

IUCN
Academy of
Environmental Law Research Studies



Biodiversity, Conservation, Law + Livelihoods

Bridging the North-South Divide

EDITED BY
Michael I. Jeffery
Jeremy Firestone
Karen Bubna-Litic

IUCN ACADEMY OF ENVIRONMENTAL LAW RESEARCH STUDIES

Biodiversity Conservation, Law + Livelihoods

Bridging the North–South Divide

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BIODIVERSITY CONSERVATION, LAW + LIVELIHOODS

The IUCN Academy of Environmental Law Research Studies' third colloquium brought together more than 130 experts from 27 nations on nearly every continent. This book brings together a number of the papers presented there and offers a global perspective on biodiversity conservation and the maintenance of sustainable cultures. It addresses issues from international, regional, and country-specific perspectives. The book is organized thematically to present a broad spectrum of issues, including the history and major governance structures in this area; the needs, problems, and prerequisites for biodiversity; area-based, species-based, and ecosystem-based conservation measures; the use of components of biodiversity and the processes affecting it; biosecurity; and access to and sharing of benefits from components of biodiversity and their economic value.

Michael I. Jeffery, QC, is Professor of Law at Macquarie University and Director of its Centre for Environmental Law. He served as Dean of Law in 1999. He received his LLB degree from the University of Toronto and his LLM degree from Osgoode Hall Law School, York University. A former Chair of the Province of Ontario's Environmental Assessment Board, he was appointed a Queen's Counsel in 1978 and headed the environmental law practice of one of Canada's largest law firms in the 1990s. He has served as Deputy Chair of the IUCN's Commission on Environmental Law and has been the Editor-in-Chief of the *Macquarie Journal of International and Comparative Environmental Law* since its inception.

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Acknowledgments

We wish to warmly acknowledge the contributions of the many individuals and institutions that enabled us to bring together in this volume the majority of the research papers presented at the third Colloquium of the IUCN Academy of Environmental Law hosted by Macquarie University's Centre for Environmental Law in Sydney, Australia, in July 2005.

After five years of diligent work on the part of members of the International Union for the Conservation of Nature and Natural Resources (IUCN) and in particular the members and former Chairs of the IUCN Commission on Environmental Law (CEL) and the IUCN Environmental Law Centre, the Academy was formally launched in Shanghai, China, in November 2003. Shanghai was also the location of the Academy's first Colloquium hosted by Shanghai Jiao Tong University. The second annual Colloquium was held in Nairobi, Kenya, with Sydney being chosen as the site of the third Colloquium in what has developed in a short space of time into one of the most important annual events on the international environmental law calendar.

Macquarie University's former Vice-Chancellor, Professor Di Yerbury, enthusiastically supported the activities of the Academy and ensured the success of the third Colloquium through a generous grant from the University's Millennium Fund. Special thanks must be accorded to both Professor Tony Adams, Pro Vice-Chancellor (International), who filled in at the opening ceremony for Professor Yerbury, who was overseas and unable to officiate, and Professor Elizabeth More, Vice-Chancellor (Administration), who represented the University at the closing banquet held at Sydney's Taronga Zoo overlooking Sydney Harbour.

The leadership of Professor Michael Jeffery, QC, Director of the University's Centre for Environmental Law and Coordinator of the Colloquium Committee, was essential to the success of the week-long event. His job was made easier with the enthusiastic support and around-the-clock work of his Centre colleagues Donna Craig, David Leary, and Susan Shearing.

Much of the success of the Colloquium was due to the tireless yet cheerful administrative support provided by a dedicated cadre of student volunteers, and special thanks must be given to Kate McLoughlan, Michael Collins, and Marcia Valsinger-Clarke for their roles. The Biodiversity Conservation Day Tour to Kuring-gai Chase National Park led by Professor Ben Boer (University of Sydney) and Chief Judge Brian Preston of the NSW Land and Environment Court was a memorable highlight of the Colloquium, and we owe them both a debt of gratitude for their superb efforts. Likewise, we wish to thank Professor Liz Deane, the Dean of Macquarie University's Division of Environmental

and Life Sciences, and her staff for arranging for delegates to enjoy “lunch with the wallabies” and tour the University’s wallaby research facility.

We thank United Nations Secretary-General Kofi A. Annan for his support of the Academy and for providing the introduction to this publication. Essential financial support was provided by the United Nations Development Programme, and we wish to warmly acknowledge the assistance provided by UNEP’s Bakari Kante and Lal Kurukulasuriya. Financial support was also provided by the NSW government, represented at the Colloquium by the Hon. Bob Debus, Attorney-General and Minister for the Environment, and the Commonwealth government, represented by Mr. Howard Bamsey, Acting Secretary, Department of Environment and Heritage.

Australian Commonwealth Senator and IUCN Vice-President Christine Milne lent her strong support as outlined in her opening remarks.

We also wish to warmly acknowledge the contributions of Professor Joseph Sax, who gave the Academy’s Distinguished Lectures and contributed throughout the Colloquium, and Dr. Françoise Burhenne-Guilmin, who delivered the Keynote Address.

We are most appreciative of the support and hospitality of the Hon. Justice Keith Mason AC, President of the NSW Court of Appeal, who graciously hosted a reception at the Court and conducted a tour of the Banco Court for invitees.

The Colloquium could not have been a success without the participation and contributions of the more than 130 leading environmental lawyers, judges, and academics representing 27 countries around the world, and the research papers comprising this volume attest to the exceptional expertise and experience of those involved. A special thanks must be given to Professor Robert Percival and Associate Professor Lye Lin Heng for their assistance in crafting a statement, to be known as the “Macquarie Statement,” which was adopted by consensus on the last day of the Colloquium.

Thanks also to those who assisted the Editorial Committee in working on this publication, including Macquarie students Jane Scanlon, Emiliano Schivazappa, and Nik Hughes. We are grateful to Cambridge University Press and its representative, John Berger, for the publication of these research papers and the compendium material. And of course this volume would not have been possible without the devotion and enthusiasm of the project manager, Mary Paden, of Aptara Inc., on behalf of Cambridge University Press.

We would be remiss in failing to accord Professor Nicholas A. Robinson, Chair of the Academy, a special note of thanks; without his inspiration and dedication neither the Academy nor the impressive body of research knowledge contained in this and earlier colloquia publications would have seen the light of day. His guidance, leadership, and scholarship are evident throughout all Academy activities.

The Editors

UNITED NATIONS



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**THE SECRETARY-GENERAL
MESSAGE TO THE THIRD COLLOQUIUM
OF THE IUCN ACADEMY OF ENVIRONMENTAL LAW
Sydney, 11 July 2005**

The Millennium Ecosystem Assessment released earlier this year was the first comprehensive global evaluation of the world's major ecosystems. The product of an unprecedented, four-year study involving natural scientists, scholars and environmental leaders from all over the world, it offers a sobering look at how human activities are causing environmental damage on a massive scale. It challenges all countries, all people and the IUCN Academy of Environmental Law to do more to protect the environment on which our lives depend.

The report tells us how biodiversity is declining at an alarming rate. Twenty-five percent of commercially exploited marine fish stocks are over-harvested. The conversion of wetlands, forests, and mangroves is reducing the capacity of ecosystems to mitigate the effects of extreme weather events such as the recent tsunami in the Indian Ocean. If the world is to meet the agreed target of reducing the loss of biological diversity by 2010, and achieve the Millennium Development Goals by 2015, we will need dramatic steps to change course.

Laws, regulations, enforcement measures, policy reforms, market mechanisms, and investments in the management of critical ecosystems must all be part of the picture. Your colloquium on the law of biodiversity can provide essential guidance. We need legal tools that will turn recommendations into practice. And we need your suggestions as to how environmental law can bring about the policy, institutional, and behavioural changes needed to deal with the root causes of environmental degradation.

The Millennium Ecosystem Report did not only sound an alarm; it also proposes solutions and strategies for restoring and maintaining ecosystems. It is encouraging to know that the World Conservation Union is involved in the search for solutions on an issue of great urgency to all humankind. Please accept my best wishes for the success of your deliberations.

A handwritten signature in black ink, appearing to read 'K. Annan', written in a cursive style.

Kofi A. Annan

Macquarie Statement

14 July 2005
Sydney, Australia

Delegates at the IUCN Academy of Environmental Law's Third Annual Colloquium hosted by Macquarie University through its Centre for Environmental Law reached a consensus on the need to protect biological diversity as a fundamental part of efforts to ensure a healthy environment for present and future generations of humans and other living species.

The statement, to be known as the "Macquarie Statement" was debated in the final plenary session of the five-day gathering in Sydney of more than 130 environmental experts from 27 nations to consider the theme of "Biodiversity Conservation, Law + Livelihoods: Bridging the North-South Divide." The complete text of the statement follows:

MACQUARIE STATEMENT

Statement of the Third Colloquium of the IUCN Academy of Environmental Law

At the Third Colloquium of the IUCN Academy of Environmental Law, more than 130 environmental experts from 27 nations representing universities from each continent gathered to consider the theme of "Biodiversity Conservation, Law + Livelihoods: Bridging the North-South Divide." Papers presented by the participants and discussions in both plenary and panel sessions reflected a broad recognition that efforts to protect biological diversity are a fundamental part of efforts to ensure a healthy environment for present and future generations of humans and other living species.

The colloquium took into account the findings of the Millennium Ecosystems Assessment that, despite past warnings, threats to biodiversity and general environmental degradation have continued unabated, making it difficult to meet the original target of reducing the loss of biodiversity by the year 2010 and to meet Millennium Development Goals by 2015. To improve our capacity to meet these goals, the colloquium emphasized the following themes.

Human activity, including anthropogenic causes of climate change, is contributing to an alarming rate of species extinction that is reducing the diversity of the biosphere to the detriment of present and future generations.

Environmental law must focus on redressing the factors that contribute to the reduction in biological diversity at their sources by creating appropriate incentives for

changing behaviour. Further, environmental law must develop and put into effect the legal tools that will turn established and evolving scientific and policy recommendations into enforceable norms, institutions and procedures. At a global level, this must build on the established principle of common but differentiated responsibilities.

The establishment and maintenance of protected areas on a national, regional or global basis can play an important role in protecting endangered species and preserving biodiversity by conserving ecosystems and natural habitats on which species depend.

Recognizing the complex interdependencies of living organisms in ecosystems, efforts to preserve biodiversity must emphasize a broad ecosystem approach, rather than focusing primarily on preventing extinction on a species-by-species basis or park-by-park basis.

As globalization spreads concepts of private property, it is important that concepts of property law be reconceptualized to ensure the protection of public values and to prevent the destruction of the economy of nature and the environmental services that ecosystems provide.

Measures that promote the conservation and sustainable use of biodiversity ultimately will contribute to a more peaceful and prosperous world for the benefit of both current and future generations. All countries should follow sustainable development paths, learning from, and avoiding, the mistakes of the past.

As knowledge of the causes and consequences of environmental problems continues to improve, it is imperative that legal concepts be adapted to take into account new information and to improve the capacity of law to respond to environmental imperatives. The considerable expertise possessed by members of the Academy of Environmental Law can be leveraged to make significant contributions to improved public policy through collaborative and comparative law research projects. These projects can help improve our understanding of what policies work and why and enhance our ability to employ law to achieve our shared goals.

Special and deliberate efforts should be made to develop a critical mass of expertise and institutional arrangements in developing countries, paying particular attention to the interests of minority, indigenous and marginalized peoples to ensure equitable national and regional sustainable development.

Every country and regional entity must put into place legal and policy mechanisms as well as institutional procedures that protect the rights of minorities, indigenous and marginalized people in relation to their settlements, knowledge, customary law and access to justice, ensuring that they have priority in benefits derived from sustainable use of biodiversity.

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Introduction

Michael I. Jeffery, Jeremy Firestone,
and Karen Bubna-Litic

The threats to biological diversity are well known, and include overharvesting of flora and fauna, species introductions, habitat loss and fragmentation, pollution, tourism, globalization, and climate change. These factors threaten the sustainability of culture as well. This volume, addressing as it does the conservation of biodiversity and the divide between developed and developing states, appropriately focuses international and comparative environmental law scholars, practitioners, and policy makers on ways to engage cooperatively to meet the broader imperatives of a sustainable biosphere and sustainable cultures. It also usefully ties these concepts together in one volume given the interrelationship between the two. The tension between nature conservation, on the one hand, and sustainable cultures, on the other, is perhaps best reflected in international law by section 8(j) of the 1992 Convention on Biological Diversity (CBD). There states are called on to conserve biological diversity and to “respect, preserve, and maintain” indigenous cultures while at the same time promoting the wider sustainable use of the components of biological diversity. Appropriately, the Convention recognizes that the conservation of biological diversity is a “common concern of humankind.” We would suggest that sustainable cultures should likewise be recognized. It is to these twin goals – rather, obligations – that we now turn.

This book places the issues threatening biological diversity – the variability of life on Earth and their interaction at the level of genes, species, and ecosystems – in a contemporary context. We have moved beyond the debates of the early 1990s at the time of the Rio Conference, which focused primarily on economic development in an environmentally sustainable manner, to where we find ourselves today with an increased awareness that the way forward must necessarily address poverty eradication on a sustainable basis. Any realistic hope of achieving the Millennium Development Goals lies with reducing poverty through the conservation and sustainable use of biodiversity on a truly global scale. This reduction in poverty will be evidenced in five main areas: security of food production; sustainable livelihoods; improvements to health; reduced vulnerability to natural disasters and conflict over shared resources, such as food and water; and, finally, in the area of ecosystem services. This volume, although only an introduction to some of these areas, represents the aspirations of the participants to the colloquium and the Academy to be built on in future fora.

To this end, the World Conservation Union (IUCN) Academy of Environmental Law assembled many of the world’s most distinguished experts in all areas of biodiversity law at its third annual colloquium in July 2005 hosted by Macquarie University’s Centre for Environmental Law in Sydney, Australia. This followed the Academy’s inaugural

colloquium on the Law of Energy for Sustainable Development hosted by Shanghai's Jiao Tong University in 2003 and the second colloquium on Land Use Law for Sustainable Development in 2004 hosted by the University of Nairobi.

The Academy's third colloquium, entitled *Biodiversity Conservation, Law + Livelihoods: Bridging the North-South Divide*, brought together more than 130 environmental experts from 27 nations representing universities from each continent to consider issues related to the colloquium's theme. The exceptional level of expertise represented by the author/presenters of the papers contained in this book with respect to the myriad of biodiversity issues addressed throughout the five-day colloquium was reflected by the preeminence of two participants in particular: Dr. Françoise Burhenne-Guilmin, the presenter of the colloquium's Keynote Address and a coauthor of the "Guides" to both the CBD and the Cartagena (Biosafety) Protocol, and Professor Joseph L. Sax, who presented the Distinguished Lectures and is recognized as one of the true pioneers responsible for the development of environmental law as a separate and important legal academic discipline. The participation of Australian traditional owners throughout the colloquium was greatly appreciated by all.

The message by then United Nations Secretary-General Kofi Annan, which is presented at the beginning of this book, attests to the gravity of the ecological dangers facing humankind and, indeed, all living organisms, and acknowledges "the role that environmental law can play in bringing about the policy, institutional, and behavioural changes needed to deal with the root causes of environmental degradation."

The level of synergy and positive interaction among the participants was evident throughout the colloquium both in the plenary sessions and the more thematic breakout sessions. Nowhere was this more evident than in the final plenary session, when, after extensive debate, a consensus was reached on a final statement of principles, referred to as the "Macquarie Statement" and reproduced on page xiii.

We decided on a thematic structure to organize the material contained in the various sections as it was felt that the broad spectrum of issues covered by the concept of biodiversity could best be presented in this manner. This in no way is meant to distract from the fact that the presenters represented every major region of the world and that the chapters address many of the same issues from a country-specific or regional perspective. Notwithstanding this thematic structure, it will be readily apparent that the book in its entirety also presents a global perspective on a matter of global concern.

The sections in the book represent seven themes. Part I sets the context in terms of history and the major governance structures in this area. Joseph L. Sax, in, "Environmental Law Forty Years Later: Looking Back and Looking Ahead," sets a challenge to environmental lawyers worldwide. He confronted us with the notion that there has been widespread failure to address the incentive systems that generate environmental degradation and that our legal systems need to reconstitute themselves to tackle the new values and understandings of contemporary environmental issues such as biodiversity. He shows how property law has developed to encourage exploitation of the land for human purposes and points out that even though we now have environmental laws to conserve land and water, the underlying property law has not changed. Environmental values have not been integrated into the basic structure of the law and so the old incentives remain. The theme of challenging the conference was continued with Dr Françoise Burhenne-Guilmin's chapter, "Biodiversity and International Law: Historical Perspectives and Present Challenges – Where Do We Come From, Where Are We Going?"

Dr Burhenne-Guilmin poses the challenge to lawyers of operationalising the ecosystem approach and promoting sustainable use within the CBD. Brendan Mackey considers the contribution that the Earth Charter plays in building a global moral community and its role in the foundation of new legal instruments, institutions and processes on global governance. Finally, Paul Martin examines how the role of law must change to meet the challenge of ecological sustainability.

Part II encompasses the conservation of biodiversity and is divided into three sections with the first identifying the needs, problems, and prerequisites in relation to biodiversity. Michael Jeffery questions the effectiveness of developing countries' implementation of the CBD's environmental protection and sustainable human development mandates, and, more specifically, he analyzes the CBD's role in poverty eradication and the "poverty-environment paradigm." He advocates improving environmental governance, developing strategies that meet the economic and social needs of people who depend on biodiversity products and the surrounding ecosystem, and resolving intellectual property issues that are inequitable to poorer countries. In his chapter, "Legal and Paralegal Rules for Biodiversity Conservation: A Sequence of Conceptual, Linguistic, and Legal Challenges," Douglas Fisher identifies the legal challenge resulting from the use of language in the field of biodiversity conservation. He questions our perceptions, understandings, and construction of the concept and value of nature and biodiversity and suggests how it should be expressed and treated in the legal system. Abdul Haseeb Ansari examines biodiversity issues from an Islamic, ethical, legal, and policy viewpoint. Implementation of the CBD is considered in "Experience, Mistakes and Challenges: The Implementation of the Convention on Biological Diversity in Brazil," by Jose Rubens Morato-Leite, Heline Sivini Ferreira, and Patryck de Araújo Ayala. The authors conclude that, although implementation of the CBD is crucial in a megadiverse country like Brazil, impediments, such as politics, institutional weakness, little or no access to information, economic issues, limited exchange and collaboration, social factors, and lack of appropriate policies and laws need to be overcome through a multidisciplinary and qualified group working together. Nicholas de Sadeleer looks at the unique position that European community law plays in the protection of biodiversity and concludes that although it may have an advantage over international law in terms of efficacy, there is a danger that the principle of subsidiarity may lead to a race to the bottom in terms of environmental protection. Justin Rose's chapter investigates the legal and institutional aspects of the region-wide promotion of community-based conservation and natural resources management as an environmental governance mechanism in the Pacific Island region.

The theme of Part III is conservation measures, which are divided into area-based and species-based. The Minister for the Environment in New South Wales, the Hon. Robert Debus, sets out his government's new initiatives on land management. These are community conservation areas, which are essentially multi-use reserves that are managed consistent with sustainability principles, where community involvement and input is encouraged. The other two chapters on area-based conservation are case studies from Ethiopia and Japan. Desalegn Wana's chapter, "Local People's Perceptions and Attitudes towards Nech-Sar National Park, Ethiopia," emphasizes the importance of a participatory approach for the conservation of biodiversity in ensuring the local people's involvement in park management. Yasuhiko Kagami examines the processes involved in the nomination of Shiretoko for world heritage status. The species-based approach