

# Ecological Footprint

---

- It measures the average environmental impact of individuals or populations in different countries and areas.
- **The impact of a person on the environment is expressed as **ecological footprint**, an estimate of the amount of land needed to support their lifestyle.**
- Amount of biologically productive land and water needed to supply each person or population with the renewable resources they use and to absorb or dispose off the wastes from such resource use.

# Environmental Worldviews

There are three perspectives in how we should deal with issues of pollution, resource overconsumption, and loss of biodiversity.

- **planetary management**
- **Stewardship**
- **environmental wisdom**



# Environmental Worldviews

## Environmental Worldviews

### Planetary Management

- As the planet's most important species, we are in charge of the earth.
- Because of our ingenuity and technology we will not run out of resources.
- The potential for economic growth is essentially unlimited.
- Our success depends on how well we manage the earth's life-support systems mostly for our benefit

### Stewardship

- We are the planet's most important species but we have an ethical responsibility to care for the rest of nature.
- We will probably not run out of resources, but they should not be wasted.
- We should encourage environmentally beneficial forms of economic growth and discourage environmentally harmful forms.
- Our success depends on how well we manage the earth's life-support systems for our benefit and for the rest of nature

### Environmental Wisdom

- Nature exists for all species and we are not in charge of the earth.
- Resources are limited, should not be wasted, and are not all for us.
- We should encourage earth-sustaining forms of economic growth and discourage earth degrading forms.
- Our success depends on learning how the earth sustains itself and integrating such lessons from nature into the ways we think and act

- Each of these worldviews acknowledges that the Earth is a **closed system**, meaning matter does not enter or leave it in large amounts.
  - Resources are finite.
  - Wastes do not “go away”.
- These understandings form the basis for understanding and solving each of the issues within environmental science.
- Need to focus on
  - Planetary Management – **of human growth**
  - Environmental Wisdom – wise use of our natural resources



*Earthrise*, taken by astronaut Frank Borman in 1968, during the Apollo 8 mission.

# Solutions

- Current Emphasis (Reactive)
- Sustainability Emphasis (Proactive)

