Acts of Intervention: Humans and the Environment

Grade level 6-8

Curricular Connections Science / Visual Arts

Artist

Ron Rudnicki (American, 1956) Born in El Paso, TX. Works in East Freetown, MA.



Artwork

Rain Gates, 2000, granite, water, plantings, 25' \times 60' \times 60, Museum purchase with funds provided by Betty Jane and Stephen Andrus

Rain Gates is a sculptural landscaped environment about passage. It speaks to the physical passage of the viewer from one point in the landscape to another higher or lower point, depending upon the viewer's access point. The vertical distance to be traveled is actually about twenty feet, i.e. a considerable climb and/or descent. The rigor of this physical passage becomes mediated by the flowing water, the meandering step-stones, and the variegated plantings that share the path.

Perhaps the most impressive aspect of *Rain Gates* is how it brings the viewer into its presence—the special space that it creates in the landscape. The curved shapes of *Rain Gates* seem to rise organically from the craggy bedrock to invite the viewer to meditation, to enter the magic circle, and to proceed through the environment at a slower pace. The flowing, changing water contained by this artist-created subset of nature, allows us to ponder both the fixed and the transient aspects of existence—to set ourselves apart from the flow of the moment, to dream.

Goals

- 1. Students will learn to carefully view and describe Rain Gates.
- 2. Students will examine the outcomes of human interventions in the natural environment.
- 3. Students will learn about site-specific and installation art as they relate to sculpture.
- **4.** Students will discuss the positive and negative impacts of human intervention on the environment.

Vocabulary

- Site-specific: Art made for a specific space.
- Installation: Art made for a specific space which is dependent on viewer interaction.
- Intervention: Something that comes in or between things in order to stop or change them.
- Subtle: Having a faint, delicate quality that's hard to detect.

Looking Questions

- What do you see?
- What does the term "site-specific" mean? How does it apply to this work?
- Where does this sculpture begin and where does it end? How can you tell?
- What has the artist, Ron Rudnicki, used to create this sculpture?
- What are the relationships of the different parts of the sculpture to each other? Describe the relationship between the sculpture and the natural environment.

Discussion Questions

"In outdoor environments or natural settings I direct my energy to leaving subtle acts of intervention where sculpture and nature can merge."—Ron Rudnicki

- How do you think it would feel to walk through the installation Rain Gates?
- How is an installation different from an individual sculpture?
- How do you think this sculpture has changed since it was installed in 2000? In what ways will it continue to change?
- Do you think there is any part of this work that ties the whole thing together? Explain.
- How might this particular "act of intervention," as Rudnicki calls this sculpture, enhance the existing environment?

Activity: Moments of Human Intervention

• Students will research a case of human intervention in the natural environment, and compare it to Rudnicki's *Rain Gates*.

Materials

- Research tools
- Paper, pencils or pens
- Internet
- Library

Directions

Each student will select and research a case of human intervention in the natural environment. Example: The introduction of Zebra muscles into the Great Lakes and the resulting economic and biological change. Example: The use and impact of chemical fertilizers and pesticides, such as DDT, on the agriculture and the greater ecosystem. Example: Andy Goldsworthy's natural material installations. Example: Deforestation of the Amazon.

- Each student will write an essay describing their findings and compare the intervention to that in *Rain Gates* using the **Comparison Worksheet**.
- Students will present their case to the class.
- As a class, the students will discuss positive and negative impacts of human intervention on the environment.

Reflection Questions

- What surprised you most about what you learned from the case studies?
- Would you describe the examined cases as "subtle acts of intervention?" Why or why not?
- If you met Ron Rudnicki what questions would you ask him about Rain Gates?

National Standards

Science: http://cnets.iste.org/currstands/cstands-sK4.html

C: Life Science: C1. Structure and function in living systems

E: Science and Technology: Evaluate completed technological designs or products.

Resources

Websites

MapMachine: National Geographic's Online Atlas http://plasma.nationalgeographic.com/mapmachine/

Biodiversity: Human Intervention

http://www.globalissues.org/article/170/why-is-biodiversity-important-who-cares

Biology-Online: Population Regulation in an Ecosystem

http://www.biology-online.org/4/5_monitoring_populations.htm

Research Books

Ecosystems and Environment, Ann Fullick, Heinemann Library, 1999

ISBN: 1575727757

Extensions

- Social Studies: Study the global political implications of a particular human intervention on the environment (Example: History of the Suez Canal) and engage in a class debate.
 - Standard IX Global Connections
- English Language Arts: Students imagine experiencing this sculpture from different perspectives, worm's-eye-view, bird's-eye-view, etc. Then students write a short piece describing their experience considering the details available from each particular viewpoint.
 - Standard 5: Students employ a wide range of strategies as they write and use different writing process elements appropriately to communicate with different audiences for a variety of purposes.

- Math: Students work in small groups to create math problems based on volumes of water in *Rain Gates* and exchange their problems with other groups to solve.
 - Standard: Problem Solving

Comparison Worksheet

Directions: Select and research a case of human intervention in the natural environment. Examples: The introduction of Zebra muscles into the Great Lakes and the resulting economic and biological change. Example: The use and impact of chemical fertilizers and pesticides, such as DDT, on the agriculture and the greater ecosystem. Example: Andy Goldsworthy's natural material installations. Example: Deforestation of the Amazon.



- 1. Use this **Comparison Worksheet** to explore the **differences and similarities** between the act of human intervention you are researching and Ron Rudnicki's *Rain Gates*.
- 2. Write a short essay describing the differences and similarities between the two.

Describe the environment surrounding the act of intervention.

How does the act of human intervention react to or change the local environment?

How does it **complement** or **conflict with** the environment?

If you could change anything about this act of human intervention, what would you change? Why?