**Pristine or Produced: Examining the Exent Mankind has Transformed the Planet**

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**Objectives:**

1. Research how ancient civilizations and past humans transformed their landscapes through deforestation, agricultural practices, hunting, species introductions, etc.
2. Choose three unique landscapes around the world to research more extensively.
3. Take before and after images of three distinct landscapes that have experienced massive transformations due to human activity.

**Methodology:**

Most people have emotional attachments to the landscapes that they consider to be pristine, or untouched by man. These places are usually thought to be the净土 of conservation efforts due to the fact that they are “untouched,” but researchers are now realizing that such places rarely exist. Virtually every landscape on the planet has been altered by mankind. For example, the majority of the world’s forests were previously thought to be untouched by man, but researchers are now realizing that significant changes have occurred. This has been evident in the Amazon rainforest, Scottish Highlands, and the African Savanna.

**Amazon Rainforest:**

Today, most people think of the Amazon rainforest as a pristine jungle, unchanged for thousands of years. In reality, very little of it has remained extensively forested for more than a few decades. Before the arrival of Europeans it is estimated that the population of the Americas was over 50 million, half being in South America. In some areas, the population density was greater than that it is today. Populations were wildly spread and the people used the land extensively.

“The earth moving involved in creating them must have been comparable to building the pyramids. They have a grandeur and a majesty of their own.”-Spanish conquistador Francisco de Orellana, 1542

“The earliest explorers were the only Europeans to ever see the Amazonian cities in their full glory. By the time the first explorers arrived the vast cityscape described by Francisco de Orellana was already in ruins. Many of these great cities were swallowed by the nearby unexplored forest and forgotten forever. However, new satellite imagery technology is allowing researchers to remotely look deep in the jungle to find evidence of ancient cities, temples, roads and other infrastructures. We now know that large sections of forest that were previously thought to be untouched by man can be explored by satellite imagery.”

**Scottish Highlands:**

Today, the Scottish Highlands are famous for their timeless views of mountains, glens and glacial rivers. However, until 8,000 years ago, the majority of the land was covered in forest. When Scottish villagers began using early agriculture technologies, they also began clearing woodland to make room for farms. For thousands of years, woodland cleared steadily declined as the population of Scotland increased and more land was needed to grow crops. It is estimated that around half of the natural woodland was cut down by 80 AD. During the 17th and 18th centuries, much of the remaining forests were heavily exploited to fuel the Scottish timber and coal industries. By the 20th century, only 5% of Scotland’s land area remained as woods. Although there was an increase of attention towards forest reforestation in the early 1900’s, both World Wars took a toll on the woodlands and by 1947 only 3% of the land remained in tree cover.

**African Savanna:**

Most wilderness would consider the African savanna as a prime example of pristine wildness. In reality, much of the grassland and bush landscape that wilderness think of as “natural Africa,” is less than 150 years old. The idea that Africa is full of pristine landscapes could be largely traced back to Teddy Roosevelt’s famous safari in the early 1900’s. Roosevelt related the idea of the United States describing itself as a “Pleistocene” landscape dominated by humans. However, less than 20 years before Roosevelt’s safari, the landscape he saw looked incredibly different. Until the height of the scramble for Africa, the continent was dominated by the rich cattle kingdoms and much of the land was in pasture. For hundreds of cattle, grassland on the savanna, keeping the grasses short and preventing other vegetation from growing. This all changed in 1847 when Italian soldier accidentally brought a cattle plague called Rinderpest to Africa. In ten years, the disease spread across the continent, killing billions of the cattle that the African kingdoms heavily depended on to survive. Whenever the cattle died, the African people also suffered. The disease spread to wild cattle-nosed animals like the giraffe, antelope, wildbeast and buffalo. The spread of Rinderpest also coincided with a large drought, which made it even more deadly for both humans and animals. Between the cattle calamity and the drought, many of the once mighty tribes and kingdoms were devastated.

“Some people imagine sleeping sickness has favoured our enterprise. Powerful and warlike as the pastoral tribes are, their pride has been humbled and out progress facilitated by this awful visitation. The advent of the white man has not also been so peaceful.”-Frederick Lugard, British Army Captain

**Results:**

All over the world, researchers are finding new evidence of extensive past forest clearance. Erik Ellis, a geographer at the University of Maryland, estimates that by five thousand years ago, humans had already altered at least a fifth of the Earth’s land surface. Even though the population of humans was far lower than it is today, the people spread out and large areas of land were required to sustain populations due to primitive farming methods.

Below is an example of the most commonly used map to show remaining wilderness areas untouched by man. However, after considering my research, it is clear that almost every landscape has been changed by human activity at some point in history.

“Most of the world is profoundly altered by human activity, often stretching back thousands of years. We knew what we were doing. From the tropical rain forests to the tundras, from the tundra grasses of New Zealand to the once forested Scottish past peat bogs, and then the Rootedlands of China to the heaths of central Europe, we have been transforming landscapes, wetting and drying, foresting and deforesting, planting and burning, grazing a plowing, hindering regeneration to extinction, and transforming new species in their place.”-

-Fred Pearce, The New Wild

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“The Scottish Highlands of the Highlands landscape, the result of all vegetation besides grasses. And age once face in a Scottish Highlands has been transformed before large scale deforestation.”

After the World Wars, both the government and private owners have worked to restore woodlands across Scotland. Today, around 10% of the Scottish Highlands is now forested.

“Alexis de Tocqueville: ‘The earth moving involved in creating them must have been comparable to building the pyramids. They have a grandeur and a majesty of their own.’”

-Fred Pearce, The New Wild

“The vast landscapes of the African savanna demonstrate the extent of human alteration on the planet. Producing these paintings allowed me to place myself in these environments, gain a deeper understanding of how drastically mankind has changed each landscape.”

**Conclusion:**

Humans have been altering the surface of the earth for thousands of years. From the great plains of North America, to the African Outback, from the Congo Rainforest to high in the Andes, people have been shaping this planet for their own benefit for centuries. While there are those who think human modifications devalue the landscape, we can also find comfort in knowing that these changes are lifecycles of the earth, and that the landscape will continue to evolve. However, after considering my research, it is clear that almost every landscape has been changed by human activity at some point in history.

“Most of the world’s surfaces results from long and complex interactions between human activities and natural processes.”-

-Oliver Rackham, British Landscape Historian

“The earth moving involved in creating them must have been comparable to building the pyramids. They completely altered the landscape. Every feature of this land is manmade.” -Clark Ericson, University of Pennsylvania

“The Scottish Highlands of the Highlands landscape, the result of all vegetation besides grasses. And age once face in a Scottish Highlands has been transformed before large scale deforestation.”

*Acknowledgments: Blakemore, Erin. “Amazon Jungle Once Home to Millions More Than Previously Thought.” National Geographic...*