

4. Species Extinction

1. Migrating Pigeons

- At the turn of the 18th century, written records tell of skies 'darkened' with billions (estimate: 5 billion) of migrating pigeons. Their vast numbers made them easy prey for humans who saw the pigeons as a source of down for quilt bedding and pig feed.
- In 1860, the Bird Protection Law was introduced, but migrating pigeons, for some reason, were excluded from the protected species category.
- By the time a law was enacted to preserve migrating pigeons in 1867, it was too late. They were all but extinct.
- "At 1 o'clock in the afternoon of September 1, 1914, Martha, the last surviving migrating pigeon on the planet, fell silently from her perch at the Cincinnati Zoo to signify the death of a species. "All Americans mourn for this great loss," wrote the N.Y. Times.
- Today, Martha and her mate are displayed as a pair at the Smithsonian institution.

2. Buffalo

- In the early 1800's, a thundering herd of gigantic, brown animals - buffalo - ran wild across North America. At that time, some 60 million head were believed to roam the continent. Known as the life-blood of the Native American civilization, buffalo were systematically slaughtered by white settlers in an attempt to wipe out the indigenous population and open up new tracks of land for white settlement.
- In 1868, a small group of concerned individuals took affirmative action to save the buffalo as it faced certain extinction. The last three buffalo were rescued and from that number, an estimated 60,000 (1/1000th of the original population) head now inhabit the grasslands of central USA.

3. Today's Rate of Species Extinction is Unprecedented in Earth's History.

- On at least five occasions in the past (the Ordovician Period, the Devon Period, the Permian Period, the Triassic Period and the Cretaceous Period), the vast majority of earth's creatures have become extinct due to radical climatic changes or extraordinary natural phenomenon.
- In the Permian Period, 250 million years ago, 90% of all life became extinct.
- In the Cretaceous Period, 65 million years ago, 75 percent of all dinosaurs vanished.

However, the current rate of species extinction proceeds at a far more rapid pace than at any time in earth's history. So far, species have become extinct due to economic greed and over-hunting, but what is currently occurring on an unprecedented scale is the eradication of species due to ecosystem destruction.

- At the rate of : 50,000~150,000 per year (100~300 per day)
→ The extinction rate is dozen of thousand times faster than that in the past.
- 25% of the whole species is facing crisis of extinction.

(1/4 of mammalian, 1/9 of birds)

“It has been already too late to maintain the bio-diversity.”

(Reported by UNEP, 1999)

4. Causes of Extinction

- The major cause was over hunting up until recently, but today, it is ecosystem destruction due to excessive development that is the prime culprit.
- The most serious cause is the destruction of tropical rainforests. The terrestrial ecosystem is supported by forests, and these forests in turn, support a huge variety of plants and animals.
- Other forms of ecosystem devastation include cutting through mountains, reclaiming lakes, marshes or rivers, artificially hardening river banks and sea coasts with layers of concrete, developing golf courses, leisure facilities, industrial complexes, as well as agricultural chemical pollution and environmental pollution.
- When the natural environment is altered to such an extent, it is difficult to predict just how much this devastation will affect the rapidly increasing species extinction.

5. Such Extinction of Species will Eventually Bring about the Extinction of Human Beings

- Simply because all creatures are interdependent. The extinction of several species will lead to the destruction of the whole ecosystem. Human beings may rest at the top of the animal pyramid, but we will in turn fall like dominoes as this destruction continues.
- The Ecosystem has already shown definite signs of weakening, while the immune system and reproductive function of living organisms has already revealed serious deficiencies, which can only get worse, such as eczema, allergies, cancer and AIDS.

6. What we can do?

- Stop buying or using fur coats, animal skins and stuffed animals, and do not keep tropical fish and pets.
- Minimize the usage of golf courses and leisure facilities that destroy the environment.
- Buy organically grown food products.
- Minimize usage of imported goods as such products gradually lead to environmental damage of the nations exporting these goods.
- Endeavor not to pollute air, water and soil in your daily life.
- Minimize usage of private cars. Minimize wastewater and garbage discharged by households.
- Stop massive consumption and massive abandonment.

"We know that all life on earth comprises one complex fabric of interdependent existence. This fabric is woven not by us; we are just its weaving yarn. What we do to this fabric today will ultimately seal our fate." In 1854, this extract of a letter was sent from a concerned tribal chief in Seattle to the US president.