



# We Must Take Action Regarding Climate Change

### BY PAUL HOPKINS, COCHAIR, CONSERVATION/EDUCATION

The Earth, our home, is under existential threat. Much of that threat is our own doing, related to the amount of carbon dioxide and other heat-trapping gases being released into the atmosphere as a result of human activities, particularly the use of fossil fuels for energy. There is an ambitious goal to achieve 50 percent "green energy" use by the end of this decade. If we don't meet or exceed this goal, we will face serious consequences as a result of the cascading effects of global warming.

All living things use the Earth's resources

and generate "waste" in the process. As it has developed, one species' waste is another species' resource in the web-of-life. This natural recycling process has evolved over vast expanses of time and ensures a "healthy" living environment for all living things. The web of life is complex and even convoluted, but can adapt to changes that occur very slowly.

Occasionally a species may generate waste that cannot be recycled by the existing web-oflife. When that happens, the change can drastically alter the web-of-life. Living organisms can alter the global environment to their detriment. It has happened before.

Life is believed to have first evolved about 4

CLIMATE CHANGE, TO PAGE 3



# **OUR MISSION**

On the (Muddy) Trails......

Getting Yourself Ready for Another Year of Biking in Changing Circumstances ......7

Spring (?) School.....

Where in the Whites?....

New Chapter Website....

COVID-19 and the AMC.....8

NH Forest Health Update.....10

NH Chapter AMC-100th Year

Want to Get Involved? .....12

Celebration.....

The Appalachian Mountain Club is the nation's oldest outdoor recreation and conservation organization, and promotes the protection, enjoyment, and understanding of the mountains, forests, waters and trails of the Appalachian region. AMC has more than 100,000 members, 16,000 volunteers, 450 full-time and seasonal staff. The New Hampshire Chapter is the second largest of the 12 Chapters within the Club.

VOLUME 46, NUMBER 2 SPRING 2020



# The Trail Less Taken—Outdoor **Adventures Near Home**

### BY BOB MCLAUGHLIN

We started this series of articles in the hope that it could encourage our readers to explore less known and less trafficked trails and locations. In the beginning our goals were to combat damage due to overuse of our more popular locations and to suggest alternatives where the peace of wilderness could still be found. Now, in the midst of the COVID-19 pandemic and the call for social distancing, there is more reason to seek trails less taken.



Photo by: Bob McLaughlin. There is no need to climb one of the high peaks to find great views. There may be one in your back yard!



## BY BOB MCLAUGHLIN

Through an unintended but fortunate coincidence, this issue of Mountain Passages is being published on the 50th anniversary of the first Earth Day in 1970.

It is easy to focus on the environmental challenges we currently face, such as invasive species and climate change. This issue has articles on both. However, this article focuses on the progress we have made since the first Earth Day and the programs to celebrate the 50th Anniversary in this age of social distancing, as well as the goals for the future. While there is clearly further work to be done. we should also acknowledge and celebrate what we have accomplished!

It is difficult to comprehend how serious the environmental issues facing the nation were in 1970.

For example, on June 22, 1969, the Cuyahoga River in Cleveland, Ohio, caught fire due to the high levels of pollution present in the water. The event was not considered newsworthy by the local papers because only \$50,000 in damage resulted, and besides, this was the 13th time the river had caught on fire in previous hundred years! However, the event caught the attention of Time magazine and the national newspapers and television networks and soon became a potent symbol of how degraded our environment had become.

In 1969, a blow out at a

well on a drilling platform off the California coast at Santa Barbara released more than three million gallons of oil, eventually creating an 800 square mile oil slick in the Pacific. Thousands of seabirds died as well as dolphins, sea lions and seals. Again, national media covered the disaster in detail, including President Nixon's visit to the spill site.

There were many other indications of environmental problems. In 1962, Rachel Carson published her landmark book, Silent Spring, which described the devastating impact of pesticide use, particularly DDT, on birds and other wildlife. Smog was a recognized problem caused by coal smoke or the interaction of nitrogen oxides and volatile organic compounds in the atmosphere. In 1966, a smog event in New York City resulted in the deaths of at least 169 people. Also, in 1966, the first alarms were

EARTH DAY, TO PAGE 5





This cartoon that appeared in the Pogo comic strip created by Walt Kelly became an icon of the Earth Day celebration.

# **Advertise Here to Reach Almost 15,000 Environmentally Active Outdoor Enthusiasts**

DEADLINE **ISSUE** Spring March 15 Summer May 15 Fall August 15 November 15 Winter

AD SIZE PRICE (per issue) 1/8 page 3.5"w x 2.5"h 1/4 page 3.5"w x 5"h \$160 7.5"w x 5"h \$250 1/2 page

20% Discount for advertising in six consecutive issues, with prepayment

For questions, or to submit ad: Advertising@amc-nh.org Please send ads as color PDF or jpeg high-resolution files, at correct size. Ads will appear in color in the on-line and print versions.

We reserve the right to refuse ads that are not related to the mission of AMC. We do not provide proofs and accept no liability for errors beyond the cost of the ad.

## **MOUNTAIN PASSAGES**

Volume 46, No. 2 Spring 2020

Mountain Passages is published four times a year by the New Hampshire Chapter of the Appalachian Mountain Club.

Submissions. Members may submit articles or photos (hi-res jpegs) to newsletter@amc-nh.org. Articles may be edited at the discretion of the editor to meet space and style requirements. Publication is on a space-available basis. While Mountain Passages does not pay for submissions; a byline or photo credit is given. Contact Mountain Passages for reprint permission.

Advertising. The AMC NH Chapter members enjoy the outdoors year-round by hiking, paddling, skiing, backpacking, climbing and biking and more.

For information and the Ad Rate Sheet, send an email to newsletter@amc-nh.org.

We reserve the right to refuse any submission, photo or advertising that is not consistent with the mission of the AMC

Address Changes. Address changes or other changes to your membership must be made through AMC Member Services at 10 City Square. Boston, MA 02129; 800-372-1758; outdoors.org/membercenter

Please note: Member address updates cannot be handled by AMC-NH officers, committee chairs, or the newsletter editor.

Mountain Passages Online. If you're receiving Mountain Passages through the mail, please consider signing up to get the electronic version instead.

You'll get added resources not available to print subscribers: direct links to emails, forms and online information, color photos, online registration forms.

To sign up, go to www.outdoors.org/ membercenter and set your AMC-NH Chapter newsletter preference to online.

Editors: Robert S. McLaughlin & Brett Billings newsletternh@amc-nh.org

Graphic Design: Jessica Clifford, Graphic Designer, Artist & Photographer. jess.amcnews@gmail.com

## CLIMATE CHANGE, FROM PAGE 1

billion years ago. At that time there was very little oxygen available and the web-of-life was based on anaerobic processes. Ultimately, some species, possibly cyanobacteria, evolved the ability to generate oxygen. The primitive oxygen generating molecule eventually developed to become chlorophyll. Chlorophyll, and its precursors, enabled the bacteria to harness the sun's energy and thereby flourish in great numbers. Their "waste" product was oxygen gas.

Oxygen was toxic to most of the existing organisms and the web-of-life in which they lived; but the organisms generating the oxygen were very tiny and the Earth is enormous. For a long time the oxygen was safely dispersed without ill effect.

However, given enough time, the collective effect of the generation of oxygen caused the Earth's oceans and atmosphere to become oxygenated (the Great Oxygenation Event), causing massive extinction.

Fortunately, some organisms had also developed the ability to detoxify oxygen and in fact use it to more efficiently generate energy. The distinction between aerobic and anaerobic organisms had been born. Aerobic organisms, including humans and all the plants and animals around us, went on to occupy the bulk of the planet, while anaerobes were relegated to the few niches where oxygen is not present in significant quantities.

Subsequently, the paleontological record reveals a number of extinction events, but except for the Great Oxygenation Event, none appear to be related to the actions of living organisms.

Leap forward to today and look at what is happening regarding the totality of the ways in which we humans live our lives.

In pre-industrial society, human and animal muscle were the main sources of energy. Even then human activities were causing a slow increase in the carbon dioxide levels in the atmosphere. However, in the 19th century, humans learned how to generate vast amounts of energy by burning fossil fuels, such as coal and later petroleum and natural gas. These fossil fuels were created millions of years ago and naturally sequestered carbon dioxide. These fuels are transformed into energy by burning, and one of the byproducts of combustion is carbon dioxide. While carbon dioxide is an essential component of the web-of-life, it is also a greenhouse gas.

We humans live everywhere on the planet in greater and greater numbers. Collectively, we use an enormous amount of fossil fuels, and the combustion generates an enormous amount of carbon dioxide waste. The Earth's natural systems can only recycle so much of that gas, and we humans are adding increasing amounts of carbon dioxide into the natural environment that cannot be recycled by natural processes. Since carbon dioxide is a greenhouse gas and its concentration in the atmosphere is increasing, the Earth is warming up. Ultimately there will be a profound change, and we humans are the change agent.

These changes are happening as you read, and the changes are fairly obvious. Global warming is indicated by the melting of the glaciers, polar ice caps, and permafrost. Scientists are telling us that the sixth mass extinction is underway partly as a result of the rapid warming.

The essential differences between us and the cyanobacteria of long ago are:

- We are aware that climate and environmental changes are occurring;
- We know we are causing

these changes;

- We can predict the likely outcome of these changes; and
- We can choose do something about it.

Greta Thunberg, a teenage Swedish schoolgirl whose singular "SKOLSTREJK FÖR KLIMATET" (school strike for climate), morphed into an international movement, in a speech before the U.N. General Assembly, said: "We are in the beginning of a mass extinction, and all you can talk about is money and fairy tales of eternal economic growth." The takeaway here is that the world economy, which has been built on the assumption of endless growth, cannot long continue, because the continued excess is rapidly degrading the planet and its ecosystems.

The intention of the Paris Global Climate Change Agreement is to limit the global temperature increase to less than 2 degrees Celsius (3.6 degrees Fahrenheit) and preferably to 1.5 degrees Celsius above preindustrial levels. In order to accomplish this goal by the end of this century, it will require a 7.6 percent reduction in greenhouse gas emissions every year starting immediately for a decade. This is to be completed by the year 2030.

Just how big is a 7.6 percent annual reduction for a decade? Let's assume that without a change in the source of energy, the level of greenhouse gas emissions is directly related to the level of global human industrialized activity. If you compute the final level of industrialized activity after reducing the current level of industrialized activity by 7.6 percent annually

over ten years, the future value after ten years is 45 percent.

The assumption and numbers of the above calculation show that the level of carbon dioxide emissions must be reduced by 45 percent from what it is today. This is consistent with the 50 percent "green" energy goal in the opening paragraph.

There are choices:

- 1. We can reduce the total level of industrialization to some prior amount;
- We can substitute "green" (non-carbon dioxide emitting) energy sources for fossil fuel energy sources;
- 3. We can develop methods to sequester some or all of the excess carbon dioxide gas generated; or
- 4. We can adopt some combination of reduction, substitution and sequestration.

The magnitude of the transformation is daunting, and will affect every aspect of our society, including political, business, and religious activities. World leaders must be goaded into action. We must continue what a Swedish teenage schoolgirl has started, and Take Action.

Do your part. Go to the AMC Club website, select Conservation and Take Action from the drop down menu. Select one or more of the featured items and send a message to elected officials or government agencies.

Go to the NH-Chapter conservation web page, amcnh. org/committees/conservation/, Click on the buttons for Transportation Initiatives and Earth Day.

Take Action.





### TRAIL LESS TAKEN. FROM PAGE 1

Rather than suggesting specific alternatives for hiking and other outdoor activities, we are suggesting alternatives to find your own trail less taken.

## Stay Local Challenge

Many think of traveling long distances for our outdoor activities, but in most cases that is not necessary. The COV-ID-19 concerns provide a good opportunity to explore places closer to home.

Explore your neighborhood: Take a map, preferably a topographical map, and draw a 3 mile circle around your home. For most areas in New Hampshire the circumference of the circle will contain multiple parks and open areas, and possibly other points of interest. Highlight these areas and plan outings to explore each. You can drive to the highlighted locations but it might be more fun to walk/hike to each. Keep a journal of your exploration and include photos.

Once you have explored all of the areas in within the 3-mile circumference, expand it to 4 miles and continue your exploration. If you are like me, you will be amazed at what you can find so close to home. I have explored old logging roads, tracked streams to their sources, observed wildlife I never see at

home, and found signs of former developments. While I live in Lincoln, NH, I suspect most of you will discover unsuspected treasures in the areas where you

Visit Nearby Parks and Reserves: For those who like to complete lists, including "peak-baggers" like me, you can complete lists of state parks and forest preserves ranked by order of distance from your home and visit each in order. You can find listings of state parks at the New Hampshire State Parks website (www.nhstateparks.org) and a listing of forest reserves at the Society for the Protection of New Hampshire Forests website (www.forestsociety.org). Another good source for information about forest reserves and parks in your area is provided by the Upper Valley Trail Alliance (www.trailfinder.info). You may be amazed what you will find.

Start a Nature Study of an Area in Your Neighborhood: We all can get enjoyment and satisfaction from learning more about the nature in an area near our homes. This activity can require some study, but many resources are online. It can also require some time, but isn't that what we have more of in the era of "stay at home" orders? Learning more about our local environment can be rewarding and intriguing. It can also be a great enrichment activity for



Photo by: Bob McLaughlin. New Hampshire is rich is wonderful places to visit. Find the ones where you live.

stay at home children!

First, select a physical area to focus on. The area should not be too big or too small, and should include a variety of habitats. Maybe something between an acre and five acres would work, particularly if it includes a forested area adjacent to a meadow. If it also includes a wetland or a marsh, that is a great bonus.

Second, pick out what you want to study. The possibilities are virtually endless. For example, what about:

• Recording birds you observe in your study area and tracking how they vary as the season progresses and at various times of day;

- Cataloging trees in the study area, when they leaf out and bloom, and how they vary in the different microenvironments of the area (e.g., on different slopes of the hill, at different distances from the woodland edge, or with different elevations); and
- Cataloging wildflowers as they bloom through the season. Again, you might want to record how they vary in different microclimates.

Whatever you choose to study, go about it in an organized way. Have a dedicated lab notebook, maintain a regular schedule, and take photos.

TRAIL LESS TAKEN, TO PAGE 5 (\*\*)





Photo by: Bob McLaughlin. When you are exploring your neighborhood, look for the small treasurers.

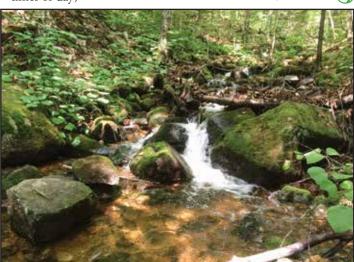


Photo by: Bob McLaughlin. Following a stream will sometimes lead you to beautiful places you will want to visit again.

## 衡 Trail Less Taken, from Page 4

This a great time to sharpen your identification skills or to begin the study if you are a novice. It is never too late to learn, and what you learn will enrich you for the rest of your life.

## Stay Safe Out There

Just as in everything else now, it is important that you take steps to stay safe wherever you are. Avoid crowded areas; if you get to your intended



destination, and you find the parking lot full and people milling around, go somewhere else. Observe social distancing, stay a full six feet from others and make sure your groups are less than 10, or better yet limited to your regular companions. This is not the time for strenuous adventures; you do not want to cause our emergency response personnel to spend time helping you if they are needed to help others suffering with COVID-19.

Finally, if you feel sick, stay home. You don't want to be responsible for infecting others.

Use this time to explore locally. You may find that you prefer the trail less traveled.



## EARTH DAY, FROM PAGE 2

raised regarding contamination of the environment with the various polychlorinated biphenyls (PCBs) which were widely used as insulating and cooling liquids in electrical equipment, hydraulic fluids, lubricants, cutting oils, and many other applications.

Suffice it to say, there were many environmental challenges facing the planet when the first Earth Day was held in 1970.

Senator Gaylord Nelson, a Democrat from Wisconsin, is generally recognized as the founder of Earth Day in 1970. On that first Earth Day, reportedly 20,000,000 Americans joined together for demonstrations and an environmental "teach in." About 2000 colleges and universities, 10,000 primary and secondary schools, and hundreds of communities throughout the United States participated. Among other things, the first Earth Day helped to create an umbrella national environmental movement joining all of the other environmental organizations. The first Earth Day also demonstrated the political power of the environmental protection movement.

Change then happened quickly:

- December 2, 1970, the US Environmental Protection Agency was created;
- December 31, 1970, the Clean Air Act was virtually completely rewritten to create the current structure of air pollution control in the United States;
- October 18, 1972, the Clean Water Act was rewritten to create the current structure for water pollution control in the United States;
- December 16, 1974, the Safe Drinking Water Act was passed;
- September 30, 1976, the Resource Conservation and Recovery Act regulating hazardous waste was passed;
- October 11, 1976, the Toxic Substances Control Act (TSCA) was passed which among other things, provided the regulatory structure for PCBs;
- December 10, 1980, the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA or Superfund) was passed to address existing hazardous

substance disposal sites; and

 October 17, 1986, the Emergency Planning and Community Right-To-Know Act was passed.

This is just a skeletal listing of the major federal environmental laws passed in the wake of the first Earth Day. Many other laws and substantial amendments followed which fine-tuned and expanded the initial regulatory requirements. While many of these laws might have been passed without Earth Day, there can be little argument that the focus on the environment fostered by Earth Day was a major factor.

Over the years, Earth Day has continued to expand its reach. It started in the United States, but now is celebrated globally in 193 countries through the Earth Day Network. The Earth Day Network has a website at <a href="https://www.earthday.org">www.earthday.org</a> that lists news and planned events as well as an extensive collection of feature articles worth exploring.

This year to mark the 50th anniversary of Earth Day, the Earth Day Network has identified Climate Action as its major theme. Originally,

many gatherings and activities were scheduled, but most, if not all, of these events have been cancelled in response the COVID-19 pandemic. However, observation of Earth Day will go on. If nothing else, get out and make the world a better place by cleaning up litter, limiting your waste, or even planting a garden. Remember, while Earth Day is important, it is just a day. We will only succeed if we make every day Earth Day.

This year is a year not only to observe Earth Day, but also to celebrate all that has been achieved, and all that can be achieved in the future.

# HAPPY EARTH DAY!



# On the (Muddy) Trails



Photo by: Richie Holstein. Bikes create long trenches through muddy spots on a trail and can create damage that is hard to repair.

BY RICHIE HOLSTEIN, CO-CHAIR, TRAILS

Mud season. Shoulder season. Preamble to blackfly season. That long, dark, tea time of the trail when the snow runs out, when the monorail narrows to a tightrope, when you start to go truly stir crazy.

As snowpack shrinks and rain arrives, it's pretty obvious how streams and rivers are affected: floods and near-floods. Trails are similar; below that crusty corn snow the ground is thawing from the top down and soaking up lots of water, often more than it can hold.

Walking or riding on supersaturated ground causes erosion and soil compaction. You'll see water squish up from the ground, creating new puddles where you walked or rode. What you may not notice is soil compaction. Soil compaction

Photo by: Richie Holstein. You can do more than make six inch deep foot prints on a muddy trail. You can lose your shoe in the mud and deal with it bare footed!

makes it harder for vegetation to grow and more difficult for soil to absorb water. In the long run, there will be increased flooding and additional erosion, leaving rocks and roots exposed.

The period of snow-melt and muddy trails varies considerably. It depends on soil composition, elevation, sunlight reaching the trail, depth of snowpack, and spring rainfall. In contrast to lower elevations, higher elevations in the mountains can remain cold, wet, snowy, and icy deep into spring and occasionally into summer.

Going around the wettest places in the trail bed contributes to widening the trails. Walking on the edges of trails tramples vegetation, causing more damage to both trail and environment.

Leave No Trace outdoor ethics prescribe traveling only along durable surfaces such as rock, gravel, snow, and hard, dry soil. You can turn around when you come upon a muddy section of trail! If you really can't resist the call of the trail, stick to low elevations and south-facing slopes and stay in the center of the trail no matter how muddy.

Finally, before you continue down a muddy trail, remember it's not just you out there. What happens when the next 100 hikers slog through the same mud? Trails can suffer major damage that can take years to repair.

For a list of muddy roads, see the WMUR TV web page of New Hampshire road closures:

www.wmur.com/article/ mud-season-has-arrived-in-nhworking-list-of-roads-closeddue-to-mud/26859348

You can find AMC Backcountry weather at: www.outdoors.org/outdooractivities/backcountry-weather

This site often shows road conditions leading to facilities as well as trail conditions. Similar notices of road closures and other mud season situations exist for Massachusetts, Vermont, and Maine. More trail conditions are posted on: <a href="https://www.newenglandtrailconditions.com/">www.newenglandtrailconditions.com/</a>

Think globally, hike and ride locally!

Would you like to learn more about keeping our trails in great shape? Get in touch with us via trailsnh@amc-nh.org to learn what's involved and to get involved!



Photo by: Richie Holstein. If you can rock hop, that is better than slogging through the mud. If you cannot rock hop, why not come back another day?



# Getting Yourself Ready for Another Year of Biking in Changing Circumstances

BY DORIA HARRIS, BIKING

All of the current AMC NH Bike Committee activities have been cancelled due to public health concerns regarding COVID-19 transmission. But that doesn't mean you should give up on biking this spring and summer.

Biking for Your Health and Enjoyment: Currently people are being encouraged to get out of doors for exercise and when doing so to practice safe social distancing. Biking solo or with your family is great way to enjoy the season. Recently, the roads have been a lot less crowded making biking more enjoyable.

Bike Maintenance: How's your bike? Are the tires soft? Chain rusty? Brakes need checking? Derailleur need adjusting? Although our Bike Maintenance Workshop has been cancelled, you can still do some basic work on your bike yourself. There are a lot of really useful *YouTube* videos available to coach you through basic bike maintenance procedures. I've

found the Park Tool videos particularly useful. Why not try them yourself?

Preparing for a Bike Tour: We are disappointed to cancel our Bike Overnight to Wilgus State Park planned for June 6-7. How about doing your own Bike Overnight? Gather your camping gear together, load and ride your bike, and then camp in your own back yard. If you find you can live off what's on your bike for 24 hours, good chances are you're packed appropriately for future touring.

We hope to be able to offer the Bike Maintenance Workshop and Bike Overnight as well as our day rides in the future. These activities will be posted on the AMC NH Activity Calendar when available. For details of the above activities go to: <a href="http://amc-nh.org/calendar/activites.php">http://amc-nh.org/calendar/activites.php</a>

Get out and ride, stay healthy, and enjoy the season.



Photo by: Doria Harris. Riders on the way to camp during the AMC Bike Overnight 2019. We will do it again!



Photo by: Doria Harris. Bike Leader Hiel Lindquist at the 2019 Bike Maintenance Workshop. This year's spring workshop has been cancelled.

# Spring (?) School

This year only, the NH Chapter's renowned Spring School has been rescheduled to the Fall. The "Spring" School is now planned for Friday, October 30 to Sunday, November 1, 2020.

We plan to hold the same great programs focusing on:

- Basics of Outdoor Safety;
- Map and Compass;
- Backpacking;
- Leadership and Mountain Skills; and
- Trail Work Instruction.

Join us then as we cover almost every aspect of safe three-season backcountry travel, designed for hikers of all levels! You will work with our very experienced volunteer instructors in small experiential learning groups who are all active

Registration is not open yet, but you can check the NH Chapter's website to register when available.



Photo by: Bob McLaughlin. Do you know what mountains these are and from what viewpoint the photo was taken?

Years ago Mountain Passages ran a regular feature entitled Views to Amuse. In Views to Amuse a photo was presented, and the reader was challenged to identify the location of the subject. With all of the current "stay at home" orders, it seems like a good time to revive the

concept behind Views to Amuse.

This time will be a little different though. Not only will you be challenged to identify the subject of the photo, but also the location from which it was taken. For example, a photo taken from the northern end of Franconia Notch might

be "photo of Cannon Mountain taken from Artist's Bluff." All of the photos will be of a location in the White Mountains.

For this issue's photo, describe:

- What mountains are in the photo; and
- From which mountain the photo was taken.

You can send your answers to WitWamcnh@gmail.com, and we will publish the first five correct answers received in the next issue of *Mountain Passages*.



# COVID-19 and the AMC

BE OUTDOORS staying close to home for now, with our collective health and wellbeing the highest priority.

In continued and evolving support of the national effort to control the spread of COVID-19, AMC encourages limiting outdoors engagement during this time to brief, local outings and backyard adventures, always keeping in compliance with state and federal stay-at-home guidance. Popular outdoor locations and facilities have recently been overrun with visitors, defeating the purpose of international social distancing protocols meant to minimize corona virus-related health risks.

In accordance with state and local mandates due to the current health risks inherent with large gatherings, AMC has taken the following measures:

- AMC LODGING: All operations (huts, lodges, camps, cabins, programs, etc.) are closed and all other AMC buildings are closed to the public at least through June 4, 2020. Staff presence is limited to 24-hour security detail.
- AMC ACTIVITIES: All staff-led AMC programs, trips, and activities have been canceled or postponed at least through June 4, 2020. Volunteer-led activities have been canceled at least through June 4. Please check the listings for updates as conditions may change.
- AMC STAFF & VOLUN-TEERS: All non-essential

AMC travel, in-person meetings, and gatherings have been canceled at least through May 4, 2020. AMC staff and volunteers are holding team and cross-team interactions digitally. A mandatory work from home policy for all non-essential employees is in effect. Within all jurisdictions now subject to statewide emergency stay-at-home orders, including our Massachusetts headquarters location and New Hampshire facilities, we are rigidly enforcing the full and unqualified closure of all AMC facilities to all persons at this time.

AMC remains committed to supporting individuals and families during this challenging time, and we are dedicated to continuing our mission of protecting and enjoying the outdoors to the fullest extent possible. Please stay connected with us via our website, <a href="www.outdoors.org">www.outdoors.org</a>, as well as Facebook, Twitter, and Instagram for suggestions on non-destination based activities.

AMC will continue to closely monitor this evolving situation, and we urge our staff, volunteers, guests, and program participants to do the same. We will provide ongoing facility, program, and activities updates and guidelines to promote safe actions during this time. Individuals should continue to consult the CDC for ongoing guidance and transmission prevention methods.



The New Hampshire Chapter website is being rebuilt from the ground up and will be switching to a new domain.

The old website is at <a href="https://www.amc-nh.org">www.amc-nh.org</a>; the new website is at <a href="https://www.amcnh.org">www.amcnh.org</a>. The difference in the web address is the hyphen is gone. Chapter emails will also be transitioning to the new domain name.

While the new website is still a work in progress, updates are not being made to the old website. Both websites are currently accessible, but you should go to the new

website <u>www.amcnh.org</u> for current information.

By the time you are reading this, we hope you will be able to find the current and back issues of *Mountain Passages* at www.amcnh.org/newsletter Please be patient during this transition. Once it is fully up and running, we think you will find the new website a great improvement.



# DOS & DONTS OF GETTING OUTSIDE SAFELY FROM nhpr

DO work in your garden, play with your kids in the yard or take up backyard birdwatching.

**DO** visit less-trafficked trails, parks and forests close to home - and discover new ones! Ask friends and family for recommendations or use a tool like Trail Finder.

**DO** take a bike ride, go for a run, walk around the neighborhood - by yourself or with others in your household. Enjoy the quiet or use the time to binge a new podcast.

**DO** find an online yoga class, dance party or workout and join in from the deck or in a quiet park - even if it's embarrassing!



**DON'T** try to complete your mountain climbing bucket list or tackle Tuckerman's for the first time! You could put yourself and rescue personnel at risk, and hospitals are already taxed.

DON'T visit state beaches, the Appalachian Trail or the White Mountain National Forest.

Many state parks remain open, but unstaffed - check for closures before you go, avoid crowded locations, obey restrictions and carry everything out with you.

DON'T keep meeting up with your running group or personal trainer, or attend other social fitness outings - even if no one seems sick and don't carpool with anyone not in your household.

> DON'T travel to outdoor destinations out of the state or country. Community transmission is real.



New Hampshire Public Radio is providing excellent coverage of New Hampshire in the COVID-19 era. In connection with this coverage they created this helpful "Dos and Don'ts" poster for outdoor activity during a pandemic. ©NHPR

# NH Forest Health Update

### BY BRETT BILLINGS

Concord, NH—While many outdoor enthusiasts have struggled to access nature amid the ongoing stay-at-home orders in response to the new coronavirus, New Hampshire forests have been struggling with health concerns of their own.

Each year, the NH Division of Forest and Lands posts a Forest Damage Map, and in the past decade, insects and fungi caused the most damage to forests outside of the White Mountains.

"WE'RE HOPING
FOR FORESTERS
TO SEE TRENDS...
OR FOR WHAT
THEY CAN DO
ON THEIR LANDS
TO MINIMIZE
THE IMPACT
OF DAMAGE."

Kyle Lombard, Forest Health Program Coordinator for the Division said.

But what these maps measure may not be the biggest cause of damage to NH forests. In Lombard's experience, the most damage has likely come from changes in hydrology, or the movement of water in relation to land. "But we don't map that — we don't want it to be noise in our dataset," Lombard said. "We would literally be too busy to map anything else." When high water or flooding is mapped, "It would've had to have been pretty substantial."

The damage to NH forests changes each year, and the interplay between insects, disease, weather, and humans makes finding clear answers difficult. When forests are damaged, finding a single cause is often hard to do, and often, damage rarely happens to just one species of tree. "New Hampshire forests are so mixed nowadays, it's really hard to tell and label it from far away," Lombard said.

The mapping mostly happens from the air. With the help of civil air patrol, forest specialists from the division electronically map damaged trees from the air, and follow-up surveys usually happen on the ground to determine specific pests, causes, and hosts.

Insects have caused the lion's share of harm in the state since 2010. Forest Tent Caterpillars and Balsam Woolly Adelgids have harmed the most acres in the state, but recently, Emerald Ash Borers have boomed - up to 3,262 acres since 2016. A joint quarantine on Emerald Ash Borers from the NH Division of Forests and Lands and the NH Division of Plant Industry was lifted in 2018 because the insect is so thoroughly entrenched in the Granite State.

Another joint quarantine was lifted that same year for Hemlock Woolly Adelgid, another insect that has become well-established in the state. But one quarantine that has remained in effect since its adoption in 2011 has been the ban on bringing firewood into the state.

In the past decade, fungi have also caused significant damage to NH forests, and warmer and wetter springs have contributed to increased White Pine Needle Blight, a disease likely caused by four or more different fungi. Septoria Leaf Spot and Anthracnose, both fungal diseases, have affected swaths of forest in the state.

These warmer and wetter springs also contribute to increased seed production in some trees, so much so that the extra seeds effectively defoliate the trees - taking energy away from the tree's ability to produce leaves. While this is happening in only a small sliver of acreage in NH, it's a sign of stress. "Typically, a stressed tree will put out more seed, because it wants the species to survive, should it die" says Jen Weimer, a Forest Health Specialist with the Division. "There's some level of normalcy there, but it's something that's picked up."

There is a silver lining though: Forests adapt. "Most of the acres you have all this mortality on recovers or has a new healthy forest growing in its place," Lombard said.

Keep in mind as you explore NH forests:

- Learn to identify trees and pests that harm them
- Report suspected tree and insect damage
- Clean your hiking shoes before exploring a new forest
- Wear clean clothes before exploring a new forest, especially in spring

Recommendations for firewood movement within NH (from NHBugs.org):

- Use locally-sourced firewood—buy it where you burn it!
- Buy or gather firewood near your destination, and only what you will use on your trip.
- When you buy firewood locally, get a receipt.
- Burn all firewood to completion before you leave; don't take it to your next destination or leave it for the next person.
- Tell your friends about the risks of traveling with firewood
   no one wants to be responsible for starting a new pest infestation.

Keep in mind AMC's guidance (as of April 22) as you explore NH forests:

- Limit outdoor engagement to brief, local outings and backyard adventures.
- Stay in compliance with federal and state stay-at-home guidance/orders.
- Observe social distancing with other when outdoors.



# NH Chapter AMC—100th Year Celebration

It is almost 2021. Help Us Plan Activities for Our 100th Year Anniversary of the NH Chapter of the AMC!

Almost 100 years ago, in 1921, the New Hampshire Chapter was created by the Appalachian Mountain Club. Originally identified as the Merrimack Valley Chapter, it officially changed its name to the New Hampshire Chapter to include all AMC members who lived in New Hampshire. This means that 2021 will be

the 100th anniversary of our Chapter.

This definitely calls for a celebration!

NH AMC Chapter Executive Committee is looking for individuals to join a planning committee that will organize activities to recognize the 100th anniversary of the chapter. These activities could include a special themed annual meeting, special educational sessions, conservation activities, hikes, paddles, ski trips, climbs, trail

work, bike rides or socials that commemorate of the 100th anniversary of the Chapter.

We are looking for ideas and plenty of them!

If you would like to join in this fun celebration call or email Rick Silverberg, AMC NH Chair, at (603) 455-9119 or rsilverberg54@gmail.com







## AMC NH EXECUTIVE COMMITTEE

Dick Silverhora	chairnh@amc-nh.org
Vice Chair	vicechairnh@amc-nh.org
Jim Kent	treasurernh@amc-nh.org
Kerry Landry Secretary	secretarynh@amc-nh.org
Debbie Marcus	bikenh@amc-nh.org
Hiel Lindquist	·
Paul Hopkins	tion .conservationnh@amc-nh.org
	excursionsnh@amc-nh.org
	membershipnh@amc-nh.org

<b>Mountaineering</b> Kathy Upton	mountaineeringnh@amc-nh.org
	newsletternh@amc-nh.org
Robert S. McLaug Jessica Clifford, E	hlin & Brett Billings, Editors Design & Layout
PaddlingRoscoe Diamond	
<b>Programs</b> Vacant	programsnh@amc-nh.org
	skinh@amc-nh.org Ierio Viti & Thor Smith
TrailsRichie Holstein &	trailsnh@amc-nh.org Bill Foster
Communications Christina Cozzen	communicationsnh@amc-nh.org s & Jen Kimball

Web Committeewebchairnh@amc-nh Paul Berry & Stephanie Howes	.org	
Young Members youngmembersnh@amc-nh Jamie Cullinane & Chelsea Tweed	.org	
<b>Past Chapter Chair</b> pastchairnh@amc-nh Frank Miller	.org	
<b>Regional Dir. NH/ME</b> regionaldirectornh@amc-nh John Mullens	Ŭ	
AMC NH Chapterwebsite: www.amcnh	.org	
Address changes and membership renewals:		

ddress changes and membership renewals.

AMC Member Services

10 City Square, Boston MA 02129
617-523-0636 or
www.outdoors.org/membercenter





Appalachian Mountain Club NH Chapter PO Box 1348 Lincoln, NH 03251

# 'Mountain Passages' is only the beginning...

From hiking to biking, AMC's New Hampshire chapter has it all. Visit our website at amc-nh.org and read more about us and our many year-round events.



Debbie Marcus, who formerly chaired the Programs Committee, has become the Chapter's Secretary. Because of the commitment serving as Secretary entails, Debbie has reluctantly decided she needs someone else to take over Programs.

The Programs Committee gets involved with all the other committees and supports their activities. Programs also schedules interesting speakers and programs at area libraries, and handles the details and hospitality of our Chapter's Annual Meeting.

The Programs Committee needs your help in executing the plans. Why not give it a try?

If you are interested, please contact Debbie at secretarynh@amc-nh.org, or Rick Silverberg at rsilverberg54@gmail.com.



