

SILENT SHIFTS

EVOLVING WINTERS IN THE WHITE MOUNTAINS

Co-curated by:

MEGHAN DOHERTY
JOE KLEMENTOVICH

January 21 – March 29, 2025

MMM
Museum of the
White Mountains
at Plymouth State University

SILENT SHIFTS

EVOLVING WINTERS IN THE WHITE MOUNTAINS

The tingle of freezing cold air in your nose.

The sting of the wind on exposed cheeks.

The sparkle of fresh snow in the brilliant winter sun.

The squeak of boots on sub-zero, packed snow.

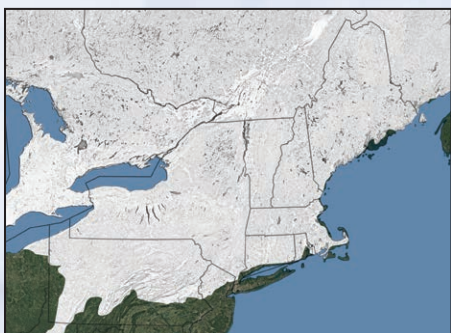
The crunch of a snowshoe breaking through a hard crust.

For some, these sensations of winter evoke a feeling of joy that comes with playing outside in the snow. For others, they might bring to mind the hard work of clearing roads, driveways, and sidewalks, or sitting inside by a nice, warm fire. Silent Shifts traces how our experience of winter has changed over the last 150 years and how it will continue to change. We explore how the intersection of simultaneous changes in our climate, technology, and access to the outdoors are affecting our experience of winter.

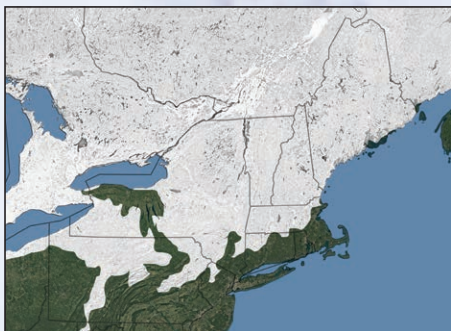
Historically, our winters were colder and snowier than they are today. Current climate models indicate that even as our winters get warmer, the White Mountains will continue to have at least three weeks of snow cover greater than six inches deep. Without climate action, the seacoast region will no longer have this consistent winter snow cover by the end of the century.

SHIFTS

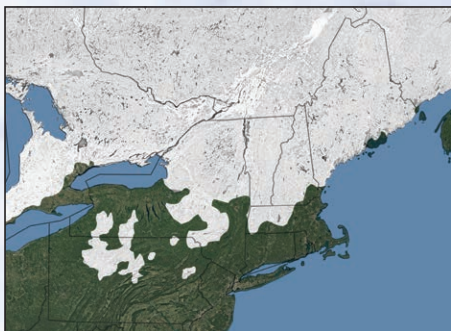
TE MOUNTAINS



Over the period 1980-2005, areas with at least twenty days of snow cover (snow greater than 1” deep) extended well into Pennsylvania and northern New Jersey.



If we maintain climate policies consistent with those in 2021, snow cover across the northeastern United States is projected to retreat northward and to higher elevations by the end of the century (2070-2100).



If we hadn't signed the Paris Agreement in 2015, over 50% of the northeastern United States region would become snow-free, including the Seacoast in New Hampshire by late century (2070-2100).

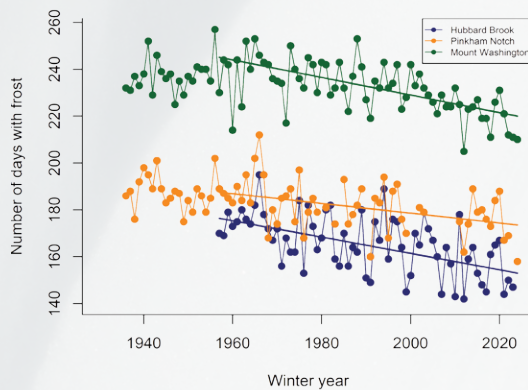
Figures courtesy of Elizabeth Burakowski, based on Elizabeth Burakowski et al, "Future of Winter in Northeastern North America: Climate Indicators Portray Warming and Snow Loss that will Impact Ecosystems and Communities," *Northeastern Naturalist*, 28 (Special Issue 11):180-207.





Winter's Legacy

Stark windswept views of the summit of Mount Washington. Skiing in the White Mountains from December to June. Steady streams of people hiking up to ski in the backcountry. This is what winter in the White Mountains looks like in the popular imagination: the worst weather in the world and backcountry skiing in May. This exhibition explores these aspects of winter as well as many others.



Data source: USDA Forest Service, Northern Research Station. 2024. Hubbard Brook Experimental Forest: Daily Temperature Record, 1955 - present ver 14. Environmental Data Initiative. <https://doi.org/10.6073/pasta/67395641442370b21198973fb553def5>

In the 1930s when winter tourism was still in its early stages, Brad Washburn flew over Mount Washington to take this photograph, and the Appalachian Mountain Club produced this brochure to entice people up to the region for winter recreation opportunities. While

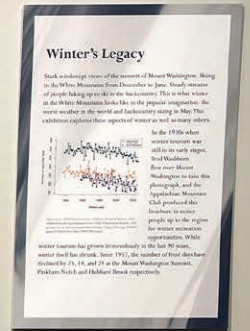
winter tourism has grown tremendously in the last 90 years, winter itself has shrunk. Since 1957, the number of frost days have declined by 25, 14, and 24 at the Mount Washington Summit, Pinkham Notch and Hubbard Brook respectively.



Northwestern Mountain Club
 1914-1915
 Photo: [unreadable]
 [unreadable]
 [unreadable]



Brad Washburn
 1937
 Photo: [unreadable]
 [unreadable]
 [unreadable]



Brad Washburn, **A Windswept Summit, Mount Washington**, Black and white aerial photograph, 1937, Museum of the White Mountains, Gift of Maurice and Diane LaRoche



MOUNT WASHINGTON AVALANCHE CENTER

Get the MWAC App.

We have a new app for easy access to avalanche information and observations on-the-go. You can download the app for free in the Apple App Store or the Google Play Store.

GET THE FORECAST

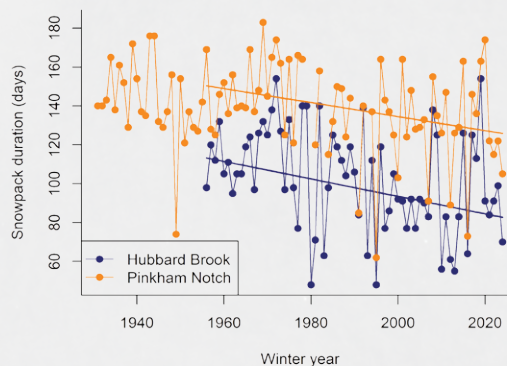


Accessing Winter

In the 1880s, when the Snow-Shoe Section of the Appalachian Mountain Club started organizing February trips to the White Mountains, they had to convince innkeepers in the Mount Washington Valley to re-open for them as most places were only hosting guests in the warmer months of the year. The supply of winter lodging quickly grew to meet this new demand. By 1945, a brochure aimed at winter tourists listed 100 places as being open for guests.

Access to lodging was not the only dilemma facing early winter recreation enthusiasts. Access to proper equipment was also a challenge. The Appalachian Mountain Club hosted lectures and demonstrations in their Boston club rooms to both encourage people to join their excursions and to educate them about the equipment needed. Today groups like Inclusive Ski Touring and events like the Backcountry Ski Festival help to spread information about how and where to get out into the White Mountains in winter.

As access to winter recreation has grown over the last 140 years, the amount of snow there is to enjoy has decreased. The duration of snowpack has declined by 31 days at Hubbard Brook and 25 days at Pinkham Notch since 1956.

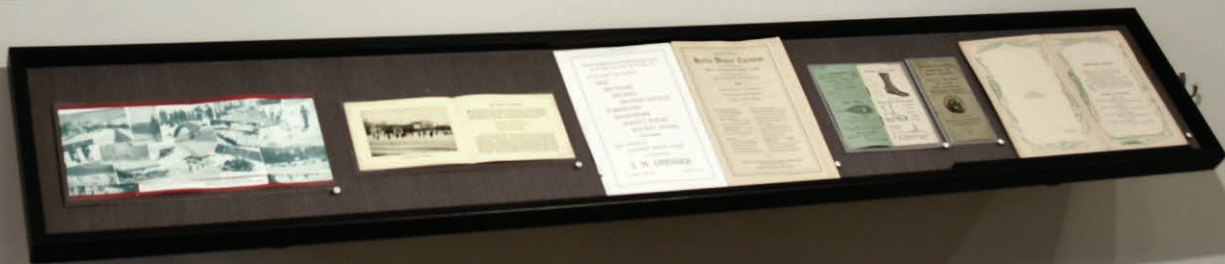


Data source: USDA Forest Service, Northern Research Station. 2024. Hubbard Brook Experimental Forest: Snowpack duration, 1955 - present ver 14. Environmental Data Initiative. <https://doi.org/10.6073/pasta/67395641442370b21198973fb553def5>



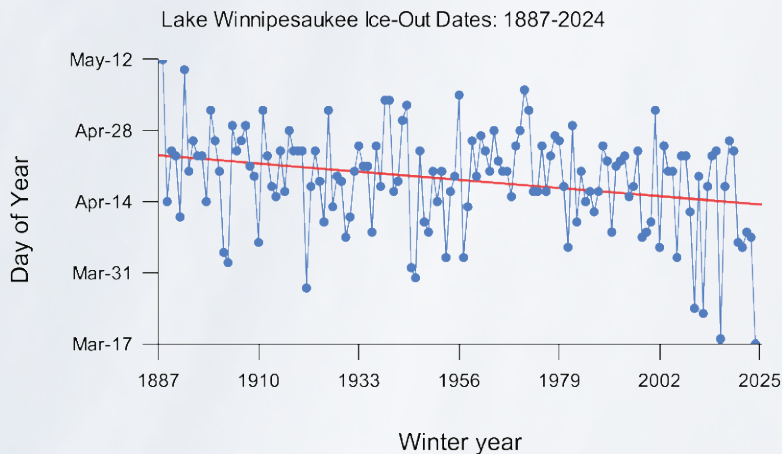
Accessing Winter

As the 1930s drew to a close, the U.S. Forest Service's Appalachian Division was planning to open up the winter recreation areas in the White Mountains. The plan was to provide a network of roads and trails that would allow winter recreation in the White Mountains. The plan was to provide a network of roads and trails that would allow winter recreation in the White Mountains. The plan was to provide a network of roads and trails that would allow winter recreation in the White Mountains.



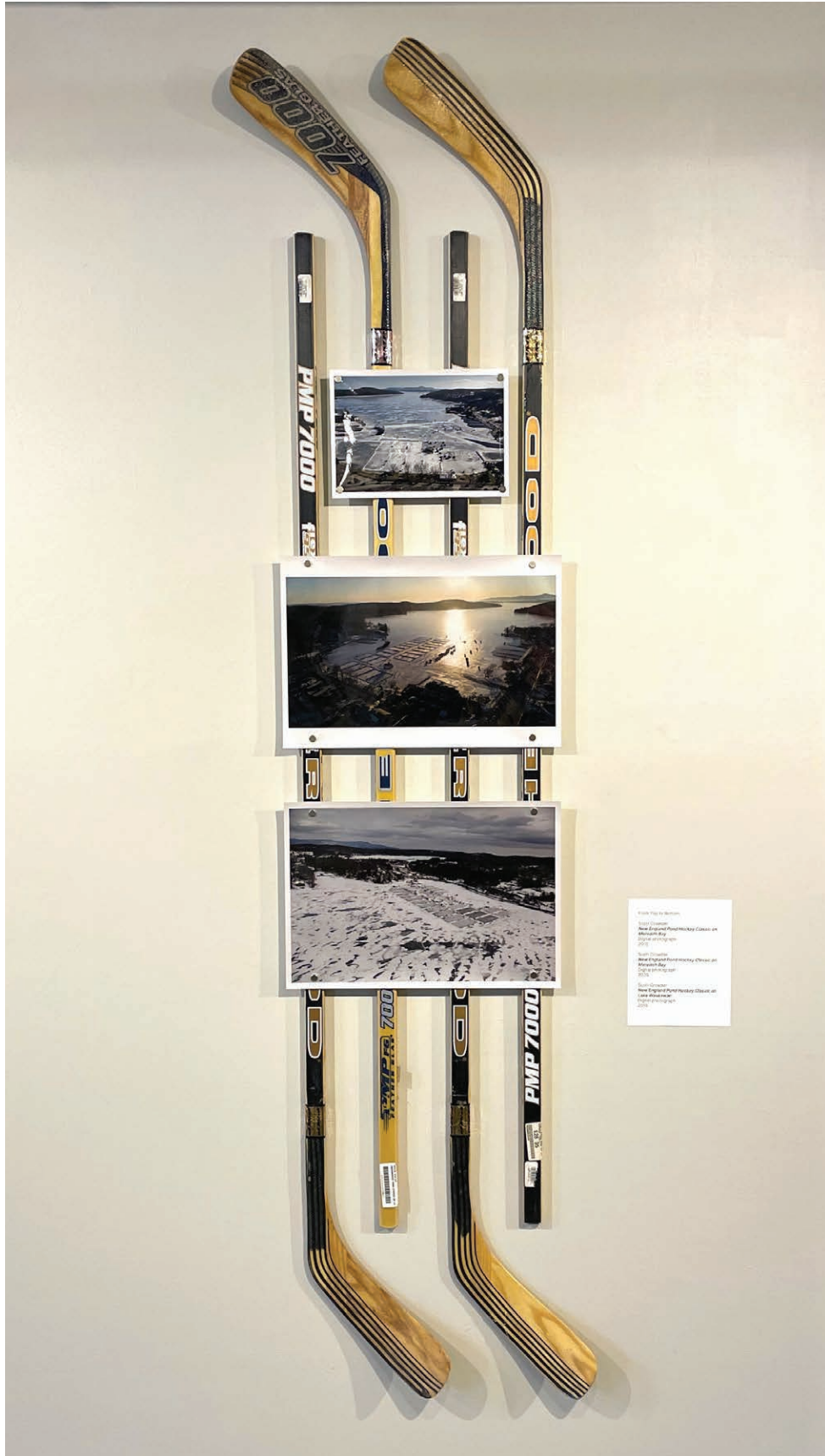
Life on the Ice

When the New England Pond Hockey Tournament began in 2010, 77 teams played on seven rinks set up on Lake Winnepesaukee's Meredith Bay. Over the last 14 years, the tournament has grown to 275 teams playing on 26 rinks. In recent years, a lack of solid ice has forced the tournament to move to Lake Waukegan, a smaller body of water that freezes more consistently during our warmer winters.



Data source: Winnepesaukee.com (<https://www.winnepesaukee.com/index.php?pageid=iceout>)

Since 1887, records have been kept for Lake Winnepesaukee's ice-out, defined as the point when the ice has melted enough for the M/S Mount Washington to travel between its five ports around the lake. While there is a fair amount of variability in the dates, the overall trend is that ice-out is happening sooner in the spring.



From Top to Bottom:
 Top Photo:
 Noel Englund PMP Hockey Club, on
 Mainland Bay
 2000
 Middle Photo:
 Noel Englund PMP Hockey Club, on
 Mainland Bay
 2000
 Bottom Photo:
 Noel Englund PMP Hockey Club, on
 Mainland Bay
 2000

POW



PROTECT OUR WINTERS

We turn passionate outdoor people into climate advocates, working together to protect the places and experiences they love from climate change.

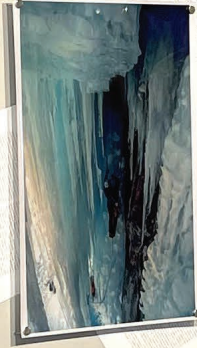
Join Team POW



Change and Adaptation

In the words of the Ice Climbing Guide to Northern New England, “the region’s climate produces vast quantities of groundwater which leaks out each winter, flowing down our hillsides forming frozen fun-parks all over the place.” While there were only two ice climbing guide operations in the Mount Washington Valley in the 1970s when modern ice climbing started to take hold in the region, there were 19 in 2022. Although increasing numbers of people are drawn to these “frozen fun-parks,” analysis of historical ice conditions, photographs, reports, and meteorological data found that in general the “ice climbing season is both shorter and more variable than historical seasons.” This trend is likely to continue: based on moderate climate projections the season is expected to shorten from an average of 97 days to 76 days by 2050 and 64 days by 2099.

To meet the demands of additional climbers and decreased climbable ice, guides are adapting. One adaptation has been the growth of mixed climbing, where ice tools are used to climb rock and ice. This allows guides to take climbers out on days when historically the ice would have been considered unclimbable.



Change and Migration

The White Mountains are home to a diverse array of wildlife, including moose, deer, and black bears. As the climate changes, these animals are being forced to migrate to higher elevations and further west in search of suitable habitat. This migration is causing significant changes to the local ecosystem and the way we interact with it.

Key Findings

- Snowpack is melting earlier and staying thinner for longer.
- Ice cover on lakes and streams is shorter and less consistent.
- Winter temperatures are rising, leading to less snow and more rain.
- These changes are affecting water availability and the health of the forest.

What We Can Do

- Support local conservation efforts and organizations.
- Practice responsible recreation and minimize our impact on the environment.
- Advocate for policies that address climate change and protect our natural resources.

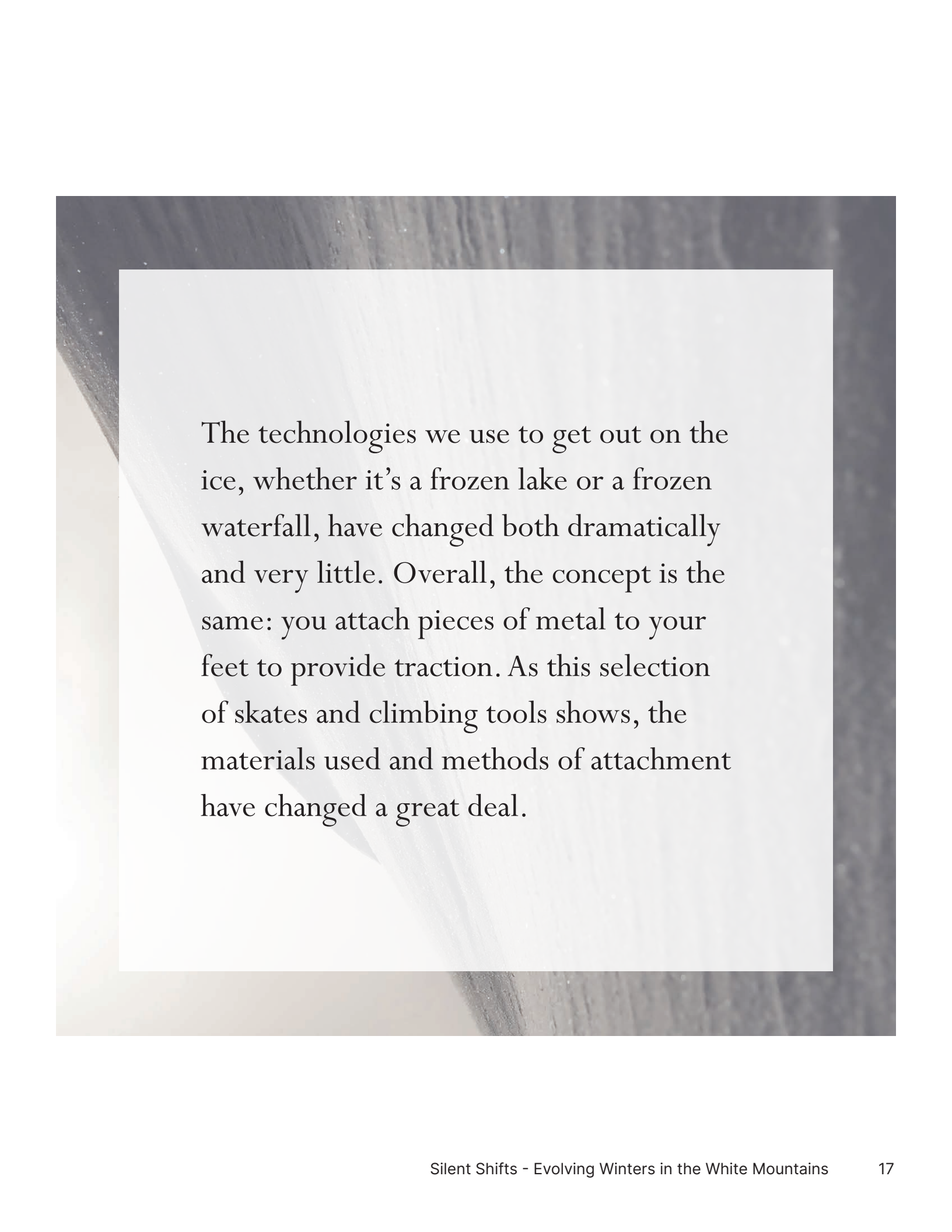


Discover More
About NEDS



New England DISABLED SPORTS

“Where boundaries are broken”



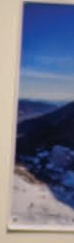
The technologies we use to get out on the ice, whether it's a frozen lake or a frozen waterfall, have changed both dramatically and very little. Overall, the concept is the same: you attach pieces of metal to your feet to provide traction. As this selection of skates and climbing tools shows, the materials used and methods of attachment have changed a great deal.

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1. One Skating, Skating on the Adirondack, Rock and Ice, 1870-1920. Major reconstruction from the One Skating Collection, Mount Washington Club Library.
2. Dan Johnson, Highland Ave. Skate, Digital photograph, 2012.
3. Ice Skates, Wood, metal, and leather, 1850-1920. On loan from the Mount Washington Club Library.
4. Ice Skates, Plastic, metal, and synthetic materials, c. 2020. On loan from Vermont State University Mount Washington Campus.
5. Ice Climbing Shoe, Leather, rubber, fabric, and metal, c. 1980. On loan from a private collection.
6. Ice Climbing Shoe, Leather, rubber, and metal, c. 1970. On loan from a private collection.
7. Ice Climbing Rope, c. 1970. On loan from Rick Wilson.
8. Rick Wilson, Ice Climber's Guide for Northern New England, 2002. Museum of the White Mountains, DNH at Dixie Tavernette.
9. Eastern Mountain Sports Catalog, 1971. On loan from Victor Crane.



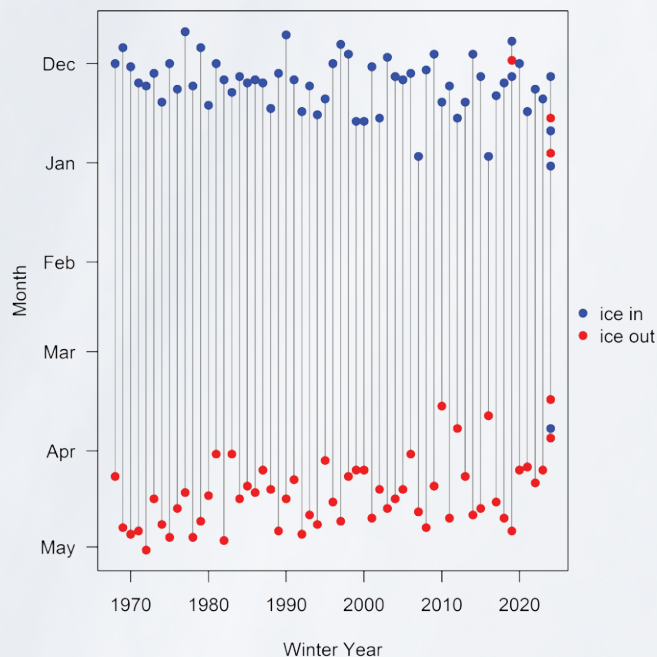
Informational text panels on the gallery wall.



Small text panel on the left wall.

Life on the Ice

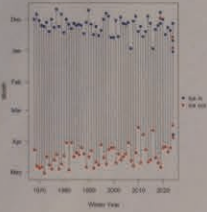
It is not only our biggest lake that is affected by changes in our climate, but also smaller lakes and ponds throughout the region. Researchers at the Hubbard Brook Experimental Forest in Woodstock, New Hampshire, have been recording ice-in and ice-out dates for Mirror Lake since 1967. Last winter (2023-2024) was the first time on record that the lake had four ice-in and ice-out days.



Data Source: Hubbard Brook Watershed Ecosystem Record (HBWatER). 2024. Hubbard Brook Experimental Forest: Mirror Lake Ice Cover 1968 - ongoing ver 9. Environmental Data Initiative. <https://doi.org/10.6073/pasta/8aebc45f3ae1944bdb0ccb0a6c6e51d5>

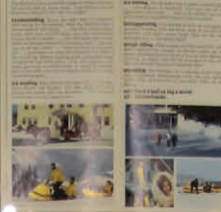
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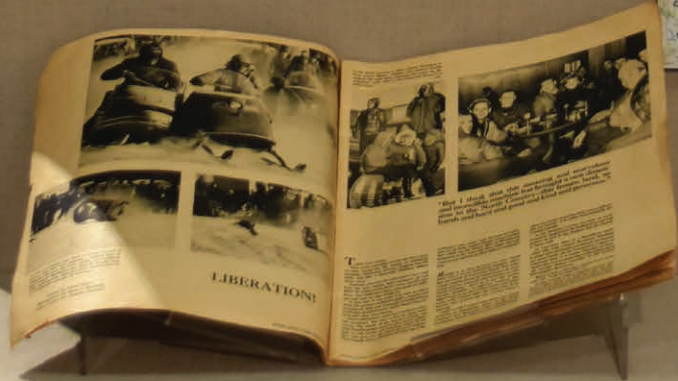
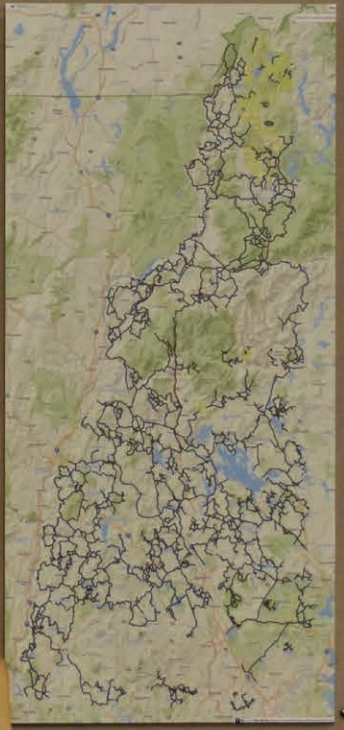
Hubbard Brook Experimental Forest and Watershed Research Station, U.S. Forest Service, 1980-2024. All rights reserved. © 2024 U.S. Forest Service. All rights reserved. © 2024 U.S. Forest Service. All rights reserved. © 2024 U.S. Forest Service.

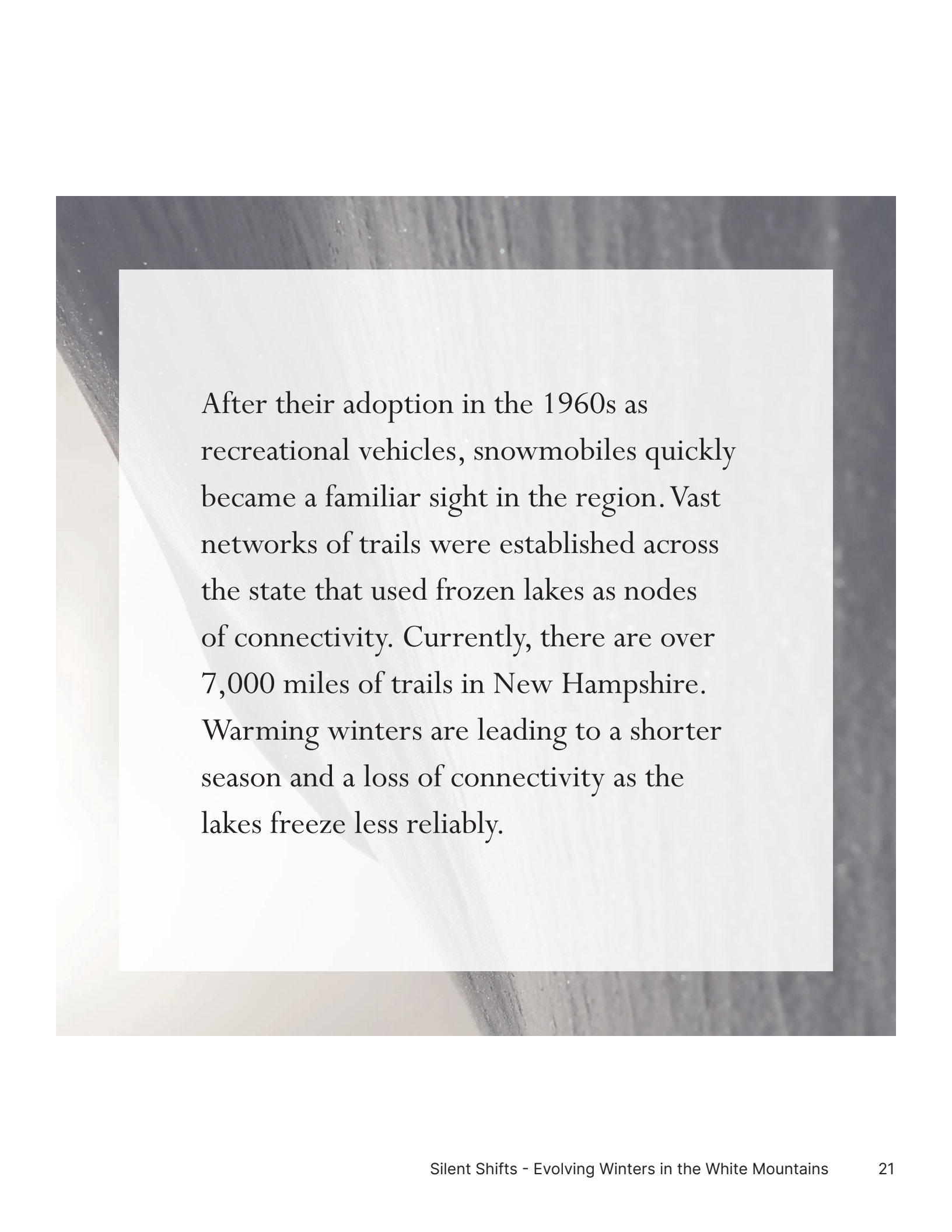
there's so much to do you may not have time to ski



1. The Balsams Wilderness Ski Area Dixville Notch, New Hampshire, Enclosure, 1975, Museum of the White Mountains, Gift of Straphim and Gal Barbs.
2. 1st Annual Balsams Cup Snowmobile Races, Official Souvenir Program, Tunxis postcard, 1966. On loan from Coebrook Historical Society.
3. CIVIC Magazine, Jewish Winter Carnival Highlights, 1966, 1967 magazine, 1975. On loan from Coebrook Historical Society.
4. Current New Hampshire Snowmobile Trail Conditions, January 2, 2024, Courtesy of Garfield.
5. Boston Globe Magazine, Liberation Newspaper, 1966. On loan from Coebrook Historical Society.

After their adoption in the 1960s as recreational vehicles, snowmobiles quickly became a familiar sight in the region. Vast networks of trails were established across the state that used frozen lakes as nodes of connectivity. Currently, there are over 7,000 miles of trails in New Hampshire. Warming winters are leading to a shorter season and a loss of connectivity as the lakes freeze less reliably.





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Outdoor Afro
celebrates and inspires
Black connections
and leadership in
nature.



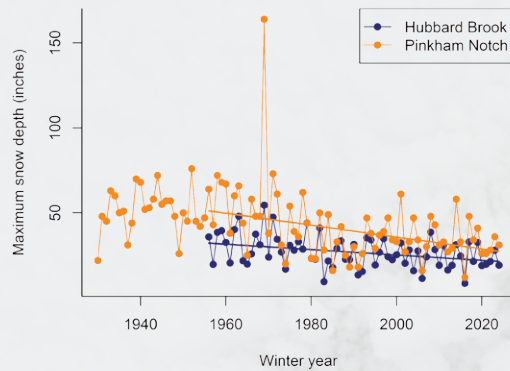
Outdoor
Afro



Get involved.

Shifting Technologies

Indigenous peoples across the snowy regions of this continent developed and refined snowshoe technologies in response to myriad different types of snow conditions and uses. Long treks on packed snow required a different shape than the first tracks through knee high powder. Snowshoe technologies remained close to traditional Indigenous designs into the twentieth century. By the middle of the twentieth century, new materials were used



Data Source: USDA Forest Service, Northern Research Station. 2024. Hubbard Brook Experimental Forest: Weekly Snow and Frost Measurements, 1955 - present ver 20. Environmental Data Initiative. <https://doi.org/10.6073/pasta/c9ee6279d033ecfceb0b4c498114b9e1>

first for bindings and crampons and later for the whole snowshoe. The technology continues to evolve as snowshoers are as likely to encounter ice as snow on the trails.

While some winter sports require a lot of specialized and expensive equipment

for very specific conditions or terrains, snowshoeing requires minimal equipment and can be done anywhere there is snow. Although warming winters are leading to less snow overall, there are still plenty of opportunities to get out on snowshoes and enjoy the winter scenery.

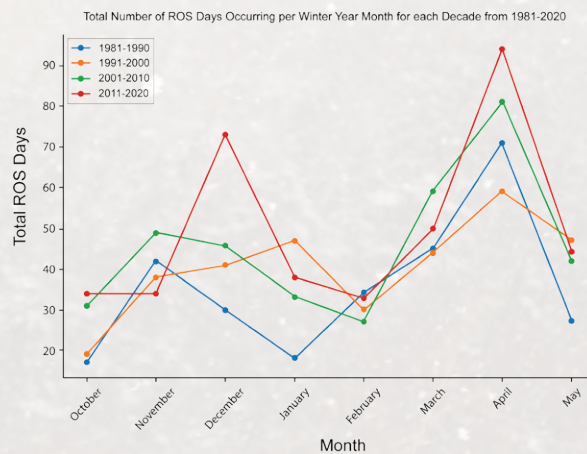




Perils of Winter

As the number of people getting out in the winter in the White Mountains increased over the twentieth century, so too did the number of accidents. In 1939, Henry “Swampy” Paris’s concern for skier safety in Tuckerman Ravine led him to establish the Mount Washington Safety Patrol, now the Mount Washington Volunteer Ski Patrol. This group is one of many volunteer organizations that support U.S. Forest Service and New Hampshire Fish and Game with search and rescue efforts in the region.

Shifts in winter weather patterns are making their jobs harder. Meteorologists at the Mount Washington Observatory have found that days with rain on snow have increased by 17% when comparing 1981-2010 and 1991-2020. Not only do these events decimate the snowpack, but they also increase the risk of avalanches and flooding.

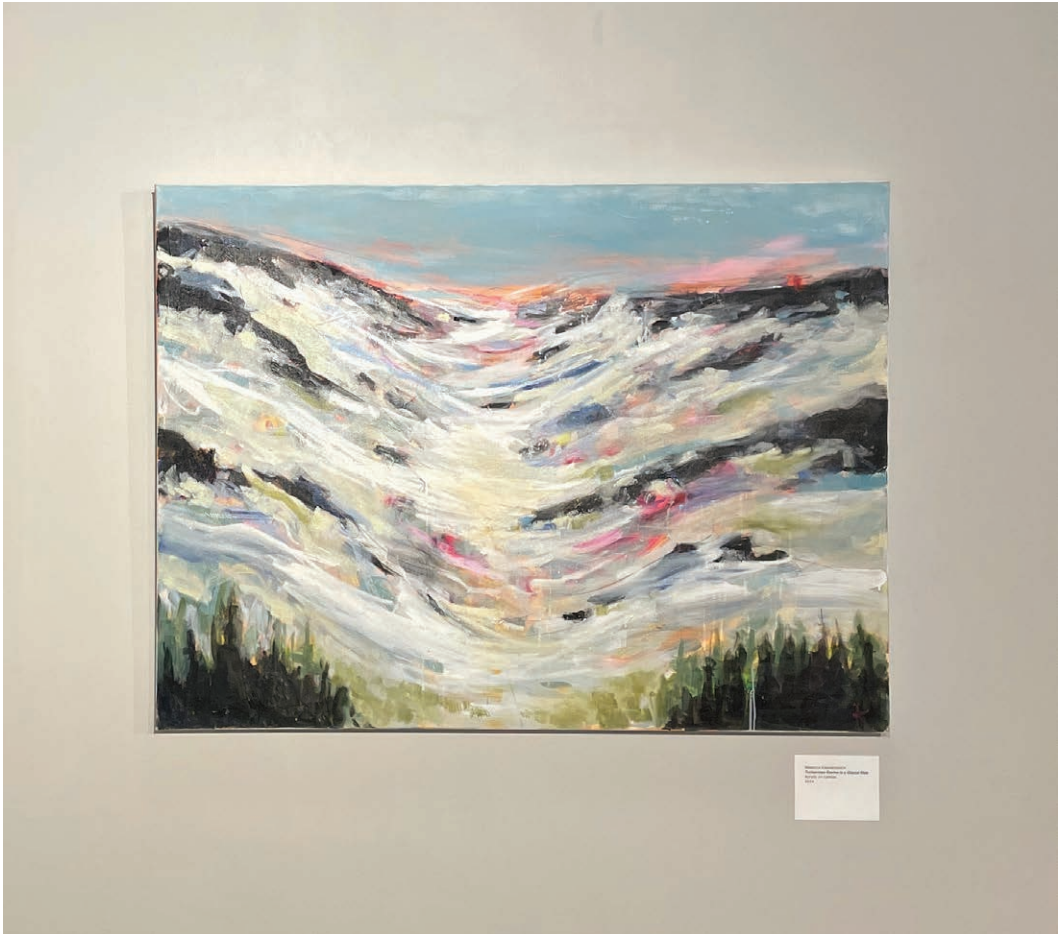


Data Source: Charles Peachey, Weather Observer, Mount Washington Observatory, A Climatology of Rain-on-Snow Events On Mount Washington



Most early painters of the region were seasonal tourists who visited in the spring, summer, or fall. As a result, there are very few paintings of winter in the White Mountains from the mid-nineteenth century. While some artists, like Harrison Bird Brown, stayed long enough in the fall to see what some call “snowliage,” snow on the high mountains with peak fall colors in the valley. However, few stayed for the depths of winter. This Jasper Cropsey piece was painted a couple of years after a trip to New Hampshire while the artist was living in England.

As the nineteenth century progressed, this changed. Artists, including Benjamin Champney, bought homes in the region, and the increase in winter tourism led to more accommodation options in winter. Now, many artists live in the region year-round. Some, like Erik Koeppel, paint with a historical eye; others, like Rebecca Klementovich, use abstraction to capture winter in the Whites.







Cross country ski and amusement events, ski jumping, fancy dress skating, a dog sled race, and a hockey game. Gorham's 1913 Winter Carnival had a little something for everyone. Winter carnivals spread across the North Country in the 1920s. These winter carnivals combined a sense of playfulness, a love of nature, and a competitive spirit into one or three days of winter fun. After an almost 40-year hiatus, winter carnivals in Berlin with ski jumping and an art sled race, maintaining the playfulness and competitive nature of earlier events.



Winter Carnival, N.H. 1923
 Photo by [unreadable]

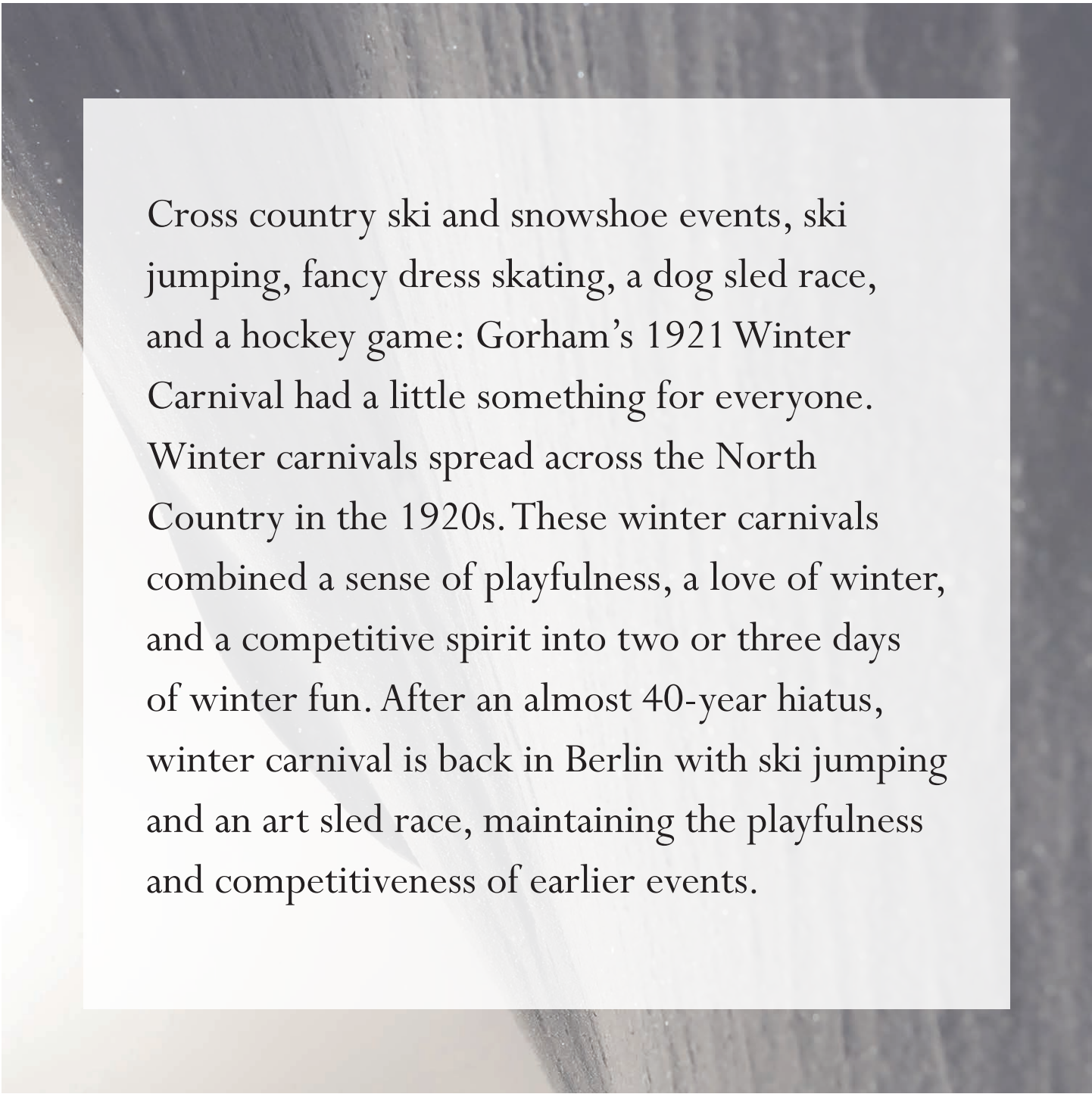
EXPERIENCE.



The mission of the Mt. Eustis Ski Hill in Littleton, New Hampshire is to provide skiing and snowboarding, as well as reliable programming and events that foster a love of North Country snowsports heritage, at low or no-cost to residents.

Find out more by scanning the QR code.





Cross country ski and snowshoe events, ski jumping, fancy dress skating, a dog sled race, and a hockey game: Gorham's 1921 Winter Carnival had a little something for everyone. Winter carnivals spread across the North Country in the 1920s. These winter carnivals combined a sense of playfulness, a love of winter, and a competitive spirit into two or three days of winter fun. After an almost 40-year hiatus, winter carnival is back in Berlin with ski jumping and an art sled race, maintaining the playfulness and competitiveness of earlier events.

Historically, dog sled races were a staple component of winter carnival events. Crowds would line Main Streets throughout the region to watch the dogs race by pulling full sleds. While warming winters make training and racing harder, there is still an active dog sled community in the area. To learn more about one musher's experiences, watch Sally Manikian's Mountain Voices talk from November 2024.

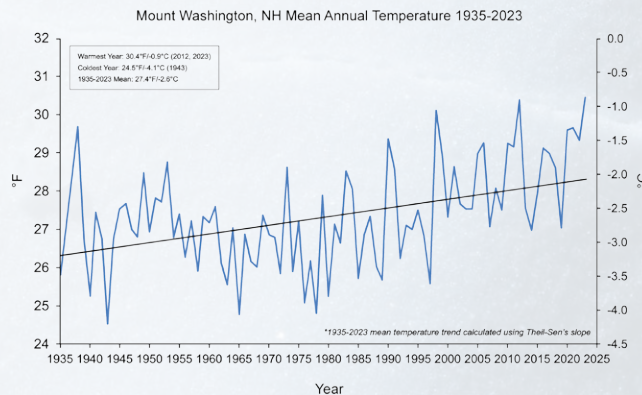




From Top to Bottom:
 Unknown photographer
Dog Sled Races
 Black and white photograph
 c. 1970
 On loan from the Colebrook Historical Society
 Unknown photographer
Dog Sled Races
 Black and white photograph
 c. 1950
 On loan from the Colebrook Historical Society
 Unknown photographer

Polar Training Grounds

The first record of winter weather conditions on the summit of Mount Washington is from 1870. An account of the expedition, published in *Nature*, captured the prevailing sense of Mount Washington in winter: “Everybody knows that Mount Washington, in New Hampshire, is visited by thousands of persons in the summer months, and that its climate corresponds better with that of Labrador or Greenland than with that of New England. In the winter universal desolation reigns there.”



Data Source: Ryan Knapp, Weather Observer/Meteorologist, Mount Washington Observatory, Weather Archive, Climate 1935-2023. <https://mountwashington.org/weather/mount-washington-weather-archives/>

These desolate conditions make it the ideal place to prepare for polar expeditions. Robert Peary trained there before going to the Arctic in 1909 and Richard Byrd’s team went before their 1929 Antarctic Expedition. Arthur Walden’s sled dog teams were bred in Wonalancet, New Hampshire and trained on Mount Washington before sailing with Byrd to Antarctica. Today, the summit of Mount Washington continues to be a testing ground for equipment used for aviation and meteorology.



Polar Training Grounds

The first record of winter weather conditions on the summit of Mount Washington is from 1878. In account of the complexity, published by the U.S. Department of the Interior, the following is a summary of the data for the winter of 1878-79. The following is a record by thousands of feet in the winter months, and from the same source as before with the addition of "Climax" from the top of the highest peak in the winter and summer months.

These results combine make it the ideal place to prepare for polar expeditions. The first winter record from the summit was taken in 1897 and the last in 1915. The first winter record from the summit was taken in 1897 and the last in 1915. The first winter record from the summit was taken in 1897 and the last in 1915.



A long, dark display case containing several small photographs, a larger photograph, and a small text card. The items are arranged horizontally within the case.

Mount Washington
 White Mountains
 New Hampshire
 U.S. Department of the Interior
 U.S. Geological Survey
 Washington, D.C.

A dark display board with three framed black and white photographs of people and dogs in snowy mountain settings. The photographs are arranged in a triangular pattern.

5

4

6



Après ski?

The development of ski areas in New Hampshire followed national trends with periods of growth first in the 1930s and then in the 1960s and 1970s. The number of ski areas, here defined as places with a mechanical means for getting to the top of the slope, be it a rope tow, a chairlift, or a gondola, peaked in the late 1960s with 103 operations across the state. A few years of low snow totals and the expense of snowmaking equipment led to a series of closures in the late 1980s and early 1990s. While the number of ski areas has remained fairly stable since the mid 1990s, analysis of climate data alongside snowmaking capacity, published in Current Issues in Tourism, has shown that "the era of peak ski seasons has likely passed in most US markets." Furthermore, researchers estimate that 10-15% of Northeastern resorts will not be economically viable by 2050.

However, not all ski areas are as focused on profit margins. Throughout the state there are non-profit ski areas, large and small, that are committed to maintaining and growing the ski community by making skiing more affordable and accessible.

Winter year	Total Open Ski Areas
1930-1931	1
1931-1932	6
1932-1933	32
1933-1934	47
1934-1935	81
1935-1936	85
1936-1937	70
1937-1938	90
1938-1939	103
1939-1940	96
1940-1941	85
1941-1942	69
1942-1943	52
1943-1944	43
1944-1945	33
1945-1946	32
1946-1947	32
1947-1948	32
1948-1949	34
1949-1950	32
2020-2021	32



Photo: Peter Allen
 The New Hampshire Ski Area
 Photo: Peter Allen
 The New Hampshire Ski Area

Interested?
Visit our website
to view all of our
ski programs.



Empowering Diversity

The logo is a large white circle with an orange border. Inside the circle, the words "INCLUSIVE" and "SKI TOURING" are written in a bold, blue, sans-serif font, curving along the top and bottom respectively. In the center of the circle is a stylized smiley face. The eyes are represented by two horizontal orange bars, each with a small black dot in the middle. The mouth is represented by a horizontal black line with a small black dot in the middle. The entire logo is set against a background of a snowy mountain slope with evergreen trees.

INCLUSIVE

EST. 2021

SKI TOURING

Accessibility on the Slopes





Community Snow Observations

A COMMUNITY-SCIENCE CAMPAIGN TO MEASURE SNOW

anytime. anywhere.



BE APART OF THE
CSO COMMUNITY

*Learn how to measure snow and share
your observations.*





Get Involved.

Get Involved.

Community Snow Observations
<https://communitysnowobs.org/>



Inclusive Ski Touring
<https://inclusiveskitouring.org/>



Protect Our Winters (POW)
<https://protectourwinters.org/>



Outdoor Afro
<https://outdoorafro.org/>



New England Disabled Sports
<https://nedisabledsports.org/>



Ski Mt. Eustis
<https://www.mteustis.org/>



Mount Washington Avalanche Center
<https://www.mountwashingtonavalanchecenter.org/>



Non-profit organization ads, Eddy Damis, Jr.



Sleigh Bells Ring

While the sights and sounds of sleighs dashing through the snow are no longer common in our woods, the joys of winter remain. Whether that takes the form of curling up next to the fire while watching the world become a winter wonderland or looks more like pushing yourself to scale frozen waterfalls, winter in the White Mountains is a time of quiet, snow-covered landscapes and long, cold nights. As the days grow longer, be sure to make the most of the daylight and enjoy the crisp air and the sparkling snow.



Benjamin Champney, **Winter Scene**, Oil on canvas, 1873,
On loan from Michael Mooney and Robert Cram

Exhibition Checklist

Winter's Legacy

Brad Washburn, **A Windswept Summit, Mount Washington**, Black and white aerial photograph, 1937, Museum of the White Mountains, Gift of Maurice and Diane LaRoche

Appalachian Mountain Club, **Ski-ing**, Blue printed brochure, c. 1935, Museum of the White Mountains, Gift of Linda Moore

Joe Klementovich, **Skiers in Left Gully**, Digital photograph, 2011

Accessing Winter

Appalachian Mountain Club, **At Club Rooms - Dec 6-10, 1910**, Black and white photograph, 1910, On loan from the Appalachian Mountain Club Archives

Joe Klementovich, **Skiers near the top of "Duchess" on the Eastern Slope of Mount Washington**, Digital photograph, January 8, 2017

Joe Klementovich, **Eastern Snow and Avalanche Workshop 2023 featuring Blake Keogh and Hilary McCloy**, Digital photograph, 2023

Joe Klementovich, **Mardi Fuller Leading Attendees of the Introductory BIPOC Ski Touring Course at Cranmore Mountain**, Digital photograph, 2024

Joe Klementovich, **Attendees of Backcountry Ski Festival After Party at Tuckerman Brewery**, Digital photograph, 2024

New Hampshire State Planning and Development Commission, **Winter Map**, Three color printed brochure, 1938, On loan from the Gorham Historical Society

Appalachian Mountain Club, **Snow-Shoe Section**

1882-1911, Printed booklet, 1911, On loan from the Appalachian Mountain Club Archives

Appalachian Mountain Club, **Suggestions for Winter Equipment**, Printed booklet, 1908, On loan from the Appalachian Mountain Club Archives

Appalachian Mountain Club, **Snow-Shoe Manual**, Printed booklet, 1915, On loan from the Appalachian Mountain Club Archives

Berlin Winter Carnival Program, Printed booklet, 1923, On loan from the Berlin and Coös Historical Society

Mount Madison House, Printed booklet, ca. 1910, On loan from the Gorham Historical Society

White Mountains Holiday, Printed brochure, 1945, Museum of the White Mountains, Gift of John and Anne Newton

Life on the Ice

Scott Crowder, **New England Pond Hockey Classic on Meredith Bay**, Digital photograph, 2010

Scott Crowder, **New England Pond Hockey Classic on Meredith Bay**, Digital photograph, 2020

Scott Crowder, **New England Pond Hockey Classic on Lake Waukewan**, Digital photograph, 2016

1st Annual Balsams Cup Snowmobile Races, Official Souvenir Program, Printed booklet, 1968, On loan from Colebrook Historical Society

CIVIC Magazine, **Jaycee Winter Carnival Highlights**, Printed magazine, 1975, On loan from Colebrook Historical Society

The Balsams Wilderness Ski Area Dixville Notch, New Hampshire, Brochure, c. 1980, Museum of the

White Mountains, Gift of Stephen and Gail Barba

Boston Globe Magazine, **Snowmobiles-A New Liberation**, Newspaper, 1966, On loan from Colebrook Historical Society

Change and Adaptation

Carold Nelson and David Batchlder **Ice Climbing in Huntington Ravine**, Digital photograph, 1983, On loan from Carold Nelson

Joe Klementovich, **Doug Madara Climbing Widow's Walk**, Photograph, 1998, On loan from Joe Klementovich

Joe Klementovich, **Kelsey Rex Climbing Standard Route**, Digital photograph, 2024

Shifting Technologies

Snowshoes, Bent wood, rawhide, and metal nails, c. 1900, On loan from the Mt. Kearsarge Indian Museum

Snowshoes, Bent wood, rawhide, synthetic strapping, and metal crampon, mid-20th century, On loan from Peter Crane

Snowshoes, Aluminum tubing, plastic, webbing, c. 1990, On loan from a private collector

Snowshoes, Aluminum tubing, plastic, and webbing, c. 2015, On loan from a private collector

Snowshoes, Aluminum and plastic, 2023, On loan from a private collector

Guy Shorey, **Women Snowshoeing**, Black and white photographic print, c. 1900, Image reproduction from the Mount Washington Observatory, Guy L. Shorey Collection

Bienvenue aux Raquetteurs Pennant, Printed paper with pin, 1954, On loan from the Berlin and Coös Historical Society

Kilburn Brothers, **Winter Sports**, Stereoview,

c. 1865, Museum of the White Mountains, Gift of Dan Noel

Black Forest Enterprises Equipment Catalogue, Printed booklet, c. 1970, On loan from Peter Crane

Ski Hut Equipment Catalogue, Printed booklet, 1970-1971, On loan from Peter Crane

Photographer unknown, **Men from the Joliette Snowshoe Club**, Black and white photograph, n. d., On loan from the Berlin and Coös Historical Society

Le Joliette Patch, Felt, n. d., On loan from the Berlin and Coös Historical Society

Club Raquetteurs Joliette Membership Card, Printed card, 1977, On loan from the Berlin and Coös Historical Society

Union Americaine des Club de Raquetteurs Convention Annuelle Programme, Printed booklet, 1934-1935, On loan from the Berlin and Coös Historical Society

National Congress of Snowshoers Program, Printed booklet, 1971, On loan from the Berlin and Coös Historical Society

Perils of Winter

Unknown photographer, **Emergency Phone Located between Tuckerman Ravine and Harvard Cabin**, Photograph, c. 1960, On loan from the Swampy Paris Collection

Unknown photographer, **NH Fish & Game Officers and Volunteers in a Probe Line Searching for a Buried Avalanche Victim in Huntington Ravine**, Photograph, c. 1960, On loan from the Swampy Paris Collection

Unknown photographer, **NH Fish & Game Conservation Officers Gathering Equipment at Pinkham Notch Visitors Center**, Photograph, c. 1960, On loan from the Swampy Paris Collection

Joe Klementovich, **Avalanche Debris from a Wet Slab Avalanche in Tuckerman's Ravine**,

Digital photograph, 2018

Rescue beacon, On loan from International Mountain Climbing School

Snowshoes, Bent wood and hide, c. 1930, On loan from the Colebrook Historical Society

Unknown photographer, **USFS and Volunteers Evacuating an Injured Skier out of Tuckerman Ravine, Mount Washington**, Photograph, c. 1950, On loan from the Swampy Paris Collection

Unknown photographer, **Henry "Swampy" Paris Skiing an Injured Skier out from Hermit Lake**, Photograph, c. 1950, On loan from the Swampy Paris Collection

Artists in Winter

Jasper Cropsey, **Winter Scene, North Conway, NH**, Oil on canvas, 1859, On loan from Robert Cram and Michael Mooney

Harrison Bird Brown, **Mts. Jefferson and Adams from the Glen**, Oil on canvas, 1861, On loan from P. Andrews and Linda McLane

Eric Koeppel, **Sunrise on the First Snow**, Oil on canvas, 2024

Rebecca Klementovich, **Tuckerman Ravine is a Glacial Ride**, Acrylic on canvas, 2024

A Century of Ski Jumping

Edited by Joe Klementovich, **100 Years of Ski Jumping**, Video, 2:03, Footage provided by the Berlin and Coös Historical Society, Cooper Dodds, Scott Halvorson, HEB Engineering, Redbull

Unknown photographer, **Crowd at Nansen Ski Jump**, Black and white photograph, 1938, On loan from the Berlin and Coös Historical Society

Unknown photographer, **Eastern Ski Jumping Event, Digital photograph**, January 23, 2022, Courtesy of the Associated Press

Unknown photographer, **Eastern Ski Jumping Event**, Digital photograph, January 23, 2022, Courtesy of the Associated Press

Guy Shorey, **Ski Jumping in the White Mountains**, Black and white photograph, c. 1925, Image reproduction from the Mount Washington Observatory, Guy L. Shorey Collection

Revival of Winter Carnival

Unknown artist, **Pair of Skis**, Wood, leather, and metal, c. 1870, On loan from Gorham Historical Society

Unknown artist, **Winter Carnival Berlin, N. H.**, Two color print, 1923, On loan from the Berlin and Coös Historical Society

Unknown artist, **Nansen Ski Club Winter Carnival**, Poster, 2024, On loan from Berlin and Coös Historical Society

Unknown photographer, **Dog Sled Races**, Black and white photograph, c. 1970, On loan from the Colebrook Historical Society

Unknown photographer, **Dog Sled Races**, Black and white photograph, c. 1950, On loan from the Colebrook Historical Society

Unknown photographer, **Silver Bunnell and his Sled Dogs**, Black and white photograph, c. 1920, On loan from the Colebrook Historical Society

Guy Shorey, **White Mountain Winter Carnival, Postcard**, 1921, Museum of the White Mountains, Gift of John and Anne Newton

Gorham Carnival Association, **Dog Team Race Prize Cup won by D. P. Brown February 8, 1921, Henri Skeen Driver**, Pewter, 1921, On loan from the Gorham Historical Society

Gorham Winter Carnival Program, Printed booklet, 1921, On loan from the Gorham Historical Society

Guy Shorey, **Sled Dog at Berlin Winter Carnival**, Black and white photograph, 1924, Image

Reproduction from the Mount Washington Observatory, Guy L. Shorey Collection

Berlin Winter Carnival Program, Printed booklet, 1922, On loan from the the Berlin and Coös Historical Society

Berlin Winter Carnival Scrapbook, Scrapbook and photo album, 1922, On loan from the Berlin and Coös Historical Society

Guy Shorey, **The Gorham Winter Carnival**, Postcard, c. 1920, Museum of the White Mountains, Gift of John and Anne Newton

Polar Training Grounds

Harper's Weekly, **Mount Washington**, Newspaper print, January 14, 1882, Museum of the White Mountains, Gift of Nancy T. Block

Chick and Andrews, **Mount Washington in Winter**, H. O. Houghton Company, Printed book, 1871, Museum of the White Mountains, Gift of Dan Noel

Unknown photographer, **Ski & Sky**, Black and white photograph, c. 1930, Museum of the White Mountains, Gift of Laurence and Judith Webster

Clough & Kimball, **Summit Mt. Washington, Winter of 1870-1871**, Stereoview, 1870, Museum of the White Mountain, Gift of Dan Noel

Clough & Kimball, **Tip Top and Summit Houses**, Stereoview, 1870, Museum of the White Mountains, Gift of Dan Noel

Clough & Kimball, **Tip Top House, Frost Two Feet Thick**, Stereoview, 1870, Museum of the White Mountains, Gift of Dan Noel

Hunting's Studio, **Chinook on Mt. Washington N. H.**, Postcard, c. 1927, Museum of the White Mountains, Gift of Laurence and Judith Webster

Hunting's Studio, **A. T. Walden and his Dog Sled Team on Mt. Washington N. H. No. 3**, Postcard, c. 1927, Museum of the White Mountains, Gift of Laurence and Judith Webster

Hunting's Studio, **A. T. Walden and his Dog Sled Team on Mt. Washington N. H. No. 1**, Postcard, c. 1927, Museum of the White Mountains, Gift of Laurence and Judith Webster

Mrs. Clarks [sic] Mt. Washington Trip, On Top of Mt. Washington, Postcard, n. d., Museum of the White Mountains, Gift of Jon Fox

Byrd Antarctic Expedition Airplane, Black and white photograph, c. 1930, Museum of the White Mountains, Gift of Laurence and Judith Webster

Aerial View of South Pole from Airplane, Black and white photograph, c. 1930, Museum of the White Mountains, Gift of Laurence and Judith Webster

Après Ski?

Fischer Race Skis, On loan from Rodgers Ski and Sport

Sleigh Bells Ring

Benjamin Champney, **Winter Scene**, Oil on canvas, 1873, On loan from Michael Mooney and Robert Cram

Brad Washburn, **East of Mount Monroe**, Black and white aerial photograph, 1937, Museum of the White Mountains, Gift of Maurice and Diane LaRoche