CHALLENGE TO ALL MONTREALERS.

Our challenge to Montrealers: To make Montreal the greenest city in North America within 5 years, and full of wildlife. How ?: To plant a small wildflower patch, the size of a kitchen table in your yard this fall. The cost will be $2 for a 25 lb bag of weedless soil, old newspapers, or cardboard. Renature Montreal will give you free wildflower seeds. We will try to amass enough wildflower seeds to supply several hundreds of seed envelopes. If you are happy with the results, the following year grow a larger patch of wildflowers. If you are dissatisfied just pull all the flowers and rake the soil over your lawn or rest of garden it will be a good fertilizer and mulch. But we are almost 100% sure, you will love the results. With time, you will notice more bees and bumble bees, butterflies and moths, more night hawks with their nasal PENTZ, more chimney swifts, more warblers, chickadees and toads, snakes, turtles and maybe even frogs depending on your neighbourhood. But the most important change you will note is the change in yourself and your family and neighbours as they become more in tune with nature and nature more in tune with them. The greatest effect we have found is in seniors and children.

Come see the wildflower garden we planted behind the greenhouse at 7000 Blvd LaSalle in Verdun. We were authorized on April 5, 2024 to plant the garden. It was just Kentucky blue grass, and shrubs then and we were allowed a space 3 feet deep. We put down 2 tons of soil in 8 days and we planted the seeds of 100 native species on April 13, 2024. See what nature has wroth in 6 months time!!!!! Oz is 78 years old, Joan is 72. Total cost was $500 for 250 bags of seedless soil.

There is an entomologist at the University of Delaware who has been studying birds and wildlife for over 20 years. His name is Douglas Tallamy. He is famous in the U.S., but we have only met 15 Quebecers who have even heard his name. He has published many prestigious academic papers and many books. His earliest book is “Bringing Nature Home”.

His studies have shown the following:

1. CATERPILLARS:

1)Most birds with exceptions such as waterfowl and raptors, feed their young almost exclusively CATERPILLARS. Yes, that is right, not adult insects, not seeds, not worms but caterpillars. There are some exceptions such as robins, feeding worms or goldfinches, feeding thistle seeds, but almost all birds feed their young caterpillars.

a) Caterpillars are the larvae of butterflies and moths.

b) A Chickadee couple requires 6,000 to 9,000 caterpillars to feed a brood of 3 to 10 chicks to fledgling.

1. CATERPILLARS NEED NATIVE PLANTS

2)Caterpillars usually can only feed on a very narrow range of native wild plants. They usually will starve to death if only invasive non-native plants are present. The classic example is Monarch butterflies, will starve to death if there are no milkweed plants. It takes, not hundreds but thousands of years for caterpillars to change their metabolism so that they can eat a non-native plant. So, too many non-native plants and you have no caterpillars. No caterpillars or too few and young birds starve.

1. PERCENTAGE OF 70 % NATIVE PLANTS

3)The critical number Dr Tallamy with Dr Peter Marra and other discovered over a five-year study and published on October 22, 2018 in PNAS, The Proceedings of the National Academy of Science is 70%. Less than 70% of native plants and the number of caterpillars falls below the sustainable level and the number of chicks drops below normal and the bird population declines. Over the last 50 years, the bird population in North America has dropped from 10 billion birds to 7 billion birds. 2/3 of birds in NA are predicted to go extinct. That is right over 500 bird species will decrease to extinction. Birds Canada at [www.birdscanada.org](http://www.birdscanada.org) has an app for recommending plants for each region. If you go to the site, for Montreal, they show up to 472 species of wild plants out of a total of maybe 3,000 indigenous plants. The average native plant population in Montreal is probably less than 15%. This is why you see so few birds in Montreal and so much more off island. The untouched boreal forest has huge numbers of birds.

1. COLD SPELL NEEDED TO DESTROY THE INTERNAL GERMINATION INHIBITORS OF INDIGENOUS PLANTS SEEDS AND THUS THE NEED FOR FALL PLANTING

4a)Native plants, unlike commercial plants like marigolds, cosmos, Batchelor button, will not germinate if planted in late spring. Native plants are like regular plants, they flower in the summer and the seed ripen in the fall. But there is a major difference. For native plants, if the seeds germinated in the fall they would freeze and die in the winter. So native plants need what is known as STRATIFICATION, a long period of cold to rid the seeds of germination inhibitors, so that only in the spring and not sooner they can germinate and grow. If you took a native seed, you harvested in the fall but kept indoors without a cold stratification period, and in spring you planted it, it would lie dormant on the ground for a full year until the following year’s spring before it germinated.

4b)So, we recommend planting wildflower seeds in the fall or winter. After they germinate in the spring, they are just like any normal flower except they are more beautiful, and they will feed caterpillars and their seeds require a long cold spell to germinate.ONE DAY FLOWER BED PREPARATIJON

5a)Like all new flowers, you want to plant them in a bed of soil, free from weeds. In the past it was recommended to take 2 or 3 years to prepare a truly weedless bed. It involved multiple plowing, herbicides, fallow crops and repeating. Now there is a new method that can be done in one day. You put down 1 to 3 layers of newspaper or advertising flyers. You cover the newspapers with weedless soil, which you can buy for $2 for a bag of 25 pounds. Then you tamp the seeds down onto the soil, so they do not blow away. You wait until spring, the newspapers will smother the grass and weeds, until the earthworms decompose the newspaper into a carbon rich fertilizer. The new native wildflowers will send their roots down through the rotting newspaper into the now weedless ground below. No plowing, no chemicals, no wait.

5b) The seed, after this long period of stratification will germinate and sprout in the spring into the most beautiful flowers on earth. They will feed caterpillars which will feed birds and other wildlife such as, frogs, toads, snakes, turtles.

5c) The cost will be $2 for a 25 pound bag of weedless soil. Renature Montreal will supply the seeds for free. But you will be saving Montreal millions of dollars, due to less lawn care, less polluting gasoline, less fertilizers, less pesticides, less fungicides, less vole poisons, less watering, less storm related flooding. Eventually when extended to trees, less heat islands, increased mental and physical health, less domestic violence more chats over the ubiquitous wildflower patches. Young people will develop a new respect and hope as they participate in this new “thing”.

1. SIMPLE CHEAP EFFECTIVE

6)Simple, cheap, effective. But the Chickadees and all other birds and wildlife will be forever grateful to you. And we hope no species will ever go extinct. See articles by Cornell University, Audubon Society, University of Florida, University of Delaware, the United Nations, very expensive standard textbook etc etc about growing native plants in the Resources and References section.

Why are we doing this? Quebec has a long and complicated history. From 100,000 years to 12,000 years ago, it was covered by a glacier up to 1.25 miles thick. So over only, 12,000 years plants have been slowly returning to Quebec. The Indigenous people did forest farming to keep the land much healthier and more fertile than it is now. Since the time of Jean Talon, the land has been farmed and changed to a much less fertile state.

Recently, Quebecers have converted millions of acres of woodlands and farms to monoculture fields of GMO modified corn and soya. Over the last 30 year: BTI a bacterium which specifically kills caterpillars has been put in their genomes. Corn seed is needlessly coated with neonicotinoids an insecticide which indiscriminately kills all insects and causes birds to become confused and disorientated according to Bridget Stutchbury of York University. After clear cuts, forests for evergreens for pulp and paper are aerially sprayed with herbicides to make 100 percent sure the forest is a monoculture. So, the chosen evergreen has no competition or complexity. This increases productivity and profit. We are starving all wildlife in all these and many other ways.

In 1996 there was very rapid change to almost exclusive corn and soya farming. Canada is third largest pork exporter, and Quebec is champion of Canada for pork exports. Agriculture and food industries converted to changing soya and corn into pork, beef, chicken, dairy and ultra-refined artificial foods. Huge increase in obesity.

To put our challenge in perspective, we want to give you 2 examples of very expensive challenges undertaken in the past and present.

The first challenge was like a folie, a beau geste, but is fascinating. The second challenge is like a John F. Kennedy moon shot, noble but extremely expensive.

The first example is Ascension Island. Ascension Island is in the South Atlantic. Initially it was supposed to be where Napoleon was to be exiled. But there was no food nor potable water on Ascension. It is a desert volcanic cone about 1 million years old. So, Napoleon was exiled to St. Helena Island even further south in the Atlantic and Ascension Island was to be a back stop to prevent any escape from St. Helena.

The naval garrison at Ascension was bored. They were visited by Charles Darwin in 1837 and a few years later by another botanist, Joseph Hooker, who later was in charge of the world-famous Kew Gardens. Hooker decided to green Ascension by planting trees. Over 330 species from around the world, were planted supervised by Kew Gardens. They transported at least 5,000 trees at enormous expense. But a minor miracle occurred. The trees took the moisture from the sea air around Ascension and recycled it. The forest became a cloud forest and a lake formed on the mountain side. So, within about 6 decades, at enormous expense, Ascension was transformed from a million year old desert cone into a lush tropical forest. What folly, what an expensive beau geste. They say only mad dogs and English men go out in the noon day sun. But when you play God for folly, you create problems. Ascension had originally 25 to 30 plants and 10 endemics. The folly condemned 3 of the 10 to extinction. One of the 3 extinct plants may have been recently rediscovered.

The second example is atonement for man having semi-destroyed island with introduced rats. Man has contaminated thousands of islands with black rats. The rats destroy bird colonies, and erode plant life, soils and other animals on the islands and cause surrounding coral to deteriorate. Organisations have been set up to kill every single rat on an island and any nearby island. If a single pregnant female rat survives, the island will be completely re-infested within 2 years, the rats are so prolific. It is extremely costly to annihilate every single rat. It costs millions of dollars for a single island. But after annihilation, the island returns to normal, and the pelagic birds can start breeding again.

As we stated earlier, our challenge will not cost but will save millions of dollars for Montreal, alleviate pollution and provide food for plants and wildlife and have huge social benefits for society apart from the above. Everyone loves beautiful lawn. Kentucky Blue Grass is an alien invasive from Europe. We consider it ugly and so will you after you see the eye popping native Quebecois wildflowers. Nature considers Kentucky Blue Grass as GREEN CONCRETE, sterile, a food desert, cheap to plant but costing millions of dollars per year to maintain as it slowly destroys all North American cities. Give nature a break, get rid of GREEN CONCRETE. Get rid of all alien invasive species which create a FOOD DESERT, starving wildlife and plant native wildflowers which feed wildlife which creates a FOOD OASIS.

We do not want any extinctions. Extinctions are forever.

In summary:

Young birds eat mainly caterpillars.

Caterpillars in general can only eat native plants. Invasive plants cause a food desert.

70 % is a critical number for birds. Less than 70% native plants and wildlife declines, enough decline and you have extinctions.

Montreal has much less than 20% native plant coverage.

Native wildflowers need a prolonged cold spell to germinate and therefore should be planted in fall or winter.

To get a weed free flower bed, put down weedless soil over 1 to 3 layers of newspaper. Tamp down seed on this weedless flower bed.

Renature Montreal will supply the native wildflower seeds for free. We hope to have several hundreds of seed envelopes available.

Cheap, simple, effective. And save millions of dollars and save the environment.

We are sure in 5 years’ time, Montreal will be the greenest city in North America, because Montrealers are decent people and will all work together to help the fauna and flora that need our help. Probably the children will understand best and be the most insistent to help. All children in their hearts are wise.

We give examples from Cornell University and the University of Florida, but there are easily over a hundred documents which support Dr. Douglas Tallamy’s idea of native plants and our native plant garden. Please visit our renatured garden behind the green house at 7000 Blvd LaSalle, Verdun.

<https://www.google.com/url?sa=t&source=web&rct=j&opi=89978449&url=https://www.allaboutbirds.org/news/its-true-a-yard-full-of-native-plants-is-a-yard-full-of-well-fed-birds/&ved=2ahUKEwjYyN2t1oCGAxXJFzQIHVERBTEQFnoECBMQAQ&usg=AOvVaw3JvoIE2kTlj3TeuXiZ23NN>

<https://www.google.com/url?sa=t&source=web&rct=j&opi=89978449&url=https://www.birds.cornell.edu/landtrust/native-plants-for-birds/&ved=2ahUKEwia_LqN34GGAxUB4skDHWnNCpoQFnoECBYQAQ&usg=AOvVaw25bqJxmbXrLUQ2l4rDxsQM>

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