

7-6.6

The Environment

- The environment has been harmed by:
- population growth
- urbanization,
- industrialization.

Population growth and urbanization have led to an increase in land development, which has harmed or eliminated many animal and plant habitats.



The Green Revolution

- The Green Revolution that began in the 1960s was an attempt to increase food production worldwide through the increased use of fertilizers, pesticides, and new strains of crops.
- The result was higher yields of crops and lower rates of famine. Increase in agriculture also resulted in an increase in population.
- A downside to this green revolution, however, was the chemicals released into the environment and increased soil erosion.



Increase in Urbanization and industrialization (CITIES!)

- According to the United Nations:
- In 1950, it was estimated: 732 million people in the world lived in urban areas.
- In 2005, this number was estimated to have quadrupled to 3.2 billion.

Urbanization often results in problems of increased waste, pollution, and increased warming in the cities compared to rural areas.



Improvements in land development farming has it's negative side...

- Some land development and farming techniques have led to increased release of chemicals and soil erosion.
- The change in the use of the land had also changed wildlife habitats, endangering various species around the world.



Urbanization and Industrialization

- Urbanization and industrialization play a role in these changes in that cities and business require more land agriculture.
- Urbanization and industrialization have increased the demand for earth's natural resources and led to changes in the use of the earth's resources, often resulting in pollution and environmental issues.

- **Pollution**
- Hydrocarbon emissions from automobiles and carbon dioxide emissions from the burning of fossil fuels such as coal and oil for energy have caused air and water pollution, acid rain, damage to the ozone layer, and increased the greenhouse effect.
- The continued burning of coal and oil has released carbon dioxide into the atmosphere, leading to acid rain and pollution.



- CFC's –
Chlorofluorocarbons
- The earth's ozone layer, which protects against the sun's ultraviolet rays, has been damaged by the release of CFC's. Continued loss of ozone could result in increased levels of skin cancer and damage to plant and animal species.

Sources of Chlorofluorocarbons (CFCs)

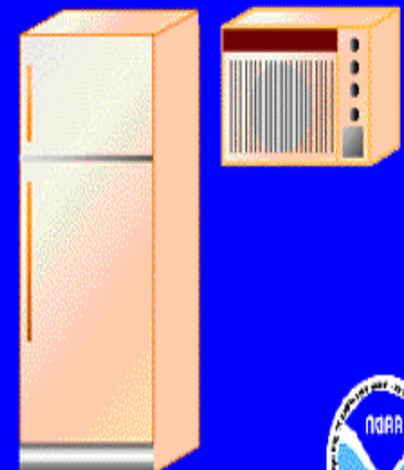


Insulation
Materials



Aerosols

Refrigeration
Air Conditioning



Kyoto Protocol

- Efforts have been made by groups worldwide to curb the emissions of CFCs both by large manufacturers and by small producers.
- In 1992, many nations of the world signed the Kyoto Protocol, designed to reduce greenhouse gases emitted by each country.

How to help the Environment!

- *On the local level, many communities and schools undertake recycling programs in an effort to reduce waste. Increasingly, some citizens are purchasing products made of recycling materials, opting for Reusable bags at grocery stores, using more energy efficient light bulbs, and unplugging electrical appliances in an effort to make a small impact.*



Other changes...

- Such as hybrid and electric cars that use less oil and energy efficient appliances that require less power are increasingly being developed and used.
- The research and development of alternative sources of energy continues to increase worldwide as well.
- Many alternatives and renewable energy sources such as solar and wind are being increasingly used to provide power for homes and businesses. Nuclear energy, a nonrenewable energy source is also widely used as a power as a power source.

