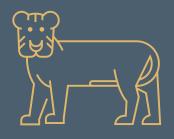




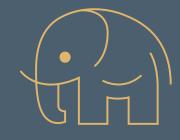
www.worldpreservationfoundation.com



# BIODIVERSITY





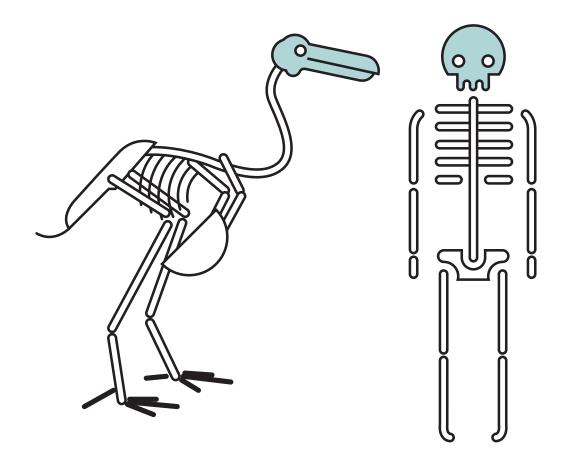


### INTRODUCTIION

The world is in the grips of the sixth great extinction and humans are causing it. The web of life that we depend on for food, water and health is being destroyed.

Fortunately, there is a solution. Returning grazing lands to native forests and habitat will release over a quarter of the earth's surface. This is the least expensive and most effective means we have of halting this extinction.

# HUMANS HAVE CAUSED THE SIXTH GREAT MASS EXTINCTION



"Human alteration of the global environment has triggered the sixth major extinction event in the history of life and caused widespread changes in the global distribution of organisms. These changes in biodiversity alter ecosystem processes and change the resilience of ecosystems to environmental change. This has profound consequences"

Nature Journal, 2000



# PROBLEM





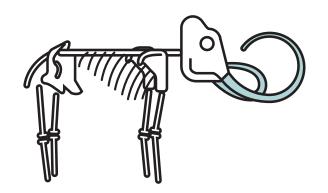


#### **BIODIVERSITY EXTINCTION HAPPENING** 1000X FASTER THAN NORMAL, IF WE DON'T STOP IT WE RISK LOSING EVERYTHING

"Plants and animals are now disappearing at up to 1,000 times the natural background rate of extinction, with vital life-supporting ecosystems that could soon be irreversibly damaged. And then we have global warming, even with the strictest greenhouse gas emission limits, the Earth's temperature is still expected to rise another 3.5°C within a few decades, which would result in the death of the Amazon rainforest, massive hurricanes smashing coastal cities, vast runaway release of methane from melting permafrost, and ultimately, mass extinctions... If these six factors are not stopped fast, we risk losing everything"

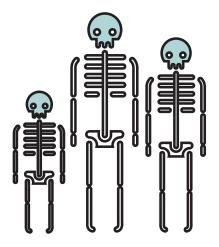


Nature Journal, 2005



"HUMANS ARE RESPONSIBLE FOR SO MANY SPECIES DYING OUT THAT WE ARE NOW IN THE MIDST OF A SIXTH MASS EXTINCTION"

The Telegraph, 2015



#### "THE ACCELERATING LOSS OF BIODIVERSITY POSES A FUNDAMENTAL THREAT TO THE SURVIVAL OF HUMANKIND"

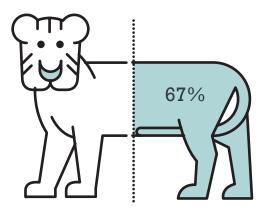
International Union for the Conservation of Nature, 2013

### WILD ANIMAL NUMBERS COULD FALL BY 67% FROM 1970-2020

The number of wild animals on Earth could fall by more than two-thirds in the 50 years to 2020, according to a new report which places the blame on the destruction of habitats, hunting and pollution. The forecast could lead to major consequences for humans.

The Living Planet Report 2016 says that animal losses are on track to

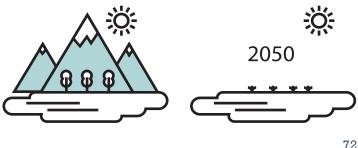
reach 67 percent in the 50 years to 2020. The report's authors also took into consideration a recent trend in animal population decline, citing a 58 percent plummet between 1970 and 2012.



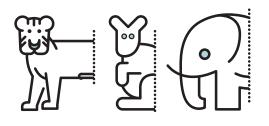
WWF Living Planet Report 2016

# EARTH'S WILDERNESS COULD BE LOST BY 2050

Biologists with the Wildlife Conservation Society have revealed that over the last 20 years, the Earth has lost 3.3 million square kilometers (1.27 million square miles) of wilderness – an area twice the size of Alaska and half the size of the Amazon rain forest. If the trend continues, we stand to lose everything in 30 years'time.



Wildlife Conservation Society



#### GLOBAL WILDLIFE HAS BEEN HALVED SINCE 1970

"Wildlife populations have been cut in half over the past four decades... The number of mammals, birds, reptiles, amphibians and fish on Earth dropped by 52% from 1970 to 2010"

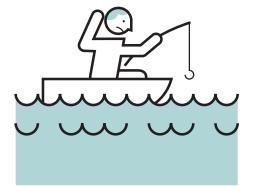
Live Science, 2014

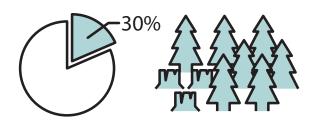


#### 70% OF PLANTS ENDANGERED

"70% of plants are endangered or critically endangered from extinction"

IUCN, 2009





#### 90% OF FISH GONE

"Overfishing has wiped out 90% of big fish, since the  $1950\mbox{'s"}$ 

National Geographic, 2003

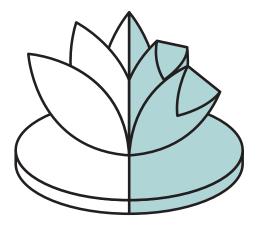


 $^{\prime\prime}30\%$  of global forest cover has been cleared, while another 20% has been degraded"

World Resources Institute, 2015

### 50% OF WETLANDS GONE

"Since 1900 over half of wetlands worldwide have disappeared"



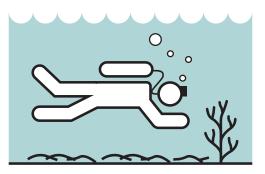
Institute for European Environmental Policy,



#### **35% OF MANGROVES GONE**

"More than 35% of the world's mangroves are already gone. The figure is as high as 50% in countries such as India, the Philippines, and Vietnam, while in the Americas they are being cleared at a rate faster than tropical rainforests"

WWF, 2015



#### **70% OF CORAL DEGRADED**

"70% of coral reefs are projected to suffer from degradation by 2030 without a dramatic change in how much carbon we emit"

Smithsonian Magazine, 2012



# CAUSE





#### LIVESTOCK PRODUCTION IS THE GREATEST THREAT TO BIODIVERSITY

"The livestock sector may well be the leading player in the reduction of biodiversity, since it is the major cause of deforestation, as well as one of the leading drivers of land-degradation, pollution, climate change, overfishing, sedimentation of coastal areas and facilitation of invasions by alien species"

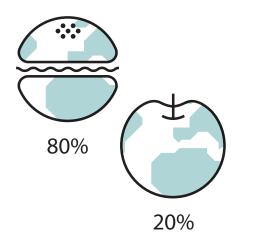
UNFAO, Livestock's Long Shadow, UN Food and Agriculture Organization (UNFAO), 2006



#### MEAT IS THE BIGGEST THREAT TO WILDLIFE

"Diets rich in beef and other red meat can be bad for a person's health. And equally [as] bad for Earth's biodiversity... human carnivory, and its impact on land use is the single biggest threat to much of the world's flora and fauna"

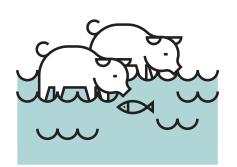
Science Magazine, 2015



#### 80% OF AGRICULTURAL LAND IS FOR MEAT AND DAIRY

"80% of agricultural area is currently devoted to meat and dairy production"

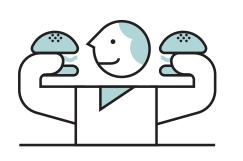
Netherlands Environmental Assessment Agency, Planbureau Voor Der Leefomgeving (PBL), 2009



#### AGRICULTURE IS CHANGING THE FACE OF THE EARTH

"Humans have transformed 40% to 50% of the ice-free land surface, changing prairies, forests and wetlands into agricultural and urban systems"

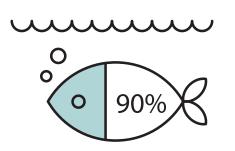
Nature Journal, 2000



#### MEAT CONSUMPTION HAS DOUBLED SINCE 1970

"Global animal protein consumption has more than doubled since 1970"

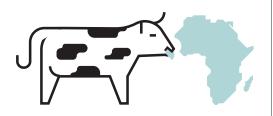
Netherlands Environmental Assessment Agency, Planbureau Voor Der Leefomgeving (PBL), 2009



#### 90% OF BIG FISH GONE

"Overfishing has wiped out 90% of big fish, since the  $1950\mbox{'s"}$ 

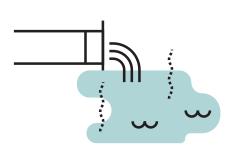
National Geographic, 2003



#### CATTLE ARE RESPONSIBLE FOR 80% OF AMAZON DEFORESTATION

"Cattle ranching is the number one culprit of deforestation in virtually every Amazon country, and it accounts for 80% of current deforestation"

United Nations, 2014



#### AGRICULTURAL WATER MISMANAGEMENT IS DESTROYING ECOSYSTEMS

"The way that water is managed in agriculture has caused wide-scale changes in ecosystems and undermined the provision of a wide range of ecosystem services. The external cost of the damage to people and ecosystems, and clean-up processes, from the agricultural sector is significant. In the United States of America the estimated cost is US\$9 to US\$20 billion per year"

United Nations, 2014



#### OVERGRAZING CAUSES DESERTIFICATION

"The major causes of soil erosion / desertification are still inappropriate agricultural practices, deforestation and overgrazing"

European Commission, 1999



# TIMELINE All Life on Earth Is Threatened

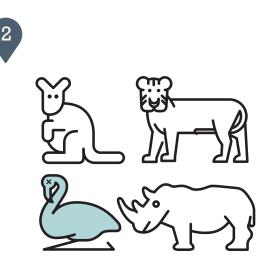




#### **BIODIVERSITY TIPPING POINT BY 2045**

"Earth's biodiversity could reach a tipping point as early as 2045, threatening to collapse all of Earth's ecosystems, threatening all life on earth"

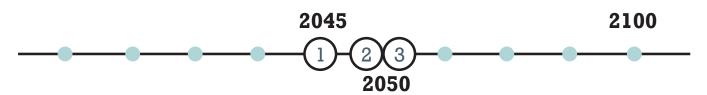
Nature Journal, 2009



#### **QUARTER OF EARTH'S SPECIES EXTINCT BY 2050**

"One-fourth of Earth's species could be headed for extinction by 2050"

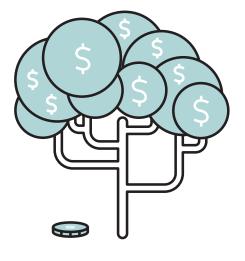
The Nature Conservancy, 2015



#### <sup>3</sup> GLOBAL LOSS OF ECOSYSTEM SERVICES WILL COST 7% OF GLOBAL GDP BY 2050

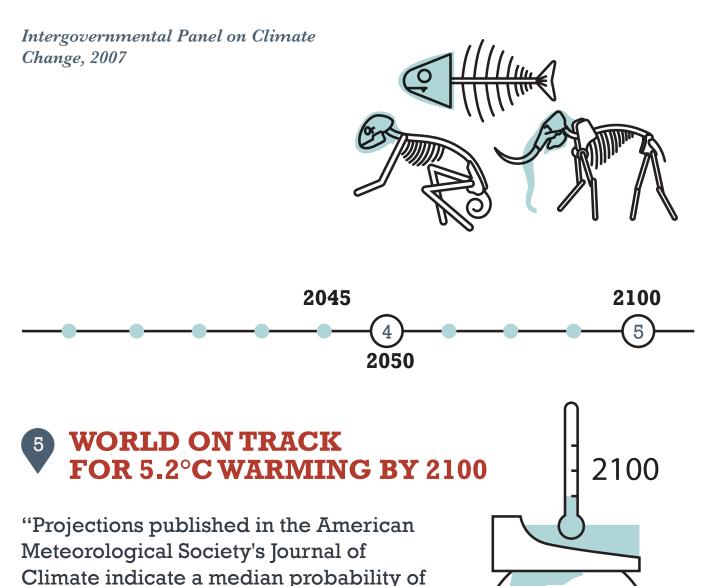
"The estimated annual loss in ecosystem services from the cumulative loss of biodiversity will be worth nearly €14 trillion (thousand billion) by 2050, equivalent to 7% of the global 2050 GDP"

European Commission, 2008



#### **4** 70% OF ALL SPECIES EXTINCT IF TEMPERATURES INCREASE BY 3.5°C

"If the global average temperature increase exceeds about 3.5°C, model projections suggest between 40% and 70% of species assessed around the globe will face extinction"



surface warming of 5.2°C by 2100, with a

90% probability range of 3.5°C to 7.4°C"

Massachusetts Institute Of Technology, 2009

Environmental Report – The Future of Food

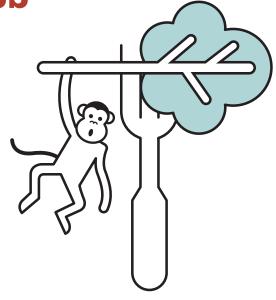


# SOLUTION



### PLANT BASED DIET MOST EFFECTIVE TO STOP BIODIVERSITY LOSS

"A no meat diet would have the single greatest benefit, preventing the loss of 60% of biodiversity loss"



Netherlands Environmental Assess ment Agency, 2010

# **ECOSYSTEM BANKRUPTCY**

"A rescue package similar to that introduced after the global financial crisis is urgently needed to halt the

worldwide loss of biodiversity, which is resulting in a heavy human cost... we are bankrupting our natural economy"



Secretary General Ban Ki-moon

United Nations News Centre, 2010





www.worldpreservationfoundation.com