



**INTERNATIONAL ENVIRONMENTAL
LAW & POLICY SERIES**

**INTERNATIONAL LAW
AND THE
CONSERVATION OF
BIOLOGICAL DIVERSITY**

**EDITORS
MICHAEL BOWMAN
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International Environmental Law and Policy Series

International Law and the Conservation of Biological Diversity

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International Environmental Law and Policy Series

**International Law and the Conservation of
Biological Diversity**

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Abbreviations

AJIL	<i>American Journal of International Law</i>
ASEAN	Association of South-East Asian Nations
ASIL	American Society of International Law
ASMA	Antarctic Specially Managed Area
ASPA	Antarctic Specially Protected Area
AT	Antarctic Treaty
ATCM	Antarctic Treaty Consultative Meeting
ATCP	Antarctic Treaty Consultative Party
ATS	Antarctic Treaty System
BFSP	British & Foreign State Papers
BGCI	Botanic Gardens Conservation International
CCAMLR	Convention on the Conservation of Antarctic Marine Living Resources
CCAS	Convention on the Conservation of Antarctic Seals
CEP	Committee for Environmental Protection
CGIAR	Consultative Group on International Agricultural Research
CIDIE	Committee of International Development Institutions on the Environment
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
Cm/Cmnd	Command Paper
CNPPA	Commission of National Parks and Protected Areas (of the IUCN)
Col JTL	<i>Columbia Journal of Transnational Law</i>
COM	Communication from the Commission [of the EC] to the Council
CPGR	(FAO) Commission on Plant Genetic Resources
CRAMRA	Convention on the Regulation of Antarctic Mineral Resource Activities
CYIL	<i>Canadian Yearbook of International Law</i>
DAC	Development Assistance Committee, OECD
DOEM	Designated Officials for Environmental Matters of the United Nations
EC	European Community
ECE	(United Nations) Economic Commission for Europe
ECOSOC	Economic and Social Council (of the United Nations)
EFTA	European Free Trade Association
EIA	Environmental Impact Assessment
EIPR	<i>European Intellectual Property Review</i>
EIS	Environmental Impact Statement
EP	Environmental Protocol
EPA	Environmental Protection Agency (US)
EPL	Environmental Policy and Law
EPO	European Patent Office
ESA	Endangered Species Act of 1973 (US)
ESCAP	(United Nations) Economic and Social Commission for Asia and the Pacific
FAO	Food and Agriculture Organisation
GATT	General Agreement on Tariffs and Trade
GDP	Gross Domestic Product
GEF	Global Environment Facility
GNP	Gross National Product

HC	House of Commons Paper
HL	House of Lords Paper/Debates
IARC	International Agricultural Research Centre
IBP	International Biological Programme
IBRD	International Bank for Reconstruction and Development
ICAO	International Civil Aviation Organisation
ICJ Rep.	Reports of the International Court of Justice
ICLQ	<i>International and Comparative Law Quarterly</i>
ICSU	International Council of Scientific Unions
IJMCL	<i>International Journal of Marine and Coastal Law</i>
ILA	International Law Association
ILC	International Law Commission
ILM	International Legal Materials
ILO	International Labour Organisation
ILR	International Law Reports
IMO	International Maritime Organisation
INC	Intergovernmental Negotiating Committee
INSC	International North Sea Conference(s)
IOC	Intergovernmental Oceanographic Commission
IPCC	Intergovernmental Panel on Climate Change
IPGRI	International Plant Genetic Resources Institute
IPR	Intellectual Property Rights
ITTO	International Tropical Timber Organisation
IUCN	International Union for the Conservation of Nature and Natural Resources (The World Conservation Union)
IUPGR	International Undertaking on Plant Genetic Resources
IWC	International Whaling Convention
JPTSO	<i>Journal of the Patent and Trademark Society Office</i>
LDC	London Dumping Convention
LNTS	League of Nations Treaty Series
LOSC	Law of the Sea Convention
Misc	United Kingdom Command Papers, Miscellaneous Series
MSY	Maximum sustainable yield
NEPA	National Environmental Policy Act of 1969 (US)
NGO	Non-Governmental Organisation
NIEO	New International Economic Order
NOAA	National Oceanic and Atmospheric Administration (US)
OAU	Organisation of African Unity
ODA	Overseas Development Administration (of the UK)
OECD	Organisation for Economic Co-operation and Development
OJ	<i>Official Journal of the European Communities</i>
OJ EPO	<i>Official Journal of the European Patent Office</i>
PARCOM	Paris Commission (on Land-based Pollution)
PASIL	<i>Proceedings of the American Society of International Law</i>
PCIJ Rep.	Reports of the Permanent Court of International Justice
PGR	Plant Genetic Resource
RECIEL	<i>Review of European Community and International Environmental Law</i>
RGDIP	<i>Revue générale de droit international public</i>
RIAA	Reports of International Arbitral Awards
SCAR	Scientific Committee on Antarctic Research
SIPRI	Stockholm International Peace Research Institute
SPA	Specially Protected Area
SPAW	1990 Kingston Protocol to the Cartagena Convention on Specially Protected Areas and Wildlife
TEWG	Transitional Environmental Working Group
TFAP	Tropical Forestry Action Plan

TIAS	Treaties and Other International Acts Series
TRIP	Trade Related Intellectual Property
UKTS	United Kingdom Treaty Series
UNCED	United Nations Conference on Environment and Development
UNCHE	United Nations Conference on the Human Environment
UNCLOS	United Nations Convention on the Law of the Sea
UNCTAD	United Nations Conference on Trade and Development
UNDP	United Nations Development Programme
UNECE	See ECE (above)
UNEP	United Nations Environment Programme
UNESCO	United Nations Educational, Scientific and Cultural Organisation
UNGA	United Nations General Assembly
UNTS	United Nations Treaty Series
UPOV	International Union for the Protection of New Varieties of Plants
UST	United States Treaties and Other International Agreements
WCED	World Commission on Environment and Development
WCMC	World Conservation Monitoring Centre
WCP	World Climate Programme
WCS	World Conservation Strategy
WIPO	World Intellectual Property Organisation
WMO	World Meteorological Organisation
WRI	World Resources Institute
WWF	World Wide Fund for Nature

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Introduction

Michael Bowman and Catherine Redgwell

The 1992 United Nations Conference on Environment and Development (UNCED) produced a number of instruments, of which only two comprised treaty texts opened for signature. One, the 1992 United Nations Framework Convention on Climate Change, addresses the serious problem of the impact of human activities on the earth's atmosphere and consequent global warming. This topic was the subject of a previous study by the Committee on Environmental Law of the British Branch of the International Law Association, which anticipated the conclusion of the Convention with publication by Graham and Trotman in 1991 of *International Law and Global Climate Change*. The other, the 1992 United Nations Convention on Biological Diversity ("the Biodiversity Convention"), is the focus of this present volume, which reflects the work of the Committee since 1991. The bulk of the project was completed by the late summer of 1994, though in some cases it has been possible to take account of developments subsequent to that time.

The Convention on Biological Diversity

The Convention is the first international treaty explicitly to address all aspects of biodiversity ranging from the conservation of biological diversity and sustainable use of biological resources to access to biotechnology and the safety of activities related to modified living organisms. Though any survey of international environmental law would reveal international wildlife treaties stretching back a century or more, and a wide range of instruments concerned with habitat protection and the control or reduction in activities which adversely affect species and habitat, there is no doubt that explicit attention to biodiversity conservation is a recent phenomenon. For example, the 1972 United Nations Conference on the Human Environment, considered by many to constitute the genesis of modern international environmental law, makes no reference to biological diversity as such in the resulting Stockholm Declaration. However, there are references to the need for conservation, particularly in Principle 4 which calls for the safeguarding and wise management of "the heritage of wildlife and its habitat which are now gravely imperilled by a combination of adverse factors".

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It was only in 1980 in the World Conservation Strategy (WCS), formulated by the IUCN in collaboration with UNEP, WWF, FAO and UNESCO, that explicit reference to diversity of life forms is found. The WCS articulates one of the three fundamental objectives of living resource conservation as the preservation of genetic diversity. The 1982 World Charter for Nature, and the Second World Conservation Strategy, *Caring for the Earth* (1990), follow this new emphasis on the need to conserve the "vitality and diversity of the Earth". Hence the latter explicitly calls for the conservation of biodiversity (rather than its predecessor's reference exclusively to "genetic diversity"), including "not only all species of plants, animals and other organisms, but also the range of genetic stocks within each species, and the variety of ecosystems". "Keeping within the Earth's carrying capacity" is a related theme of *Caring for the Earth* as part of, and indeed an essential prerequisite to, sustainable development. *Our Common Future*, the 1987 Report of the World Commission on Environment and Development, explicitly views species and ecosystems as resources for (sustainable) development.

One of the main threats imperilling development – and the conservation of biodiversity – is the rapid destruction of the earth's most species-rich ecosystems. A 1990 Report by the IUCN, WWF, World Resources Institute, Conservation International and the World Bank, *Conserving the World's Biological Diversity*, states that nearly one quarter of the earth's biological diversity is estimated to be at risk of extinction during the next twenty to thirty years. More species than ever before are so threatened, many (particularly insects) before they have even been described or classified. The threat is exacerbated by the fact that at least half of the earth's species are located in tropical rain forests, thus reinforcing the link between species and habitat.

The World Commission on Environment and Development called for a new approach to species and ecosystem conservation based upon the notion of "anticipate and prevent" and for the negotiation of a properly funded "Species Convention" along the lines of the 1982 United Nations Convention on the Law of the Sea. This reflected growing international recognition of the need for a global convention to remedy the perceived defects of the previous piecemeal approach to conservation of global biodiversity. Although global conventions did exist, their focus was selective, covering only internationally important sites (e.g. the World Heritage Convention), particular types of ecosystem (e.g. the Ramsar Convention on Wetlands of International Importance) or particular species (e.g. the Convention on the Conservation of Migratory Species of Wild Animals) or regulating a particular threat to endangered species (e.g. the Convention on International Trade in Endangered Species of Wild Fauna and Flora). Regional conventions added to this patchwork quilt of protection, but did not provide for the comprehensive global regulation needed.

Thus, in 1987, UNEP's Governing Council resolved to establish an *ad hoc* working group to examine "the desirability and possible form of an umbrella convention to rationalize current activities in this field, and to address other areas which might fall under such a convention" (Resolution 14/26). By 1990 consensus had been achieved regarding the negotiation of a framework convention building on, rather than attempting to consolidate or replace, existing international treaties. Assisted by related activities in the IUCN and FAO, UNEP was able to produce a first draft of a convention to launch the formal negotiating process in February 1991 in the Intergovernmental Negotiating Committee for a Convention on Biological Diversity (INC).

Within the INC, Working Group I addressed general issues such as fundamental principles, general obligations, *in situ* and *ex situ* conservation measures, and the relationship of the Biodiversity Convention with other international agreements. Working Group II dealt with access to genetic resources and technologies, technology transfer, technical assistance, financial mechanisms and international cooperation. By and large, this division of responsibilities is reflected in the structure of the Convention itself, with most of Working Group II's responsibilities falling in the later articles of the Convention. Negotiations concluded with the adoption of the Convention at Nairobi on 22 May 1992. The Convention was opened for signature at UNCED in Rio de Janeiro on 5 June 1992 and entered into force a scant eighteen months later on 29 December 1993 following the thirtieth ratification (by Mongolia).

The Structure of the Book

In the case of the Biodiversity Convention, the approach of the Committee has necessarily differed from that taken to *International Law and Global Climate Change* since we were addressing a Convention already concluded and, as we were to witness, one which entered into force only eighteen months later at the end of 1993. We have retained the approach of extending beyond the ambit of the Convention itself to examine the conservation of biodiversity in international law. As a consequence, the following chapters include not only detailed analysis of the Convention (Chapter 2) but also of particular features such as sustainable use of biological resources (Chapter 3), *ex situ* conservation (Chapter 7) and plant genetic resources (Chapter 8). The controversial issue of intellectual property rights, which delayed United States' signature of the Convention, is comprehensively analysed in Chapter 9.

Property rights are a linking theme of several chapters, given the Biodiversity Convention's reaffirmation of sovereign rights over natural resources, including biological resources, and increasing enthusiasm for the use of property rights – whether held by the individual, a group (e.g. Plant Breeders' Rights) or by the State – as a means of providing an incentive for the management and sustainable use of biological resources. The Biodiversity Convention implicitly recognises the uneven global distribution of natural resources, and consequently the heavy burden which implementation of the Convention will inevitably impose on many developing States which happen to be the depository of rich, even “mega-diverse”, biological resources. Differences between developing and developed States over a whole host of issues, and the role of indigenous peoples, form the focus of Chapters 12 and 13 respectively, followed by an examination of the critical issue of resourcing the estimated US\$3.5 billion needed annually to implement measures necessary to conserve biodiversity (Chapter 14). The problems of implementation of the Convention in the European Union (Chapter 11), which has ratified the Convention along with all of its Member States, and the United States (Chapter 10) are also examined.

In order fully to appreciate the context in which the Biodiversity Convention was negotiated, its essentially framework character, and the wide range of existing international conventions which, directly or indirectly, conserve biodiversity, this volume also includes an analysis of existing measures for protection of the terrestrial (Chapter 4), marine (Chapter 5) and Antarctic (Chapter 6) environment. Existing measures in the European Union and the United States are also addressed in the relevant chapters, with the overt policy of the latter being to ensure that no new instrument was needed for implementation of the Biodiversity Convention.