



BIODIVERSITY

By:

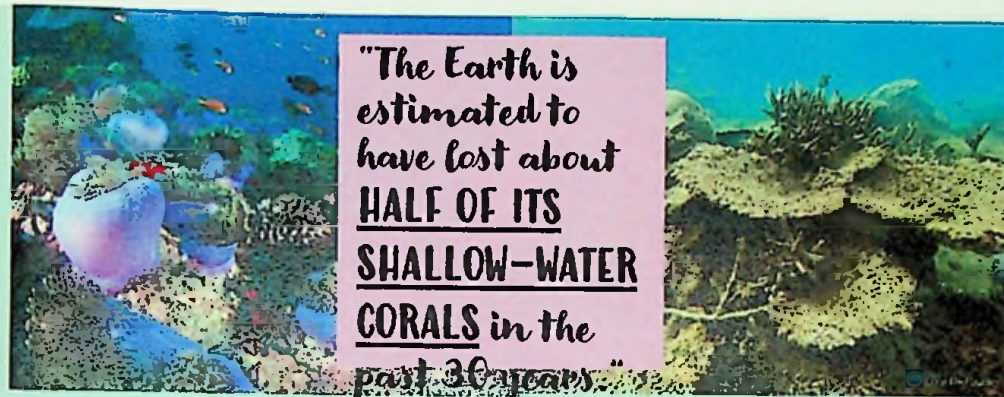
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WHAT IS BIODIVERSITY?

- BIODIVERSITY IS THE VARIETY OF LIFE IN THE WORLD, A SPECIFIC HABITAT, OR ECOSYSTEM.
- GENETIC DIVERSITY AND SPECIES DIVERSITY INCREASE THE OVERALL BIODIVERSITY

IMPORTANCE OF BIODIVERSITY

- BIODIVERSITY HELPS SUPPORT MANY NEEDS WHILE REGULATING THE ECOSYSTEM
- WILDLIFE CONSERVATION, GENETIC DIVERSITY, SPECIES DIVERSITY, AND HUMAN IMPACT ARE FOUR IMPORTANT COMPONENTS THAT MAKE UP BIODIVERSITY TODAY



How do I help?

- ✓ AVOID THINGS CONTAINING ANIMAL PRODUCTS.
- ✓ CLEAN UP THE ENVIRONMENT LOCALLY AND RECYCLE.
- ✓ DON'T SPRAY HERBICIDES AND PESTICIDES IN THE BACKYARD
- ✓ SPEAK UP! LET YOUR VOICE BE HEARD.



Genetic

Definition

- Genetic diversity is the total number of genetic characteristics in the genetic makeup of a species.
 - What this means is that if there is a high genetic diversity, then a population will have a much easier time adapting and evolving to better suit its environment.

How does this affect the world?

- An example of when genetic diversity suffers would be the Cheetah
 - A few thousand years ago the genetic diversity of Cheetahs suffered from low population.
 - This caused many of these Cheetahs to inbreed, causing genetic disorders.
 - At the current rate of breeding it will take hundreds of years before they recover their genetic diversity.

- "It is not the strongest of most intelligent that survive adapted to char

How Has This Affected Us?

- ❖ Humans use more than 25% of natural resources than what the plant can contain

What does this mean?

- Reduced diversity means:
- Vulnerability to pest and disease on food
 - Vulnerability to where fresh water is irregular or short of supply





- Human beings are the most dangerous cause of destruction of the earth's biodiversity, habitat loss is caused by deforestation, overpopulation, pollution, and global warming.
- Humans may destroy natural landscapes as they mine resources and urbanize areas. This is detrimental, as it displaces residing species, reducing available habitats and food sources.

INTRODUCTION

- https://ensia.com/wp-content/uploads/2020/03/Voices_Supercar_main-920x458.jpg
- <https://envirobites.org/wp-content/uploads/2018/03/biodiversity-loss-feature-image.jpg>
- <https://www.nationalgeographic.org/encyclopedia/biodiversity/>

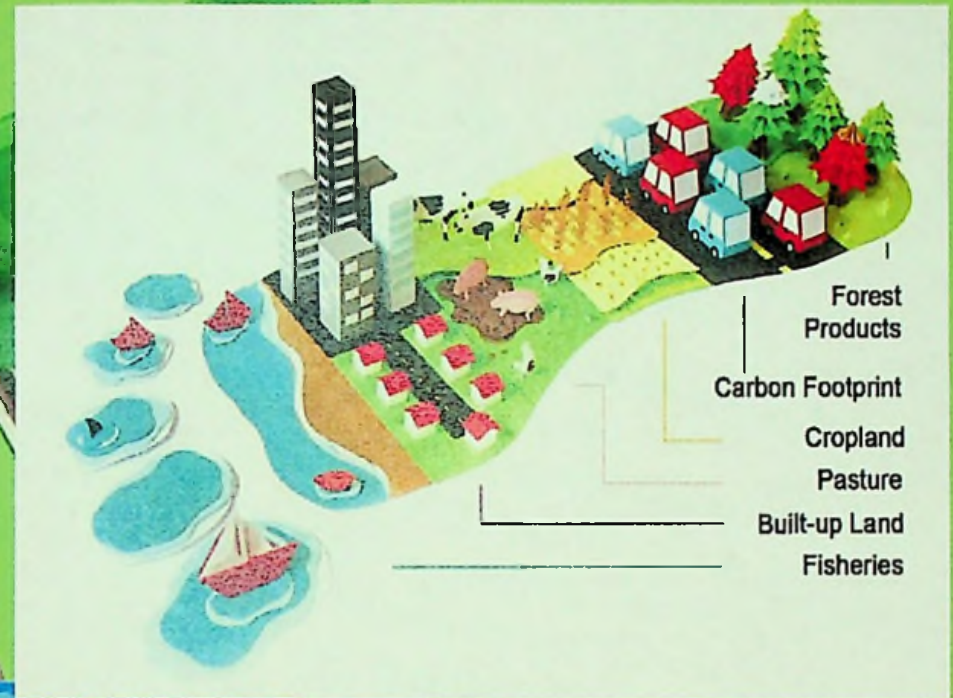
WILDLIFE CONSERVATION

- <https://www.worldwildlife.org/initiatives/wildlife-conservation>
- <https://awionline.org/content/what-you-can-do-wildlife>
- <http://corvette.salemstate.edu:2048/login?url=http://search.ebscohost.com/login.aspx?direct=true&AuthType=cookie,ip,epid&custid=ssc&db=cmedm&AN=31376197&site=eds-live&scope=site>
- <http://corvette.salemstate.edu:2048/login?url=http://search.ebscohost.com/login.aspx?direct=true&AuthType=cookie,ip,epid&custid=ssc&db=cmedm&AN=31989981&site=eds-live&scope=site>
- <https://www.nhes.org/wildlife-conservation/>
- <https://www.nwt.org/Our-Work/Wildlife-Conservation>
- <https://www.seweeassociation.org/reason-wildlife-conservation-important/>
- <https://www.globalteer.org/importance-of-wildlife-conservation/>
- <https://www.abc.net.au/cm/r/image/10921380-3x2-xlarge.jpg?v=3>
- https://nongabay-images.s3.amazonaws.com/rainforests/photos/bolivia_drone_190172_1280x670.jpg
- <https://www.pandotrip.com/wp-content/uploads/2015/10/Top-Coral-Reefs-Maldives-Photo-by-WaterFrame-Alamy-740x555.jpg>
- [https://www.popsi.com/resizer/zaWGk2qdq50jSgK1_KChOfY\(Bzk-/760x570/filters:focal\(2000x1500:2001x1501\)/arc-anglerfish-arc2-prod-honnier.s3.amazonaws.com/public/57VCK437OU4AC5L53H2K7O6KUE.jpg](https://www.popsi.com/resizer/zaWGk2qdq50jSgK1_KChOfY(Bzk-/760x570/filters:focal(2000x1500:2001x1501)/arc-anglerfish-arc2-prod-honnier.s3.amazonaws.com/public/57VCK437OU4AC5L53H2K7O6KUE.jpg)
- <https://img.favpng.com/17/17/14/budgerigar-parrot-bird-cockatiel-parakeet-png-favpng-BsUyr5enwFQX0WFLGjl.bj2z0q.jpg>
- https://66.media.tumblr.com/da50807297561ee56ad39a845e86d6c3/tumblr_pb3nqxLDvR1w8sg16o2_250.png
- <https://i.pinimg.com/originals/dc/8c/00/dc8c006f12805ab799cf71b832457e6f.png>
- <https://lh3.googleusercontent.com/proxy/B8ncjkMtOSQv2ynxvMU5ILJ43U0kTtyCCakzL4RW1.8I.GvtEGAdb3z1hugOhAsW4VQ9JdTqRsUS-CXFHDXLON5GqpyoPo-Y>
- https://media.treehugger.com/assets/images/2013/04/sad_koala.jpg

REFERENCES:

Species Diversity

- https://www.panda.org/our_work/biodiversity/biodiversity_and_you/
- <http://www.biodiversity.ru/coastlearn/bio-eng/boxes/specdiv.html>
- <https://www.nature.com/scitable/knowledge/library/the-maintenance-of-species-diversity-13240565/>
- <https://www.google.com/search?q=biodiversity+the+human+impact+on+population&>
- <https://blogs.mis-munich.de/environmentalist/2016/11/29/2813/>
- <https://www.khanacademy.org/science/high-school-biology/hs-ecology/hs-human-impact-on-ecosystems/a/hs-human-impact-on-ecosystems-review>
- <https://www.greenfacts.org/en/biodiversity/l-3/1-define-biodiversity.htm>



- Humans affect biodiversity by their population numbers, use of land, lifestyles and causing damage to habitats.
- Biodiversity is important to humans for many reasons, ecological life support. Biodiversity provides functioning ecosystems that supply oxygen, clean air, water, pollution of plants, pest control, wastewater treatment and many ecosystem services.



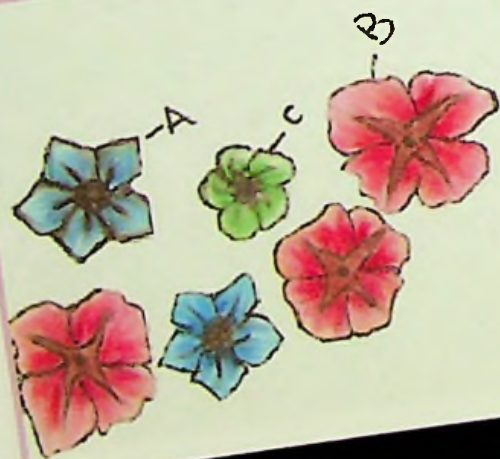
Species Diversity

Definition:

- # of species that are represented in a given community.
- a tool used by conservationist to determine if intervention is needed for a certain area.

Three Components:

- # of species found in a community
- #/abundance of individuals per species
- Distribution of eveess of species



Example:

- A, B, and C are 3 different types of flowers in a specific habitat

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Diversity

How this may affect you?

- Genetic diversity affects many species, especially products of breeding such as dogs
 - One thing that people don't realize about purebred dogs is that a lot of the time they are inbred to preserve the bloodline that causes birth defects that can cause a range of problems

How can I help?

- Some proposed methods of reducing further genetic diversity loss is by using what is called Genebanks
 - A Genebank is a sort of repository that hold genetic information of plants and animals until it's needed.
- You can also get involved with nature reserves and habitat restoration programs in your area.
 - We would suggest contacting your local Parks department for possible volunteer opportunities.

the species that survives, nor the
ives. It is the one that is the most
ade" -Charles Darwin

