

## Lab: Ecological Footprint

Visit the website <https://www.footprintnetwork.org/our-work/ecological-footprint/> to answer the following questions.

1. What does an Ecological Footprint measure?
2. Relate biocapacity with ecological footprint.
3. Ecological footprint and biocapacity are measured in global hectares. What is a global hectare?
4. When did humanity first reach global overshoot?
5. (not on website) Relate overshoot to our previous discussions of population dynamics (think  $r$  &  $K$ ).
6. Describe the benefits of calculating ecological footprint.

Watch the video “National Footprint Accounts” under “Ecological Balance Sheets” (also found at [https://www.youtube.com/watch?time\\_continue=2&v=T5M3MiPfW4](https://www.youtube.com/watch?time_continue=2&v=T5M3MiPfW4))

7. Explain the term “ecological balance sheet”?
8. What is the difference between an “ecological debtor” and an “ecological creditor”?
9. How many data points are included per country per year?
10. What is the global ecological footprint currently?

Click on “Visit Footprint Explorer” under “Ecological Footprint Explorer” - <http://data.footprintnetwork.org/#/>

11. Click on the United States. What is the deficit? What does this mean?
12. Name any country with a reserve. What is the reserve value? What does this mean?
13. Click on “Total Ecological Footprint” then “Ecological Footprint per Capita”. How does the map change between the two selections? What does this mean?
14. Click on “Total Biocapacity” then “Biocapacity per Capita”. Name three countries with a high biocapacity. How does this change when calculated per capita?

Now calculate your footprint at <https://www.footprintcalculator.org/home/en>, click on “add details to improve accuracy” where possible and work through the simulation.

15. Name five specific things that influence your ecological footprint.
16. If everyone on the planet lived with the same lifestyle as you, how many planets would be needed?
17. Which of the following makes up the largest percentage of your ecological footprint?  
Food, Shelter, Mobility, Goods or Services
18. How many global hectares are necessary to support your lifestyle?
19. What is your personal Earth Overshoot Day?
20. Which “How do you feel” emoji did you select?
21. Name two things you could do, starting today, that would lower your ecological footprint.
22. Does ecological footprint/resource use even matter? Why or why not?