



BIOSPHERE HIGHLIGHTS

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Dreaming of Bras d'Or Lake Honey by Randy Pointkoski

What does the phrase "Living the dream in rural Cape Breton" really mean? Sometimes it is sitting by the wood stove on snowy nights, dreaming about how to enhance our home's landscape, while advancing the goal of future home food security. To that end we have built Hugelkulture berms and planted a constellation of Haskaps (aka Honeyberries) to compliment a number of trees and shrubs at our Coopers Pond home near Christmas Island, NS. To support our bio diversified backyard food forest, we started looking into proactive pollination that also produces honey products.

On one of those stormy nights, the dream of doing something constructive with oversized 300 year old maple firewood logs got mixed up with the dream to build a beehive out of local materials. A plan emerged for log bee hangout that would occasionally provide some honey. After all, man has been working bees to get honey from hives for 3000 years.





Since the winter of 2017, I have built three log hives. The first out of maple in Cape Breton, the second was 5:1 scale model which now serves as a candy dish on my desk. The third is a hemlock hive which has been setup in an urban back yard in Esquimalt, BC. The log hives are a "Bush Craft" implementation of Top Bar Bee Hives. Each design has

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The Bras d'Or Lake Biosphere is located in Mi'kma'ki, the ancestral and unceded territory of the Mi'kmaq.





If you haven't done so, check out the Biosphere web site. New look; same URL <u>blbra.ca.</u> We welcome your comments and suggestions.







X xerces.org

improvements that are resulting from the hive builder learning about bees and their expectations of habitable hive.

Since purchasing our first one kilogram tubes (~10,000 to 12,000) of Italian bees from New Zealand delivered to Halifax, and getting a similar tube in Victoria, BC, I have been dealing with live bees in many ways: purchasing packages of local bees and mated queens, watching and trapping swarms then deciding what to do with the box of swarmed bees, re-hiving or handing off.

Over the last two seasons, we have been able to harvest and share a few precious jars of log hive honey. We have also demonstrated the bees like the log environment. I hope to continue to learn about the fascinating field of beekeeping and refining the log hive design while working in the Victoria area. The dream is to bring this experience back home to Cape Breton, so I can enjoy Cooper's Pond wild flower honey in my tea on a hill overlooking the Bras d'Or Lakes.

Links:

To follow Randy's activities with Cooper's Pond Log Hive see: <u>https://www.facebook.com/Loghives/</u> For a broad based blog on Bee Keeping techniques: <u>https://www.facebook.com/groups/152145961891404/</u> An excellent online beekeeping starting point: <u>http://www.beginningbeekeeping.com/</u>

Best Practices Corner: Leaves are not

Litter by Annamarie Hatcher

As the trees shake off this year's crop of leaves I note increased activity among my neighbours as they rake, blow and shovel the discarded leaves into bags to await the garbage trucks. Let's rethink this autumn yardwork. Compost those leaves yourself and you can save yourself a lot of work and decrease the amount of fossil fuel burned to take waste to the municipal garbage dump! Those fallen leaves are a valuable resource which can easily take the place of expensive soil amendments that you cart home from the garden store each spring. Compost that pile of autumn colour. You will produce leaf mould, a soil amendment that significantly enhances water retention, soil structure and habitat for microorganisms in your garden soil. The process is simple and the benefits many.

Autumn leaves are mostly carbon. The compost process is different than that used to compost your nitrogen-rich grass clippings or kitchen scraps. For carbon-rich leaves, the composting process is largely mediated by fungi rather than bacteria. Given time and adequate moisture, fungi will break down the leaves. The composting should <u>not</u> be done in the garden because bacteria will rob the soil of nitrogen to balance their metabolic needs as they break down the leaves. Here is what you need to do:

1. Choose a site for your leaf pile and explain your strategy to the neighbours.

2. Rake the leaves into the pile and moisten them (don't saturate). If you





<u>https://www.hobbyfarms.com/howto-create-a-lasagna-garden/</u>



Red dots indicates Mesonet weather stations in the Bras d'Or Lake watershed.

https://www.facebook.com/CBWeather Mesonet/ are worried about dispersal in the wind, enclose the pile in a wire compost bin that you can easily fashion out of chicken wire. If you want to speed up the process, physically break down the leaves with a lawn mower before you rake them into a pile.

3. Let the fungi do their thing for one to two years.

4. Extract the black, crumbly, earthy-smelling leaf mould. Add it to your garden soil and prepare to deal with an abundant harvest of homegrown flowers and vegetables. Leaf mould can be tilled into soil or deposited as an effective mulch for a no-till garden. If you add it to the soil surface, worms and micro-organisms will incorporate the organic material and nutrients into the soil.

https://xerces.org/2017/10/06/leave-the-leaves/

DIY: How to Make a Lasagna Garden

By <u>Colleen Vanderlinden</u>

Lasagna gardening is a no-dig, no-till <u>organic gardening method</u> that results in rich, fluffy soil with very little work from the gardener. The name "lasagna gardening" has nothing to do with what you'll be growing in this garden. It refers to the method of building the garden, which is, essentially, adding layers of organic materials that will "cook down" over time, resulting in rich, fluffy soil that will help your plants thrive. Also known as "sheet <u>composting</u>," lasagna gardening is great for the environment because you're using your yard and kitchen waste and essentially composting it in place to make a new garden. You can continue reading the complete article <u>here</u>.

Cape Breton Weather Mesonet Network by Jonathan Buffett

The Cape Breton Mesonet network was founded by me several years ago beginning as just one station in Port Hawkesbury in 2005. Since then, it has evolved into something much greater than I could ever have imagined. My goal was to establish a network of weather stations where data is available free of charge in an open source format. The network has grown steadily to 21 stations and 19 partner stations by October of this year. It is now a cooperative network led by the community and funded at the grassroots level which has been very successful. This network is quite unique, and it's something Cape Breton can boast about that not many other places have. Climate change could have significant impacts (both positive and negative) on the Bras d'Or Lakes and its watershed. Monitoring and archiving any changes in weather patterns, such as temperature and precipitation could prove to be very useful in future research of the Bras d'Or watershed. The network provides weather watching enthusiasts to see real time weather conditions and historical records in all the locations. Station monitoring data can be found at www.capebretonweather.ca

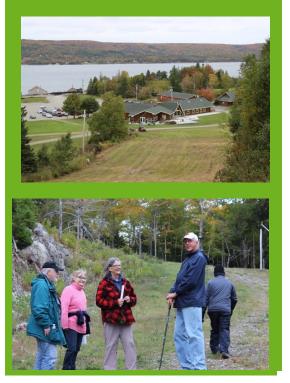
Today a Facebook page for the CB Weather Mesonet has been created to help increase the awareness of this wonderful initiative. Please visit the page regularly, like, post and share information and images of interest in Cape Breton weather watching and interpretation.



Giant Hog Weed

Hike The Hill in Ben Eoin: The Biosphere's Celtic Colours Community Event

Despite wet weather threating this year's event on October 11th, we had a reasonable turnout. Many thanks go to the grounds crew at The Lakes Golf Club for preparing the trail plus the Community and BLBRA Volunteers who made it happen! See next three photos.



Meet the Residents (carefully): Giant Hogweed (Heracleum mantegazzianum) By Annamarie Hatcher

Giant hogweed is an invasive plant which occurs in many places in Canada. It was reported in the Bras d'Or Lake Biosphere during Bras d'Or Watch this past July. It is a perennial in the carrot family which is easily confused with other members of that family such as Angelica, another invasive plant which is common in areas of the Biosphere. Giant hogweed can grow to heights of 4 or 5 meters. A mature plant has huge leaves, a thick green stem with reddish-purple splotches and prominent coarse white hairs, especially at the base of the leaf stalk. It is native to the area of Eurasia called the Caucasus mountains and was introduced to many other countries as a garden ornamental. The sap of giant hogweed is dangerous for humans. Blisters and scars result from exposure to the sap and then the sun. This reaction is due to high concentrations of a chemical in the sap that the plant produces to fight fungal infections. When it touches skin, the chemical leaches into cells, forms a bond with the DNA and kills the cells. Because the skin can no longer protect itself from the sun, a serious skin inflammation called phytophotodermatis results. This chemical is found in other members of the carrot family but in much lower concentrations. There are several types of plants growing in the Bras d'Or Lake Biosphere which may be confused with giant hogweed so you should learn to tell the differences. An excellent resource which was produced by government of Maine can be found at: https://www.maine.gov/dacf/php/horticulture/gianthogweed.shtml

Another excellent resource can be found here:

https://www.abbotsford.ca/Assets/2014+Abbotsford/Planning+and+Dev elopment/Planning/Environment/Giant+Hogweed+National+Fact+Sheet. pdf

Bras d'Or Lake Biosphere Featured

Trail By Lynn Baechler

In this issue of 'Biosphere Highlights' the Trail Committee of the BLBRA is featuring a less used trail; the old pioneer road which crosses North Mountain (locally known as Marble Mountain) from Valley Mills to the community of Marble Mountain. Personally, this is one of our favourite hikes. Starting in Valley Mills (park at the side of the road) the first section of early succession growth quickly turns into a wonderful old forest (Eastern hemlock grove). Although there is no signage on this trail, it is easy to follow. Emerging from the oldest part of the forest, the vegetation gradually changes into a younger mixed wood forest. On the plateau the pioneer road gives way to a wide forestry road, again not signed, but following the map and heading south, then southeast, you will come down the mountain to the community of Marble Mountain. It is easier to follow the trail if you hike from Valley Mills to Marble Mountain rather than the other direction.

The old hemlock / yellow birch forest is magical and home to a variety of





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Many hands make light work.

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The BLBRA welcomes your comments or suggestions. Let us know if you do not wish to receive this newsletter. Address your comments or suggestions here. lichens, mosses and ferns. Along the route you will see granitic outcrops as well as marbles and other metamorphic rocks. There will be wetlands to observe on the plateau and you will experience early forest succession where the forest has been cut in the past. Views of the Bras d'Or Lake and a multitude of islands are superb as you hike down the eastern side of the mountain; another reason for doing the hike in this direction. This hike is best accomplished with a vehicle at both ends of the trail so you can return to where you parked your car. So, make sure you hike this trail with several individuals unless you are equipped to walk back for a total of a 13 km hike!

To view this trail map plus other biosphere trail information and maps, click <u>here</u>.

The next BLBRA meeting will take place on Friday, October 26 at Crane Cove Sea Foods Boardroom 4115 Shore Road in Eskasoni Time: 1:30 – 4:30 PM All are welcome!

Are you a podcast fan? You might like to listen to this one. Living in a beautiful natural area such as the Bras d'Or Lake Biosphere has it benefits in ways you may not have considered. Have a listen to <u>this episode</u> of Hidden Brain from National Public Radio. Truly, People and Nature; better together.



The fall colours have been amazing this year. Feast your eyes on the Fall Colours on Sable Island, September-October 2018 by Zoe Lucas of the Sable Island Institute. Click here to view.

