

ATTLEBORO LAND TRUST NEWS

July 2021

A Monthly Newsletter on Outdoor Adventure, Conservation and History

A publication with Attleboro High School Collaboration

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Summer at the Attleboro Land Trust

While many are enjoying the summer school vacation and warmer weather, the Land Trust is busier than ever. Plants and the grass are growing, It is a full-time effort to keep the trails clear and the properties, particularly the Richardson Nature Preserve with its fields and lawns, mowed and cleared for all our visitors. The Colonial Garden and the Attleboro Community Garden are both growing well. We are trying to cull back the “invasives” on our properties thanks to the work of our Terra Corps member Evan and his volunteer mid-week “work parties”. We are thankful that much progress has been made.

We are now planning for our work with the Attleboro High School “School to Career” program students with whom we have been working for several years. It will be good to interact with the students again after losing last year. This program starts in early July and runs for five weeks.

Hike Attleboro Day will take place on July 17, with the main hub being the Richardson Nature Preserve venue and going on at all our properties that have trails as well as City and Audubon sites. See the included article on page 3.

When you have the opportunity, come out and explore our properties. The fairy houses at Richardson Preserve beckon; the swans have cygnets and there are ducklings at Larson Woodlands; birds are plentiful at both Nickerson and Lawrence Preserves where you can hear their songs when you quietly stop and listen; the big rock at Leach Sanctuary awaits your visit, while Coleman Reservation and Vaughn Forest offer many wonders along the trails. We have a new property and trails opening up soon. See you there.

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<https://www.youtube.com/channel/UCUAeg-BwaBICy-HuIXd2lrg>

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All of Attleboro to Get Involved on Hike Attleboro Day July 17th!

The entire City of Attleboro is set to get involved when the Hike Attleboro program has its official grand opening celebration on July 17th! Local businesses, city agencies, conservation-focused and other organizations and, of course, hikers from around the area will mark a turning point in a collaborative effort by Attleboro's three major open space landowners to promote Attleboro as a green city open to outdoor enthusiasts. The Attleboro Land Trust will be hosting the start of the event at the Richardson Preserve beginning at 9 am and hikers will be urged to fan out amongst eleven Hike Attleboro locations owned by the Land Trust, the City of Attleboro, and the Massachusetts Audubon Society and suitable for hiking as part of the Hike Attleboro network.

Local businesses that offer refreshments and nature-oriented products are ready to welcome hikers in the Park Street area, nearby Oak Hill Avenue and Downtown Attleboro. How would you like to sample some delicious **Bliss Dairy** Ice Cream? The Park Street located summer refuge will offer free gift certificates to those who visit the Richardson Preserve. **Seven Arrows Farm** and **Evergreen Nursery** on Oak Hill Avenue are also sponsoring as well as the **Brigg's Corner Store**, **Liston Portables**, **Citiworks Fencing** and **Pleasant Printing**. You can also visit the other five preserves located in the Park Street area: Audubon's Oak Knoll and Attleboro Springs, the Land Trust's Colman Preserve and Vaughan Preserve, and the City's Handy Street Conservation Area.

THE CITY OF ATTLEBORO, ATTLEBORO LAND TRUST AND MASS AUDUBON INVITE YOU TO CELEBRATE AND EXPLORE THE CITY'S TRAILS, GREEN SPACES AND SPECIAL PLACES

HIKE ATTLEBORO DAY



selfie scavenger hunt

miles of trails

wildlife

SATURDAY, JULY 17

FREE AND OPEN TO ALL

VISIT WWW.HIKEATTLEBORO.ORG FOR FULL EVENT SCHEDULE

Attleboro Garden Club as well as other groups. **Mayor Paul Heroux** and other dignitaries will be speaking at Richardson at 10:30 AM to highlight the wonders of Attleboro that are being featured now and into the future as Attleboro develops as a green-friendly city. For those who cannot attend in person, the talks will be live-streamed thanks to the live-streaming services of **Stanetsky Memorial Chapel** in Canton.

Visit Hikeattleboro.org for event and scavenger hunt details. We hope you will join us and share in some spirited summertime hiking at the numerous trail systems Attleboro has to offer on July 17th and all summer long. Do not forget to show your support by purchasing a brilliant green Hike Attleboro T-Shirt at the event!!!

Brian Hatch

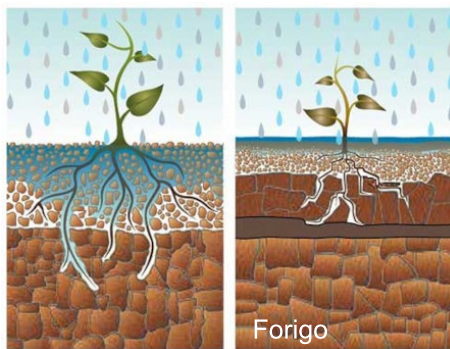


DROUGHT 2020 by Phil Boucher

It is easy to be lulled into believing that we have turned the corner on the severe drought of 2020. We have had to date what would seem to be sufficient rainfall to counter the few days of high heat and a little dryness this spring. We can certainly feel relieved when we observe the events unfolding in the far west again this year. Hopefully, our relief will not be short-lived but there are several things for us to consider.

If you have specimen landscape trees or some ornamental plants that are important to the property, there are things to consider now before extreme heat develops. The severe aspects of the drought that we experienced can have lasting effects that should be addressed soon. High heat events now may expose the problems that can be easily seen and corrected. Most problems of trees and plants occur from insufficient water.

Here are some basics to consider when looking over your plants to determine their general health. Trees, like all living things, succumb in several separate ways. By looking at and knowing your plants or trees in general appearance and history, you may be able to diagnose a problem through the elimination of the three conditions presented. Consider if the general vigor of the plant has decreased? This can occur through disease or insect damage that can slowly deplete the plant's energy. There can be basic dysfunction where parts of the plant such as leaves or



Good Soil

Compact Soil

branches are not working properly. This can be due to root problems such as toxins in the soil like oil, leaching from cement foundations, build-up of salts or ice melt products or even severe soil compaction. Soil compaction creates a starvation situation where air and water are unavailable to the roots. Then perhaps the more obvious would be storm damage that has somehow structurally compromised the function of the plant in some way. This is just a basic list if you suspect something is not right with your plants and areas to ask questions about.

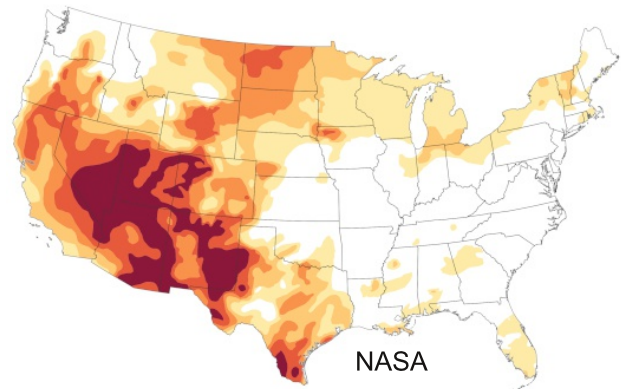
This year it will be very important to water your plants deeply during the summer months. Many of us may be looking at a two-year window to feel confident that the trees we value are doing well. Since we can not see into the ground, watering is the best thing we can do.

Since a lawn irrigation system is totally inadequate to water trees, here is the best and easiest method to consider. Using a garden hose turned on at low volume (about a quarter to one-third of the hose diameter) place the hose near the base of the tree. Over hours, move the hose around under the tree canopy. The objective is to go out to the drip line all around the tree. NOTE: The drip line is the full extent of the tree branches side to side. Consider that you are holding an umbrella upright in a rain event. As the rain begins to drip from the umbrella edge, that is the drip line. The root system of a tree goes from the trunk to the edge of its canopy. It may be beneficial to punch random holes under the canopy to ensure that the water can penetrate the ground. This process may have to be repeated a couple of times depending on the severity of the heat and dryness during the summer.

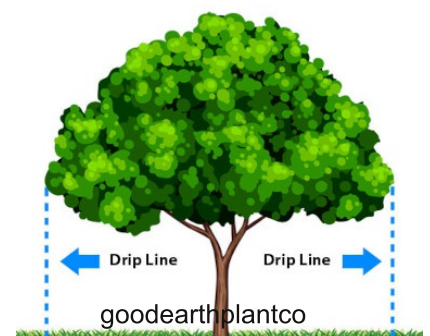
Please remember: Fertilizer provides elements, not energy. It is also not medicine for whatever you might suspect is wrong with your tree.

State/City Water Restriction:

<https://www.cityofattleboro.us/DocumentCenter/View/5393/State-Mandated-Water-Restrictions>



Spring 2021 drought



Attleboro Community Garden



***Ladybug
Release
2021
We're Free!***



Colonial Garden at Richardson Nature Preserve



Photos by Bill Lewis

The Attleboro Land Trust is looking for Supporters by becoming a member, making a Tax-Deductible Contribution and/or as a Conservation Volunteer. Membership, contributions or volunteering can be done securely at Attleborolandtrust.org or by mail at Attleboro Land Trust, P .O. Box 453, Attleboro, MA 02703. Thank you for your support.

Is Organic Really Better?

by Erica Donaruma & Kaleigh FitzGerald

For the past couple of years, more people have chosen organic foods within their daily consumption. According to the Organic Trade Association, in 2016 the average percentage of households throughout the country that purchased organic foods was 82%. In Massachusetts alone, it was 85%. The Organic market continues to grow day by day but what are the benefits and is it really better?



There are many benefits to organic foods like fewer pesticides, GMO-free and they also benefit animals. According to the USDA, a product can only be classified as organic if it is used with only natural pesticides. Organic foods are not pesticide-free but synthetic pesticide-free. Some pesticides do increase your risk of certain cancers and diseases. Also, to be classified as organic by the USDA, using genetically modified organisms (GMO's) in organic products is prohibited. Organic meats are made from animals that do not receive antibiotics or growth hormones and the animals are treated to be as if they are naturally in the wild. You may choose to purchase organic meats because you know you will not consume any unknown chemicals, drugs, or because the animals are raised better, but no evidence supports organic meat being a healthier food source for you.



There may not be much data on how much healthier organic foods are for you but there are ways to determine if purchasing organic foods and the reasoning behind it is better. Some people purchase organic meats because they do not support the abuse animals encounter compared to the organic animals. Someone who is not vegetarian but someday wants to be may show their support for animals by purchasing organic products over regular meats because of the way the animals are treated. Producing organic foods is also better for the environment compared to non-organic foods. Artificial and pesticide-ridden foods usually come with machines that pollute the air whereas natural organic foods do not pollute the environment as much. Farming with synthetic pesticides in the soil can also hurt the surrounding wildlife if they were to encounter it.

Aside from some of the benefits of organic foods, there are also some negatives like the cost, no solid evidence to prove that organic is healthier for you and the preservation life is short. Organic foods are pricier than non-organic due to more land being needed to grow organically. Also, the demand for organic foods has risen and is still growing so prices will keep increasing for organic foods. According to an article published by Harvard Medical School, there is no known nutritional advantage that organic foods have over non-organic foods. Organics also have a short shelf life because they do not have all the preservatives that other foods have which would cause families to have to spend more money more frequently.

So, is organic food better? Answers to this question will vary person by person because it comes down to what every individual wants to consume. Some people like to consume products that are deemed natural and non-artificial, and others do not want to spend extra money on something that has no proof to nutritionally benefit their body.



WOODLANDS – INVASIVES AT WORK by Phil Boucher

Since the arrival of Europeans in the 1600s, mature forests and woodlands no longer exist in our corner of Massachusetts. The timber was clear-cut to create open agricultural space for food and animal production. For about 250 years agriculture was at its pinnacle as the area grew. Our own Bristol County was once a major vegetable producer with its long growing season influenced by soils and the warmth of nearby saltwater bays. As the early 1900s saw a steep decline in agricultural activity, the once cleared land, through natural succession, began to regenerate back to the woody state.



Red Cedar

It is said that Nature abhors a void, whereby it quickly fills in any resting or open land. Natural habitat succession in this area first starts with weeds and then to shrubs, Red Cedar and wild Cherry trees which are referred to as pioneer plants. Then white pines, oaks, birch and maples begin to develop a strong presence and shade out the subordinate plants progressing toward a mixed climax woodland that has mature trees and a diverse vibrant understory. Nature's process favors the indigenous plant species to find their proper place in an ecosystem.



Euonymus Alatus

Most Land Trust properties are made up of second and even third-growth trees that are transitioning to mixed hardwoods. Not all have substantial upland, so the moist, shallow soils and increased shade form a woodland that is far slower to develop with significant problems of stability and long-term durability.

Primary succession has now taken a new twist with the introduction of invasive plants. No open or resting piece of land is safe from incursion by these highly successful and competitive plants. Many of the ornamental plants used in the landscapes arrived because they were so successful elsewhere. Examples are the fragrant multiflora rose and euonymus (Burning Bush). Given that over 90% of all plants introduced into America are not to be considered invasive, the remaining percentage can be problematic as they invade any open space or woods at will.

The aggressive exotic plants exclude nearly all native plant material and add nothing to a greater desirable diversity of newly forming or established woodland. The crowding out of the native plants has brought natural succession to a halt as the colonies of invasive plants have the physiological abilities to make alterations to the water, soil and available growing space. Without some sort of human intervention, the balance is tilted away from native species and toward the invasive plants.

The abundance of invasive plants and the sheer number of seeds and seedlings they produce are very evident. How to successfully control them is the larger question. Coping with these exotic introductions as they blend in with our native species complicates the management situation and makes the hopes of success less secure. Keeping invasive plants out of conservation areas is required to decrease the loss of sensitive plant communities that may only exist in limited areas. A course of action to do nothing would be easiest but far too devastating for our environment and ultimately for our wildlife and ourselves.

Whether these plants were accidentally introduced by early Europeans for food or medicinal purposes or came to our shores for cattle or wildlife feed, erosion control or were deemed just too pretty to ignore, they are now here. It is a problem that is getting bigger year by year. We can not possibly eradicate all the offending plants but if we begin with protecting our most valued or significant properties, we will have a foothold for what will be a decade-long battle. Perhaps in no other way than in choosing a fight that we can win, can we expect success.



Multiflora Rose

If you do not wish to continue receiving this newsletter, send an email to ALToptout@gmail.com and include your email address. Bill Lewis, Editor

Protecting Crops and Plants from Weather, Animals, and Pollution

by Amy Portillo

People who farm or garden need to protect their crops from weather, animals and pollution. Various kinds of weather affect plant growth in numerous ways. The most obvious are the effects of heat on photosynthesis: in which plants use carbon dioxide to produce oxygen; and respiration: an opposite process in which plants use oxygen to produce carbon dioxide at night. The effect of temperature on plants varies widely and is influenced by factors such as exposure to sunlight, moisture, drainage, elevation, the difference between day and night temperatures, and proximity to surrounding rock structures. If extreme hot or freezing weather is the problem, insulate them with mulch and cover them with a row cloth to protect against dramatic temperature swings.



There is a chance that you have to protect your crops from animals. Animals always try to ruin your crops. Therefore, it is a good idea to protect them if you want to keep them growing. Fences are generally your best bet when it comes to protecting your vegetable garden from pests like rabbits and deer. To prevent burrowing animals, you will want to plant your fence into the ground as far down as one foot. If you have a rabbit problem, fences should be at least three feet high. Like fencing, plant coverings can work wonders. Of course, they will not do much for burrowing animals, but covering your vegetables in netting, garden fabric or even chicken wire can protect your beloved veggies from groundhogs, birds and squirrels.

Pollution is a widespread problem affecting the world as a whole. It comes in many forms including air, land, and water pollution and from a variety of sources including industry, commercial and transportation sectors. Air pollution comes from smokestacks at a factory, car exhaust or off-gassing from paint or plastic production. Some chemicals that affect the crops are carbon, sulfur and nitrogen oxides. When plants are exposed to these harmful chemicals, some damages are stunted plant growth, change in color, etc. Another type of pollution is land or soil pollution. Land or soil pollution comes from improper waste disposal,



like oil spills, landfills, pesticides, or sometimes illegal dumping leaving toxic chemicals in the soil making crops not being able to grow or be eaten. The last pollution is water pollution. Watering plants is very important but using contaminated water is very bad for your crops. Sometimes there is an excess of nutrients in the water that causes an excess in plant growth. Other times this excess in nutrients in the water causes a fluctuation in acidity that damages or kills the plant.

To get plants to grow fully due to problems with animals, pollution and bad weather, it is always important to keep your crops safe, in a good environment and using safe substances on them.



Watch and Learn! YouTube Channel by Evan Foster



Interview with Nick Wyllie

I am officially announcing the Attleboro Land Trust's newly formed YouTube channel (@AttleboroLandTrust) where we will post videos related to the Land Trust's work. Please subscribe to our channel to help us reach our goal of reaching 100 subscribers! It is as simple as clicking on the link above and clicking on the "Subscribe" button in the top right corner. We thank you in advance for your support!

Currently, there are two playlists uploaded to the YouTube channel. The first playlist is "Learn about Land Conservation with the Attleboro Land Trust", which includes interviews with various ALT board members along with other land conservation-focused groups that exist in Attleboro. Some of these groups include Mass Audubon, the City of Attleboro and Friends of the Ten Mile and Bucklin Brook. By watching these presentations, you will gain a better understanding of the work that these organizations are doing and ways that you can get involved. If you enjoy using open spaces like walking or hiking trails, then I highly recommend watching these presentations to learn more about how these open spaces are created and protected. Another important aspect of this work is volunteers! Volunteer opportunities are occurring weekly, and all the organizations listed above need more volunteers to assist with their projects. One opportunity that I would like to highlight is the "weekly work party" with the Attleboro Land Trust on Wednesdays from 9 am to 12 pm. If you are interested in getting the weekly email that outlines the location and details for the work parties, please send an email to evanfosterALT@gmail.com and indicate that you are interested in the "weekly work party". The events will also be posted to the Attleboro Land Trust website. We look forward to meeting you!

The second playlist uploaded to our YouTube channel is called "ALT Educational Videos". These videos are great resources to learn about different topics related to the natural world and outdoor recreation. Some of the topics include the "Difference between Fungi and Lichens", "How Trees Survive the Winter", and "How to Properly Dress for Winter Conditions". These short videos only take 2-3 minutes to watch and contain an immense amount of information that you will have with you when adventuring in the backcountry. Have you ever wondered why trees lose their leaves or why lichen can live on barren surfaces like rock faces or what layer is best for certain winter conditions? If you answered yes to any of these then these videos are perfect for you! We hope that you enjoy them!

To access these playlists, please click on the link at the beginning of this article. Once the ALT YouTube page opens, click on the "Playlists" tab to see all of the playlists. Decide which playlist you would like to view and click on that respective one. We hope that you enjoy our content and



Interview with Charlie Adler

learn something new while watching them. Please let us know what you think of the videos by liking the video and leaving a comment in the comments section. And finally, please remember to click that "Subscribe" button to help us reach our goal of 100 subscribers. We thank you all in advance for your continued support of our work to preserve and protect land in the City of Attleboro.



Interview with Danica Warns

The Insects are Biting This Summer



We are back in insect season. There are numerous insects on our and other properties including ticks, mosquitoes, biting flies, and gnats. They can carry many diseases such as Lyme, Zika, EEE, Rocky Mountain spotted fever, and West Nile which they inject when they bite. When going out you should use some repellent. You can refer to our article on repellents in the September 2020 issue of this newsletter at attleborolandtrust.org.

Studies show some things that make mosquitos attracted to you: exercising, higher metabolism, higher body temperature, more body

odor, being pregnant, type O blood, lactic acid, ammonia, acetone or items containing acetone such as nail polish and some hair sprays, heavier breathing, plus there is some genetic predisposition. The chemicals that repel mosquitos are Deet, picaridin, IR 3535 and PMD (Lemon Eucalyptus). PMD is the only somewhat organic one as it is still produced commercially but is organically derived.

After visiting any of our or other outdoor properties be sure to check for ticks that can be as small as a grain of sand.



What's Happening on the Barrows' Farm in 1721

It was summer, but the summer of 1721 was cooler than normal. It did mean that they had enough rain to keep the crops growing but because of overcast days, the crops did not get as much sunlight. The colonists hoped the crops would grow to maturity before the fall frosts. Their main food crops, adapted from the Native Americans of New England - Maize corn, Succotash beans, and hard squashes - plus peas they had brought from England, needed more than three months to mature. The crops grew more slowly that year. Now it is called Growing Degree Days (GDD) which is calculated



New England Maize Corn

as the number of degrees the average daily temperature is above 50 degrees. Corn needs a certain amount of GDD to mature. The cooler weather also meant that herbivore pests were more prevalent as their normal food sources were also growing slowly.

The kitchen garden was even more important during this time of year as it was providing the quick-growing vegetables to get the family through the summer until the



hudsonvalleyseed

Succotash Beans

main crops matured. Lydia and the girls would be very fastidious in the care of the plants.

For the work at the sawmill and the felling of the trees, the cooler weather made work a bit easier.



thelandconnection

Hard Squashes