking trails of different lengths, difficulty levels, and views along the path, and these trails can be used by experienced and inexperienced hikers, families with young children, people with disabilities, and people with pets.

¹⁴ Hike Ontario. (2007). “Manual of Best Practices to Increase Trail Use by Hikers and Walkers in Ontario.” <http://hikeontario.com/wp-content/uploads/2015/11/HO-BestPractices-Web.pdf>

Target specific population groups

In order to build a broader trail community, the third practice discusses the importance of targeting specific population groups and providing opportunities to non-traditional users such as seniors, children and youth, low-income families, people with disabilities, and visible minorities (such as I, 2007). With a better understanding of the needs and characteristics of specific population groups, the project can be designed to meet the exercise, recreation, and transportation expectations of each target group. This understanding will also be critical to choose and produce effective marketing methods and tools.

Market the experience

The fourth practice focuses on marketing and expanding influence of the local trail system. Strategies might include creating an official website, or access on an official website, providing easy access to current information and virtual experiences. Website allow for up to date and accurate trail information Lake Placid currently does not have a website providing a comprehensive map for each main trail. Further the Lake Placid trail system is dynamic and continuously changing; it will be vital for the Lake Placid trail commission to ensure that all provided information is the most current information available.

Evaluate and modify the program

After implementing the marketing campaign, the fifth practice is to measure and evaluate the performance, i.e. whether the trail use among hikers and walkers has truly increased. Through analyzing the results, we can know whether the marketing activities have successfully led to the expected outcomes and how to modify and improve the marketing program in the future. It is important for Lake Placid to come up with effective ways to collect trail user marketing program.

4.2 Case Study 2: Champlain Area Trails (CATS)

This project can also use CATS four valuable practices as a reference.

Trail maps and descriptions need to be accessed easily on an official website:

CATS has its own official website which provides easily accessible online trail maps and descriptions. Tourists can easily decide the trails that are best suited for their use and compare the differences between each trail. This will improve user experience and satisfaction. Although potential users can find Lake Placid trail maps online, most of them are not user-friendly, they do not provide a comprehensive view of the system as a whole, and are not all located in one online space. Therefore, we highly recommend that Lake Placid develop an integrated map including individual trail maps and trail descriptions.

Trail information is comprehensive in terms of different categories:

CATS has posted an integrated map system involving all trails and other important information (residence, restaurants, camping and gas store) (see Appendix 2). CATS organizes trails for a variety of different users, such as families with young children or the handicapped. CATS involves trails best for view, in-town trails, unique trails and challenging trails for reference (see Appendix 3) as well. CATS also provides trail recommendations for use in different seasons (see Appendix 4). The Lake Placid official website does not have detailed use categories. Though some tourism websites include a few trails of the Lake Placid area; these websites are not easily accessible for most tourists and sometimes the information is not free.

Community engagement:

CATS provides a high level of community engagement. CATS sets up donation and voluntary job options, which is a smart way to attract extra help and attention. For instance, Champlain trail lovers can contribute trail descriptions to CATS via its official website and can also volunteer to provide trail maintenance. These volunteers are called trail adopters, and their jobs include cutting branches and saplings growing into the trail, taking cut vegetation and debris off the trail, and cutting/ removing sapling stumps that could trip hikers. Lake Placid should involve people who are familiar with Lake Placid trail system to maintain and develop trail system.

Brand-building including mission and brand logo:

Brand building is another way to improve the publicity of the Lake Placid trail system. For instance, CATS has its own brand logo and mission and these help to distinguish CATS from other trail systems. CATS also has explicit short-term and long-term goals. One is creating trails that make it possible for people to “Hike the Lake” by walking from hamlet-to-hamlet. The other is extending the trail system to neighboring towns around Lake Champlain and eventually connecting them to trails in the Adirondack Mountains, Vermont, and Quebec. We can see that establishing unique features of the trail system is crucial to marketing trail system.

5. Stakeholder Analysis

During this project, the team conducted three qualitative interviews with stakeholders in the community. Each interview is detailed in the following are summaries. Raymond Curran, who was unable to participate in an interview did contribute GIS data for the Heaven Hill Trails and the Henry's Wood Trail.

Don Mellor

The team conducted an in-person interview with Don Mellor in Lake Placid on the weekend of March 25, 2017. Don Mellor is an outdoor education counselor at Northwood School; the Cobble Hill Trailhead parking area exists as an easement on the property of the school. Don Mellor is also recognized as an ice and rock climbing expert in the area¹⁵. His input on the Cobble Hill Trail and knowledge of trail types and basic elements for trail descriptions were extremely valuable for us.

There were several critical gains from the interview. First, Don Mellor recommended the book "12 Short Hikes Near Lake Placid" by Phil Brown to help with developing trail descriptions. Second, the interview led us to realize that the previous data for the Cobble Hill trail provided by 2015 Cornell Team had become outdated and our team needed to revise the trail. Third, the trail description for Cobble Hill should include alerts about the location and accessibility of side paths, and note winter seasonal concerns for the steep sections of the trail. Fourth, he suggested that dog-friendly (or not) and trail type should be included as relevant trail information categories. Finally, Don Mellor confirmed Dean Dietrich's opinion to exclude the Whiteface Landing Trail, and adding the Copperas Pond Trail to the trail list.

James McKenna

The Team conducted a phone interview with James McKenna, the Vice Chairman of the Uihlein Foundation¹⁶, on March 30, 2017. The Henry's Woods Trail and the Heaven Hill Trails are owned and maintained by the Uihlein Foundation. James McKenna has experience marketing

¹⁵Don Mellor. N.Y., 1988, Climbing in the Adirondacks: A Guide to Rock and Ice Routes in the Adirondack Park. Second Edition. The Adirondack Mountain Club, Inc., Lake George,

¹⁶ Uihlein Foundation, <https://www.adirondackfoundation.org/online-grants-manager/uihleins-ironman-sports-fund>

local trail system.

The information provided by James McKenna allowed the team to improve the accuracy of the Henry's Woods and Heaven Hill trail descriptions. After reviewing the maps created by the team for the two trail systems, James McKenna pointed out that there were three more trails recently created within the Heaven Hill Trail system, which should also be included in the map. These three trails are Bear Club Loop, Big Field Loop and Old Orchard Loop.

We also discussed whether to include two multi-use trails, the Lussi and Logger Trail and the Craig Wood Trail as part of the walking trail mapping project. Both of these trails are mainly designed for mountain bikers. A major concern is that walkers or hikers might encounter bicyclists and it could result in dangerous collisions. After discussions with Josh Wilson, the leader of Adirondack Trail Improvement Society, and James McKenna, we collectively agreed to not include either of these two bike trails on the walking trail map.

Steve Guglielmi

The team conducted an additional phone interview with Steve Guglielmi on April 20, 2017. Steve Guglielmi is a Forester for the New York State Department of Environmental Conservation (DEC). His role includes to maintaining and managing trails. He shared his extensive knowledge of the Peninsula Trails and the McKenzie Pond Trail with us.

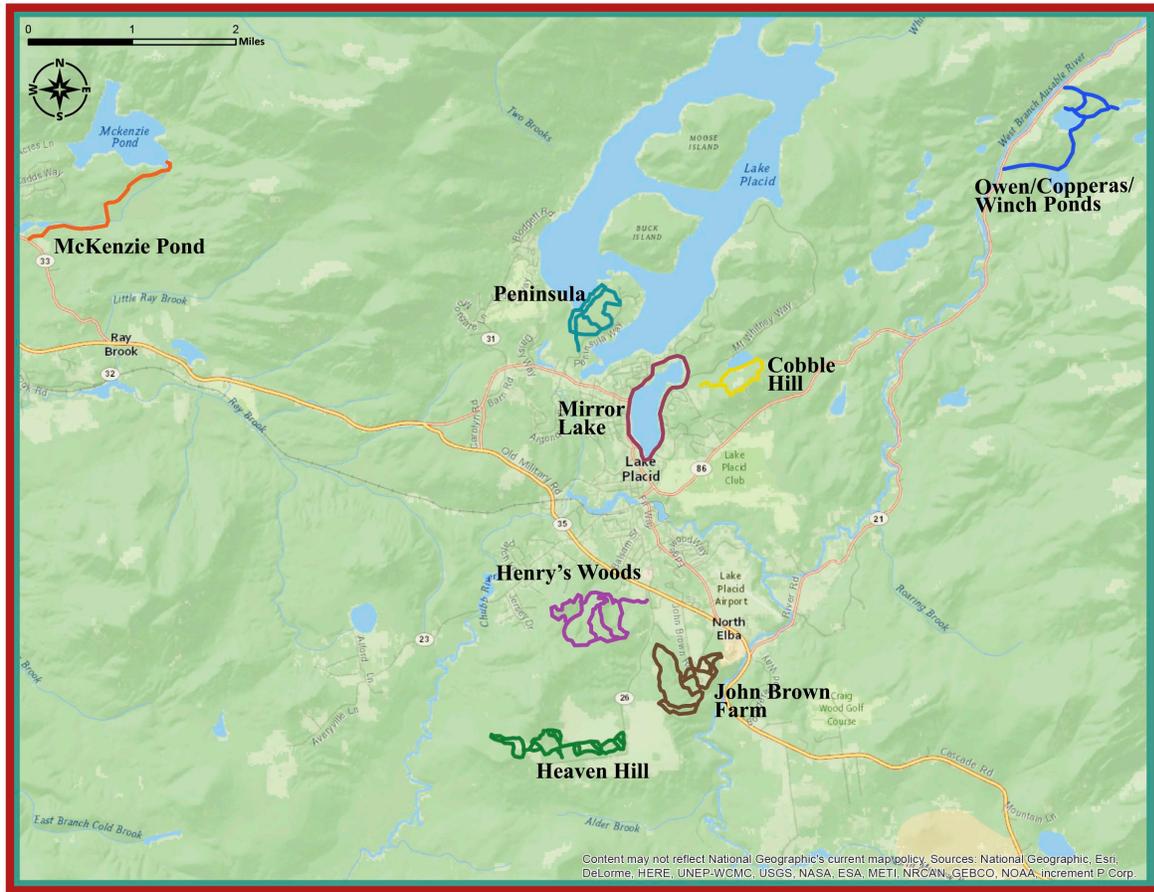
After speaking with Mr. Guglielmi, the team revised the map of the Peninsula Trails. He also advised the consulting team on the relationship between the Jackrabbit Trail and the McKenzie Pond Trail, as well as how to title and display the map for the McKenzie Pond Trail as a section of the Jackrabbit Trail. The Jackrabbit Trail is a relatively long trail with some steep sections which may be very challenging for inexperienced hikers and young children; the team ultimately decided to focus on the McKenzie Pond Trail instead of the whole Jackrabbit Trail.

6. GIS Analysis

Our first step to create the maps of Lake Placid's trails is to plot their paths using Geographical Information Systems (GIS) software. This analysis is essential for our project because we are going to make pamphlet of walking trails and we will use GIS to build accurate maps. For the GIS analysis, the data was manipulated to fit the needs of this project. Issues arose in the projection of the files. Every dataset was projected on a different coordinate system and had to be re-projected to be New York State Plane East. This projection centers the map projection in eastern New York and minimizes the natural distortion that occurs when transforming a 3-d globe to a 2-d surface.

We encountered several challenges while collecting our GIS data. Our data sources included the 2015 Cornell team consulting team, local stakeholders, and data the current team collected using a Global Positioning System (GPS) tracker. The data collected from the 2015 was dated and thus not entirely reliable - we found that trails had changed and the data no longer matched the actual trails. As a result, we modified the existing trail data by editing the points of the trail. Our team conducted a site visit to map the Cobble Hill and Power Pond trails; the existing data for the Cobble Hill trail is out of date and the Power Pond trail is a newly cut trail without any existing data for that.

The following general map, Map 1, has the locations of every trail included in the Walking Trail System.



Map 1: General Map, Including all Individual Walking Trails

We have designed maps for each of the individual trails. Each map uses four different maps to communicate all of the relevant trail information. The main map shows the trails, streets, and terrain which implies the basic location of the trails. The other three maps are satellite map, town map, and contour map which is the following Map 2.



Map 2: Sample Map of Peninsula Trails

7. Recommendations

7.1 Map Matrix Recommendations

After interviewing stakeholders and examining the selected case studies, we recommend that the maps exclude elements like camping, hotel/motel, gas/convenience store, information station/service, restrooms, and restaurants. Many of these amenities do not exist near the trail area. We recommend including trail type (loop, traverse, and out & back), suitable visitors (whether friendly to inexperienced hikers, people with disability and families with young children), perceived risk, and whether the trail is dog-friendly.

We recommend adopting the following matrix as an instruction for creating trail maps and developing trail descriptions. It lists all of the important information categories to be considered. This information should be presented in either the map or the description for each trail. Information, such as parking location and pet suitability, can be shown by adding simple icons to the map, while information like route and view, needs to be described in text.

	1 Cobble Hill	2 Henry's Woods	3 Heaven Hill Trails	4 John Brown's Farm	5 Mirror Lake	6 Peninsula Trails	7 Copperas Pond Trail	8 McKenzie Pond	9 Power Pond Trails
Trailhead									
Trail End									
Location									
Route									
Length									
Duration									
Difficulty									
Group									
Landscape/Views									
Multi-use									
Seasonal Concern									
Parking									
Public Transportation									
Perceived risk									
Dog friendly									
Trail type (loop/out and back/traverse)									

Table 1: Matrix of Trail Information

7.2 Mapping Recommendations

The final deliverable is an online map in PDF version. It starts with a general map of the area with the nine selected trails marked in nine different colors. Following that are the maps for each of the trails. The Maps are included in Appendix 5.

First, we recommend numbering the trails from 1 to 10. Each page uses the assigned color tone from the overview map as the major thematic color. Second, we highlight the trail type and difficulty under the name of each trail because these are the two pieces of information that are most important for tourist use. Third, we start the trail description with a general introduction, then provide specific information about the sub-trails of the system. Following the trail description, the warning section highlights the perceived trail risks and seasonal concerns. Finally, we add a series of icons to mark specific features and multi-uses on the trail. The Family Friendly and Dog Friendly icons are used to indicate for whom the trail is accessible. The maps use the Trailhead and Parking icons on the map to point out the specific locations.

In addition, we also recommend creating a cover page with information about 1) the Development Commission, 2) general warnings and reminders, such as “clean up after pets,” “stay on the trail when crossing private properties,” and equipment suggestions, etc. 3) a short welcome paragraph, 4) the public transportation information (if applicable), and 5) emergency contact information.

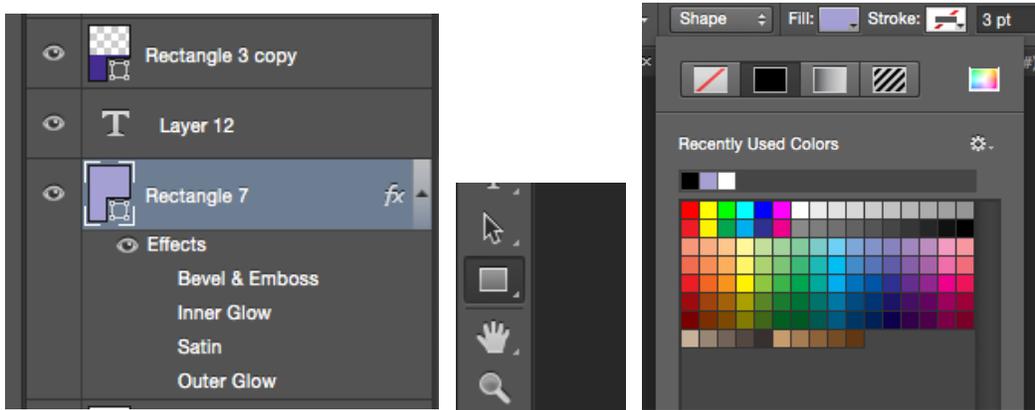
For future projects, we recommend the following tasks that would enhance the overall trail system maps: 1) Develop printed versions of the walking trail map and distribute it at informational kiosks. 2) Create maps of multi-use trails in the area. 3) Reach out to a broader group of stakeholders (visitors, local businesses, trail maintain organizations, outdoor clubs, etc.), collect both qualitative and quantitative data from them to learn the more general community needs about the trail service. 4) Develop maps for the mountain biking trail system. 5) Turn maps into posted plaques along each trail. The plaques can designate “You are here” with a dot representing the spot the hiker is standing on. By doing this, novice hikers can note their location. This can serve as an environmental-friendly way by reducing the need for excess paper map copies.

Appendix

Appendix 1 – How to Build the Maps

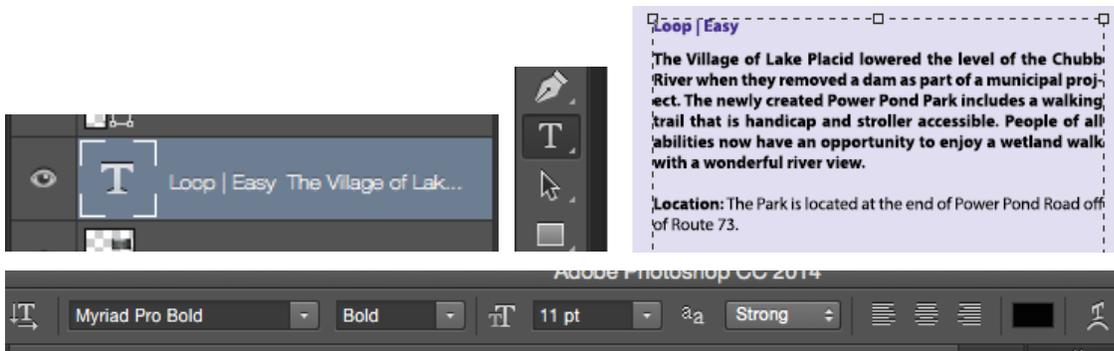
Step 1: Change the thematic color.

In the list of layers, choose the background Rectangle layer. Click the Rectangle Tool on the left. Click the rectangle next to Fill to change the color. Use the same way to change the color of other rectangles.



Step 2: Type the title and text descriptions.

Choose the type layer. Click the Type Tool on the left. Put text in the dashed line box. Font type, size and color can be changed through the row on the top.



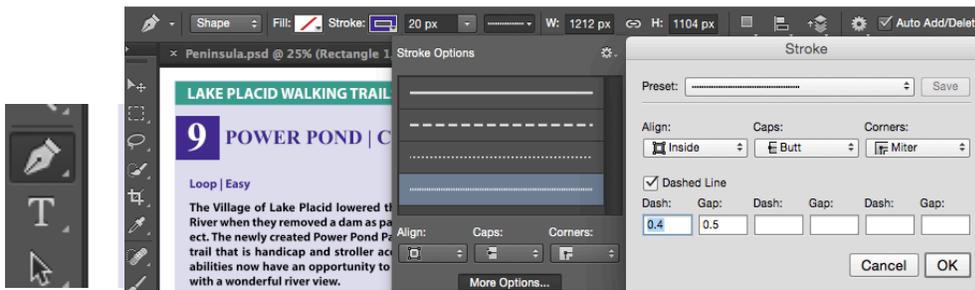
Step 3: Insert the map and picture.

Drag the map or picture from local device into the Photoshop interface. Adjust the picture by pressing Ctrl + T (command + T for Mac).



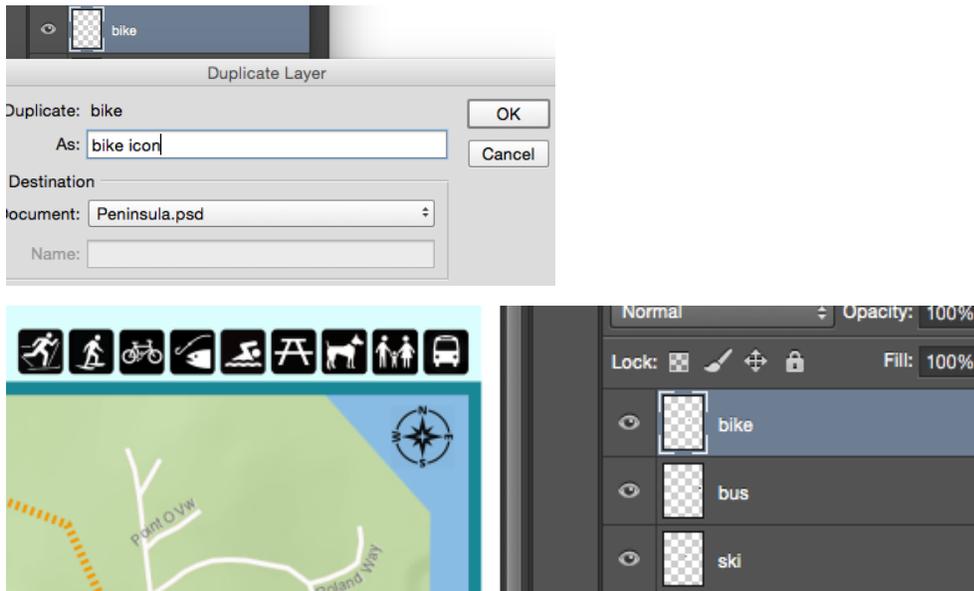
Step 4: Draw the trail.

Choose the Pen Tool on the left. Set parameters of the pen through the row on the top. Draw the dashed line following the trail identified by red lines on the Open Map (from GIS). Move the pen layer (trail route) to match the Landscape Map.

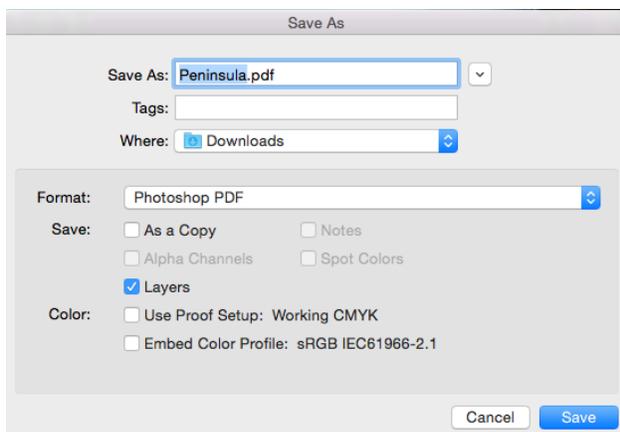


Step 5: Add icons.

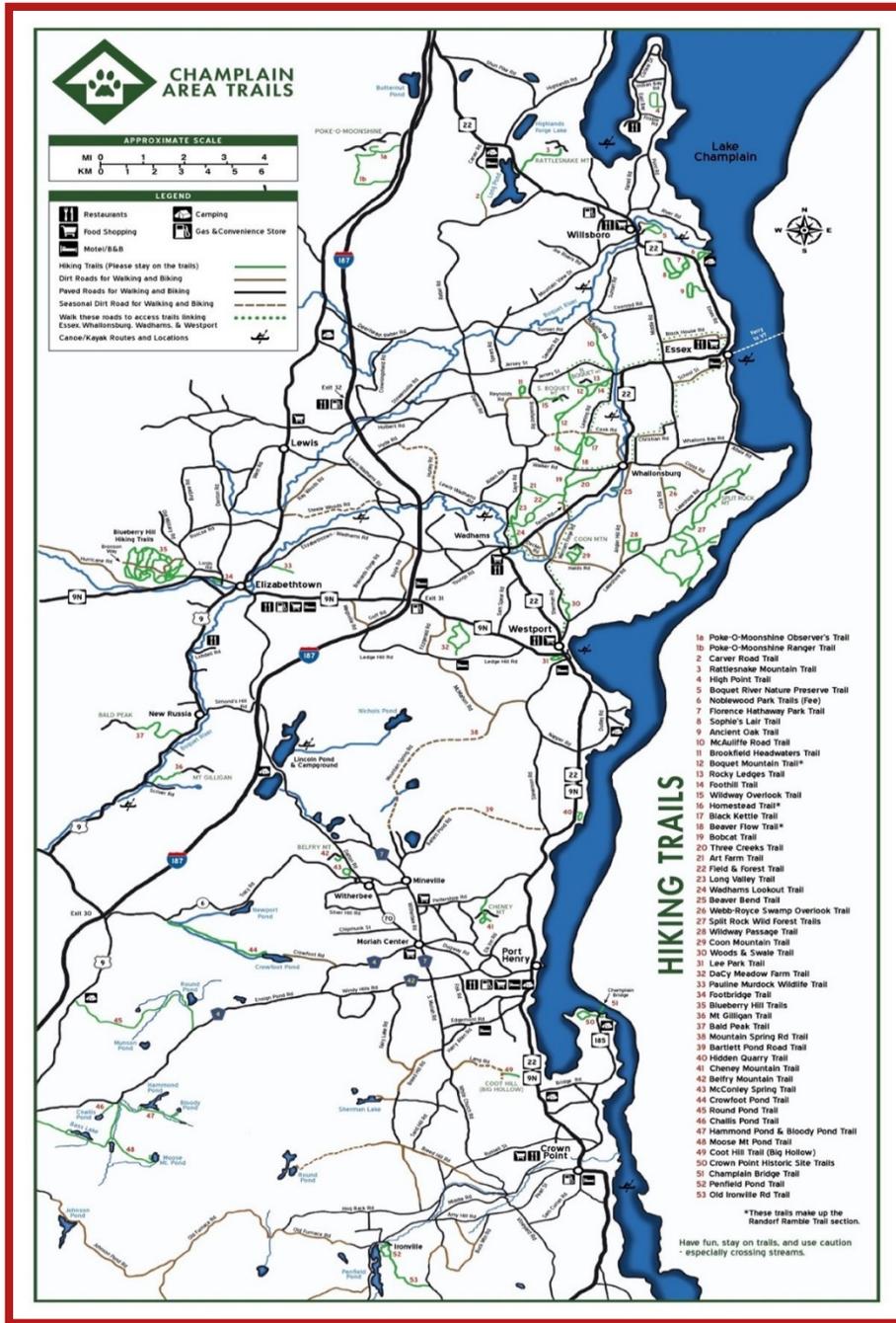
All icons can be found in the Info Page psd document. Right click the icon layer and choose duplicate layer to the targeted psd document. Then the icons can be found on the list of layers. Move and adjust an icon in the same way as adjusting a picture.



Step 6: Save the file as both psd and pdf versions.

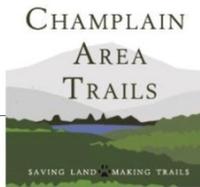


Appendix 2



Map 3: Champlain Area Trails (CAT) Map Example

Appendix 3



PO Box 193 • 6482 Main Street Westport, NY 12993
518 962 2287
www.champlainareatrails.com

Comprehensive Guide to CATS Trails

Thank you for hiking on Champlain Area Trails. **To help you pick the trails to hike**, here is a list describing some specific features (*numbers are from the CATS 2016-2017 Trail Map*). The asterix connotes highest recommendations for easy trails.

Hiking trails good for families with young children (highest recommendations are #s 19 & 34)

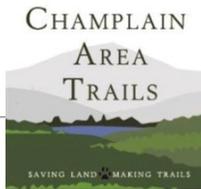
- 2 – Carver Road Trail
- 4 – High Point Trail
- 5 – Boquet River Nature Preserve Trail
- 7 – Florence Hathaway Park Trail
- 9 – Ancient Oak Trail
- 10 – McAuliffe Road Trail
- 11 – Brookfield Headwaters Trail
- 12 – Boquet Mountain Trail (easier to start on Cook Road)
- 15 – Wildway Overlook* (relatively easy to climb to a great view)
- 16 – Homestead Trail (note on map how it connects to other trails)
- 17 – Black Kettle Trail (self-guided nature trail; has a few moderately difficult areas)
- 18 – Beaver Flow Trail
- 19 – Bobcat Trail* (especially easy trail; best to start on Walker Road, goes by beaver ponds)
- 24 – Wadhams Overlook Trail
- 30 – Woods & Swale Trail
- 34 – Footbridge Trail (self-guided nature trail; activities for young children along trail)
- 40 – Hidden Quarry Trail
- 52 – Penfield Pond Trail

Hikes with Views

- 1 – Poke-O-Moonshine Trails (moderately difficult to view and fire tower)
- 3 – Rattlesnake Mountain (moderately difficult)
- 15 – Wildway Overlook* (relatively easy hike to a great view)
- 17 – Black Kettle Trail
- 23 – Long Valley Trail
- 24 – Wadhams Overlook Trail
- 27 – Split Rock Wild Forest Trails (long hikes with a few overlooks)
- 29 – Coon Mountain (has steep staircase to a great view)
- 41 – Cheney Mountain (a few short steep areas to three good views)
- 42 – Belfry Mountain Trail (short walk to a fire tower)
- 49 – Coot Hill (great view)

Figure 3: CATS Trail Guide

Appendix 4



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CATS Trails in Winter

Thank you for using Champlain Area Trails in winter. **To help you pick a trail to explore**, here is a list describing levels of difficulty for cross-country skiing (*numbers are from the CATS 2016-2017 Trail Map*). We recommend using snowshoes or skis in snow deeper than 4 inches to prevent “postholing.” (See “winter trail etiquette” below.)

CATS trails are good for snowshoeing and most provide enjoyable cross-country skiing with some trails being more challenging than others. The easy trails are relatively level or on old roads. Moderate trails have steeper slopes and can be narrower. Difficult trails are steep and narrow. The asterisk connotes highest recommendations for easy trails.

<u>Easy Skiing</u>	<u>Moderate Skiing</u>	<u>Difficult Skiing</u>
2-Carver Road Trail	12-Boquet Mountain Trail	1-Poke-O-Mooshine Trails
4-High Point Trail	16-Homestead Trail	3-Rattlesnake Mountain Trail
5-Boquet River Nature Preserve	18-Beaver Flow Trail	13-Rocky Ledges Trail
6-Noblewood Park Trail	20-Three Creeks Trail	14-Foothill Trail
8-Sophie’s Lair Trail*	22-Field and Forest Trail	15-Wildway Overlook Trail
9-Ancient Oaks Trail	30-Woods & Swale Trail	17-Black Kettle Trail
10-McAuliffe Road Trail	28-Wildway Passage Trail	27-Split Rock Wild Forest Trails
11-Brookfield Headwaters Trail	31-Lee Park Trail	29-Coon Mountain Trail
19-Bobcat Trail*	32-DaCyMeadow Trail	30-Woods & Swale Trail
21-Art Farm Trail	33-Pauline Murdock Trail	35-Blueberry Hill Trails
23-Long Valley Trail	38-Mountain Spring Rd. Trail	36-Mt. Gilligan Trail
25-Beaver Bend Trail	39-Bartlett Pond-McConley Trail	37-Bald Peak Trail
26-Webb Royce Swamp Trail	43-McConley Spring Trail	41-Cheney Mountain Trail
34-Footbridge Trail	47-Hammond & Bloody Pond Trail	44-Crowfoot Pond Trail
40-Hidden Quarry Trail*	49-Coot Hill	45-Round Pond Trail
50-Crown Point Historic Site	52-Penfield Pond Trail	46-Challis Pond Trail
	53-Old Ironville Road Trail	48-Moose Mountain Pond Trail

Figure 4: CATS Winter Trail Difficulty

A GUIDE TO SELECTED WALKS LAKE PLACID / NORTH ELBA

The Village of Lake Placid and Town of North Elba are nestled among the Adirondack Mountains in the middle of a large wilderness. This creates many opportunities for residents and guests to explore the outdoors and connect with nature. A convenient way to experience the woodlands, steams, and vistas of the area is to take a short walk on one of the many local trails.

This guide includes information on eight trails in the Lake Placid area that are enjoyable for all hikers – novice to experienced. These particular trails were selected from the large number of possible hikes because they are multi-use and easily accessible throughout the year. They can be used for a family outing, a casual walk to connect with a friend, or a time of solitude and reflection in a serene setting.

“Between every two pine trees is a door leading to another life.” - John Muir

TRAIL ETIQUETTE

The trails and paths highlighted in this guide are either open to the public through the generous actions of non-profit organizations or are part of the New York State Trail System. Please pay close attention to the rules of each system and observe these simple guidelines to preserve the trails and allow everyone to enjoy them.

RESPECT THE LAND

- Stay on the marked trails
- Pack out your trash
- No camping, fires, hunting or trapping
- No disturbance or removal of plants, animals, rocks, or firewood

RESPECT OTHERS

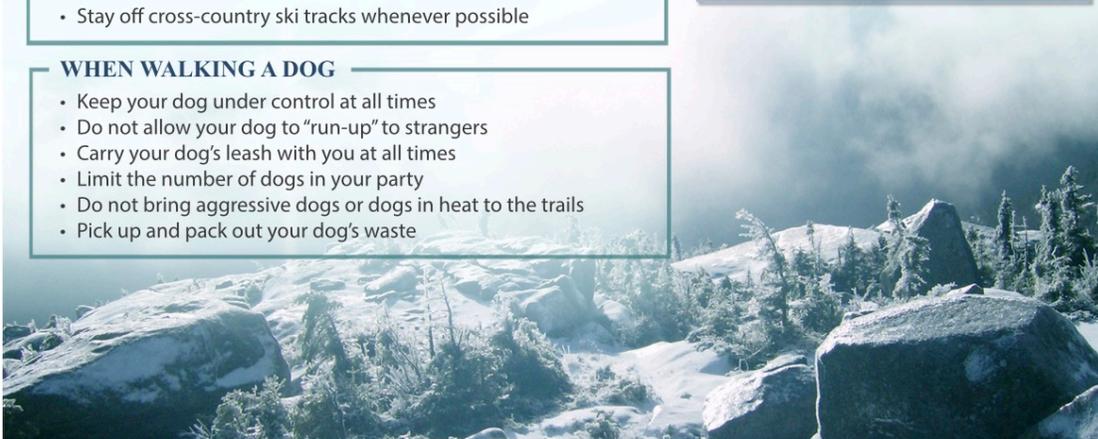
- Bikers and skiers should yield to walkers
- No motorized vehicles
- No smoking or use of alcohol
- Use earphones when listening to music
- Use snowshoes to prevent “posting” (creating deep footprints) in snow
- Stay off cross-country ski tracks whenever possible

WHEN WALKING A DOG

- Keep your dog under control at all times
- Do not allow your dog to “run-up” to strangers
- Carry your dog’s leash with you at all times
- Limit the number of dogs in your party
- Do not bring aggressive dogs or dogs in heat to the trails
- Pick up and pack out your dog’s waste

LEGEND

	Trailhead		Parking
	Snowshoeing		X-Country Skiing
	Mountain Biking		Skating
	Fishing		Swimming
	Paddling		Bouldering
	Picnic		Camping
	Dog Friendly		Family Friendly
	Bus Accessible		



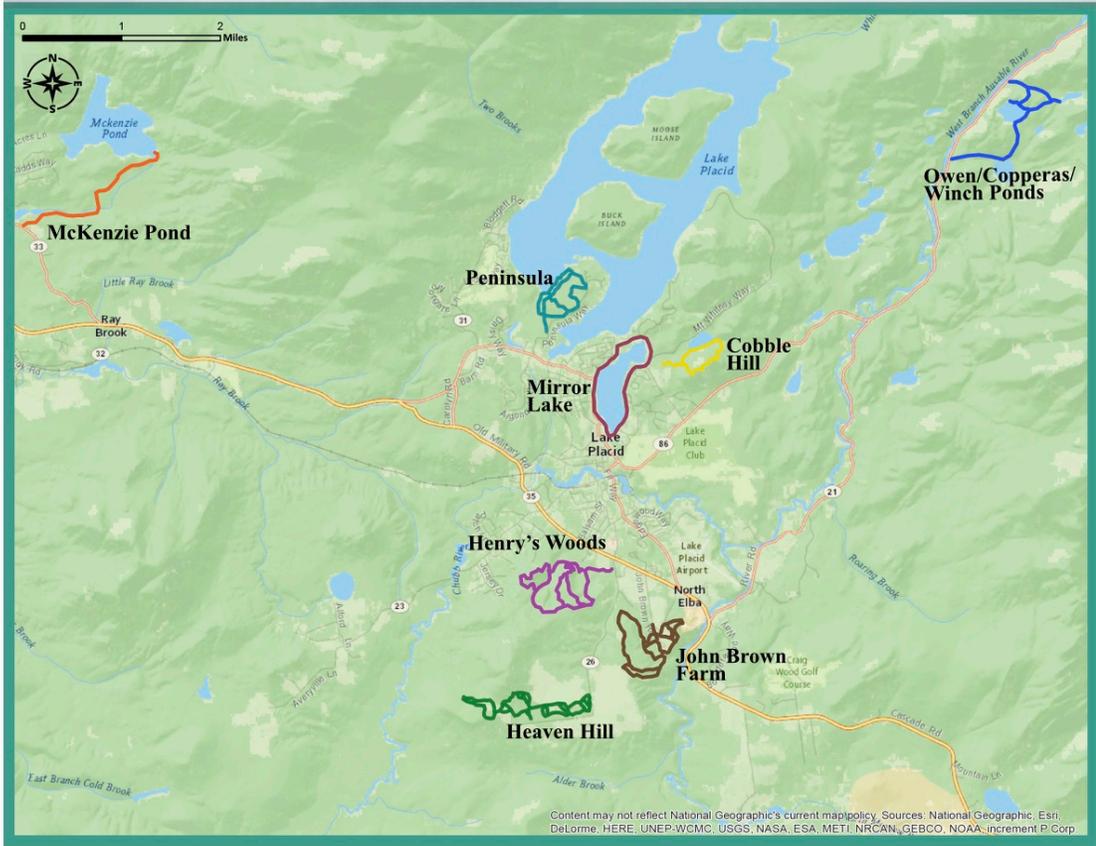
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LAKE PLACID WALKING TRAILS

8 SELECTED WALKS IN LAKE PLACID / NORTH ELBA



- | | | |
|-----------------------|------------------------|------------------------------|
| 1. Cobble Hill Trail | 4. John Brown Farm | 7. Owen/Copperas/Winch Ponds |
| 2. Henry's Woods | 5. Mirror Lake Pathway | 8. McKenzie Pond Trail |
| 3. Heaven Hill Trails | 6. Peninsula Trails | |



LAKE PLACID WALKING TRAILS

1 COBBLE HILL TRAIL

Loop | Easy to Moderate

Cobble Hill is a relatively short trail for a rewarding mountaintop experience featuring views of the Village of Lake Placid and High Peaks Region. This trail is good for hiking, snowshoeing, and limited x-country skiing around the base.

Location: The trailhead parking area is located .3 miles on the rear access road to Northwood School off Mirror Lake Drive.

Be sure to pay attention to the signs. There are several intersections with unmarked paths. After 0.4 miles an intersection marks the split for the short and long trails. The shorter, steeper route on the right is 0.8 miles. The longer 1.6 mile trail on the left follows a more gradual ascent. Both trails combine for a 2.4 mile loop.

Warnings:

- The steep section on the short trail is very icy in the winter. Microspikes recommended.
- Hiking shoes recommended.

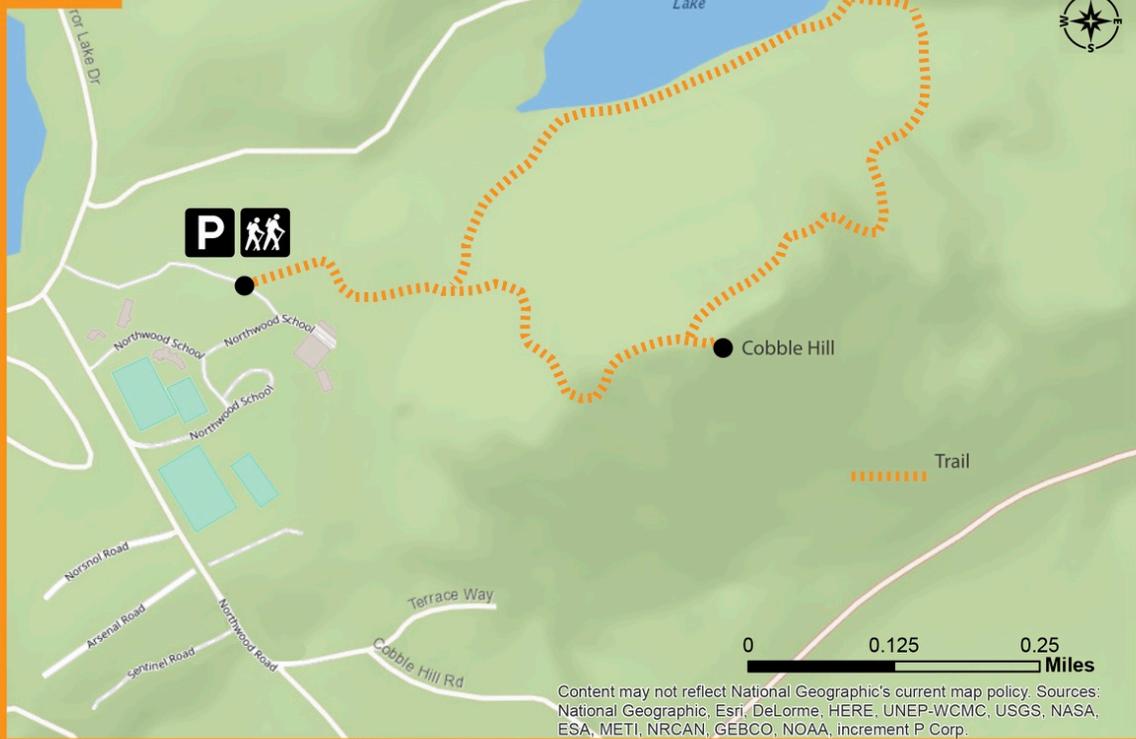


The short trail includes a steep climb over rough footing to a rock slab requiring a scramble and the use of a short rope. This may be a challenge for small children, those with physical impairments, or a fear of heights. A trail on the right avoids the steepest section. The trail continues above the slab. A spur on the right leads to the summit, or the trail continues straight to begin the descent via the long trail. (Families with Young Kids / Novice Hiker: 45 minutes to summit. Experienced Hiker: 20 minutes to summit)

The long trail offers easy to moderate terrain. From the intersection at the base, turn left along an old road and then veer right onto a foot trail across a private parking area. This leads to the shore of **Echo Pond**. Follow along the pond until the intersection at the end, then turn right. Take another right at the next intersection about 0.1 miles from the pond. This starts a moderate climb along an old road meeting up with the short trail. A spur on the left leads to the summit or continue straight to begin the descent via the short trail. (Families with Young Kids / Novice Hiker: 1 hour to summit. Experienced Hiker: 30-45 minutes to summit)



2.4 miles



LAKE PLACID WALKING TRAILS

2 HENRY'S WOODS

Loop | Easy

The Henry's Woods Trail System consists of 5 distinct trails through a thick, shaded forest with occasional brook crossings and mountain views. It is good for hiking, running, walking, mountain biking, snowshoeing and x-country skiing.

Location: The trailhead with its sign and parking area is on Bear Cub Road .1 miles from the intersection with Old Military Road.

The Connector Trail, which starts out flat then climbs slightly, connects the parking area to the Loop Trail (0.3 miles, 10 minutes).

The Loop Trail is the longest trail in the network and is used to access the Switchback, Plateau, and Rocky Knob Trails. Turning to the right from the Connector, it drops slightly to cross a bridge and then circumnavigates a high plateau. On the back side of the loop it climbs modestly to the top of the plateau before descending to its beginning (2.0 miles, 30-40 minutes).

The Switchback Trail is the shortest trail. It zigzags up a steep slope to the Plateau Trail (0.25 miles, 5-10 minutes).



The Plateau Trail is mostly flat and accessed off the Loop Trail. It follows along the edge of a long plateau with outstanding views of Whiteface Mountain and the village, before returning to the Loop Trail (0.9 miles, 10-15 minutes).

The Rocky Knob Trail is the highest trail of the system offering stunning views of the village and the High Peaks. It climbs rather aggressively with several small switchbacks before descending and returning to the Loop Trail (0.9 miles, 30 minutes).

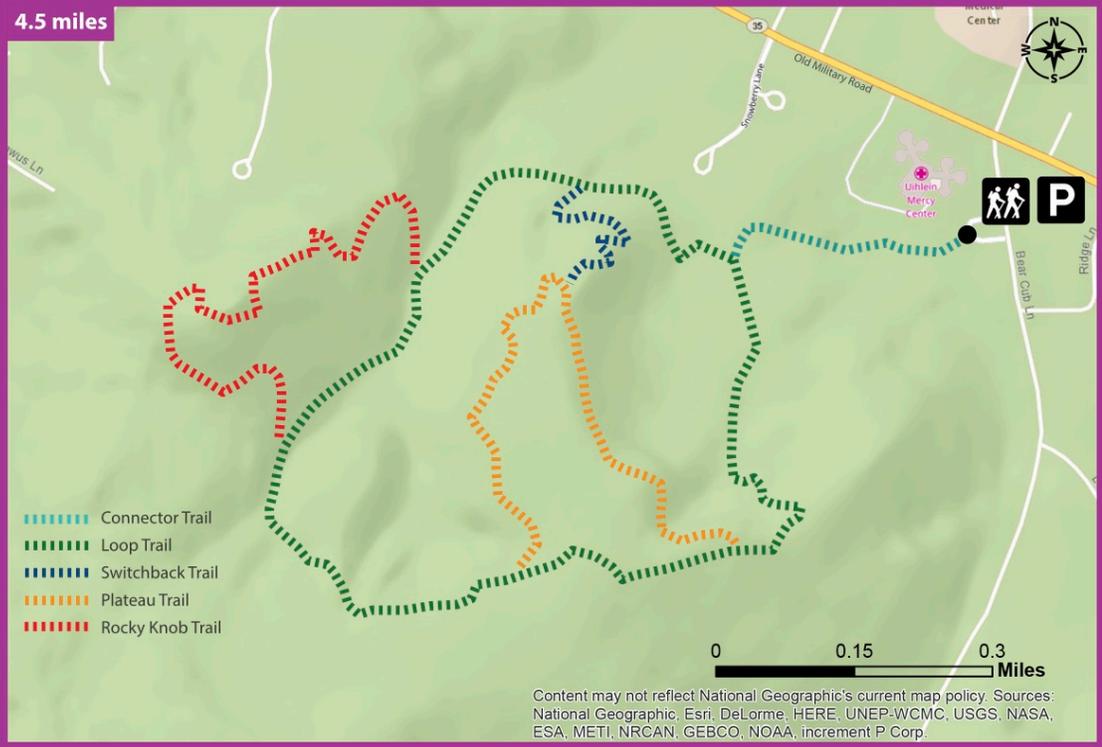
Round Trip: Family with Young Kids / Out of Shape Hiker: 2 - 2.5 hours. Experienced Hiker: Round Trip: 1 hour.

Warning:

Hikers should be wary of bikers on blind hills or corners



4.5 miles



LAKE PLACID WALKING TRAILS

3 HEAVEN HILL TRAILS

Loop | Easy

The Heaven Hill Trail System consists of three main loops. They follow long, established farm or woods roads and intersect with other trails to form several shorter loops of varying lengths. The trails can be used for hiking, running, walking, mountain biking, snowshoeing, and x-country skiing.

Location: The trailhead with its sign and parking area is on Bear Cub Road 2.2 miles from the intersection with Old Military Road.

Warning:

Hikers should be wary of bikers on blind hills or corners



Beginning in a wooded setting, the 1.5-mile **Old Orchard Loop** opens into a large field and circumnavigates an old apple orchard with outstanding views of the High Peaks.

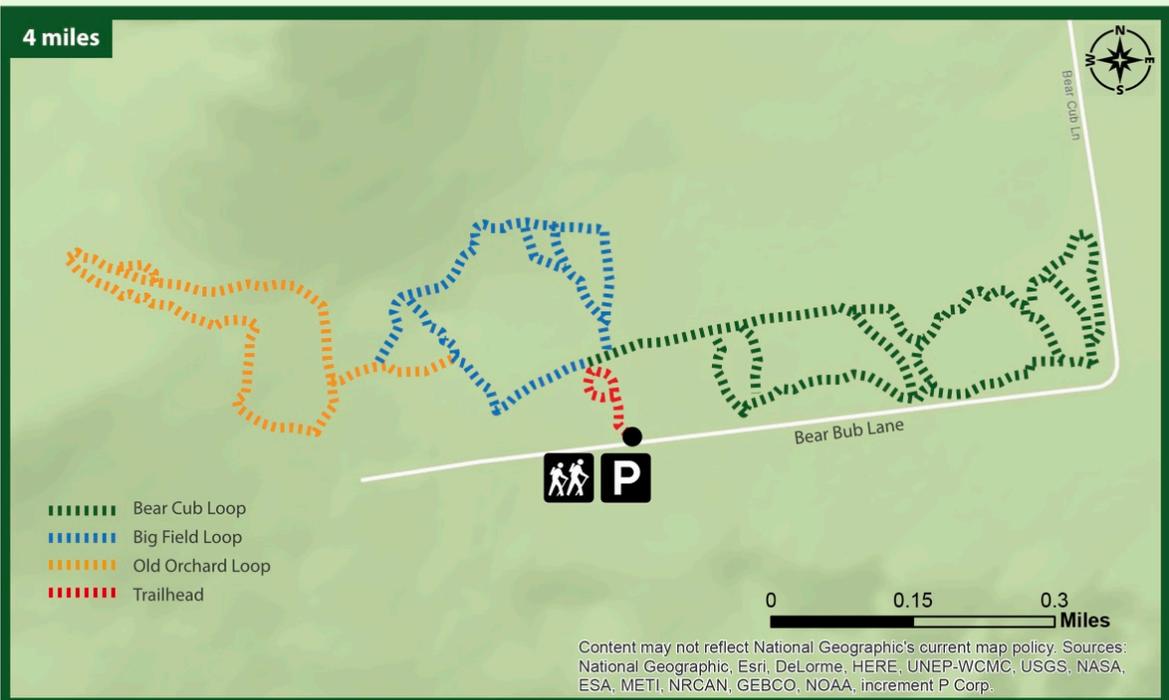
The Bear Cub Loop is a woodland trail with limited terrain change. The basic outer loop is 1.5 miles in length with the option of five cross-trails to shorten the distance. Stay on the trail to avoid trespassing on private lands.

The Big Field Loop has moderate ups and downs. After a short walk in the woods, it runs along the edge of a large field with views of Whiteface Mountain. The trail returns to the woodlands rejoining the Bear Cub Loop at 0.9 miles. There are two cut-off trails to vary the distance.



View on the Old Orchard Loop

4 miles



LAKE PLACID WALKING TRAILS

4 JOHN BROWN FARM

Loop | Easy

John Brown's Farm is a National Historic Landmark operated by the National Park Service. It is the home and gravesite of abolitionist John Brown, most famous for leading the pre-Civil War Raid on Harper's Ferry. There is a fee to access the museum displays inside the farmhouse which is open May through October. The trails are free and available to the public year-round. They offer good opportunities for birding, picnicking, trail running, snowshoeing, and x-country skiing, with outstanding views of the ski jumps and High Peaks.

Location: The turn onto John Brown Road and the Farm is marked by signs near the intersection of Rt. 73 and Old Military Road. The dirt parking area for the trail system is .6 miles from that intersection.

A register is located at a trail junction behind John Brown's home. The trails can also be accessed from the small dirt parking area located on the left, prior to the farmhouse.

Warnings:

- These trails often cross private property; be careful to stay on the trail.
- The trail junctions are unmarked.

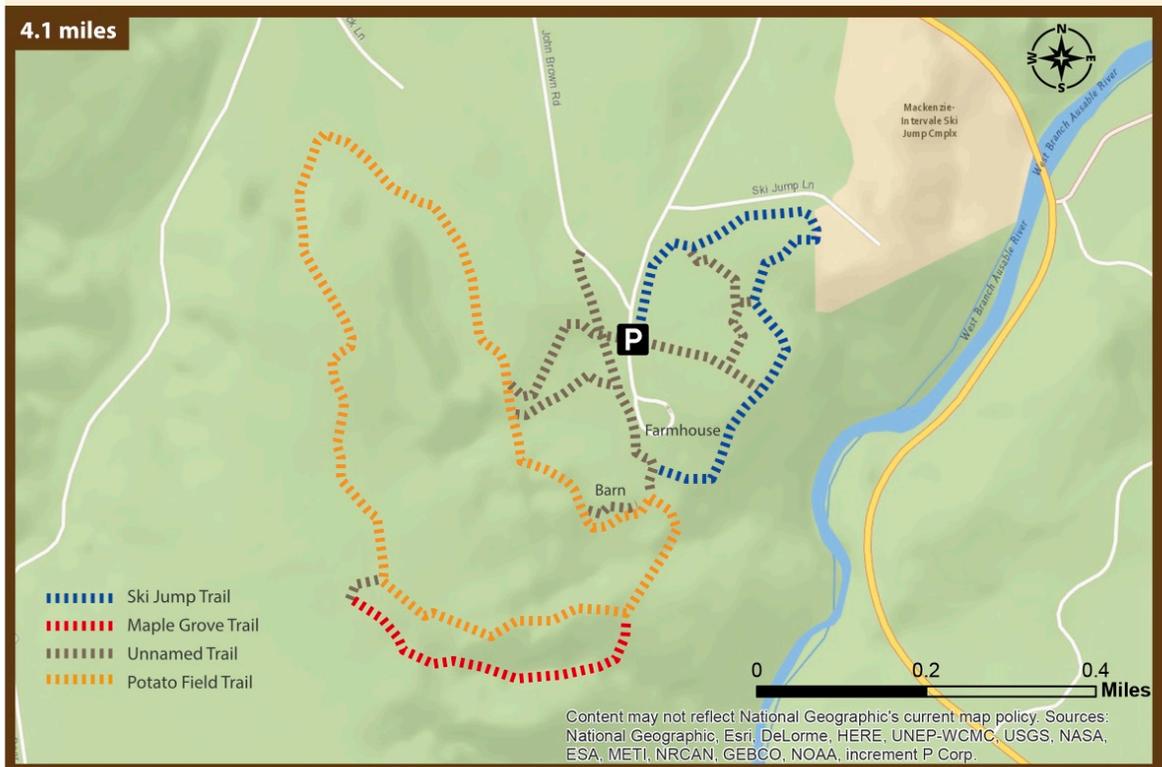
The Ski Jump (0.8 miles) and **Maple Grove** (0.3 miles) loops both start at the dirt parking area. They head across an open field before entering a wooded section that leads to the trail head register behind the farmhouse. From there, the trail splits to return to the parking area via the road or continue to the Potato Field Loop.

The Unnamed Trail (1.2 miles) is a shortcut for the Ski Jump Trail that heads directly across the field from the dirt parking area.

The Potato Field Loop (1.8 miles) starts behind the farmhouse. A left turn after the pond enters the woods and descends before a fairly long, but moderate ascent. A right turn leads to a small knob before entering the woods, providing for a quicker return to the parking area.



The barn in fall



LAKE PLACID WALKING TRAILS

5 MIRROR LAKE PATHWAY

Loop | Easy

The Mirror Lake Pathway follows a red brick sidewalk around Mirror Lake and through the heart of the Village. It passes by a public park and beach, lakefront homes, and through the store-lined Main Street. The level sidewalk is suitable for strollers and wheelchairs and is often used by locals for jogging and walking. Walking takes about 45 minutes.



Great view at the Mirror Lake

Location: Parking is not available along the whole pathway. The best roadside parking areas are on Parkside and Morningside Drive. Two metered lots are also available; a large lot on Main Street by the Olympic Center and a smaller lot on Searle Lane, across from the tennis courts.

The sidewalk features **46 grey plaques** with names and elevations for each of the High Peaks. There are also granite benches, dog waste stations, and garbage cans available throughout.

In the summer, Mirror Lake is popular for swimming, non-motorized boating, fishing, and tennis at the nearby public courts. In the winter, several areas are plowed for ice skating and hockey, while the whole lake is open to walking or skiing. Two of Mirror Lake's most exciting winter attractions include the **Lake Placid Toboggan Chute**, where a 30-foot high trestle sends toboggans down an ice-covered chute, and dog sled rides. Both operations vary depending upon the weather.

Warning:

Be careful of thin ice! Always check local sources for current ice conditions.



2.7 miles



This map may not reflect National Geographic's current map policy. Sources: National Geographic, Esri, DeLorme, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp.

LAKE PLACID WALKING TRAILS

6 BREWSTER PENINSULA NATURE TRAILS

Loop | Easy

These interconnecting trails are located on the shores of Lake Placid. They are close to the Village Center but offer a taste of wilderness in a quiet and peaceful setting. Views of Lake Placid Lake make this an excellent destination for all kinds of short outings: hiking, running, x-c skiing, snowshoeing, mountain biking, family picnics, fishing, and swimming.

Location: The turn from Sara-Placid Road onto Peninsula Way is a fairly steep uphill. At the top of the hill the road becomes gravel. The trailhead is .2 miles from that point.

The Corridor Trail accesses the trail network. It is very flat and wide (0.75 miles, 10-15 minutes).

The Ridge Trail starts from the end of the Corridor Trail and climbs steadily to the top of a long ridge. The trail then drops about 20 feet before moderately descending through the forest to the Boundary Trail (1.3 miles, 10-15 minutes).



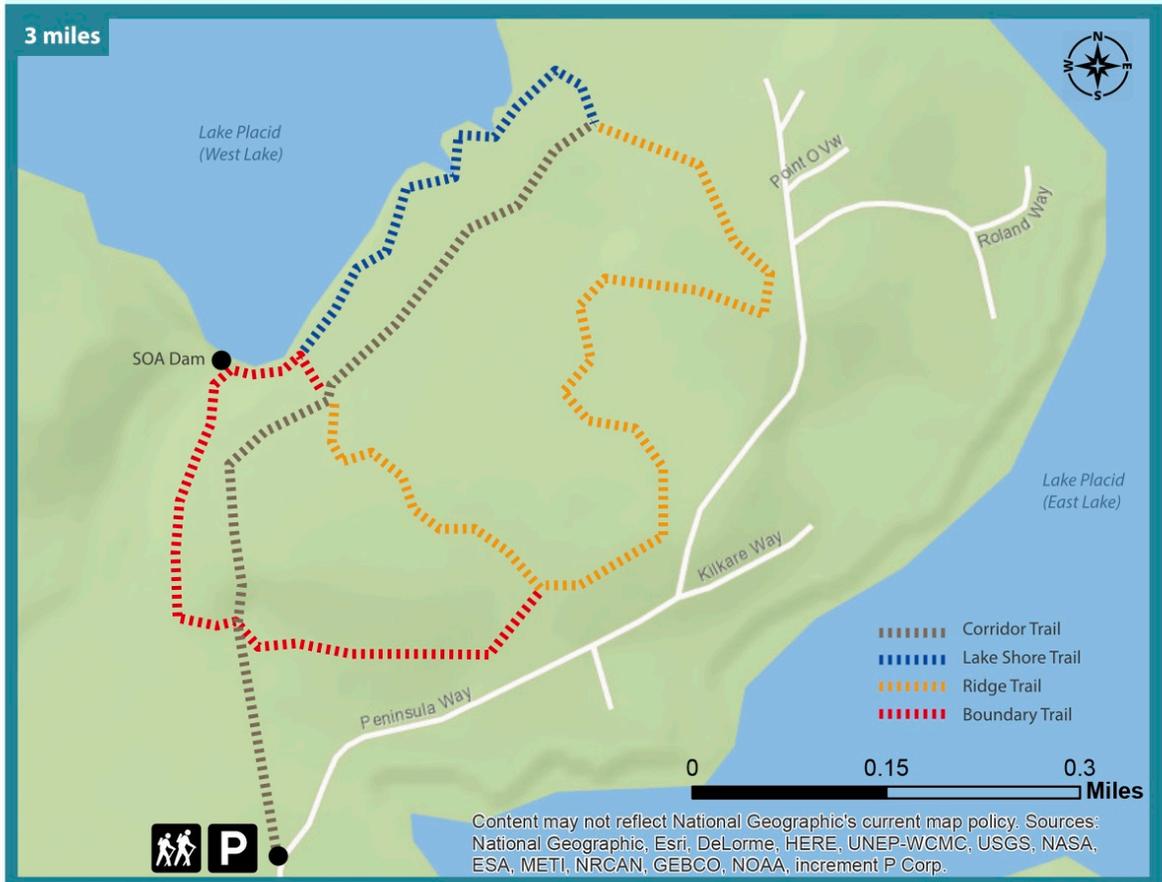
The dam in winter

The Lake Shore Trail follows the shore of Lake Placid before ending at the junction with the Boundary Trail. This trail is rougher with lots of roots and rocks, but is a highlight of the system (0.8 miles, 10-15 minutes).

The Boundary Trail provides quick access to a dam at Lake Placid Lake with outstanding views of the lake, Whiteface Mountain, and Cold Brook (.9 miles, 10-15 minutes).

Warning:

Hikers should be wary of bikers on blind hills and corners.



LAKE PLACID WALKING TRAILS

7 OWEN | COPPERAS | WINCH PONDS

Loop or Traverse | Easy to Moderate

These trails visit three ponds offering excellent views with swimming and fishing opportunities.

Location: From the traffic light at the intersection of Routes 73 and 86, take Route 86 toward Wilmington. After 5.2 miles on the right is a brown sign indicating the pull-off for Owens Pond. Another half mile will take you to the large parking lot on the left for Copperas Pond.

From the southern **trailhead** (Owen Pond), the trail starts moderately, climbs briefly along a brook and then descends to **Owen Pond**. A herd path leads to the pond shore with a view of the Sentinel Range.

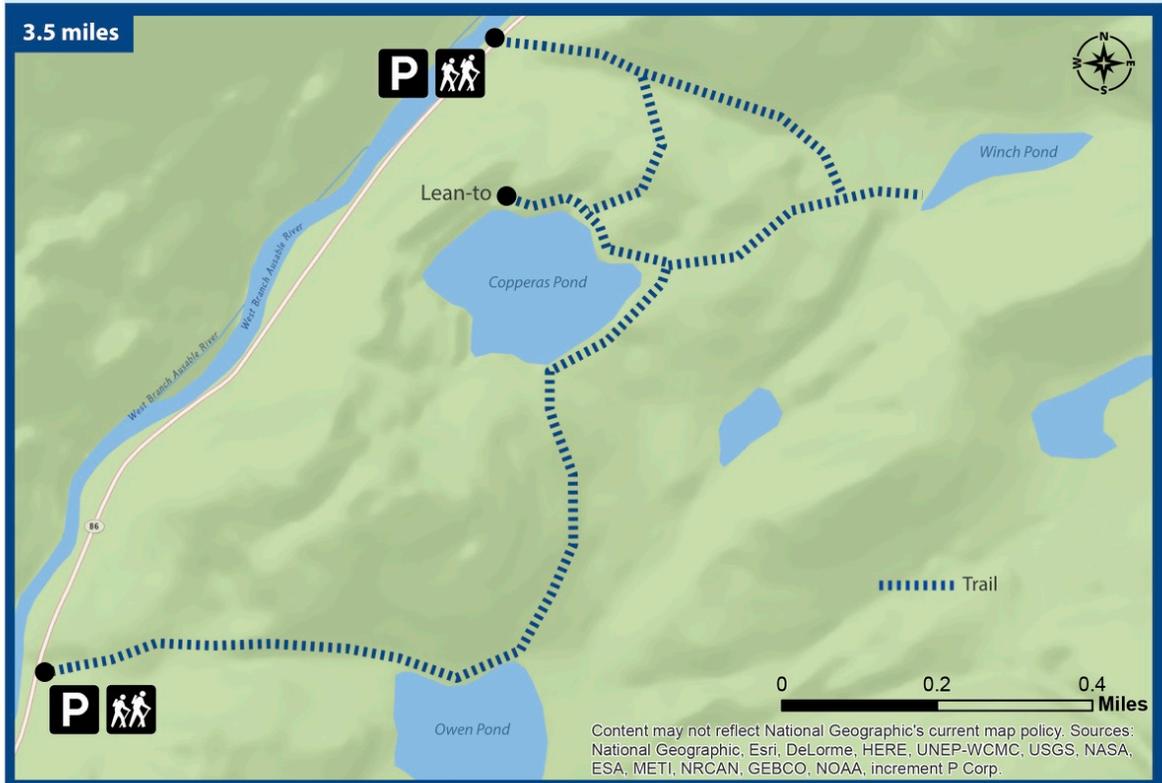
Past Owen Pond the trail reaches its steepest part climbing 120 feet in 0.2 miles, then descends quickly to **Copperas Pond** providing the scenic highlight with a spectacular view of Whiteface Mountain.



Past a camping area and long boardwalk is an intersection. Right leads to **Winch Pond**, a little pond decorated with water lilies. Left leads along Copperas Pond and either heads to the lean-to on the left or meets up with the northern trailhead on the right.

Warnings:

- The trail descending from Copperas Pond to the highway is steep and rocky.
- Be sure your car is parked entirely off the paved road at the Owen Pond Trailhead.



LAKE PLACID WALKING TRAILS

8 MCKENZIE POND TRAIL

Out and Back | Easy

McKenzie Pond is located between Saranac Lake and Lake Placid. The trail, which leads to the beautiful pond after which it is named, is fairly flat and passes through a thick forest.

Location: Follow Route 86 from Lake Placid toward Saranac Lake. Turn right and follow McKenzie Pond Road for 1.6 miles. Just past the Black Fly Baseball Field is a parking pull off marked with a blue Jackrabbit Trail sign.

The well-marked turnoff to McKenzie Pond is about 1.6 miles from the trailhead, with an additional .25 miles to the pond. Paddling, hiking McKenzie Mountain, and bouldering are additional popular pursuits.

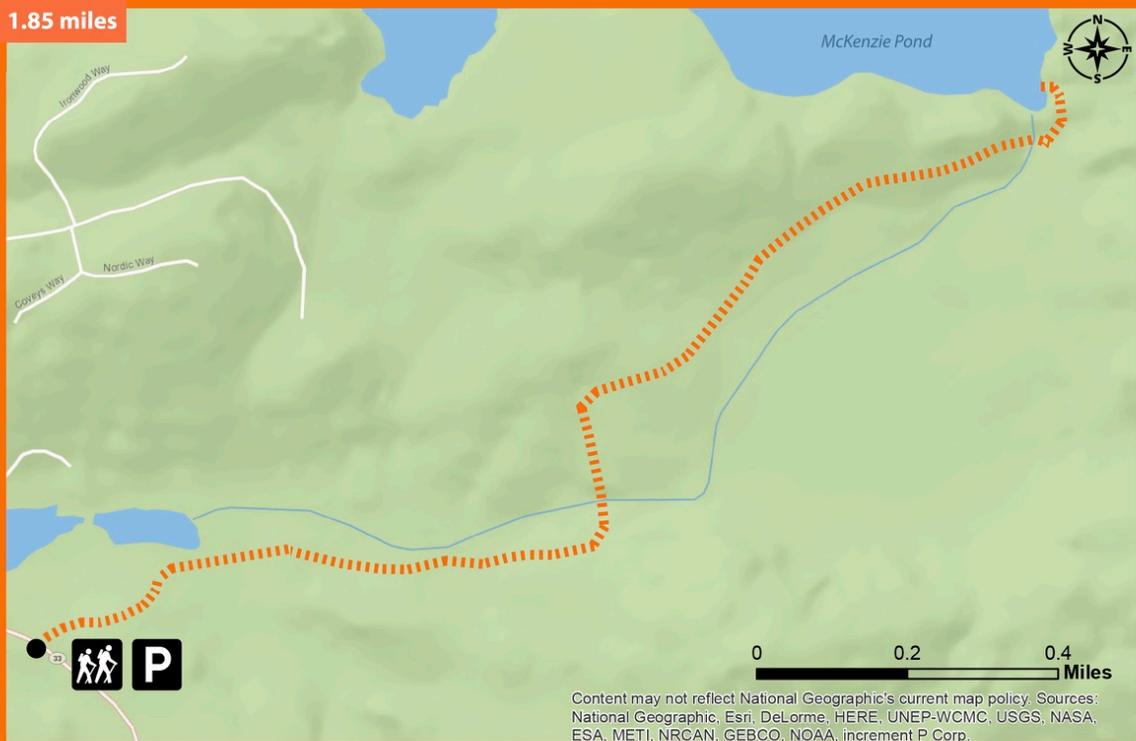
This trail is part of a longer trail system known as the **Jackrabbit Trail**, connecting the communities of Keene, Lake Placid, and Saranac Lake. For more information on the full system, visit: www.jackrabbittrail.org.

Warning:

Trailhead parking on McKenzie Pond Road is limited and on a curvy road. Be sure to pull all the way off the pavement.



1.85 miles



LAKE PLACID WALKING TRAILS

9 POWER POND | CHUBB RIVER TRAIL

Loop | Easy

The Village of Lake Placid lowered the level of the Chubb River when they removed a dam as part of a municipal project. The newly created Power Pond Park includes a walking trail that is handicap and stroller accessible. People of all abilities now have an opportunity to enjoy a wetland walk with a wonderful river view.

Location: The Park is located at the end of Power Pond Road off of Route 73.

The flat walking path starts south of the Power House Road Bridge, following the east side of the **Chubb river** and surrounding wetland. It crosses the river to a historic cribwork dock, before circling back across the river on a timber foot bridge near an overlook.

Learning stations which provide cultural, historic and environmental information about the Village of Lake Placid can be found along the path.



0.7 miles

