

Environmental Security

Approaches and issues

Edited by

Rita Floyd and Richard A. Matthew

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We dedicate this book to our respective children Corin S. Floyd (born 2011), Ainslie C. S. Matthew (born 2001), Elissa A. Matthew (born 2003) and Liam A. Matthew (born 2003), in the hope that our natural environment will still be a place of beauty and a source of well-being for them to enjoy as adults.

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This book is one of those notorious edited books that has been years in the making. Rita first wanted to read a book of this kind back in 2003 when she was a student trying to come to grips with environmental security, but none was available. At that time the idea of editing was daunting and it became more a concrete reality only after the International Studies Association's annual meeting in Chicago (2007), after which Richard joined the project as co-editor. Having taught environmental security for many years, he was equally frustrated with the absence of such a book. The initial enthusiasm for the book became slowly side-lined by other commitments (notably Richard's travels and Rita's maternity leave) and the not insignificant challenge of co-editing across the Atlantic. In the end we owe completion to Routledge's Andrew Mould's interest in, and enthusiasm for, this project, who first heard of it in the summer of 2011.

We are grateful to our contributors, some of whom have waited patiently for the completion of this book for many years. We count ourselves lucky that many have continued to believe in the project and also in us. We are also grateful to our two fabulous research assistants Karen An and Rosemarie (Rosie) Said (both from the University of California at Irvine), who have done a terrific job of formatting and checking the final version of each chapter. We would like to thank Faye Leerink and Stewart Pether from Routledge for their continuous support. And we are grateful for the helpful comments of three anonymous reviewers on a detailed proposal for this book.

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Richard would like to thank the Samuelli Foundation for supporting research carried out at the Center for Unconventional Security Affairs, including the research for this volume, and for supporting the Center's operations, making it possible to engage Rosemarie and Karen. He also would like to thank Rita, who first conceived of the volume, and whose tireless dedication to its completion sustained the project.

The book's cover was chosen deliberately. Instead of selecting a – for this kind of book – more standard picture of an already damaged environmental landscape, we wanted the cover to depict nature's beauty, and in that way remind everyone why we should care about environmental issues.

CONTRIBUTORS

Saleem H. Ali is Professor of Sustainability Science and Director of the Centre for Social Responsibility in Mining at the University of Queensland, Australia, and also a tenured professor of environmental studies at the University of Vermont (USA). His most recent book is *Treasures of the Earth: Need, Greed and a Sustainable Future* (Yale Univ Press, 2010). Dr. Ali was selected as a “Young Global Leader” by the World Economic Forum in 2011 and an “Emerging Explorer” by the National Geographic Society in 2010. He holds a doctorate in environmental planning from MIT, a Masters in Environmental Studies from Yale and a BSc in Chemistry (summa cum laude) from Tufts University. He can be followed on Twitter @saleem_ali.

Alexander Carius is director of adelphi and a senior policy analyst and public policy advisor on climate, environment and development. For almost two decades he has lead international expert teams to analyse security implications of global environmental and climate change. He regularly advises government agencies and international organisations on strategies to address emerging risks and threats and develop cooperative mechanisms towards resource governance and peacebuilding.

Jennifer Sciubba is an Assistant Professor in the International Studies department at Rhodes College in Memphis, Tennessee. Dr. Sciubba has studied at the Max Planck Institute for Demographic Research in Rostock, Germany, and is a former demographics consultant to the Office of the Secretary of Defense (Policy) in Arlington, VA. Her latest book is *The Future Faces of War: Population and National Security* (Praeger/ABC-CLIO 2011). She received her PhD and MA from the University of Maryland and her BA from Agnes Scott College.

Geoffrey D. Dabelko is a Professor in Ohio University’s Voinovich School of Leadership and Public Affairs (<http://www.ohio.edu/voinovichschool/>) and director of the Environmental Studies Program. From 1997-2012 he was director of the Woodrow Wilson Center’s Environmental Change and Security Program, a nonpartisan research-policy forum on environment, population, health, development, and security issues. He currently serves as a senior advisor to the Wilson Center’s Global Sustainability and Resilience Program. His current research focuses on climate change, natural resources, and security as well as environmental pathways to confidence-building and peacebuilding, with a special emphasis on water resources. Geoff is co-editor with Ken Conca of *Environmental Peacemaking and Green Planet Blues: Four Decades of*

Global Environmental Politics (4th edition). He is an IPCC lead author for the 5th assessment and member of the UN Environment Programme's Expert Advisory Group on Environment, Conflict, and Peacebuilding. He holds a Ph.D. in government and politics from the University of Maryland.

Simon Dalby is CIGI Chair in the Political Economy of Climate Change at the Balsillie School of International Affairs, Waterloo, Ontario. He was formerly Professor of Geography, Environmental Studies and Political Economy at Carleton University in Ottawa. He is coeditor of *Rethinking Geopolitics* (Routledge 1998), *The Geopolitics Reader* (Routledge 1998, 2006), the journal *Geopolitics*, and author of *Creating the Second Cold War* (Pinter and Guilford, 1990), *Environmental Security* (University of Minnesota Press, 2002) and *Security and Environmental Change* (Polity, 2009).

Tom Deligiannis is completing his Ph.D. in the Department of Political Science at the University of Toronto. He is currently a Lecturer in the Department of Political Science at the University of Western Ontario in London, Ontario, an Adjunct Faculty member in the Department of Environment, Peace, and Security at the UN-mandated University for Peace (UPEACE) in Costa Rica, and an Associate Fellow of the Institute for Environmental Security in The Hague.

Nicole Detraz is an Assistant Professor of Political Science at the University of Memphis. Her research centers on exploring the multiple connections between security, the environment, and gender. She explores the implications of various actors linking broad issues like climate change to security discourses. Her work has recently appeared in *Global Environmental Politics*, *Security Studies*, and *International Studies Perspectives*. She is the author of *International Security and Gender* (Polity 2012).

Indra de Soysa is professor of political science at the Norwegian University of Science and Technology in Trondheim, Norway. His recent articles appear in *Journal of Peace Research*, *International Studies Quarterly*, *International Organization*, *Conflict Management and Peace Science*, and *International Interactions*. Currently, he serves as Warden of St. Thomas College Mt. Lavinia in Sri Lanka.

Rita Floyd is a tenure track Birmingham Fellow in Conflict and Security at the Department of Political Science and International Studies at the University of Birmingham (UK) and a Fellow of the Institute for Environmental Security, The Hague. She is the author of several peer-reviewed articles and of *Security and the Environment: Securitisation Theory and US Environmental Security Policy*, Cambridge University Press, 2010. Dr Floyd can be contacted at r.floyd@bham.ac.uk.

Carolyn Lamere works at the Environmental Change and Security Program at the Woodrow Wilson International Center for Scholars. She graduated from Rhodes College in Memphis, Tennessee in 2012 where she studied International Relations. She has focused her research on population and global health, including through onsite work in Nicaragua with GlobeMed, a student-run nonprofit.

Achim Maas works as coordinator for the cluster "Sustainable Interaction with the Atmosphere" at the Institute for Advanced Sustainability Studies (IASS) in Potsdam,

Germany. He primarily focuses on climate foreign policy, climate engineering and risk governance. Until May 2012 he worked at adelphi in Berlin as a senior project manager on interlinkages between natural resources, peace and conflict. He studied in Frankfurt am Main and Bradford and holds an MA in International Politics and Security Studies.

Patrick MacQuarrie is the Water Policy and Sustainability Advisor for the global IUCN Water Programme. His areas of expertise are resilience and adaptive capacity, transboundary water policy, conflict management, hydropolitics, hydrology and agricultural engineering. Patrick recently completed his PhD where he managed the Transboundary Freshwater Dispute Database (TFDD) and worked on several transboundary water projects with international partners including the Mekong River Commission, the Nile Basin Initiative, USAID, IRG, and the World Bank. Prior to his PhD, Patrick worked in the private sector as a fluidic research and development engineer. He holds a BS in Agricultural Engineering and MS in Engineering Science from Washington State University, an M.Phil in International Peace Studies at Trinity College, Dublin, and a PhD in Resource Geography at Oregon State University.

Richard A. Matthew (BA McGill; PhD Princeton) is a Professor in the Schools of Social Ecology and Social Science at the University of California at Irvine, and founding Director of the Center for Unconventional Security Affairs (www.cusa.uci.edu). He is also a Senior Fellow at the International Institute for Sustainable Development in Geneva; a Senior Fellow at the Munk School for International Affairs at the University of Toronto; a senior member of the UNEP Expert Group on Environment, Conflict and Peacebuilding; and a member of the World Conservation Union's Commission on Environmental, Economic and Social Policy. He has carried out fieldwork in conflict zones throughout South Asia and Sub-Saharan Africa, and has consulted widely with government agencies and the private sector. He has served on several UN missions, including two that he led to Sierra Leone, and he was the lead author of the UN technical report, *Sierra Leone: Environment, Conflict and Peacebuilding Assessment*. He has over 140 publications.

Bryan McDonald (BA/MA Virginia Tech; PhD UC, Irvine) teaches on American environmental history and environmental studies at Pennsylvania State University. He is the author of *Food Security* (Polity, 2010) and co-editor of *Global Environmental Change and Human Security* (MIT Press, 2009) and *Landmines and Human Security: International Politics and War's Hidden Legacy* (SUNY Press, 2004, paperback 2006). His research articles and reviews have appeared in *Environment*, *The Environmental Change and Security Project Report*, *Global Environmental Politics*, *Natural Resources Journal* and *Politics and the Life Sciences*. He is a Fellow at Penn State's International Center for the Study of Terrorism and a member of the Advisory Board of the Center for Unconventional Security Affairs at the University of California, Irvine.

Dennis Pirages is Professor of Political Science at the University of Nevada, Las Vegas. He received his doctorate from Stanford University, and spent three decades at the University of Maryland. He is a lifetime Fellow of the American Association for the Advancement of Science. Dr. Pirages has authored or edited fourteen books and

numerous articles and book chapters. He was one of the first scholars to explore the sustainability concept and currently is working on alternative ways of thinking about security.

Adam Simpson is Lecturer in the International Relations program at the University of South Australia. He previously taught at the University of Adelaide where he remains an Associate in the Indo-Pacific Governance Research Centre. His research adopts a critical approach to environment, development and security in the South. He has published in journals such as *Pacific Review*, *Third World Quarterly* and *Environmental Politics* and is the author of *Energy, Governance and Security in Thailand and Myanmar (Burma): A Critical Approach to Environmental Politics in the South* (Ashgate, 2013).

Bishnu Raj Upreti is a senior researcher in conflict management. He has written and/or co-edited 26 books on conflict, peace, state-building, and security and frequently published in peer reviewed international journals. Besides research, he is also teaching at Kathmandu University. He has worked as Research Fellow at King's College London and Surrey University, UK. He is engaged with policy-makers, politicians and the national and international media on Nepal's armed conflict and peace process. Dr Upreti is member of advisory boards of different national and international organisations. He is currently the South Asia Regional Coordinator of NCCR North-South, a global research network active in addressing the challenges to sustainable development. Corresponding email address to Dr Upreti is bupreti@nccr.wlink.com.np.

Michael Watts is currently Class of 1963 Professor of Geography and Development Studies, at the University of California, Berkeley, where he has taught for over thirty years. A Guggenheim Fellow in 2003, he served as the Director of the Institute of International Studies from 1994-2004. He is the author of 14 books and over 200 articles, his latest book with photographer Ed Kashi is *The Curse of the Black Gold* (powerHouse, New York, 2008). Watts has consulted for a number of development agencies including OXFAM and UNDP and has provided expert testimony for governmental and other agencies, including most recently the Bowoto et al., v. Chevron case in the federal district court in San Francisco. Watts has served as a consultant to the Ford and Rockefeller Foundations and a number of NGOs and foundations. Watts is currently the Chair of the board of Trustees of the Social Science Research Council and serves on a number of boards of non-profit organizations including the Pacific Institute.

Mary C. Watzin recently became Dean of the College of Natural Resources at North Carolina State University, after spending 21 years in the Rubenstein School of Environment and Natural Resources as Professor, and for the last three years, as Dean. She holds a PhD in Marine Sciences from the University of North Carolina at Chapel Hill, and a BSc in Marine Science from the University of South Carolina. She has received numerous awards and other recognitions for her teaching, research, and service, including the Kroepsch-Maurice award for teaching excellence, the Teddy Roosevelt Conservation award, and the Ibakari- Kasumigaura Prize recognizing her work with colleagues in Macedonia and Albania on transboundary water management. Watzin specializes in lake and watershed ecology and management, with a wide-ranging program of research focused on understanding how human activities influence

ecosystem health and how adaptive management can be used to improve environmental outcomes.

Anja Wittich is currently in charge of the IUCN Caucasus Cooperation Center located in Tbilisi, Georgia. She is responsible for realizing the IUCN Caucasus Strategy, for developing the overall IUCN programme in the region, negotiating with donors and partners as well as for supporting the growing member network of IUCN in the South Caucasus. Her position with IUCN has been supported by the German Centrum für Internationale Migration und Entwicklung (CIM) since 2009. Prior to that she worked for the Berlin-based environmental organization adelphi and coordinated a programme on environmental law and policy in the South Caucasus and focused on environmental cooperation and security issues in transition countries.

Aaron T. Wolf is a professor of geography in the College of Earth, Ocean, and Atmospheric Sciences at Oregon State University, USA. His research and teaching focus is on the interaction between water science and water policy, particularly as related to conflict prevention and resolution. A trained mediator/ facilitator, he directs the Program in Water Conflict Management and Transformation, through which he has offered workshops, facilitations, and mediation in basins throughout the world.

ABBREVIATIONS

AIDS	Acquired immunodeficiency syndrome
BALWOIS Project	Water Observation and Information System for Balkan Countries
CBC	Caucasus Biodiversity Council
CBDN	Caucasus Business Development Network
CBM	Confidence building measures
CI	Caucasus Initiative (of the German Federal Government)
CSR	Corporate Social Responsibility
DFID	United Kingdom's Department for International Development
DOD	US Department of Defense
DRC	The Democratic Republic of the Congo
DUSDES	Office of the Deputy Undersecretary of Defense for Environmental Security
ENP	European Neighbourhood Policy
ENVSEC	Environment and Security Initiative
EPA	Environmental Protection Agency
ESS	Environmental Security Studies
EU	European Union
FDI	Foreign direct investment
GECHS	Global Environmental Change and Human Security
GEF	Global Environment Facility
GLOFs	glacial lake outburst floods
HIV	Human immunodeficiency virus
IFI	International Financial Institution
IO	International organizations
IPCC	Intergovernmental Panel on Climate Change
IRFC	International Federation of the Red Cross and Red Crescent Societies
IWRM	Integrated Water Resource Management
LOCP	Lake Ohrid Conservation Project
LOMB	Lake Ohrid Management Board
MENA	Middle East and North Africa region
MoE	Ministries of the environment

MOU	Memorandum of Understanding
NATO	North Atlantic Treaty Organization
nef	new economics foundation
NGO	Non-governmental organization
NK	Nagorno-Karabakh
NRE	Non-recognized entities
OSCE	Organization for Security and Co-operation in Europe
PRIO	Peace Research Institute in Oslo
REC	Regional Environment Centre for the Caucasus
SARS	Severe acute respiratory syndrome
SCRM	South Caucasus River Monitoring
SDC	Swiss Development Cooperation
SO	South Ossetia
SSA	Sub Saharan Africa
STS	Science and Technology Studies
TJS	Trans-boundary Joint Secretariat
UN	United Nations
UNDP	United Nations Development Programme
UNSC	United Nations Security Council
USAID	United States Agency for International Development
USDAT	Undersecretary of Defense for Acquisition and Technology
WSSD	World Summit on Sustainable Development

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ENVIRONMENTAL SECURITY STUDIES

An introduction

Rita Floyd and Richard A. Matthew¹

Introduction

Over the past two decades a substantial body of literature has emerged in North America, Europe and throughout much of the developing world exploring the existing and potential linkages between security and the environment. While it explores some ideas that have roots in classical thought, this literature is largely a response to two almost simultaneous events: the end of the Cold War (1989–92), which compelled a rethinking of the concept of security, and the 1992 Rio Earth Summit, which mobilized scientific evidence of global environmental change into a global policy agenda widely regarded as urgent and vital.

The ensuing flood of academic enquiry has examined large-scale environmental processes such as climate change and deforestation. It has explored the socio-political effects of changes in natural resource assets at various scales of analysis. It has examined the activities of the military from an environmental perspective and sought to understand the role the environment plays in conflict and in conflict resolution. It has explored the interaction of environmental change with demographic and health factors from a security perspective. It has considered the environment in terms of different levels of security analysis including global, regional, national, subnational and human. It has studied vulnerability to environmental change from the perspective of equity and poverty. And it has sought to understand the impacts of strategies for conservation and adaptation to environmental stress in different security contexts.

This work has been important and influential. It has been the subject of considerable policy activity. It has been popularized by leading journalists and authors. It has been integrated into International Relations and security studies curricula at both undergraduate and graduate levels. Interest among the emerging generation of scholars appears widespread and strong, and many of the scholars who defined the field in the early post-Cold War years continue to be active in it.

Perhaps reflective of the complexity of our high-speed and densely interconnected world, environmental security has not evolved over the past two decades as a homogeneous field of analysis, but rather as a polysemous category encompassing a wide range of analytical and normative meanings and positions. Indeed, the field of environmental security is so fragmented that the term is used to refer to entirely different, and even