
**Conservation, viewed in its entirety, is the slow and laborious unfolding of a new relationship between people and land.*

*Aldo Leopold,
Wisconsin Wildlife Chronology (1940)*

**The Stone Age came to an end,
but not because we ran out of stones.*

*— Ernesta Ballard, Commissioner,
Alaska Dept. of Environmental Conservation*

**Tell me the landscape from which you come,
and I will tell you who you are.*

Jose Ortega y Gasset

**The king who cannot take good care of the mountain, forest,
lake and meadow, will not be able to rule the nation.*

Guan Zhong (645 BC)

**A nation deprived of its liberty may win it, a nation divided
may unite, but a nation whose natural resources are
destroyed must inevitably pay t*

Understand that policies are the rules that govern the behavior of an individual, group, organization or government. Policies

include conventions, laws, regulations, enforcement, contracts, partnerships, and collaboration.

Zeros play havoc with the total number of points received in the semester. Each year, 20% of the students in this course receive an F, and inevitably they have several zeros on the grade sheet. This is NOT a difficult course—unless you fail to do the work. It is always better to turn in something rather than taking a zero.

Grades will be based on the percentage of points earned out of the total possible points in the course, as shown below.

Grade on Entry Knowledge Quiz	75
Short Paper on Your “Ecological Footprint.”	50
15 Online Chapter Quizzes (10 pts each)	150
Attend Leopold Discussion 1	20
Attend Leopold Discussion 2	20
Attend Leopold Discussion 3	20

Attendance is taken at each discussion session. **You must be present within the first 10 minutes of class and remain the rest of the period to be counted.** If you do not know where the room is, please try to find it in advance so you do not miss the first session. If you do miss one, it will not be possible to “make-up” the points for attendance. However, you can still complete the reflection paper, subject to the late paper policy described below (i.e. no extra time is given if you miss the discussion session, UNLESS you were seriously ill). Note that it often takes a while before campus scheduling assigns us rooms.

5b) Three Essays based on SCA

The grading criteria and directions for each of the essays are included in this syllabus, pages 10 and 11.

Each written assignment is turned in AT THE END OF CLASS on the DATE DUE. It is far easier to keep track of papers if they are all collected in class at the same time. To encourage everyone to turn them in on time and to reward those who do, the following points will be deducted from late papers.

Points Deducted for Late Papers:

S E S

Sports Teams.

Other reasons.

Illness

severe

Other

before

NO OTHER EXCUSE WILL BE ACCEPTED



Your Ecological Footprint & The PAT Equation

NRM 101 Assignment DUE:
See schedule (last page) for date due.

50 pts

ASSIGNMENT

A. Your Ecological Footprint

First, calculate your ecological footprint at [_____](#)

You will need to click on North America, then the U.S., then choose your preferred language, and answer

Background Info (questions from this will be on the first test)

What's your 'Ecological Footprint?'

Karen Youso, Star Tribune April 22, 2003

Everybody loves the Earth. And why not? It supplies us with food, a place to live, places to go and ways to get there.

All this human activity puts a demand on the planet. That's not a problem as long as the demand doesn't exceed nature's ability to supply.

The question on this 33rd anniversary of the first Earth Day is: Are we taking more from nature than nature can give? Or, more specifically, are we drawing more than our fair share of the Earth's resources?

One way to address the question is by calculating an "ecological footprint." The bigger your footprint, the more of Earth's resources are needed to support you as you live, eat and move about. Add your footprint to everybody else's and you get the total human demand on nature.

Nature, in this case, is figured as the acres of Earth's land and water that produce food, absorb so-called "greenhouse" gases from fossil fuels and provide space for roads and homes. In other words, the part of Earth that supplies us.

Take the number of productive acres and divide it by the number of people on Earth, and you get nature's available capital, according to Mathis Wackernagel of Redefining Progress, a think tank in Oakland, Calif.

Every person on the planet would get 4.5 acres before overdrawing on nature's bank, Wackernagel says. But some say that people should have access to the amount that exists in their country, which doesn't always fit the average. For example, productive land in the United States allows about 14 acres per resident. Yet the average American footprint approaches 24 acres per person.

We aren't alone in taking more than Earth can replenish. The average German uses 12 acres, Australians 19 acres per person. As the human footprint increases, resources for future generations and wildlife diminish.

"You may not need elephants to live, but some people don't want to live in a world without elephants," Wackernagel said.

It's a choice, he said. What kind of world do we want to live in?

The challenge is to find quality of life within nature's means.

According to Redefining Progress, the Ecological Footprint for the average American is 23.5 acres. Here's an example of how it's divided and ways to reduce it:

FOOD: 5.5 acres

The average American eating meat at least once a week requires 5.5 acres to allow for food production and

energy used to transport, process, package and store it. About three-quarters of the typical American's diet is prepackaged, processed food that comes from farther than 200 miles away.

To reduce: Eat less meat, or eat range-fed or wild meats. Plants generally require less land, energy and other resources. Otherwise, buy more locally produced meats, preferably from small-scale, organic or so-called sustainable farmers.

Much of the energy in the food system is spent on transportation, processing, packaging and storage. Grow food yourself, shop at farmers markets or buy directly from farmers.

SHELTER: 5.1 acres

This measures the energy and resources for constructing, heating, cooling and maintaining a dwelling. This number is for a 1,000 to 1,500-square-foot, free-standing house with energy conservation and two occupants.

To reduce: A smaller-sized home with more occupants means the resources used go farther. Adding to the family, however, isn't an effective strategy to minimize your impact. Don't oversize your home. Also, living in a condo, townhouse or apartment tends to decrease your footprint.

MOBILITY: 4.3 acres

This is how walking, biking, trains, planes and automobiles affect the planet. It reflects the space and resources used for building byways, and manufacturing and operating vehicles.

The average American drives about 14,000 miles a year, or 270 miles a week, in a vehicle that delivers 15 to 25 miles per gallon and occasionally has passengers.

Americans spend an average of 4.7 hours per person on commercial airlines every year. This is roughly equivalent to a round-trip flight between Washington, D.C., and Chicago.

An average American using public transportation travels 25 to 75 miles a week. For many Minnesotans, the weekly average would be zero.

To reduce: Use public transportation, shorten your daily commute, drive fuel-efficient vehicles, car-pool and, whenever possible, walk or bike.

GOODS AND SERVICES: 8.6 acres

Goods include appliances, clothing, electronic items, sports equipment, toys, computers, household furnishings and cleaning products.

Services include water, sewage, garbage, telecommunications, education, health care, entertainment, recreation and tourism, military and other government services.

To reduce: Because our lifestyles increasingly depend on goods and services, this part of the footprint can be significant. To reduce, lower your score on food, housing and mobility. Another approach: repair, don't replace. Think energy efficiency when you buy and recycle whenever possible.

Total footprint: 23.5 acres.

Humanity's Footprint

Today, humanity's Ecological Footprint is already over 30 percent larger than what the world can offer. This means we are overusing

the planet and liquidating its ecological assets. Examples of our overuse include deforestation, collapsing fisheries, and the build-up of heat-trapping carbon in the atmosphere. At the same time, a significant percentage of the world's people do not have enough resources to meet basic survival needs.

To overcome this sustainability challenge, we need to do a better job of budgeting our planet's limited resources. Nature provides an average of 2.1 hectares (5.3 acres) of biologically productive space for every person in the world. By 2050 that available space will be reduced to 1.4 hectares (3.5 acres) per person if predictions of global population are accurate. Also,

some of this area must be set aside for the estimated 10 million other species on the planet.

On average, people use 2.8 hectares (6.9 acres), but there is a wide range. In some countries, the average is as low as 0.5 hectares (1.2 acres), while others use as much as 13 hectares (32 acres) per person. Even within any given country, individuals' footprints vary widely.

By more carefully tracking human impacts on the Earth's resources, we can learn

REFLECTION # (check one)

1

2

3

YOUR FIRST & LAST NAME:
