



**Essential Readings in Environmental Law**  
IUCN Academy of Environmental Law ([www.iucnael.org](http://www.iucnael.org))

## **BIODIVERSITY AND WILDLIFE LAW**

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### **Overview of Key Scholarships**

#### **Emergence of wildlife conservation and biodiversity law**

1. Hornaday, W.T., *Our Vanishing Wildlife: Its Extermination and Preservation* (Charles Scriber's Sons 1913);
2. Scarff, J.E., 'The international management of whales, dolphins and porpoises: An interdisciplinary assessment' (1977) 6(2) *Ecology Law Quarterly* 323-427; and
3. Snape (III), W. J., *Biodiversity and the Law*, Island Press, 1996.

#### **Focusing on wildlife and biodiversity law**

4. Cirelli, M.T., *Legal Trends in Wildlife Management* (FAO 2002);
5. Bowman, M., P. Davies, and C. Redgwell, *Lyster's International Wildlife Law*, (2<sup>nd</sup> edn, Cambridge University Press 2010);
6. Freyfogle, E.T, and D. D. Goble, *Wildlife Law: A Primer*, (Island Press 2012);
7. Bilderbeek, S., (ed), *Biodiversity and International Law* (IOS Press, 1992); and
8. Jeffery, M.I., J. Firestone, and K. Bubna-Litic (Eds) *Biodiversity Conservation, Law and Livelihoods: Bridging the North-South Divide* (IUCN 2008).

#### **Specific contexts, critical and cross-cutting Issues**

9. Oldfield, S., (ed), *The Trade in Wildlife: Regulation for Conservation: Regulation for Conservation*, (Earthscan 2003);
10. Morgera, E., *Wildlife law and the empowerment of the poor* (Food and Agriculture Organization 2011);
11. Philippopoulos-Mihalopoulos, A., (ed), *Law and Ecology: New Environmental Foundations*, (Routledge, 2011); and
12. McManis, C.R., (ed), *Biodiversity and the Law: Intellectual Property, Biotechnology and Traditional Knowledge* (Earthscan, 2012).

## **Background**

The conservation of living natural resources has ancient origins. It is clear that many Indigenous and traditional communities did, and continue to, conserve and manage wildlife and natural resources. Most of the documentation of these practices is within the (legal) anthropological literature. In a contemporary context concern for the environment first emerged in the late 19<sup>th</sup> century. Literature at the time, as well as environmental historical research, captures early concerns about environmental degradation, wildlife loss and calls for conservation laws to be established. Some of the earliest laws at this time were space-based measures including the first national parks established to protect nature more broadly.

At the international level, developments early in the twentieth century focused on management of harvested wildlife resources (for example, the *North Pacific Fur Seal Convention, 1911* and *Whaling Conventions*). However, significant concern for loss of wildlife and the need for species conservation grew in the 1970s and 1980s leading to a rapid expansion in national and international law. Over time, as scientific findings were made and areas such as ecology developed, laws and policies moved from single species (*Agreement on the Conservation of Polar Bears*) to groups of species (*Convention on Migratory Species*). Later habitat treaties (*Ramsar Convention on Wetlands of International Importance*) were adopted as well as specific agreements focusing on the underlying causes of degradation (for example, *Convention on International Trade in Endangered Species*). A broadening of the focus from wildlife to biodiversity conservation emerged in the 1980s and culminated in the adoption of the *Convention on Biological Diversity*. This evolution is matched in terms of the literature.

Wildlife law is distinguishable from animal rights and animal law. Wildlife law tends to focus on wild and native animal conservation. Whereas, animal law focuses on domestic and farmed animals, and animal rights on the welfare of those species, most wildlife law concentrates predominantly on conservation of species. Utilisation of wildlife, for example in terms of fisheries, tends to be considered in the context of natural resources law more broadly. The adoption of the Convention on Biological Diversity, with its focus on conservation and sustainable use, caused a broadening of the research focus, and literature, to include these issues.

While the twelve texts selected as Essential Readings in this list are those that focus on wildlife and biodiversity law, there are many important contributions that can be found in texts that aim to cover the entire field of environmental law. This is true both with regard to international and national law. With regard to the former, there is a vast array of international environmental law literature commencing in the 1970s and the depth and breadth of literature continues to expand. Most of the key texts include at least one chapter on wildlife and/or biodiversity law. Likewise, a number of publications have been written on national contexts from the earliest development of wildlife laws to contemporary biodiversity conservation. A number of texts are suggested in the list at the end of this paper with relevant chapters indicated in parentheses.

## **Emergence of Wildlife Conservation**

1. Early literature, such as **W.T. Hornaday**, in *Our Vanishing Wildlife* (1913), sounded a warning about loss of wildlife and called for the development of new laws to address conservation concerns. The book is divided into two parts: extermination and

preservation. It covers a range of jurisdictions but is not comprehensively global in its coverage. Under preservation are chapters on 'how to make a new game law', the 'new laws needed' and 'game preserves and game laws in Canada'. Although over a century old now, the book is interesting from an historical perspective, not only given the consideration of legal perspectives related to wildlife preservation, but also because of the utilisations of wildlife resources that have long since been abandoned.

2. Later still, authors such as **J.E. Scarff** (1977) began to narrow their attention to specific species, in this case cetaceans, in his paper titled *The international management of whales, dolphins and porpoises: An interdisciplinary assessment*. This is not the only publication of this type at the time, but it is illustrative of the more focused scholarship on a group of species whilst simultaneously taking a more international perspective. This article explores early legal efforts to regulate whaling, the subsequent International Convention on the Regulation of Whaling, the work of the International Whaling Commission, as well as more philosophical issues such as the ethics of killing cetaceans.
3. **W.J. Snape**, in his volume, *Biodiversity and the Law* (1996), includes both a historical perspective and contemporary analysis of biodiversity and the law, mainly in the international and US context. A focus is how existing law can be utilised to conserve biodiversity as well as the future of biodiversity law. Although not an interdisciplinary text, it does include some consideration of the scientific and economic issues.

#### **Focusing on wildlife and biodiversity law**

4. The book, *Legal Trends in Wildlife Management* (2002), by **M.T. Cirelli** provides an analysis of national wildlife laws from around the world, as well as key features of international wildlife treaties. This is a valuable contribution to the literature because it identifies contemporary developments which have improved wildlife laws including the incorporation of socio-cultural dimensions and public participation, the focus on identification of the underlying causes of wildlife loss, and better management and planning.
5. Relatively few texts are devoted purely to wildlife law. The book by **M. Bowman, P. Davies** and **C. Redgwell**, *Lyster's International Wildlife Law*, (2010), is the latest edition of a longstanding text in this area (the original text being published in 1985). The book provides an analysis of international wildlife and habitat protection treaties and their implementation, as well as an analysis of the foundations for wildlife protection, and cross-cutting issues such as wildlife trade, the impact of climate change and anthropogenic interferences with species.
6. **E.T. Freyfogle** and **D.D.Goble's**, *Wildlife Law* (2012), provides a comprehensive analysis of US State and Federal wildlife law, including constitutional issues, legislation, key wildlife issues and legal responses. There are few such comprehensive texts in other jurisdictions, and as noted above, most wildlife law analyses are contained within broader environmental law texts.
7. **S. Bilderbeek's** book, *Biodiversity and International Law* (1992) was one of the first texts to address international environmental law and the conservation of biodiversity and captures the presentations and findings of the Netherlands Committee for IUCN 1991 International Environmental Law Conference. The authors are drawn from a wide range

of backgrounds, many of whom have gone on to become leaders in this area. Highlights include speeches by **D.A. Posey** on ‘The relation between cultural diversity and biological diversity’; and **A.A. Oposa** ‘Institutional roles in establishing environmental priorities’.

8. A common theme in much of the literature is the role of community participation and equitable utilisation. The book edited by **M.I. Jeffery, J. Firestone** and **K. Bubna-Litic**, titled ***Biodiversity Conservation, Law and Livelihoods: Bridging the North-South Divide*** (2008) is one such volume. The book brings together a number of the papers on biodiversity conservation and the maintenance of sustainable cultures, from international, regional, and national 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.

### **Specific contexts, critical and cross-cutting Issues**

In the last two decades a considerable body of literature has developed around specific issues underlying biodiversity loss and affecting wildlife conservation. Several themes can be identified including literature which looks at particular causes of wildlife loss, new perspectives that may impact upon the achievement of positive outcomes, intersections of biodiversity law with other areas, and challenges that remain either unchanged or where interventions to date have been ineffective.

9. **S. Oldfield’s** edited text, ***The Trade in Wildlife: Regulation for Conservation***, (2003) explores the underlying cause of much wildlife loss, being trade. The book covers the regulation of international trade and its enforcement, as well as exploring a number of case studies. Although this text is now over a decade old the challenges that it explores remain current. In particular, the section on lessons learned from other illegal trade regulation experiences remains valuable.
10. In the text by **E. Morgera’s** ***Wildlife law and the empowerment of the poor*** (2011), rather than focusing on how poverty can contribute to loss of wildlife, the perspective taken is to explore rights that can support community-based wildlife management and public participation in conservation, as well as frameworks to support traditional uses. The author examines wildlife and biodiversity treaties and the international law that supports a rights-based approach (including the *Aarhus Convention (Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters)*) before moving to an examination of key elements of national legislation that can be utilised to facilitate community involvement in planning, management, conservation, use and enforcement.
11. The book edited by **A. Philippopoulos-Mihalopoulos**, ***Law and Ecology*** (2011), is a more theoretical analysis examining the connection between law and ecology. This edited text includes chapters from a variety of perspectives and authors. Some chapters are more theoretical (covering topics such as the ‘ecological narrative of risk’ and ‘animals and the future salvation of the world’) and others more applied (for example ‘biotechnology as environmental regulation’ and ‘perspectives on environmental law and the law relating to

sustainability: a continuing role for ecofeminism’). Overall the volume adds greatly to the literature by taking a less anthropocentric approach to nature conservation.

12. Edited by **C. R. McManis**, the book titled *Biodiversity and the Law: Intellectual Property, Biotechnology and Traditional Knowledge* (2012) is an edited volume with contributions from lawyers and other social scientists as well as biologists. It explores biodiversity and the law including biotechnology as both a solution and a source of biodiversity loss, bio-prospecting and the contribution of traditional knowledge to these areas.

### **Discussion Topics and Questions**

1. How can the Aichi targets be achieved?
2. Area-based versus species-based measures. Is a more holistic regime needed?
3. Combatting illegal wildlife trade.
4. Conserving wildlife and biodiversity in areas beyond national jurisdiction
5. How to address the impacts of climate change on wildlife and biodiversity?
6. Invasive species

### **Organisations, Websites and Projects**

#### Organisations

1. Centre for Biodiversity Policy and Law
2. Center for International Environmental Law
3. Center for International Sustainable Development Law (CISDL)
4. Center for Wildlife Law (USA)
5. Centre of Excellence for Biodiversity Law, University of Malaya - [http://law.um.edu.my/?modul=Research\\_Centres](http://law.um.edu.my/?modul=Research_Centres)
6. Institute for Conservation Biology and Law, University of Wollongong
7. International Union for Conservation of Nature and Natural Resources (IUCN)
8. Wildlife Conservation Society

#### Websites

1. **ECOLEX** -which is operated jointly by FAO, IUCN and UNEP ([www.ecolex.org](http://www.ecolex.org))
2. **WashLaw Web Wildlife Law** - ([www.washlaw.edu/subject/wild.html](http://www.washlaw.edu/subject/wild.html))

### **Journals**

1. *Biodiversity and Conservation*;
2. *Ecology Law Quarterly*;
3. *International Journal of Marine and Coastal Law*;
4. *Journal of International Wildlife Law & Policy*;
5. *Journal of Wildlife Management*; and
6. *Natural Resources Journal*.

## **Key terms**

1. *Aichi* targets are 20 specific goals agreed at the Conference of the Parties to the Convention on Biological Diversity in 2010. They focus on addressing the underlying causes of biodiversity loss and direct pressures on biodiversity, improving the status of biodiversity, promoting sustainable use and enhancing the benefits to all, and improving implementation through participatory planning, knowledge management and capacity building.
2. *Alien species* means flora or fauna which are introduced by humans and are non-native to an area, region or country.
3. *Animal law* focuses on the protection of fauna predominantly in relation to domestic, farm and companion animals.
4. *Animal rights* is an area of law focusing on the welfare of fauna.
5. *Area-based measures* are legal tools used to conserve the environment and natural resources through declaration of protected zones such as national or marine parks, nature or aquatic reserves etc.
6. *Biodiversity* is a shortened form of the phrase 'biological diversity'. From a legal perspective it is defined in the Convention on Biological Diversity as including genetic, species and ecosystem diversity.
7. *Endemic species* are those flora or fauna native to a particular area, region or country.
8. *Invasive species* are alien species (see above) which are introduced and become established in the introduced environment and have a negative impact on local ecosystems and species.
9. *Species-based measures* are law and policy tools which focus on particular species such as quotas, prohibitions on harvesting and equipment restrictions in a species context etc.
10. *Wildlife law* is all law which focuses on the protection of fauna but it tends to focus upon wild and native species.

## **Other Relevant Literature**

### **Background and historical texts**

- Black, J.D. , *The Management and Conservation of Biological Resources* (FA Davis Company 1968);
- Lund, T., 'Nineteenth Century Wildlife Law: A Case Study of Elite Influence' (2001) 33 *Ariz. St. L.J.* 935; and
- Sands, P. (ed), *Greening International Law* (The Free Press 1994).

### **International environmental law texts with reference to wildlife and biodiversity law**

- Alam S., J.H. Bhuiyan, T.M.R., Chowdhury, and E.J. Techera (Eds) *Routledge Handbook of International Environmental Law* (Routledge, 2013) (see the following chapters: chapter 12 Biological Diversity written by C. Oguamanam; chapter 13 Freshwater, Habitats and Ecosystems by D. Fisher; chapter 15 Marine Environmental Law: UNCLOS and Fisheries by R. Bratspies and A. Telesetsky);
- Birnie P., A. Boyle, and C. Redgwell, *International Law and the Environment*, (3<sup>rd</sup> Ed, Oxford University Press, 2009) (see in particular chapter 11 Conservation of Nature, Ecosystems, and Biodiversity: Principles and Problems; chapter 12 Conservation of Migratory and Land-based Species and Biodiversity; chapter 13 Conservation of Marine Living Resources and Biodiversity);

- Bodansky, D., J. Brunnee and E. Hey (Eds), *The Oxford Handbook of International Environmental Law* (Oxford University Press, 2008) (see in particular the following chapters: 15 Ocean and freshwater resources by Freestone D. and S.M.A. Salman; 16 Biological Resources by Rayfuse, R.; 24 Ecosystems by Tarlock D.);
- Fitzmaurice, M., D. Ong, and P. Merkouris (Eds), *Research Handbook on International Environmental Law* (Edward Elgar, 2011) (see in particular the two following chapters: 24 International Environmental Law Governing Threats to Biological Diversity by Ong D.M.; 25 Fisheries and Marine Biodiversity by Barnes, R.);
- Hunter, D., J. Salzman and D. Zaelke, *International Environmental Law and Policy* (4<sup>th</sup> Ed, Foundation Press, 2010) (see in particular chapter 15 Biodiversity and Wildlife Conservation);
- Koivurova, T., *Introduction to International Environmental Law* (Routledge, 2014) (see in particular chapter 5 Branches of international environmental law);
- Sands, P. and J. Peel, *Principles of International Environmental Law*, (3rd Ed, Cambridge University Press 2012) (see in particular the following chapters: 8 Freshwater resources; 9 Oceans, seas and fisheries; 10 Biodiversity); and
- Wold, C., (1995) *The Biodiversity Convention and Existing International Agreements: Opportunities for Synergy*. Washington DC: The Humane Society of the United States/International.

#### Environmental law texts in a national context

- Bates, G., *Environmental Law in Australia* (8th edn, LexisNexis 2013) (see the relevant chapters: 11 Protected areas; 12 Native vegetation; 13 Native wildlife and threatened species);
- Bell S., D. McGillivray and O. Pedersen (Eds) *Environmental Law*, (8<sup>th</sup> edn, Oxford University Press 2013) (see chapter 19 on Conservation of Nature);
- Fisher, E., B. Lange and E. Scotford, *Environmental Law: Text, Cases & Materials* (Oxford University Press 2013) (see in particular chapter 20 on Nature Conservation);
- Kidd, M., *Environmental Law* (Juta 2011); (see in particular chapter 5 on Conservation of Biological Diversity);
- Medaglia, J.C., F.K. Phillips and F. Perron-Welch in collaboration with J. Rohe and R. Jiménez-Aybar, 'Biodiversity Legislation Study A Review Of Biodiversity Legislation in 8 Countries' (Global Legislators' Organisation (GLOBE), World Future Council and Centre for International Sustainable Development Law (CISDL) 2014); and
- van der Linde, M., and L. Feris (Eds), *Compendium of South African Environmental Legislation*, (Pretoria University Press 2010) (see in particular chapters 2.2.2.5 (Animals) and 2.2.2.6 (Fisheries)).

#### Specific issues in wildlife and biodiversity law

- Ayling, J., 'What Sustains Wildlife Crime? Rhino Horn Trading and the Resilience of Criminal Networks', (2013) 16(1) *Journal of International Wildlife Law & Policy* 57;
- Couzens, E., *Whales and Elephants in International Conservation Law and Politics* (Routledge 2013);
- Gillespie, A., 'Biodiversity, Indigenous Peoples and Equity in International Law' (2000) 4 *New Zealand Journal of Environmental Law* 1-47;
- Lueck, D., 'The Economic Nature of Wildlife Law' (1989) 18(2) *Journal of Legal Studies* 291-324;

- Nurse, A., *Policing Wildlife: Perspectives on the Enforcement of Wildlife Legislation* (Palgrave Macmillan 2015);
- Vincent, K., 'Reforming Wildlife Law: The Law Commission Proposals for Wildlife Law and Wildlife Sanctions' (2014) 3(2) *International Journal for Crim, Justice and Social Democracy* 67-80; and
- Warner, R., 'Conserving marine biodiversity in areas beyond national jurisdiction: co-evolution and interaction with the law of the sea' (2014) 6(1) *Frontiers in Marine Science* 1-11.