

Environmental Racism & The Tragedy of the Commons

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Overview of Lesson: This lesson is designed to engage students with critical thinking regarding the environment, sustainability, and environmental racism and justice. The lesson focuses on an in-depth comparison between the widely accepted Western idea of the Tragedy of the Commons, championed by Garrett Hardin, and the experiences and knowledge of Indigenous peoples. Students are expected to engage in critical thinking and conversation to understand not just the anthropocentric idea of the Tragedy of the Commons, but also the inherent racism and injustice to Indigenous peoples and their knowledge that comes with the idea.

About the Project: American Indians lived in the area we now call North Carolina for at least 15,000 years. Archaeologists study the remnants of their communities to learn who these people were and how they lived and prospered for thousands of years. The lesson presented below was developed as part of the 2021-2022 UNC World View Fellows Program, [Exploring Indigenous Cultures: Ancient North Carolinians, Past and Present](#). It is one in a series of lessons that the Fellows created for K-12 schools and community colleges to help students learn about the ancient peoples that lived here and those who represent today's vibrant American Indian populations. Lessons connect past to present day by exploring multiple resources within the [Ancient North Carolinians: A Virtual Museum of North Carolina Archaeology website](#) to examine how communities changed over time and what influenced these changes. Understanding past Indigenous lifeways—their complexity, resiliency, and vitality—allows for a greater appreciation of the contributions American Indians made to the past and continue to make to the present and future of North Carolina.

Length of Lesson: 2 class periods assuming a standard block (90 minutes).

Suggested Grade Levels: 10th-12th grades

Subjects: AP Environmental Science; Earth and Environmental Science; AP US History; American History 1 & 2; AP Human Geography

Corresponding National and State of North Carolina Standards:

[EIN-2](#): When humans use natural resources, they alter natural ecosystems.

EIN-2.A: Explain the concept of the tragedy of the commons.

[EEn.2.8](#): Evaluate human behaviors in terms of how likely they are to ensure the ability to live sustainably on Earth.

EEn.2.8.3: Explain the effects of uncontrolled population growth on Earth's resources.

[Geography and the Environment](#): Geographic and environmental factors, including competition over and debates about natural resources, shape the development of America and foster regional diversity.

The development of America impacts the environment and reshapes geography, which leads to debates about environmental and geographic issues.

Unit 1-LOB: Explain how and why various Native populations in the period before European contact interacted with the natural environment in North America.

[America in the World](#): Diplomatic, economic, cultural, and military interactions between empires, nations, and peoples shape the development of America and America's increasingly important role in the world.

Unit 1-LOF: Explain how and why European and Native American perspectives of others developed and changed in the period.

Unit 2-LOE: Explain how and why interactions between various European nations and American Indians changed over time.

[AH.B.1](#): Evaluate American identity in terms of perspective, change, and continuity.

A.H. B. 1.3: Critique multiple perspectives of American identity in terms of oppression, stereotypes, diversity, inclusion, and exclusion.

A.H.B.1.6: Explain how the experiences and achievements of minorities and marginalized peoples have contributed to American identity over time in terms of the struggle against bias, racism, oppression, and discrimination.

[AH.C&G.1](#): Evaluate the relationship between the American people and the government in terms of freedom, equality, and power.

A.H.C&G.1.4: Explain how racism, oppression, and discrimination of Indigenous peoples, racial minorities, and other marginalized groups have impacted equality and power in America.

[Cultural Patterns and Processes](#): Cultural practices vary across geographical locations because of physical geography and available resources.

Unit 3-PSO-3.A: Define the characteristics, attitudes, and traits that influence geographers when they study culture.

Unit 3-PSO-3.B: Describe the characteristics of cultural landscapes

Unit 3-PSO-3.C: Explain how landscape features and land and resource use reflect cultural beliefs and identities

Unit 3-SPS-3.A: Explain how historical processes impact current cultural patterns.

Essential Questions:

1. How does historical context impact our views of resources and resource use?
2. To what extent should we consider the background of central thinkers in relation to their ideas?
3. How can a shift from Western thinking to Indigenous knowledge change the way we view resources?
4. Why is Indigenous knowledge not at the forefront of our search for sustainability?

Lesson Objectives: At the end of this lesson, the student should be able to:

1. Define and explain the concept of the Tragedy of the Commons.
2. Explain the Western cultural ideas that support the Tragedy of the Commons.

3. Justify the use of a thinker’s background and/or actions to evaluate the usefulness of their ideas.
4. Compare and contrast Western thinking and Indigenous knowledge as it relates to resource use.
5. Analyze historical context to describe environmental racism and environmental justice as it relates to current Indigenous populations.

Background information for the educator:

This lesson makes use of a multitude of resources in order to engage students in conversations relating to historical context of current events or beliefs, critical thinking relating to central thinkers and their concepts, and in determining when and how environmental racism occurs. The particular focus here is on Indigenous populations in the Americas and even further to North America. The lesson can be expanded to address any number of Indigenous populations, but this focuses specifically on Indigenous populations in North Carolina.

Environmental racism occurs when a group experience the negative consequences of an environmental issue (landfill siting for example) disproportionate to their representation in the population. *Environmental justice* refers to the movement and action that seeks to address these disparities and to remedy them. *Indigenous knowledge* is the collective cultural history, experience, and teachings of a particular group of individuals who inhabited the New World prior to Columbian contact.

The Tragedy of the Commons is an idea brought about by Garrett Hardin in 1963 to address the social implications of rising population and shared resource depletion. The essay from Hardin is an extension of an 1833 pamphlet by William Lloyd. In the simplest terms, the Tragedy of the Commons occurs when a shared resource (a *commons*), which is used by many but owned/managed by no one, is depleted through the selfishness of individuals. Put bluntly, short term individual gains lead to long term collective losses.

Preparation for this lesson asks students to engage with several videos, readings, and sections of the Ancient North Carolinians website. Students will focus particularly on the sections related to Colonial Heritage in the Late and Early Colonial time frames. Additionally, students should refer to the Indian Heritage by region section and look specifically at the region in which they live.

Student Action:

- **Preparation** (completed prior to coming to class; time will vary by student)
 - Students should read the document “[The Tragedy of the Commons](#)” by Garrett Hardin and annotate the text. Annotation should focus on language and ideas that demonstrate Western/European thoughts or assumptions about resource use and culture. (Suggested to give the document 2-3 days in advance)
 - Students should watch the video entitled “[Indigenous Climate](#)” and “[Rick Hill: What is Indigenous Knowledge.](#)” Students should make note of differences between what they read and what they hear.
 - Students should visit the website [Native Land](#) to determine what Indigenous people(s) lived in the area where they do.

- **Day 1: Beginning** (10-15 minutes)
 - Establish rules for conversation. These should determine the focus and behavior of the conversation. For the most part, these are non-negotiables.
 - Using a collaborative document (ex. Google Doc or Google Slides) have students share their thoughts about the reading and the videos. It is useful to separate out the different sections of the reading as it is relatively dense and complex. Make note of sections that stand out to students for discussion later.
- **Day 1: Building Background** (30-40 minutes)
 - Divide students into groups of 4-5. Direct students to the [Ancient North Carolinians](#) website.
 - Assign students one of the following: [Historic Period \(generally\)](#), [Early Colonial Period](#), [Late Colonial Period](#), or the [Historical Period](#) of the region.
 - Student groups should use the information provided to develop a cultural overview of the Indigenous peoples of the area. Provide students with the Environmental Racism & The Tragedy of the Commons Background Builder [graphic organizer](#). Encourage students to expand on the information they find in the Ancient North Carolinians website.
 - As students work, they should use the spaces in the document to connect back to the reading and videos.
- **Day 1: Establishing Common Knowledge** (25-30 minutes)
 - Use a collaborative document to have students create a gallery walk of what they've learned from their exploration. Since multiple groups will have worked on the same section, student groups can work together to create their section of the gallery walk. Each group should develop an aesthetically pleasing and informative series of slides regarding their cultural overview. Groups should also create a slide that describes thoughts or connections to the reading and/or videos.
- **Day 2: Beginning** (20-25 minutes)
 - Review the rules for conversation.
 - Have student groups select a spokesperson and present their section of the collaborative document to the class.
 - Once students are finished, have them read Garrett Hardin's entry in the [Southern Poverty Law Center](#) (SPLC) database.
- **Day 2: Evaluating Worldview** (30-40 minutes)
 - Use the guiding discussion questions provided to facilitate a conversation with students. The goal is to steer students toward conversations that relate the historical periods and cultures found in their exploration of the Ancient North Carolinians website and the thought process behind Tragedy of the Commons.
 - **Guiding Discussion Questions**
 1. How does understanding the culture of ancient and historical Indigenous groups or contemporary American Indians provide context for an understanding of environmental racism?
 2. In what ways do the worldviews of the Indigenous groups you explored differ

- from the worldview shared in Tragedy of the Commons?
3. How and where do you see the clash between Indigenous peoples and Western ideas of resource use? What happens when those ideas collide?
 4. How might our historical picture of Indigenous peoples lead us to believe that the Western idea of resource use is universal or better?
 5. After reading Tragedy of the Commons and exploring Hardin's entry in the SPLC database, how has your opinion changed of his ideas?
 6. Should the personal actions and beliefs of a thinker such as Hardin impact the validity or the worthiness of their ideas? How so?
- **Day 2: Closing** (15-20 minutes)
 - Ask students to think about their feelings and thoughts about the discussion that just occurred. Have them write down the names for their emotions and any discomfort or issues they may be experiencing. Acknowledge the students' experiences.
 - Use a collaborative document (preferably the same one from the rest of this exercise) to have students share one take away and one question from the discussion over the past two days.

Assessment: Show students two closing images: [Native American groups of North Carolina](#), [Map of Landfills and Hazardous Waste Sites in North Carolina](#). Provide students with time to compare the maps and look for overlap. Then, have students write a one-page reflection on the following questions:

1. How has the Western idea of Tragedy of the Commons created environmental racism against Indigenous peoples in North Carolina?
2. What steps can/should be taken to address these issues?

Learning Extension:

This lesson can be expanded upon through a more thorough discussion of environmental racism and comparing the impacts on Indigenous populations with those of other minorities (particularly black and brown communities). Suggestions for specific focus include: [Warren County Protests](#) in context with [Standing Rock Protests](#); whitewashing of the Indigenous American.

Explore Further: Suggested resources for educators

- [Environmental Justice for Tribes and Indigenous Peoples](#) from the Environmental Protection Agency
- [Indigenous Environmental Network-Sacred Land Film Project](#) from the Indigenous Environmental Network
- [Diversity Your Feed: Six Indigenous Environmental Organizations You Should Follow](#) by Native Americans in Philanthropy.
- Dr. Robert Bullard speeches, presentations, and writings

Materials:

- Collaborative Document (Google Doc, Google Slides, or Jamboard) shared with all students
- Projector/Smartboard/Interactive Panel
- Copies of attached [Graphic Organizer](#)

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