



Wildlife and the Built Environment I

Recommended grade levels: 6-8

Recommended Time: 50+ min

Associated NGSS concepts: Principle II, (MS-LS2-5), (ETS1.B)

KEY VOCABULARY

Infrastructure- the basic material and organizational structures needed for a society to run (buildings, roads, plumbing, internet, etc)

Observation- using all 5 senses to think closely about a thing or person

Companion Species- species that have adapted to live with and among humans, wild or domestic

Cohabitation- living together or in close proximity with the other

Urban Nature- the nature that is found in developed locales. Not necessarily limited to thinking about cities, any nature found in populated areas.

LESSON WALKTHROUGH

Generate

Begin by prompting students to have a conversation with the instructor about urban nature and wildlife. Students should dive deeper than just recognizing and naming wild species that live near them, rather they need to reconsider animal encounters as wild life observations. Conversation should start with generating this list then moving on to discussing the conditions where these animals are spotted. Some questions to guide this discussion are:

- What were you doing when you saw ___?
- What time of day was it?

- How was the animal's demeanor?
- What do you think of when you encounter a __ in the wild?
- Is it ubiquitous in daily life? Is it rare to see a __?
- Does the amount of interactions you have with a __ change your attitude towards seeing them?

Move the discussion to talking about the presence of the built environment in these interactions. One common thread regarding wildlife is that while they have adapted to living in developed areas, their existence is still stressful and strongly impacted by encounters with people.

Challenge students to share experiences and thoughts about how cohabitation is never as simple as it seems.

Create

Encourage critical thinking in this discussion to think about how wildlife is directly impacted by built infrastructure and technology. Brainstorm a list together and write it out on the board for easy reference for students as you transition into their activity. In small groups students will engage in either *Infrastructure Editors* or *Wildlife Wheatpasters*.

Reflect

Students will present their work to the class and collectively reflect on the main lessons of the activity:

- Wild lives are impacted in many ways by infrastructure that is not built for them in mind.
- As good companion neighbors there are actions we can take to promote harmonious living.
- Public education and retrofitting our world is one immediate action we can take to be more wildlife aware.

ACTIVITIES

Infrastructure Editors

Students will work together in groups to design and provide a plan to edit existing infrastructure and build structures in place to make them more wildlife friendly. Some material edits that already exist are inventions such as birdsafe window decals to prevent glass collisions, or freeway wildlife overpasses. Worksheets of build environments are found at the end of this document for students to work off of.

For a more advanced version of this exercise, students can forgo the worksheet and brainstorm their own infrastructure edits generated from class discussion.

Materials needed: Built infrastructure worksheets, paper, pencil

Wildlife Wheatpasters

Wheatpasters is an old name for artists or marketers who hang posters in public spaces. Students will work in pairs or groups to design a poster campaign about being wildlife aware. Their goal is to identify a key issue urban wildlife face and present a wildlife friendly alternative to it. Posters must be informative, accessible (easy to understand), and eye-catching!

Materials needed: Paper (standard size for draft), poster paper, art supplies

Send a photo to SBWCN of your wildlife friendly crafts and we may reach out to share your work on our socials!

EXTENSION EXERCISE:

Nature Journaling

Nature journaling is more than just listing and drawing wildlife you see. It is about observing and recording nature, the living and nonliving things in it. Nature journals are a mix of science and art. In this extension of the lesson, instructors will help students set up a Nature journal. Certain elements of their journal must include: a species name (common or scientific are acceptable), the date, time of day, weather, and other environmental elements nearby, especially include notes on how they notice the species interacts with built environments and infrastructure. Students should also be encouraged to add their thoughts and observations to annotate the drawing of their items.

An example of a nature journal set up is available under Animals Around Us II. This can be used if desired.

Materials Needed: Paper/booklet, Pencil, Colors