What is Environmental Sociology?

"the study of how social systems interact with ecosystems."

What is an ecosystem?

Ecosystem has been defined as: a geographic area where plants, animals, and other organisms, as well as weather and landscape, work together to form a bubble of life

Why study the environment from a sociological perspective?

- Examine the past and how people have affected our environment
- Examine the current condition of the environment: how it is currently affecting people and how it has been affected by people
- Consider what might be done in the future to improve the environment and prevent its continued degradation

Experts say there are at least three major environmental problems that we are facing.

What might they be?

Climate crisis

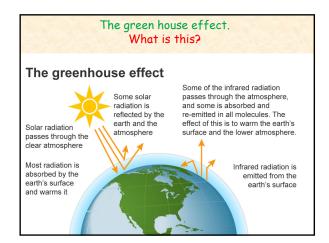
Pollution

Threats to biodiversity

What would you guess is the basic cause of the climate crisis?

Increased temperatures around the world are causing global climate change.

What is causing the earth's temperature to increase?





What are some of the effects of global warming?

- Fires and desert
- Floods and draughts
- Hurricanes
- warming of the oceans
- Destruction of forests
- Damage to biodiversity



What is El Niño?

Every two to seven years, atmospheric patterns shift due to warming oceans.

When unusually warm water settles off the western coasts of Mexico and South America during the spring, the moisture and energy released into the atmosphere can profoundly change regional weather, from North America and South America to Asia and Africa.

What about "acid rain"? What is it?

Gases produced from the burning of fuels react with the oxygen in the air and water vapor,

transforming into acids that fall onto the earth's surface with rain.

(sum: gases produce both global warming and acid rain)

What are the effects of acid rain?

Acid rain has detrimental effects on trees, freshwater and soils, destroys insects and aquatic life-forms.

It causes paint to peel, corrosion of steel structures such as bridges, and weathering of stone buildings and sculptures, as well as impacts on human health.

There are at least two "<u>fundamental"</u> <u>causes</u> of global warming (production of too much CO² and methane). Any guesses what these may be?

1. <u>human behaviors</u> and particularly capitalism

How might capitalism be contributing to global warming?

2. <u>social structures</u> (e.g., communities built to rely on automobiles)

Which is most detrimental to global warming? (human behavior or social structure)

On the one hand, social structures that affect the environment include:

- Transportation systems
- Industries that pollute the air and water
- Media that argue that there is no environmental problem or, conversely, exadurates the problems
- <u>Political system</u> that argues against there being a problem or, conversely, highlights the problems

On the other hand, human behaviors that affect the environment include:

- Capitalism
- <u>Travel</u>/driving large <u>vehicles</u> that require lots of gasoline (RV, airplanes)
- Use of <u>lawn mowers</u> with no protection from gas escaping
- Political and sports figures, movie stars who announce that there is no problem or helps to highlight the problems

What would you guess is meant by environmental injustice (also referred to as environmental justice)?

The disproportionate exposure of communities of color and the poor to pollution.

The subsequent negative effects on these people's health, well-being, happiness, etc.

For example: Where do cities spend their community-improvement money? Where would you guess an air-polluting asphalt plant would be located? Why? People who live in <u>poor countries</u> are often least responsible for greenhouse gas emissions and yet bear the brunt of health impacts from climate change.

They are more vulnerable because of their limited capacity to cope with climate variability and extremes.

What is the biodiversity problem?

- Loss of life to animals, insects, etc.
- Some insects (e.g., bees, krill) are crucial to the food chain and these are being threatened
- · Extinction of animal species

How might extinction of a species affect the animal chain?

