

Assignment I-1 MY ECOLOGICAL FOOTPRINT (& Course Policies)

(Individual Assignment worth 10 pts)

DUE IN CLASS TUESDAY SEP 1, 2009

In this assignment you will become familiar with the concept of the Ecological Footprint, calculate your own Footprint, compare it with the average Footprint of another country, and estimate what your future Footprint might be. Lastly, you will demonstrate a mastery of the Course FAQ!

Ecological Footprint (def): “A measure of how much [biologically productive land and water](#) an individual, population or activity requires to produce all the resources it consumes and to absorb the waste it generates using prevailing technology and resource management practices. The Ecological Footprint is usually measured in [global hectares](#). Because trade is global, an individual or country's Footprint includes land or sea from all over in the world. Ecological Footprint is often referred to in short form as Footprint (not footprint).”

SOURCE: http://www.footprintnetwork.org/gfn_sub.php?content=glossary#Ecologicalfootprint

About the Redefining Progress Ecological Footprint Quiz:

SOURCE: http://www.myfootprint.org/en/about_the_quiz/what_it_measures/

“The Ecological Footprint Quiz estimates the area of land and ocean required to support your consumption of food, goods, services, housing, and energy and assimilate your wastes.”

Your ecological footprint is expressed in "global hectares" (gha) or "global acres" (ga), which are standardized units that take into account the differences in biological productivity of various ecosystems impacted by your consumption activities. Your footprint is broken down into four consumption categories: **carbon** (home energy use and transportation), **food, housing**, and **goods** and services. Your footprint is also broken down into four ecosystem types or biomes: cropland, pastureland, forestland, and marine fisheries.”

PART I. Complete the following Background Reading:

Go to the *Redefining Progress* website and read:

- ☐ [What it Measures](#) http://www.myfootprint.org/en/about_the_quiz/what_it_measures/
- ☐ [Ecological Footprint FAQ](#) http://www.myfootprint.org/en/about_the_quiz/faq/

PART II. Answer the following questions, based on the [What It Measures](#) webpage:

1. What is the average world citizen’s (per capita) Ecological Footprint?

_____ (in global hectares)

_____ (in acres – [calculate this](#))

_____ (in “Earth’s needed”)

2. By what percent is humanity currently exceeding (overshooting) the biosphere’s ecological capacity? _____

[NOTE: you can find the answer to #2 on the [What It Measures](#) link, but be sure you understand where the answer came from, i.e. how was it calculated mathematically?? This is a good “math practice” self test!!]

PART III. Use the **Ecological Footprint Calculator** at <http://www.myfootprint.org/> to calculate your **OWN Footprint**. HINT: *Can't find how to get the quiz started? Look for the place where it says **ENTER** on the intro screen.*) NOTE: *You may select the U.S. measurement system.*

IMPORTANT: **AS YOU TAKE THE QUIZ KEEP TRACK OF THE VALUES YOU ENTER** (for use in #4)

[Hints: You can calculate your Footprint for your current residence (e.g. for dorm, apartment -- measure or estimate your living square footage) or for your permanent family residence(phone home to help with the info!) Google up help on other items, e.g. to estimate air travel, try: <http://www.webflyer.com/travel/milemarker/>, to estimate the size of a lot in the City of Tucson see: <http://www.ci.tucson.az.us/planning/codes/luc/zonecht1.pdf> (7000 sq ft is the minimum lot size for a single family residence, zoned R-1, for larger areas in acres or square feet, think in terms of what % of a football field the lot would fill and see the following link for help: <http://www.gigfoot.net/faq/100.html> Use your browsing skills to help you make any other estimates you may need. A useful tool for converting values from one type of unit to another is MegaConverter2 <http://www.megaconverter.com/mega2/>]

When completed, print out the results sheet from the Footprint Quiz , write your NAME on it, and staple it to your assignment when you turn it in.

3. Based on your results, what is **your** current Ecological Footprint? _____ (in acres) _____ (in “Earth’s”)

What is the “**Country Average**” Footprint for the **USA**? _____ (in acres) _____ (in “Earth’s”)

4. Write a paragraph comparing **your Footprint** with the **Country Average Footprint for the USA**. (In your paragraph compare the two in terms of: (i) total global acres, (ii) global acres by consumption category (i.e., carbon, food, housing, goods), and (iii) Earth's needed.

5. Start the quiz again and pick another country, but enter in the SAME VALUES for your Footprint as you did for #3 (when you selected the U.S. as your country). The Results Page will show you how your Footprint values compare to the average of the country you’ve selected if you lived *there* instead of the USA.

*[Note, however, that your re-calculated footprint will be **weighted** by the average values of the county you have selected, hence in countries where the average footprint is much lower than the US, your re-calculated footprint will come out much lower than it did in #3. See the [Quiz's FAQ](#) question: **What is the general methodology for calculating my footprint?** For an explanation of how the footprint is calculated in each country.]*

Country selected: _____ **Country’s Average Footprint:** _____ (in acres) _____ (in “Earth’s”)

6. Write a paragraph comparing **your original (USA) Footprint** (calculated when you took the quiz the first time, as in # 3) with **(a) the Country Average Footprint in the country** you selected in #5.

(In your paragraph compare the two in terms of: (i) total global acres, (ii) global acres by consumption category, and (iii) Earth's needed).

7. Speculate on why the country in which a person resides makes such a difference in the individual's Footprint.

8. Evaluate your future Ecological Footprint. Recalculate your own Footprint using answers you predict will reflect your life in 5 to 10 years (bigger income, larger home, kids(?), more travel, etc. etc.) – Try to be realistic!!

What is your estimated future Footprint? _____ (in acres) _____ (in “Earth’s” needed)

9. Briefly describe your predicted changes in lifestyle. Do they increase or decrease your Footprint? In which categories? How and why?

PART IV. SYLLBUS & COURSE POLICIES -- READ, UNDERSTAND, ACT ACCORDINGLY

Finally, do you know what FORMAT this homework assignment should be in before you submit it?

(The answer to this is in [FAQ #12](#), along with other information and policies about how the course operates.)

10. To wrap up this assignment, do the following:

- (1) Carefully read the online [SYLLABUS](#) & [FAQ](#), to learn all the **COURSE POLICIES**, along with other useful information that will help you have a successful semester. Also read the [University of Arizona Code of Academic Integrity](#) if you have not already done so. There's important material in there about your rights as a student, along with the "prohibited conduct" type information, so it's wise to be aware of what it says.
- (2) Use the **PRACTICE SELF TEST ON THE SYLLABUS & COURSE POLICIES FAQ** in D2L to test your understanding of the information and policies in the SYLLABUS and FAQ
- (3) When you are ready, take the corresponding **PRACTICE READINESS QUIZ (RQ) ON THE SYLLABUS & FAQ AND ACCEPTANCE OF COURSE POLICIES**. You may take it as many times as you need until you get a perfect score of 7 out of 7 (100%). *(The last two questions on the RQ indicate that you have read and understood our Course Policies and the University of Arizona's Code of Academic Integrity and hereby agree to conduct yourself in this course according to the standards upheld by them.)*

In order to get credit for Question #10 of this Assignment, you will need to submit the RQ with a perfect score of 7/7 (100%) by no later than midnight Thursday September 3rd.