Merrymeeting News



The Newsletter of Friends of Merrymeeting Bay • PO Box 233 • Richmond Maine 04357 • 207-666-1118 • www.fomb.org

Friends of Merrymeeting Bay (FOMB) is a 501(c)(3) non-profit organization. Our mission is to preserve, protect, and improve the unique ecosystems of the Bay through:

Education

Conservation & Stewardship

Research & Advocacy

Member Events

Support comes from members' tax-deductible donations and gifts.

Merrymeeting News is published seasonally and is sent to FOMB members and other friends of the Bay. Article hyperlinks and color images are available online at: www.fomb.org

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Strategic Distancing (Then as Now)

This article, slightly edited, is reprinted from the Ft. Ticonderoga website where it was posted on March 30, 2020. The Fort was contacted for permission to use but did not respond, similarly to the experience of the Arnold Expedition Society who ran this in their spring newsletter. Further reading on smallpox in the Revolutionary War can be found on the Mt. Vernon and History.com websites.

The term social distancing is increasingly familiar to us in these times of anxiety over an infectious disease. The Continental Army in the summer of 1776 faced a similar issue, but with a more immediate and deadly threat. Smallpox, a virulent, painful, and extremely contagious disease, was the bane of the Continental Army heading into 1776. The mid-1770s saw an epidemic of smallpox that was exacerbated and spread by the movement of people as a result of the Revolutionary War. From Boston to the Pacific Ocean, smallpox ravaged the continent in the late 18th century.

One of most dangerous outbreaks came during the American invasion of Canada.

American authorities authorized an invasion of the colony of Québec in the summer of 1775, following the capture of Fort Ticonderoga, Crown Point, and their naval control of Lake Champlain.

After capturing St. Jean (St. Johns), Chambly, and Montréal, American troops were poised to conquer the colony and prepared for an attack on the capital, Québec city. The assault on the



Rumors of the Pox

city, in a blinding snowstorm on December 31, 1775, was a disaster. General Richard Montgomery, in overall command of the Continental forces, was killed almost instantly, Benedict Arnold was wounded, and many Americans were captured. The weary Americans, daily reduced in number by troops leaving for home at the end of the year, prepared for a long siege of the city with inadequate tools, artillery, and equipment.

Smallpox becomes the greater enemy

British reinforcements eventually relieved the besieged city in May of 1776 and in roughly two months the American forces were pushed back over 250 miles from the gates of Québec to the southern end of Lake Champlain. The retreat was harrowing, ill-equipped, and harried by British regulars. The American forces suffered immensely before consolidating at the old fortress of Crown Point in early July. Throughout the winter and the demoralizing retreat, it was not a human enemy that caused the most havoc and fear. John Adams wrote to his wife Abigail in June of 1776 and explained, "The Small Pox is ten times more terrible than Britons, Canadians, and Indians together."

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He explained to her that "This was the Cause of our precipitate Retreat from Quebec, this the Cause of our Disgraces at the Cedars." The Canadian campaign had brought soldiers together in close quarters from as far south as Virginia and as far north and east as Maine. In this dense and diverse human environment, the disease spread quickly among soldiers who had not received immunity by surviving a bout of the disease earlier in life. Rates of illness crept up to almost 50% of the American forces outside Québec by May, making them unable to resist the influx of Fresh British troops, even if they had the supplies, food, and clothing they needed. In their wake, the Americans left a trail of dead and dying men suffering from smallpox who could not match the speed of the withdrawal.

The disease spread in the American camps, and reinforcements joining the army were often disabled when they arrived and contracted the disease themselves. The horror of the epidemic peaked at Isle aux Noix in the Richelieu River, just north of Lake Champlain, where American forces consolidated before heading to Crown Point. The unhealthy, low-lying ground and the massive numbers of sick men combined in an excruciating scene of misery. Too many men to tend to, the rapid spread of the disease, and the hasty pace of retreat left men in agony, with scores dying daily and being hastily buried in mass graves.

Soldiers resort to risky self-inoculation

What was to be done? Americans knew about one possible solution: inoculation. Inoculation was a well-known treatment by 1776. By cutting the skin and inserting the contents of a smallpox sufferer's pustules, patients contracted a milder form of the disease and, when recovered, received the benefit of immunity, as if they had survived a full outbreak. The practice was well known and treatises on it went through multiple editions in both England and America by the time of the Revolutionary War. Despite its potential, inoculation was still dangerous. Poorly conducted inoculation could result in spreading the disease; those who were inoculated were incapacitated for weeks; and inoculation could still be deadly, if not to the same percentages as the full illness.



Dr. Jonathan Potts (1745-1781)Artist: Henry Benbridge (American) 1743-1812)
Art Institute Chicago

Inoculation was known as a potential way to protect large groups of people, like an army, from the deadly disease. Smallpox had broken out in Boston during the British occupation. The British army had higher rates of immunity within their ranks, due to endemic exposure to the disease in Great Britain, but General Howe had recommended that British soldiers who did not have immunity should be inoculated. While inoculation was not mandatory, troops who were being inoculated or didn't have immunity were segregated to prevent the spread of the disease and to preserve the fighting ability of the army.

Pennsylvanian Doctor Jonathan Potts, of the Continental Army in Canada, received orders from Brigadier General William Thompson to establish and direct a hospital at Sorel, Québec, where the Richelieu River empties into the St. Lawrence River. The American retreat from Canada happened quickly enough that deliberate steps to contain disease were hard to implement. Although the retreat from Québec removed American forces from Canada, Potts continued to tend to the sick of the army from his new post at Fort George where he executed General Gates' orders to distance the sick from the healthy troops.

Continental soldiers received no such orders and fear of smallpox drove many in the northern army to inoculate themselves and their comrades

over the winter of 1775–1776. Continental Army commanders quickly saw the situation getting out of hand. Between botched inoculations and disabled men who had been inoculated, more of the army was being incapacitated, precisely when they needed to preserve order. Orders were issued to the army prohibiting the practice. Throughout the spring these orders were repeated, with harsh punishments threatened, but as troops retreated and new men joined the army and witnessed the horrors of the disease, haphazard and uncoordinated inoculations continued.

By the beginning of July 1776, American forces had fallen back up Lake Champlain to Crown Point and searched for a place to make their stand against the British and the disease. The remarkable ability of the virus to survive on textiles and other surfaces meant that anywhere it had been was dangerous. The survival of smallpox was used to nefarious effect by British officials who infamously sought to spread the disease among Native populations through infected blankets. Stopping the spread of the disease meant getting susceptible people away from it; the Continental army needed to practice Strategic distancing.

Infected soldiers are isolated to preserve American forces

Knowing that almost anywhere soldiers went had the possibility to spread the virus, American forces, under command of General Horatio Gates, met at Crown Point on July 7, 1776 to discuss halting the retreat. They made the decision to make a stand at the narrow point in Lake Champlain where the LaChute River empties into it, particularly on the virgin east side of the lake, where no troops had been stationed. They resolved: "That it is prudent to retire immediately to the strong ground on the east side of the Lake opposite to Ticonderoga, with all the healthy and uninfected troops; and that the sick and infected with the smallpox be removed to Fort George, it appearing clearly to the Council that the post opposite to Ticonderoga will the most effectually secure the country, and removing the infected with the small-pox obviate every objection that may at present retard the Militia (ordered by Congress) from joining the Army."

By moving the army to Ticonderoga and its eastern shore counterpart (soon to be known as Mount Independence) the army sought to avoid a contagious location. It further separated its already sick men by sending them further south to Fort George at the lower end of Lake George. There, away from the main body of troops, but close enough to re-join the army quickly, the worst cases could recover. The disease continued to afflict the army, but calculated and systematic decisions to move to uninfected areas and formally segregate ill troops may have saved the American Revolution. By late summer, smallpox was reduced in its virulence across the entire army. Edmund Munro, arriving in



Winter and smallpox hit the Continental Army at Valley Forge

August from Lexington, MA with militia to reinforce Ticonderoga, was able to report to his wife that, "there is none sick of the small Pox & it is thought there is no Danger."

Later General George Washington would introduce large-scale inoculation to the entire Continental Army. To be most effective and to preserve fighting capabilities, inoculation needed to be conducted in a systemic fashion, not in the haphazard way it was being conducted in Canada in late 1775 and 1776. But the strategic distancing practiced by General Gates in July of 1776 preserved the integrity of the northern army. By October, when the British advanced up the Lake, American soldiers sent to the hospital at Lake George mustered the strength to rejoin the army at Ticonderoga, which had swelled to over 10,000 men.

The American troops at Ticonderoga in the summer of 1776 may not have defeated smallpox, but by taking careful, and calculated steps, they mitigated its most harmful effects, preserving their ability to fight. This was a critical step for the American Revolution, allowing troops to resist the British advance in October and preserving the army as a fighting force. Many in the army might have echoed John Adams, who in his letters to Abigail reiterated his hope and perseverance in the face of infectious disease and military defeat: "these Reverses of Fortune don't discourage me. It was natural to expect them, and We ought to be prepared in our Minds for greater Changes, and more melancholly Scenes still. It is an animating Cause, and brave Spirits are not subdued with Difficulties."

Fifty Activities Kids Can Do at Home

COVID-19 has changed the way our schools operate. Many students are only going to classes part of the time and studying at home the rest of the time, while some students are just learning from home.

Our popular FOMB education programs ,both in-school and Bay Days, remain on hold as we do our part to stem the spread of corona virus.

Offered here are 50 environmental learning activities students can do from home. To take full advantage of the many hyperlinks in this resource, please bring up our newsletter on line at www.fomb.org.

Learn about solutions to climate change

- 1. Become energy waste detectives by using our citizen's guide to reducing energy waste.
- 2. Make a challenge to keep unused lights off in your house.
- 3. Make your own wind turbine and learn about the power of offshore wind.
- 4. Make your own solar oven from a pizza box and find out how using solar power could make your community healthier and cleaner.
- 5. Calculate your family's carbon footprint.
- 6. Make videos in support of moving our country to 100% renewable energy. Post the video and tag your elected officials on social media.
- 7. Learn about the impact of transportation on our climate. Make a plan for how to incorporate more walking and biking into your family's daily life -- and more public transit once we get past "social distancing."

Learn about ways to reduce waste

- 8. Watch The Story of Stuff and clean out your junk and look for treasures.
- 9. Measure your weekly trash output. Make a plan to reduce your family's waste by 25% by the time school starts.

- 10. Make a pledge to reduce your plastic use and create an online challenge with your friends.
- 11. Reduce food waste by reorganizing your fridge.
- 12. Make a compost bin for your kitchen.
- 13. Make your own reusable bag from old t-shirts.
- 14. Make your own produce bag for fruits and vegetables.
- 15. Make reusable food wraps from beeswax.
- 16. Try to repair something -- whether a toy, gadget or a picture frame, there are instructions to fix anything on YouTube. Discuss how repair cuts waste while you fix your item.
- 17. Make art out of your trash and then have an art show at home.
- 18. Make crafts out of plastic bottles.
- 19. Upcycle styrofoam with these craft ideas.
- 20. Write a letter to your member of Congress to support the Break Free from Plastic Act of 2020, to reduce single-use plastic and packaging nationally.

Learn about plants

- 21. Learn about the earth, trees, and plants.
- 22. Learn about the rainforest and then make a terrarium.
- 23. Make leaf rubbings on paper.
- 24. Create a self portrait out of leaves, sticks, and other foraged materials.
- 25. Learn how to plant a garden outdoors. If you are in Colorado, you can get your own bee friendly garden kit from Environment Colorado.
- 26. Or start an indoor container garden.
- 27. Make plantable seed paper from old paper scraps.
- 28. Make seed bombs to help bees and other pollinators
- 29. Play a game about where your food comes from.

Learn about waterways, parks, and conservation

- 30. Research waterways in your community and make a map of local rivers, lakes and streams.
- 31. Learn about water pollution through these activities.
- 32. Take a virtual tour of our parks, such as Yellowstone National Park!
- 33. Take a virtual dive in the Florida Keys or one of our other marine sanctuaries.
- 34. Learn about glaciers and write a story or draw a picture about them.
- 35. Learn about healthy soils.
- 36. Take action to support the Land and Water Conservation Fund, which is the nation's most successful federal land conservation and recreation program. (You can send the email or use it as a template for a letter to Congress.)

Learn about and protect birds, bees, and other wildlife

- 37. Learn about how animals camouflage themselves. Play hide and seek inside based on what you learn!
- 38. Learn about birding.
- 39. Make a bird feeder out of an apple, peanut butter and birdseed.
- 40. Turn a milk or juice carton into a bird feeder.
- 41. Build an insect hotel.
- 42. Read the book Myrtle the Turtle and discuss the impacts of plastic waste on our planet
- 43. Make a mason bee home
- 44. Make up a song about protecting animals in your hometown from pollution.
- 45. Draw pictures of your favorite animals that need greater protections, such as bees, sea turtles and orcas. Post the pictures to social media and tag your elected officials.

Create a healthier home and community

- 46. Create an environmental scavenger hunt. Adapt it to your own home or backyard.
- 47. Write a letter to your school district asking them to adopt electric school buses.
- 48. Go for a hike and teach your children about park trail stewardship.
- 49. Download the Wow in the World kids podcast and discuss the topics after each episode.
- 50. Organize a family litter patrol. Get gloves and/or pick-up tools and pick up trash if you go on walks at a nearby park.

Author: Megan Severson

State Director, Wisconsin Environment

Megan is the state director for Wisconsin Environment. She has recruited and trained dozens of organizers and worked for years to implement the field strategy that helped to win the Clean Power Plan. Megan lives in Madison, Wis., and spends much of her free time at her family's farm along the Mississippi River, where she enjoys hiking, swimming, hunting and skiing.



Be a friend of the Bay—make art!

Volunteering in the Age of COVID-19

While our education programs remain mostly on hiatus, important outdoor work goes on in research, advocacy, land conservation and in maintaining the currency of our internet presence, all situations where virus precautions are simple to maintain. Activities include: Androscoggin shad population assessment proximal to the Brunswick dam, water quality monitoring and sample processing, lower Androscoggin upgrade proposal efforts, work on enhanced and updated Bay Site Directory for educational activities and outings, easement monitoring, Chops tower CMP lawsuit, conservation land acquisition and restoration.

Thanks to summer volunteers in these areas!

Research & Advocacy: John Lichter, Tom Hughes, Becky Bowes, Charlie Spies, Helen Watts, Phil Brzozowski, Chuck Dyke, Jeff Sebell, Kathleen McGee, Kermit Smyth, Colleen Moore, Ed Friedman & Dave Mention.

Land Conservation: Stephanie Donaldson, Linda Lee, Colleen Moore, Kermit Smyth, Betsy Ham, Ed Friedman, Warren Whitney, Tom Gilbert, Bob Weggel, Kent Cooper & Steve Eagles.

Education: Terry Porter

Web Work: Stan Moody & Martin McDonough

Newsletter: Becky Bowes & Ed Friedman





John Lichter attempts to record shad below Brunswick on underwater video.

Becky Bowes gathers water samples on the Androscoggin. Kermit Smyth practices COVID-safe water sample processing outside the office...

...and COVID-safe bacteria detection inside.

Kermit eradicates invasive phragmites on the Abbagadassett.









Legal Update

CMP's tower lighting and radar at the Chops cause unacceptable harm and threat of harm to people and the environment. As expected, CMP has responded to our nuisance lawsuit with a Motion to Dismiss. Their Motion argues federal preemption (the FAA for lighting and FCC for microwaves) voids any complaint based on state laws. We disagree, and our response is due October 26. For latest court filings, please see second item down on the Legal page of our web Cybrary. To report tower lights on when there are no aircraft present, call the CMP Outage Line at 1-800-696-1000. Operators are trained to take your calls.



WE NEED YOU! PLEASE SUPPORT OUR IMPORTANT WORK

FOMB Leadership

Our accomplishments are due to the hard work of dedicated volunteers, especially those who serve on our committees. If you want to get involved and serve, please contact the committee chair or Ed Friedman. We always welcome member input and we'd love for you to join us!

Steering Committee

Ed Friedman, Chair (Bowdoinham)
Vance Stephenson, Treasurer (Kettering, OH)
Tom Walling, Secretary (Bowdoinham)
Simon Beirne (Gardiner)
Becky Bowes (Brunswick)
Phil Brzozowski (Brunswick)
Nate Gray (Vassalboro)

Education Committee

Betsy Steen, Co-Chair, 666-3468 Tom Walling, Co-Chair, 666-5837

Conservation and Stewardship Committee Chair Vacancy

Membership and Fundraising Committee Nate Gray, Chair, 446-8870

Research and Advocacy Committee Ed Friedman, Chair, 666-3372

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Thanks to Rebecca Bowes for newsletter layout.



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