

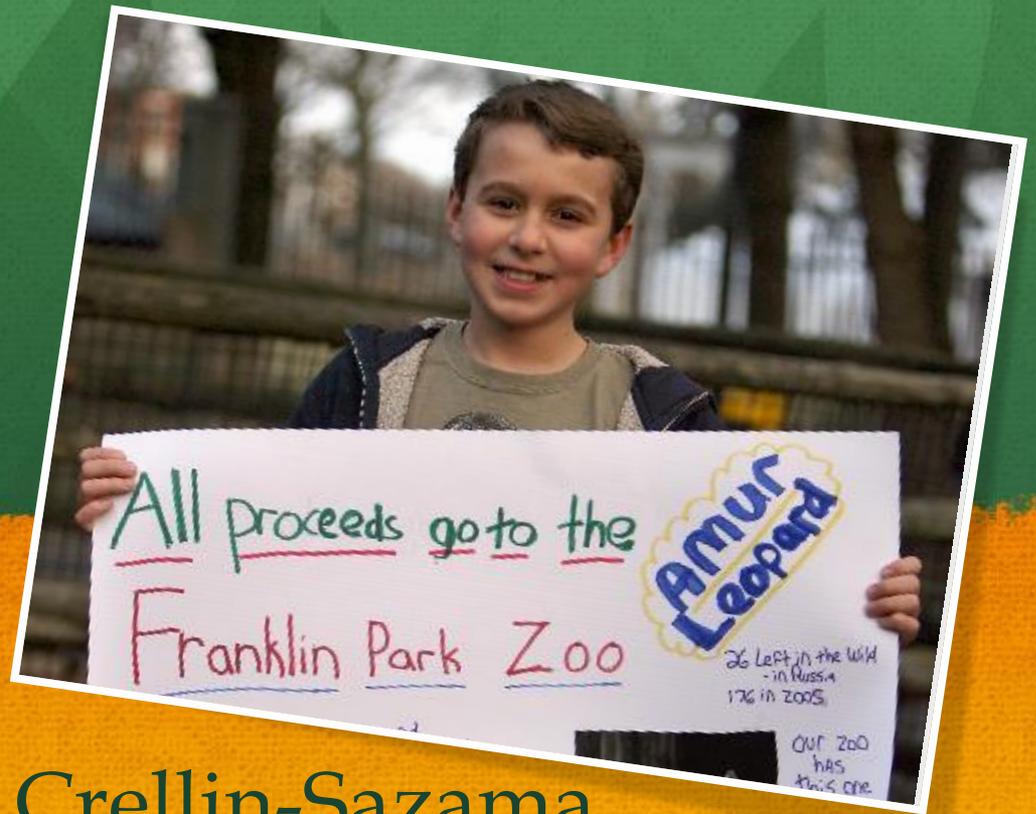


Animals and Climate Change

One future for all living things



Youth United for Animals and the Planet (YUAP)



Created by Adam Crellin-Sazama

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Zoo Volunteer

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Check out Adam's Website:

www.YUAP.org

Why I'm here today

- Climate change is happening now
- Changes are affecting all animals, including humans
- There are things we all can do to make a difference
- It's up to our generation
- We need to get connected and work together as a community



Animal Pop Quiz!

Question One:

How many Amur
Leopards are there in
the wild?



Question One:

How many Amur
Leopards are there in
the wild?



Answer: 75



Question Two:

How many northern white rhinos are left?



Question Two:

How many white rhinos are left?

Answer: 4



There were
500 just
thirty years
ago.

Question 3:

How many elephants
are killed by poachers
every year?



Question 3:

How many elephants are killed by poachers every year?

Answer: 30,000. That's two every hour.



Central Africa has lost 64% of its elephants in the past ten years.

Question 4:

How many animal
species go extinct
every year?



Question 4:

How many animal species go extinct every year?



Answer: More than
1,000

99% of
endangered
species are at-risk
because of human
activities.

Question 5:

How many acres of
rainforest are
destroyed each year?



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rainforest are
destroyed each year?



Answer: 78 million

- An area the size of New York State is lost every year.



Question 6:

How many people
does it take to make a
difference?



Question 6:

How many people
does it take to make a
difference?



Answer: One



How did the situation get
this way for animals?



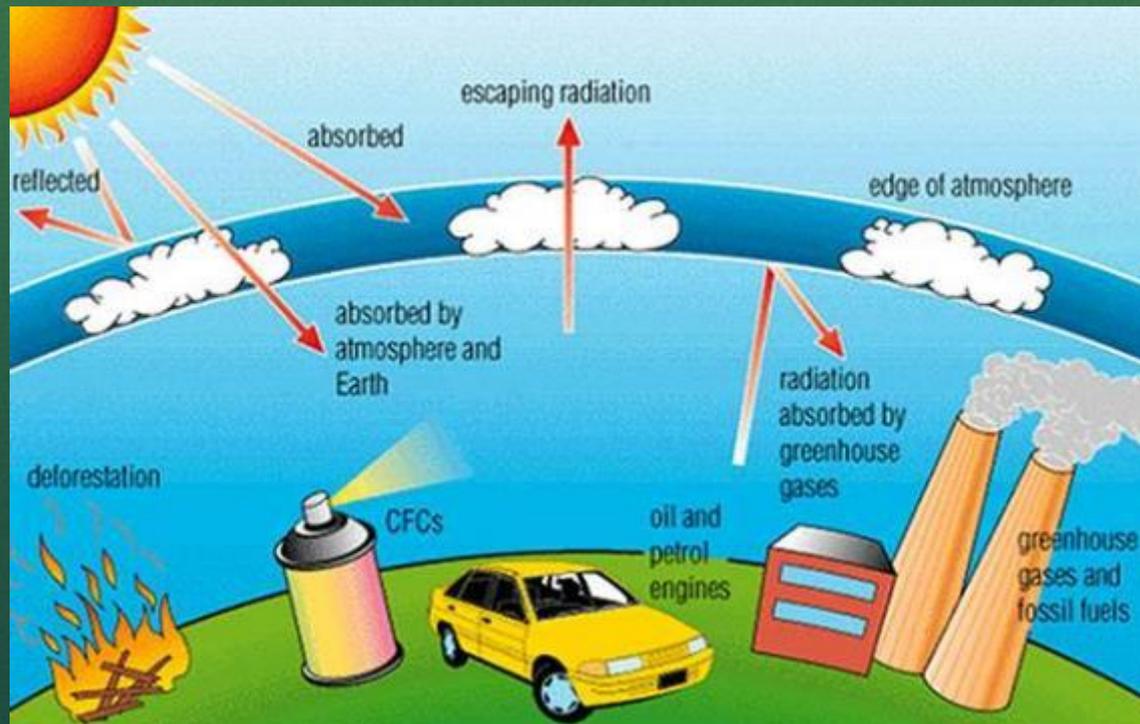
Climate Change

350 parts per million of carbon in the atmosphere is considered safe.

Climate Change

350 parts per million of carbon in the atmosphere is considered safe.

We just passed 400 parts per million.



Climate Change

The carbon we burn every day is hurting animals around the world.



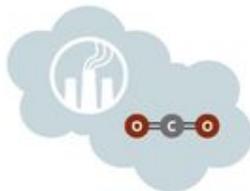
A BRIEF GUIDE TO ATMOSPHERIC POLLUTANTS

A number of different chemical entities, from a range of sources, can contribute towards atmospheric pollution, the consequences of which can include global warming and smog. This graphic looks at a selection of major groups of atmospheric pollutants, their major sources, and their effects.



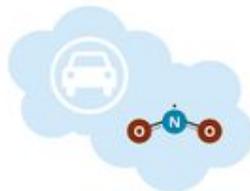
CARBON MONOXIDE

A gas generated by the incomplete combustion of fuels – primarily from road transport. Affects human health, as it reduces oxygen-carrying capacity of the blood. It also reacts with other atmospheric gases to produce ozone.



CARBON DIOXIDE

A gas generated by the burning of fossil fuels in the production of electricity. Also emitted by natural processes. Human emissions are linked with rising atmospheric CO₂ levels and anthropogenic global warming.



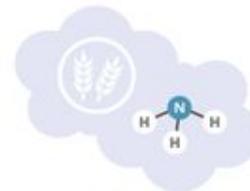
NITROGEN OXIDES

Primarily created by combustion in road transport. Nitrous oxide is an important global warming contributor, whilst nitrogen dioxide is involved in ground-level ozone forming reactions, and is also a component of smog.



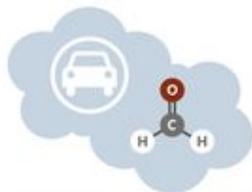
SULFUR DIOXIDE

The primary source of sulfur dioxide is the burning of fossil fuels to generate electricity. It can contribute to smog, reacts with water to produce acid rain, and can also cause wheezing and breathing problems for asthmatics.



AMMONIA

Ammonia's primary atmospheric source is from its use in agriculture, such as manure & fertilisers. It can react with other pollutants to produce particulate matter. It also has the ability to over-enrich ecosystems with nitrogen.



VOCs

VOCs (volatile organic compounds) are emitted naturally by vegetation. Amongst significant human sources is road transport, as well as solvents. They can contribute to formation of ground-level ozone and smog.



OZONE

The ozone layer shields us from UV radiation, but ground-level ozone is a major pollutant. It's formed from other pollutants in the presence of sunlight. Ozone is a major component of smog, and can also cause health effects.



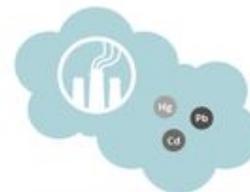
POPs

POPs (persistent organic pollutants) are volatile chemicals released into the atmosphere, often from agricultural or industrial uses. They persist in the environment and can have health effects on both wildlife & humans.



PARTICULATE MATTER

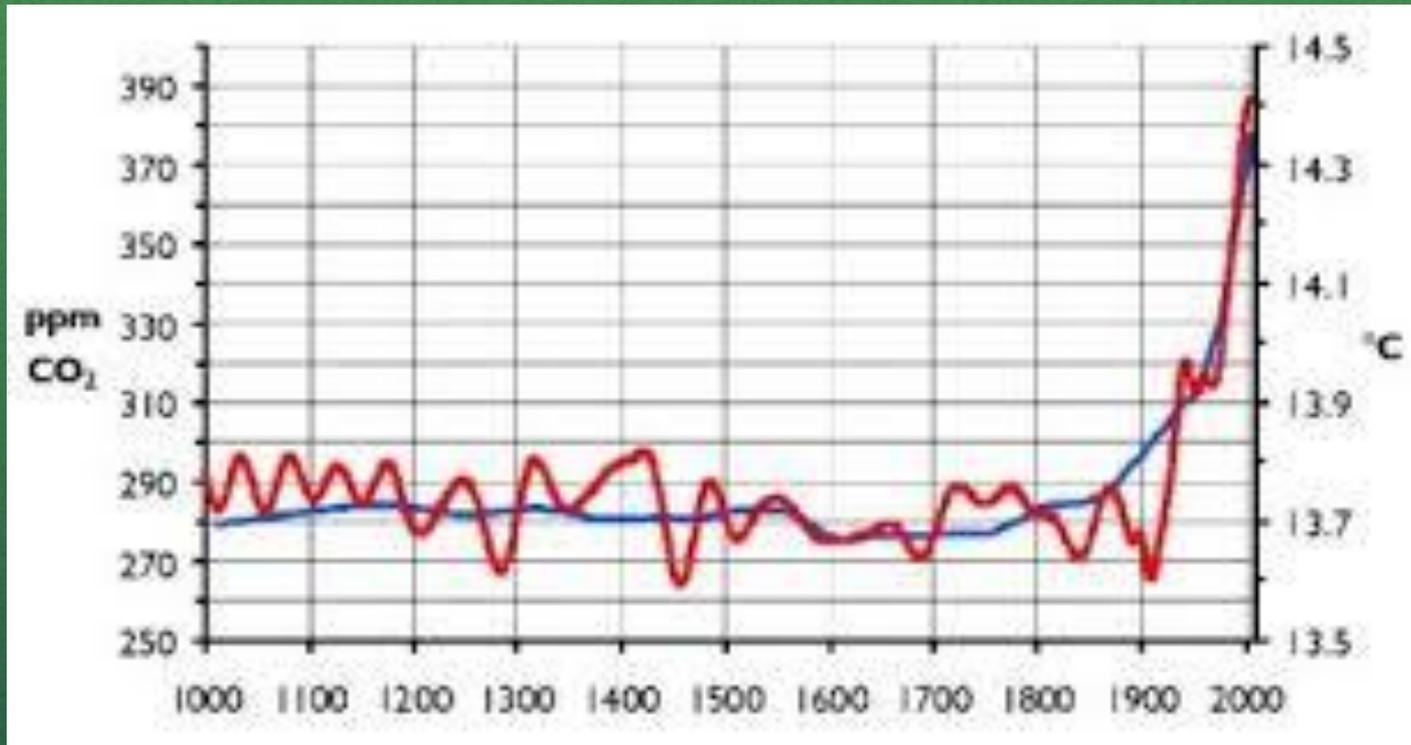
Particulate matter is composed of a huge number of different components. Some are directly emitted, while others are generated by reactions in the atmosphere. They cause haze and can also cause lung problems if inhaled.



HEAVY METALS

Heavy metals are released into the atmosphere from a range of sources, including burning of fossil fuels and road transport emissions. Some, such as mercury and lead, have toxic health effects in humans.





--- Carbon in the atmosphere ---Average temperature on Earth

Global warming has already affected ecosystems, including changes in growing seasons, species ranges, and breeding patterns.

Many species cannot adapt fast enough to these changes.

Species that can't move will go extinct.



The North American Right Whale is going extinct because it can't find enough plankton to eat in warmer ocean waters.

And, there are other factors
that affect animals...



HABITAT DESTRUCTION is the main threat to 85% of endangered species.

Half of the world's original forests are gone.

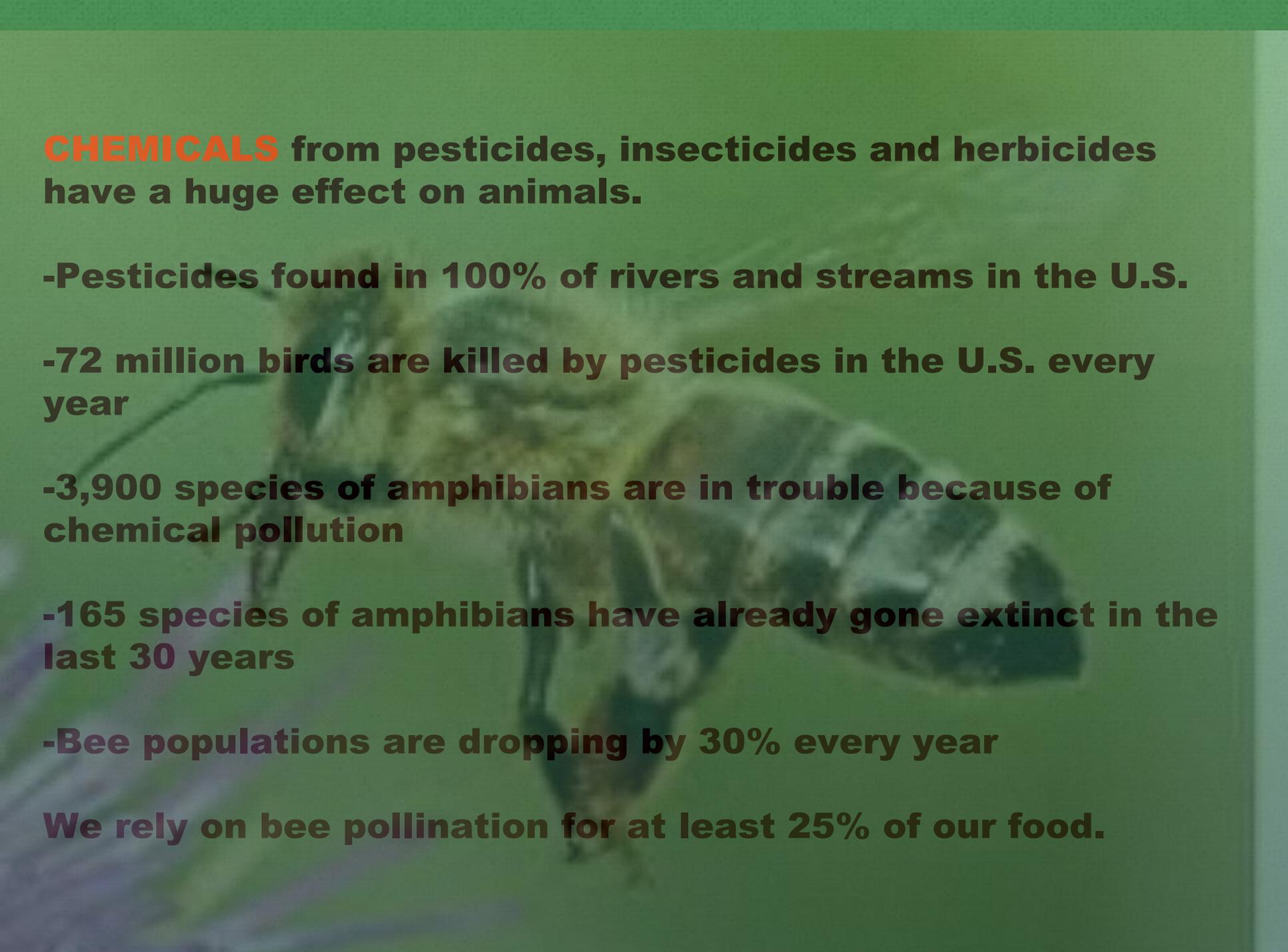
Humans are taking up more land without thinking about how it affects the planet.

POACHING affects many species. Animals are killed for one body part that is worth a lot of money. Elephant tusks are sold for \$1,000 per pound to make jewelry, figurines, and other objects. Poor people are exploited to hunt the animals.

Because of poaching:

- The black rhino population is down 98% in the past fifty years.**
- The lion is extinct in seven African countries**
- There are only 2,000 Grevy's zebras left in the wild**
- Up to 80,000 pangolins were killed last year for their scales**



A close-up photograph of a bee on a purple flower, serving as a background for the text. The bee is positioned in the center-right of the frame, facing left. The flower's petals are a vibrant purple, and the background is a soft, out-of-focus green.

CHEMICALS from pesticides, insecticides and herbicides have a huge effect on animals.

-Pesticides found in 100% of rivers and streams in the U.S.

-72 million birds are killed by pesticides in the U.S. every year

-3,900 species of amphibians are in trouble because of chemical pollution

-165 species of amphibians have already gone extinct in the last 30 years

-Bee populations are dropping by 30% every year

We rely on bee pollination for at least 25% of our food.

Climate change, habitat destruction,
poaching, chemicals...



If we know all of these things are hurting animals and causing extinctions, why don't we stop them?



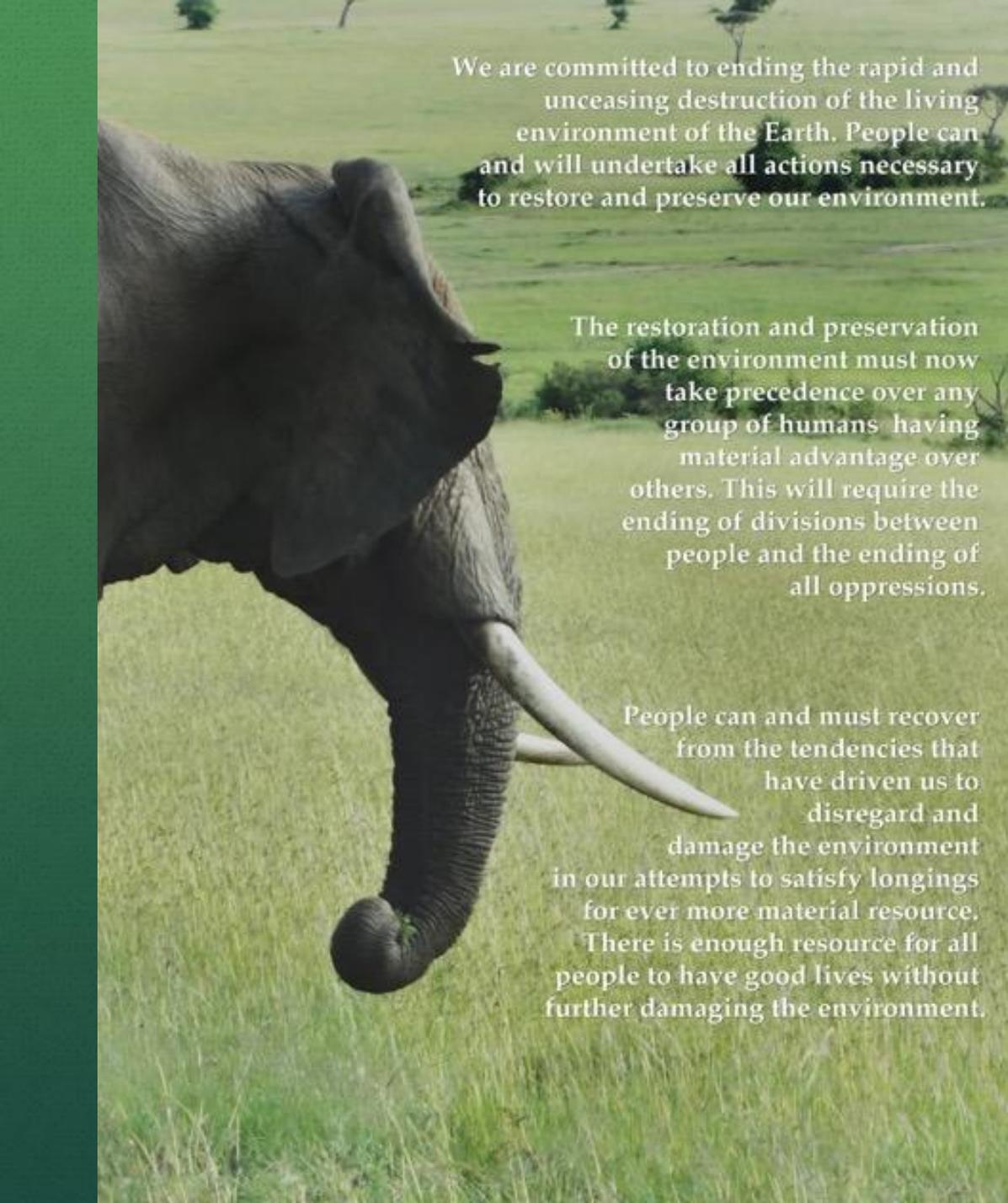
Global capitalism puts profits before the planet, people and animals.

Our economic system focuses on making money now, without thinking about the effects or planning for a sustainable future.

Having money won't matter if we can't live on the planet anymore.

The health of the planet and the survival of people and animals is our top priority!

We can find ways to feed everyone and use renewable energy to power our lives.



We are committed to ending the rapid and unceasing destruction of the living environment of the Earth. People can and will undertake all actions necessary to restore and preserve our environment.

The restoration and preservation of the environment must now take precedence over any group of humans having material advantage over others. This will require the ending of divisions between people and the ending of all oppressions.

People can and must recover from the tendencies that have driven us to disregard and damage the environment in our attempts to satisfy longings for ever more material resource. There is enough resource for all people to have good lives without further damaging the environment.

We need to work together to end greed and the exploitation of people and the planet.

There is enough for everyone.

We need to end all forms of humans harming humans.

We can do it!

CHANGE IS POSSIBLE!



If we took all the money we are spending looking for more fossil fuel, including in the arctic, we could transition to a green economy and save the planet (according to the International Energy Agency).

CHANGE IS POSSIBLE!

Just a few years ago, there were only 26 Amur Leopards.

President Obama is supporting laws to ban selling ivory and giving \$10 million for anti-poaching efforts in Africa.





Costa Rica has found ways to get almost all of their electricity from renewable sources.

Young people are advocating for a healthy atmosphere and a sustainable climate by bringing lawsuits in all fifty states through Our Children's Trust.

More than 500,000 people went to New York City for the People's Climate March in September 2014, one of 2,600 events that weekend in 162 countries.



Zoos are helping, too!

Zoos play a critical role in helping animal species survive.

AZA accredited zoos have more than 450 programs through the Species Survival Plan to maintain healthy, genetically diverse captive populations.

Zoos educate 180 million visitors every year about climate change and its effect on animals.

Zoos do research and help conservationists protect animals in the wild.

Zoos raise money to fund conservation efforts around the world.

Interesting fact: More people go to AZA accredited zoos in the US than to all NFL, MLB, NHL and NBA games combined. Zoos educate a lot of people!

And lots of other cool stuff!

Zoo New England is:

Rescuing injured animals like Blue, an American Cougar now living at the Stone Zoo.

Saving the rattlesnake population in the Blue Hills.



Helping whooping cranes migrate
by teaching them to follow
ultralight aircraft



Re-introducing Mexican Gray
Wolves in Mexico and in the
American Southwest.



Supporting 96 Elephants, an
organization working to save wild
elephants.



So...What can YOU do to make a difference for the climate and for animals?



WAYS TO TAKE ACTION

- Recycle and compost
- Conserve water and use biodegradable soap
- Turn off the lights and turn down the heat and air conditioning when you leave the house
- Organize “Power Down Fridays” at your school
- Send a letter to your legislators asking them to support the bill to ban ivory sales in Massachusetts
- Send a letter to Home Depot and ask them to stop selling RoundUp because it kills bees

WAYS TO TAKE ACTION

- Plant a tree or a garden
- Walk, ride your bike or use public transportation
- Hang your clothes to dry instead of using a dryer
- Organize to stop gas leaks
- Consider becoming a vegetarian
- Encourage your school and family to participate in Meatless Mondays
- Form a Green Team at your school
- Talk to other people about climate change and animals

HOW DOES MEATLESS MONDAY HELP?

IF THE WORLD REDUCED MEAT CONSUMPTION BY



15%

{BY DOING MEATLESS MONDAY}

IT WOULD HAVE THE SAME IMPACT
ON GREENHOUSE GAS EMISSIONS AS



TAKING **240** MILLION CARS
OFF THE ROAD EACH YEAR

**MEATLESS
MONDAY**

#MeatlessMonday

8 SIMPLE TIPS

-TO-

SAVE ENERGY & WATER AT SCHOOL



Turn off lights when you leave the room.



Keep vents and radiators unobstructed and clean - this is your source of heat and ventilation.



Close doors and windows to keep heat in or out.



Turn off computers, computer monitors, projectors and printers when not in use.



Open up the blinds to let in natural light, and then turn off the classroom lights to save energy.



Dress for the weather to avoid using energy inefficient space heaters or AC units.



Remove unnecessary, and often prohibited, appliances, such as mini-fridges, microwaves, and heaters.



Conserve water by turning off faucets when not needed, and reporting leaks immediately.

For more information and ideas contact:

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