

## Nature in the Metropolis

**W**orld Environment Day 2005 might be just the moment to highlight some pristine location that showcases what we most value about our environment: clean air, pure water, uncluttered landscapes, and rich plant and animal life. But instead, the United Nations (UN) Environment Programme turns to a city, San Francisco, as the focus for its celebrations. The reason is simple: Cities are where people concentrate, and what we find there—business, universities, government, and media—shapes public perceptions and political agendas.

This June, mayors from around the world will gather in San Francisco to discuss “green cities” and what sustainability means in the urban environment. The topic is timely because we are witnessing a key moment in the history of our species. For the first time, more people are living in cities than outside them. Now and into the future, we will be *Homo urbanus*: the city dweller.

This transition is profound. For one thing, it seems likely to be irreversible, at least under any scenario we would care to witness. For another, it is a manifestation of a relentless trend. It has taken a few millennia for the number of people living in cities to reach 3 billion. It will take only about 50 years to double that number. According to UN projections, cities will absorb nearly all of the growth in the human population over the next three decades. At the beginning of the 20th century, the three most populous cities were London (6.5 million), New York (4.2 million), and Paris (3.3 million). By 2015, Tokyo, Mumbai, and Delhi will top the list with populations between 20 and 37 million residents. But it isn't only the megacities that fuel the growth in urban populations. The number of urban areas with over 1 million people is expected to grow by over 40% between 2000 and 2015. The vast majority of this growth will be in middle- and low-income countries.



In some respects, cities are good for the environment. They concentrate half the world's population on about 2% of Earth's land surface, and they are undeniably centers of innovation and economic growth. However, they are also centers for the production of heat, waste, and pollution. The activities and demands of their residents can shape both nearby wilderness and globally distant sites, with better or worse environmental outcomes. If city mayors are to set out some steps on the path to sustainability, they will need to address these and many other interconnected issues as they seek to enhance the quality of life of urban residents, particularly the poor, in an environmentally sustainable fashion.

A further subtle but important consequence of increased urbanization is that most of the world's people will have much of their direct contact with nature in an urban rather than rural setting. We don't know what the long-term effect of this might be, but one likely outcome is increasing urban-versus-rural disagreement on priorities for the urban hinterland. For instance, what constitutes appropriate wildlife or habitat management? It seems very likely that our environmental ethic will gradually change.

Whatever the future of our environmental ethic, one thing is clear: What remains of habitats and biodiversity within the city is of disproportionate importance. And, perhaps surprisingly, these may also be of national or even global significance. São Paulo, Brazil, contains important fragments of the Atlantic Rain Forest embedded within its conurbation. Significant remnants of the unique Cape Floristic Province persist within and around Cape Town in South Africa. Even in London, there are still superb opportunities to connect with nature, from the restored wetlands of Barn Elms to the acid grasslands of Richmond Park.

If World Environment Day is anything, it is a day of reflection, and hopefully a day for commitment. Excellent partnerships for managing nature in the city are already under way, such as the Chicago Wilderness Consortium in the United States, which comprises 172 public and private organizations working together to protect, restore, and manage Chicago's natural resources. Such efforts need to be emulated. Extending them further will also require an integrated science of urbanization that is today woefully inadequate. We must move quickly. And we must remember that nature in the metropolis needs to be nurtured, not only for its value now, but even more for its importance in the future.

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