The Soviet environment has reached crisis point – Belorussia and the Ukraine have, as a result of the Chernobyl accident, been declared ecological disaster zones, and across the country as a whole as many as 20 per cent of the population live in environmental danger areas and another 35–40 per cent in unsatisfactory conditions. According to a Supreme Soviet Environment Committee report of 1989, 80 per cent of all illness in the USSR relates either directly or indirectly to environmental problems. Not surprisingly, environmental problems have become a subject of immense public concern and have provided an anti-government, anti-party and sometimes anti-Russian catalyst.

In this timely book, leading specialists from both the West and the Soviet Union present a comprehensive and up-to-date analysis of these problems. The contributors examine the aftermath of Chernobyl, the catastrophic causes and effects of the Aral Sea’s shrinkage, the environmental plight of the indigenous tundra peoples and the relationship between environmental issues and public unrest. Other chapters explore the domestic and international problems of regulation and assess the effects of perestroika and glasnost on the environment as well as on environmental politics. The depth of analysis in this volume together with the breadth of topics addressed will ensure that it is read by students and specialists of the Soviet Union and environmental issues, as well as by all government officials, journalists and industrialists with an interest in the Soviet environment.
The Soviet environment: problems, policies and politics
Selected papers from the Fourth World Congress for Soviet and East European Studies
Harrogate, July 1990

Edited for the
INTERNATIONAL COMMITTEE
FOR SOVIET AND EAST EUROPEAN STUDIES

General Editor
Stephen White
University of Glasgow
The Soviet environment: problems, policies and politics

Edited by
John Massey Stewart
Contents

Notes on contributors page ix

Preface xiii

1 Environmentalism and nationalism: an unlikely twist in an unlikely direction
   MARSHALL I. GOLDMAN 1

2 The environmental basis for ethnic unrest in the Baltic republics
   PHILIP R. PRYDE 11

3 Political participation, nationalism and environmental politics in the USSR
   CHARLES E. ZIEGLER 24

4 BAM after the fanfare: the unbearable ecumene
   VICTOR L. MOTE 40

5 The massive degradation of ecosystems in the USSR
   ZEEV WOLFSON 57

6 The new politics in the USSR: the case of the environment
   JOAN DEBARDELEBEN 64

7 Water management in Soviet Central Asia: problems and prospects
   PHILIP P. MICKLIN 88

8 Perestroika: how it affects Soviet participation in environmental cooperation
   ELENA NIKITINA 115
viii Contents

9 US–Soviet cooperation for environmental protection: how successful are the bilateral agreements?
Kathleen E. Braden 125

10 US–USSR nuclear safety cooperation: prospects for health and environmental collaboration
Michael Congdon 150

11 The global impact of the Chernobyl accident five years after
Zhores Medvedev 174

12 Glasnost, perestroika and eco-sovietology
Igor I. Altshuler, Yuri N. Golubchikov,
Ruben A. Mnatsakanyan 197

13 Environmental issues in the Soviet Arctic and the fate of northern natives
Alexei Yu. Roginko 213

14 Air and water problems beyond the Urals
John Massey Stewart 223

Index 238
Contributors

Igor I. Altshuler was a research associate of the Department of Geography, Moscow State University from 1972 to 1990, and is co-author of several books on global and regional environmental problems (atmospheric pollution, acid rains and bio-geochemical cycles). In recent years he has specialised in the USSR's environmental problems. He is co-founder of Moscow State University's Youth Council on Nature Protection (1974), the Association for the Support of Ecological Initiatives (1988) and the Independent Ecologists' Foundation (1990). Since 1991 he has been coordinating the 'Chernobyl' project of WISE (World Information Service on Energy), Amsterdam.

Kathleen E. Braden is an associate professor of geography at Seattle Pacific University. She has participated in the US–USSR Environmental Agreement under Area V for a project on snow leopard conservation techniques. She is co-author of The Disappearing Russian Forest: Dilemma in Soviet Resource Management (1988).

Michael Bruce Congdon is a former US Foreign Service officer. From 1987 to 1990 he was affiliated to the US Nuclear Regulatory Commission. He is currently advisor to the Director, Division of Nuclear Safety, International Atomic Energy Agency, Vienna. From 1981 to 1984 he was distinguished visiting professor at the US Air Force Academy. In October 1990 he visited Chernobyl and the contaminated areas with the IAEA team assessing the health effects of the accident.

Joan Debardeleben is an associate professor of political science at McGill University, specialising in Soviet domestic politics. Her publications include The Environment and Marxism Leninism: The Soviet and East German Experience (1985), as well as numerous articles in scholarly journals. She is editor of To Breathe Free: The Environment-
Contributors


Marshall I. Goldman is Professor of Economics, Wellesley College, and Associate Director of the Russian Research Center, Harvard University. He is the author of The Spoils of Progress: Environmental Disruption in the Soviet Union (1972) and What went wrong with Perestroika (1991).

Yuri N. Golubchikov is a research associate of the Department of Geography, Moscow State University, and a specialist in a broad range of geographical and environmental problems, especially in mountainous and Arctic territories. He is the author of several books, including Mountains (1988, in Russian), and is a co-founder of the Independent Ecologists' Foundation (1990).

John Massey Stewart is a freelance writer, journalist and lecturer, specialising on Siberia and the Soviet Far East. He is at present writing a book on the natural history, geography and environmental problems of that region, The Natural History of Russia (1992), and is the author of Across the Russians.

Zhores Medvedev is a biologist who worked as senior scientist in Soviet research institutes from 1951 to 1972. Since 1973 he has been attached to the National Institute for Medical Research, Mill Hill, London. He has written more than 200 papers and articles as well as thirteen books, some with his twin brother, the historian Roy Medvedev, including The Nuclear Disaster in the Urals (1979), and The Legacy of Chernobyl (1989).

Philip P. Micklin is a professor in the Geography Department at Western Michigan University, Kalamazoo, Michigan, USA. He has studied and written extensively on water management problems in the USSR for twenty-five years, focusing primarily on large-scale water transfer proposals, water management in Central Asia, and the shrinking of the Aral Sea.

Ruben A. Mnatsakanyan is a research associate of the Department of Geography, Moscow State University, and a specialist on the USA's agriculture and related environmental questions and in recent years on the environmental problems of the USSR. He is a co-
Contributors


VICTOR L. MOTE is an associate professor of geography and Russian studies, USA, of Houston, PhD (INDEA Title IV & VI Fellow), University of Washington, Seattle (1967–71), was Captain in the US Marine Corps (Vietnam Veteran) (1964–67). He is also the author of over 100 published writings, primarily dealing with Siberia.

ELENA NIKITINA is a senior researcher for the Institute of World Economy and International Relations of the USSR Academy of Sciences. She specialises in the problems of environmental security, international environmental cooperation and environmental management in the USSR. She has published a book, World Meteorological Organisation and the World Ocean, and is the author of about forty articles and chapters in monographs, both in Russian and English.

PHILIP R. PRYDE is an environmental analyst in the Department of Geography at San Diego State University. He specialises particularly on the USSR where he has travelled widely. He serves on the editorial board of Soviet Geography, has written over fifty articles and chapters in monographs, and is the author of Non-conventional Energy Resources, Conservation in the Soviet Union (1972), and the recent Environmental Management in the Soviet Union (1991).

ALEXEI YU. ROGINKO is a research associate of the Section of Environment and Ocean Development in the Institute of World Economy and International Relations (IMEMO), USSR Academy of Sciences, Moscow. A graduate of the Geographical Faculty of Moscow State University, he has published about thirty works on international marine and Arctic environmental protection issues.

ZEEV WOLFSON is editor of and frequent contributor to Environmental Policy Review: the Soviet Union and Eastern Europe, produced by the Centre for Soviet and East European Studies, Hebrew University of Jerusalem. He is also environmental advisor to the Israel Environmental Protection Service. He has a PhD in geography from Moscow State University and, under the pseudonym of Boris Komarov, wrote The Destruction of Nature in the Soviet Union which was translated into seven languages and won him Italy’s 1983 Gambrinas Award for the best book on ecology.
xii  Contributors

Charles E. Ziegler is an associate professor of political science at the University of Louisville, in Kentucky. He is the author of a number of articles and monographs on the Soviet Union, including Environmental Policy in the USSR (1987, 1990). He is currently working on a book on Soviet relations with North-east Asia.
Preface

The Third World Congress of Soviet and East European Studies, held in Washington, DC, in 1985, contained four panels on the environment. Despite many official invitations, not a single Soviet delegate was present. Five years later, at the Fourth World Congress in Harrogate, England, the environmental panels had doubled to eight and included papers by seven Soviets: a reflection both of the increased interest by Western academia in the Soviet environment and the increased freedom under perestroika.

The fourteen chapters in this volume are a selection of the environmental papers given at Harrogate by representatives of five nationalities: Soviet, British, American, Canadian and Israeli. In some cases the papers have been altered or expanded; in others, they are new. Together, they present an illuminating and often disturbing picture of the Soviet Union's many environmental problems as well as of the policies and politics involved. To the editor's knowledge, this is the first book to give an overall picture of the Soviet environment by both Western and Soviet specialists – and, significantly, the latter do not mince their words. It is pertinent to have not only the Academy of Sciences of the USSR represented here (Nikitina and Roginko) but also one of the country's many new independent organisations (founded indeed by Altshuler and Mnatsakanyan).

Those Western authors published here include almost all the best-known names in the field of Soviet environmental studies. Among them are Marshall Goldman, who can perhaps be said to have pioneered the subject, Philip R. Pryde, whose book on Soviet nature conservation has remained the only one in the field for many years, and Philip P. Micklin, for long the West's leading expert on the (so far aborted) Siberian river-reversal scheme and now the foremost Western authority on the massive Aral Sea problem. All the authors are well-known specialists in their various spheres.

Two noted ex-Soviet citizens are also significant contributors: the biologist Zhores Medvedev who, after much painstaking research, first
revealed the 1957 nuclear accident in the Urals to an (initially) highly sceptical world and has now done much work on Chernobyl, and Zeev Wolfson who, under the pseudonym Boris Komarov, sent for publication in the West a seminal work, *The Destruction of Nature in the Soviet Union*, the first full-scale account of Soviet environmental degradation.

Several environmental themes emerged clearly at Harrogate and are articulated in these pages. One was the disastrous ecological situation in the USSR and its impact not only on public health but on nationality problems. (This important ethnic dimension is discussed here by Goldman, Pryde and Ziegler.) A second theme was the effect of perestroika on the environmental situation, both for better and for worse, and the public debate and widespread concern now being voiced under glasnost. A third was the increasing Soviet participation in bilateral and multilateral environmental cooperation (see Braden, Congdon and Nikitina).

Quite apart from the major themes, many new and challenging points are advanced. Philip P. Micklin, for instance, notes two important changes in Central Asia’s management of water, so crucial in this desert area: the introduction of irrigation water charges – which will hopefully end the waste of so much water – and at least a partial shift from high water-consuming crops such as cotton and rice to vegetables and other lower users. But he notes that the enormous (and notorious) water transfer project to Central Asia may be revived, pointing both to a 1988 top-level decree which directed that the scientific study of north–south water transfers continue, and to a 1990 joint declaration by the presidents of the four Central Asian republics and Kazakhstan urging the necessity of the scheme. But perhaps the strongest statement comes from Zhores Medvedev who asserts that, but for a weak bottom plate in the Chernobyl reactor which acted as an unplanned safety valve, the world’s worst nuclear accident could have been an infinitely worse disaster with the meltdown of the site’s other reactors and the emission of not millions but billions of curies.

This book appears at a particularly crucial time. The USSR can be said to have reached an environmental crisis. In 1990, for instance, following the example of Byelorussia, the Ukrainian Supreme Soviet declared the whole of the Ukraine an ecological disaster zone due to the Chernobyl accident. But across the whole country as many as 20 per cent of the population live in environmentally dangerous areas and another 35–40 per cent in unsatisfactory conditions and, according to a Supreme Soviet Environmental Committee report of 1989, 80 per cent of the population’s diseases relate, directly or indirectly, to environmental problems. Muscovites named pollution as their principal worry in a
Preface

poll taken by the city’s Institute of Sociology in 1990. The impact of pollution on the air the citizens breathe, on their water supplies, on their health and their lifespan, on the very survival of the small peoples of the north (vide Roginko) – and, significantly, the disclosure under glasnost of the serious situation – has acted as a catalyst for perhaps millions in their attitude towards the ruling apparatus as well as serving to focus anti-Russian feeling.

Public opinion is now a political factor. According to Philip R. Pryde’s paper, 331 environmental groups had come into being by 1990 and the country’s first Green Party emerged in Latvia the same year. An inter-republican Green Party held an inaugural congress in Moscow in the summer of 1990 and a nation-wide green alliance is now in existence and is likely to grow in numbers and influence.

But there is a huge number of problems to be solved. Some of these problems are described in the first annual state report on the environment – a welcome new development – published in 1989 by Goskompriroda, the State Committee for Nature Protection. This committee was set up to centralise the environment’s management under, moreover, the first Soviet minister not to be a party member, Professor Nikolai Vorontsov. Although the committee has now been upgraded into a ministry, it remains to be seen whether it will survive if decentralised republican bodies take over.

Gorbachev’s revolution has taken us a long way from the time when pollution was regarded as a capitalist problem, when any talk of Soviet pollution was regarded as anti-Soviet and when (in 1984) the dean of the geography faculty of Moscow University, Alexander Ryabchikov, could say: ‘The planned nature of our socialist economy enables us to foresee things and to take timely measures to abate the harmful effects man’s economic activities have on the environment’. Gorbachev’s own speech to the Communist Party Congress of August 1990 sounded the difference: ‘The abandoned state of our farms, the disastrous situation with our forests and rivers, the massive ecological problems – are these not the result of the policies followed in past decades?’

I wish to thank Michael Holdsworth of CUP for his patience, Stephen White, series editor, for his valued expertise and help, Con Coroneos, copy editor, for his diligence, Tony French for his experienced advice, Jane Gowman for her indefatigable word-processing, and my wife, Penelope, for her unfailing understanding and support.