

Microhabitat Mapping Toolkit

Challenge Objective:

Discover and document the tiny wild spaces hiding in plain sight.

Challenge Overview:

In this toolkit, you'll become an urban ecologist. You can do this on your own, with friends, as a club, or with your class. You'll . . .

- Map small forgotten corners like sidewalk cracks, fence edges, and parking lot borders
- Photograph and sketch what grows there
- Identify native vs. invasive species
- Create your own "microhabitat field guide" to share with your peers

Short on Time? Choose Your Path:



Explorer:

Try the Research and Explore steps.



Researcher:

Do the Research and Expert Interview steps.



Storyteller:

Focus on your Expert Interview and Take Action Steps.



Advocate:

Skip to the Research and Take Action steps.

RESEARCH

Goal:

Understand what microhabitats are and why they matter.

Activity:

Choose one or more:

- Find a short video or article about urban plants, native vs. invasive species, or how plants adapt to cities.
- Look for small green patches near roads, sidewalks, or buildings these "forgotten corners" are microhabitats!
- Ask Yourself:
 - Why do some plants thrive where others can't?
 - What do these little pockets of life tell us about adaptation and resilience in nature?





EXPLORE

Goal:

Locate and document microhabitats in your community.

Head outside and look for small wild spaces such as sidewalk cracks, fences, gutters, planters, or around trees.

- Take photos or sketches of what you find.
- Note what's growing there: grass, moss, weeds, flowers, vines?
- Observe & note conditions: sunlight, moisture, soil type, or nearby litter.
- Record signs of wildlife: ants, bees, birds, or other small animals.
- Compare microhabitats: Notice differences between similar spaces. What might explain the variation?



Tip: Can't go outside or short on time? Use Google Street View to study microhabitats in your area.

LEARN FROM AN EXPERT

Goal:

Get insight from someone who knows your local environment.

Activity:

Interview or email with a local park ranger, native plant society member, or community gardener.

Sample Questions:

- How can you tell if a plant is invasive or native?
- What are some easy ways people can support native species in small urban spaces?
- Why do microhabitats matter for pollinators, insects, and other small wildlife?





DOCUMENT YOUR FINDINGS

Goal:

Turn your observations into a visual Microhabitat Field Guide.

You can include:

- Photos or drawings of your microhabitats
- Labels for native vs. invasive plants
- Short notes on where you found them and what role they play in the ecosystem
- A map or digital layout showing where each habitat is located

Optional final formats:

- A printed mini field guide or zine
- A digital slideshow, poster, or short video
- An online post or classroom display





TAKE ACTION

Goal:

Share what you learned and inspire others to notice nature around them.

Choose one or more:

- Present your guide to your class, garden club, or community group.
- Post your findings online or in your school newsletter to highlight hidden habitats.
- Partner with a local garden or club to protect or restore one small patch of land.
- Leave small informational signs (with permission) to help others recognize native species.





REFLECTION

You've uncovered nature in unexpected places! Ask yourself:

- What surprised you most about where plants, insects, or other life can thrive?
- How could you protect or restore one of the microhabitats you discovered?
- What patterns or connections did you notice between different microhabitats in your community?

By exploring, documenting, and sharing your findings, you've shown how even the tiniest spaces can support life.

