

# What is an ecological footprint?

Source: Global Living Project [www.globallivingproject.org](http://www.globallivingproject.org)

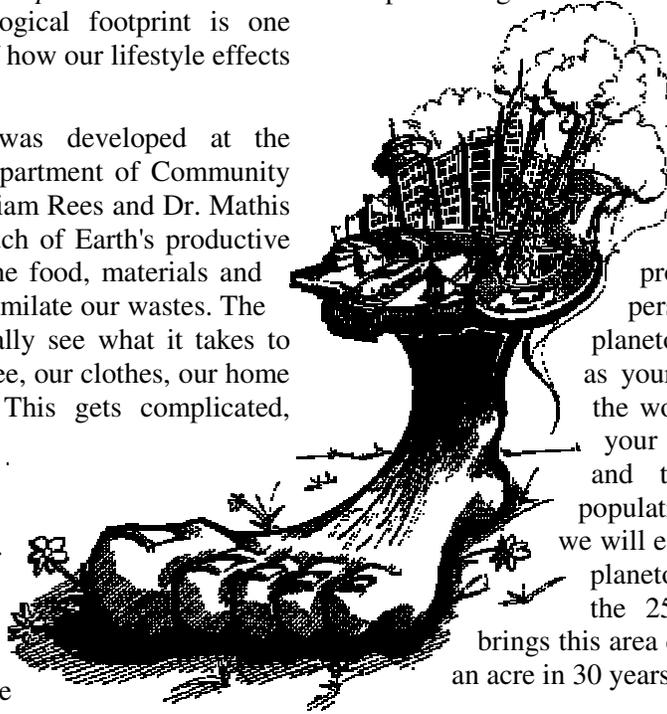
The morning alarm rings. You take a hot shower, brew up a cup of coffee, read a bit from the morning newspaper and hop in the car to get to work on time. *Have you ever stopped to consider the total environmental impact involved in each of these daily habits?* The ecological footprint is one technique to answer the question of how our lifestyle effects the planet.

The ecological footprint (EF) was developed at the University of British Columbia department of Community and Regional Planning by Dr. William Rees and Dr. Mathis Wackernagel. It estimates how much of Earth's productive land and sea is used to produce the food, materials and energy that we consume and to assimilate our wastes. The EF looks behind the scenes to really see what it takes to make an alarm clock, a cup of coffee, our clothes, our home and to operate our automobile. This gets complicated, especially in our global economy where the products we consume originate from all over the world.

As an example lets take a deeper look at that morning cup of coffee. Land is needed to grow the coffee beans, for the processing and distributing operations, to house

corporate management and advertisers as well as the downtown store. Additional forestland is needed to absorb the CO2 resulting from all the energy burned harvesting, processing and shipping the coffee. Somewhere on the planet land was mined to make the metal for the machinery used in each step of the process and for the chemicals used in fertilizers and pesticides.

Given that 6 billion humans are sharing all the biologically productive land on this earth, each person has 5.5 acres as their personal planetoid. You can think of this 5.5 acres as your virtual homestead, spread around the world to grow your food, produce all your material needs, including energy, and to absorb all your wastes. As population doubles over the next 30 years, we will each be left with a 2.75 acre personal planetoid. Leaving sufficient habitat for the 25 million other species on Earth brings this area down to one wise acre now and half an acre in 30 years.



## How much Earth is there?

**126 billion acres**

Amount of Earth covered by low bio-productive oceans, deserts, ice caps, and human settlement: **94 billion acres**

How much bio-productive land and sea exists? **32 billion acres**

Current human population: **6 billion**

How much exists per person today? **5.3 acres**

How much is available per person if we leave 80% wild for the 25 million other species on Earth? **1 acre**

How much do humans on average use globally ? **6.9 acres**

*Currently, Earth is ecologically filled with humans and as one species we overshoot Earth's bio-capacity by 30%!*

## Ecological Footprints Around the World

**United States - 24 acres**

Canada - 18 acres

Switzerland - 12 acres

Russian Federation - 11 acres

World Average - 6.9 acres

Mexico - 6.4 acres

**Personal Planetoid - 5.3 acres**

Turkey - 5 acres

China - 4 acres

GLP - 3.2 acres (summer) and 4 acres (winter)

India - 1.9 acres

Bangladesh - 1 acre

**Personal Planetoid (80 percent wild) - 1 acre**

It is only since the industrial revolution that resource use and consumption has skyrocketed. The US was built on foundations of frugality, yet today, North Americans are the world's greatest consumers. If the world's people consumed as North Americans, we would need four Earths! The link between consumer habits and global warming, war, species extinction, and social injustice is lost amidst fast paced advertising and a throw-away consciousness. Before we can tell those in the so called "third world" to reduce their population, we could gain respect and credibility if we first got our own house in order and reduced our consumption. Simple mathematics reveals that consuming four times the amount available per capita (as is typical for industrialized nations) means that for each over-consumer there needs to be three other people using one third of what is available to them.

Imagine the planet to be a pizza and you have 4 friends at the table. The pie is divided into quarters. If one wants four times average (3/4 of the pizza), the other 3 need to divvy up one quarter. With this understanding, it makes ethical sense to only use our share.

The reality is that Earth is ecologically filled, meaning that everything we use beyond one acre is detracting from what another person or species has to nourish their lifestyle. Looking at the implications of such inequity is the heart of the GLP.

The power of ecological footprinting is that it helps us step out of the context of a wealthy, industrialized, human centered culture. We can use it to design a lifestyle, a business, or an institution that is in alignment with our personal or collective value system. The beauty of footprinting is that if 100 people designed a lifestyle that was within their personal planetoid, we would see 100 unique solutions. Footprinting inspires us to play with our creativity and calls on us to find ways of sharing Earth with other humans and other species. The GLP is committed to developing practical and philosophical tools that promote sustainable lifestyles applicable to both rural dwellers and urbanites alike.

## Websites:

### Global Living Project

[www.globallivingproject.org](http://www.globallivingproject.org)

### Ecological Footprinting Articles

[dieoff.org/page13.htm](http://dieoff.org/page13.htm)

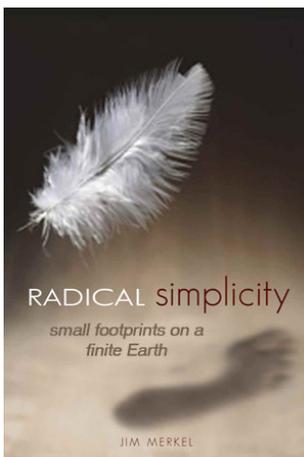
### Footprint assessment:

[www.myfootprint.org](http://www.myfootprint.org)

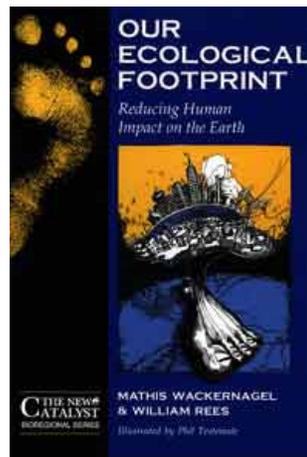
### Indepth footprint assessment:

[www.redefiningprogress.org/footprint](http://www.redefiningprogress.org/footprint)

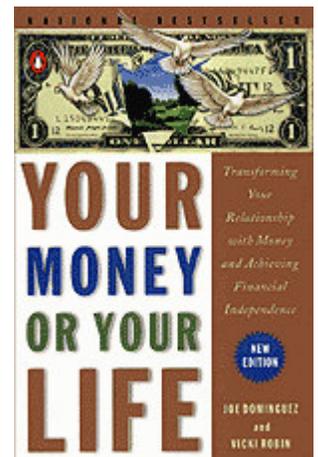
## Books:



Radical Simplicity  
Jim Merkel



Our Ecological Footprint  
Williams E. Rees, Mathis Wackernagel



Your Money or Your Life  
Joe Dominguez, Vicki Robin