

Introduction

As a part of the CNC education toolkit, a group of educators at institutions around the world has gathered and reviewed hundreds of resources about biodiversity and citizen science that are relevant to the City Nature Challenge. These resources are our recommended activities for the general public.

The following progression is appropriate for a general, non-scientific audience. Activity 1 provides an introduction to why biodiversity matters, and this can serve as a springboard for a discussion on urban conservation and citizen science (i.e., “There is nature and wildlife in the city, too.”). Activities 2, 3, and 4 prepare participants for BioBlitz fieldwork and iNaturalist usage, respectively. Activity 5 allows participants to “take something back” from the BioBlitz, as a reminder of the biodiversity they encountered.

See ‘modifications and extensions’ section below for ideas on how to make these activities work for you, whether you work with the public at a museum, nature center, after school program, homeschool, or other informal environments. You can search through the [full set of general public resources](#) for educator guides, classroom and field activities, media, and more!

Although the [Guide to Teaching Students Outside](#) was written for students, you may find some useful tips on outdoor group management and teaching strategies.

Objectives: Participants will...

- Become aware that biodiversity exists and matters, not only in the wild but also in cities
- Equip self with necessary skills to conduct a BioBlitz, particularly using the iNaturalist interface
- Reinforce discoveries/learnings with the creation of a physical, communicative output

Activities

Activity 1: Introduction to Biodiversity and Citizen Science Videos

Post to social media or use one or both of these videos to introduce the public to the concepts of biodiversity and citizen science.

- **Video 1:** [Why is biodiversity so important?](#)
 - **Activity Time:** 5-minute video
 - **Recommended Use:** Useful resource for starting an introductory discussion on biodiversity. Facilitators can then bring the discussion to the city, setting the CNC in context.
- **Video 2:** [SciShow “The Awesome Power of Citizen Science”](#)
 - **Activity Time:** 10 minute video
 - **Recommended Use:** Post this on social media or include in a newsletter to help set-up your volunteers and members for one of the core reasons to participate in the City Nature Challenge. You could also loop this video in your nature center, museum, or aquarium.

Activity 2: [National Geographic: Backyard BioBlitz](#)

- **Type:** Field Investigation
- **Prep Time:** 30 minutes to review the materials
- **Activity Time:** Several hours to participate in BioBlitz.
- **Recommended Use:** Guided instructions for families and homeschool groups to participate in a BioBlitz in their own yard or green space. Includes activities that are good for kids.

Activity 3: [National Geographic Mission: Explore](#)

- **Type:** Field Investigation
- **Prep Time:** 15 minutes to review the materials
- **Activity Time:** Depends on the number and type of mission you select.
- **Recommend Use:** Encourage families to use these missions when participating in their own backyards and greenspaces. You can also include these print-outs for nature center visitors to participate in the challenge to find biodiversity.

Activity 4: [Encyclopedia of Life Introduction to iNaturalist](#)

- **Type:** Field Investigation
- **Prep Time:** 30 minutes to review the materials
- **Activity Time:** One to two hours to trial-run iNaturalist.
- **Recommended Use:** Once participants are familiar with the concept and work involved in a BioBlitz (Activity 2 and/or 3), they can proceed to using iNaturalist. The [Teacher's Guide](#) includes useful guidelines on recommended observations to include, and what not to (e.g. wild vs. cultivated). Although this was written for use with students in formal settings, it can be adapted for general public audiences.

Activity 5: [EOL Species Cards](#)

- **Type:** Activity
- **Prep Time:** 30-60 minutes to prepare the required stationery
- **Activity Time:** Varies
- **Recommended Use:** Good follow-up/wrap-up activity to remind participants of what they discovered during the BioBlitz. Great craft-based activity for families to work on (a memento of the BioBlitz!), and fairly non-threatening for non-scientific audiences, too. These cards can then be used as a “refresher” the next time they participate in a BioBlitz. (This activity can be modified to produce a poster, booklet, or any desired medium to communicate findings.)

Modifications + Extensions

- **Watch [The Crowd and The Cloud](#)**
 - **Full Episodes:** <http://crowdandcloud.org/>
 - **Recommended Episode:** <http://crowdandcloud.org/watch-the-episodes/episode-four>
 - **Prep Time:** 30 minutes to review episodes
 - **Activity Time:** Episodes are 60 minutes, segments are 10-15 minutes long.
 - **Recommended Use:** After the City Nature Challenge, post links to the Crowd and Cloud episodes and segments to encourage people to find and participate in more citizen science projects. Episode 4 is specifically focused on more nature projects and show citizen science through the 4 seasons.

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- **Extend exploration throughout the year:**
 - Create an iNaturalist project for your nature center or for your audience to continue making observations throughout the year, then share highlights on social media.
 - Encourage participants to time each week as a family going on walks or hikes and documenting what they find.
 - Have families build bird feeders to increase the biodiversity they can see in their backyard or from a window.
 - Provide tips for how people can make their yards more wildlife friendly, building backyard habitats or window boxes to attract pollinators.
 - Explore the [full set of general public resources](#).