

Bioblitz at the Library: Celebrating Biodiversity

Activity Time:

45 – 60 minutes; Long duration (*days to months*)

Intended Audience:

Families, All Ages

Type of Program:

Facilitated hands-on experience; Passive program (*if instructions are provided at the start of the course*)

Overview

Invite your community on a walk around the library's outdoor spaces to record observations of the plants and animals. Turn this into a community science project by submitting the observations to the free app, iNaturalist. The data will be used to inform biologists how to best protect and restore an ecosystem.

What's the Point?

- * In order to protect native plants and animals, we first must understand where wildlife is located and how it's distributed.
- * Community members can deepen their connections to one another over their shared place and observations of their local environment.
- * Participating in community science projects will allow individuals to develop their scientific knowledge and observational skills, while contributing valuable data that can enhance scientific research.

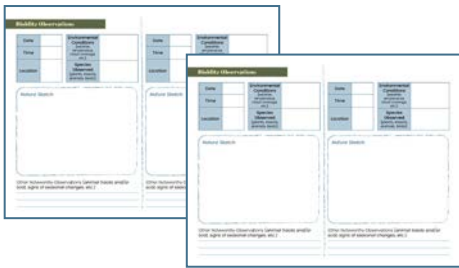
Materials

Facility needs **one** or more of the following:

- * An outdoor space for participants to go on a leisurely walk or to sit and make observations of nature. Consider reaching out to a community partner, such as city parks, if this is not available on the library's grounds. **Safety Note: choose an area with few hazards; set and identify boundaries.**
- * Windows to view nature from indoors
- * Access to community trails
- * Access to community nature cams

Program Materials:

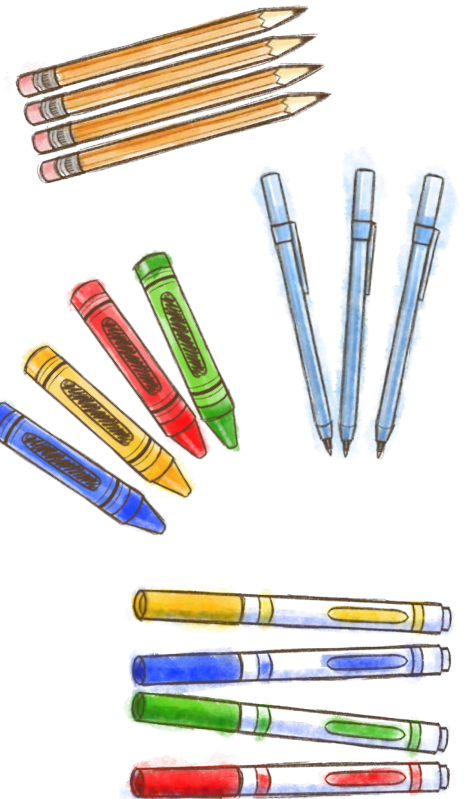
- * **Observation Sheets**



- * **(Optional) Clipboards**



- * **Pencils, pens, crayons, markers**



- * **Field guides for trees, plants, insects, birds, and animals from your area**



- * **(Optional) Smart phone or tablet**



Preparation:

Print images of common plant and animal species from your area to help participants with identification. You can look up species using the following resources:

- * Search for local animals by state: <https://animalia.bio/lists>
- * Search for local plants by state: <https://plants.usda.gov/home/stateSearch>
- * Search for local birds by region: <https://www.audubon.org/bird-guide>
- * **(Optional)** Create a Bioblitz project on the iNaturalist platform using the instructions found here: <https://www.wildhope.tv/engage/how-to-organize-a-bioblitz/>. You can choose to focus your observations on a single species, such as a "Bug Bioblitz," or keep it broader. All data is helpful!

Activity

STEP 1.

Welcome to the Bioblitz!

Gather your audience in your outdoor space (**or the indoor space with a window**) introduce yourself, and welcome them to the Bioblitz! Explain that to protect native plants and animals, we must first understand where wildlife is located and how it's distributed. A bioblitz takes a snapshot of an ecosystem, and we are here today as a team of observers to record the plants and animals within this area. Scientists will use this data, uploaded onto iNaturalist, to learn more about how to best protect and restore and ecosystem.

Facilitator's Note: Ask open-ended questions such as:

- * Who are some amazing observers and what makes them good observers?
- * What are different ways we can observe nature?
- * What wildlife have you observed in your neighborhood?
- * What changes have you noticed in your environment recently?

STEP 2.

Observation Warm-Up

Before handing out the Observation Sheets, lead the audience through an "observation warm-up." Share that it can be easy to miss or overlook the details around us, so you're going to offer three strategies that can help them develop their observation skills.

"I notice..."

- * Ask everyone to find one natural object and return to sit or stand in a circle.
- * Instruct the group to "turn and share with your neighbor" what you notice about your object. Give them one minute to share with each other.
- * Remind them that observations are what you notice in the moment, not what you already know or opinions you have. "I notice this is a leaf" recalls what you already know, or "I notice this is gross" is your opinion, not an observation.
- * After one minute, invite a few pairs to share their observations with the whole group.

"I wonder...?"

- * Now invite partners to dig a little deeper and turn back to their partner to use the sentence starter "I wonder...?" about their object and to ask as many questions they can think of. Sample "I wonder...?" questions can include:
 - *I wonder how long this rock has sat in the same spot?*
 - *I wonder why this leaf changed colors in the fall?*
 - *I wonder if the patterns on this bark serve a specific purpose?*
- * After one minute, invite a few pairs to share.

"It reminds me of..."

- * Finally, invite participants to share with their partners to connect their observations to an experience they've had or information they already know by prompting them to share what their observations of their object reminds them of. Sample "it reminds me of..." statements can include:
 - *The lines on this leaf remind me of river systems in a watershed.*
 - *The shape of this pinecone reminds me of the spiral shape found in a seashell.*
 - *The color of this rock reminds me of the color of my best friend's eyes.*

STEP 3.

Outdoor exploration (or making observations through the window) and data collection

It's now time to use our observations to collect data! Pass out the Observation Sheets on clipboards, along with writing and drawing utensils. Remind participants of the field guides and the pictures of local plants and animals if they would like to look up specific species.

Encourage folks to work alone or in groups. Let them know how long they have to make their observations and set a timer for when it's time to re-group.

STEP 4.

Conclude

Allow time for folks to share about one of their most interesting finds. If you created a Bioblitz event on iNaturalist, collect their Observation Sheets and let them know you will be entering the data into the app.

Encourage participants to create their own iNaturalist account at home and join your Bioblitz event to continue adding their observations after the program is over.

Extensions



- * Continue exploring! Consider offering this program weekly or monthly over the course of the year to look for changes in the plants and animals.
- * Make this a passive program by offering Observation Sheets that can be picked up and turned in at the front desk.