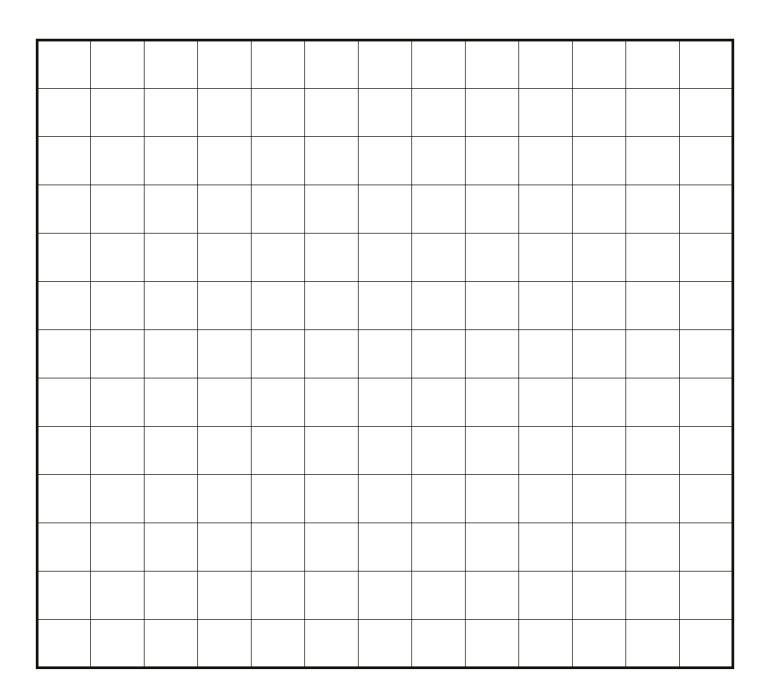




## GET TO KNOW YOUR SPACE

#### Sketch your space

Once you've identified an outdoor space where you live, learn or work, use this page to sketch it out with the help of <u>Google maps</u>. Use the grid provided to help draw features to the correct scale.





#### **Light mapping**

Adapted from

https://www.gardeningknowhow.com/garden-how-to/info/making-a-sun-map.htm

Explore how much sunlight your outdoor space receives by creating a sun map. This will help determine which types of native plants this space will need to thrive. To make a sun map, you will need graph paper, a ruler and pencil crayons.

Redraw the map that you've sketched of your habitat area onto a new sheet of graph paper or on the grid below. Be sure to include buildings and other structures, such as tall fences, large trees and shrubs, and anything else that may cast shadows throughout the day.

From the start to the end of the day, mark down where sunlight is hitting your outdoor space and where the shade is every two hours. Use reds, oranges and yellows to mark sun exposure and cool colors like purple, blue and grey to indicate shade. For each time interval, it's helpful to use a different colour or shade.




#### Water mapping

How much water does your site naturally get? Knowing this can help determine what kind of drainage your garden bed or container garden will need. After a rain event, map where water collects and flows in your outdoor space. Use arrows to show the direction of water. Indicate puddles, ponds, wetlands, streams, downspouts from roofs, slopes, dry vs. wet spots, etc. This may also help if you are planning a rain garden.

It's worth marking down the location of hoses, sprinklers and irrigation.



CREATE AN ACTION PLAN FOR WILDLIFE

## ADDITIONAL LAYERS AND OBSERVATIONS

(other elements to layer onto the map)

Once you have created the first three layers of your map, you can continue to include other elements and observations as new layers to determine what sorts of natural infrastructure (plants and trees) would work best in the space.

#### Soil quality:

If there is soil present in your selected space, take samples of the different types of soil. Record your observations such as the soil's colour, texture, composition, compaction, particle size and nutrient composition. From this, you can determine what areas of the outdoor space would be best suited for which types of plants and what areas may need additional organic matter, compost, sand or clay added to it. If your area does not have any soil and you are planning to plant in a container, you can skip this step!

#### Site context and connections:

Is the outdoor space accessible to things that will help maintain it, such as running water (from a hose, kitchen or washroom), storage for gardening materials, or compost for nutrients? Identify and include these types of site features that may be relevant to the habitat you are planning.

#### **Buffer zones:**

While the habitat you create is to be enjoyed by all, plan to ensure it won't be driven or stepped over by identifying and drawing any roads and walking/biking paths — as well as other high-traffic areas such as sports fields, playgrounds and dog parks. Once you have these mapped, plan to leave enough space between any of these high-traffic areas and your habitat to ensure the longevity of your site.

#### **Materials:**

Is there any possibility of reusing material from projects or operations nearby?

#### Microclimate:

Does your outdoor space have any particularly windy areas or microclimates that might interfere with the project? If so, consider avoiding these areas based on your habitat's needs.

#### **Community connections:**

Wildlife such as pollinators will visit different habitat patches in an area on their search for food and shelter. Your proposed patch of habitat will add to the resources available to them. Are there green spaces or gardens nearby that wildlife visit? Are there community garden projects you could share your knowledge with or seeds from your native plant garden?



# LEARN ABOUT LOCAL ECOSYSTEMS AND NATIVE SPECIES

#### Locate your ecozone:

An ecozone is a large area of land that is defined by its distinct combination of living and non-living, interacting elements – which include its geology, plant life, wildlife, climate and more. Pinpointing your ecozone can help you find the relevant resources to identify native plants and animals.



Ecosystems local to you (example ecosystems include grassland, forest, aquatic, etc.):

Good existing features to keep in your outdoor space:

Plant species wish list:

Where to get plants/seeds/trees from:

Approximate cost of plants/seeds/trees:



#### **Habitat calculator**

Adapted from Carolinian Canada's Wildlife Action Plan.

Once you have mapped out your area but before you start planting, you can use the following calculator to set a baseline for your area. This exercise can then be redone once the project has been completed and can be repeated annually, or whenever more habitat is created.

	AREA TYPES	DESCRIPTION	EXAMPLES	PERCENTAGE OF Property (0-100)	
A	NATURAL Habitat	Old vegetated areas and natural ecosystems	Forests, thickets, prairies, meadows, ravines, wetlands, ponds and streams		NATURAL INFRASTRUCTURE Add A+B*
В	PLANTED Habitat	Areas on your property where plants (such as trees, shrubs and flowers) have been planted	Food garden, flower bed, planter boxes, memorial and fruit trees		
С	SOFT	Permeable surfaces that rain can soak through	Lawns, soccer fields, gravel and wood chips		HUMAN INFRASTRUCTURE Add C+D
D	HARD	Impermeable surfaces that rain runs off	Buildings, parking lots, roads and paved driveways		
	WHOLE Property	ADD ALL TYPES A-D		100	

<sup>\*</sup>The higher the proportion of natural infrastructure, the healthier, more resilient and more biodiverse a landscape will be. Aiming for 30-50 per cent is an excellent goal. You can achieve this by expanding existing natural infrastructure features (categories A and B) and/or by converting human infrastructure (categories C and D) so that they include natural features.



## SELECT YOUR HABITAT TYPE

#### **Habitat restoration projects**

Based on your initial baseline results from the habitat calculator, you can use the table below to identify what type of habitat could be created in your outdoor space.

AREA TYPE	FIRST STEPS	NEXT STEPS	LONGER-TERM PROJECTS
NATURAL HABITAT	Identify the plants and animals currently in this space using a tool like iNaturalist, making a note of keystone species and species at risk	Grow natural buffers     to begin the process of     expanding natural areas	Develop a     long-term monitoring     and stewardship plant in     collaboration with your     school and your local     conservation authority
PLANTED HABITAT	Add a few native plants to your space that are appropriate to your region and growing conditions (use your light and water maps as a guide!)	Replace non-native/     ornamental plants with     diverse native species	Grow garden beds for seed harvest and sharing
SOFT	<ul><li>Stop using pesticides/ herbicides</li><li>Reduce mowing</li></ul>	<ul> <li>Plant a garden bed</li> <li>Incorporate steppable native plants</li> </ul>	Convert to native plants and trees
HARD	Make a container garden     or raised bed	Create a rooftop garden	Build a greenhouse to grow native plants to incorporate into your planted habitats



Your project name:

**Planting location:** 

Describe your idea:

How can others be involved?

Supplies and resources needed:

For example: What do you want to accomplish for wildlife?

Project team and roles (if applicable)

How can others use this outdoor space?

Site preparations and permissions needed:

Stewardship plan for your habitat (maintenance, watering):

**Project goals:** 

### **BUILD OUT YOUR IDEA!**

Го-do list:							
TASK	WHEN	WHO WILL LEAD THIS?					
	ı	1					



- **Track your impact:** Creating an *Action Plan for Wildlife* is an important step in your personal journey towards fighting climate change and biodiversity loss. Once you've completed your action plan, log into your Living Planet @ Campus dashboard to record that you've completed this important activity. You can also count it towards your WWF Living Planet Leader student certification under the category *Personal Application of Sustainability*.
- Share your action plan with others: Interested in actioning your plan for wildlife? If you haven't already, present your idea to others who can help you make your idea a reality. Planting at home? Talk to your family or roommates about the importance of creating space for wildlife where you live. Planting at work? Inspire your coworkers and management to plant native plants, sharing the benefits to wildlife and to people. Gardens are excellent places to visit to de-stress and reconnect with ourselves. If interested in planting on campus, talk to your student union, your campus sustainability office or the grounds department.
- Inspire others to create habitat for wildlife: Share what you've learned about the importance of native plants, and how planting even one native plant is a step towards fighting climate change and reversing biodiversity loss. What you share may inspire someone to apply it at home with their family or roommates. Let them know that they can be part of the solution by growing native plants that provide shelter and nourishment for wildlife, whether they have access to large green spaces or a small balcony or stoop for a container garden.