



Mapping deforestation

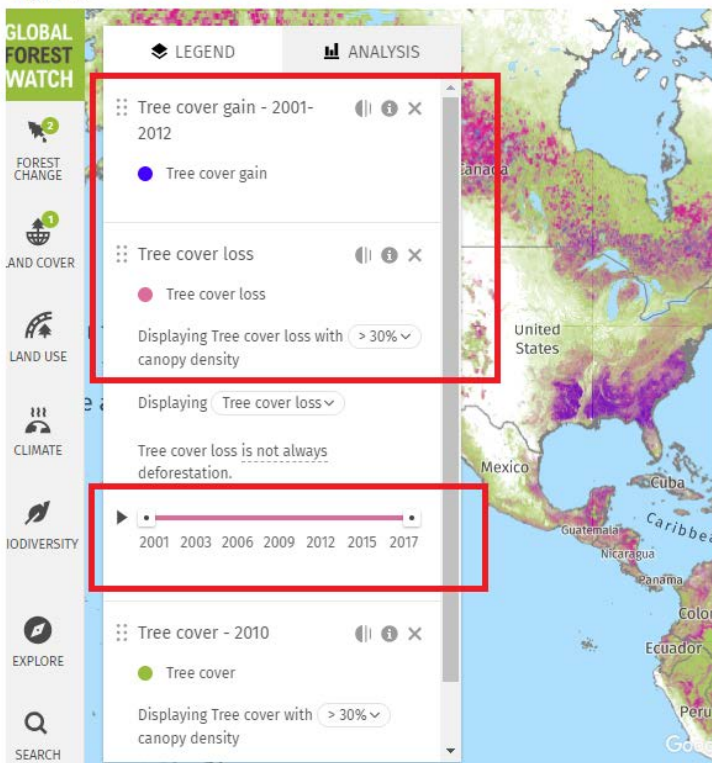
Deforestation has caused the destruction of millions of acres of forest habitat. But what is driving people to cut down so much forested land? And can reforestation efforts help rebuild what has been lost?

Part 1: Global Forest Watch Map

Directions: Global Forest Watch, a non-profit that monitors deforestation across the planet, has an interactive map that shows how forests have been cut down and expanded since 2000. Go to their website and click on the map (or go to <https://www.globalforestwatch.org/map>). To the left of the screen, there is a tool (Figure 1) that will allow you to see the change in tree cover gain (blue) and tree cover loss (pink) with unchanged forest (green).

Click on the “play” button towards the bottom of the screen to see how each factor has changed since the year 2000 (Figure 1). As the simulation runs, observe different parts of the world and how their forests have changed.

Figure 1



1. What continents saw the most tree cover loss? _____

2. What continents saw the most tree cover gain? _____

Part 2: Change in tree cover by country

Deforestation has not been evenly distributed across the Earth, some countries have seen a lot of their forests cut down while other have preserved and even expanded their natural habitats.

Directions: Select a country by either using the search tool at the bottom left of the screen or by clicking on that country on the map. Once you have selected your country, click analyze (Figure 2) which will show that country's forested area. Use the analysis (Figure 3) to calculate the change in forested area for your assigned country by using the equation below. A negative number would show a net loss in forested area and a positive number would show a net gain in forested area.

Figure 2

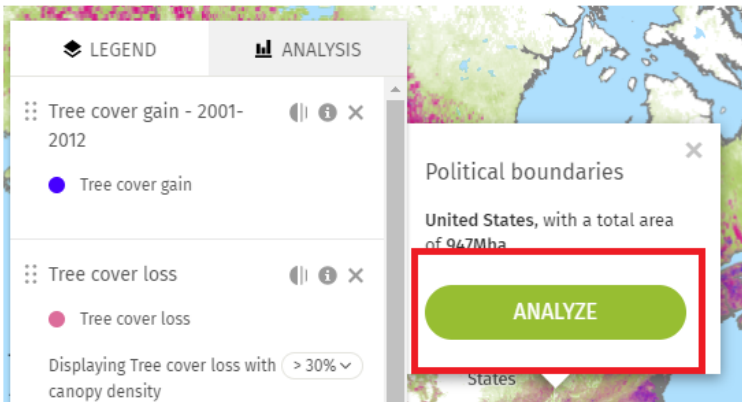
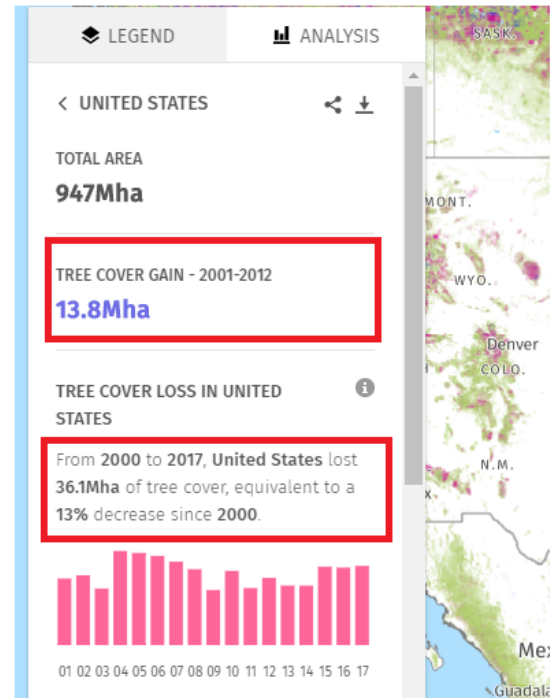


Figure 3



Your Country: _____

Amount of tree cover gain (blue number) – Amount of tree cover loss (pink number) = Net change

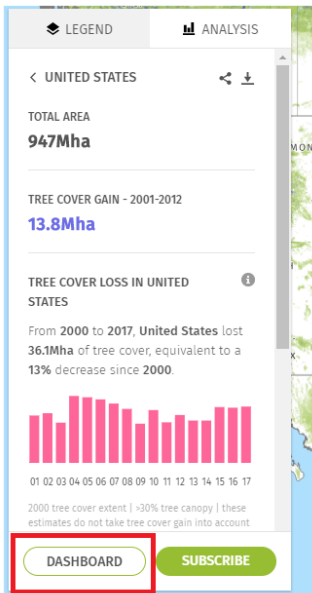
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Part 3: Deforestation drivers

Many countries around the world have lost significant amounts of their forested land. But each country has a different reason that is driving their deforestation.

Directions: At the bottom of your country's deforestation analysis, click on the "dashboard" tool, which will bring you to your country's profile page. (Figure 4).

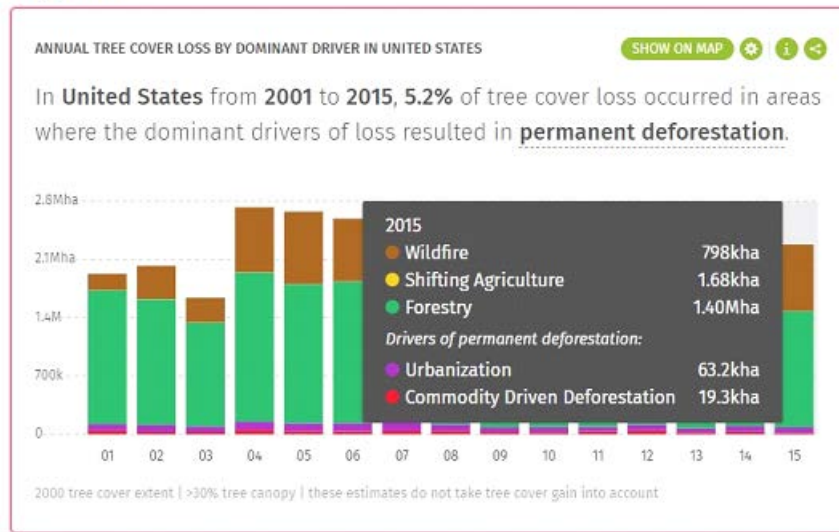
Figure 4



Take a few minutes to look through the data on your country. You will find information on the rate of deforestation, how the deforestation in your country compares with others, and which regions of your country have seen the most deforestation.

The second graph down will show annual tree cover lost by driver (Figure 5). By scrolling over each bar, you can see what is causing the deforestation in your country, which is shown in kilohectares (for scale, one kilohectare is amount 3 times the size of Central Park in New York City). Find the top three drivers of deforestation in your country and the amount of area that was lost in the most recent year available.

Figure 5



Deforestation Driver	Area Lost (kHa)
1.	
2.	
3.	

Part 4: Science Communication

Most people go through their daily lives without understanding how threatened our forests are, nor the positive impacts they have on our lives.

Directions: Information graphics, also known as infographics, are visual representations of information, data or knowledge. These graphics are used where complex information needs to be explained quickly and clearly.

Use the data collected in this activity to create an infographic on deforestation in your assigned country. Include the amount of land that has been lost since 2000, the amount of forested area still left in that country, and the factors that are driving deforestation. Explain why forests are so important, both for humans and for other species. You may even want to calculate the year at which your country will run out of forested land at the current rate of deforestation. Adding color, graphs, pictures or other visual aids will help engage people who view your infographic. **Creating your infographic may require additional research!**

Your infographic