

# 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 13 billion in fifty years. 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 megacities each with a population greater than 10 million. From a historical perspective, this growth has occurred almost instantaneously.

### 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. Currently, 69 out of 206 countries have a fertility rate at or below 2.1, and 75 countries are at or above 4.0. 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 1.3% per year, a decrease from a high of 2.1% in 1961. In absolute numbers, we add approximately 77 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*

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.

have been defined as the ages between 15-45. In some countries, more than 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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### 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 reach .....	2 BILLION
1930 to 1960 (30 years) to reach .....	3 BILLION
1960 to 1974 (14 years) to reach .....	4 BILLION
1974 to 1987 (13 years) to reach .....	5 BILLION
1987 to 1999 (12 years) to reach .....	6 BILLION
1999 to 2013 (14 years) estimated to reach .....	7 BILLION

### Current Global Growth Patterns

- Current Population - 6.14 billion
- Growth Rate - 1.3% per year
- Fertility Rate - 2.8\*
- Numerical Increase - 77 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.



## Sizing Up Population Numbers

### Time Unit:

Year (700-701)

### Population Increase:

76,570,430

### Correlation:

The population of the United States in 1900.

### Time Unit:

Month

### Population Increase:

6,380,869

### Correlation:

The population of El Salvador in 2000.

### Time Unit:

Day

### Population Increase:

209,782

### Correlation:

Twice as many people as fit in the largest U.S. football stadium.

### Time Unit:

Hour

### Population Increase:

8,741

### Correlation:

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

### Time Unit:

Minute

### Population Increase:

146

### Correlation:

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

### Time Unit:

Second

### Population Increase:

2.4

### Correlation:

American taxpayers pay less than 3¢ 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 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. Human population growth 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

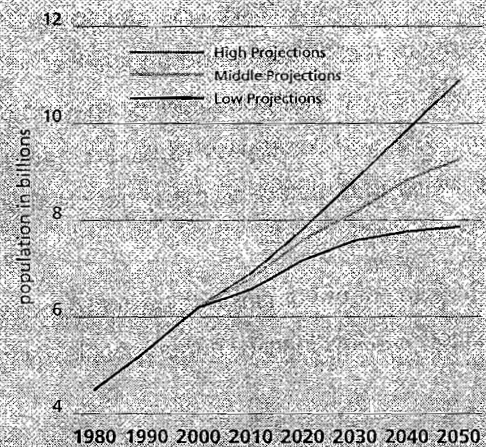
The United Nations projects three scenarios (low, medium and high) for our future global population. The numbers vary depending on fertility rates, although each assumes some level of decrease. The most widely accepted, the medium level projection, states that world population will reach 9.3 billion in 2050.

**Low** – 7.9 billion people by 2050 assumes fertility rate will drop to 1.7

**Middle** – 9.3 billion people by 2050 assumes fertility rate will drop to 2.2

**High** – 10.9 billion people by 2050 assumes fertility rate will drop to 2.6

### World Population Projections



## What Can I Do?

- Become active in programs, such as NWF's Population and Environment Program and NWF's Keep the Wild Alive Campaign™, that work for these and related causes.
- 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 Int'l Conf. 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

Tel 202-797-6800 Fax 202-797-5486 Website [www.nwf.org](http://www.nwf.org)

Population & Environment Program Email [population@nwf.org](mailto:population@nwf.org) Website [www.nwf.org/population/](http://www.nwf.org/population/)

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