



VCU

Too much consumption or too many people?

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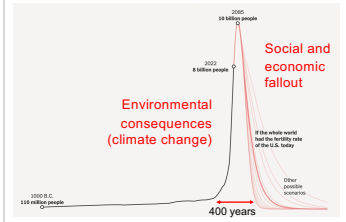
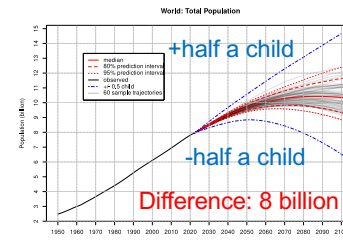
Poster:

How many people can the planet support at current or increasing consumption levels? How much nature is enough or sufficient for functional ecosystems? While it's mostly the top-10% of consumers who cause ~50% of climate change, it is the product of population size and average consumption which will determine if the planet has a sustainable future. Earth may sustainably support only 2-4 billion people at a high standard of living, hence we have to take action.

...or too many people?

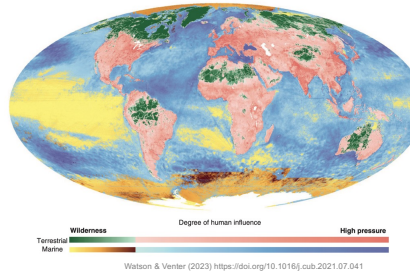
The world population will decline ... but only in 30-50 years now

The big picture: The world population over 3000 years

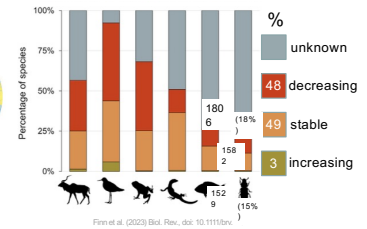


While there are too many people consuming too much, there may be too few people in 200 years. However, presently, humanity adds 70 million people per year, and having half a child more or less per woman, will result in a difference of 8 billion people by the end of this century!

Wilderness left on earth



48% of >71,000 species are declining

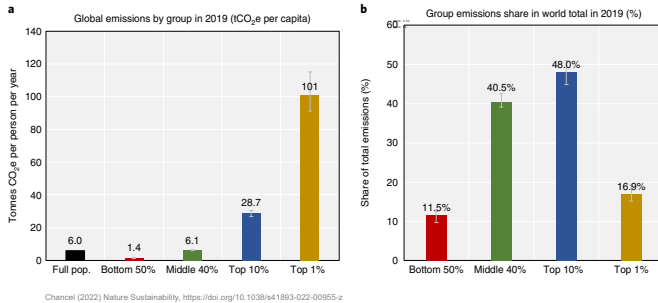


Too much consumption ?

The flipside to consumption is disposal. US consumers disproportionately consume relative to their percentage of population.

- **Trash:** The US produces 12% of the world's trash, while comprising only 4% of the world's population. The US also consumes 25% of the world's energy
- The average US consumer disposes of 5 pounds of trash daily (1,800 pounds annually).
- Americans dispose of 200,000 pounds of food daily.
- Over 1,800,000 acres in the US are dedicated to landfills (and this does not account for the trash sent overseas).
- The US recycling rate has never exceeded 35%.
- **Water:** The average US individual daily consumption of water is 159 gallons, while more than half the world's population lives on 25 gallons per day.
- **US impact:** the US population (4% of the world) has more environmental impact than the 51% that live in the other five largest countries.

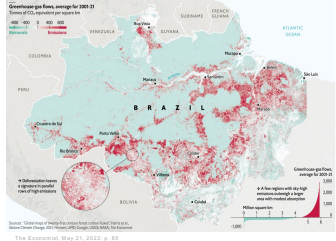
The global middle class (and their consumption) continues to grow



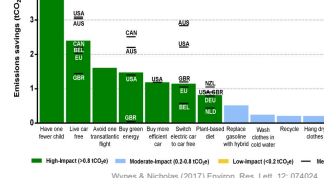
10% of the human population cause ~50% of climate change, but the top 50% cause almost all. More and more people are (rightfully) striving to become "middle class". A growing global "rich middle" class is only sustainable if there are no more than 2-4 billion people (depending on their consumption levels).



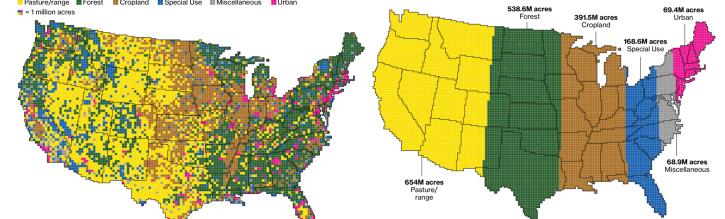
Deforestation of the Amazon



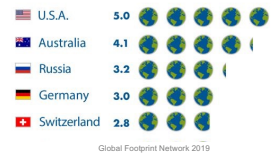
Effectiveness of measures we can take to reduce our impact on resources and nature



Land use in the US



How many Earths do we need if the world's population lived like...



Conclusion
While everybody deserves to have a high standard of living, high levels of consumption are not sustainable with 8 or 10 billion people. Hence consumption as well as population size needs to decline to conserve a sufficient amount of nature to sustain viable ecosystems and resources.

Further information

Meredith Katz, Ph.D.
VCU Sociology

Uetz, P. (2024) on overpopulation Youtube

Uetz, P. (2024) Overpopulation myths Free Inquiry