

Global Population Growth: The Numbers and What They Mean



Of all the environmental issues we face in the new millennium, none is more important than global population growth. Population growth drives deforestation, the expansion of agricultural land, the pollution of air, water and soil, and suburban sprawl. Human activity, such as urbanization and development, fragments wildlife habitat and drives many species to extinction. Changes to our landscape are occurring faster and on a larger scale than ever before.

Our population surpassed 6 billion in 1999, and could pass 12 billion in fifty years at current fertility rates. Never before have so many people shared the planet earth. For 99.9 percent of humankind's existence, our world population was less than 10 million people. By the year 2015, there will be twenty-three mega cities each with a population greater than 10 million. From a historical perspective, this growth has occurred almost instantaneously.

A Quick History of Global Population Growth

It took from the beginning of humans until about 1800 to reach.....1 BILLION
 1800 to 1930 (130 years) to reach2 BILLION
 1930 to 1960 (30 years) to reach3 BILLION
 1960 to 1974 (14 years) to reach4 BILLION
 1974 to 1987 (13 years) to reach5 BILLION
 1987 to 1999 (12 years) to reach 6 BILLION
 1999 to 2013 (14 years) estimated to reach7 BILLION

Current Global Growth Patterns

Current Population - 6.38 billion
 Growth Rate - 1.23% per year
 Fertility Rate - 2.8*
 Numerical Increase - 74 million people per year
 Doubling Time - 53 years
 * Fertility rate is the average number of children a woman will have in her lifetime given current birth rates.

Global Fertility Trends and the Role of Population Momentum

Fertility rate is the average number of children a woman will have in her lifetime given current birth rates. Fertility rates vary widely from country to country and are dependent on a large number of factors. As of 2000, 59 countries had a fertility rate below 2.1 and 133 countries had fertility rates at or above 2.1. 47 of these countries had a total fertility level at or above 5.0. Globally, average fertility rates have fallen since the early 1950s from about 5 births per woman to the current rate of 2.8 births. This decrease is due in large measure to increased educational and economic opportunities for women and the provision of voluntary family planning.

Despite this decrease in the average global fertility rate, global population levels continue to grow at a rate of 1.2% per year, a decrease from a high of 2.1% in 1961. In absolute numbers, we add approximately 74 million people to the planet every year.

Even though each individual woman is having fewer children, there are simply so many women in their childbearing years that rapid population growth is still occurring. *Childbearing years* have been defined as the ages between 15 and 45. In some countries, more than

There are currently about 3 billion people worldwide under the age of 25. This is the largest group of young people ever, and a clear example of the implications of population momentum. The reproductive and life choices these people make will have an enormous impact on population growth rates, which in turn will impact the conservation of wildlife and wild places.

half of the entire population falls within this range. The demographic structure of these countries means that their absolute population continues to grow, although the overall rate of increase is declining. This phenomenon is known as *population momentum*. Even if fertility rates drop to 2.1 (replacement level fertility), it would take many generations for population stabilization to occur.

The key to a more stable population is an age structure that has roughly equal numbers in each age group. This leads to a very slow rate of growth. An age structure that has a large and growing number of people entering their reproductive years will continue to drive unsustainable population growth rates.



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Sizing Up Population Numbers

Time Unit:

Year (2000-2001)

Population Increase:

74 million

Correlation:

The population of Egypt in 2002.

Time Unit:

Month

Population Increase:

6.2 million

Correlation:

The entire population of the State of Indiana in 2002.

Time Unit:

Day

Population Increase:

203,024

Correlation:

Two large sports stadiums filled to capacity.

Time Unit:

Hour

Population Increase:

8,460

Correlation:

Approximate number of people who visit the Washington Monument every week.

Time Unit:

Minute

Population Increase:

141

Correlation:

Approximately the number of endangered mammals and birds in the U.S.

Time Unit:

Second

Population Increase:

2.33

Correlation:

American taxpayers pay less than 3¢ per taxpayer, per week toward USAID family planning assistance.

- Scientists estimate that there are between 7 million and 15 million species worldwide.
- One out of every eight plant species on earth is threatened with extinction.
- The world is in the midst of a mass extinction unlike any since the extinction of the dinosaurs 65 million years ago. Extinction rates are currently estimated anywhere between 100 to 1,000 times greater than normal.

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Why it Matters?

No one is really certain how many people the earth can sustain. There are many factors that enter into that equation, including land use practices and consumption levels. However, there is one thing that we do know: we live on a planet with finite resources – resources that need to be shared by an unprecedented number of humans. Six billion humans

sharing the earth is unlike anything ever experienced in human history and it is having devastating impacts on our environment and natural resources.

Population Growth and Wildlife

The impact of human population growth on the world's biodiversity and the health of our ecosystems is enormous. For their struggle to survive,

wildlife probably face no greater challenge than human population growth. It is perhaps the largest of the challenges that face wildlife in their struggle to survive. Our efforts to keep the wild alive must focus both on preserving the natural areas where endangered and threatened species actually live, and working to achieve a balance between population and nature.

Predicted Growth

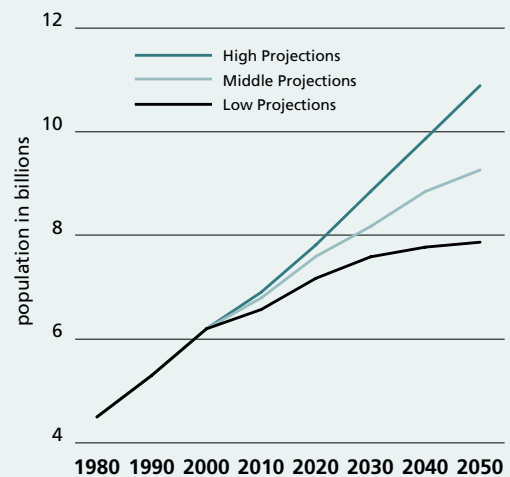
The United Nations projects three scenarios (low, medium and high) for our future global population. The numbers vary depending on fertility rates, (the current rate is at 2.8,) although each assumes some level of decrease. The most widely accepted, the medium level projection, states that world population will reach 8.9 billion in 2050.

Low 7.4 billion people by 2050 assumes fertility rate will drop to 1.54

Middle 8.9 billion people by 2050 assumes fertility rate will drop to 2.02

High 10.6 billion people by 2050 assumes fertility rate will drop to 2.5

World Population Projections



What Can I Do?

- Become active in programs, such as NWF's Population and Environment Program and other NWF programs that work for these and related causes. www.nwf.org.
- Work to restore the environment around you – participate in river clean-ups, plant trees, reduce waste and excess consumption and volunteer to help the environment.
- Learn about land use and development issues and become

involved in the decision making process regarding land use decisions in your community.

- Speak Up! Your personal contact with your elected officials is invaluable. Call, write or visit your representatives and let them know that:
 1. Population and environment issues are important to you.
 2. U.S. recognition of population's role in the environmental problems facing the world today is critical for achieving long-term

sustainability.

3. The U.S. must fulfill its commitment made at the International Conference on Population and Development in 1994 to help make family planning services universally available by the year 2015. Worldwide, nearly 60% of couples want to limit or space the birth of their children. Yet over 150 million married couples do not have access to family planning services.

For more information contact: National Wildlife Federation, 1400 16th Street, NW, Suite 501, Washington, DC 20036

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