American Museum of Natural History

***The Hall of Biodiversity*** *& the NYC Watershed*

The Hall of Biodiversity presents a vivid portrait of the beauty and abundance of life on Earth, highlighting both biodiversity and the factors that threaten it.

Ecological biodiversity is illustrated by a 2,500-square-foot walk-through diorama that depicts part of the Dzanga-Sangha rain forest, one of Earth’s most diverse ecosystems. Featuring more than 160 species of flora and fauna, the diorama uses video and sound to re-create the ecosystem at dawn, at an elephant clearing, and degraded by human intervention along a road.

The hall’s Spectrum of Life exhibit showcases the diversity of life resulting from 3.5 billion years of evolution. More than 1,500 specimens and models, from microorganisms to terrestrial and aquatic giants, are organized into 28 groups along the 100-foot-long installation.

Underscoring threats to biodiversity, a timeline of the five previous mass extinctions includes examples of species lost. A nearby display case features examples of extinct and threatened species, including the long-extinct Dodo bird and the threatened Siberian tiger. A multi-screen video installation provides a tour of nine ecosystems and explores perils to preservation.

In text, graphics, and on video, the Transformation of the Biosphere Wall presents dramatic case studies of changes to the biosphere—all living things on Earth and their habitats. Case studies on the Solutions Wall suggest possible remedies to the biodiversity crisis. Between these two walls, 10 computer kiosks offer access to Web sites, a bibliography, names of conservation organizations, and a searchable archive of the Hall’s quarterly BioBulletin —a video magazine.

**Check out these WATERSHED points of interest:**

* Dzanga-Sangha rain forest diorama
* Transformation of the Biosphere Wall, including:
  + Acid rain
  + Air pollution
  + Coastal flooding
  + Managing agricultural landscapes
  + Damage to Soils & Freshwaters – Human consumption of freshwater over time
  + Local land use policies – Clean Water Act, conservation easements
  + Deforestation – Forest loss over time
  + Research and Outreach – GREEN organization doing watershed protection

**Student Activity & Lesson Ideas**

*Generated by teams of Watershed Forestry Educators at the Museum on Saturday, January 17, 2015*

**Activities During Visit:**

1. **Transformation of the Biosphere Wall Investigation**: Divide students into small groups and assign each team to one of the 5 topics on the Solutions Wall. Each group does the following activities:
   1. Identify 5 scientific vocabulary words you know
   2. Find 5 vocabulary words that you don’t know (record them to look up later OR have students look up definitions on smart phones in exhibit.)
   3. For each type of environmental problem, describe 3 human activities that contribute to it.
   4. Identify and describe 2 possible solutions to each type of environmental problem.
   5. Choose one of the videos to watch and summarize it in your notes.
   6. Take pictures (selfies!) of different environmental problems and solutions. Relate these issues to similar issues in your local environment and community.
   7. Choose and record one of the environmental quotes then summarize what it means and why you like it.

**Post-visit Activities:**

1. **Dig Deeper with Videos**: The exhibit videos can be viewed at home through the AMNH website. Summarize the video and relate the information to the NYC watershed.
2. **Local Connections**: View and print the photos you took of the museum exhibit. Research a local environmental issue by taking pictures, finding news articles, and interviewing residents, local leaders and experts. Then describe how your local issue is both similar and different from the environmental problem described in the exhibit. What solutions did the exhibit suggest? How might these solutions work (or not work) to help solve the local issue.