300 Million and Growing
a complex problem for conservation

by **Todd Katzner**, Director of Conservation & Field Research

Sometime in October the population of the United States of America hit 300 million. That's an awful lot of people. How big is that? Well, it depends on how you look at it. China (approximately 1.2 billion) and India (approximately 1 billion) have far larger populations than the US, and both on smaller total land areas. However, as I discussed in the previous issue of *Bird Calls*, what matters isn't our population size in absolute numbers, but a combination of the size of the population and the amount of resources that each person uses — often called the Ecological Footprint.

The Ecological Footprint is "a resource management tool that measures how much land and water area a human population requires to produce the resources it consumes and to absorb its wastes under prevailing technology." The footprint can be scaled to the individual, state, country or globe. How does the footprint of US citizens rank in the world? High. Immensely high. A 2005 accounting lists us as second worldwide, with a score of 9.7 (hectares per person); only the United Arab Emirates (UAE) is higher (10.5). Individuals in the third and fourth rated countries (Kuwait at 7.3 and Australia at 7.0) use nearly 30% fewer resources than US citizens.

So what does a population of 300 million mean in the context of our ecological footprint? Well, UAE, Kuwait and Australia among them have about 25 million people, so even though their citizens' footprints are large, their relative international impact is small. The US is the only country with both a massive population *and* a massive ecological footprint. Because of this, our environmental impact is greater than that of any other single country in the world. As we reach and surpass 300 million, our nation's impact on the world, its resources, and its biodiversity can only continue to increase.

How do we solve this problem to ensure that our children inherit a planet where they can flourish? We need to start by recognizing that our environmental impact is due to a combination of two factors — population size and consumption. In a perfect world we could easily control both of these factors. In practice, though, neither of these factors is easy to manage and almost all of the options for limiting population size and consumption present complex and sometimes unpalatable complications. For example, in China the government largely stopped population growth by limiting reproduction to one child per family — an autocratic approach unlikely to find favor in a democracy such as ours. Likewise, the US uses more fossil fuels per capita than any other nation, and if we drove smaller cars fewer miles and limited our industrial wastes, our carbon dioxide emissions could be dramatically reduced.

By the time you read this issue of *Bird Calls*, we as a nation will be looking back at the 300 million milestone. As a conservation biologist, my job is to gather information and disperse knowledge in a way that helps all of us lead better lives and that leaves a better America for our children. In this case, population growth is, in many ways, integral to the US economy and social structure, and we seem unwilling to make the serious commitments needed to reduce either consumption or population size. Nevertheless, we need to do all we can to see that 300 million milestone again soon, this time passing it in the other direction as population declines.

For a good description of how ecological footprints are calculated and evaluated, check out http://www.footprintnetwork.org/.

Look for signs like these on exhibits throughout the Aviary, showing a visual chronicle of the dramatic increase in global population.