A PRIMER ON INTERNATIONAL ENVIRONMENTAL LAW: SUSTAINABILITY AS A PRINCIPLE OF INTERNATIONAL LAW AND CUSTOM

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ABSTRACT

International environmental law draws from two important sources: international treaties and conventions and customary international law. The main body of international environmental law today is comprised of around twenty multilateral treaties and more than 275 bilateral agreements that contain explicit references to environmental issues. This article provides an overview of many of the important sources of international environmental law and a

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1. A treaty, under international law, is a “formal agreement between sovereign states or organizations of states. The term treaty is ordinarily confined to important formal agreements, while less formal international accords are called conventions, acts, declarations, or protocols.” The Columbia Encyclopedia (University Press, 2004), http://encyclopedia2.thefreedictionary.com/Convention+and+treaty (last visited Jan. 21, 2009). A treaty has been more formally defined as “any international agreement in any written form, whether embodied in a single instrument or in two or more related instruments and whatever its particular designation (treaty, convention, protocol, covenant, charter, statute, act, declaration, concordat, exchange of notes, agreed minute, memorandum of agreement, modus vivendi or any other appellation).” Documents of the 14th Session, [1962] 2 Y.B. Int’l L. Comm’n 31, U.N. Doc. A/CN.4/SER.A/1962/Add.1.
survey of several international institutions that are most heavily involved in the arena of international environmental law. The article relies on primary statutory materials, academic and legal publications, and organizational, institutional, and other internet sources.

I. INTRODUCTION

In general, the interrelationship between national legal systems and international law is subject to great discussion and controversy. Because of the confluence, yet seeming contradiction, of concepts such as national sovereignty and the principle of global social responsibility "there is disagreement over whether indeed there can even be a body of law known as international law, and if there is, what those laws are." In fact, there is neither any international super-legislative power to establish an international environmental regime nor any effective international enforcement mechanism concerning international environmental agreements that have been created.

The primary source of international law emanates from the major actors in the international arena—the traditional nation-states—as represented by and through their legally constituted governments and national parliaments. While Article 38 of the Statute of the International Court of Justice speaks generally to the issue of the origin and foundation of international law, in reality, international law itself, as it is applied to consenting nation-states, is said to be derived from two primary sources: treaties, conventions, and other agreements

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2. The traditional characteristics of sovereignty generally are said to include:
   a) independence of political and economic institutions;
   b) an effective governmental structure (including executive, legislative, and judicial branches);
   c) a defined physical territory;
   d) the capacity to enter into and conduct foreign relations; and
   e) a population.

See, e.g., Nkambo Mugerwa, Subjects of International Law, in Manual of Public International Law, 253–55 (1968). It is from this principle of sovereignty that important principles of international law have been established: the equality of states and the duty to refrain from interference in the external and internal affairs of other sovereign states. Id. at 254.


4. A nation state is generally considered as a "political unit consisting of an autonomous state inhabited predominantly by a people sharing a common culture, history, and language." American Heritage Dictionary (5th ed. 2000).

freely entered into by nation-states,\(^6\) and “general principles” derived from long-standing practices among nations.\(^7\)

In more recent times, intergovernmental agencies and nongovernmental organizations (NGOs), “other subjects of international law,”\(^8\) multinational corporations (MNCs),\(^9\) and individuals,\(^10\) have all become major “actors” in the creation and development of international law.

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7. This represents the so-called *consensual view* of international law, as it was reflected in the 1920 Statute of the Permanent Court of International Justice, and later preserved in Article 38(1) of the 1946 Statute of the International Court of Justice. Article 38(1) is generally recognized as a definitive statement of the sources of international law. In deciding a case, the International Court of Justice may apply (a) international conventions “expressly recognized by the contesting states,” and (b) “international custom, as evidence of a general practice accepted as law.” Subparagraph (c) adds the requirement that the general principles applied by the Court are “the general principles of the law recognized by civilized nations.” Statute of the I.C.J., art. 38(1)(c). In addition, as it is nation-states that by their consent determine the content of international law, sub-paragraph (d) acknowledges that the International Court of Justice is also entitled to refer to “judicial decisions” and the most highly qualified juristic writings “as subsidiary means for the determination of rules of law.” It is also well established that “[t]he Party which relies on a custom of this kind must prove that this custom is established in such a manner that it has become binding on the other Party.” Asylum Case (Colom. v. Peru), Judgment, 1950 I.C.J. 276 (Nov. 20).


[A] corporation that has its facilities and other assets in at least one country other than its home country. Such companies have offices and/or factories in different countries and usually have a centralized head office where they co-ordinate global management. Very large multinationals have budgets that exceed those of many small countries...

Sometimes referred to as a *transnational* corporation.

*Id.* (emphasis added).


> Where the facts warrant, the ATCA may be a viable remedy for foreign environmental misconduct by U.S. corporations. Corporations may be liable for violations of environmental treaties, such as the International Convention for the Prevention of Pollution from Ships or the Convention on Long-Range Transboundary Pollution that the United States has ratified.

II. SOURCES OF INTERNATIONAL ENVIRONMENTAL LAW

A. Conventional Law

Much of the origin of contemporary international environmental law can be traced to the important United Nations Conference on the Human Environment, held in Stockholm, Sweden, in 1972, which produced the historic *Stockholm Declaration.*\(^{11}\) The *Declaration* contains twenty six principles, an action plan consisting of 109 separate recommendations, and a resolution dealing with institutional and financial arrangements. Topics covered in the principles include:

a) Principle 1: Fundamental Human Rights;

b) Principles 2–7: Management of Human Resources;

c) Principles 8–12: The Relationship between Development and the Environment;

d) Principles 13–17: Planning and Demographic Policy;

e) Principles 18–20: Science and Technology;

f) Principles 21–22: State Responsibility;

g) Principles 23–25: Respect for National Environmental Standards, along with the need for State Cooperation; and

h) Principle 26: The Threat of Nuclear Weapons to the Environment.\(^{12}\)

A second seminal agreement was adopted by the United Nations General Assembly in 1982, by a vote of 111–1.\(^{13}\) It is called the *World Charter for Nature.*\(^{14}\) The *Charter* contains a preamble and twenty-five principles, as follows:

a) Principles 1–5: General Principles;

b) Principles 6–13: Providing Detailed Rules for the Management of the National Environment; and

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14. *Id.*
B. Customary International Law

Professor Stephen Schwebel was elected as a Judge to the International Court of Justice in 1981, representing the United States. Professor Schwebel later served as its President from 1997-2000. Justice Schwebel described the area of customary international law as follows:

The content of customary international law, or the governing interpretation of a treaty, may be influenced or even determined by a judgment of the Court. The Court's decisions thus enjoy, as Lauterpacht has put it, an 'intrinsic' authority within the international community. The 'intrinsic' authority of the Court's decisions and the coherence of its case-law are fundamental factors which enable it to contribute to the development of international law.

Customary law is likewise defined in Article 38 of the statute of the International Court of Justice. Customary law may be seen as analogous to common law in the legal system of the United States or of the United Kingdom. Customary law has its source in what is termed as "state
practice" in the "general principles of law that are recognized by civilized nations," and in the judicial decisions of respected jurists. Many customary law provisions in the realm of international environmental law have been subsequently enacted as treaty provisions. Two respected private organizations, the International Law Association (ILA) and the International Law Commission (ILC), have undertaken to codify many customary rules.

It should also be recognized that under traditional principles of international law, the obligation to prevent transnational pollution—the key international environmental issue—falls squarely and solely upon individual states. In essence, in attempting to address the panoply of issues, and "[d]rawing upon international custom as the primary source of law, publicists have sought to develop an international liability scheme to regulate transboundary pollution and have codified rules of customary international law to clarify the legal duty

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REV. 1555, 1561 (1984); The Extent to Which the Common Law is Applied in Determining What Constitutes a Crime, and the Nature and Degree of Punishment Consequent Thereupon, in THE AMERICAN LAW REGISTER 135 (Jan. 1867) (noting that "The law of nations, being the common law of the civilized world, may be said, indeed, to be a part of the law of every civilized nation; but it stands on other and higher grounds than municipal customs, statutes, edicts, or ordinances."). Professor Henkin is the former President of the American Society of International Law and the Chairman of the Institute for the Study of Human Rights at Columbia University. Columbia Law School, Louis Henkin, http://www.law.columbia.edu/null?&layout=profpopup&main.ctrl=contactmgr.detail&main.view=profiles.detail&global.id=545 (last visited Nov 1, 2008).


23. The International Law Association (ILA) was founded in Brussels in 1873. It has "consultative status" as an international NGO, with a number of specialized agencies in the United Nations system. The website of the ILA notes:

The main objectives of the Association are the study, clarification and development of both public and private international law. It is in the work of the various International Committees that these aims are pursued and biennial conferences provide a forum for comprehensive discussion and endorsement for the work of these committees.


upon states to prevent serious transnational environmental harm." However, efforts to develop an effective and enforceable international liability scheme have largely been unsuccessful. Thus, proponents of the creation of an international environmental regime have focused efforts on imposing procedural obligations on states—"such as the duty to assess potential environmental harm to another state from domestic activity and the duty to inform other nations of activity threatening transfrontier environmental injury." 

Professor Nancy Kubasek has developed an important construct and has described four basic principles that have evolved under customary environmental law that will be further delineated in this paper. In the discussion of Professor Kubasek's ideas, three rather famous and important cases will be considered: the Trail Smelter Arbitration, the River Oder Case, and the Corfu Channel Case.

The first principle of customary international law is that of "good neighborliness"—that is, no state is entitled to use its land in a way that might infringe on the rights of another nation. The doctrine is allied in the U.S. common law with the concept of nuisance—involving an unreasonable interference with the use and enjoyment of another's land—and practically may be most relevant in the area of water and air pollution. The doctrine of "good neighborliness" may be best exemplified as a principle of customary law in the Trail Smelter Arbitration.

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26. Id. at 1493.
27. Kubasek, supra note 3, at 432–34.
28. The citation may be found in its Latin form: "Sic uter tuo alienum laedas." Id. at 432.

Principle 21 of the Stockholm Declaration effectively underscores this principle:

States have, in accordance with the Charter of the United Nations and the principles of international law, the sovereign right to exploit their own resources pursuant to their environmental principles, and the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other states or areas beyond the limits of national jurisdiction.


In this case, it was alleged that sulfur dioxide fumes from a smelter located in Trail, British Columbia, were causing damage to farmland and crops in the neighboring State of Washington. The initial complaint was brought in 1926. After many years of intense bilateral negotiations between the United States and Canada, the government of Canada accepted liability and agreed to arbitrate the issue of damages. In its 1941 decision, the arbitration panel wrote:

Under the principles of international law, as well as U.S. law, no state has the right to use or permit the use of its territory in such a manner as to cause injury by fumes in or to the territory of another [state] or the properties or persons therein, when the case is of serious consequence and the injury is established by clear and convincing evidence.

A second principle is that of due diligence in protecting the rights of other states in the international environmental arena. It may be true that while international environmental law does not contain any absolute prohibition on pollution, the duty has been extended to require that states take measures necessary to prevent and abate pollution, as far as possible, given realistic economic constraints.

A third principle is that of the equitable or reasonable utilization of shared resources, which was promulgated in the River Oder case. In this case, the Permanent Court of International Justice set the standard for the operation of the rule of equitable use of shared resources by stating: "... this Community of interest [of riparian states] in a navigable river becomes the basis of a common legal right, the essential features of which are the perfect equality of

32. Id. at 1917, 1924.
33. Trail, British Columbia, was the home to the largest lead and zinc smelting complex both in Canada and in the British Empire. Noxious smoke from the 400-foot high stacks regularly made its way down the Columbia River valley. Upon crossing into the United States, the smoke caused damage to crops and forests in Washington State. University of Idaho, Trail Smelter Arbitration, http://www.law.uidaho.edu/default.aspx?pid=66516 (last visited Oct. 26, 2008). The website notes: "Today, the Trail Smelter Arbitration is celebrated as the first international ruling on transborder air pollution, having established the 'polluter pays' principle as the basis for resolving transboundary environmental disputes and remains one of the key underpinnings of international environmental law." Id.
34. ENCYCLOPEDIA OF PUBLIC INTERNATIONAL LAW 900 (Vol. 4 2000).
36. Id.
all riparian states in the use of the whole course of the river...."\(^{38}\) This important principle was emphasized by its inclusion in the Helsinki Rules.\(^{39}\) In fact, Article IV of the Helsinki Rules states: "Each basin state is entitled, within its territory, to a reasonable and equitable share in the beneficial uses of the waters of an international drainage basin."\(^{40}\)

The Helsinki Rules are quite instructive in providing guidance as to what may be considered "reasonable" by listing several factors that should be taken into account in any determination. These factors (not delineated in any order of importance) include:

a) Geographic and climatic conditions;
b) Social and economic needs of the neighboring states;
c) Comparative costs of alternative ways to satisfy those needs;
d) Availability of the technology to reduce the impact on the environment; and

e) The practicality of compensation as a means of adjusting any burden.\(^{41}\)

The fourth principle of customary international law is a duty to inform and cooperate by giving prior notice under certain circumstances. The duty to give prior notice may be exemplified by the Corfu Channel case\(^{42}\)—in fact, the first case heard by the International Court of Justice. In this case, two British warships were traveling through the Corfu Channel, a part of the territorial waters of Albania.\(^{43}\) The warships were damaged by mines that had been previously placed in the waters by the Germans during World War II.\(^{44}\) It was alleged that Albania had \textit{at least} some knowledge of the existence of the mines

\(^{38}\) \textit{Id.}\(^{39}\) \textit{INTERNATIONAL LAW ASSOCIATION, REPORT OF THE FIFTY-SECOND CONFERENCE} 487 (1967).

\(^{40}\) \textit{Id.} at 486.

\(^{41}\) \textit{Id.} at 497.


\(^{43}\) \textit{Id.} at 12. By way of contrast, under established principles of international law, [\ldots ] the term \textit{international waterways} is used to designate relatively narrow channels of marginal sea or inland waters though which international shipping has a right of passage because the waterways either connect two areas of the high seas or enable ocean shipping to reach interior ports on international seas, gulfs, or lakes that otherwise would be landlocked, or rivers that serve as international boundaries or traverse successively two or more states. Their legal status as open to ships carrying cargo or passengers to or from foreign ports is partly recognized in customary international law and is partly governed by particular treaty agreements.

\(^{44}\) \textit{Corfu Channel Case, supra} note 42, at 12–13.
and thus should bear the responsibility for the damage to property or any loss of life.\textsuperscript{45} The Court noted:

From all the facts and observations mentioned above, the Court draws the conclusion that the laying of the minefield which caused the explosions on October 22nd, 1946, could not have been accomplished without the knowledge of the Albanian government.\textsuperscript{46} As regards the obligations resulting for her from this knowledge, they are not disputed. It was her duty to notify shipping and especially to warn the ships proceeding through the Strait on October 22nd of the danger to which they were exposed. In fact, nothing was attempted by Albania to prevent the disaster, and these grave omissions involve her international responsibility.\textsuperscript{47}

The International Court of Justice ruled that Albania had a duty to compensate the British for damage to its property and for loss of life.\textsuperscript{48} The Court stated: "[t]he obligations incumbent upon the Albanian authorities consisted in notifying...the existence of a minefield in Albanian territorial waters and in warning the approaching British warships of the imminent danger to which the minefield exposed them."\textsuperscript{49} The case is also important because the International Court of Justice established a standard for the amount or quantum of proof that states must meet in litigation before the International Court. The preponderance of evidence standard was established in order for a state to prevail before the Court in future cases.\textsuperscript{50}

III. INTERNATIONAL INSTITUTIONS WITH AN IMPACT ON INTERNATIONAL ENVIRONMENTAL LAW

Clearly, the United Nations is the most important and influential intergovernmental organization involved in the development of international environmental law. In reality, the creation, adoption, and articulation of recommendations, policies, treaties, and conventions by the United Nations is a critical first step towards the realization of a worldwide environmental imperative. Several individual United Nations programs merit special attention and a closer look.

\textsuperscript{45} Id. at 18.  
\textsuperscript{46} Id. at 22.  
\textsuperscript{47} Id. at 23.  
\textsuperscript{49} Corfu Channel Case, supra note 39, at 22.  
\textsuperscript{50} Id.
A. The United Nations Environment Programme (UNEP)\textsuperscript{51}

The United Nations Environment Programme (UNEP) is charged with coordinating United Nations environmental activities, assisting developing countries in implementing environmentally sound policies, and encouraging sustainable development through the adoption and implementation of sound environmental practices.\textsuperscript{52} The UNEP, headquartered in Nairobi, Kenya,\textsuperscript{53} was founded as a result of the June 1972 United Nations Conference on the Human Environment.\textsuperscript{54} The UNEP also has six regional offices serving West Africa, North America, Europe, Latin America and the Caribbean, Africa, and Asia and the Pacific, and various country offices.\textsuperscript{55}

In 1972, the United Nations General Assembly, through Resolution 2997, mandated that the UNEP and the Environmental Fund take steps to effectuate the plan of action set forth in the \textit{Stockholm Declaration}.\textsuperscript{56} The UNEP has a structure comprising three separate entities:

The \textit{Governing Council} is charged with promoting international cooperation on environmental matters and providing general guidance on policy matters for directing and coordinating the various environmental programs within the United Nations system.\textsuperscript{57} In addition, each year, the Council reviews and approves the allocation of money from the Environmental Fund.\textsuperscript{58} The Council reports on the activities of the UNEP to the General Assembly through the Economic and Social Council (ECOSOC).\textsuperscript{59} The Council is composed of fifty-eight member states, elected on a rotating basis from the membership of the General Assembly.\textsuperscript{60}

The \textit{Environment Secretary} is headed by the UNEP’s Executive Director (currently Achim Steiner of Germany) and consists of a staff of approximately 200.\textsuperscript{61} The Secretariat coordinates the various environmental programs in the

\begin{itemize}
\item \textsuperscript{52} Id. at 18.
\item \textsuperscript{53} Id. at 8.
\item \textsuperscript{54} Id.
\item \textsuperscript{55} Id. at 21.
\item \textsuperscript{57} Id.
\item \textsuperscript{58} Id. ¶ II.2.c.
\item \textsuperscript{59} Id. ¶ II.2.h.
\item \textsuperscript{60} Id. ¶ III.1.
\item \textsuperscript{61} G.A. Res. 2997 (XXII), \textit{supra} note 56.
\end{itemize}
United Nations system, reviews and evaluates the effectiveness of the programs, advises the myriad intergovernmental bodies of the United Nations system on environmental programs, and administers the Environment Fund.

The Environment Fund generally relies on voluntary contributions from member states in order to create a funding mechanism for financing various United Nations initiatives and for sponsoring its many programs.

Among the major programs offered by the UNEP are the Division of Early Warning Assessment (DEWA), responsible for analyzing the state of the global environment and assessing global and regional environmental trends; the Global Environment Outlook Project (GEO), a "clearing house" for information from DEWA and other UNEP and non-UNEP organizations; the Global Resources Information Database (GRID), designed to "assimilate and reference data geographically" from a wide variety of sources—including satellite observations; and the Regional Seas Programme, fostering cooperation among nations sharing coastal areas and encouraging regional agreements to address waste water and related development issues.

B. The World Bank

Prior to the mid-1980s, environmental factors were rarely raised as considerations in lending decisions by the World Bank. That situation changed radically in 1987 when the World Bank was reorganized and a dedicated environmental department was established. Nations who applied for World Bank funding were required to prepare an environmental issues paper (similar

62. Id. ¶ II.1.
63. Id.
64. Id. ¶ II.2.c.
65. Id. ¶ II.2.h.
70. This program involves more than 140 states and territories, participating in thirteen Regional Seas programs. See United Nations Environment Programme, Regional Seas Programme, http://www.unep.org/regionalseas/About/default.asp (last visited Mar. 23, 2008).
to the "Environmental Impact Statement" in the United States) for each loan application. When an individual project application is under consideration, a preliminary screening is undertaken by the environmental department of the World Bank. Each project will receive an "environmental rating:"

a) Category A— Involves the greatest potential to incur environmental impact. As a result, a full environmental audit (EA) will be required of the potential borrower;

b) Category B—requiring a limited assessment of specific impacts;

c) Category C—not requiring any assessment because the project request is unlikely to have an environmental impact;

d) Category FL— not requiring an assessment because the environment is the focus of the project itself.

The World Bank reported that in the ten-year period from 1990–2000, 210 individual projects were classified as Category A, requiring a full environmental audit, and 1004 projects were classified as Category B, requiring a limited assessment. In 2001, the World Bank issued a strong statement and


a) establishes the CEQ (Council on Environmental Quality), which operates as a federal "watchdog" on environmental policy;

b) requires federal agencies to take environmental consequences into account in their decision-making processes; and

c) requires that an Environmental Impact Study (EIS) be prepared for every major legislative proposal of any action by a federal agency that has a significant impact on the quality of the human environment.


73. This procedure may closely resemble what is known as an environmental audit under U.S. law. The Environmental Protection Agency (EPA) defines the procedure as a "systematic, documented, periodic and objective review by regulated entities of facility operations and practices related to meeting environmental requirements." See EPA, INCENTIVES FOR SELF-POLICING: DISCOVERY, DISCLOSURE, CORRECTION AND PREVENTION OF VIOLATIONS 36 (May 11, 2000), http://www.epa.gov/compliance/resources/policies/incentives/auditing/auditpolicy.pdf (last visited Sept. 9, 2008). See also 42 U.S.C. §§ 4321-4347.


declared that the goal of its strategy was to “promote environmental improvements as a fundamental element of development and poverty reduction strategies and actions.”\footnote{6}

By 2005, it was clear that environmental concerns had become a central focus in the project approval process. A report, entitled \textit{Implementation of the Management Response to the Extractive Industries Review},\footnote{7} set guidelines for investment strategies in funding oil, mining, and gas projects which carry with them even more stringent requirement guidelines when a project has a potential effect on indigenous peoples. The guidelines also clarify the specific criteria required to prohibit investments in areas where it is necessary to protect biodiversity and critical habitats.\footnote{7} The World Bank Group has set a goal of increasing the investment in renewable energy (RE) and energy efficiency (EE) by twenty percent annually from 2005 to 2010.\footnote{9}

As an indication of the scope and breadth of environmental projects supported by the World Bank, a search of active “World Bank Projects” yielded 826 records.\footnote{80} Records may be accessed for each of the regions supported by World Bank funding.\footnote{81}

\section*{C. Global Environment Facility}

The Global Environment Facility (GEF) funds specific projects that focus on environmental protection. The GEF was established in 1991 and was later modified in 1994 to finance actions in four areas:

\begin{itemize}
  \item a) biodiversity loss;
  \item b) climate change;
\end{itemize}


\footnote{Id. at 14.}


\footnote{Id.}


\footnote{Id. For example, a search of “Environment + Africa” yielded 239 records of active projects.}
c) degradation of international waters; and

d) ozone depletion.  

At present, there are 178 countries who are members of the GEF initiative. In August of 2006, member nations pledged $3.13 billion at the Third GEF Assembly. Since its inception, the GEF has funded more than 1950 projects in 160 countries. The GEF funds projects under the Convention on International Trade in Endangered Flora and Fauna (CITES), the United

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84. Id.

85. Id.


Roughly 5000 species of animals and 28,000 species of plants are protected by CITES against over-exploitation through international trade. They are listed in the three CITES Appendices. The species are grouped in the Appendices according to how threatened they are by international trade. They include some whole groups, such as primates, cetaceans (whales, dolphins and porpoises), sea turtles, parrots, corals, cacti and orchids. But in some cases only a subspecies or geographically separate population of a species (for example, the population of just one country) is listed. CITES, The CITES Species, http://www.cites.org/eng/disc/species.shtml (last visited Nov. 23, 2008). The table below shows the approximate numbers of species that are included in the CITES Appendices as of the writing of this paper.


<table>
<thead>
<tr>
<th>FAUNA</th>
<th>Appendix I</th>
<th>Appendix II</th>
<th>Appendix III</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mammals</td>
<td>277 spp. + 16 sspp. + 14 popns</td>
<td>295 spp. + 12 sspp. + 12 popns</td>
<td>45 spp. + 8 sspp.</td>
</tr>
<tr>
<td>Birds</td>
<td>152 spp. + 11 sspp. + 2 popns</td>
<td>1268 spp. + 6 sspp. + 1 popn</td>
<td>35 spp.</td>
</tr>
<tr>
<td>Reptiles</td>
<td>75 spp. + 5 sspp. + 6 popns</td>
<td>527 spp. + 4 sspp. + 4 popns</td>
<td>55 spp.</td>
</tr>
<tr>
<td>Amphibians</td>
<td>16 spp.</td>
<td>98 spp.</td>
<td></td>
</tr>
<tr>
<td>Fish</td>
<td>15 spp.</td>
<td>71 spp.</td>
<td></td>
</tr>
<tr>
<td>Invertebrates</td>
<td>62 spp. + 4 sspp.</td>
<td>2100 spp. + 1 sspp</td>
<td>17 spp.</td>
</tr>
<tr>
<td>FAUNA TOTAL</td>
<td>597 spp. + 36 sspp. + 22 popns</td>
<td>4359 spp. + 23 sspp. + 17 popns</td>
<td>152 spp. + 8 sspp.</td>
</tr>
<tr>
<td>PLANTS</td>
<td>295 spp. + 3 sspp. + 2 popns</td>
<td>28674 spp. + 3 sspp. + 2 popns</td>
<td>8 spp. + 1 sspp. + 1 popn</td>
</tr>
<tr>
<td>GRAND TOTAL</td>
<td>892 spp. + 39 sspp. + 22 popns</td>
<td>33033 spp. + 26 sspp. + 19 popns</td>
<td>161 spp. + 9 sspp. + 1 popn</td>
</tr>
</tbody>
</table>


In the United States, Congress enacted the Endangered Species Act in 1973. 16 U.S.C. §§ 1531-1544 (as amended through 1988). In its legislative findings, Congress declared:

a) various species of fish, wildlife, and plants in the United States have been rendered extinct because of economic growth and development untempered by adequate concern and conservation;

b) other species of fish, wildlife, and plants have been so depleted in numbers that they are in danger of or threatened with extinction;

c) these species of fish, wildlife, and plants are of aesthetic, ecological, educational, historical, recreational, and scientific value to the Nation and its people.

§ 1531.


88. See Montreal Protocol on Substances that Deplete the Ozone Layer art. 5, Sept. 16, 1987, 26
IV. SOME OBSERVATIONS AND CONCLUSIONS

In the past twenty to thirty years, there has been a growing movement for the development of a worldwide “environmental imperative” based on the cooperation of the world’s nation-states. The United Nations clearly stands as the preeminent international forum for the discussion of key environmental issues such as those relating to land, forests, biodiversity, freshwater, coastal and marine, atmosphere, urban areas, and disasters. However, it is important to consider the viewpoint that “[i]nstead of multiplying statements of vague international legal principles and obligations, publicists need to engage in the much more empirical work of identifying common interests and constructing a regime based on them.” In this context, the proper functioning of the international legal environment is critical, along with the contributions that are made by the major economic and political institutions involved in solving core environmental problems. This correlation and synergy between the legal environment and “key” institutions will no doubt continue—and be strengthened—in the future.

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90. Developments in the Law, supra note 25, at 1521.