The Caskey Property

1162 Main Street, Lake Of Bays

Planting plan created by The District Municipality of Muskoka

Survey Date: 04/10/2019





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: 5b**

Land Characteristics by Compartment

	Length	Width	Area	рН	Soil	Moisture	Light	Height
A	15.6m	7.2m	56.2m ²	acidic	loamy	normal	partial sun	max 2m
В	11.5m	5m	28.8m ²	acidic	loamy	normal	partial sun	max 2m
С	6.4m	3m	19.2m ²	acidic	sandy, Ioamy	moist, wet	partial sun	
D	7.7m	6.8m	52.4m ²	acidic	loamy	normal	full sun, partial sun	
	41.2m	5.5m	156.6m 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	А	В	С	D	Potted	Bareroot	Wildflower
Bush Honeysuckle	15	7			22		
Red Osier Dogwood	1	1		1	3		
Ostrich Fern	9				9		
Ninebark	2				2		
Common Polypody	6			6	12		
Narrow Leaved Meadowsweet	2			6	8		
New Jersey Tea	9				9		
Shrubby Cinquefoil		4			4		
Christmas Fern		6		3	9		
Silky Dogwood		1		2	3		
Bearberry		6					6
Sweet Gale			2		2		
Swamp Rose			1		1		
Steeplebush			3		3		
Swamp Milkweed			3				3
Blue Flag Iris			9				9
Canadian Serviceberry				1	1		
Alternate-Leaved Dogwood				1	1		
Subtotal	44	25	18	20	89	0	18
Totals	107						



Plant Information

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



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.



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.







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.



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.



Common Polypody Height: 30 cm

The Common Polypody is a small, evergreen fern species that typically grows less than 30 cm in height. This plant may also be known by the common names Rock Polypody or Rock Cap Fern. The leaves are erect, leathery, yellow green to dark green colored, and pinnately compound with 8-20 deep lobes.







Narrow Leaved Meadowsweet Height: 1-2m

The Narrow Leaved Meadowsweet is an erect, deciduous shrub, which grows in the shape of a mound to a height of 1-2m. This species develops numerous branches and branchlets, giving it a sparse appearance. Leaves produced are simple and narrow with sharply toothed borders growing alternately along the branches. These bright, light green leaves appear crowded, as they grow close together on the stocks and branches. During the fall, leaves turn a yellow-red or yellow-orange colour. Small white to light pink flower clusters appear in the spring growing in a dense, narrow pyramid at the terminal ends of the branches. During late summer to early fall, these flowers produce smooth, papery seed pods.

New Jersey Tea Height: 1-1.5 m

New Jersey Tea is a short, hardy, deciduous shrub species that typically grows between 1 and 1.5 m in height. This plant may also be known by the common names: Red Root, Indian Tea, or Wild Snowball. The leaves are alternately arranged, broad, ovate shaped, dark to medium green colored, have toothed margins, and have hairy undersides. The flowers are tiny, white colored, fragrant, appear in clusters on flowering stalks, and bloom between May and July. The flowers are beneficial for pollinator species, like butterflies and hummingbirds. The root system is thick and deep making the plant drought tolerant and valuable for erosion control.





Shrubby Cinquefoil Height: 1 m

Shrubby Cinquefoil is a hardy, deciduous shrub species that grows about 1 m in height. The stems are reddish brown to gray and appear shredded with age. The leaves are green to blueish green, narrow and elliptic shaped, hairy, alternately arranged, compound with 5 leaflets, and have entire margins. The flowers are showy, yellow, saucer shaped, have five petals, appear in small clusters on terminal branches, and bloom between June and September. In the fall, the flowers give way to an oval-shaped, brown fruit covered in white hairs. The flowers are beneficial to pollinator species, like bees and butterflies. This is a popular shrub for ornamental use in gardens.



Christmas Fern Height: 0.5 m

The Christmas Fern is a hardy evergreen fern which can withstand a variety of environmental conditions. It is one of the most common ferns within North America. This species produces robust, leathery, lace-like leaves which grow in a fountain like clump and persist throughout the winter. Silvery and scaled fiddleheads emerge early in the spring. This fern rarely exceeds heights of half a meter and is a popular fern species to utilize in landscaping due to its year-round colour. This fern is often planted for restoration applications due to its ability to conserve soil and control erosion.





Silky Dogwood Height: 2-4m

The Silky Dogwood is a large, deciduous shrub species native to Eastern North America that reaches a height of 2-4m. This species produces a rounded shape due to its numerous upright branches stemming from a central, multi-stemmed base. Branches which grow touching the ground can develop their own root system, often creating thickets. During the spring and summer, branches are a shiny, light green colour and change to a red colour during the fall and winter. This species produces simple, lance-shaped leaves arranged oppositely along the branches. During the spring and summer, the foliage is a deep green colour and turns dark red-purple during the fall prior to dropping. Small, yellow-white flowers bloom during mid-June, maturing into bright blue berries in September. This species of Dogwood grows best alongside Willow when being planted to mitigate erosion and stabilize shorelines.



Bearberry

Height: 20 cm

Bearberry is a low growing, evergreen shrub/ground cover species that grows about 20 cm tall. The leaves are dark green, leathery, shiny, ovate shaped, alternately arranged, and have entire margins. The flowers are tiny, urn shaped, white to pink colored, appear in drooping clusters, and bloom between April and May. Flowers are followed by bright red berries, which remain throughout the fall and winter. These berries are beneficial to wildlife species like birds and small mammals.





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.



Swamp Rose Height: 2m

The Swamp Rose is a beautiful perennial shrub species that typically grows 2m in height and spreads 2m. It is visually appealing with large pink flowers that last about 6-8 weeks. These flowers have five pink petals, a yellow center, and a pleasant fragrance. This species produces oblong shaped, compound leaves comprised of seven leaflets with serrated edges. The Swamp Rose produces red, round, fleshy fruit called rose hips, which remain on the bush throughout winter. These fruiting bodies provide a winter food source for wildlife, such as Grouse, Black Bears, Deer, and Rabbits. Swamp Rose may be confused with Prickly Wild Rose, which has a similar appearance. However, Swamp Rose can easily be distinguished by the presence of curved thorns, which appear at the nodes of the twigs without any occurring between the nodes. Swamp Rose grows best in moist, rich soils such as swamps and marshy shorelines. However, this species can also tolerate drier, loamy soils.





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.



Swamp Milkweed Height: 1 m

Swamp Milkweed is a beautiful wildflower species that typically grows about 1 m tall. The leaves are light green coloured, narrow, lance shaped, and oppositely arranged. The flowers are showy, fragrant, bright pink, appear in clusters on flowering stems, and bloom between July and August. The flowers give way to large, long and narrow, brown seed pods, which produce an abundance of seeds with tufts of long, white hairs. The flowers are beneficial to pollinator species, like bees and butterflies. As with all Milkweeds, the stem exudes a milky sap when broken, however the sap of the Swamp Milkweed is less milky than other species. This sap is critical for caterpillars of the endangered Monarch Butterfly to deter predators.





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.



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.

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Alternate-Leaved Dogwood Height: 5-10 m

The Alternate-Leaved Dogwood is a tall, deciduous shrub or small tree species that can grow 5-10 m in height. This plant may also be known by the common name Pagoda Dogwood. It can be grown either in the form of a single stem tree or multistemmed shrub comprised of two or three smaller trunks. The leaves are ovate shaped, alternately arranged, have prominent veins, have a pointed tip, and have entire margins. The flowers are showy, fragrant, whitish yellow, appear in flat clusters, and bloom between May and June. These flowers produce clusters of dark blue berries. The flowers are beneficial for pollinator species while the berries are beneficial for wildlife species. The root system is valuable for controlling erosion and stabilizing loose soil. This plant is often used as a small ornamental tree in landscaping. The common name comes from the fact that all other Dogwood species have oppositely arranged leaves.



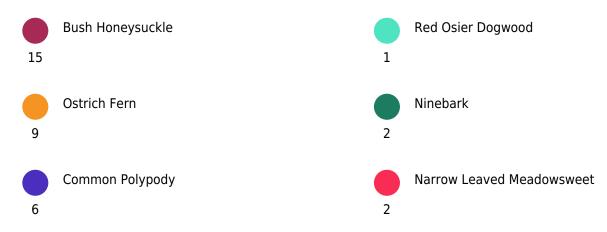
Compartment A

Naturalization Area

Wildflower Farm 866-476-9453 www.wildflowerfarm.com 10195 Hwy 12 West, Coldwater

- ₽H: acidic
- ♥ DEPTH: potted
- MOISTURE: normal
- SOIL TYPE: loamy
- $\stackrel{\wedge}{=}$ PLANT HEIGHT: max 2m
- 🖄 LIGHT CONDITIONS: partial sun









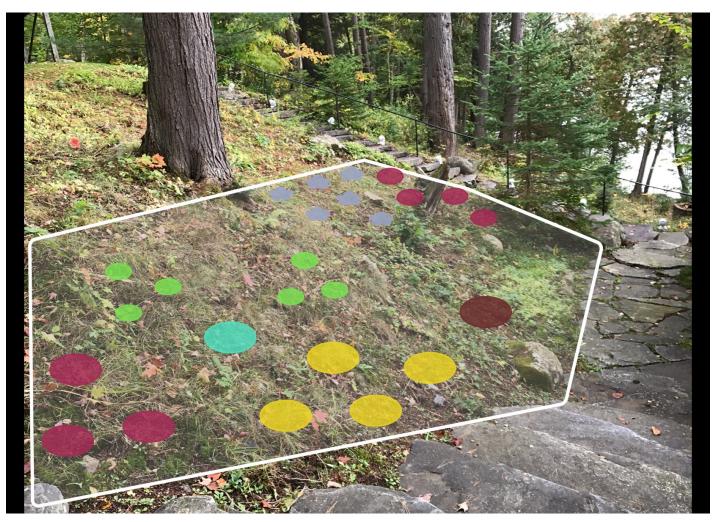
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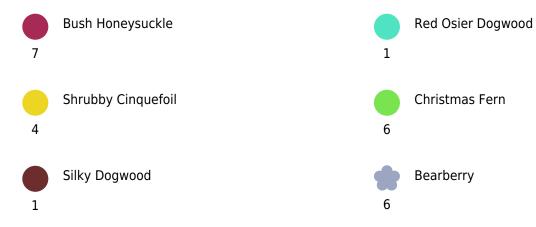


Compartment B

Naturalization Area

- ₽H: acidic
- ♥ DEPTH: potted
- MOISTURE: normal
- SOIL TYPE: loamy
- $\stackrel{\uparrow}{=}$ PLANT HEIGHT: max 2m
- 🖄 LIGHT CONDITIONS: partial sun



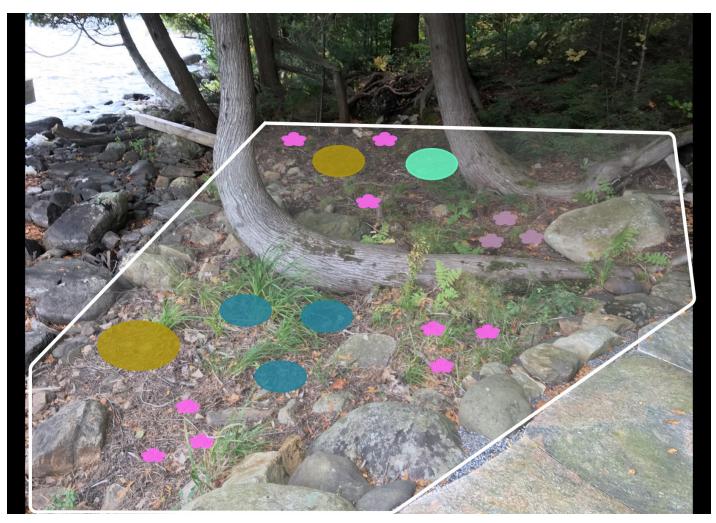




Compartment C

Naturalization Area

- ₽H: acidic
- ♥ DEPTH: potted
- MOISTURE: moist, wet
- SOIL TYPE: sandy, loamy
- 🖄 LIGHT CONDITIONS: partial sun





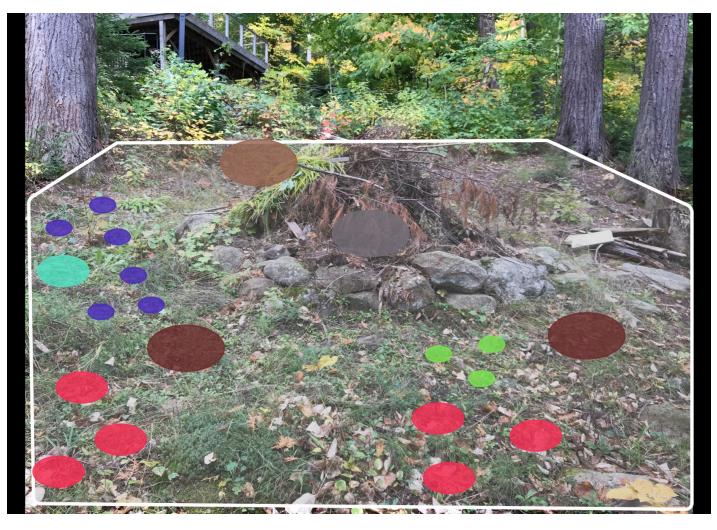


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Compartment D

Naturalization Area

- ₽H: acidic
- ♥ DEPTH: potted
- MOISTURE: normal
- SOIL TYPE: loamy
- 🖄 LIGHT CONDITIONS: full sun, partial sun





Alternate-Leaved Dogwood







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	69	12.00	828.00
Free bareroot plants	0	\$0	\$0
Free wildflowers	18	\$0	\$0
Total costs			1128.00



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 Janet & James Caskey 1162 Main Street Dorset 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

Janet & James Caskey Owner Signature:



Representative Signature:





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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.

