

Study Guide For Teachers

Billy B.
In
“**Nature in the City**”
presented by

Young Audiences
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www.yanj.org
www.yaep.org



BACKGROUND INFORMATION FOR STUDENTS

Why are cities located where they are? Why do certain species of animals live there? What are the examples of the natural world's constant presence in the urban environment? What can we do to better integrate natural systems into our designs for buildings, roadways and urban green spaces?

In looking at the location of cities, one almost always finds, in one form or another, water. Rivers emptying into oceans, rivers coming together with other rivers, bays, the coast of very large lakes, these are the places where cities have come to be. The ability for large ships to bring and take away large amounts of goods enables the local population to engage in commerce with the other far away ports. What started as little trading posts often became the cities we know today. Also, the bodies of water often provided, as still do provide, seafood. And today, the bodies of water are important recreational areas. Thus, it is the natural environment that establishes where our urban centers are located.

Animals that are adaptable in their diet and their dwelling requirements, or those who find the structures we build match their needs, are the animals we find living with us in the city. Raccoons, possums, squirrels, rats, foxes, rabbits, deer, coyote, crows, pigeons, falcons and hawks, cockroaches and many others have found comfortable niches in man-made environments.

There have been many recent efforts to better design and take advantage of natural systems to save energy in our structures and provide better habitats for the creatures who live amongst us. People are creating “green roofs” (roofs covered with plants) to absorb sunlight and keep the interiors of buildings cooler during the warmer times of the year. These roofs will also provide safe resting spots for migrating birds.

Like the little green weed poking up through the sidewalk or giant snowstorm covering the streets and bringing traffic to a halt, nature is constantly making its presence felt in the urban environment.

ABOUT THE PROGRAM

This show on Nature in the City was commissioned by the Centers for Nature Education, and the Institute of Museum and Library Services as a compliment for an in school curriculum that engages children in learning about their culture and the ecology of their neighborhoods. Billy B. uses science, humor, music, dance and audiences participation to introduce the many examples of the natural world in the urban environment and to promote the young peoples stewardship of the urban green spaces and waterways.

LEARNING GOALS

- Students will explore the many examples of nature in the urban environment
- Students will be reminded or taught for the first time about the importance and constant presence of photosynthesis, pollination, water flow and quality, migration and animal habitat.

BEFORE THE PROGRAM

1. Have the students list all living things in a specific area, for example, their school grounds or their backyards. Go over the list with the students and try to identify what each living thing gets and gives the chosen area of study. Does the listed creature's behavior conflict with his human neighbors? Why? What, if anything, could be done to resolve the conflict? Does the listed creature's behavior benefit his human neighbors? How? How would the loss of this creature affect his human neighbors?
2. At the following website, www.gowilsnyc.org, find and play the "squirrel game".
3. In New Jersey get access to *Bridges to the Natural World* by New Jersey Audubon. This book breaks New Jersey in to different regions and addresses the environment of each.

AFTER THE PROGRAM

1. Have students create an urban habitat using the simple "box project" concept. Students pick a specific habitat and include everything in that habitat that is necessary to sustain the diverse life within that habitat that is necessary to sustain the diverse life within that habitat. They can use real objects or create models for display in the classroom.
2. Have students do a field study on their playground. Have them count the birds they see, identifying them if possible or at least classifying them as little or big. Are the birds acting as a flock or are they more individual in their behavior? Have them identify the ant holes and the color of the ants. Have them establish how many different species of ants are living in the playground.

Follow the activities in the "Nature in the City" coloring and activity book which was given to the school by Billy B.

VOCABULARY WORDS

Urban: having city-like characteristics

Skyscrapers: very tall buildings

Habitat: the environment of a particular animal or plant, the place where they live and get the things they need to live.

Peregrine: a falcon, bird of prey, which prefers to live at the top of high places such as cliffs and skyscrapers. With its excellent vision, it dive bombs it's prey; often pigeons (in both the natural and urban environments), reaching speeds of up to 200 MPH.

Species: a group of plants or animals that have a certain common feature that set them apart from others. The male and female of a species of animal can mate together to produce young that will resemble the parents.

Soil: the top layer of the Earth's crust that consists of sufficient minerals and organize materials to be richly inhabited by organisms in general.

Climate: the temperature and weather patterns of a given area.

ARTIST INFORMATION

A veteran performer, Billy B. has performed for the National Geographic Society and the World Wildlife Fund as well as the White House, the Kennedy Center, The Smithsonian and in front of 200,000 people during the 20th National Earth Day. Billy B. has recorded several CDs of original songs and also written the script and music for all of his shows, and performed for television, video and film.

RESOURCES

www.billybproductions.com

www.takeahike.org

www.gowildnyc.org