

The Mattice Property

204 Timothy's Lane, Muskoka River

Planting plan created by The District Municipality of Muskoka

Survey Date: 12/10/2018





Schedule A:

Plants & Property

Land Characteristics

This planting plan is designed based on the land characteristics identified during the day of the site visit. Plants are chosen according to the soil and light conditions on your property. The number of plants chosen for each planting compartment takes into account the square metre area of the space, as well as the amount of current vegetation cover. **Your property is part of ecoZone: 4b**

Land Characteristics by Compartment

	Length	Width	Area	pH	Soil	Moisture	Light	Height
A	3m	2m	6m ²	acidic	sandy	moist, wet	full sun	
B	4m	3m	12m ²		sandy	moist, wet	full sun	
C	6m	10m	60m ²	acidic	loamy	normal	full sun	
D	2m	3m	6m ²	acidic	sandy, loamy	normal	full sun	
E	3m	3m	9m ²	acidic	loamy	normal	full sun	
F	3m	2m	6m ²	acidic	loamy	normal	full sun	
	21m	3.83m	99m ²					

Plant Selection Summary

The following shrubs and trees are chosen for their suitability and survivability given the current soil and light conditions in each compartment on your property, as well as preferable features.

Plant Species	A	B	C	D	E	F	Potted	Bareroot	Wildflower
Sweet Gale	3	3					6		
Steeplebush	6	7			2	2	17		
Blue Flag Iris		3					3		
Yellow Birch			2				2		
Red Maple			1				1		
Ninebark			2	1			3		
Shining Willow			2				2		
Red Osier Dogwood			3	2			5		
Canadian Serviceberry			1				1		
Nannyberry			1				1		
Wild Black Currant			1				1		
Bush Honeysuckle				3	3	3	9		
Ostrich Fern				3			3		
Wild Columbine				4					4
Wild Geranium				3					3
Subtotal	9	13	13	16	5	5	54	0	7
Totals	61								

Plant Information

The following table summarizes key information about each plant selected for your property.



Sweet Gale

Height: 1-2m

Sweet Gale is a medium-sized shrub which grows into a thick bush about 1-2 m tall. This species produces 1-8 cm long, oblong-lanceolate leaves which are finely toothed at the tip and are spirally arranged. When bruised, these leaves give off a pleasant aroma. Male and female catkins are produced on separate plants. The seeds are dispersed from the female plants via water, as they float on two corky bracts. This shrub also provides a good food source for bird species that eat the seeds including Grouse, Chickadees, and Bluebirds. Mammal species like Beavers and White-Tailed Deer also browse on the twigs and leaves of this plant.



Steeplebush

Height: 1 m

The Steeplebush is a deciduous shrub species that typically grows about 1 m in height. This plant may also be known by the common names: Rose Spiraea or Hardhack. The leaves are dark green, about 7 cm long, elliptic to ovate shaped, have toothed margins, and have dense yellowish brown hairs on the undersides. The flowers are tiny, rose pink to purplish coloured, bloom in late summer, and appear on tall, dense, steeple shaped clusters. This plant is useful for controlling erosion and stabilizing shorelines. The flowers are also beneficial for pollinator species, like bees and butterflies.



Blue Flag Iris

Height: 0.5 m

The Blue Flag Iris is a showy perennial wildflower that typically grows about 0.5 m in height. This plant may also be known by the common name Harlequin Blue Flag. The leaves are light green, sword-shaped, slightly arched or erect, and appear growing out as a cluster around the base of the plant. The attractive blue flowers start to bloom in the early spring, emerging from a tall flowering stalk that can reach up to 1 m. The flowers are beneficial to pollinator species, like bees and butterflies. The seeds are also beneficial to wildlife species, like birds and small mammals.



Yellow Birch

Height: 25 m

Yellow Birch is a native deciduous tree species that can grow up to 25 m in height. The bark is thin, flaky, shiny, and can be brownish-yellow, bronze, or silvery colored. The leaves are deep greenish-yellow, simple, alternately arranged, oval shaped, have doubly serrated edges, and are about 8-11 cm long. This tree species produces catkins in April-May, which are slim, cylinder shaped, yellowish brown flower clusters. In the Fall, seed pods are produced that are brown colored, cone shaped, and break apart easily. Yellow Birch is a slow growing tree but can live up to 150 years. This tree species is beneficial to wildlife species like birds and mammals.



Red Maple

Height: 12-25m

The Red Maple is the most common and widespread deciduous tree of Eastern and Central North America. This species can grow 12-25m at maturity. The trunk of this hardwood species is branch free from the base to about halfway up the trunk. When planted in an open area, the trunk can divide and branch out fairly close to the ground. As the tree matures, it develops a short, narrow crown consisting of horizontal and ascending branches. The leaves on the Red Maple grow opposite each other on the branches. During the summer, leaves are bright green on top with a whitish underside. During the fall, the leaves turn a bright red or scarlet colour, from which the name is derived. Prior to leaf development, tree flowers bloom in early May. Red Maple tree flowers are small and red to yellowish orange in colour, growing in clusters on a thin stalk. During June and July, tree flowers develop into reddish winged keys, which hold and disperse seeds. The Red Maple plays an important role in the lumber industry, as its wood is excellent for woodworking.



Ninebark

Height: 2-3m

The Common Ninebark is a very hardy, large (2-3m in height), deciduous shrub naturally occurring within riparian zones. This species is often planted as an ornamental shrub for its exfoliating bark which reveals reddish-light brown inner bark. This shrub is multi-stemmed with numerous horizontal and ascending branches creating a full, round shape. The Common Ninebark produces dull green, ovate to round shaped leaves with three to five lobes per leaf. During the fall the leaves turn brilliant yellow or dark purple. Between May and June, showy, bell-shaped flowers bloom in clusters on the terminal ends of the branches. During the summer, these flowers give way to small green or green-yellow berries which turn a bright red upon ripening.



Shining Willow

Height: 10m

The Shining Willow is a relatively large deciduous shrub, which grows up to 10 m in height. The shiny leaves are 5-11 cm long and 1-5 cm wide, which are what give this Willow its name. They are lance shaped, with dark green color on the top, and light green on the bottom. Flowers bloom from May to June and range in colour from yellow to a green/brown.



Red Osier Dogwood

Height: 1.5-4m

The Red Osier Dogwood is a medium-sized, deciduous shrub native throughout Northern and Western North America which typically grows to 1.5-4m. This species is multi-stemmed with numerous erect and ascending bright red branches that create a loose and spreading form. Leaves produced are simple, two-toned with a dark green upper side and light green underside. They are arranged opposite each other along the branches. During the fall, the foliage turns a brilliant red to dark purple. Clusters of small, creamy white flowers form on the terminal ends of the branches between June and July. The Red Osier Dogwood produces blueish-white fruiting bodies during late summer, which may persist throughout the winter. This shrub's berries provide an important winter food source for numerous species, from large deer to small wintering birds.



Canadian Serviceberry

Height: 3-5 m

The Canadian Serviceberry is a multi-stemmed shrub or small tree which grows from 3-5 m in a dense round form. This plant may also be known by the common names: Juneberry, Shadblow, or Shadbush. Early in the spring, prior to leaf development, clusters of fragrant, showy white flowers bloom along the branches. By July, these flowers give way to the fruiting bodies. The fruits are initially small, green berries, which grow to the size of blueberries and turn a deep purple-blue upon maturation during the fall. Leaves produced are finely toothed and spear-shaped. Throughout the summer, leaves are dark green and turn a dramatic orange-red during the fall.



Nannyberry

Height: 3 m

Nannyberry is a large deciduous shrub species that typically grows about 3 m in height. The leaves are dark green, ovate shaped, oppositely arranged, have a pointed tip, and have finely toothed margins. The flowers are showy, white colored, appear in flat topped clusters, and bloom in May. These flowers produce blueish black berries, which are edible to humans and persist throughout the winter. The flowers are beneficial to pollinator species, like bees and butterflies. The fruit is beneficial to wildlife species, including birds and small mammals. This shrub has attractive fall foliage. The root system is extensive, making this plant valuable for controlling erosion and stabilizing loose soil. This shrub can be pruned to have a single stem and grown as a small tree instead of a shrub.



Wild Black Currant

Height: 1-2m

The Wild Black Currant is a lovely shrub species that grows 1-2 m in height and produces small, edible, black berries. Wild Black Currant is a member of the Gooseberry family and is characterized by having alternating leaves that are 3-8 cm long with 3-5 sharp lobes. This shrub has bell-shaped flower clusters that are creamy white to yellow in color, about 9 mm long, and appear in early June. These flowers give way to small edible black berries, which are best when cooked into jams, jellies, and pies. This species differs from other Currants as it has noticeable resin dots on the undersides of the leaves and branches that are slightly hairy, but not prickly. Wild Black Currant grows best in wet or moist conditions, full or partial sun exposure, and a variety of soil types. It can be naturally found in sandy swamps/marshes, meadows, open forests, and along shorelines. This species is an ideal shrub to utilize for shoreline restoration as it is aesthetically appealing and attracts wildlife, such as song birds. However, this species should not be planted in the vicinity of pine trees because it is a vector for White Pine Blister Rust, a fungus that negatively impacts White Pine trees.



Bush Honeysuckle

Height: 1m

The Bush Honeysuckle is a small, hardy, deciduous shrub that rarely grows taller than 1 m in height. The leaves are simple, oppositely arranged, ovate shaped, and have finely toothed margins. During the spring and summer, the leaves are dark green in colour, then in the fall they take on a variety of colours ranging from a deep purple to light yellow. The flowers are small, showy, yellow to orange colored, trumpet shaped, appear in clusters on the tips of branches, and bloom between June and July. The flowers are beneficial to pollinator species, including hummingbirds and butterflies. The roots of the Bush Honeysuckle are fibrous, giving it the ability to form thickets and making it an ideal shrub to plant for erosion control.



Ostrich Fern

Height: 1.5 m

The Ostrich Fern is a coarse, erect to arching perennial fern, that can grow up to 1.5 m in height. The stems are clustered and arching while the leaves are ostrich-plume shaped, widest near top, and very gradually narrowed to the base. The size of the leaves grow up to 1.5 m long and 12-40 cm wide, with around 40 pairs of leaflets or pinnae. The leaflets are long, narrow-pointed, and ascending. The leaves are fertile, with spore clusters on the undersides of sub-leaflets.



Wild Columbine

Height: 0.5 m

Wild Columbine is a perennial wildflower that grows about 0.5 m tall and is popular among gardeners due to its beautiful red and yellow coloured flowers. These flowers are nodding flowers, meaning that they droop downwards off the end of the branch. They have five sepals and five petals that stretch upwards creating five long spurs out the back. The leaves are attractive, compound and made up of 9-27 leaflets, appear in groups of three, and are rounded or broadly egg-shaped with rounded lobes. The sweet nectar of this wildflower is a great attractant to hummingbirds and butterflies.



Wild Geranium

Height: 70 cm

Wild Geranium is a herbaceous perennial wildflower species that grows up to 70 cm tall. The leaves on the wildflower are basal with 5-7 deeply divided toothed lobes, ranging between 10-13 cm wide. Due to the shape of the leaves, Wild Geranium is often mistaken for Canada Anemone. It is often found in meadows and forests, preferring partial to full shade with moist loamy soil. Wild Geranium is an ideal wildflower for erosion control because it forms colonies through its rhizome system. The small petaled purple flowers attract a variety of bees and butterflies, making it a great addition to your garden for pollinators. Wild Geranium has also been used for many medicinal purposes due to its astringent properties. The rhizomes are dried and grounded to be used for mouth ulcers, inflamed gums, and sore throats.

Compartment A

Naturalization Area

- ⚖ PH: acidic
- 🌱 DEPTH: potted
- 💧 MOISTURE: moist, wet
- 🌾 SOIL TYPE: sandy
- ☀ LIGHT CONDITIONS: full sun



Sweet Gale

3



Steeplebush

6

Compartment B

Naturalization Area

- DEPTH: potted
- MOISTURE: moist, wet
- SOIL TYPE: sandy
- LIGHT CONDITIONS: full sun



Sweet Gale

3



Steeplebush

7



Blue Flag Iris

3

Compartment C

Naturalization Area

- ⚖️ PH: acidic
- 🌱 DEPTH: potted
- 💧 MOISTURE: normal
- 🌾 SOIL TYPE: loamy
- ☀️ LIGHT CONDITIONS: full sun



Yellow Birch

2



Ninebark

2



Red Osier Dogwood

3



Nannyberry



Red Maple

1



Shining Willow

2



Canadian Serviceberry

1



Wild Black Currant



1

1

Compartment D

Naturalization Area

- ⚖ PH: acidic
- 🌱 DEPTH: potted
- 💧 MOISTURE: normal
- 🌾 SOIL TYPE: sandy, loamy
- ☀ LIGHT CONDITIONS: full sun



Ninebark

1



Red Osier Dogwood

2



Bush Honeysuckle

3



Ostrich Fern

3



Wild Columbine

4



Wild Geranium

3

Compartment E

Naturalization Area

- ⚖ PH: acidic
- 🌱 DEPTH: potted
- 💧 MOISTURE: normal
- 🌾 SOIL TYPE: loamy
- ☀ LIGHT CONDITIONS: full sun



Steeplebush

2



Bush Honeysuckle

3

Compartment F

Naturalization Area

- ⚖ PH: acidic
- 🌱 DEPTH: potted
- 💧 MOISTURE: normal
- 🌀 SOIL TYPE: loamy
- ☀ LIGHT CONDITIONS: full sun



Steeplebush

2



Bush Honeysuckle

3



Schedule B

Financial Summary

Project by: The District Municipality of Muskoka

Shoreline Re-Naturalization Starter Kit includes: free site visit, customized re-naturalization planting plan for your shoreline property, native plants including free bare root (small) and potted (large) plants and wildflowers, coconut fibre pads to deter grass from growing around new plantings, tree guards for all deciduous trees, mulch for your wildflowers, Plant Care Guide with instructions on how to take care of your new plants, Habitat Creation Guide and a Wildflower Garden Guide.

Our planting plans are created onsite with you and provide detailed information and plans to re-naturalize your shoreline property. We take photos of areas for planting and overlay native plants that are well suited to your property based on site conditions such as soil type and sunlight availability.

We will work with you to create a plan that works for you including options for low growing plants in areas where views are important.

Item	Quantity	Cost/Item	Subtotal
Starter Kit fee			\$300
Free potted plants	20	\$0	\$0
Paid potted plants	34	12.00	408.00
Free bareroot plants	0	\$0	\$0
Free wildflowers	7	\$0	\$0
Total costs			708.00



Schedule C

Project Agreement

Stewardship Agreement

Please indicate your agreement to this proposed plan by signing the following Stewardship Agreement and submitting it, along with your financial contribution, to:

The District Municipality of Muskoka

70 Pine Street Bracebridge, Ontario P1L 1N3

Plant Availability

Please note that plant species may need to be changed based on plant stock availability at the time of ordering.

Project Completion

Upon receiving your signed stewardship agreement and financial contribution, a date will be booked for you to pick up your Natural Edge Kit. The District Municipality of Muskoka will supply all plants and materials. If you are paying for the planting to be completed for you, a date will be arranged for The District Municipality of Muskoka to plant your shoreline, bringing the plants and materials with them. If there are particular dates that you would prefer, we will do our best to accommodate your requests.

The Natural Edge Stewardship Agreement with The District Municipality of Muskoka

Agreement made this _____ Day of the Month of _____ in the Year _____.

BETWEEN Jackie & Randy Mattice 204 Timothy's Lane Ontario
(Hereinafter called the OWNERS)

AND **The District Municipality of Muskoka** 70 Pine Street
Bracebridge, Ontario P1L 1N3 (Hereinafter called DMM)

WHEREAS the Owners and DMM have met and discussed plans for shoreline naturalization on the specified area(s) in Schedule A existing on the Owners' land;

WHEREAS the Owners indicate approval of the project as proposed; and

WHEREAS the project is, or will be for the benefit of the Owners and others;

NOW THEREFORE THE PARTIES AGREE AS FOLLOWS:

1. This Agreement shall be in effect for a period of 5 years, commencing with the date of this Agreement.
2. The Owners and DMM agree that the areas where the work is to be performed is as described in Schedule A.
3. The Owners agree to pick up their Natural Edge Starter Kit from DMM's office and plant their shoreline within two days of receipt. The Owners will provide "after" photos of the work completed to be used for reporting purposes. If the Owners wish to have the planting completed for them, then DMM or it's contractors, employees and agents will complete the planting at cost, as indicated in Schedule B.
4. If the planting is to be completed by DMM, then the Owners grant DMM, its contractors, employees and agents, the right to enter the property to perform the work agreed upon as outlined in Schedule A. In addition, DMM, its contractors, employees and agents may inspect the work performed for the purposes of monitoring the project and survival assessment, with prior agreement with Owners for date and time of inspection.
5. The Owners agree to contribute the "Landowner contribution" and pay the costs indicated in Schedule B.
6. In instances where the Owners are to pay DMM for work to be performed (outlined in Schedule A), the Owners agree to provide payments to DMM prior to the commencement of that operation. Failure of payment shall constitute a breach of this Agreement and the Owners agree that this Agreement will be terminated and thereupon the Owners agree to pay DMM the estimated costs of the operations of the project completed to date, if any.
7. The Owners agree, if necessary, to perform a reasonable amount of maintenance, which is described in the Native Plant Care Guide, available at naturaledge.watersheds.ca.
8. If a contractor is required to perform the work outlined in Schedule A, then the contractor carrying out the work on the land described will be required to take out and furnish evidence of a comprehensive policy of public liability and property damage coverage. The contractor and their workers will be required to be in good standing with the Workplace Safety and Insurance Board (WSIB) prior to performing the work.
9. The Owners agree not to remove, destroy or alter the project without prior consultation and approval of DMM. Pruning and trimming planted nursery stock, or adding replacement native nursery stock is exempt.
10. The Owners agree not to mow the planted area.
11. The Owners do acknowledge that DMM, its contractors, employees and agents, having performed said works, are not under further obligation with respect to survival of nursery stock, inspection, or maintenance.
12. The Owners, in the absence of negligence, hereby remise, release and forever discharge DMM, its contractors, employees and agents from all claims and demands for injuries, including death, loss, damages and costs in any way related to or connected with installation and maintenance of the work described or resulting from any deleterious effects of the work to the land or to the lands and buildings thereon retained by the Owners.

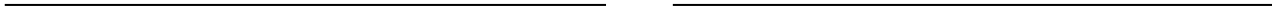
IN WITNESS WHEREOF the parties have agreed to the contents of this plan; SIGNED:

The District Municipality of Muskoka

Jackie & Randy Mattice

Representative Signature:

Owner Signature:





About this program

About The District Municipality of Muskoka

The District of Muskoka is an upper-tier municipality that has monitored water quality in Muskoka area lakes since 1980. Since 2002, the Muskoka Water Strategy has provided integrated and strategic initiatives for the protection of Muskoka's water resources. The purpose of the strategy is to guide and minimize the impact of human activities on water resources; ensure human and environmental health; and preserve the quality of life in Muskoka.

This program was created by Watersheds Canada

We believe that every person has the right to access clean and healthy lakes and rivers in Canada. At Watersheds Canada, we work to keep these precious places naturally clean and healthy for people and wildlife to continue using for years to come. We love working with others to meet the needs of local communities, whether you're a concerned citizen, a landowner, a lake association looking for help, or a coalition of groups interested in activating your local community.