

### Environment 101 Trivia



- 1. Work together with your tablemates
- 2. Three rounds of five questions, will grade your own.
- 3. Use the answer sheet provided
- 4. No looking up answers online or using Al!
- 5. Disagree with our answers? Ask Judge Imhof!
- 6. Have fun, and hopefully learn something along the way!
- 7. Did we mention that there were prizes?!?

ROUND 1

The North Carolina mountains are home to more species of what type of creature than any other place in the world?

# In which North Carolina county did the U.S. environmental justice movement begin?

# Name as many sources of renewable energy as possible.

North Carolina is one of the top 3 producers in the country in the production of (at least) 5 agricultural products. Name the 5 products.

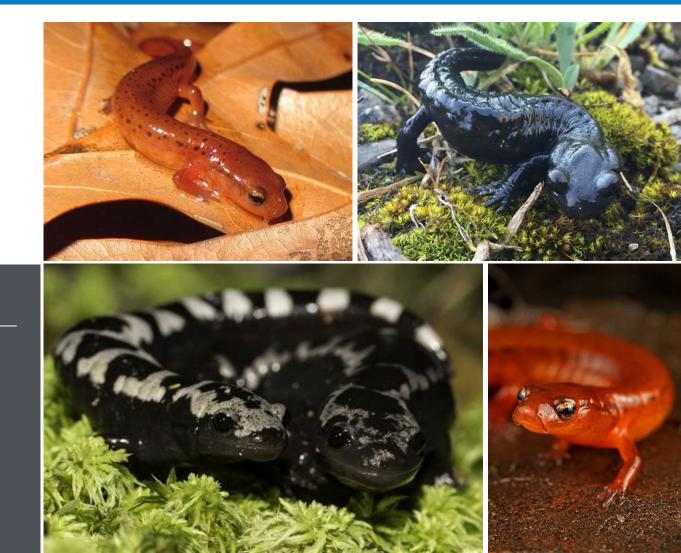
### How many public EV charging locations (level 2 or higher) are available in North Carolina?

# ROUND 1 - ANSWERS

The North Carolina mountains are home to more species of what type of creature than any other place in the world?

Answer:

### Salamanders



In which North Carolina county did the U. S. environmental justice movement begin?



Answer:

Warren County



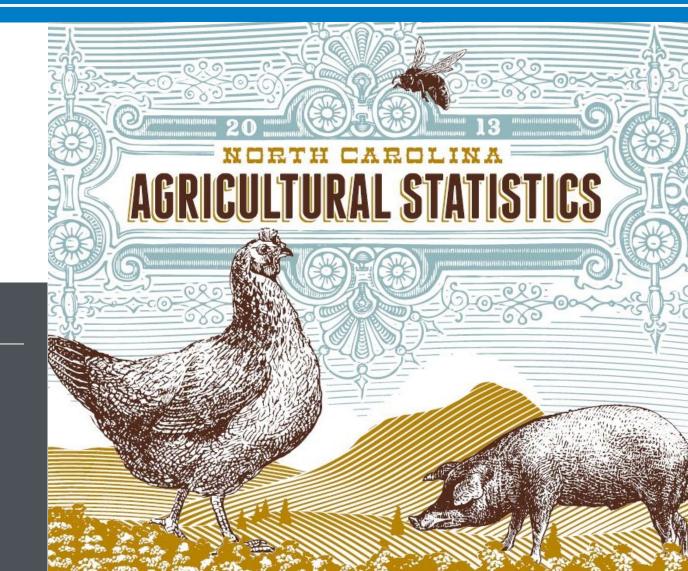
### Name as many sources of renewable energy as possible

# Answer:BiomassHydrogenGeothermalSolarHydroelectricTidalWind



North Carolina is one of the top 3 producers in the country in the production of (at least) 5 agricultural products.

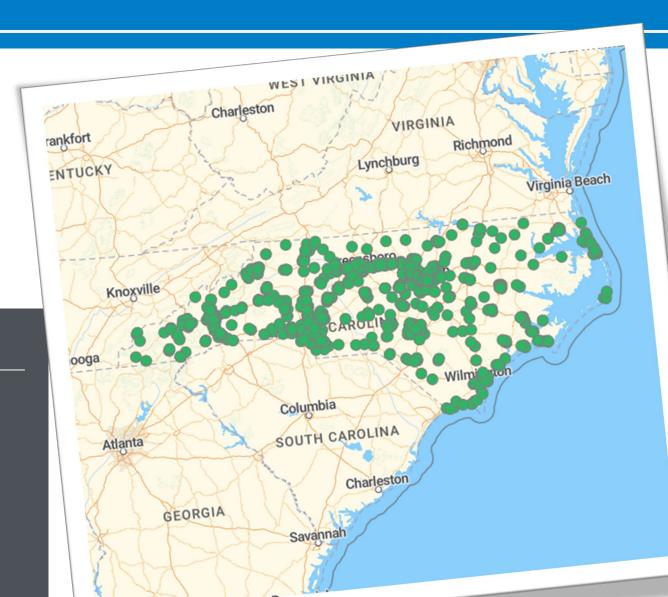
Answer:				
Christmas trees	Swine			
Poultry	Торассо			
Sweet potatoes				



How many public EV charging locations (level 2 or higher) are available in North Carolina?

Answer:

1,517



ROUND 2

According to the North Carolina Department of Environmental Quality (DEQ), North Carolina has 17 major river basins.

Name the river basins contained entirely within North Carolina's borders.

### What natural resource is found in North Carolina that can be mined for use in electric vehicle batteries and in other energy storage devices?

# What is the most visited National Park in the United States?

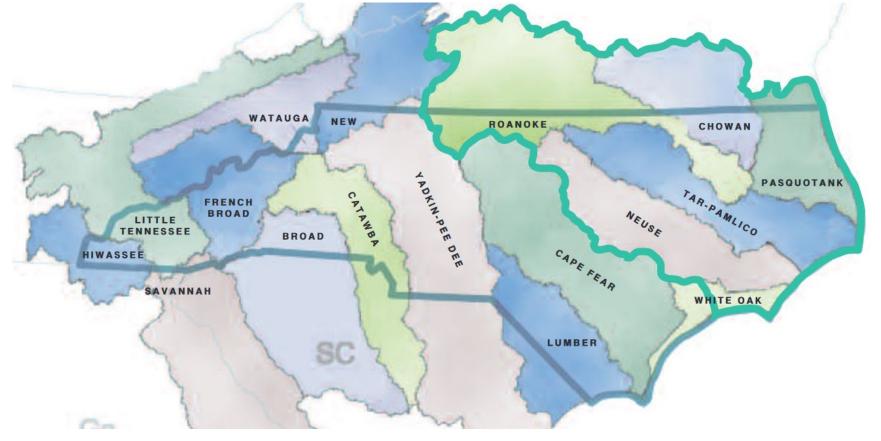
Bonus Question: What is the most visited North Carolina State Park?

According to the 2022 Sea Level Rise Technical Report produced by NOAA, sea levels along U.S. coastlines are projected to rise, on average \_\_\_\_\_ inches in the next 30 years. Name the group of chemicals widely used in nonstick cookware, cosmetics, food packaging, carpeting, and other products that break down very slowly and have been found as a contaminant in water resources nationwide?

# ROUND 2 - ANSWERS

# Name the river basins contained entirely within North Carolina's borders.

- 1. Cape Fear
- 2. Neuse
- 3. White Oak
- 4. Tar-Pamlico



What natural resource is found in North Carolina that can be mined for use in electric vehicle batteries and in other energy storage devices?

Lithium

### ORTH GAROLIN \* two dealer **Piedmont Lithium Project** (Giperatio Atlanta ithium Batteries EWI

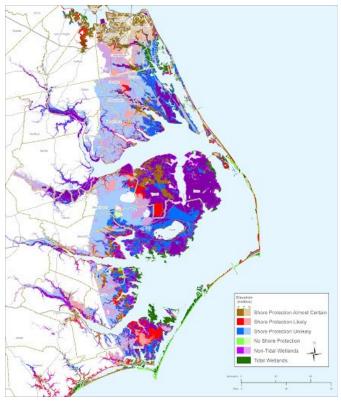
### What is the most visited National Park in the USA? **Great Smoky Mountains NP**



What is the most visited North Carolina State Park? Jordan Lake State Recreation Area



According to the 2022 Sea Level Rise Technical Report produced by NOAA, sea levels along U.S. coastlines are projected to rise, on average **10-12 inches** in the next 30 years.



This is equivalent to 3x the rate of sea level rise over the past 100 years.

Name the group of chemicals widely used in nonstick cookware, cosmetics, food packaging, carpeting, and other products that break down very slowly and have been found as a contaminant in water resources nationwide?

### Per- and Polyfluoroalkyl Substances PFAS

Also known as "forever chemicals." A large manufacturing facility near Fayetteville owned by Dupont and Chemours produced PFAS for many decades.

# Round 3

Which of the following is causing the most species to go extinct? [Choose one]

- a. Pollution
- b. Climate change
- c. Loss of habitat
- d. Hunting

# What is the largest source of air pollution in North Carolina?

- a. Industrial operations
- b. Transportation
- c. Electric generation
- d. Residential use

# Which of the following species are native to North Carolina?

- a. Virginia Opossum
- b. Zebra Mussel
- c. Kudzu
- d. Hemlock Wooly Adelgid

# What is North Carolina's ranking, out of 50 states, in the amount of solar power generated?

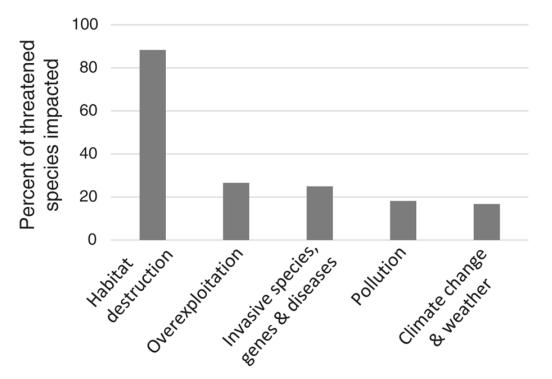
True or False:

A pumped hydroelectric dam consumes more energy than it generates.

# Round 3 - ANSWERS

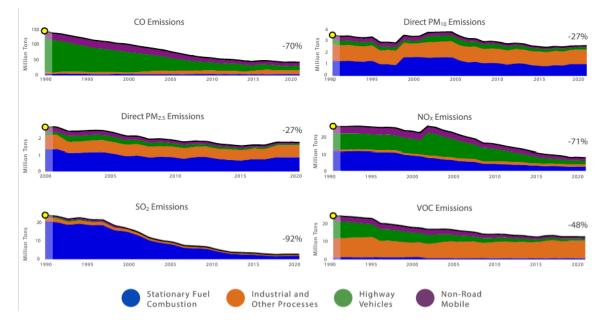
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Source: US EPA, Air Trends Report 2022.

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What is North Carolina's ranking, out of 50 states, in the amount of solar power generated in 2023?

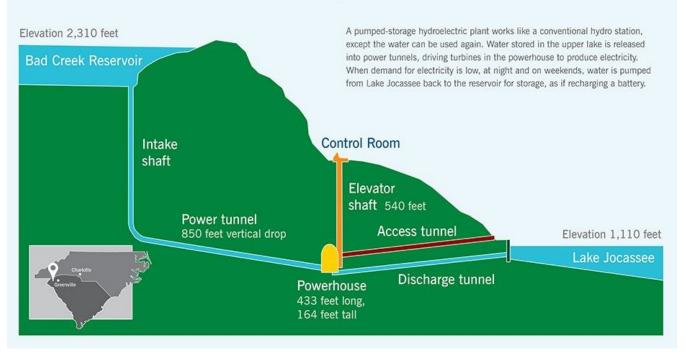
	State	Solar Capacity (MW) 2023	Solar Capacity Growth 2022 to 2023
	California	36,461	15%
	Texas	18,476	37%
	Florida	10,352	33%
	North Carolina	7,150	11%
	Arizona	5,848	14%
	United States total	139,012	23%

#

Source: Climate Central, April 3, 2024 (US EIA Data)

# A pumped hydroelectric dam consumes more energy than it generates. **TRUE**

#### How Bad Creek Hydro Station works



- Pumped hydro:
  - Is the world's largest source of energy storage
  - Provides long duration storage and flexible operations.
  - Pairs well with intermittent resources such as solar and wind energy to balance grid supply and needs
  - Duke Energy operates over 2,200
    MW of pumped storage at its
    Jocassee and Bad Creek facilities,
    and has an additional 1,400 MW
    planned

Bonus Question

### How long is the Mountains to Sea Trail "land route" that stretches from Clingman's Dome to Jockey's Ridge State Park?

# BONUS ANSWER

How long is the Mountains to Sea Trail "land route" that stretches from Clingman's Dome to Jockey's Ridge State Park? **1,175 Miles** 







Connecting consumers with green energy and carbon offset providers.



#### THIS ORGANIZATION SUPPORTS LOCAL CARBON OFFSETS

NC GreenPower recognizes:

### LEADERSHIP NORTH CAROLINA CLASS 31

The carbon footprint from personal vehicle travel to this event in Asheville, North Carolina was offset through a donation to NC GreenPower for local carbon offsets. This mitigation of carbon dioxide has the approximate environmental equivalent to **13,125 pounds** of coal not consumed, **15,288 miles** not driven or **66 trees** planted.

Thanks for supporting our environment!

APRIL 2024 | ASHEVILLE, NC WWW.NCGREENPOWER.ORG

