

**Six Degrees: Our Future on a Hotter Planet, by Mark Lynas**  
**Earth QUEST Quotes**  
**Prepared by Dr. Laura Guertin, Earth Science**  
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## **Introduction**

### **Quotes:**

- **Page 17:** "...most people do not have the slightest idea what two, four, or six degrees of average warming actually mean in reality."
- **Page 18:** "...if six degrees of cooling was enough to nearly wipe us out in the past might six degrees of warming have a similar effect in the future?"
- **Page 22:** "...history teaches us that human events are too unpredictable to support such a deterministic approach... climate change is the canvas on which the history of the 21<sup>st</sup> century will be painted. Forewarned is forearmed."

## **One Degree**

### **Quotes:**

- **Page 28:** "However small the global shift, the evidence is now overwhelming that what the western United States suffered during this period was not a short-term rainfall deficit but a full-scale megadrought lasting many decades at least."
- **Page 30:** "In a world that is less than a degree warmer overall, the western United States could once again be plagued by perennial droughts – devastating agriculture and driving out human inhabitants on a scale far larger than the 1930s calamity."
- **Page 38:** "...the oldest ice at the base of the cores proved to be over 11,000 years old, showing that at no time since the last glacial epoch has the peak of Kilimanjaro been free of ice."
- **Page 49:** "It may still be possible to save the Arctic from complete loss of ice – but only if other atmospheric pollutants (such as soot, which darkens the ice surface and speeds melting) are reduced, as well as carbon dioxide."
- **Page 60:** "In total 70 percent of the world's reefs are now either dead or dying."

## **Two Degrees**

### **Quotes:**

- **Page 100:** "Clearly, at this point of time to do things that are expensive and which will impede our economic growth just to cut down on emissions of greenhouse gases would be something the Indian public would not accept," [Rajendra] Pachauri admitted recently."
- **Page 109:** "But however resourceful the state's water engineers might be, they are going to struggle to find a way out of the collision course between a burgeoning population and a declining water supply as the world warms."
- **Page 110:** "...those countries that suffer most, and don't have massive purchasing power, will slip irrevocably into structural famine and crisis. By a cruel irony, these

- include many of the countries that have done least to cause climate change.”
- **Page 115:** “Of crucial importance for natural species is the speed of temperature rise.”
  - **Page 116:** “There is no point in declaring somewhere a nature reserve if all the species within it have to flee north within a few decades in order to avoid going extinct.”

## Three Degrees

### Quotes:

- **Page 127:** “Even at the coarse resolution of a computer model grid, Botswana’s fate is clear: The entire country is covered by “active” dunes after about 2070.”
- **Page 132:** “Indeed, the Pliocene was probably the last time in the past three million years that the North Pole lost its ice sheet completely.”
- **Page 133:** “If CO<sub>2</sub> concentrations at today’s levels back in the Pliocene gave three degrees of global warming, surely they’ll do the same now?”
- **Page 141:** ““The functioning of the Amazon basin as a hydrological power engine is a critical component of contemporary climate.””
- **Page 145:** “Other than fire, Australia’s great concern will be water. Despite the country’s relative dryness compared to other continents, the average Australian household currently manages to flush, drink, wash, and hose its way through a staggering 350 liters (92.5 gal) of water a day.”
- **Page 154:** “As excavating work continued, it gradually dawned on archaeologists that something dramatic and terrible had happened to the Maya, something that had precipitated the collapse of their entire civilization almost overnight.”
- **Page 158:** “Drought years in Indonesia can already be disastrous, with food shortages and forest fires so severe that huge areas of the country – and neighboring Malaysia – disappear underneath heavy palls of smoke for weeks at a time.”
- **Page 160:** “A quirk of atmospheric dynamics means that air temperatures in the highland region are rising at twice the global average, and accelerated glacial retreat has been recorded across all the major ice-capped ranges.”
- **Page 163:** “All of human history shows that given the choice between starving *in situ* and moving, people move.”
- **Page 166:** “Snowless springs, hotter summers, and harsher droughts will all increase the vulnerability of the Southwest to perhaps the most feared agent of all: fire.”
- **Page 171:** “In July 2007 an international scientific team reported in the journal *Nature* that regions in the Northern Hemisphere poleward of 50°N (an area that includes Canada, the United Kingdom, Scandinavia, northern Europe, and Russia) have experienced an increase in precipitation, this change roughly balanced by a drying in the tropics and subtropics. This trend is projected to continue...”
- **Page 178:** “...between a third and a half of all species alive today will have joined the living dead category by 2050 if global warming is over two degrees by that date.”

## Four Degrees

### Quotes:

- **Page 193:** “Global warming is joined by other mounting threats – including population growth, soil loss, fossil aquifer depletion, and the wholesale destruction of ecosystems – each of which has the potential to escalate into a major survival crisis for modern civilization.”
- **Page 197:** “Migration is the traditional human adaptation to crisis, but this time there will be nowhere to hide. Civilizational collapse, like the blast wave of a neutron bomb, will sweep around the globe.”
- **Page 212:** “...stabilizing global temperatures at four degrees above current levels may not be possible because of carbon releases from Arctic permafrost.”

## Five Degrees

### Quotes:

- **Page 227:** “...it takes centuries for higher temperatures at the top of the ocean to propagate down into the depths...”
- **Page 232:** “For humanity, a new era of enforced localism is likely, where globalization goes into reverse and people reassert more restricted identities.”
- **Page 236:** “A drastic reduction in human populations is unambiguously the most likely outcome of a rise in global temperatures toward five degrees...”

## Six Degrees

### Quotes:

- **Page 244:** “Evergreen forests may even have grown at the South Pole itself (where they would have spent nearly half the year in polar darkness), although today three kilometers of ice prevent the discovery of any fossil wood to prove it.”
- **Page 255:** “With warm water rapidly reaching ocean depths, a now familiar monster was stirring on the continental shelves: methane hydrates.”
- **Page 258:** “...the end-Permian mass extinction outranks all others. According to some calculations, 95 percent of species, on land and in the sea, were wiped out.”
- **Page 259:** “An extinction event, tentatively titled the Anthropocene Mass Extinction, is already under way, largely independent of global warming.”
- **Page 260:** “Human releases of carbon dioxide are possibly happening faster than any natural carbon releases since the beginning of life on Earth.”
- **Page 264:** “Scientists have calculated that only a billion years remain before the biosphere will go extinct forever from overheating – the planet is already 4.6 billion years old, and for much of this time it was lifeless.”

## Choosing Our Future

### Quotes:

- **Page 269:** “The warning is clear, but do we have the collective will to hear it?”
- **Page 270:** “...due to the thermal time lag of the planet, even if all emissions of

greenhouse gases stop quickly... temperatures will rise by between a half and one degree Celsius..."

- **Page 281:** "The conclusion of this book is that we have only *seven* years left to peak global emissions before facing escalating dangers of runaway global warming."
- **Page 284:** "So fossil fuels, more than any other factor, have made humans successful."
- **Page 286:** "Our evolutionary psychology preconditions us not to respond to threats that can be postponed until later."
- **Page 294:** "In Cape Cod, Massachusetts, prominent environmental activists such as Robert F. Kennedy, Jr., have opposed a large offshore wind farm, despite its potential for clean power generation, because, some suspect, it would spoil their view."
- **Page 297:** "Perhaps the easiest and most beneficial way to reduce emissions would be to stop the destruction of tropical forests."
- **Page 301:** "It seems clear to me that no amount of lecturing from bearded hippie environmentalists will persuade society at large that the consumer treadmill is not the quickest route to health and happiness."