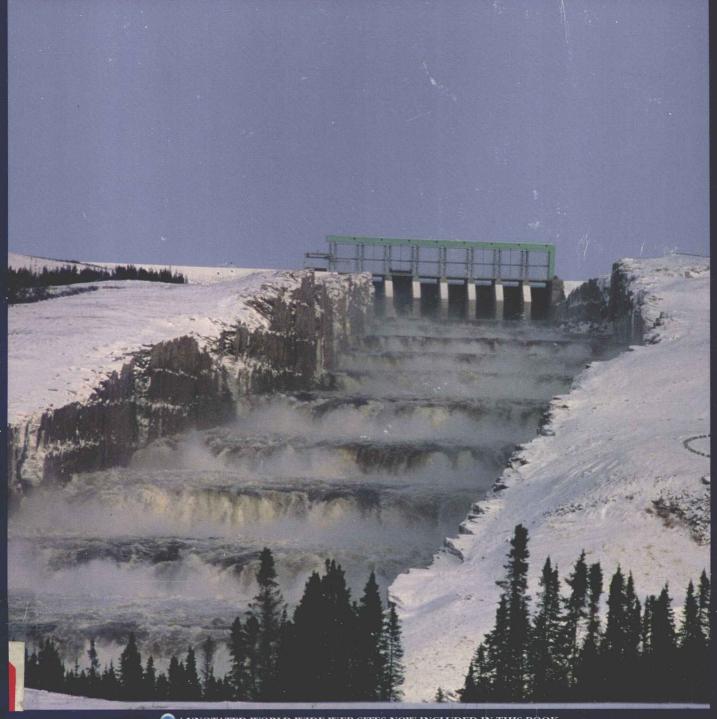
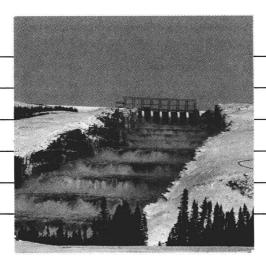
# GEOGRAPHY 98/99



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# GEOGRAPHY 98/99

#### Thirteenth Edition



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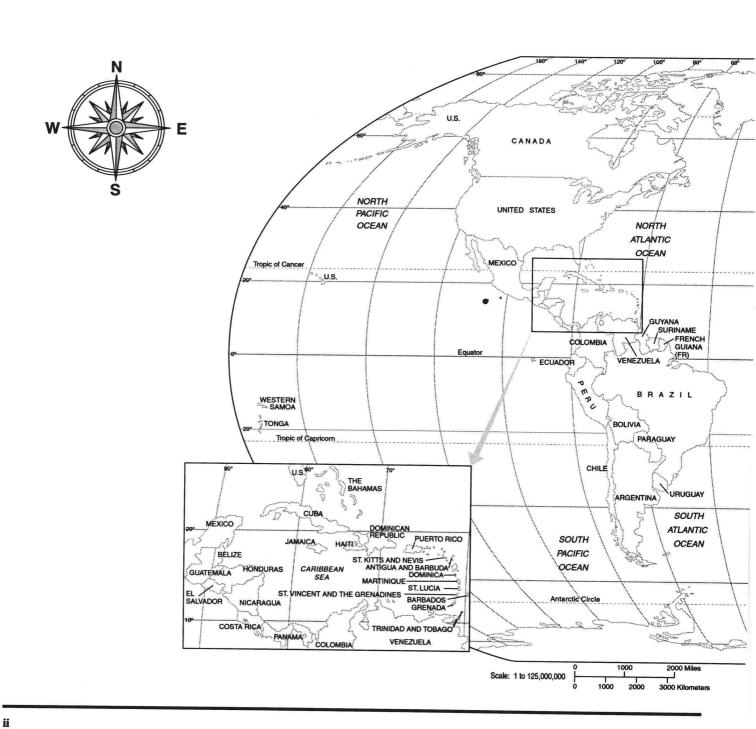
Gerald R. Pitzl Macalester College

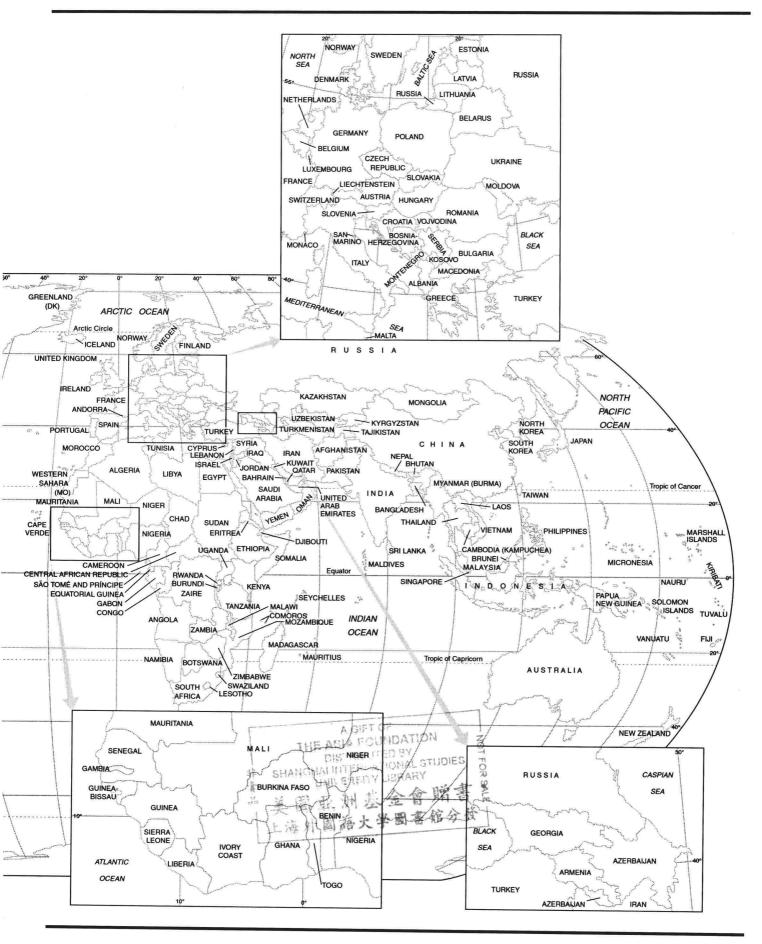
Gerald R. Pitzl, professor of geography at Macalester College, received his bachelor's degree in secondary social science education from the University of Minnesota in 1964 and his M.A. (1971) and Ph.D. (1974) in geography from the same institution. He teaches a wide array of geography courses and is the author of a number of articles on geography, the developing world, and computers in social science education.



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This map has been developed to give you a graphic picture of where the countries of the world are located, the relationship they have with their region and neighbors, and their positions relative to the superpowers and power blocs. We have focused on certain areas to more clearly illustrate these crowded regions.





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Thirteenth Edition

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Members of the Advisory Board are instrumental in the final selection of articles for each edition of ANNUAL EDITIONS. Their review of articles for content, level, currentness, and appropriateness provides critical direction to the editor and staff. We think that you will find their careful consideration well reflected in this volume.

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# To the Reader

In publishing ANNUAL EDITIONS we recognize the enormous role played by the magazines, newspapers, and journals of the *public press* in providing current, first-rate educational information in a broad spectrum of interest areas. Many of these articles are appropriate for students, researchers, and professionals seeking accurate, current material to help bridge the gap between principles and theories and the real world. These articles, however, become more useful for study when those of lasting value are carefully *collected*, *organized*, *indexed*, and *reproduced* in a *low-cost format*, which provides easy and permanent access when the material is needed. That is the role played by ANNUAL EDITIONS. Under the direction of each volume's *academic editor*, who is an expert in the subject area, and with the guidance of an *Advisory Board*, each year we seek to provide in each ANNUAL EDITION a current, well-balanced, carefully selected collection of the best of the public press for your study and enjoyment. We think that you will find this volume useful, and we hope that you will take a moment to let us know what you think.

he articles in this thirteenth edition of *Annual Editions: Geography* represent the wide range of topics associated with the discipline of geography. The major themes of spatial relationships, regional development, the population explosion, and socioeconomic inequalities exemplify the diversity of research areas within geography.

The book is organized into five units, each of which contains articles relating to geographical themes. Selections address the conceptual nature of geography and the global and regional problems in the world today. This latter theme reflects the geographer's concern with finding solutions to these serious issues. Regional problems, such as food shortages in the Sahel and the greenhouse effect, concern not only geographers but also researchers from other disciplines.

The association of geography with other fields is important, because expertise from related research will be necessary in finding solutions to some difficult problems. Input from the focus of geography is vital in our common search for solutions. This discipline has always been integrative. That is, geography uses evidence from many sources to answer the basic questions: Where is it? Why is it there? What is its relevance? The first group of articles emphasizes the interconnectedness not only of places and regions in the world but of efforts toward solutions to problems as well. No single discipline can have all of the answers to the problems facing us today; the complexity of the issues is simply too great.

The writings in unit 1 discuss particular aspects of geography as a discipline and provide examples of the topics presented in the remaining four sections. Units 2, 3, and 4 represent major themes in geography. Unit 5 addresses important problems faced by geographers and others.

Annual Editions: Geography 98/99 will be useful to both teachers and students in their study of

geography. The anthology is designed to provide detail and case study material to supplement the standard textbook treatment of geography. The goals of this anthology are to introduce students to the richness and diversity of topics relating to places and regions on Earth's surface, to pay heed to the serious problems facing humankind, and to stimulate the search for more information on topics of interest.

I would like to express my gratitude to Barbara Wells-Howe for her continued help in preparing this material for publication. Her typing, organization of materials, and many helpful suggestions are greatly appreciated. Without her diligence and professional efforts, this undertaking could not have been completed. Special thanks are also extended to Ian Nielsen for his continued encouragement during the preparation of this new edition and to Addie Raucci for her enthusiasm and helpfulness. A word of thanks must go as well to all those who recommended articles for inclusion in this volume and who commented on its overall organization. James Hathaway, Artimus Keiffer, Mark Lowry, Peter O. Muller, Eileen Starr, Daniel Weiner, Randy W. Widdis, and Wayne Strickland were especially helpful in that regard.

In order to improve the next edition of *Annual Editions: Geography,* we need your help. Please share your opinions by filling out and returning to us the postage paid *Article Rating Form* on the last page of this book. We will give serious consideration to all your comments.

Juste R. Petyl

Gerald R. Pitzl



# Geography in a Changing World

Seven articles discuss the discipline of geography and the extremely varied and wide-ranging themes that define geography today.

World Map To the Reader Topic Guide Selected World Wide Web Sites	ii vi 4 6
Overview	8
1. The Four Traditions of Geography, William D. Pattison, Journal of Geography, September/October 1990.  This key article, originally published in 1964, was reprinted, with the author's later comments, in the 75-year retrospective of the Journal of Geography. It is a classic in the history of geography. William Pattison discusses the four main themes in geography that have been the focus of work in the discipline for centuries—the spatial concept, area studies, land-human relationships, and earth science.	10
2. The American Geographies, Barry Lopez, Orion, Autumn 1989. The American landscape is nearly incomprehensible in depth and complexity, according to Barry Lopez. To truly understand American geography, one must seek out local experts who have an intimate knowledge of place, people who have a feel for their locale that no outsider could possibly develop.	15
3. Human Domination of Earth's Ecosystems, Peter M. Vitousek, Harold A. Mooney, Jane Lubchenco, and Jerry M. Melillo, Science, July 25, 1997. "Human alteration of the Earth," the authors contend, "is substantial and growing." Earth's ecosystems are being affected by human intervention through land transformation and biotic and chemical changes. Recommendations are made to reduce the rate of change, to better understand Earth's ecosystems, and to assume more responsibility for managing the planet.	20
4. The Global Tide, George A. Lopez, Jackie G. Smith, and Ron Pagnucco, The Bulletin of the Atomic Scientists, July/August 1995. Globalization is a term used to describe the rapidly increasing incidence of economic, social, and political interactions across the borders of sovereign states. Economic activity was the first process to be globalized, and the multinational corporation symbolizes that change.	26
<ol> <li>The Coming Climate, Thomas R. Karl, Neville Nicholls, and Jonathan Gregory, Scientific American, May 1997. Global warming is a widely accepted phenomenon. The consequent changes in climate are directly connected to anthropogenic (human- induced) factors. The major culprits are greenhouse gases, aerosols, and a number of other substances.</li> </ol>	33



## Land-Human Relationships

Six articles examine the relationship between humans and the land on which we live. Topics include the destruction of the rain forests, desertification, pollution, and the effects of human society on the global environment.

Is It El Niño of the Century? J. Madeleine Nash, Time, August 18, 1997. 38

41

48

57

71

- **Weather** patterns globally will be greatly altered due to radically shifting ocean currents in the Pacific, an occurrence known as **El Niño**. The 1997–98 El Niño visit brought abnormal weather conditions to many world regions.
- The Tortured Land, Eugene Linden, Time, September 4, 1995.
  - Calling Siberia "a landscape steeped in tragedy," Eugene Linden recounts the epic of Siberia as a metaphor for death and deprivation. And now the water and forest resources are being decimated and degraded. Environmental destruction, it seems, will continue as Russia strives to attract foreign capital to bolster its sagging economy.

Overview 46

- 8. The Environmental Challenges in Sub-Saharan Africa, Akin L. Mabogunje, *Environment*, May 1995.
  - Sub-Saharan Africa suffers from serious environmental problems: deforestation, soil erosion, desertification, wetland degradation, and insect infestation. Akin Mabogunje, an eminent Nigerian geographer, suggests that Western models of economic development have not worked in this region. It is "back to the drawing board" for answers to these serious problems.
- "Dammed If You Do...," World Press Review, August 1997.
   The article summarizes the controversies raging over megadamming projects to enhance economic development and energy production.
   Economic gains are offset by population relocation and environmental degradation.
- 10. Past and Present Land Use and Land Cover in the USA, William B. Meyer, Consequences, Spring 1995. Cities, towns, and villages now cover slightly more than 4 out of every 100 acres of the land in the continental United States, and every day the fraction grows. This article looks at both the positive and negative consequences of changes in land use.
- 11. China Shoulders the Cost of Environmental Change, Vaclav Smil, Environment, July/August 1997.
  Economic development in China is occurring at staggeringly high rates. Environmental protection is taking a back seat to dynamic

bite out of China's growing gross domestic product.

growth and modernization. Ecosystem degradation is taking a big



## The Region

Ten selections review the importance of the region as a concept in geography and as an organizing framework for research. A number of world regional trends, as well as the patterns of area relationships, are examined.

- 12. Threat of Encroaching Deserts May Be More Myth than
  Fact, William K. Stevens, New York Times, January 18, 1994.
  Recent findings based on satellite measurements cast doubt on the contention that the world's deserts are expanding. Studies of the Sahara reveal periods of expansion and recession in the 1980s (depending on periods of greater or lesser rainfall). The keys to rehabilitating arid lands appear to be the familiar prescriptions of soil conservation and erosion control.
- 13. Health in the Hot Zone: How Would Global Warming Affect Humans? Richard Monastersky, Science News, April 6, 1996.
  Global warming is bringing about changes in the locations of deadly diseases, including malaria, cholera, and dengue fever. The major concern of the World Health Organization is that the developing world will suffer the greatest from increases in disease brought about

#### Overview

by weather changes.

84 86

92

14. The Importance of Places, or, a Sense of Where You Are, Paul F. Starrs, Spectrum: The Journal of State Government, Summer 1994.

Paul Starrs writes eloquently of the importance of *place* as a geographical concept and the value of *regions* in our common thought. "Places matter," he states. "And that, most of all, is why regions are relevant."

**15.** The Rise of the Region State, Kenichi Ohmae, Foreign Affairs, Spring 1993.

The *global* market has dictated a new, more significant set of *region states* that reflects the real flow of economic activity. The old idea of the *nation-state* is considered an anachronism, an unnatural and dysfunctional unit for organizing either human activity or emerging economic systems.

16. Megacities: Bane—or Boon? World Press Review, August 1996. Two United Nations organizations differ in their views on the long-term effects of megacity development in poor countries. By 2015, there will be 27 megacities (cities with more than 10 million inhabitants), nearly double the number in 1996. This selection presents various views on the dynamics of world urbanization.

17.	Regions and Western Europe, Barry M. Brunt, Journal of	101
	Geography, January/February 1995.	
	A new relevance is given to the concept of region, a codifying geo-	
	graphic idea that can assist in understanding the complexities of	
	global systems. The regional concept has grown in importance be-	
	cause of the reduction in the frictional effect of distance, the vastly	
	increased degree of <i>spatial interaction</i> among places, and consequent <i>geopolitical</i> concerns.	

112

116

132

- 18. Twin Challenges: Energy and the Environment in Asia, William F. Martin, Harvard International Review, Summer 1997. Asia's energy needs will increase dramatically over the next 15 years. As energy use increases, environmental quality will suffer. The Asia Pacific Economic Cooperation (APEC) forum has the task of creating a working group on energy and the environment for this dynamic region.
- 19. Does It Matter Where You Are? The Economist, July 30, 1994. As the computer affects society, it appears that it is possible to run a business from any location. The truth, however, as this article points out, is that people and businesses are most effective when they have a center or base of operations; where one is located does, indeed, matter greatly.
- 20. Low Water in the American High Plains, David E. Kromm, The World & I, February 1992. The serious depletion of groundwater in the Ogallala aquifer highlights a key example of the possibility of sustainable development in midwestern North America. There has been widespread concern that this important source of water is drying up. If excessive use of this water supply is not curtailed, drought conditions could result in this key region of agriculture.
- 21. Water Resource Conflicts in the Middle East, Christine Drake, Journal of Geography, January/February 1997.
  Wars in the future may well be fought over accessibility to fresh water. The Middle East, an arid land, is blessed with an abundance of petroleum but very little fresh water. The seeds of potential conflict are ever present.
- 22. Troubled Waters, Mark J. Valencia, The Bulletin of the Atomic Scientists, January/February 1997.
  The geopolitical situation in Asia continues to raise concerns, with disputes over territories claimed by various countries. Oil and gas reserves in the South China Sea are major factors in the disputes, as Asian countries expand their economic bases.
- 23. Moscow Reclaims Its Past, Nicole Prevost-Logan, Archaeology, July/August 1997.
  Moscow is experiencing a flurry of archaeological activity. As Russia expands its economic growth under capitalism, its 850-year past is being unearthed, and settlement patterns of past eras are emerging. The historical geography of the great city is becoming clearer as excavations continue.



## Spatial Interaction and Mapping

Seven articles discuss the key theme in geographical analysis: place-to-place spatial interaction. Human diffusion, transportation systems, urban growth, and cartography are some of the themes examined.

Overview	146
24. Transportation and Urban Growth: The Shaping of the American Metropolis, Peter O. Muller, Focus, Summer 1986. Peter Muller reviews the importance of transportation in the growth of American urban places. The highly compact urban form of the middle nineteenth century was transformed in successive eras by electric streetcars, highways, and expressways. The city of the future may rely more on communication than on the actual movement of people.	148
25. Bridge to the Past, Scott Elias, Earth, April 1997. Accurate dating of the Bering Sea Land Bridge, the route of accessibility for the first New World inhabitants, has been established at 12,000 years B.P. Possible scenarios for that time include animal migrations by grazers from the Siberian steppers to Alaska and the Yukon.	156
26. An Animal Superhighway? Patricia King, Newsweek, July 28, 1997. Human-made barriers are making it harder for wild animals to migrate from place to place in the western expanses of the United States and Canada. Environmental groups are now proposing an 1800-mile animals-only corridor from Yellowstone to the Yukon. The corridor would be closed to grazing and human activity, allowing accessibility throughout the region to wild animals.	161
27. Raising the Dead Sea, Fred Pearce, New Scientist, July 22, 1995.  The proposed canal linking the Red Sea and the Dead Sea (the Red-Dead project) would solve a water deficiency problem in Jordan caused by the intermittent flow of the Jordan River into the Dead Sea. The scheme would refill the Dead Sea. In addition, the \$4 billion project could improve relations between Israel and Jordan.	163
28. The New White Flight, William H. Frey, American Demographics, April 1994. In a number of U.S. states, high levels of minority immigration from other countries appear to be driving low- and middle-income whites away. William Frey reviews the new dynamics of migration within the United States.	166
29. Hispanic Migration and Population Redistribution in the United States, Kevin E. McHugh, The Professional Geographer, November 1989.  The Hispanic population in the United States has grown rapidly over the last two decades. Kevin McHugh highlights aspects of Hispanic migration, the concentration of Hispanics regionally, and recent redistributions.	172
30. Raster Data for the Layman: Just What Is GIS? Mark Monmonier, Mercator's World, Volume 1, Number 2, 1996. Geographic information systems (GIS) deal with the storage, handling, and display of data representing areas. As such, GIS provides the pieces of information necessary for the production of detailed maps and map overlays. GIS is revolutionizing cartography in many ways.	178



## Population, Resources, and Socioeconomic Development

Eight articles examine the effects of population growth on natural resources and the resulting socioeconomic level of development.

Overview	182
Overview	18

- 31. Population, Poverty, and the Local Environment, Partha S. Dasgupta, Scientific American, February 1995. The author reports the findings of an interdisciplinary study showing that population growth, poverty, and degradation of local resources often fuel one another. The focus of the study is on small rural
- 32. The Future of Populous Economies: China and India Shape Their Destinies, Robert Livernash, Environment, July/August 1995.
  China and India have the largest populations of any countries in the world. By 2025, it is estimated that China will have 1.5 billion people and India 1.4 billion, collectively representing 35 percent of world population. Robert Livernash reviews their problems and the plans to handle them. Food, energy, and adequate fresh water sources are only a few of the difficulties that are expected to worsen.

communities.

- 33. Vicious Circles: African Demographic History as a Warning, Timothy C. Weiskel, Harvard International Review, Fall 1994.

  Timothy Weiskel calls into question the old adage, "Development is the best contraceptive." Early population projections for developing countries were based on the demographic transition model, an application now deemed inappropriate for the developing world.
- 34. How Much Food Will We Need in the 21st Century? William H. Bender, *Environment*, March 1997. Expanding human *population* will require greater food supplies. Efforts toward *sustainable development* in the *agriculture* sector are essential to ensure adequate food supplies in the next century.
- 35. Russia's Population Sink, Toni Nelson, World Watch, January/February 1996.
  The demographic transition in Russia has taken another deadly turn. Since 1986, death rates in Russia have slowly risen, and, beginning in 1991, birthrates have slipped below death rates. The result for Russia is a decline in population from 1991 to the present. Breakdowns in the social fabric are to blame, along with serious environmental problems.
- 36. Vanishing Languages, David Crystal, Civilization, February/March 1997.
  The language map of the world is changing steadily. When populations are decimated by new diseases, their languages die as well. In other instances, the draw of economic gains in another region will lower the numbers of people using a language.

37.	We're All Minorities Now, Martha Farnsworth Riche, American Demographics, October 1991. The United States is fast becoming a truly multicultural society. Through changes in migration patterns and increased national birthrates among ethnic groups, minorities are increasing in numbers. The spatial patterns of ethnic concentration in the United States are decidedly uneven.	21
38.	Smooth Sailing: Hong Kong's Economic Transition, Victor Fung, Harvard International Review, Summer 1997. The truly global orientation of Hong Kong and its role as an economic leader in the industrialization of Asia will ensure its viability in the future.	22
	ex icle Review Form icle Rating Form	22 22 22

# **Topic Guide**

This topic guide suggests how the selections in this book relate to topics of traditional concern to students and professionals involved with the study of geography. It is useful for locating articles that relate to each other for reading and research. The guide is arranged alphabetically according to topic. Articles may, of course, treat topics that do not appear in the topic guide. In turn, entries in the topic guide do not necessarily constitute a comprehensive listing of all the contents of each selection. In addition, relevant Web sites, which are annotated on pages 6 and 7, are noted in bold italics under the topic articles.

TOPIC AREA	TREATED IN	TOPIC AREA	TREATED IN
Accessibility	<ul><li>21. Water Resource Conflicts</li><li>25. Bridge to the Past</li><li>26. Animal Superhighway? (15, 21, 28)</li></ul>	Economic	<ol> <li>Global Tide</li> <li>Environmental Challenges in Sub-Saharar Africa</li> <li>"Dammed If You Do"</li> <li>China Shoulders the Cost</li> </ol>
Agriculture	<ul><li>20. Low Water in the American High Plains</li><li>32. Future of Populous Economics</li><li>34. How Much Food?</li><li>(10, 17, 18, 31, 32)</li></ul>		<ol> <li>Does It Matter Where You Are?</li> <li>Troubled Waters</li> <li>Moscow Reclaims Its Past</li> <li>Vicious Circles</li> <li>Vanishing Languages</li> <li>Smooth Sailing</li> </ol>
Anthropogenic	5. Coming Climate (8, 9)		(1, 2, 8, 11, 12, 15, 31)
Arid Lands	<ul><li>12. Threat of Encroaching Deserts</li><li>21. Water Resource Conflicts (11, 12, 14)</li></ul>	Ecosystem	<ol> <li>Human Domination</li> <li>China Shoulders the Cost         <ul> <li>(1, 4, 5, 6, 7, 8, 9)</li> </ul> </li> </ol>
Cartography	See Maps	El Niño	6. Is It El Niño? (1, 4, 5, 7, 9)
Climatic Change	<ol> <li>Coming Climate         <ul> <li>(8, 9)</li> </ul> </li> <li>Transportation and Urban Growth</li> </ol>	Energy	<ol> <li>"Dammed If You Do"</li> <li>Twin Challenges</li> <li>Future of Populous Economics         <ul> <li>(1, 2, 4, 5, 8)</li> </ul> </li> </ol>
Communication	(15)	Environment	7. Tortured Land
Computer Mapping	30. Raster Data for the Layman (23, 24, 26, 27, 28)		<ol> <li>"Dammed If You Do"</li> <li>China Shoulders the Cost</li> <li>Twin Challenges</li> <li>Animal Superhighway?</li> </ol>
Conservation	12. Threat of Encroaching Deserts (11, 12, 14)		35. Russia's Population Sink (1, 4, 5, 7, 8, 12, 16, 18, 22, 29)
Deforestation	8. Environmental Challenges in Sub-Saharan Africa (11, 12, 32)	Erosion	12. Threat of Encroaching Deserts (11, 12, 14)
Demographic Transition	33. Vicious Circles 35. Russia's Population Sink (29, 31, 32)	Forests	7. Tortured Land (29)
Desertification	8. Environmental Challenges in Sub-Saharan Africa	Geographic Information Systems (GIS)	See Computer Mapping
	12. Threat of Encroaching Deserts (11, 12, 14, 32)	Geography	<ol> <li>American Geographies</li> <li>Regions and Western Europe</li> <li>Does It Matter Where You Are?</li> </ol>
Developing World	<ul><li>13. Health in the Hot Zone</li><li>33. Vicious Circles (11, 12, 14, 32)</li></ul>	Geopolitical	(2, 5, 10, 15)  17. Regions and Western Europe
Development	9. "Dammed If You Do" 11. China Shoulders the Cost 33. Vicious Circles		22. Troubled Waters (15, 17, 18)
	(11, 12, 14, 32)	Global Issues	<ol> <li>Global Tide</li> <li>Coming Climate</li> <li>Health in the Hot Zone</li> </ol>
Distance	17. Regions and Western Europe (4, 5, 6, 15)		<ol> <li>Rise of the Region State</li> <li>Regions and Western Europe</li> <li>Does It Matter Where You Are?</li> </ol>
Drought	<ol> <li>Low Water in the American High Plains (1, 5, 10, 15)</li> </ol>		38. Smooth Sailing (15, 18, 31)

TOPIC AREA	TREATED IN	TOPIC AREA	TREATED IN
Greenhouse	5. Coming Climate (1, 8)	Poverty	31. Population, Poverty, and the Local Environment (24, 25, 32)
Groundwater	20. Low Water in the American High Plains (17, 18, 21)	Region	7. Tortured Land 14. Importance of Places
Historical Geography	23. Moscow Reclaims Its Past (4, 5)		<ul><li>17. Regions and Western Europe</li><li>18. Twin Challenges</li><li>19. Does It Matter Where You Are?</li><li>26. Animal Superhighway?</li></ul>
listory of Geography	1. Four Traditions of Geography (4, 5)		29. Hispanic Migration 36. Vanishing Languages (15, 21, 24, 29)
mmigration	28. New White Flight 29. Hispanic Migration (24)	Region State	15. Rise of the Region State (15, 18)
ndustrialization	38. Smooth Sailing (31)	Resources	7. Tortured Land 31. Population, Poverty, and the Local Environment
and Transformation	3. Human Domination (7)		(5, 31, 32)
Landscape	American Geographies     Tortured Land	Satellite	12. Threat of Encroaching Deserts (11, 12)
	10. Past and Present Land Use and Land Cover in the USA (4, 5, 10)	Settlement	23. Moscow Reclaims Its Past (4, 5)
Location	19. Does It Matter Where You Are? (5, 15)	Soil	<ol> <li>Environment Challenges in Sub-Saharan Africa (11, 12)</li> </ol>
Maps	30. Raster Data for the Layman 36. Vanishing Languages (23, 24, 25, 26, 27, 28)	Spatial Interaction	17. Regions and Western Europe (15)
Megacity	16. Megacities <i>(15)</i>	Spatial Patterns	<ul><li>29. Hispanic Migration</li><li>37. We're All Minorities Now (19, 10)</li></ul>
Migration	<ul><li>25. Bridge to the Past</li><li>26. Animal Superhighway?</li><li>28. New White Flight</li></ul>	Sustainable Development	<ol> <li>Low Water in the American High Plains</li> <li>How Much Food? (17, 18)</li> </ol>
	<ol> <li>Hispanic Migration</li> <li>We're All Minorities Now         <ul> <li>(23, 24, 25, 26, 32)</li> </ul> </li> </ol>	Third World	See Developing World
Multicultural	37. We're All Minorities Now (30)	Transportation Systems	24. Transportation and Urban Growth (15)
Multinational	4. Global Tide (15, 18)	Underdeveloped Countries	See Developing World
Nation-State	15. Rise of the Region State (15, 18)	Urban	<ol> <li>Megacities</li> <li>Transportation and Urban Growth (15, 16, 17)</li> </ol>
Place	<ol> <li>American Geographies</li> <li>Importance of Places (4, 5, 10)</li> </ol>	Water Conservation	7. Tortured Land 27. Raising the Dead Sea 32. Future of Populous Economics (12, 31, 32)
Population	<ol> <li>"Dammed If You Do"</li> <li>Hispanic Migration</li> <li>Population, Poverty, and the Local Environment</li> </ol>	Weather	6. Is It El Niño? 13. Health in the Hot Zone
	<ul><li>32. Future of Populous Economics</li><li>34. How Much Food?</li><li>35. Russia's Population Sink</li></ul>	Wetlands	(1, 8, 9)  8. Environmental Challenges in Sub-Sahara
	36. Vanishing Languages (10, 23, 24, 25, 26, 29, 32)		Africa (11, 12)

# Selected World Wide Web Sites for Annual Editions: Geography

All of these Web sites are hot-linked through the Annual Editions home page: http://www.dushkin.com/annualeditions (just click on a book). In addition, these sites are referenced by number and appear where relevant in the Topic Guide on the previous two pages.

Some Web sites are continually changing their structure and content, so the information listed may not always be available.

#### **General Sources**

- U.S. Geological Survey—http://www.usgs.gov/—This site and its many links are replete with information and resources for geographers, from explanations of El Niño, to mapping, to geography education, to water resources. No geographer's resource list would be complete without frequent mention of the USGS.
- The Association of American Geographers—http://www.aag.org— Surf this site of the Association of American Geographers to learn about AAG projects and publications, careers in geography, and information about related organizations.
- Social Science Internet Resources—http://www.wcsu.ctstateu.edu/ library/ss\_geography.html—This site is a definitive source for geography-related links to universities, browsers, cartography, associations, and discussion groups.
- 4. The New York Times—http://www.nytimes.com/—Browsing through the archives of The New York Times will provide you with a wide array of articles and information related to the different subfields of geography.
- National Geographic Society—http://www.nationalgeographic.com/— This site provides links to National Geographic's huge archive of maps, articles, and other documents. Search the site for information about worldwide expeditions of interest to geographers.

## Geography in a Changing World

- 6. Geological Survey of Sweden: Other Geological Surveys—http:// www.sgu.se/links/Surveys\_e.shtml—This site provides links to the national Geological Surveys of many countries in Europe and elsewhere, including Brazil, South Africa, and the United States. It makes for very interesting and informative browsing.
- 7. Santa Fe Institute—http://santafe.edu/—This homepage of the Santa Fe Institute—a nonprofit, multidisciplinary research and education center—will lead you to a plethora of valuable links related to its primary goal: to create a new kind of scientific research community, pursuing emerging science. Such links as Evolution of Language, Ecology, and Local Rules for Global Problems are offered.
- Public Utilities Commission of Ohio—http://www.puc.ohio.gov/gcc/ gcc\_index.html—PUCO aims for this site to serve as a clearinghouse of information related to global climate change. Its extensive links provide for explanation of the science and chronology of global climate change, acronyms, definitions, and more.
- Mission to Planet Earth—http://www.hq.nasa.gov/office/mtpe/—This site will direct you to information about NASA's Mission to Planet Earth program and its Science of the Earth System. Surf here to

- learn about satellites, El Niño, and even "strategic visions" of interest to geographers.
- 10. American Studies Web—http://www.georgetown.edu/crossroads/ asw/—This eclectic site provides links to a wealth of resources on the Internet related to American studies, from agriculture and rural development, to architecture, to race and ethnicity. It is of great help when doing research in demography and population studies.

## Land-Human Relationships

- 11. The North-South Institute—http://www.nsi-ins.ca/info.html— Searching this site of the North-South Institute—which works to strengthen international development cooperation and enhance gender and social equity—will help you find information on a variety of development issues.
- 12. United Nations Environment Program—http://www.unep.ch/— Consult this home page of UNEP for links to critical topics of concern to geographers, including desertification and the impact of trade on the environment. The site will direct you to useful databases and global resource information.
- 13. Measurement of Air Pollution from Satellites (MAPS)—http://stormy.larc.nasa.gov/overview.html—This page from the National Aeronautics and Space Administration focuses on measurements of carbon monoxide in the atmosphere and provides links to many other sites of interest to geographers. Also click on http://ccf.arc.nasa.gov/dx/basket/storiesetc/satfile.html if you're interested in more Space Links from NASA, including information on satellites.
- 14. World Health Organization—http://www.who.ch/Welcome.html— This home page of the World Health Organization will provide you with links to a wealth of statistical and analytical information about health in the developing world.

## The Region

- 15. Virtual Seminar in Global Political Economy//Global Cities & Social Movements—http://csf.colorado.edu/gpe/gpe95b/resources. html—This Web site is rich in links to subjects of interest in regional studies, such as sustainable cities, megacities, and urban planning. Links to many international nongovernmental organizations are included.
- 16. NewsPage—http://pnp1.individual.com/—Individual, Inc. maintains this business-oriented Web site. Geographers will find links to much valuable information about such fields as energy, environmental services, media and communications, and health care.
- WWW-LARCH-LK Archive: Sustainability—http://www.cir.toronto. edu/ARCHIVES/HMAIL/larchI/0737.html—This site gives you the opportunity to read—and respond to—a discourse on sustainability, with many different opinions and viewpoints represented.
- 18. IISDnet—http://iisd1.iisd.ca/—This site of the International Institute for Sustainable Development, a Canadian organization, presents