# GUIDELINES FOR PROTECTED AREAS LEGISLATION

by Barbara J. Lausche





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# International Union for Conservation of Nature and Natural Resources (IUCN) 1196 Gland, Switzerland

United Nations Environment Programme (UNEP) Nairobi, Kenya

> 1980 Reprinted 1985

#### Preface

The World Conservation Strategy, prepared by IUCN with the advice, cooperation and financial assistance of UNEP and WWF, and in collaboration with FAO and UNESCO, recognizes that the conservation and management of natural resources requires effective legislation. The Strategy also stresses the important role that protected areas play in nature conservation.

The Guidelines for Protected Areas Legislation have been prepared with a view to providing an outline of major issues which need to be considered when developing legal schemes for protecting areas. It is anticipated that the users of the Guidelines will range from drafters to enacters to implementers in the legislative process.

This document is the result of the work of Barbara J. Lausche, member of the IUCN Commission on Environmental Policy, Law and Administration, working in close cooperation with the IUCN's Environmental Law Centre. The first step in the process of elaborating the Guidelines involved reviewing background materials and legislation available at the Law Centre; this was followed by consultations with scientific, managerial and legal experts. Two drafts of the Guidelines were circulated to specialists in the field, and the project was concluded with the convening of a meeting of experts wherein final adjustments were made to the text. In addition to that of members of IUCN's Commission on Environmental Policy, Law and Administration, important inputs to the project have been received from members of both IUCN's Commission on National Parks and Protected Areas and Commission on Ecology.

It is felt that these Guidelines will be more effective if from time to time they might be updated as a result of user feedback. Particularly useful would be information about difficulties which have arisen in instituting protected areas legislation in various countries, and the approaches which were used to overcome these problems as well as suggestions as to problems or instances not foreseen in these Guidelines.

I would finally like to thank the author for all of her efforts, and hope that the Guidelines will prove useful and generate widespread interest and reaction.

Wolfgang E. Burhenne Chairman, IUCN/CEPLA

#### The author

Barbara J. Lausche was born in Minnesota, USA, in 1946. An environmental lawyer and legal drafter, she has experience in United States and developing country environmental and natural resources management law.

Newly appointed Natural Resources Lawyer and Policy Analyst, Food and Natural Resources Division, Office of Technology Assessment, U.S. Congress, her prior experience included contract work with US-AID, positions as project officer of the International Institute for Environment and Development, attorney with the Natural Resources Defense Council and the U.S. Environmental Protection Agency, and Peace Corps Volunteer.

She spent four years in Africa, two of those years as environmental lawyer in The Attorney Generals Chambers, The Gambia, West Africa.

Ms. Lausche has a Juris Doctoral (J.D.) Degree from Columbus School of Law, Catholic University of America, Washington, D.C., 1976.

## **Acknowledgements**

The author wishes to acknowledge that this document was prepared in close cooperation with the staff of the IUCN Environmental Law Centre, and in cooperation with members of IUCN Commissions and other experts in their personal capacity. Specific acknowledgement is in order to the following persons for their participation in consultations and meetings on the development of the Guidelines: J.M. Boyd, W.E. Burhenne, F. Burhenne-Guilmin, D. Caponera, C. Childs, B. des Clers, H. Eidsvik, J.P. Harroy, H. Henke, H.A. Hilme, C. de Klemm, V. Koester, J. Low, K. Miller, G. Moore, D. Navid, D. Pedley, E. Rehbinder and G. Wetterberg. Special acknowledgement is also due to J. May, IUCN consultant in 1977 who assembled considerable background inventory material on relevant national legislation.

Finally IUCN wishes to acknowledge the direct financial support of the World Wildlife Fund to this project as well as that of the United Nations Environment Programme whose support to IUCN through project FP/1110-79-01 helps to enable the Law Centre of the Union to guide such project activities.

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- Excerpts from: The Biosphere Reserve and its Relationship to Other Protected Areas, IUCN, 1979.
- III. Excerpts from: Operational Guidelines for the Implementation of the World Heritage convention, UNESCO, 1978.
- Substantive Definitions for Protected Areas taken from Some International Documents.

#### Bibliography

#### GENERAL INTRODUCTION

#### A. General Purpose and Audience

The guidelines for protected areas legislation are intended to provide an outline of major issues which are important to address in the process of developing national or subnational legal schemes for protected areas. Inquiries frequently have been made about the possibility of developing a model act which incorporates these important protected area legal issues. However, a model act has not been drafted; legal, political, social, economic, cultural, and ecological differences among countries and regions make it impossible to draft one statute responsive to all situations.

This document is not intended to serve primarily as an advocacy document for creation of protected areas. Neither will it deal with theory and scientific fundamentals which comprise the field of ecology. Those purposes should be the principal aim of other documents and publications which focus attention on the scientific and technical benefits of protected areas, or debate the nature of the basic ecological processes existing within natural environments<sup>1</sup>. These guidelines will be most useful when scientists and decisionmakers have recognized the need for review or establishment of protected areas legislation for ecologically sound programmes. At that stage, they can provide helpful guidance in establishing a responsive legal framework for the creation and maintenance of long term protected areas programmes.

The anticipated audience for these guidelines is the legal drafter and other participants in the legislative process who are reviewing, revising, or creating protected areas legislation. Protected areas managers or planners also may find the guidelines useful in understanding and appreciating the legislative needs of their programme. Because these guidelines have had the benefit of scientific and legal review from experts working with protected areas, they represent some consensus as to essential legal elements important to both disciplines. This should advance the practical usefulness of the guidelines in the field.

The preparation of these guidelines has become necessary and important for several reasons. Countries and organizations frequently approach IUCN for advice on legislation for protected areas. On a case by case basis, it has not always been possible to respond as fully as may have been needed. Setting out in one document the important and basic legal elements for legislation may help countries review, evaluate and draft their own laws, as well as provide some framework for consultants and organizations who are advising others.

There are several major shortcomings in much of the existing legislation on protected areas which make the preparation of these guidelines particularly appropriate. For this project numerous national and subnational laws and background materials on protected areas were examined. As might be expected, the level of legal protection and depth of legal treatment varies considerably from country to country. There is often no integrated protected areas programme nor any clear policy as to what the national or regional priorities and goals should be for a programme. It is also often unclear how or if protected areas programmes fit into national or regional long term development goals and planning. Frequently, one of the major shortcomings in existing programmes is the lack of comprehensive legislation for the establishment of protected areas; to com-

pensate for this, efforts are made to cover protected area matters with piecemeal legislation. Mechanisms for coordination with other competing resource interests for purposes of national resource use and land use planning are often weak or nonexistent. For many countries there also is either a lack or serious inadequacy of legislation and institutions to provide sufficient long term protection.

In addition, existing legislation often does not recognize the wide range of purposes and benefits which could flow from different types of protected natural areas. Many enactments lack flexibility to allow for the establishment of different types of protected areas. For example, the creation of certain conservation areas specifically for protecting particular species might not be provided. Consequently, the only mechanism to protect certain species might be the national park, which usually serves a wider purpose. Similarly, if watershed protection is desired the same lack of flexibility with existing laws on protected areas might be encountered. Provisions also are needed in much legislation to better deal with the various forms of habitat destruction. Many countries provide some legal protection to wild animals and often, indirectly, to some habitats. However, there are few provisions directly recognizing habitat preservation as an objective so as to be able to legally regulate the various kinds of activities which may cause habitat destruction, for example, forest exploitation, cattle grazing, human settlements, etc.

In many countries, the law enforcement provisions of protected areas legislation are often inadequate. Officers who must enforce protected areas laws frequently lack sufficient authority to carry out their duties properly. On occasion, there may be uncertainty as to what jurisdiction or responsibility protected areas officers have in relation to the functions of regular enforcement officers. The powers may be so limited as to be useless when attempting to apprehend a criminal or enforce a provision outside the protected area. At the subnational level (departmental, state, provincial, district, etc.), many enforcement provisions are again weak. Frequently, the duties and powers of the different institutional levels, officers, and other staff are not clearly defined and distinguished.

Measures which promote vigilant law enforcement hand in hand with public education are particularly critical for countries where there is insufficient public information or interest in conservation. Nevertheless, much existing legislation lacks adequate provision for building public awareness of protected areas programmes and enforcement requirements.

Finally, much of the legislation does not adequately recognize the role of scientific planning and management in preservation of protected areas. Few enactments require the use of management plans to guide officials in the protection and operation of the areas. The concepts of zoning and buffer areas to protect different locations and purposes also are rarely authorized. There is a need for legal recognition of these techniques, a strengthening of existing protection and enforcement provisions, as well as better integration and coordination of protected areas programmes into a country's comprehensive planning and long term development goals. This document provides a framework for considering these fundamental elements in relation to their importance for legislation on protected areas.

# B. Scope of Work

These guidelines focus on "protected areas" where the primary purpose is conservation. The range of possible natural areas to be protected is broad and the

terms used for specific protected areas may have different meanings in different parts of the world. Inevitably, the variety of purposes and functions served by natural areas has led to a variety of management systems and terminologies. The 1980 United Nations List of National Parks and Equivalent Reserves alone notes 29 different names used for various kinds of protected areas around the world<sup>2</sup>. Efforts have been made to achieve international agreement on terminology and classification of protected areas. But so far the goal is still a distant one.

However, for purposes of national or subnational legislation, the lack of internationally agreed terminology for categories of protected areas should not be an inhibiting or restricting factor. More important than terminology or classification labels is identification of protected areas by purposes and objectives. Descriptive terms relating to purposes and objectives for an area will determine what kind of management and protection are needed and what activities are compatible with the primary conservation purpose.

For these guidelines, an effort has been made to minimize the use of specific protected area labels. Instead, throughout the discussions reference will be made to the need for internal consistency of legal provisions with the purposes and objectives of the specific protected area involved. For example, purposes and objectives of various areas may dictate management requirements which range from strict and unmanipulated resource protection measures at the one end, to heavy resource manipulation measures at the other. Similarly, enforcement needs may vary according to specific purposes and objectives of an area.

Notwithstanding an effort to avoid labels, the guidelines recognize the several categories for protected areas developed by the IUCN Commission on National Parks and Protected Areas (CNPPA)3. The CNPPA categories represent a systematic analysis, according to their conservation objectives, of conservation areas found to exist around the world. The delineation of such categories provides a useful planning tool as well as a means for better international communication. The categories offer a conceptual framework for designing a system of conservation areas. They reflect the future direction for protected areas criteria. They also provide a useful reference for various management requirements associated with protected areas objectives. It is therefore advisable for the legal drafter to be familiar with the CNPPA categories.

These guidelines contain principles and concepts which are applicable to a range of possible conservation areas. They were prepared based upon the premise that any legislation should contain certain tools for establishing and maintaining the protected areas important to that country or region. They assume that a comprehensive legal regime for protected areas should contain adequate mechanisms to allow for the creation and maintenance of areas: (1) where ecosystems are protected with a minimum of human manipulation (sometimes called strict nature reserves, national parks); and (2) where particular resources or elements of an ecosystem are protected and in some cases, only for particular periods of time, with the potential for a greater degree of human manipulation (for example, some sanctuaries, watersheds, protected landscapes, managed nature reserves). In some cases, these areas may be joined as part of one larger conservation network serving several purposes.

Finally, this paper does not incorporate examples from existing statutes when discussing specific elements. Examples would suffer from the same shortcomings as would a model statute. One country's statutory language may be appropriate for its own purposes and inappropriate for another's purposes. The fact of

selection alone implies some subjective judgment on usefulness and value which can hardly be universally applied. Further, a provision cited out of context of the entire institutional and legal framework may completely overlook or misrepresent the interrelated elements which make that provision useful. There is no ideal example. In light of the elements reviewed in this document, each drafter must choose and formulate the proper and specific language appropriate to meet the legal and policy needs at hand.

#### C. General Format

This paper is divided into two parts: Part One - a short preliminary section with background material on protected areas; and Part Two - the principal section containing the guidelines. The preliminary discussion is included to introduce and review in one document some of the major background issues involved with protected areas. Part Two, containing the guidelines for protected areas legislation, focuses on principal issues which should be examined and dealt with in any protected areas legal regime. It is recognized that each country or system is unique. There may be additional legal elements or requirements peculiar to any country's legal and traditional systems which must be included in particular legislation.

Four appendices are attached. The first three provide information on criteria and categories of protected areas for three major international programmes; the IUCN Commission on National Parks and Protected Areas classifications used for the United Nations List of National Parks and Equivalent Reserves, the Biosphere Reserves, and the World Heritage List. The fourth appendix contains a few examples of substantive definitions of protected areas as they appear in some international conventions and other documents.

A bibliography is provided at the end of the paper for further background information.

# PART ONE - BACKGROUND INFORMATION AND GENERAL THEORY ON PROTECTED AREAS

Numerous books, pamphlets, and articles have been written on various aspects of conservation and protected areas. This Part will summarize some of the major background issues involved with creation of protected areas as a review for the user of the guidelines. For a more thorough coverage of protected areas theory, the reader might consult other materials including some of those referenced in the bibliography to this paper.

## I. Conservation and Development

As summarized from the World Conservation Strategy<sup>4</sup>, development is the modification of the biosphere and the application of human, financial, living and non-living resources to satisfy human needs and improve the quality of life. Sustainable development is development which adequately takes into account all human and natural factors (e.g., social, ecological, economic, etc.) and their trade-offs to achieve satisfaction of human needs and improvement of the quality of life for present and future generations.

As used in the World Conservation Strategy and in this paper, conservation is a process which includes, but is not limited to, preservation. It involves human management of the biosphere to yield the greatest sustainable benefit for present generations while maintaining its potential to meet the needs and aspirations of future generations. It is:

"a process-to be applied cross-sectorally-not an activity sector in its own right. In the case of sectors (such as agriculture, fisheries, forestry and wildlife) directly responsible for the management of living resources, conservation is that aspect of management which ensures that utilization is sustainable and which safeguards the resources concerned"<sup>5</sup>.

For sustainable development, the achievement of the objectives of conservation is indispensable. As noted by Kenton Miller, Chairman of the IUCN Commission on National Parks and Protected Areas, in his book, *Planificacion de Parques Nacionales para el Ecodesarrollo (Planning National Parks for Ecodevelopment):* 

"In practical terms, the objectives of conservation must be absorbed into those of development. Conservation must be perceived as an element of development. But at the same time, it must be recognized that development can take place only within the limits of Planet Earth. Conservation is to development what maintenance is to construction. New structures are of little credit to human ingenuity unless they are maintained in good running order and provide beneficial services"<sup>6</sup>.

The interrelationship of conservation and development can be summarized with the following progression: sustainable development requires management of the living and non-living resources. Wise management yields sustainable benefits only if living resources are used in a manner which will ensure their preservation for future use. Conservation is one tool of management which is important for achieving sustainable use of living resources. Conservation objectives must be integrated into development objectives if development is to be sustainable.

Again returning to the World Conservation Strategy, the objectives of living resources conservation can be divided into three specific groups:

"to maintain essential ecological processes and life-support systems (such as soil regeneration and protection, the recycling of nutrients, and the cleansing of waters), on which human survival and development depend;

"to preserve genetic diversity (the range of genetic material found in the world's organisms), on which depend the breeding programmes necessary for the protection and improvement of cultivated plants and domesticated animals, as well as much scientific advance, technical innovation, and the security of the many industries that use living resources;

"to ensure the sustainable utilization of species and ecosystems (notably fish and other wildlife, forests and grazing lands), which support millions of rural communities as well as major industries"<sup>7</sup>.

#### II. Justification for Protected Areas

As conservation is an element of sustainable development, so top is protection an element of conservation. The progression to protection of living resources is necessary in some cases in order to achieve conservation and therefore development objectives. One tool for protection of living resources is the protected area. A protected area may be created as a natural park, reserve, sanctuary, or other unit; as has been noted above, management categories and terminology for protected areas may vary from country to country.

Protected areas may provide a variety of benefits<sup>8</sup> which support the objectives of living resources conservation. These benefits may arise to varying degrees depending upon the purpose and character of each protected area. The kinds of benefits provided by various protected areas may include:

- protection and maintenance of representative samples of major biogeographical provinces to ensure evolutionary continuity, and the health of the earth's life support system;
- 2. protection of representative, as well as unique samples of the natural systems, landscapes, and life forms;
- protection of natural areas critical for supporting development activities (such as watersheds and ground water recharge areas to ensure an adequate flow and quality of water downstream, to minimize flooding, to prevent erosion, and to reduce sedimentation), since these areas collectively may be vital to human health, agriculture, irrigation, fisheries, industry, power, transportation and recreation;
- service as a repository of genetic materials providing in situ protection of plants and a haven for wild animals which may make substantial, and in some cases, still unknown, contributions to human development, for example, in areas of world nutrition and Pharmaceuticals;
- 5. provision of irreplaceable outdoor laboratories of science for research and education;

- 6. protection of cultural, archeological or natural monuments, landscapes of historical or cultural interest, or unusual geological formations, and
- 7. provision of aesthetic pleasure, opportunities for healthy and constructive recreation, and significant sources of revenue from tourism.

For successful conservation and development, these benefits must be perceived and understood as beneficial by the local people and by the decisionmakers. The beneficial relationship between protected areas and the public should be reinforced and encouraged through development planning so that where possible some economic or social benefit to the local people can result from the programme. For example, where consistent with the area's purposes, accommodations and services for the public might be developed outside the area's boundaries, perhaps in a nearby town, to help provide some economic or social benefit. Furthermore, protected areas administrators should be encouraged, where the situation presents itself, to direct to local residents other incidental benefits flowing from proper management of the area. For example, where good management principles require some cropping of wild animal species within an area, the meat might be reserved for distribution at cost or less to neighbouring residents.

# III. International Conventions Relating to Protected Areas

Several multilateral, regional and bilateral conventions relate to protection of various kinds of natural areas. Countries which are Party to these conventions, or are considering acceptance, must be familiar with the responsibilities of the contracting States so as to formulate their national programmes in a manner consistent with any international obligations or standards.

The scope and focus of international conventions may vary. Some may be "universal" in nature, without any limitation in geographic scope. These types of conventions are open for acceptance by all nations of the world. Other conventions may be regional in scope or restricted in some other way so that acceptance is possible only by specific nations. In addition, the substantive focus of areas may vary. Some conventions may focus on the kinds of areas to be protected; others may focus on the kinds of species to be protected.

It is not possible or desirable within the scope of this overview to enumerate all existing multilateral, regional and bilateral agreements affecting protected areas. The legal drafter is urged to become familiar with all relevant agreements of the country concerned. The major international conventions which call for or encourage the creation of protected areas and, in some cases, define certain types of protected areas are noted below<sup>9</sup>.

#### A. Universal Conventions

1. Convention on the Conservation of Migratory Species of Wild Animals, 1979 (IUCN Reference No. 80000(H-979062300)).

This Convention was concluded in Bonn, Federal Republic of Germany, in June 1979. It is of relevance for protected areas because it places heavy emphasis on habitat conservation. The Convention lists migratory species that are endangered, or that require or could benefit from international agreements for their conservation and management. Parties that are States (called "Range

States") which exercise jurisdiction over any part of the range of a migratory species must endeavour to conserve and, where feasible and appropriate, restore those habitats of the listed species which are of importance in either maintaining or restoring the beneficial conservation status of the species.

 Convention Concerning the Protection of the World Cultural and Natural Heritage, 1972 (IUCN Reference No. 800000(R-972112300)).

This convention sets up a system whereby the international community can participate in protecting those parts of the cultural (monuments, groups of buildings, sites etc.), and natural heritage of outstanding universal value. Through its intergovernmental guiding body, the World Heritage Committee, nominations for the World Heritage List are received and reviewed. The nominations which meet the criteria adopted by the Committee are entered on the List.

All parties to the Convention are invited to submit nominations, with supporting documentation, of sites suitable for inclusion in the World Heritage List. Parties to the Convention have a duty to identify, protect and transmit to future generations those places of outstanding universal value within their own borders. The World Heritage Convention is particularly noteworthy in that any Party to the Convention may request assistance from the World Heritage Fund to protect an area whether or not the area is yet on the List. Aid may include studies of critical problems of conservation, providing experts, training staff, supplying equipment, or low-interest loans<sup>10</sup>.

 Convention on Wetlands of International Importance Especially as Waterfowl Habitat, 1971 (IUCN Reference No. 80000(R-971020200)).

This convention invites contracting Parties to designate at least one important wetland for inclusion on a list. States are not obliged to preserve and protect such wetlands in perpetuity but by implication they should do so unless "urgent national interest" dictates otherwise. The Ramsar Convention, as it is often called for the town where it was adopted, is important for the recognition it gives to the "great economic, cultural, scientific and recreational value" of wetlands 11.

#### **B.** Regional Conventions

 Convention for Nature Protection and Wildlife Preservation in the Western Hemisphere, 1940 (IUCN Reference No. 800000(U-940101200)).

This Convention states that "the Contracting Governments will explore at once the possibility of establishing in their territories national parks, national reserves, nature monuments, and strict wilderness reserves". While the Convention came into force in 1942, it received new attention in the late 1970s. In June 1976, the Organization of American States (OAS) unanimously adopted a resolution calling for implementation of the Convention. A series of five technical meetings took place in 1978-79 to analyze the Convention's current applicability. These resulted in recommendations that a permanent office be established within the Organization of American States to implement the Convention, and that member states designate liaison agencies responsible for Convention matters. The

Convention text lists objectives and definitions for several types of conservation areas<sup>12</sup>.

 African Convention on the Conservation of Nature and Natural Resources, 1968 (IUCN Reference No. 80000(U-968091500)).

This Convention succeeded the London Convention of 1933, which established the basic pattern of national parks and reserves in Africa. The London Convention was the first continent-wide convention for the conservation of flora and fauna. The 1968 Convention adds two distinctive features - separate articles on soil and water conservation, and an emphasis on the protection of aquatic environments of all kinds. Three types of conservation areas are encouraged and defined: "strict nature reserves", "national parks", and "special reserves"<sup>13</sup>. This Convention also sets out several obligations of contracting States regarding establishment of conservation policies, initiation of research, conservation education, and interstate cooperation. The Convention contains useful concepts and language for the general reference of any drafter.

 Convention on Conservation of Nature in the South Pacific, 1976 (IUCN Reference No. 800000(U-975061200)).

This Convention obliges the contracting parties to keep natural reserves inviolate and not to reduce the size of existing national parks "except after the fullest examination". It encourages the creation of national parks, provides for the protection of flora and fauna, and promises intergovernmental cooperation on various aspects of conservation. It also defines some protected areas<sup>14</sup>.

 Council of Europe Convention on the Conservation of European Wildlife and Natural Habitats, 1979 (IUCN Reference No. 800000(H-979091900)).

This Convention calls upon the contracting States to promote national policies and undertake measures for the conservation of wild flora and fauna, and natural habitats. While not containing an obligation to *create* protected areas, the Convention provides that each contracting Party "shall take appropriate and necessary legislative and administrative measures to ensure the conservation of the habitats of wild flora and fauna species (especially those specified by the Convention), and the conservation of endangered natural habitats" <sup>15</sup>.

# IV. International Programmes for Protected Areas

The first three conventions mentioned above (those dealing with migratory species, wetlands, and world cultural and natural heritage sites) might ultimately form effective international systems of protected areas. Other international programmes are noted below for their thrust to encourage national action by recognition or inclusion of areas as part of international programmes. Although not based on obligation in international law, such programmes can have an impact since, once an area has been so recognized, degradation may be less probable as international recognition and publicity often raises the national status of and interest in the area.

#### 1. Biogenetic Reserves

The European Network of Biogenetic Reserves was established in response to a recommendation of the First European Ministerial Conference on the Environment (Vienna, 1973). The main objectives of this programme are to achieve long-term conservation in Europe of a significant and representative sample of the various typical, unique, rare and threatened biotopes and the flora and fauna they contain and to bind the areas concerned into a European Network.

The existence of this Network was officially recognized by the Council of Ministers of the Council of Europe in Resolution 79 (9) of 25 May 1979. This Resolution also lays down the rules applicable to the designation of Biogenetic Reserves, their inclusion into the Network and exclusion therefrom. Biogenetic Reserves must enjoy a legal status ensuring effective long-term protection of the habitat, biocenoses, and ecosystems they contain.

#### 2. The Biosphere Reserves

The Biosphere Reserves network is a project of the Man and the Biosphere (MAB) programme. Launched by UNESCO in 1970, MAB is primarily a programme of research and training whereby knowledge and experience are exchanged among nations with common problems arising from similar ecosystems.

MAB's Biosphere Reserves project is entitled "Conservation of Natural Areas and of the Genetic Material They Contain" (Project 8). The objective is to preserve sites representative of all the biogeographical provinces of the world for long-term conservation monitoring and research. The planning, financing and implementation of MAB's biosphere reserve and other field projects are the primary responsibilities of its National Committees which have been established in 95 countires. The characteristics and selection prerequisites are described in Appendix II which contains excerpts from the joint publication by IUCN and UNESCO, "The Biosphere Reserve and its Relationship to other Protected Areas". As noted in those excerpts, one of the characteristics of a biosphere reserve is that it "must have adequate long-term legal protection"16,

#### 3. The United Nations List of National Parks and Equivalent Reserves

Although not a programme in the sense of the previous two examples, the United Nations List of National Parks and Equivalent Reserves is worth considering. It is compiled at the request of the United Nations by the Commission on National Parks and Protected Areas (CNPPA), one of the six Commissions of the International Union for Conservation of Nature and Natural Resources (IUCN). To qualify for inclusion in the list, a protected area has to meet certain criteria approved by CNPPA.

The first UN List was published in 1967 and revised in 1971 and 1972. The 1971 edition was a monumental work describing in detail some 1,200 natural, anthropological, historical, or archeological areas meeting certain criteria of size, protection, and management. An abridged list was published in 1975, and revised and updated in 1980.

The 1980 List includes National Parks, Nature Reserves, Biosphere Reserves, and World Heritage Sites. The CNPPA criteria for selection are used for the various protected areas categories included in the List. Appendix I provides some detail on these CNPPA criteria and categories.

In connection with this List, IUCN has issued separately the "World Directory of National Parks and Other Protected Areas". The Directory includes the protection status, broad description, and information about ecology, presence of conspicuous flora and fauna, and endangered species. Volume I was issued in 1975, and Volume II in 1977. The Directory lists some 560 areas in 60 countries <sup>17</sup>.

# V. Preliminary Considerations for Creation of Protected Areas

The drafting of legislation for protected areas must be seen within a broad context if it is to be properly used and understood. Drafting is only one part of the larger legislative process which begins with an idea reflective of social values and needs which then moves from government policy, legislative drafts, eventually to law. The legal drafter is not usually a party to the beginning of the process. More likely a technical branch of Government, a professional group or other interested party may singly or jointly originate the ideas. Before the drafter becomes directly involved, it is likely that these ideas will have matured considerably so as to be accepted by Government as part of its policy and developed into an authoritative statement justifying the action.

At the predrafting stage<sup>18</sup>, an adequate information base is important to support judgments and policies on protected areas. Where specific areas are being considered, preliminary information and site reports on the resource and its significance should be prepared and analyzed by the planners and scientists. Taking into account the time and resources available, an inventory of the existing natural resources (flora, fauna, water, specific genetic and ecological features, geology, etc.) should be done prior to establishment. If the area contains cultural resources, these should also be identified. Where time is at a premium, a more exhaustive inventory might be conducted after establishment or while the area is given interim protection<sup>19</sup>. Where a general programme is being legislated without specific sites, baseline information on the nation's or region's natural resources, threatened ecosystems and species is still important for setting programme goals and needs.

Along with a resource inventory, the planners and scientists also must examine existing social, economic and political influences. National and regional planning schemes should be reviewed. Special attention should be given to land use trends and plans for future development and their positive and negative effects on possible protected areas programmes. Information on existing land uses, transportation systems, population characteristics, and tourism factors all should be fed into the analysis.

With this background information, the planners and policy makers can determine the objectives of a protected areas programme and the types and sizes of areas needed to accomplish the various objectives. An analysis of existing conditions is essential to determining the programmes which will be possible and effective in a country. Setting up a park or reserve in one country, for example, may require very different considerations from those required in another country. Different factors affecting a programme may include the level of infrastructure development, level of economic prosperity (availability of funds), the production choices and alternatives, level of social-cultural awareness including public awareness of the need for nature conservation, etc.

Once background analysis and policy determinations have been made, the drafter more directly enters the process20. The first task of the drafter is to gain a thorough understanding of the purposes of the legislation which has been requested in support of the determined policies and programmes. This task requires clear and complete drafting instructions from the government decison-makers involved with the earlier parts of the process. Instructions should include adequate background information, a statement of principal objectives of the legislation, and the means for achieving the objectives.

The second task for the drafter is to identify and carefully review all relevant written law, common law, and case law on the subject. This review should include an examination of any international or other multilateral obligations or standards to which the country must comply. Whether or not protected areas legislation already exists, any new law may alter existing systems or obligations in some manner. Furthermore, the successful operation of protected areas legislation may be hindered where the simultaneous operation of other legislation results in conflicting purposes. In either case, as a consequence of enactment some freedoms may be restricted, existing authorities may be reorganized, new responsibilities may be added, or legal operations may be otherwise shifted. Several legal matters related to protected areas may be affected. The most obvious legislative overlaps deal with forests, wildlife, water, agriculture, land use and town planning, soils, industrial development, environmental protection, land status and land acquisition. The drafter must know before the drafting begins which of these and other legal areas are affected by or in conflict with new legislation as well as what multilateral obligations must be satisfied. Without this information, the drafter may create unintended conflicts, uncertainty, repeals by implication, or possibly unenforceable legislation<sup>21</sup>.

Based upon preliminary legal and non-legal analysis the drafter and other participants in the legislative process can proceed to the actual design, composition, and scrutiny of new or revised protected areas legislation.

# PART TWO - GUIDELINES FOR PROTECTED AREAS LEGIS-LATION

#### Introduction

This Part comprises the principal section of the Guidelines. It outlines and discusses the elements most important for legislation on protected areas. The material is presented as guidelines rather than a Model Act. The task of drafting a specific Act is best left to the legal drafters and other legislative participants in each specific country. In addition to the fact that circumstances and needs may vary, each country has its own legal and stylistic practices which will require individual attention for legislation.

A few points should be reviewed before the reader proceeds. First, protected areas legislation may take different forms in different countries. For example, some countries may have the practice of enacting a principal law for national or regional parks, reserves, or other protected areas which provides the procedures for establishing individual areas. Other countries may have the practice of enacting a self-contained law for each area. Regulations or other subsidiary legislation may flow from each method. The following guidelines use the term "legislation" to include either of these approaches since the principles apply to each.

Second, it is presumed that stylistic requirements and legal interpretation prescribed and followed in each country through Interpretation Acts, general practice, etc., will be applied to any protected areas legislation. This is left to the legal drafter in each particular case. Generally, for purposes of clarification, the use of the term "legislation" in these guidelines is meant to include regulations made under that legislation. And while the items covered are fundamental and generally appropriate for a law or Act, it is recognized that some legal systems may require certain of the subsidiary details to be dealt with in regulations or subsidiary legislation. The principal consideration should be the use of that level of legal authority which will best assure and safeguard the effective implementation of the programmes created pursuant to the legislation.

Third, the order of the items presented in these guidelines is flexible. The items have been presented here in one order for some logical progression in the discussion. Legal style and tradition may require a different order in different countries. The important consideration is that the substance of each of the elements presented be examined and dealt with in the legal scheme.

Fourth, these guidelines present the most important and essential legislative considerations for ensuring a sound and long-term protected areas programme. However, there may be additional provisions required in any given country for specific legislation to make it stylistically, legally, and procedurally whole. Again, this document does not present a self-contained model, but rather guidelines for the basic substantive elements for protected areas legislation. Local style or other specific requirements may dictate additions necessary for a workable and legally sufficient instrument in a particular country or region.

Finally, it should be noted that protected areas concepts and corresponding legislation can apply to areas of water, as well as land. Basically, marine protected areas do not differ from their land counterparts in concept, status, and purpose. The differences lie in questions of management and regulation of activities, and

are practical ones involving application of principle. When using these guidelines for marine areas, the legal drafter might examine and further develop specific application of some provisions, for example, those related to prohibited and regulated activities, to more directly reflect marine circumstances and needs. Here, consultations with and guidance from the scientific and management experts for those marine areas are particularly useful and important<sup>22</sup>.

# I. Protected Areas Policy

#### A. General

In each country a policy on protected areas should be developed. This should be at the national level for the country programme as a whole, at any appropriate subnational level, and for each protected area.

A protected areas policy is based upon ecological fundamentals of the country or region in combination with economic, social, and political factors. It should be an integral part of the comprehensive economic and development policy of the country or region. Land use planning and other development considerations should be implemented hand in hand with protected areas policy goals and considerations.

Whether the legislation is intended to be comprehensive or specific as to types of areas covered, it is advisable to include in the legislation a provision reflecting national conservation and protected areas policies where they exist. For sub-national or area-specific legislation the statement also should identify any specific policy considerations appropriate to that region or area. This will provide fundamental guidance and a broad framework within which the intent of the decision-makers can be applied. A self-contained record of the official policies behind the law will be important for implementation and future judicial review.

For aids in drafting a policy provision, the drafter might review speeches, government reports, statements in national development plans, equivalent reports from other countries, etc. Substantive discussions with Government officials involved with protected areas also are important to provide the legal drafter with helpful guidance in formulating and reviewing language for a policy provision.

The substance of the policy should provide strong principles for the specific legislative, management, administrative and financial means which will be used to implement its mandates. It should state the conservation and other goals to be achieved with establishment and maintenance of the protected areas programme.

Where relevant it should specify that a management plan be prepared for each unit of the country's protected area system. Coordination with all levels and interests of Government in matters affecting protected areas should be stressed as an important element.

Within a comprehensive framework, each protected area may be guided by its own specific policy considerations. These considerations may be the basis for particular objectives or goals. For example, some areas may be established primarily for scientific research or for preservation of an ecosystem or species threatened with extinction. Other areas may serve a combination of purposes including recreation or protection of cultural values. Policy guidelines for indi-

vidual areas may also relate to the buildings, roads, and other development activities associated with that area. Each area will have its particular role and policy basis within the comprehensive policy of any national and sub-national programme.

#### B. Constitutional Basis

In countries with a constitutional framework, there may be constitutional provisions which allocate jurisdiction for matters related to protected areas. While frequently constitutions have no express provisions on conservation<sup>23</sup>, provisions on public health and welfare, social good, or interstate matters should be reviewed for any constitutional delegation over conservation-related matters.

Incorporated into the protected areas policy should be reference to any constitutional basis, when it exists, for jurisdiction over protected areas programmes. Where there is constitutional authority for different levels of involvement with different areas or subject matter, this might also be noted.

Where more than one level of government has constitutional powers for protected areas matters, a great deal of cooperation is necessary. Under these circumstances, it may be useful for the protected areas policy to include a statement on any constitutional basis, where it exists, for national coordination of all programmes. This is justified since natural areas of a country are part of a national heritage; a national mechanism might be in the best position to coordinate protection of this heritage in accordance with national policy goals. Furthermore, it is usually the national government or a mechanism identified as representing national interests which participates in international affairs, an increasing number of which involve conservation issues with impacts for protected areas.

## C. Compliance with Multilateral Obligations

An important element of national protected areas policy or any component of that policy is recognition of international concerns and obligations. One of the purposes of domestic legislation may be to implement an existing multilateral obligation or responsibility which has arisen by Convention, treaty, or other multilateral agreement. Or, there may be international programmes or principles which are to be recognized in the legislation.

If the object of the legislation is to give effect to a particular convention or treaty, the drafter should make this clear in the law to avoid any ambiguity. The convention, treaty, or other agreement might be referenced and set out in a schedule to the law. If there are general international concerns or guiding principles which are to be recognized, these also could become part of the policy provisions of the legislation.

# II. Objectives for Protected Areas

It is essential that legislation on a protected area programme or specific area (a park, reserve, refuge, etc.) contains a clearly defined statement of objectives and purposes which have been determined for the programme or areas being created. This provision will provide valuable guidance as the basis of action for those who must manage and administer the areas. Ultimately, all activities in a protected

area must be judged according to whether they advance or defeat the objectives and purposes of that area. The specific legal regime for an area must be designed in such a way as to support and accomplish the area's objectives and purposes. Also, a provision on objectives will provide a standard and important points of reference-for later judicial review.

Objectives and purposes may be communicated through different means. The most direct is to include a specific legal provision entitled "objectives", or some equivalent title. If the legislation is a comprehensive instrument providing for several kinds of protected areas, it might contain general objectives for the entire system of protected areas as well as specific objectives for each type of area. When a specific area has been created, it should have its own statement of objectives within its particular legal instrument. It is preferable to include a distinct section on objectives to ensure a common reference point for all substantive sections so as to avoid any possible uncertainty or confusion about the goals of the programme or area.

If a distinct provision on objectives is not possible, these matters might be communicated through other substantive sections. Substantive provisions which create each protected area, require a management plan, define the powers and duties of the officers or list the permitted and prohibited activities in the area, will necessarily reflect the objectives and purposes of the area. This approach is less satisfactory because the objectives tend to be communicated more by implication than express statement.

The objectives and purposes of a protected areas programme or unit may be influenced by many factors, including scientific, economic, social, and political aspects of the country or region which have a bearing on the programme or area. For useful assistance determining the objectives of a programme, background materials developed for preliminary Government deliberations on the programme as well as parallel examples from other countries might be located. Where technical documents or preliminary management plans exist for certain areas being considered, these may be particularly useful for the drafter when formulating the legal language. Consultations with technical experts will help to ensure that the language on objectives and purposes adequately meets technical as well as legal needs.

To illustrate the general kinds of objectives which to varying degrees are sought from different protected area systems or programmes, the following examples are provided. As will be seen, some of the items overlap as different versions covering similar interests are offered. Also, the levels of application will depend upon the nature of the area involved. General objectives include those:

- to maintain representative samples of biogeographical provinces to ensure the flow of the earth's natural processes necessary to support life;
- to safeguard and maintain representative samples of the natural ecosystems and endangered species occurring therein for scientific, cultural, or historical value;
- to propagate, protect, conserve, study, and manage those ecosystems, flora and fauna, landscapes, or historical, cultural, or archeological relics, of particular national or local significance for the benefit and enjoyment of the inhabitants of the country:

- 4. to conserve ecosystems or species of particular international value for the preservation of important representative ecosystems, species, or genetic resources, or for the management of shared resources;
- to protect samples of natural, cultural, historical, and other phenomena of international interest as contributions toward the preservation of the world heritage;
- to provide educational and recreational services that will allow the public to appreciate and enjoy the values of protected areas;
- to provide for multiple-use resource areas which offer protection to ecosystems and resources as well as some secondary social and economic benefit.

More specific objectives of particular protected area units might include:

- to maintain in a natural state samples of specific ecosystems, or habitats of species to provide for environmental monitoring, scientific research, general studies, and environmental education;
- to conserve, manage, and propagate a species of rare or endangered flora or fauna and to protect, preserve, and manage its habitat for scientific, environmental, educational, recreational, and other public purposes;
- to set aside a specified area to protect a particularly threatened habitat or other resource from forest exploitation, domestic animal grazing, human settlement or other human activity;
- 4. to protect small specified areas deserving special consideration as the result of their natural beauty, special natural vegetation, hydrological forms, magnificent landscape, rare fauna, cultural significance or other pertinent value so as to be maintained in the national or local interest for recreational, educational, scientific, scenic, or cultural purposes;
- 5. to protect and maintain a watershed area;
- to manage an area in order to preserve its historical or archeological significance;
- to establish buffer zones outside the periphery of a particular protected area to lessen disturbances that may be caused by human activity outside that area;
- to regulate particular acts in any area adjacent to a protected area in order to ensure the security of the protected area and the fulfilment of its objectives.

#### III. Definitions for Different Kinds of Protected Areas

A review of protected area classifications and the associated terminologies used in different countries reveals little consistency and no standardization. There may or may not be similarity in nomenclature or criteria from country to country. A "national park" in one country might not qualify as a "national

park" in another. An area labelled a "reserve" in one country might meet United Nations criteria for a "national park" whereas some areas labelled "national parks" might not. Variations among nations makes it difficult and inappropriate in these guidelines to provide exact definitions for different classifications and types of protected areas.

It also should be noted that well-developed planning systems may achieve results similar to some of the objectives and purposes defined for protected areas. Where such planning systems exist, protected areas classifications can reinforce these planning mechanisms to accomplish the primary conservation purposes of the protected areas involved.

For purposes of legislative drafting the legal drafter will recall a primary rule of drafting which provides that a definition by itself should not contain substantive matter. The more important substantive meaning of any type of protected area should be found in the substantive sections which establish the area, set out the management plan, provide guidance as to prohibited and permitted activities, empower the authorities to declare areas for certain purposes, etc. Therefore it may be desirable, where there is a distinct section on definitions, to keep the definitions of any types of protected areas to a minimum. One approach is to refer in the definition to the precise substantive section of the legislation which authorizes the establishment and conditions for the particular type of area. For example, a "national park" means any area created under the corresponding section with that purpose.

Regarding substantive definitions and classifications of protected areas, the objectives and purposes for which an area is created will provide the framework for identifying and giving meaning to an area, regardless of the terms or labels used. As discussed previously, the kinds of protected areas may range from those, at one end, which have as their objective strict preservation of ecosystems, to those, at the other end, which conserve only certain species or resources, e.g., a forest, a valuable species of fauna, etc. Depending upon the area's purpose, human interference or manipulation may range from almost none, except perhaps for some controlled scientific research, to manipulative management and extensive utilization for recreation, education, etc. The important consideration for the legal drafter is to be aware of these ranges of purpose and manipulation so that the legal regime for the various protected areas adequately reflects and supports the objectives and purposes intended for those areas.

Finally, the substantive meaning for any type of protected area (park, reserve, wilderness, etc.) should be consistent with any conventions, treaties, or other multilateral agreements to which the country is a party. Some conventions give substantive definitions to certain protected areas categories<sup>24</sup>. It may be important to review these categories for purposes of national classification and terminology where a country is a contracting State.

To illustrate some of the substantive definitions and classifications which have been formulated for protected areas, a few examples have been cited in Appendices I and IV. These come from IUCN criteria, international conventions, the Council of Europe, and FAO of the United Nations. As discussed in the Introduction, the most modern classifications follow the IUCN categories.

#### IV. Status of Land for Protected Areas

The status of the land to be designated as a protected area is a critical and primary consideration which may require different approaches in different countries. In many developing countries, for example, much of the land is state-owned or communal. In contrast, some countries, especially in Europe, have little remaining public land but must use private land when there are overriding public interests involved.

Because of the variations of land use and land ownership rights in different countries, and the consequences flowing from these rights, it is essential that the legal drafter carefully examine the legal and customary land status in the country. In the context of possible protected area consequences, the drafter must examine laws relating to public, private or communal land definitions; land acquisition or expropriation procedures; retained customary or communal land rights; rights flowing from public or private long-term use or ownership; powers of local authorities and municipalities over land; legal relationships between local, provincial, municipal, and national entities regarding land; rights-of-way; etc.

The impacts of existing land laws and rights must be recognized, and, where necessary, dealt with through specific measures in the protected areas legislation. Some laws may have little impact; others may confuse the intent and effective implementation of the legislation if not accommodated. It should not be assumed that all legislation will be administered in a compatible way. To ensure workability, the protected areas legislation should clearly indicate what use, occupation, ownership or other land status is compatible with the possible objectives of the protected areas programme or unit. It also should specify who is responsible for carrying out the procedures and exercising the powers to acquire the land, where necessary.

#### A. Public Land

It is recognized that not all countries have surplus public lands or the means to acquire them for protected areas. However, where there is the land, or the means, protected areas should be established on public lands. This will best ensure adequate and long-term protection and management of the areas for the benefit of the country and its inhabitants as a whole.

To have public land status for protected area purposes some lands may need to be acquired from private or other interests. Where this is anticipated the protected areas legislation should provide clear procedures to acquire such lands. If the country's acquisition laws are to be available for use, this should be stated. Existing acquisition laws may contain provisions that appear broad enough for application to protected areas. Nevertheless, if there is any room for doubt because of vagueness or ambiguity, a specific acquisition provision is necessary.

This provision should clearly authorize and provide procedures for the negotiation and acquisition of land by those responsible for the protected areas programme. If monetary compensation is to be paid, the source of funds should be identified and procedures provided to value the land. Since complete acquisition and control often does not immediately follow creation of a new protected area, provisions should clearly state that private improvements on land will not be recognized as of the date the protected area is established. The

legislation should specify that such acquired land will become public land, under the control of the institution responsible for the protected area.

Some existing public land may be already encumbered. Mineral, timber, oil exploitation, grazing and other resource leases, licenses or permits might result in legally binding contracts which must be recognized. Customary use rights might be involved. Compensation for acquisition of these interests, where they conflict with the intended protected areas purpose, may be one possibility. If compensation is too expensive, the legislation might provide that no leases, licences, or other encumbrances will be renewed when they expire. On the other hand, it is possible that some activities could be carried on under certain conditions not harmful to the area's objectives. Furthermore, some of these leases or licences may not be able to be terminated due to the crucial need for their revenues. Under either circumstances, the legislation must require closer monitoring and control of the activities concerned.

The use of rights-of-way, easements, and other means to gain access to private land through protected areas land must also be dealt with in the legislation. Or situations may arise where a public through-way is planned for purposes unrelated to the protected area. To the maximum extent possible, protected areas legislation should limit or carefully restrict rights-of-way through protected areas. When they must be allowed for hardship reasons (e.g., access to water or a dwelling, or for an overriding public interest), the legislation should require that the rights-of-way be defined as clearly and narrowly as possible. The extent of use and the restrictions associated with the use should be specified in each case. Under no circumstances should the right-of-way or other special use be granted when it will defeat the purposes of the protected area, unless there is a higher public interest involved. In such cases, approval should be required by the legislative body which established the protected area.

In some cases, it is also necessary to provide for the possibility of a right-of-way through private lands to a protected area. For example, an access road through private land may need to be under the control of the protected area authority for certain purposes. Lease arrangements might be possible. Where these situations are likely to arise, the legislation should specify the general procedures applicable for acquisition or use.

#### B. Private Land

Where the use of lands which have a "private" status is being considered for protected areas, the determining factor should be whether the country's laws governing private lands are sufficiently developed to ensure adequate and long term protection of the protected area in the public interest. Again, the objectives and purposes of the protected area programme or unit must be reexamined in the context of the legal safeguards which are necessary. If these safeguards can be provided by private land laws and procedures, then this method may be a possibility.

Where private lands are used for protected areas, the protected areas legislation should give guidance as to what can be done with the private land. The legislation should specify that the land owner has an obligation to tailor his or her activities to the objectives of the area. Where appropriate, specific provisions might enumerate some of these obligations with respect to specific areas. Also, procedures should be included to safeguard the owner's rights in matters such as

the hearing of grievances and applications for development, compensation for economic loss, etc.

Circumstances may arise where the owner of private land required for protected areas purposes may be willing to exchange his or her land for land outside the designated area. Public land may be available and appropriate for such an exchange. In countries or regions where this situation could arise, it would be advisable for the protected areas legislation to grant to the protected areas authority the express power to exchange public lands for private lands.

Situations also may arise where donations of private land for protected areas purposes are a possibility. The legislation should give the protected areas authority the power to accept donations of land from private persons and groups for conservation purposes. The legislation should include the possibility of a partial donation where, for example, conditions or trusts might be imposed by the donor which make the donation partially impaired. The decision to accept or reject such terms might be left to a designated body, such as a protected area advisory committee, where one exists, or to the designated authority of the protected areas programme.

Other variations might include allowing for Government purchase of private lands with the conveyance of a lifetime lease back to the owner. Or, particularly where it is difficult to get large plots of freehold property, mixed ownership schemes might be arranged with private, subnational and national government ownership combinations.

# C. Customary Rights

In many countries, when considering the status of land the drafter must give special attention to any communal or customary land use rights and practices. Protected areas legislation must take into account the importance of the communal organization and customary authority at the local level. It is essential to the success of the programme that land arrangements for protected areas in regions with customary rights be accepted by the local customary authorities. Similarly, any associated responsibility or accountability on the part of the customary authorities for protection of the area as the result of such arrangements must be clear and firm. As a practical matter, it will be very difficult to locally implement any legislative programme if the local authorities involved do not understand, actively support, and fulfill their responsibilities pursuant to the programme created.

In some cases, it may be necessary to make special arrangements with customary officials for the use of customary land. Arrangements for a lease of the land for perpetual use and control by the protected area authority might be a possibility. Some compensation might be necessary to reimburse the traditional users for relinquishing their rights to the land. Existing laws and procedures dealing with actions on customary land for other public purposes may apply here. The application of existing laws and the requirement for any new procedures or powers should be specified in the protected areas legislation to remove any cause for doubt. Whatever approach is used, arrangements on customary land must be adequate to ensure the long-term protection of the designated area.

#### V. Establishment of Protected Areas

#### A. Background: Protected Areas Jurisdiction and Land Use Planning

In order to attain the conservation objectives of protected areas programmes, protected areas planning and establishment should strive to fulfill the purposes of the protected areas policies while fitting within the overall physical planning structure of the country and area. Protected areas legislation should provide for the establishment of protected areas within affected national, regional, and local land use frameworks. Information accompanying the nomination of a protected area should identify sufficiently the resources and management needs of the area so that decisionmakers can relate the protected areas proposal to country or regional development schemes and planning goals.

Moreover, protected areas planning cuts across subjects which are the province of more than one government entity. Such planning therefore requires a thorough analysis of jurisdictional interests which would affect or be affected by the proposed area, once created. There are three variations of jurisdiction to keep in mind with this analysis. First, different types of areas within the same programme may be under the jurisdiction of different authorities. For example, land areas may be under the jurisdiction of one authority while marine areas are under another. Or, forest reserves might be under the jurisdiction of a forestry institution, while wildlife areas are under the jurisdiction of a wildlife unit. Second, within a protected area unit, different matters may be under the jurisdiction of different institutions. For example, one unit may contain both land and water areas which would normally each be under the jurisdiction of the different institutions responsible for these matters. Or, separate institutions dealing with wildlife, forestry, archeology, geology, cultural matters, etc. may have interests inside the designated area. Third, jurisdictional questions may be raised regarding authority over external activities, both immediately outside the protected area as well as further away, which have potentially detrimental effects inside the protected area.

Identification of such jurisdictional interests must be made in the planning process as soon as possible. These interests must be coordinated and decisions made as to their hierarchy within the authority structure for the protected area programme involved. The establishment of a consultative mechanism and procedures for resolving conflicts might be important where several strong interests exist. Whatever the particular situation, jurisdictional issues must be raised and mechanisms or procedures planned for effective decision-making in furtherance of the objectives and purposes of the proposed protected area programme or unit. This is essential to ensure that the programme or unit, once established, will not be defeated in implementation by jurisdictional overlap and sectoral conflict.

Strong linkages are required generally between sectoral planning in areas affecting and being affected by protected areas (agriculture, forests, recreation, etc.). Protected areas planners and managers must have regard for what is happening simultaneously in these other sectors. It is therefore especially important that protected areas legislation recognize and require general programme and planning coordination between protected areas decision-makers and other affected government bodies and interests operating under other laws or processes. In addition, to ensure the effectiveness of each protected areas programme, this planning process should involve active public participation particularly at the local level whenever possible.

#### B. Powers to Establish, Amend and Abolish

Protected areas are established to provide lasting conservation of species and ecosystems. It is therefore important that once areas have been designated, their status not be changed except for some compelling higher public interest. To insure this permanence the fullest investigation of possible sites and maximum coordination on protected areas planning and designation is necessary from top levels of Government.

Because of the need for coordination and top-level decision-making with protected areas designations, the power to establish any protected area should be by law. Approval should be required of the highest body responsible for legislative matters in the country or region, for example, the parliament, legislative assembly, executive or other highest competent authority. Similarly, amendment or abolishment of any protected area should be through superseding legislation and determinations of this highest authority. Wherever possible, this requirement should apply to the legislation, as well as to specific boundaries and classifications for the areas created or authorized by the legislation.

While this level of approval should be the general rule, in some countries it may not be politically or administratively possible for the entire range of areas. In cases where the highest legislative level of approval is not possible, review and approval should be required at least from a competent authority at a level higher than that which is responsible for administering the protected area programme.

#### C. Procedures for Establishment, Amendment, and Abolishment

Protected areas legislation must contain enough detail on establishing, amending, or abolishing a protected area to safeguard proper implementation. Provisions should include:

- a designation of the individual or institution that will be responsible for gathering information and identifying areas for protected status or change of status (this may be the responsibility of the designated protected areas authority);
- how such nominations regarding protected areas will be made;
- the role of the public and other governmental interests;
- a recommended time-frame within which specific nominations and legal measures on a particular area must be reviewed and passed on by the legislative or other approval body, after referral; an allowance for delay or a holding action with justifiable reasons, e.g., further data required, legislature not meeting, etc., should be included.

The legislation should require the consultation of all interested parties each time an area is created, amended, or abolished. These provisions should include adequate means of public notice on each nomination or change of status to ensure that interested parties are informed in time to conduct meaningful consultations. For intergovernmental consultations, an existing intergovernmental body might provide an appropriate forum. Or, a special governmental advisory committee may serve the purpose. Means for public consultations with academic, business, or local representatives must also be provided. These might include open meetings and stated periods of time within which public comments will be

received and reviewed by the decision-making body. Wherever possible, legislation should provide that the level of protection of an area will not be reduced without opportunity for public consultations.

Furthermore, protected area legislation should provide a means of assuring that arguments in favour of continuing protected area status, where there is a challenge, will be effectively made before the decision-making body. The legislation should provide that approval of orders to withdraw or down-grade protected areas will not be given until a protected area advisory committee or other group whose primary interest is in the protected area programme has had an opportunity to consider the question and report to the decisionmakers. Such a group should be composed, in part, of technical scientific experts; this would help ensure that its report put the most favourable case for preserving the area before the decision-making body to be weighed with the evidence accumulated for other interests. Provisions also should require that:

- no withdrawal or downgrading in classification will be authorized until the decision-making body is satisfied that such withdrawal will not prejudice the well-being of the area, except where there is a specified higher public interest; and
- ii) that the decision-making body give reasons whenever it decides to approve any withdrawal or downgrading which has been opposed by the advisory committee or other group designated to report in the interest of the protected area programme. Such decision to withdraw or downgrade should be open to challenge in a Court of Law.

In cases where some compelling alternative use requires that protected areas be removed or lessened in status, the legislation should provide that replacement areas of equivalent ecological significance be designated. Where there are no equivalent areas, for example, for a unique feature, rare resource, or last surviving example of a particular ecosystem, there should be a strong presumption against changing the status except for some overriding specified higher public interest.

#### D. Demarkation of Boundaries

To avoid any doubt, boundaries of protected areas should be defined in the establishing legislation by the best means available. This may be done in tables, appendices, or schedules in the law, so long as the definition is clearly a part of the law. General legislation should require that clearly defined boundaries be included in any specific legal instrument establishing a protected area.

The amount of detail required for a boundary definition may depend upon the means at hand. It would be unrealistic, for example, to require an extremely sophisticated survey where the means were not reasonably available and where fulfilling the requirement would postpone the establishment of the area several months or years. The essential prerequisite is that the boundary be defined to a degree sufficient to be identified and communicated for necessary management and protection purposes. Where an unreasonable delay might result otherwise, the best available boundary definition consistent with this prerequisite might be acceptable until a more technical definition could be formulated.

Some of the best identified boundaries are those which follow topographical or physical features. This type of boundary is, of course, only feasible where it

coincides with the protection and management needs of protected area ecosystems and resources concerned.

Just as establishment of protected areas should be approved by the highest legislative authority, specific boundaries of protected areas should be approved by this authority, wherever possible. Otherwise decisions made at lesser levels which cause a change of boundaries from time to time may work to undermine the entire protected area.

To inform the public about protected area boundaries, the legislation should require that at the protected area site, all boundaries must be clearly marked with boundary notices spaced in a manner adequate to inform the public. In addition, regular inspections of notices and clearing of boundary lines by designated officials should be required.

Provisions should specify that posted notices around protected areas indicate:

- (a) the kind of protection afforded the area;
- (b) the extent of the area set aside (with a map);
- (c) the different penalties resulting from contravention of the law in or around the protected area.

#### E. Details on Management, Protection, and Administration

General legislation should provide for establishing a variety of types of protected areas. It generally should define management categories, and protection, enforcement, and administrative measures required for these types of areas. In addition, it is particularly important that general legislation direct any specific legal instruments establishing protected areas to contain sufficient detail regarding institutional arrangements and management operations to ensure fulfillment of the area's purposes and objectives. From a legal point of view, it would be unsatisfactory to formulate legislation which is too general or vague to meet its purposes.

Specific legislation for particular protected area units should provide a level of detail for each unit which will ensure sufficient guidance with implementation of day to day operations by the management authority. This guidance should be adequate to steer the design of any regulations which may be authorized by the general legislation. General legislation should require that specific legal instruments establishing protected areas contain adequate institutional arrangements and management provisions to ensure fulfillment of each area's purposes and objectives<sup>25</sup>.

#### F. Criteria for Qualification in International Programmes

As discussed in Part One, multilateral conventions and international programmes grant formal recognition to various nationally protected areas only if the national establishments meet certain criteria. These criteria may vary with each registry. However, some of the requirements include national provision of adequate legislative protection or assurance for implementation. It is, therefore, important that the legal drafter be familiar with these requirements and guidelines. Since the criteria are of international importance and reflect the most current statement on the future direction of protected areas, the drafter should strive to interest the country in their application and use <sup>26</sup>.

#### G. Interim Protection

It may not be always possible or practicable to declare immediately an area to be a protected area once it is identified as needing protection. For example, the status of the land or the proper protected areas classification may be uncertain; development of preliminary data and inventories may be required; analysis of the area in relation to social, economic, or other development needs may delay action. Legislation should provide some means for immediate interim protection and Government intervention once an area is identified in order to prohibit actions detrimental to the existing natural state of the property until more permanent protection is available. Otherwise, speculators may quickly invade the area for personal exploitation and benefit.

One possibility for interim legal protection is to include in the legislation the power to establish certain areas as interim protection units or zones<sup>27</sup>. Where such units are authorized, provisions should require that for establishment the responsible protected areas authorities clearly define the area and its boundaries in accordance with the requirements for any other protected area.

Power to declare an area to be an interim protection unit might rest with the highest competent official responsible for the programme (for example, at the ministerial level), or with the Head of State. Because prompt action is usually necessary when providing interim protection, it may be advisable to leave the power of prompt decision-making with a top-ranking official, rather than with a legislative body which will generally take longer to act. Also, for any such unit, interim regulations should be authorized relating to the types of activities which are permitted or prohibited in the area. Such regulations may be less stringent than those for protected areas, although they generally may need to deal with the same types of activities, including the powers of enforcement and administration, in order to adequately protect the areas<sup>28</sup>.

Interim regulation which includes prohibitions may give rise to compensation claims for certain interests temporarily lost. These claims might be dealt with according to procedures similar to those required for fully designated protected areas. The drafter should research whether land acquisition procedures are applicable to areas with only interim protection status. If compensation is to be allowed in interim protection zones, the legislation should specify this possibility, along with the procedures and requirements involved.

In well-established planning systems, some interim legal protection might also be provided through other existing legal or administrative means. Depending upon the effectiveness of these mechanisms, supplemental protection might be achieved through zoning controls, regulation of ground and air traffic, licensing of activities, etc.

# VI. Management Plans

# A. Background

Protected areas programme planning occurs at many levels<sup>29</sup>. First, as discussed earlier<sup>30</sup>, any national or subnational protected areas programme must be planned within the context of national and subnational land use schemes so as to be consistent with broad national policies and development planning goals. Second, the national or subnational protected areas programme must be planned

and its individual units identified in a manner which furthers national conservation policies and objectives for the country where they exist. Third, each individual protected area unit must be planned so that its specific objectives within the national or subnational protected areas programme can be met.

The planning level dealing with individual unit plans must address in detail the management operations and administrative needs required to fulfill the unit's objectives. The resulting plan is often called a management plan and includes recommendations on appropriate sequential development.

The development of unit management plans must be preceded by a background analysis of the resource from an international, national, regional, and local perspective. Such an analysis is a fundamental prerequisite in formulating objectives for each unit in accordance with any national conservation objectives. Background information must be collected and examined on the resource, its significance, the natural and man-caused conditions and problems bearing on the resource, and the present and anticipated future resource uses, including possible multiple use schemes. In many cases, the causes for decline of a species or degradation of an ecosystem are multiple, complex, and not fully understood. It is therefore essential that as much as possible initial research and monitoring be conducted to begin to understand and define such causes and to suggest remedial action for incorporation in the plan. Social, economic, and ecological aspects of the area also must be identified and given appropriate weight.

Based upon the background information, a unit management plan is prepared specifying particular conservation objectives of the area and providing direction to the manager for meeting these objectives. The plan should incorporate such additional research, inventory and monitoring needs as may be required on a specific or continuous basis to better understand and deal with the ecological processes underway in the area. This plan becomes a basis for making decisions on such matters as funding, permitted and prohibited uses, enforcement, and administrative requirements. As development of the unit progresses, the plan also may serve as a valuable tool for judicial reference when legal challenges are made to the propriety of official actions taken in the designated area.

Depending upon the type of area involved, the topics covered within a management plan might include conservation and protection measures necessary (including ongoing monitoring and research of those measures) to safeguard the resource; amount of utilization for recreation, interpretation, research, scientific and educational purposes; administration and maintenance; building, road, and other physical development necessary for management of the area; zoning categories to segregate activities and achieve different uses and purposes; personnel and institutional needs; local involvement; and a development schedule. In essence, the plan presents the kind of integrated development programme necessary for the unit to fulfill its objectives<sup>31</sup>.

## B. Legal Requirement for a Plan

General protected areas legislation should require that a management plan be prepared for each protected area unit established pursuant to the legislation. Specific legislation creating a particular unit should reiterate this requirement for that unit. In operation, the management plan is a flexible document which adjusts and expands as new discoveries or changes in the area alter the elements involved. Nevertheless, to encourage prompt development of the first plan once an area has been established, it may be important to specify a reasonable amount

of time after establishment, for example, one or two years, within which the plan must be operational. This time requirement, of course, will depend upon particular circumstances, including institutional and financial capabilities of the country or region. Procedures should be included for adoption of the management plan - its presentation, review, and approval along with an identification of the key participants in that process.

For some protected areas, an inventory of the resource may not have been conducted at the time of establishment. A thorough resource inventory is critical for long-term planning and effective management. Therefore, it may be desirable to require in the legislation that an inventory be completed on each area, where one does not already exist, at the earliest practicable date after establishment of the area. This exercise might be called for in the first management plan for the area.

The constituent elements and essential considerations for any plan also should be provided in the legislation. These should include:

- (1) a detailed description of the manner in which management of the protected area is to be undertaken; this should include both protection and utilization measures, as well as the research and monitoring programmes necessary to support these measures. A detailed description of the existing situation, along with a review of the reasons which led to the protection of the area, will be necessary as part of this analysis. If further inventories are needed these should be identified and plans included for their completion. When the plan calls for research and monitoring, it should include provisions for planning and coordinating these activities;
- (2) the plan should provide for the interval of time within which and manner by which public comments may be made to the authorities in connection with the plan;
- (3) when the plan allows for certain uses or developments in the protected area (e.g., recreation, building of certain facilities, etc.), it should clearly set out any conditions which are applicable to those uses or developments;
- (4) in preparation of the plan, objectives and purposes for the general programme and area should be recognized and followed;
- (5) when a plan provides for division of the protected area into zones to ensure that different objectives are met or to serve as buffer areas around more fragile lands, the plan should provide a clear description of the zoning category and the conditions under which each zone should be maintained;
- (6) the plan should state the interval of time during which it will be effective and date on which it will cease to have effect.

There may be additional elements for specific country situations. The legal drafter may find useful counsel in the technical and scientific community with these considerations.

While the legislation must provide clear guidance on content and procedures for adoption of the management plan, it also must allow for some flexibility. Often, environments are fragile; there may be a relatively high number of unknowns. There will be constant pressure to change and shift criteria and zones as

scientific standards and human interests evolve. In other words, it will not be possible to identify all future conservation needs at the time of enactment.

One means to assure some flexibility is to require that any management plan be effective no longer than a designated interval of time, for example, ten years. At the end of this interval, the management plan could be revised and updated following the procedures which apply to the preparation of the initial plan. Legislation should specify that an old plan will not be revoked until the new plan becomes effective and operational. Modification or amendment of the plan should occur only in accordance with the same procedures established for approval of the plan.

It is desirable that the public and scientific communities participate in the development of management plans as much as possible. This will better assure a full representation of possibilities and interests, as well as promote awareness of and support for the final programme. To ensure participation, the legislation should provide adequate means for public involvement in the plan preparation. Specific provisions might include:

- (1) public notice of the intent to prepare a plan in respect of a particular area;
- (2) a stated interval of time within which comments are invited on a proposed Plan;
- (3) an address and name to which comments may be forwarded for consideration;
- (4) a requirement that comments made by the public shall be taken into account in the formulation of the plan and that whenever these comments are rejected reasons should be given for such rejection.

## C. Zoning and Management Plans

Modern legislation should include the concept of zoning. This is a device whereby a protected area is divided into different units so that degrees of protection and various uses can be accomplished side by side. For example, through careful zoning, it may be possible to have, within one boundary, an area zoned as a restricted nature reserve available only for scientific purposes next to lands which are zoned for some tourism and public recreation. This is a particularly useful concept to handle an area which needs protection but, because of ecological, social, or economic reasons, must receive various degrees of protection and serve at the same time a variety of purposes. With zoning, one protected area might include separate zones for wilderness, administrative, recreation, archeological, historical, etc. activities.

To ensure that zoning is possible and encouraged, protected areas legislation should specify that a management plan may provide for the division of a protected area into zones and may set out the conditions under which each zone shall be established and maintained. Furthermore, in order to provide some guidance on the use of zoning within protected areas, the legislation should require that any zoning arrangements be described in sufficient detail to adequately control activities and provide protection. Objectives of each zone should be as clearly defined as they are for the entire protected area unit. Zoning that is too vague will promote neither the zone's nor the entire area's objectives; rather such zoning arrangements may cause effects which are detrimental to the

primary purposes of the zone or neighbouring zones. The legislation may specify and define the types of zoning categories possible under the circumstances of each programme or unit. Zoning categories might use such labels as: Scientific Zone, Primitive Zone, Extensive Use Zone, Intensive Use Zone, Historic-Cultural Zone, Zone of Recuperation, Special Use Zone, etc.<sup>32</sup>.

Adequate guidance must be set out in the management plan for classification and maintenance of each zoned area to minimize problems of incompatibility. For example, research which changes a landscape may defeat other purposes for which an area is also established. Or, recreational activities may threaten by overuse or pollution the natural features of an area, or a neighbouring area, which has been distinctly preserved for those features. The legislation should require that zoning arrangements within management plans be carefully designated and monitored to ensure that classifications and their associated objectives are not or do not become incompatible with each other or with the overall protected area's objectives.

Some zones may require special attention or particularly complex management measures. It may be necessary to provide a more detailed site plan within the management plan for these zones. For example, within a national park there may be an area zoned to protect a unique and fragile ecosystem, which may itself require more detailed management and planning. The legislation should reaffirm the need for adequate planning by specifying that each management plan must attain the level of detail necessary to ensure protection according to the objectives of the area. The preparation and implementation of more detailed site plans for particular zones may need such focussed attention that specific consultation, research, monitoring, and public involvement are necessary on the particular zone. The legislation should allow for this possibility in accordance with procedures established for the adoption and implementation of the plan as a whole.

## D. Approval of Management Plans

The purpose of a management plan is to ensure some direction and present an integrated approach to the fulfillment of an area's objectives. As discussed previously, the designation of a protected area should be reviewed and approved by the highest possible legislative or equivalent body. Similarly, to safeguard the area and its objectives, it is important that the plan, including any zoning classifications, be presented to the highest possible competent body for review and approval. At a minimum, the law should provide for review by an identified authority at a level above the authority administering the protected areas programme. Modifications or amendments to any aspect of a management plan also should require review and approval by this higher authority.

Because zoning classifications may have such a critical impact on the survival of the area, the standard of review and approval required for zoning changes which result in lesser levels of protection should be especially high. It is advisable to require that review and approval procedures for downgrading of zones be at least as stringent as those required for downgrading or declassification of entire protected areas. This is essential when one considers that zone changes to a lesser level of protection ultimately will have as serious and degrading an impact on the entire protected area as would direct declassification or downgrading of the area. At this point the legal drafter might review the procedures recommended for declassification or downgrading of entire areas33. Summarizing from that discussion, the following should be required for review and approval of downgrades

in zoning: public consultation, a report to the decision-maker by a protected area advisory committee or other special group with protected areas as a primary interest, general presumption against downgrading where the well-being of the area will be prejudiced, requirement that the decision-maker give reasons when it approves downgrading of a zone which has been opposed by the protected areas advisory group, with this decision open to challenge in a Court of Law. It may also be advisable for the legislation to specify the interval of time within which the reviewing body must act on any submission.

For emergencies requiring extraordinary measures not covered by the plan, the legislation should authorize special review and approval procedures. The authorities responsible for the protected area should be central participants in consultations regarding any extraordinary measures. To ensure that emergency provisions are not abused, the legislation should carefully describe the requirements and procedures for a situation to qualify as an emergency. Provisions as much as possible also should specify the range of permissible remedial measures, in light of the objectives of the area, which may be undertaken in an emergency. The guiding principle should be the adequate long-term protection of the protected area in furtherance of its objectives and purposes, except for some overriding specified higher public interest.

## E. Management Institutions

As discussed above, legislative provisions must specify the objectives of an area, as well as the requirement of and framework for management plans to achieve these objectives. To be effective, the provisions must also designate and identify the particular executing institution or individual who will have responsibility for preparing, elaborating, and implementing any plan. This should be expressly provided to ensure accountability for implementation and to avoid uncertainty during any judicial review.

Different levels of institutional activity may be required. For example, approval of a draft management plan may be necessary at a certain government level before submission to the higher reviewing body. Different kinds of responsibilities (protection, administration, scientific research and monitoring, etc.) may need to be executed at different times by different institutions or individuals. The legislation should authorize such funding and institutional resources as are required. The country legal and technical requirements for specificity may vary. As much as possible, however, the various functions and responsibilities created pursuant to the law should be assigned. In some cases, this may be accomplished by assigning the general functions and responsibilities to one official, with powers of delegation. Again, this will clarify who is accountable. In all cases, the authority responsible for the protected areas programme should have ultimate responsibility for oversight and coordination of all activities related to the management plans.

Management work may benefit by assistance from consultative arrangements in scientific and other technical matters. In the legislation, the use of consultative or advisory groups should be authorized as a possibility for performing some of the management and other advisory functions. Particularly where management functions are to be performed, the legislation should be clear that all work will be supervised by the authority responsible for the protected area.

## VII. Buffer Zones

As discussed above, it may be necessary to create zones inside protected areas as buffers to screen or protect certain portions of the area from surrounding forms of use. Some zones within a protected area may serve to protect adjacent zones requiring more protection by screening out harmful activities. In some cases the use of another management category, such as a national forest next to a national park, can serve this purpose. Zoning arrangements should help absorb elements considered detrimental to the purposes of the more sensitive zones while not defeating the purposes of the areas used as buffers. When zones are created within a protected area as a part of a management plan they are directly administered and managed under authority of the management plan and the legislation which created the protected area.

In many cases, however, it is also necessary to provide a buffer zone or protective belt around the outside of a protected area. Such zones increasingly are required to protect the designated area from the growing number of outside influences which would defeat the objectives of the area. These peripheral areas may be on public, private, or communal land being used for a variety of purposes. Without specific legislative authority to empower some regulation of activities in these peripheral belts, protected areas could suffer serious encroachment and damage from surrounding activities and development.

Increasingly, modern legislation is providing for the creation of peripheral buffer zones outside the protected area and authority for regulation in those peripheral zones to control certain activities which may threaten furtherance of the objectives of the adjacent protected area. Serious and ever-growing threats to protected areas are being experienced through activities which give rise to pollution from pesticides and other agricultural or industrial contaminants, disruption of the water flow and water table, fire, pollen, erosion, noise, siltation, free ranging domestic animals, etc. Express legislative authority usually will be necessary to allow the designation of peripheral buffer zones as a protection against such threats. Legislation also should grant to the protected areas authority power to regulate and prohibit activities in this zone as necessary to achieve the purposes for which the area was protected.

Peripheral buffer areas may include agricultural lands, rural settlements areas, forest plantations, or a variety of other land areas. It should be noted that in some countries well-developed planning systems may easily accommodate requirements for protected areas buffers. However, for most situations distinct provisions authorizing peripheral buffer areas are essential elements to include in protected areas legislation. Furthermore, because effective regulation of such buffer areas will require support and cooperation from local residents using these lands, the legislators may want to authorize and encourage the designation of local bodies to advise on and help enforce regulations for local buffer areas. These local bodies could be charged with specific responsibilities concerning management and surveillance of nearby buffer zones.

As with protected areas, peripheral zones and the objectives of their creation should be clearly identified and defined in the legislation. Wherever possible, the legislation should require that any peripheral buffer zone must also be approved by the legislature or equivalent body. Its establishment should meet the same requirements for specificity as would a protected area, including:

 (a) a clear and detailed statement of purpose adequate to meet the objectives of the buffer zone;

- (b) well-defined buffer zone boundaries in the legal instrument and clear demarkation of the boundaries at the site:
- a clear description of the prohibited or permitted activities and the amount of regulation authorized or required in the buffer zone;
- (d) administrative, management, and enforcement powers and responsibilities in the buffer zone, and the executing body which will be charged with these powers and responsibilities;
- (e) other authorities and agencies involved and the type of coordination required;
- (f) penalties for contravention of any regulations in the buffer zone.

# VIII. Institutional Arrangements

Legislation which creates a protected area unit or programme must identify and where necessary establish institutional mechanisms responsible for the management and administration of the unit or programme. This is essential for effective implementation of the legislation. If legislation is vague or incomplete, particularly regarding the institutional needs, the basic purposes and benefits of the protected area unit or programme may never be realized for lack of delegated responsibility, accountability, and capacity. Protected areas should not be established without designation of adequate institutional mechanisms.

The institutional arrangements whereby protected areas are managed and administered may vary from country to country. There may be different levels and kinds of institutions and authorities required for various protected areas. The levels of authority may range from the national to the local with the possible subnational levels involving departmental, state, or provincial bodies. The arrangement chosen for a particular country or programme may depend upon many elements, including the form of government (for example, whether centralized or decentralized), available finances and other institutional resources, lines of jurisdiction and decision-making, commonly accepted practice, etc. The variations possible may include elements of the following:

- strong central programme with delegation of staff and resources directly from headquarters on all matters;
- (ii) strong central programme with decentralized units at the regional or local levels to handle day-to-day operations of each protected area or region with supervision from headquarters;
- (iii) central programme which provides guidance and coordination to strong decentralized and independently operating institutions with their own staff and institutional resources for each region or unit.

There may be administrative, scientific, management, enforcement, financial and other responsibilities delegated to various divisions of the applicable authority structure. Advisory bodies and consultative organizations may be used to ensure representative participation and technical assistance by public, scientific, government and other concerns.

It is recognized that each country must adopt an institutional system to meet its own particular needs. However, for purposes of the legislation there are a few common and important elements which should be considered for any protected areas institutional regime.

#### A. General Commitment to Protect and Preserve

Whether a protected areas programme is national or subnational, the legislation should require a clear and positive commitment on the part of the responsible institutional mechanism to protect and preserve the designated area according to its purposes. Consistent with that commitment, the legislation should grant the responsible institution power to adopt such protective measures as may be necessary for each area. Such measures should be designed to adequately ensure the long-term preservation of the area's ecosystem, habitat and species according to its purposes and objectives.

Often these measures will include various forms of regulation as well as some prohibition of activities. Accordingly, the legislation also should grant the responsible institution the general power to regulate and prohibit activities as necessary. In addition, as guidance to the responsible institution, it is advisable to enumerate somewhere in the legislation the kinds of regulated and prohibited activities applicable for the particular type of protected area or areas being created. These provisions would depend upon the purposes and objectives of the area. Examples of regulated and prohibited activities which usually are controlled through legislation are discussed further in Section IX, "Prohibited and Regulated Activities for Protected Areas".

#### B. Functions of the Institutional Mechanism

A top-level Government executive official should be designated to coordinate all activities of a protected areas programme and to be ultimately responsible for ensuring the furtherance of the programme according to its legal mandates. In many countries this might be the Minister of Environment, the Minister of Natural Resources, the Minister of Agriculture, or another official of equivalent ministerial rank, so long as the official's mandate does not conflict with the functions required for protected areas. In some countries, this responsibility might be assumed by the Head of State or his delegate. Where possible, this ministerial or equivalent executive should be designated in the legislation; the official's general duties and powers also should be indicated. Wherever the responsibility is placed, the designated official should have sufficient authority and influence in the Government structure to successfully defend and promote the policies and purposes of the protected areas programme. Legislation should grant this official the power to delegate duties and powers. Duties and powers enumerated in the legislation might be further defined in subsidiary regulations.

Serving this executive official must be the institutional resources necessary to oversee and carry out on behalf of the official the management, administrative, research, and other functions required for the programme. These functions may go to an existing Government parks, wildlife, or other compatible division or unit within the ministry responsible for the overall programme. Or, an independent or quasi-autonomous Government authority may be delegated with the responsibilities. In some countries, it may be necessary to establish a new Government unit or parastatal authority. Whatever the particular practices in a specific country, it is important to choose, as much as possible, an institution with a compatible mandate, and the scientific competence, technical experience, and public purpose to carry out a protected areas programme. Existing institutions should be used to the fullest extent possible.

Furthermore, regardless of whether jurisdiction for implementation of protected areas programmes rests with a national or subnational level, it is essential that a mechanism at the national level serves a coordinating role for the entire country programme.

The following legal considerations are particularly important with respect to institutional mechanisms:

- it is essential that the legislation designate the institution responsible for overseeing and implementing the programme. This institution should be a well-defined unit, served by competent scientifically trained personnel in protected areas matters, not merely one or two officers who already have full-time responsibilities in other areas;
- wherever possible, within this designated institution the position of Director or equivalent Presiding Officer of the Protected Areas Programme should be created by legislation, and this Director should be assigned general as well as specific responsibilities for overall operation of the programme according to the directions of the executive level official having oversight responsibility;
- the regulatory and institutional responsibilities necessary for proper management of protected areas make it inappropriate to delegate the institutional powers for the protected areas programme to a Government or quasi-autonomous authority with primarily commercial interests in protected areas;
- the duties and powers, including any regulatory authority, of the responsible protected areas institutional mechanism should be set out in some detail in the legislation.

The following items illustrate the kinds of general duties and functions which might be delegated through legislation to the national or subnational institution with protected areas programme responsibility:

- performance of all matters necessary for the proper management and administration of each protected area and the programme according to its objectives and purposes;
- consistent with the protected area's objectives and purposes, the implementation of such protective measures as may be necessary for -
  - (a) protection from destruction or alteration and preservation of natural habitats;
  - (b) protection from the killing, taking, or disturbing of flora or fauna species;
  - (c) protection of ecosystems and species from pollution;
  - (d) protection from introduction of alien or exotic species;
- promotion of public educational and local information exchange programmes useful or necessary to promote the objectives and purposes of each protected area through increased public understanding, support, and participation:

- arrangement of any maintenance, management, inventory, monitoring or statistical work necessary for a particular protected area or an entire programme;
- 5. undertaking and coordination of scientific research or investigation relevant to existing protected areas or to establishment of new areas;
- 6. preparation and implementation of management plans for each protected area;
- 7. preparation of supporting data and making recommendations for the establishment of new areas, new management and protection measures for existing areas, and any other matters relevant to the programme;
- 8. coordinating activities related to protected areas and ensuring that local authorities, other concerned bodies and the public with responsibilities or interest in a protected areas programme or a particular area
  - (a) are adequately supervised and guided so each participates as part of an integrated effort;
  - (b) are kept informed about programme regulations, research, and other activities;
  - (c) are given adequate opportunity to comment or participate in decision-making on and implementation of programme measures affecting their areas;
  - (d) are encouraged to participate in and may receive benefits from any legitimate activities subsidiary to the management of the protected area for which public involvement is appropriate;
- working with and utilizing advisory bodies and other consultative arrangements as appropriate;
- carrying out training programmes;
- coordinating protected area programmes and sharing information with other countries;
- 12. administering special funds established for purposes of the protected areas;
- 13. preparing any reports and conducting any other matters incidental to or in connection with performance of these and related functions.

The kinds of general powers common for national or subnational protected areas institutions may include the following:

- making rules and regulations, which may include prohibitions governing the proper use and protection of protected areas, their ecosystems, species, habitats, and other resources; and making individual regulations governing individual protected areas where appropriate:
- making expenditures for the care, supervision, maintenance, and protection of any protected area;

- acquiring lands for protected areas, where necessary, by acquisition or other authorized means;
- 4. constructing, regulating, and altering fences, roads, paths, and other facilities in order to fulfill the purposes of a protected area;
- establishing advisory bodies as needed to help the Authority adequately perform its functions;
- entering into contractual arrangements for expert or other services required in performance of its functions;
- initiating and participating in arrangements so as to perform its functions in cooperation with any other Governmental or non-Governmental organization;
- employing agents and staff;
- 9. setting up structures and services for its own operating needs and the needs of the programme;
- raising additional funds through such means as establishing entrance fees, fees for licences, permits and other items, including major publications, issued or administered by the programme, and conducting other activities of fund-raising;
- 11. delegating its powers and functions;
- 12. doing anything necessary for or in connection with the performance of its duties and functions or incidental to its powers.

The above duties and powers provide only a general indication of the kinds of items which might be noted in legislation. Each item may require more specificity depending upon the requirement of the particular legal system and the particular protected area or programme under consideration. In addition, the interpretation of the word "powers" may vary from country to country and attach to different levels of Government under different circumstances. So these items may need to be reshuffled under powers, duties, or functions for different levels as appropriate.

In setting out duties and powers, it is especially important that the legislation provide enough detail to adequately guide the institutional authority on the range and limits of its powers and responsibilities. Powers which are too broad may result in too much administrative discretion weakening a programme's purpose and effectiveness in meeting its objectives. Similarly, responsibilities and duties which are too vague or which go undelegated may be left undone. In either case, the protected area will suffer.

An additional consideration is important. The legal drafter must aim for a careful balance in the legislation between enough detail with powers and duties, on the one hand, and enough flexibility to meet future needs, on the other. Not all needs can be anticipated. Not all resource values will remain the same. Therefore, it is important that the legislation enumerate specific necessary powers and duties which can be identified at the time of enactment, while at the same time retain a general clause authorizing and requiring such further actions as may be

necessary and incidental to the proper management and administration of the protected area or programme.

## C. Site-Specific Implementation (Local Level)

Usually, the local implementation of legislation on protected areas is the responsibility of rangers, inspectors, guards, and other officers at the protected area sites. Local understanding and support of protected area programmes in the particular locality are critical to the success of this work. The officers who work at the sites have especially important roles promoting this understanding and support.

Legislation should authorize the appointment of competent local staff and officers to carry out the site-specific mandates. Provisions should clearly define the scope of their powers and responsibilities especially with respect to enforcement<sup>34</sup>. Where possible, appointment and assignment of officers to specific protected areas should be allowed. This will provide a better opportunity to develop working relationships with local people and to allocate assignments that may be most suitable for each officer's experience and background.

In the performance of their duties, all officers should have the status of public servants regardless of whether their institutional base is Government or non-Government. This will help protect them from abuse and violence, as well as strengthen their public image and authority in matters of enforcement.

In many countries, protected areas programmes have limited staff resources, particularly for conducting operations at the local level where implementation is most crucial. There are several local resources such as staff of local authorities, other existing enforcement officers, honorary officers, or conservation groups which might be used to supplement local protected area staff, as well as to improve local participation and involvement. The use of local resources should be encouraged and authorized in the legislation to the extent possible in order to avoid any later confusion about legality, as well as to ensure the maximum local participation practicable. When use of local resources is a possibility, legislative provisions should expressly define the relationship of such local arrangements to the principal national or subnational protected area institution. This is essential to clarify jurisdictional limits, powers, duties, discretionary actions, appointment procedures, compensation, etc., resulting from the delegations.

One possibility for local involvement is to authorize the use of local authorities in implementation and monitoring of protected areaswithin their territorial jurisdictions. Such authorities at a municipal, provincial, or district level may have the resources to administer certain activities or to take responsibility for certain local protected areas programmes. For example, daily surveillance or public education programmes might become the responsibility of some local authorities. Also, some authorities, for example those which already might have customary enforcement duties and powers, might be competent to directly enforce local protected areas regulations. It should be stressed, however, that use of customary authorities for enforcement may raise questions of accountability. Firm arrangements, through contract or other means, must be established to ensure the accountability of such authorities regarding these kinds of assigned responsibilities. This is especially important where such authorities are often outside the formal government institutional framework except for this type of limited purpose.

Where local resources are not available for direct programme implementation, the national or subnational protected area institution should still consider using the local authorities for advice and consultation, information gathering and exchange, and coordination with other local activities. Both to expand staff resources and increase local participation, it is advisable that these local government mechanisms be used to their fullest capacity.

A note of caution should, however, be raised when delegating responsibilities and powers to local authorities. Some protected areas may cross the jurisdiction of more than one local authority. In this case, special care must be taken to ensure that all local activities are performed as part of an integrated programme for that protected area. Otherwise the possibility of competing and conflicting actions between authorities over one or neighbouring protected areas can too quickly confuse or defeat the programme. The legislation must require that institutional arrangements be organized so that the entire protected areas programme is operated as a coordinated and integrated whole. Delegations of authority should be possible only within this coordinated framework. And all powers and duties exercised at any level should be consistent with the overall programme goals and compatible with the actions of neighbouring or other involved authorities. Where possible, the legislation should require that special coordinating mechanisms be established as a prerequisite to delegation of local responsibilities where more than one local authority is involved in a particular protected area.

Another method to expand staff resources at the local level is to authorize local police, inspectors, and other existing enforcement officers, such as forest and wildlife guards, to oversee certain protected areas duties in their respective localities. Again, this approach may also help build understanding with local residents. Where such officers are to be used for protected areas purposes, this should be clearly specified in the legislation. To allow for some flexibility, the legislation also might generally authorize the responsible protected area authority to designate such additional officers as may from time to time be necessary for the programme.

As another approach, honorary officers might be permitted occasional service. Where this arrangement is desired, general provisions should authorize the possibility. Again, such provisions should describe the general scope of the functions and duties for those classified as "honorary officers", the procedures for and length of appointment, and the extent to which their roles may be similar to those of their counterparts, the duly appointed officers. Requirements for nomination and appointment should be set out in the law. Candidates for these appointments might be drawn from outstanding members of the conservation community, or academic groups, or be individuals particularly interested in conservation of flora and fauna.

Individual citizens, local citizen clubs, conservation groups, or other non-governmental organizations may also give substantial service in this area and should be encouraged. For example, they may be able to help monitor and patrol protected areas in their localities, design local awareness programmes, assist with local research efforts, etc. The legislation should encourage this possibility and include any procedures necessary for formal or informal participation. For example, local clubs or individuals might apply to designated officers for authority to handle certain local activities. Legislation should provide guidelines as to the scope of such local participation, the manner of compensation, if any, and the supervising requirements to ensure that control is maintained by the protected areas authority. This guidance should be designed to make the best use

of voluntary help and should avoid channelling it into too rigid a framework. The reward for extending such service may come entirely from the satisfication of participating, or the gaining of practical experience, thesis material, or simply increased public goodwill.

## D. Advisory Bodies

It is important that protected areas legislation provide some mechanism for intergovernmental coordination, public participation and education, and advisory assistance on scientific and other technical matters. This may be done through the establishment of advisory bodies. These bodies should report, either upon request or at their own initiative, to the appropriate protected areas authorities.

Countries may appoint different kinds of advisory bodies to serve a variety of different purposes. Depending upon the country, these bodies may be called advisory boards, councils, committees, commissions, etc. For protected area purposes, some advisory bodies could directly advise a central authority; others might be more localized, advising local authorities in a region or for one particular protected area.

It is desirable that, wherever possible, legislation contain provisions for advisory mechanisms. Different approaches might be used. If at the time of enactment, the desired kinds and composition of certain advisory bodies are known, they might be established through the legislation; the membership, powers and functions can be expressly authorized. If, on the other hand, these decisions have not been made by the time of enactment, a general provision should still be included authorizing the establishment of such advisory bodies as from time to time are determined by the appropriate protected area authority to be necessary or useful in furthering its work and the purposes of the legislation.

Legislation might contain both specific and general advisory body provisions. For example, when identified by the scientific and administrative officials at the time of enactment, specific technical advisory bodies could be established in the legislation. This would ensure the authorization and participation of some specific advisory mechanism from the beginning of the programme. Then, a further general provision also might be included authorizing creation of such additional advisory bodies as may be needed in the future. This would contribute to programme flexibility to meet future needs. The legal drafter and other participants in the legislative process should carefully examine during the legal review or drafting process the possibility of advisory bodies. In this way, timely decisions can be made about the kind of advisory mechanisms to create and authorize.

Any provisions on advisory bodies should set out the general guidelines and procedures for establishment and operation, as well as who will have the supervising responsibilities. As much as possible, the types of purposes (e.g., scientific advice, coordination, public participation, etc.) for which advisory bodies might be formed should be included. There should be general guidance on membership, terms of service, officers, remuneration, procedures for operation and dissolution, and other advisory body considerations appropriate for the particular country or regional situation and practice. Including such information in the legislation will provide helpful guidance for those involved with establishing advisory bodies at some future date. It will ensure the possibility that advisory

bodies can be established while allowing some flexibility so that specific composition and functions can be identified when the need arises.

Advisory bodies for protected areas programmes could have a variety of functions. For example, advisory bodies may be created specifically to advise on scientific, technical, or management matters. Other advisory bodies may serve primarily coordination, information exchange, or public participation and local education functions, etc. When a specific advisory body is created in the legislation, its functions and powers should be clearly enumerated to ensure that its purpose is understood.

General functions for advisory bodies might include:

- the study of technical problems submitted by the responsible authority as they relate to protected areas;
- recommendations to the responsible authority on the management and administration of protected areas, including suggestions as to the research programme needed to support and improve the management plan;
- 3. suggestions as to possible public education programmes, or other studies and plans for a protected area or areas;
- 4. suggestions and consultation regarding amendments to the basic law and the drafting of regulations under the legislation;
- 5. review of draft management plans, their amendment and implementation;
- advice and consultation, either by request or on its own motion, to the authority on any matters relating to the operation of the legislation; including advice relating to any particular protected area or areas which should be declared protected.

The functions of the advisory body will dictate or substantially influence its composition. For example, if the body must advise on matters related to the programmes of a particular protected area, it would be important to include in that advisory group members with expertise or interest in that protected area. Where advisory bodies are established to serve specific regions or protected areas, membership should include regional or local expertise. Where local interests will be affected, local public participation may be important, particularly by those living near the protected area. In some cases, noted experts from outside the country might be included. Non-governmental representatives from special interest groups dealing with conservation or other affected interests might be included where appropriate. Generally, it is advisable to include scientific counsel in any advisory body for protected areas since the maintenance and survival of the area is so dependent upon scientific analysis and judgment.

## E. Coordination and Intergovernmental Planning

There are three matters to discuss under the heading of coordination. First, there is a need for general coordination of a protected areas programme within the national and subnational land use and development plans. Second, existing protected area programmes should be coordinated with each other, whether or not they may be operating under one or different statutes. Third, protected areas located at a national border or of transnational character require special coordinating mechanisms.

A prerequisite for a successful protected areas programme is that it be part of an effective and continuous coordinating mechanism of government interests affected by or affecting such protected areas. As discussed in Part Two, Section V, "Establishment of Protected Areas", several sectors of activity may directly or indirectly be affected by or affect the creation and management of protected areas. These include such sectors as water, agriculture, pastoralism, transportation, forestry, mining, tourism, hunting and fishing, historical and archeological protection, etc. Without coordination of these ranging interests, protected areas legislation and programmes will be continuously frustrated and possibly entirely defeated.

One simple step which would help promote some awareness of protected area programmes is a legislative requirement that protected area units be plotted on official maps. This requirement would apply to newly created, as well as the old, units.

For a more substantive effect, it would be advisable to include an express provision in any protected areas legislation requiring intergovernmental planning and coordination. This provision should generally require, to the fullest extent practicable, that governmental matters affecting, likely to affect, or affected by protected areas be coordinated and planned to ensure attainment of coherent and effective conservation strategies and an integrated protected areas programme. In some countries there already may exist government or semi-governwhich mechanisms have intergovernmental coordination decison-making as a major function. This mechanism should include regular representation of conservation or protected areas programme interests. In some cases, semi-autonomous or autonomous authorities may be responsible for administration and management of particular protected areas. To ensure that re quirements for coordination are applied to these protected areas authorities, without regard to Government status, provisions should so specify.

As discussed previously, an advisory body might also serve for the purposes of intergovernmental planning and coordination. This would be a particularly effective mechanism if representatives were carefully chosen to reflect the concerned interests and if participation were assured of being regular.

With respect to protected areas themselves, as discussed previously, in many countries several legal regimes and levels of institutions may deal with protected areas matters, each one with jurisdiction over different kinds of areas. For example, there may be wildlife areas, national parks, forest reserves, biosphere reserves, and archeological parks, each established and administered through different laws or by different institutions. In this case not only should there be coordination; consolidation and integration of the various related laws and institutions into a conservation system should be encouraged. This would help promote more efficient management and avoid administrative overlap or conflict.

With respect to border or transnational protected areas, or areas which are parts of international systems, special provisions in legislation should endorse and encourage a spirit of international cooperation and agreements on shared resources or interests between the affected States. In addition, wherever possible with border areas, it is particularly important to seek formal arrangements with the neighbouring states on matters of regulation, administration, management and enforcement. Otherwise, circumstances which will permit a violator merely to cross the border to avoid the laws of the injured State will soon defeat the

purposes of the protected area. Bilateral or regional agreements between the affected states may be made to remedy this problem. Protected areas legislation for border, transnational, or international areas should incorporate reference to any bilateral agreements, or, where they don't already exist, encourage development of bilateral or multilateral agreements in furtherance of the purposes of the areas and resources involved 35.

#### F. Finance

It seems almost too obvious to note that even with well-planned institutional mechanisms and the necessary delegation of legal authorities, protected areas programmes are likely to falter without adequate financing. Yet programmes continue to fail for serious lack of funds. Financing for protected areas programmes should be identified or referenced in the legislation according to general practice. Financing of such programmes frequently comes from general revenue funds which are applied and budgeted for each financial period. So long as the programme remains part of Government activities, provisions will be included in the budgetary allocation for the ministry or department which oversees it. For legislative purposes, the standard finance provisions appropriate to and necessary for the legal practice and style of each country, with accounting and reporting requirements, etc., should be included.

It is recognized that funding levels for protected areas programmes are dictated, of course, by several factors, including national and sub-national development priorities, available financial resources, and potential for international assistance. However, in light of the consequences of inadequate funding, the legislation might include, where possible, some guidance on priority areas for funding, for example, monitoring, enforcement, etc. Also, the legislation might call for, where possible and appropriate, the availability of some funds for future compensation needs for acquisition of private or customary interests where necessary to fulfill the purposes of the protected area involved.

Finally, the legal drafter should investigate with appropriate officials the possibility of establishing a Conservation Fund whereby protected areas revenue could be applied directly to the protected areas programme. Generally, such a fund might be composed of a portion or all of the monies collected by the protected areas authority during performance of its duties (e.g., through fees, itence and permit charges, etc.). An advantage of a special fund is that it allows application of monies directly obtained from the protected areas programme back into specific needs of the programme. This may be an incentive to the staff where they can see some return for their work, as well as a boost to public support where local fees are returned by way of direct improvements. Where the Government so chooses, legislation might establish a special Conservation Fund, in addition to allocating general revenues, at the national or sub-national level or specific protected areas. The Fund might be designated for specific or general use purposes. The kinds and amounts of revenues which will go to make up the fund also should be identified.

# IX. Prohibited and Regulated Activities for Protected Areas

The kinds of prohibited and regulated activities for a particular protected area will depend upon the nature and purpose of the area. In light of the objectives and purposes of an area and its particular zoning classifications, activities related, for example, to research, monitoring, education, recreation, restoration, or

cultural and scenic preservation, may at times be allowed through careful regulation, and at other times be prohibited.

As an illustration, a scientific or biological reserve, which has as its primary purpose the protection and preservation of natural areas for scientific research and monitoring, may need to be essentially free of human activities except where they are part of the research or enforcement programme. Recreational and other uses may need to be prohibited. On the other hand, a national park created to preserve representative natural areas and protect related genetic and scenic resources may be able to provide some recreation, education, and research opportunities. However, these opportunities might need to be carefully controlled and monitored to preserve the natural state of the area. Or, a wildlife sanctuary or refuge protecting an individual species may require absolute protection of the species and habitat during certain seasons of the year, while during the remaining periods some limited alternative uses might be possible. Areas set aside for watershed purposes may require still different regulations or prohibitions regarding land clearing, forestry exploitation, building, hunting and fishing, recreation, etc.

For purposes of protected areas, there are three different aspects of regulation which should be discussed: regulation inside the protected area, interim regulation, and regulation outside the protected area. The substance of each of these aspects will be determined ultimately by the protected area in question. Therefore, in each case the legal drafter must look to the purposes of the area or programme being established. Then, specific legal provisions on regulated and prohibited activities must be formulated to reinforce and be compatible with other substantive sections of the legislation regarding objectives, powers and responsibilities, management plans, zoning, etc.

In formulating specific provisions on regulated and prohibited activities for specific protected areas, the legal drafter also should consult any multilateral conventions or treaties related to conservation of natural areas to which the country is a party. These instruments may already enumerate certain activities which must be regulated or prohibited in order to be in compliance.

#### A. Inside a Protected Area

1. General Prohibitions

Conceptually, prohibitions inside a protected area might be grouped into four general categories:

- prohibitions against destruction or alteration of natural systems;
- prohibitions against the killing, capturing, taking away, damaging or disturbing of any resource, or other object for exploitation or any other purpose;
- 3. prohibitions against damage of ecosystems or species from pollution;
- prohibitions against introduction of alien or exotic species.

These general prohibitions should have comprehensive application to all protected areas except for emergencies or where specific exceptions can be made pursuant to management needs or when compatible with the objectives of an

area. For example, in some areas during certain seasons, culling of specific species may be required to keep the species in balance as part of the management of the area. So long as the culling is carefully controlled, usually by the authorized officers, it may be compatible with and even necessary for the protection of the species. Scientific research may require the taking of certain specimens. Under very controlled conditions in areas when scientific research is a primary purpose, this activity may also be compatible. Or, the ecosystems being protected may be already "modified" to such an extent that they are dependent for their maintenance and survival on the continuation of certain types of controlled human activity, for example, livestock grazing, reed cutting, etc. In such cases, protection requires that these activities be exempt from the general prohibitions, and be operated either under privately owned enterprises with careful public control and monitoring, or through public action and funding.

## 2. Regulatory Control

Consistent with the above general considerations, various kinds of control may be included in legislation to adequately regulate activities in the area. Again, the purposes and objectives of the area and its zoning arrangements must dictate the severity of any prohibitions and degree of regulation required. For any given programme there may be overlap between prohibitions and regulatory controls depending upon specific needs of a unit. Therefore, in this discussion a range of possible versions is presented.

## a. General Regulations

The matters commonly addressed within general regulatory provisions include:

- 1. prohibiting or strictly regulating access to the whole or part of an area;
- prohibiting or strictly regulating activities in the area, including hunting fishing, camping, the use of fire, carrying on of trade or commerce, construction or alteration of buildings, roads, or any other works, or the use of vehicles, vessels, aircraft or other devices in, over, or through a protected area;
- 3. regulating all conduct of persons in a protected area;
- regulating or prohibiting the collecting or taking of animals or plants into or out of the protected area;
- 5. providing for the impoundment, removal, or destruction and disposal of domestic animals found straying in the protected area;
- 6. prohibiting the use of explosives and poisons in the protected area.

Where the purpose of the area is to strictly protect (for example, as with many strict nature or scientific reserves), the matters enumerated above would more likely be prohibited than allowed with some regulation. Other areas which protect only a component of an ecosystem for species or habitat preservation (for example, some wildlife sanctuaries or managed nature reserves), more likely may provide for a range of regulated activities rather than totally prohibit all activities. On the other hand, certain prohibitions may still be necessary during certain seasons of the year.

Because of these varying needs, general legislation may not be able to enumerate entirely the specific prohibitions or controls necessary for each individual area. However, it is important that the legal drafter recognize the kinds of areas which are being authorized for creation and then formulate the range of possible prohibitions and controls appropriate. Where it is clear that certain general prohibitions will apply, as with the four general prohibitions listed above, these should be expressly provided. Other matters which may permit a range of control options (for example, public access to some areas), may be allowed more flexibility. In addition, the legislation should grant to the responsible authority the power to make further specific regulations consistent with the legislation where necessary to ensure adequate protection. Or, where workable and desired, the legislation might authorize some *ex posto facto* assessment of the propriety of certain activities where reasonably necessary for the protection and management of the area.

Where specific statutes or legal instruments are required for each protected area, these documents should clearly and with some detail describe the kinds of prohibitions or regulatory controls which are authorized. The kinds of prohibitions noted in this section will generally apply, with the addition of more specific regulation on certain matters where necessary. Again, the general power to make further regulations should be authorized.

## b. Control through Concessions or Permits

A variation on the use of regulatory control is to allow certain activities only when authorized by and in accordance with special concessions or permits for those activities. Protected areas legislation might allow for the power to grant concessions or permits for certain activities in designated protected areas where there must be strict control and supervision. This power may be kept general and in the discretion of the responsible protected area authority to use as necessary for the proper management of the area. Or it may be very specific for the particular protected area in question. In either case, the legislation should explicitly condition the power to grant such concessions or permits upon the requirement that there will be no threat to the primary conservation purposes and objectives of the area. Further, the terms and conditions of use should be expressly provided for each issuance.

While not all activities lend themselves to specific control by concessions or permits, as contrasted with general regulations, some activities are well suited to this approach. For example, the granting of concessions or permits may be a useful means of control over the establishment and monitoring of the operation of tourist facilities in some national parks. Or, timber removal in some protected areas may be allowed only through a special concession. Such programmes likely would have a general policy that, without these special authorizations, the activities would be strictly prohibited. There may be special regulations for these activities which further describe procedures for application, terms and conditions of use for each kind of authorization, length of time of particular concessions or permits, the authorizing agent, etc. The kinds of activities which commonly might be noted in legislation as coming under the control of a concession or permit, to the extent they are allowed at all in a protected area, include the following:

 use, or occupation of any land and construction or alteration of buildings, roads, or other works in any protected area for a specified purpose;

- acquiring or exercising any mining or other natural resources exploitation or exploration right in any protected area;
- 3. hunting, fishing, or collecting any flora and fauna;
- 4. use or manipulation of any waters within any protected area;
- 5. removal or alteration of any flora or fauna or other natural resource on the basis of a customary or other prior right or interest in any protected area;
- 6. conducting of any scientific research;
- 7. establishment and carrying on of any activity in any protected area.

It will be up to the protected areas authorities and others in the decison-making process to decide whether control of specific activities through concessions or permits is appropriate. This will depend upon the specific circumstances involved. For example, it may be difficult to administer a permit system where the staff is limited, or where it is unknown how much use will be made of a remote area. In this case, the legislation might be able to authorize adequate control through regulations alone. On the other hand, in areas near population centres where the use is anticipated to be heavy, a permit system may be necessary to monitor and control the amount and kinds of use. High levels of use also may give rise to conflicts of use which may need to be controlled through a permit system.

The legal drafter should keep in mind the possible applications and purposes of these regulatory mechanisms, using them to best meet the existing and potential needs. As much as possible, these drafting judgments should be guided by technical scientific advice regarding the characteristics of the protected area, the institutional capabilities, and the anticipated controls needed under the circumstances.

A note of caution should be added with regard to the granting of exceptions to generally prohibited activities through a permit or other regulatory system. Too many exceptions can weaken well-intended controls and essential prohibitions. For example, too liberal an issuance of scientific permits for any slightly relevant research may result in damage to a protected area beyond the limits of its durability. Or, tourist concessions which are too numerous or too disturbing may cause harm to the natural environment of the area. As a consequence the very purpose for which the area was created, to preserve a natural ecosystem for public benefit, may be defeated. Therefore, exceptions made to prohibited activities, particularly through issuance of permits and concessions, must be granted with strict controls and under clearly defined conditions. Legislation must be clear and explicit about allowance of exceptions only where they present no threat to the primary conservation purposes and objectives of the area, are limited in time and include proper monitoring of their affects.

#### c. Recreation Control

Specific attention should be paid to recreational use, which increasingly is in need of greater controls. Many protected areas have political and popular appeal because of their recreational benefits. However, population growth and increased interest in special wilderness types of activities, e.g., boating, hunting, fishing, hiking, back-packing, camping, etc., have made recreational demand a growing

management problem. In many protected areas, recreational overuse now threatens the survival of natural sites.

Modern legislation establishing or authorizing the establishment of protected areas which may have some recreational use should include adequate provisions authorizing recreational control. Some proposals for recreation control which might be authorized through legislation and expanded through subsidiary regulations include:

- redistribution of visitors to less crowded areas;
- requirement of advanced registration of visitors for certain uses in certain areas:
- regulation of the rate at which persons enter a protected area or regulation of the duration of stay;
- direct limitations on the number of people allowed in each area (e.g., on a first-come-first-serve basis).

## 3. Emergency Measures

Emergencies present exceptions to the standard prohibitions which require special consideration. Emergencies affecting a protected area may occur outside, as well as inside, a protected area. The case of an emergency within the area usually will be a clear matter of jurisdiction and responsible decision-making by the concerned protected areas authority. Whenever that authority determines that for protection of the area, certain emergency measures are necessary, this would be properly within the scope of management and protection of the area. The situation may be slightly complicated where access to the protected area, say with special equipment in case of a fire, is through private land or land under the control of another jurisdiction. Protected areas planning and management should include contingency plans for potential emergencies; where applicable such planning necessarily should include the arranging of cooperative agreements on rights-of-way for emergency purposes, shared use of equipment, etc.

The situation involving emergencies outside the protected area but potentially affecting the area may require more careful coordination. In such a case, decision-making may be the responsibility of other authorities; remedial actions under consideration could potentially result in negative impacts within the area. Consider, for example, a serious pest problem on surrounding agricultural land which may require massive area-Wide spraying of pesticides potentially harmful to species within the protected area, likely to contaminate water which flows through the protected area, or have negative effects on endangered species likely to feed on the contaminated area. To lessen the risk that emergency decision-making might be prejudicial to the area, protected areas legislation should require that such decisions involve prior consultations with the protected areas authority with a view to choosing, to the extent possible, the alternative with the least damaging consequences to the protected area.

It should be noted that circumstances surrounding some emergencies, for example, in the case of a fire, may be such that lengthy consultations at the time of the emergency are difficult if not impossible. The amount of consultation possible will depend ultimately upon the nature of the emergency and the measures to be taken. If, for example, the remedial measures are not prejudicial

to the nature of the protected area, on-site consultation might not be as stringent a condition. However, the range of measures which are or are not prejudicial to a protected area may be a matter requiring prior consultations with the protected areas authority. The key to handling any emergencies is prior coordination and joint planning. Particularly with emergencies which may require a quick response once they occur (e.g. fires, pest outbreak, floods, etc.), prior contingency planning will provide guidance as to the range of permissible actions without further consultation, and the types of actions which under all circumstances would require further consultation.

In light of these considerations, legislation should require contingency planning and coordination of emergency response between protected areas and other authorities involved. Procedures for specific kinds of emergency measures and cooperative and consultative arrangements appropriate for use under various circumstances could be delineated in subsidiary regulations or through administrative arrangements.

## **B.** Interim Regulations

As discussed in Part Two, Section V, "Establishment of Protected Areas"36, there may be occasions where an area has been identified for protection but the designation takes some time to be final. Under such circumstances it is essential that the authorities have some legal mechanism to provide immediate interim protection for the area.

If the legislation provides a device for interim protection (for example, through declaration of an area as an interim protection unit), the provision must include the power to make interim regulations controlling certain activities in the unit. The legislation should specify that the responsible protected areas authority may prohibit all actions detrimental to the proposed objectives of the area and may regulate such other actions affecting the area as are appropriate to accomplish the purposes of the area. Any prohibitions or regulations might apply for a stated number of years (with a provision for renewal where desired) or indefinitely until the final designation is made and the permanent protective measures are in force. The types of activities prohibited may include any of the matters covered for regulation within established protected areas, for example, mining operations, hunting, fishing or agricultural activities, construction or alteration of buildings, roads or any other works, taking of timber, excavation, etc.

#### C. Beyond the Protected Areas Boundaries

## 1. Preventing and Regulating Detrimental External Activities

There is a growing number of examples where entire protected areas or certain zones are being adversely affected or destroyed by activities outside their boundaries. Certain forestry practices may create ecological problems lower in a protected watershed by changing levels of stream flow and amount of sediment. The use of agricultural and industrial chemicals on adjacent lands may affect the aquatic and other habitats within a protected area, as when surface and ground waters eventually carry the fertilizers and pesticides to protected lakes, lagoons, or estuaries. Protected areas near urban centres may be threatened by a variety of external activities - manipulation of the water table which dries up protected zones, noise, water, and air pollution from aircraft, automobiles and industry, etc.

Activities beyond the geographic boundaries of protected areas are varied and continuous. The question becomes how to influence these activities when they adversely affect or interact with the ecosystems (or elements of ecosystems) within the protected area boundaries.

As a fundamental principle, protected areas should be established within broad national land use and environmental planning schemes where these exist. When formal national plans do not exist, conservation programmes still should incorporate as much intergovernmental planning as possible. It is essential that any planning process includes also the participation of conservation and other citizens groups from around the protected areas. Without local involvement, the problem of regulating external activities will not be solved.

Some countries may have strong and effective general planning and coordinating mechanisms which will adequately safeguard also the preservation of protected areas. In most countries, however, it will be important and advisable to specify in the protected areas legislation the need for using existing planning tools as well as providing specific mechanisms where none otherwise exist to coordinate sectoral activities and involve the public for protected areas purposes.

As discussed in Section VI, "Management Plans" of control adjacent activities legislation might authorize the creation of buffer or peripheral zones immediately surrounding the protected areas. These zones will require less regulation than will protected areas. Nevertheless, they must be susceptible to some regulation of activities where there is a likelihood of damage to a protected area Legislation which authorizes the creation of buffer zones must authorize, as well, the regulation of activities in these zones to adequately protect the core area. The various types of activities requiring regulation in a buffer zone may vary with the nature of the zone and purpose of the core area. Once the general power is established to regulate in buffer zones external activities which are detrimental to the objectives of the protected area, specific matters might be left to subsidiary regulations or to legislation for each protected area.

Wherever possible, the buffer zone concept should be considered an important and essential tool for regulating activities outside but adjacent to a protected area. At a minimum, protected areas legislation should grant the protected areas authority some power to control or at least be consulted about exterior activities where there is a significant potential for damage to occur or actual damage occurring within a protected area.

Consideration also must be given to the amount of control which is possible and the types of regulations which could be used over exterior private lands as compared to exterior public lands. With private lands, once damages have occurred inside a protected area as the result of activities on the adjacent land, one possibility would be to require reparation or replacement costs from the private owner. Preferably, however, the goal should be prevention rather than repair, since some areas may be protecting rare or endangered species which may be irreplaceable and beyond monetary value. Regulations might be authorized to estaonsn prohibitively high penalties for certain offenses in adjacent areas to serve as a deterrent to committing those offenses.

#### 2. Environmental Impact Assessments

Some countries have initiated procedures requiring the preparation of environmental impact statements for certain development activities which may cause significant harm to the environment. This process helps identify potentially harmful consequences to the environment so that decisionmakers can weigh the costs and benefits of the proposed development. In many cases, awareness of adverse effects is the first step to finding alternative development plans which are less environmentally damaging, but still economically satisfactory.

In countries where some environmental assessment procedures are required, protected areas legislation could specify that such assessments will take into account effects of the development project on protected areas. It should not be assumed that this always will occur automatically. An incorporation by reference to the specific assessment requirements will help ensure that the environmental assessments specifically examine effects of the proposed development on protected areas. The protected areas legislation may call for the use of least damaging alternatives where such assessments identify serious impacts on protected areas.

In countries where these assessment procedures do not now exist, consideration should be given to adding an assessment requirement to the protected areas legislation. This provision might specify that any person, corporation, or other entity planning any public or private activity liable to threaten the achievement of the objectives and purposes of a protected area must state the risk, location, and type of damage likely to occur. Furthermore, the provision might specify procedures whereby an environmental report or study must be prepared by the developer and an accompanying design plan approved by the protected areas authority in advance of and as a condition to the project implementation. The environmental assessment mechanism could be an effective tool for influencing any external activities, not only those on the periphery, which may have negative effects on the long-term protection of the area. But for this process to have influence, public involvement and comment must be allowed to raise the issues and expand awareness of development choices.

#### X. Enforcement

A prerequisite for effective protected areas legislation is provision of adequate enforcement duties and powers. The provisions must include three primary elements - first, the types of officers to have the various enforcement duties and powers; second, the kinds of enforcement powers which should be granted; third, a strong focus on public participation in enforcement and on public education about the law and the protected areas programme.

#### A. Authorized Officers

The enforcement officers for any protected areas programme should include employees of the institutional service established for the protected areas. The provision of adequate staff, including enforcement staff, should be a requirement and responsibility of the Government through the protected area institutions set forth in the legislation.

To strengthen and support the activities of the protected areas staff, it may be possible also to use employees from various existing enforcement agencies for certain enforcement activities, especially at the local level. This approach is particularly useful when the protected areas service has limited staff and the area to patrol and oversee is large or scattered. The types of existing enforcement services which might be granted certain powers of protected areas enforcement

include forestry officers, wildlife officers, army or national guard officers, police officers, inspection officers, etc.

Where there are customary laws and practices involved, it is also advisable to enlist the services of those officials with enforcement responsibilities and authority over customary matters. To include this option, the legislation should provide that customary officials may be granted appropriate enforcement duties and powers. These functions might be acquired through appointment or other designation, in which case procedures for such appointment or designation should be provided. The responsible designating and supervising authorities should also be indicated. As discussed previously38, if services of customary authorities are used it is important to make firm arrangements to ensure accountability of these authorities for their actions within the formal protected areas institutional framework.

Finally, the use of honorary officers, perhaps chosen from lists of distinguished individuals from local conservation and other non-governmental organizations, should be seriously considered for some enforcement assignments. As discussed in Part Two, Section VIII, "Institutional Arrangements", local involvement is critical for effective implementation of protected areas programmes. And local non-governmental organizations may have the contacts and familiarity to keep the programme and people in touch with one another as to objectives, interests and needs.

When choosing any of these staffing possibilities, a primary consideration for the legal drafter should be the provision of adequate enforcement resources for the kinds of activities regulated under the law. Different countries may focus on different levels of enforcement (e.g., local, district, provincial, state/departmental, national). Depending upon the particular country situation, any enforcement resources available for and compatible with the protected areas service should be enlisted for the protected areas programme to the extent necessary to ensure adequate enforcement mechanisms.

Once it is determined what types of officers will be used for enforcement, a clear definition of such "authorized officers" for purposes of the protected areas legislation should be formulated and included. This definition is necessary to avoid any general ambiguity and confusion, inform the public about the legal status of officers, and provide the clear and ready power to use such officers whenever increased enforcement resources are needed. The definition might illustrate the types of officers (e.g., wildlife, forestry, environmental, police) coming within the scope of "authorized officers". It might also be advisable to authorize the possibility of future appointments of such officers as may be determined necessary by the Director or other Presiding Officer of the protected area authority.

An additional consideration is urged with regard to the status of "authorized officers" under protected area legislation. It is always advisable to give these officers the status of public servants when acting in the performance of their duties under the law. This will add legitimacy to their work, expand their legal jurisdiction to act as regular enforcement officers and clearly convey to the public the legality of the performance of their duties. This status also may help protect the officers from physical or verbal abuse or violence while they are performing their duties. Without a public servant status the effectiveness of the officer's work may be seriously weakened particularly when apprehending a violator outside the protected area, or presenting evidence in legal proceedings.

The public servant status should apply whether the responsible protected areas authority is a governmental or non-governmental body.

#### B. Powers and Duties of Authorized Officers

With regard to the kinds of powers and duties which should be granted in the legislation to authorized officers, there are several important considerations. Generally, these officers should be empowered to hold inquiries into and investigations of offenses. Without a warrant, they should be allowed to stop and detain for a reasonable time any person whom they see doing any act or who they have reasonable grounds for believing has done any act for which a licence, permit, concession, or other special permission applies; in such a case, they should have the authority to require the detained person to provide his or her full name and address and to produce for inspection such licence, permit, or other appropriate document.

In addition, it is very important that the legislation grant powers to such authorized officers regarding searches, seizures, and arrest. On reasonable grounds for believing a person has committed an offense against the law, the authorized officer should be empowered with adequate authority and have the express duty when evidence is presented to take necessary actions. Provisions should include the power and duty of the authorized officer to:

- enter and search any land, building, premises or possession of such person, provided that no dwelling house should be entered or searched without a warrant;
- stop, detain, and search any vehicle or other craft or conveyance which appears to have been used or is being used in the commission of an offense against the legislation;
- seize any vehicle, craft, conveyance, weapon, trap, or device of any kind in connection with which any such offense appears to have been committed;
- 4. seize any animal, plant or product or part thereof which appears to be possessed in contravention of the law;
- arrest any person the authorized officer has reasonable grounds to believe has committed such offense, and take such measures as are reasonably necessary to make such arrest.

The legislation should provide that any seized item, whether flora, fauna or any other object or substance which is a part of the natural resources of a protected area and which was possessed in contravention of the legislation, should become automatically Government property. A provision should grant the Director or equivalent Presiding Officer of the protected areas authority the power to dispose of or sell seized items which are perishable or which cannot be otherwise retained. Any proceeds of such disposal should be held by the Director or equivalent Presiding Officer until the Court or other appropriate legal proceeding makes final disposal of the proceeds.

To inform and protect the public, as well as the various branches of the enforcement service, the legislation should require each authorized officer, when acting in performance of his or her duties, to carry and produce, upon request, identification that he or she is an authorized officer under the protected areas law. Also,

wherever feasible, each authorized officer should be required to issue to the person from whom items have been seized a written receipt for items seized.

The jurisdiction of an authorized officer should extend to national territories both inside and outside the protected area when the officer is acting in the course of performing his or her duties. To protect the officer, the legislation might specify that, when acting in good faith as an officer, nothing done will be construed as an offense against the law. In addition, when accepting an appointment the enforcement officer should be instructed on the importance of taking an oath in a legal proceedings and the responsibility which it carries.

## C. Cooperation in Public Education and Research Programmes

In many countries scarcity of staff and financial resources make it difficult for the two functions, enforcement and education, to have adequate separate staff. Under such circumstances, officers working with protected areas enforcement programmes should have a related duty to inform the public about protected areas and conservation. These officers frequently will be the only or at least the most regular contacts much of the public will have with the protected areas programme at the local level. The officers will influence, to a large extent, the local impressions and understanding formed about the programme. Therefore, it is especially important that the officers view themselves as educators as well as enforcers.

At the same time, it always should be kept in mind that, depending upon the situation, it may be difficult in practice to pursue the objectives of enforcement and education simultaneously and with equal vigor; one may be sacrificed from time to time for the other. Therefore, where resources permit, these functions should have a distinct staff.

Whatever the case, authorized officers should strive to build a positive image in the community. Not only should the officers be prepared to help citizens and community groups understand the law. Wherever possible they also should take a positive role in educating the public about the protected areas programme, interpreting the meanings and relationships of particular natural areas in their jurisdiction, orienting visitors and local citizens to these areas, and generally helping the community enjoy and understand the programme.

As part of this responsibility, the officers might serve as intermediaries for information exchange from local residents to higher officials and decisionmakers in the protected areas authority. This is an essential aspect of an effective programme. Not only must the public understand the programme, the authorities must understand and appreciate the interests and concerns of the public. The enforcement officer's work will be more relevant and effective where he or she plays a direct role in assisting the flow of information to and from the local level.

In addition, there will be many occasions where convenience as well as scarcity of other staff will make the officers particularly useful in much of the routine, and some of the more specialized work related to ongoing monitoring and research programmes for the management and protection of the area. Use of the officers in this capacity should be encourgaged. It not only will help ease the staffing problem. It also will serve as an important element of staff training by building greater awareness, understanding, and skills on the part of the parti-

cipating officers regarding the natural processes occurring in the protected area and the factors which influence these processes.

Legislation should recognize and include these aspects of public responsibility as an important part of the duties of the authorized officer. Where possible, provisions should encourage that any authorized officer be trained and qualified to act also in the role of public educator in all aspects of his or her duties, helping the public and local community understand and appreciate the law, the programme, and conservation. Provisions also should recognize a role for authorized officers in the monitoring and research programmes of the protected area.

## D. Public Powers of Enforcement

A concept which is growing in interest and application in some countries is that of granting certain public powers of enforcement recognized by the courts on environmental matters. Usually, such participation is undertaken by public interest groups dedicated to conservation or other aspects of environmental protection. For a legal right to sue in the courts on behalf of a conservation or other interest, such groups may not be required to show direct personal injury so long as they are legitimately organized on behalf of that interest.

Whether or not public interest conservation groups can participate in a country's enforcement process will depend upon the particular legal system involved. Essential questions regarding standing to sue, extent of injury required, kind of representation allowed, etc., would need to be resolved in each particular country.

With these questions in mind, the legal drafter and other participants in the development of the protected areas legislation should seriously examine the possibilities for such citizen public interest involvement in legal enforcement proceedings. Granting citizen groups the right to sue or bring legal actions may become an increasingly important safeguard when public authorities are remiss in their duties or do themselves violate the law. A country's social and political, as well as legal, situation will need to be examined in order to determine whether the possibility of a public right to sue in matters of conservation is desirable or workable. If so, provisions to allow the possibility should be expressly provided. These provisions should be specific enough to cover the extent of and requirements and procedures for such public interest participation in the legal process.

# XI. Legal Proceedings

Any person arrested pursuant to the protected areas legislation should be taken as soon as practicable before the proper court to be dealt with according to the law. Where the legal system provides a right of appeal from administrative decisions, this procedure also should be recognized where applicable to certain decisions made by the protected areas authority pursuant to the legislation. There are several other elements dealing with legal proceedings which should be specified in the legislation, wherever possible.

#### A. Burden of Proof

A reversal of the burden of proof is being used in many jurisdictions for offenses against protected areas legislation. Where constitutionally or legislatively

possible, the legal drafter and others involved with the legislative process should seriously consider including a provision whereby the burden of proving any fact which would be a defence to a charge under the legislation, shall be upon the person charged. This burden of proof shift would apply to any claim of self-defence, as well as any other defence. In application, the prosecution would need to prove the facts of the case (usually with the help of testimony, under oath, of the protected areas enforcement officer) in order to raise a presumption of guilt which the accused would then have to disprove. As a variation on this same principle, the legislation might clarify that in any case where willful intent must be shown, that intent shall be presumed until the contrary is shown. For illustrative purposes, with a reversal of the burden of proof-

anyone found in possession of protected species, relics, or government trophies might be presumed to be in unlawful possession of such species, relics, or trophies; or

anyone found with a wild animal carcass during a closed season might be presumed to have hunted that carcass during the closed season; or

anyone found away from home with a hunting weapon or trapping device might be presumed to be intending to use it for hunting or trapping; etc.

Many more instances could be envisioned within specific country or regional situations where the mechanism of reversal of the burden of proof would be important for protected areas enforcement. While civil liberties must be recognized, for protected areas matters the burden of proof shift is being increasingly used as a realistic approach because of the nature of the proof involved.

#### **B. Penalties**

Clear penalties for offenses must be provided in the legislation. The kind and extent of penalty for each offense should be determined according to the ecological seriousness of offense and the resulting degree of threat to or disturbance of the achievement of the objectives of the area. For example, killing or injuring an endangered or rare species in a protected area should receive a particularly high or severe penalty. Similarly, pollution of an internationally important natural area should be severely penalized. For acts of comparable severity, the penalty should be higher for those committed within a protected area than for those committed outside the area but affecting the area. The penalties should increase significantly for second and multiple offenders. Subject to country circumstances, the drafter might consider linking the actual range of fines in each category to some floating standard, such as minimum wage for individual fines, rather than to some fixed monetary amount which may be outdated in a few years. If specimens have been collected in the protected area for purposes of resale, the fines in all cases should be set at a figure equal to several times the resale value. This may deter commercial motivation for further offenses.

Depending upon the legal system involved, it may be necessary to expressly indicate in the legislation that corporations and other business entities are liable for offenses. Whatever procedure may apply, there should be clear liability for offenses against the legislation committed by those corporate or business enterprises, with the officers liable for prosecution and punishment according to the offense. Special penalties might be specified for corporate or other business violations based upon the persistence of the offense, number of days it continues

after orders to cease the offense (e.g., with pollution), a percentage of the corporate assets, amount of damage through replacement or restoration costs accrued, etc.

Wherever possible, a percentage of the fines derived from any offense might be authorized by the legislation for direct application to repair damage from or replace items destroyed by the offense, or for other necessary conservation measures in the area. These monies might be placed in a Conservation Fund<sup>39</sup>, where one has been established, for general administration and management of the programme, or for special programme purposes.

An additional possibility with penalties might be to authorize fines against the offender for actual clean up or replacement costs. As much as possible these costs should be estimated and sums paid in advance of the repair work in order that the finances are available for the work.

## C. Forfeiture

Once the person has been convicted, protected areas legislation should authorize forfeiture without compensation of any objects or devices taken, used or involved in the commission of the offense. This power of forfeiture should include all natural flora or fauna taken as well as any cultural objects, weapons, trophies, or proceeds of sale of any such objects. It also should include any non-mechanical or mechanical means of conveyance such as motor vehicles, boats, or aircraft used in the commission of the offense.

A general power to dispose of the forfeited items should be granted to the responsible protected areas authority. When seized items are part of an offense but the person charged does not appear to answer the charge, provisions should allow that after a designated interval of time the items are forfeited to the Government to be disposed of as the protected areas authority determines.

Where non-specialist authorities or the court have the power to dispose of specimens, a provision should include the taking of advice from protected area officials on disposal. At a minimum, the taking of advice should be required on the keeping of live specimens pending trial or disposal.

## D. Applicability of Other Laws

As noted in other sections of these Guidelines, some laws may have applications which are not compatible with the purposes and objectives of the protected areas legislation. For example, national or local legislation dealing with land use practices might authorize noxious weed control, fire prevention, or anti-insect spraying and cutting, activities which might apply without differentiation to areas inside a protected zone. Or, other legislation might authorize the discharge of a pollutant, the manipulation of water, or the massive cutting of forests outside a protected area which would adversely affect the existing state inside the area.

A general regulatory power to manage an area and prohibit detrimental activities may not be adequate to protect designated natural areas from the exercise of powers under other laws. Ideally, it may be most appealing for purposes of protected areas programmes to require that application of any other law will be suspended whenever it conflicts with or is detrimental to the purposes of a protected area. However, a broad requirement excluding the operation of other

statutes under conflicting circumstances may not be practical or possible. A more workable solution might be for the legislation to require officials to consult through appropriate Government channels with those responsible for the protected areas programme before taking or authorizing any action under another law (e.g., Water, Forestry, Agriculture, Industrial Control, etc.) which may adversely affect a protected area.

More specifically, one might consider classifying the statutes whose application must be coordinated into two categories: one where simple consultation is sufficient, the other where the protected areas authority should have some veto or devolution power in order for the decision to be shifted to a higher authority such as the cabinet or top-level government approval body. This second category would involve situations where the application of the statute may endanger the very purposes of the protected area, for example through building a road inside the area or developing an upstream watershed which will change the ecology of the area.

In resolving difficulties over the application of laws and overlapping or conflicting mandates, the use of intergovernmental mechanisms established for purposes of coordination and consultation should be encouraged in the legislation. As previously discussed 40, existing intergovernmental coordinating arrangements and advisory bodies at the national and subnational levels are particularly important for this purpose. These bodies should be required to include regular representation from the conservation or protected areas authorities on any planning or other matters which may affect or be affected by protected areas programmes. Occasions will arise during the establishment and throughout the life of a protected areas programme requiring substantial and serious consultation and negotiation. An existing and legally recognized mechanism for coordination can help to achieve prompt and systematic resolution of conflicts, as well as valuable sharing of interdisciplinary expertise for effective integrated planning and programmes.

# XII. Public Participation

Throughout these guidelines, reference has been made to the need for public involvement in establishment and maintenance of protected areas. Positive interaction between local citizens and the conservation programme is of key importance to the long range success of the programme.

Legislators and other officials must be aware of and encourage this interaction. It is important for identification and use of local skills. In addition, interaction builds understanding and support. It helps promote an awareness of the relationships between protected lands and areas which surround them, in terms of ecological, social and economic consequences. Tourism resulting from a protected area, for example, can bring many benefits by way of cash inflow; at the same time it can bring many changes and social stresses to the local surroundings. Some changes may not be in the interest of the local people or of the Government when they threaten important cultural and social values. It is important to have some means to learn from the local citizens their views on impacts and change.

One means to encourage public participation at all levels is to establish this requirement in legislation. As has been noted throughout, the requirement could be inserted in specific technical provisions dealing with establishment, manage-

ment, advisory bodies, etc. In addition, it may be desirable to include a separate general provision to ensure general applicability of the requirement throughout the law. Such a provision would specifically require that Government organizations at all levels encourage, assist, and provide for citizen participation and comment with protected area decision-making and operations.

Specific provisions on public participation include:

- public opportunity to review and comment on proposed protected area designations (either being established, amended, or abolished), management plans, regulations, etc.;
- public involvement in management activities, enforcement programmes, and administration, when appropriate, with local programmes;
- public representation on advisory committees at all appropriate levels, so that local residents may have a voice in specific decisions, as well as in policy matters, immediately affecting their local protected area;
- local participation in decisions of disbursement of certain revenues for local operation of a protected area.

## XIII. The Enabling Provision and Power to Make Regulations

Not all matters can or should be settled in the basic law. Some amount of flexibility must be built in to account for accumulated experience and changing circumstances. It is of great importance to have a separate enabling provision in any protected area legislation empowering the Minister or equivalent executive power to issue and revise, as necessary, regulations to give further effect to the legislation.

For protected areas legislation, further regulation frequently will be necessary for several matters. These include entry and use conditions for various recreational and other purposes, procedures for granting permits or concessions for scientific research, resource manipulation or other uses otherwise prohibited, specific protection for certain species, areas, or times of the year, hunting conditions, detailed duties or powers of officers, penalties, etc.

The enabling provision should grant broad powers, covering any matters required or permitted under the law. In addition, the provision may give an enumeration of specific regulatory areas. An enumeration is particularly useful to join in one section the major items proposed for further regulation in the body of the law. It will also expressly clarify, without limiting, areas intended by the lawmakers for possible regulation. All areas cited may not require immediate regulation. But the power to regulate is important to delegate for the time when further needs may arise.

It may be necessary and appropriate to make specific regulations for each protected area, to cover specific purposes, objectives, management needs, uses, etc. This should be expressly authorized in the legislation.

Also, in order to provide adequate protection, some protected areas may require some regulation as soon as possible after having been designated or created. In

such instances, the legislation might designate time limits within which specific regulations must be issued for certain items.

Regulations may need to be periodically re-examined and updated to keep pace with technical, social, political and economic changes. The legislation should contain procedures for promulgating, reviewing, and revising regulations. Some regulations regarding, for example, fees or lists of specific species, may be designated for review and revision every five or so years. Matters requiring review and revision at set intervals of time should be identified in the legislation wherever possible.

# XIV. Final Provisions - Savings, Transitional and Repealing Clauses<sup>41</sup>

These matters are only briefly noted to convey the reminder that their consideration, if appropriate, not be overlooked. Where there is possibility of any doubt, savings and transitional provisions might be included. The purpose of a savings clause is to preserve or "save" a law or right which might otherwise be repealed. The purpose of a transitional clause is to make special provisions for the application of legislation to transitional circumstances which exist at the time the legislation comes into force.

The use of repeals provisions may depend upon relevant interpretation legislation. In the interests of certainty, the effect of protected areas legislation on existing laws generally should not be left to implication. As a rule, repeals should be express and also specific<sup>42</sup>. This principle is stressed here primarily because of the many effects, as noted throughout this report, that new or strengthened protected areas legislation may have on existing conservation related laws.

The drafting of a modern protected areas statute will require as a prerequisite a thorough inventory of existing laws. This inventory may identify inconsistences and overlapping areas. It may also find areas with piecemeal regulation which would best be reorganized into an integrated conservation system. Whatever the situation, it is likely that some revision or repeal of other related laws may follow from the enactment of new or strengthened protected areas legislation. Any repeals clause should be specific, referring where possible to the exact law to be repealed.

## APPENDIX I

Excerpts from: Categories, Objectives and Criteria for Protected Areas,
A Final Report Prepared by the Commission on National
Parks and Protected Areas (CNPPA) of the International
Union for Conservation of Nature and Natural Resources
(IUCN) August, 1978.

CHAPTER TWO

# METHOD FOR THE DELINEATION OF CATEGORIES FOR CONSERVATION MANAGEMENT

The maintenance and development of the human habitat requires that some areas be retained in their wild state. The flow of streams, the maintenance of genetic materials, the protection of scenic and aesthetic areas and the opportunity to enjoy and appreciate natural heritage, can benefit from the conservation of natural areas. Indeed, some benefits can only be received through establishment and maintenance of natural reserves.

Other human needs from natural resources include wood and wood products, wild animal products and protein, grazing from natural grasslands, and water for agriculture, industry, domestic use, and for energy which can be produced on a sustained-yield basis.

Logically, some benefits can be received from natural areas or wildlands in perpetuity if management is properly designed and implemented. However, there are types of benefits which compete with one another, that is, they are incompatible. For example, it is physically and biologically difficult to remove wood products and study natural ecosystems on the same area. But, perhaps the preservation of a sample ecosystem and research and monitoring can be done together if appropriately designed and controlled.

Management categories can be designed and implemented, each of which addresses a compatible set of benefits. In a particular category, the pursuit of any one benefit does not compete or rule out the possibility of receiving the other benefits of the group. Commonly known categories include the national park, wildlife sanctuary and forest reserve.

In many cases exceptions arise where even among generally compatible activities, conflicts arise during particular seasons or on specific sites such as during nesting or calving periods or at critical habitats, respectively. These types of conflicts can be treated normally through application of the management practice known aszoning.

Each benefit is related to specific objectives of management, such as, the maintenance of sample areas of major biotic formations and physiographic features in a natural state, the protection of rare or endangered species or habftats, the conservation of outstanding landscapes or natural features of aesthetic value, and the conservation of areas where renewable resources can be harvested and utilized on a sustained-yield basis. The objectives of each category are oriented towards scientific, educational, recreational and touristic activities. Ideally all objectives and activities are related to environmental protection and to economic and social development.

Areas which have been selected and are under management to meet specified compatible conservation objectives can be considered to be conservation or protected areas. They can be described and classified according to the objectives for which they are being managed. In contrast, however, the means required to meet the objectives of conservation will depend upon each particular situation and will vary with cultural, institutional, political and economic considerations.

Conservation categories which focus upon environmental protection and economic and social development provide the basis for clearly incorporating conservation into development (eco-development). Each relates to one or several of the major goals of a nation's development plan: nutrition, education, housing, water, science and technology, defense and national identity. Viewed in this way, conservation categories become means for sustained development.

In Chapter Three, conservation objectives have been grouped into several categories which are commonly found in existence around the world. The delineation of these categories is not new or absolute, nor is it meant to be final. What is significant is designed by systematic analysis. Exceptions will occur and alternative concepts will no doubt arise.

Taken together, these categories can ideally be administered as a unified national system of conservation areas. In practice, the categories are generally divided among various divisions of central government. In exceptional cases, some of the categories are administered by state, provincial or even private or corporate institutions. International categories such as the biosphere reserve and the world heritage site will often require cooperative administration among several institutions. What is relevant, however, is that the institutions responsible for the individual categories are empowered to provide for the appropriate management of the resources and are representative of the significance which the nation wishes to give to the categories.

The total number of categories necessary to manage the natural resources of any nation can be divided into three groups:

A. Those categories in which the CNPPA takes responsibility to monitor the status of each conservation area and to provide technical advice as requested.

Considered in Group A would be:

- Scientific Reserve
- II National Park
- III Natural Monument/National Landmark
- IV Nature Conservation Reserve
- V Protected Landscape
- B. Those categories which are of particular importance to IUCN as a whole and are generally found in most nations, but would not be considered exclusively within the scope of CNPPA. However, CNPPA may wish to monitor and provide expertise on those areas which are of particular importance to nature conservation.

Considered in Group B would be:

VI Resource Reserve VII Anthropological Reserve VIII Multiple Use Management Area

C. Those categories which form part of international programmes and which have specific relevance for nature conservation yet may in some cases already receive protection under a previous category. CNPPA may be called upon to monitor these categories and to provide special expertise in cooperation with other institutions to which IUCN has consultative status.

Considered in Group C would be:

Biosphere Reserve World Heritage Site (Natural).

#### CHAPTER THREE

### CATEGORIES FOR CONSERVATION AREAS

GROUP A - Areas of Particular Interest to the Commission on National Parks and Protected Areas

## CATEGORY I

Scientific Reserve / Strict Nature Reserve

#### Introduction

The rapid alteration of a variety of natural environments has created a need for a category of management which will ensure areas free of human intervention and unnatural outside influences and available exclusively for scientific research and environmental monitoring. These specific natural areas are necessary to provide adequate locations for research where a complete understanding of natural processes can be attained and where full protection of ecosystems and their inherent species is maintained.

## Management Objectives

The objectives of a scientific reserve are to protect nature (communities and species) and maintain natural processes in an undisturbed state in order to have ecologically representative examples of the natural environment available for scientific study, environmental monitoring, education, and for the maintenance of genetic resources in a dynamic and evolutionary state. Research activities need to be planned and undertaken carefully to minimize disturbance.

Criteria for Selection and Management

These areas possess some outstanding ecosystems, features and/or species of flora and fauna of national scientific importance. These areas are generally

closed to public access, recreation and tourism. They often contain fragile ecosystems or life forms, areas of important biological or geological diversity, or are of particular importance to the conservation of genetic resources. Size is determined by the area required to ensure the integrity of the area to accomplish the scientific management objective and provide for its protection.

Natural processes are allowed to take place in the absence of any direct human interference. These processes may include natural acts that alter the ecological system or physiographic feature at any given time such as naturally occurring fires, natural succession, insect or disease outbreaks, storms, earthquakes and the like, but necessarily exclude man-made disturbances. The educational function of the site is to serve as a resource for studying and obtaining scientific knowledge.

Land use control and ownership should in most cases be by central government. Exceptions may be made where adequate safeguards and controls relating to long-term protection is ensured and where the central government concurs.

### CATEGORY II

### National Park

# Introduction

Governments have for some time recognized the desirability of setting aside outstanding natural areas representative of the diversity of ecosystems of their countries so as to guarantee their protection and use for present and future generations.

Rapid exploitation of the natural resources has demonstrated that unless governments take positive and decisive action to protect the most outstanding examples of the country's natural heritage, these resources may be lost. The continued trend of urbanization has increased the need to provide opportunities for outdoor recreation and tourism in natural settings. Furthermore, the need for people to understand more fully the natural environment is of particular concern in an age of rapidly diminishing natural resources. Outstanding representative areas of a nation can serve to contribute to this understanding.

### Management Objectives

The management objectives of a Category II area call for the protection of natural and scenic areas of national or international significance for scientific, educational, and recreational use. The area should perpetuate in a natural state representative samples of physiographic regions, biotic communities and genetic resources, and species in danger of extinction to provide ecological stability and diversity.

## Criteria for Selection and Management

National parks are relatively large land or water areas which contain representative samples of major natural regions, features or scenery of national or international significance where plant and animal species, geomorphological sites, and habitats are of special scientific, educational, and recreational interest. They contain one or several entire ecosystems that are not materially altered by

human exploitation and occupation. The highest competent authority of the country has taken steps to prevent or eliminate as soon as possible exploitation or occupation in the area and to enforce effectively the respect of ecological, geomorphological, or aesthetic features which have led to its establishment.

The resource is managed and developed so as to sustain recreation and education activities on a controlled basis. The area is managed in a natural or near-natural state. Visitors enter under special conditions for inspirational, educational, cultural, and recreational purposes.

The protected status of the area is adequately maintained directly by the central government or through agreement with another agency.

#### CATEGORY III

Natural Monument / Natural Landmark

### Introduction

Many countries possess natural features of particular scientific and educational interest; however, in many cases, they receive no special national recognition. These areas, however, may be susceptible to damage or adverse exploitation. The features might include outstanding examples of a country's natural heritage such as spectacular waterfalls, caves, craters, volcanoes, unique species of flora and fauna, sand dunes, etc. They would be of such scenic, scientific, educational and inspirational importance that they merit special designation and protection. There is a need to elevate their significance because of their uniqueness so as to afford these areas greater protection for both scientific and public enjoyment.

# Management Objectives

Management objectives are to protect and preserve nationally significant natural features because of their special interest or unique characteristics and to the extent consistent with this, provide opportunities for interpretation, education, research, and public appreciation.

# Criteria for Selection and Management

This category normally contains one or more specific natural features of outstanding national significance such as a geological formation, a unique natural site, animal or plant species or habitat which, because of uniqueness or rarity, may be threatened and should be protected. The specific feature to be protected ideally has little or no evidence of man's activities. These features are not of the size nor do they contain a diversity of features or representative ecosystems which would justify their inclusion as a national park. These areas have particular potential for public education and appreciation. Size is not a significant factor. The area should only be large enough to protect the integrity of the site.

Although Category III areas may have recreational and touristic value, they should be managed in such a way that they remain relatively free of human disturbance. These areas may be owned and managed by either central or other government agencies or non-profit trusts or corporations as long as there is

assurance that they will be managed to protect their inherent features for the long term.

### CATEGORY IV

Nature Conservation Reserve/Managed Nature Reserve/Wildlife Sanctuary

### Introduction

Although most of the other categories of management play important roles in protecting and providing habitat for flora and fauna, it is essential that selected areas be set aside where manipulative management techniques can be applied to guarantee the stability or survival of certain species of plants and animals to assure their survival in the future. Due to widespread destruction of habitat, there is a need for specific areas which will protect breeding populations, feeding and breeding grounds, and critical habitat for protection of rare and endangered floral or faunal species.

# Management Objectives

The purpose of these areas is to assure the natural conditions necessary to protect nationally significant species, groups of species, biotic communities, or physical features of the environment where they require specific human manipulation for their perpetuation. Scientific research, environmental monitoring, and educational use are the primary activities associated with this category.

# Criteria for Selection and Management

A Category IV area is desirable when protection of specific sites or habitats is essential to the continued existence or well-being of individual biotic species, resident or migratory fauna of national or global significance. Although a variety of (protected) areas fall within this category, each would have as its primary purpose the protection of nature, and not the production of harvestable, renewable resources, although this may play a role in the management of a particular area. The size of the area or in certain instances seasons in which special management is necessary, will be dependent upon the habitat requirement or specific characteristics of the species to be protected. These need not require vast areas but could be relatively small consisting of nesting areas, marshes, or lakes, estuaries, forest, or grassland habitats.

The area may require habitat manipulation to provide optimum conditions for the species, vegetative community, or feature according to individual circumstances. For example, a particular grassland or heath community may be protected and perpetuated through a limited amount of livestock grazing. A marsh for wintering waterfowl may require continual removal of excess reeds and supplementary planting of waterfowl food, whereas a reserve for an endangered animal may need protection against predators. These areas may be developed in limited areas for public education and appreciation of the work of wildlife management.

Ownership may be by the central government or with adequate safeguards and controls in which long-term protection is ensured, by lower levels of government, non-profit trusts or corporations or private individuals or groups.

### CATEGORY V

# Protected Landscape

In many areas of the world, distinctive landscape patterns are created by the integration of specific natural and cultural features that present aesthetically attractive land and water settings. These may result through traditional land-use practices of a cultural group in response to their environment while in others land-use practices have retained relatively large and scenic natural or semi-natural areas near urban centres.

At the same time, increasing population and leisure time and expanding urban areas are creating demand for additional recreation and tourism areas and facilities in aesthetic environments for citizens and visitors.

The management and protection of these natural and cultural areas of importance from both a recreational use stand-point, as well as from the scientific point of view because of their potential as reservoirs of genetic material and for their social customs evidenced through land-use practices, which are disappearing under modern technology.

# Management Objectives

The objectives of this category are to maintain nationally significant natural landscapes which are characteristic of the harmonious interaction of man and land while providing opportunities for public enjoyment through recreation and tourism within the normal life style and economic activity of these areas. These areas also provide for ecological diversity, scientific, cultural and educational purposes.

# Criteria for Selection and Management

The scope or character of areas that fall within this category are necessarily broad because of the wide variety of semi-natural and cultural landscapes that occur within various nations. This may be reflected in two types of areas: those whose landscapes possess special aesthetic qualities which are a result of the interaction of man and land, and those that are primarily natural areas managed intensively by man for recreational and tourism uses.

In the first case, these landscapes may demonstrate certain cultural manifestations such as customs, beliefs, social organization, or material traits as reflected in land-use patterns. These landscapes are characterized by either scenically attractive or aesthetically unique patterns of human settlement. Traditional land-use practice associated with agriculture, grazing, and fishing would be dominant. The size of the area would be large enough to ensure the integrity of the landscape pattern.

In the latter case, natural or scenic areas found along coastlines and lake shores or in hilly or mountainous terrain or along the shores of rivers and inland adjacent to important tourist highways or population centres offering scenic views and climatic variation are often included. Many will have the physical qualities and potential to be developed for a variety of outdoor recreational uses with national significance.

In some cases the land would be privately held and the use of either central or delegated planning control would likely be necessary to assist in the perpetuation of both the land use and life style. Means of subsidization, or other government assistance, might be required for external renovations or construction to disguise improvements in the standards of living while recognizing the dynamics of evolution of the land and its use. Efforts would be made to maintain the quality of landscape through appropriate management practices. In other instances the areas are established and managed under public ownership in perpetuity.

GROUP B - Areas of Interest to IUCN in General

CATEGORY VI

Resource Reserve - (Interim Conservation Unit)

Introduction

Despite the rapidly increasing utilization of the natural resources in the world, there still remain land and water areas for which the most appropriate utilization has yet to be determined. If these lands are not protected, occupation and use are likely to occur on an unplanned, single use and short-term economic exploitation basis. This, in turn, may cause problems and compromises, and limit future options where remaining resources need to be rationally utilized. This utilization without sufficient knowledge may result in resource deterioration and loss of longer-term economic and social benefits.

# Management Objectives

One possibility is to restrict use of these areas until adequate studies have been completed as to how to best utilize these remaining resources. In such a case, the management objective is to protect the natural resources of the area for future use, and prevent or contain development activities that could affect the resource pending the establishment of more defined objectives which are based upon appropriate knowledge and planning.

# Criteria for Selection and Management

Category VI areas will normally comprise an extensive and relatively isolated and uninhabited area having difficult access, or regions that are lightly populated yet may be under considerable pressure for colonization and greater utilization. In many cases, there has been little study or evaluation of these areas, and the consequence of converting these lands to agriculture, mineral or timber extraction, or the construction of roads, etc. is unclear. Similarly, use of the resources may not be appropriate because of the lack of technology, human or financial resource restrictions, or alternative national priorities. Consequently, natural, social, and economic values are not sufficiently identified to permit the area to be managed for specific objectives or to justify its conversion to other land uses. Restricted access is implied so areas will normally require control, depending upon the pressures to enter and utilize the area. Lands may be government-owned while others may be owned or administered by public corporations.

Maintenance of existing conditions to allow for studies as to the potential use for the designated areas is a prerequisite. Protection, studies, and planning are

envisioned as the major activities while under this short-term designation. No exploitation should occur with the exceptions of use of resources by indigenous inhabitants. There is an acceptance of ongoing ecosensitive activities.

# CATEGORY VII

Natural Biotic Area / Anthropological Reserve

#### Introduction

In some countries there may be a need for the protection of natural areas in which man is a component and obtains his livelihood by means that do not involve extensive cultivation or other major modifications of the vegetation and animal life. These individuals or societies may require special protection to maintain their existence.

# Management Objectives

The objective of management is to allow the way of life of societies living in harmony with the environment to continue undisturbed by modern technology. Research into the evolution of man and his interaction with the land would be a secondary objective.

# Criteria for Selection and Management

Category VII areas are characterized by natural areas where the influence or technology of modern man has not significantly interfered with or been absorbed by the traditional ways of life of the inhabitants. These areas may be remote and isolated and their inaccessibility may be maintained for a considerable period of time. The societies are considered relatively unique and may be of particular significance to the maintenance of genetic diversity and/or for research as to the evolution of man. These are predominantly natural areas of which man is an integral component. There is a strong dependence of man upon the natural environment for food, shelter, and other basic material to sustain life. Extensive cultivation or other major modifications of the vegetation and animal life is not permitted.

Management is oriented toward the maintenance of habitat for traditional societies so as to provide for their continuance within their own cultural mores.

### CATEGORY VIII

Multiple Use Management Area / Managed Resource Area

### Introduction

There is a need for a category of management for areas that can both provide protection to natural resource systems and to certain natural resources and yet contribute significantly to a nation's economic; social, and material needs. The multiple function of these lands can provide for a sustained yield of a series of products and services under proper management. Watershed protection, for example, may be of particular importance in addition to the timber, forage or wildlife aspect of the area.

# Management Objectives

To provide for the sustained production of water, timber, wildlife, pasture, and outdoor recreation and at the same time provide for economic, social and cultural needs over a long term. The conservation of nature is also an objective of this category primarily oriented to the support of the economic activities, although specific zones may also be designated within these areas to achieve specific conservation objectives.

# Criteria for Selection and Management

A large area, containing considerable territory suitable for production of wood products, water, pasture, wildlife, and outdoor recreation. Parts of the area may be settled and may have been altered by man. Generally, these forest or other wildland areas do not possess nationally unique or exceptional natural features.

Planning to ensure the area is managed on a sustained yield basis would be a prerequisite. Land ownership would be under government control. Through proper zoning, significant areas could be given specific additional protection. For instance, the establishment of wilderness-type areas is consistent with the purpose of these areas, as would be setting aside the nature reserves. Multiple use, in the context of Category VIII, is considered to be the management of all renewable surface resources, utilized in some combination to best meet the needs of the country. The major premise in the management of these lands is that they will be managed to maintain the overall productivity of the land and its resources in perpetuity.

# GROUP C - Internationally Recognized Affiliated Designations

### Biosphere Reserve

#### Introduction

The UNESCO Man and the Biosphere Programmes initiated fourteen projects in 1970. The focus of project No. 8 is to conserve natural areas throughout the world through the establishment of a network of biosphere reserves.

### Management Objectives

The primary objective is to conserve for present and future use the diversity and integrity of biotic communities of plants and animals within natural ecosystems, and to safeguard the genetic diversity of species on which their continuing evolution depends.

Biosphere reserves are to provide opportunities for ecological research, including particularly, baseline studies, both within natural and altered environments. These reserves have particular value as benchmarks or standards for measurement of long-term changes in the biosphere as a whole and are consequently important sites for environmental monitoring. Biosphere reserves are to provide facilities for education and training.

### Criteria for Selection and Management

Each biosphere reserve will include one or more of the following:

(a) representative examples of natural biomes; (b) unique communities or areas with unusual natural features or exceptional interest; (c) examples of harmonious landscapes resulting from traditional patterns of land use; and (d) examples of modified or degraded ecosystems capable of being restored to more natural conditions. A biosphere reserve must have adequate long-term legal protection. Each biosphere reserve will be large enough to be an effective conservation unit, and to accommodate different uses without conflict. Each reserve must be approved by the Man and the Biosphere International Co-ordinating Council before it can receive designation as a biosphere reserve.

Each biosphere reserve will be zoned to provide direction as to its management. Four zones may be delineated as follows: (a) Natural or Core Zone; (b) Manipulative or Buffer Zone; (c) Reclamation or Restoration Zone; and (d) Stable Cultural Zone.

World Heritage Site (Natural)

### Introduction

The International Convention concerning the Protection of the World Cultural and Natural Heritage (UNESCO 1972) provides for the designation of areas of "outstanding universal value" as World Heritage Sites. These exceptional areas must be recommended by the signatory nation responsible for the site for declaration by the international World Heritage Committee. The sites will undoubtedly include many previously designated protected areas.

# Management Objectives

The primary objective is to protect the natural features for which the area was considered to be of world heritage quality. Also important is to provide publications of information for world-wide public enlightenment as well as to provide for research and environmental monitoring.

### Criteria for Selection and Management

Areas to be considered under the Convention will be restricted to those which are truly of international significance. Natural sites must represent one or more of the following criteria:

- be outstanding examples representing the major stages of the earth's evolutionary history;
- (ii) be outstanding examples representing significant ongoing geological processes, biological evolution and man's interaction with his natural environment.
- (iii) contain unique, rare or superlative natural phenomena, formations or features or areas of exceptional natural beauty; and
- (iv) be habitats where populations of rare or endangered species of plants and animals still survive.

Natural Heritage Sites must also fulfill conditions relative to the integrity of the site.

Management of these sites will stress the maintenance of the heritage values, will ensure the continuation of legal protection, and will promote each site as to its significance to each country, its people and the world.

All sites will have to have strict legal protection and will be owned by government or a non-profit corporation or trust for the long term. While recreation and on-site interpretation will generally be developed, some sites may be of such significance that public use will either be strictly controlled or prohibited.

# APPENDIX II

Excerpts from: The Biosphere Reserve and Its Relationship to Other Protected Areas IUCN, MAB, UNESCO Publication, 1979

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Characteristics of	of Biosphere	Reserves

- Biosphere reserves will be protected areas of land and coastal environments. Together they will constitute a world-wide network linked by international understanding on purposes, standards and exchange of scientific information.
- 2. The network of biosphere reserves will include significant examples of biomes throughout the world.
- Each biosphere reserve will include one or more of the following categories:
  - (i) Representative examples of natural biomes.
  - (ii) Unique communities or areas with unusual natural features of exceptional interest. It is recognized that representative areas may also contain unique features, e.g. one population of a globally rare species; their representativeness and uniqueness may both be characteristics of a globally rare species; their representativeness and uniqueness may both be characteristics of an area.
  - (iii) Examples of harmonious landscapes resulting from traditional patterns of land use.
  - (iv) Examples of modified or degraded ecosystems capable of being restored to more natural conditions.

(At the 5th session of the ICC (UNESCO 1977) it was stressed that: "Each biosphere reserve will generally have a non-manipulative core area, in combination with areas in which baseline measurements, experimental and manipulative research, education and training can be carried out. Where these areas are not contiguous they can be associated in a cluster).

- 4. Each biosphere reserve should be large enough to be an effective conservation unit, and toaccommodatedifferentuses without conflict.
- 5. Biosphere reserves should provide opportunity for ecological research, education and training. They will have particular value as benchmarks or standards for measurement of long-term changes in the biosphere as a whole. Their existence may be vital to other projects in the MAB programme.
- 6. A biosphere reserve must have adequate long-term legal protection.

In some cases biosphere reserves will coincide with, or incorporate, existing
or proposed protected areas, such as national parks, sanctuaries or nature
reserves.

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### THE SPECIAL FOCUS OF BIOSPHERE RESERVES

There are already many national and international programmes for protecting areas of land or of water for various purposes. Among these programmes are the preservation of nature (samples of unique or representative ecosystems, or the habitats of rare or endangered species), the safeguarding of archaeological or nistorical monuments and sites, or of cultural landscapes (areas which have been moulded by human activity in special and characteristic ways) or the maintenance of beauty or solitude in the landscape. To match these purposes there is a multitude of different terms, many of them embodied in national legislation, to describe areas that have been set aside for particular reasons or are used in particular ways. But, although the purposes are usually identifiable, the usage of the terms varies widely and in a confusing manner between one country and another; attempts to standardize have met with only limited success. What then is special about "biosphere reserves" and what is the justification for introducing yet another new concept?

There are six special features:

- (a) The emphasis in selection is on representative samples of major ecosystems rather than on those that are exceptional;
- (b) they form an international network in which the international character is ensured by an exchange of information and personnel through MAB committees and MAB Technical notes;
- (c) they provide for manipulative research in portions of the reserves:
- (d) they combine conservation, research education and training as major objectives;
- (e) they play an integrative role with local populations whose social and economic activities comprise a significant management input;
- (f) they focus their efforts on the relationship between man and the biosphere.

These features give a different character and emphasis to the biosphere reserve, which justifies a special term of international validity.

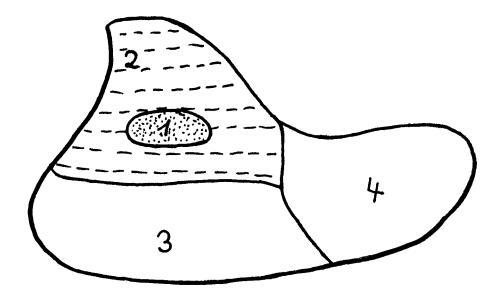
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### SPATIAL ORGANIZATION OF BIOSPHERE RESERVES

The generalized biosphere reserve

Ideally all the components making up the reserve should be contiguous; of course, they must all belong to the same biome. Such an arrangement is illustrated in Figure 1.

Figure 1. A generalized biosphere reserve. All four types of management zones are contiguous. Variations on this model are shown in Annex 2 of MAB Publications No. 22. The entire reserve lies within the same biological region.



- 1. Natural or Core Zone: Managed for minimum human interference, to serve as a baseline for the biological region; research, educational and training activities are carefully controlled and must be non-manipulative.
- Manipulative or Buffer Zone: Managed for research, education and training activities and manipulative methods and techniques are permitted. Traditional activities including timber production, hunting, fishing and grazing are permitted in a controlled manner.
- Reclamation or Restoration Zone: Managed to study and reclaim lands and natural resources where heavy natural or human-caused alteration has passed ecological thresholds, where biological processes have been interrupted or where species have become locally extinct.
- 4. Stable Cultural Zone: Managed to protect and study ongoing cultures and land-use practices which are in harmony with the environment. Local residents and their activities are to continue, but new technologies may be strictly controlled.

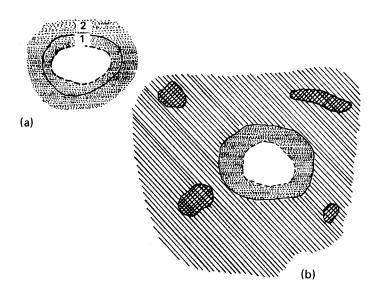
## The cluster biosphere reserve

It may not always be possible, however, to have all the elements in close contact with one another. In many countries the large areas necessary may no longer be available. For example, there may be a suitable core area in a Strict Nature Reserve or National Park. Areas for manipulation may exist in national or state forests, in experimental catchments or in range management stations; "cultural" or degraded areas may also be at a distance. In this case the biosphere reserve could be formed of areas separate from one another, provided that other essential criteria are met - adequate legal control, manageability and sufficient buffering of the core area. Such an arrangement is illustrated in Figure 2 and 3.

Figure 2. (a)

Generalized biosphere reserve showing the core and buffer zone concept. No development is permitted in the core areas and uses are strictly controlled. Buffer zones are used for research and education purposes and public use is limited. Manipulations could be carried out in buffer zones, most appropriately in buffer zone 2;

(b) Diagrammatic representation of a biosphere reserve cluster. Core-buffer zone concept is extended to include geographically separate reserves which can provide the opportunity for controlled manipulations while also better representing regional variability. Fringe areas are shown between and surrounding the reserves.



Biosphere reserve

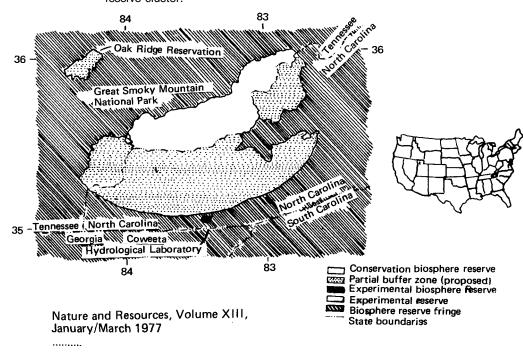
Buffer zones (1 and 2)

Experimental biosphere reserves

Biosphere reserve fringe

Nature and Resources, Vol. XIII No. 1 January/March 1977

Figure 3. Example of a biosphere reserve cluster from the southern Appalachian region, south-eastern United States. The major conservation type reserve is the great Smoky Mountain National Park. Partially surrounding it is a buffer zone. Nearby experimental reserves are the Coweeta Hydrological Laboratory and the Oak Ridge Environmental Research Park. Fringe areas include additional tracts which can augment studies carried out within the biosphere reserve cluster.



### LEGAL PROTECTION AND SECURITY

Biosphere reserves can succeed in protecting ecosystems and species, and in providing the localities for long continued research and monitoring, only if they are secure and if they can be managed consistently and effectively for these objectives. It is, therefore, essential that each country should afford adequate long-term protection under law, and should provide the money and manpower necessary for management.

It may be possible to assure legal protection under existing legislation covering protected areas. Indeed it is probably better, in general, that there should not be new legislation specifically for biosphere reserves, because this is likely to harden the definition of the term "biosphere reserve", and it would then be likely to assume different forms in different countries, each with the sanctity of law. This has happened, for example, to the term "national park". If, however, there is good reason why a country would find it advantageous to enact legislation covering biosphere reserves, there is no compelling argument as to why it should not do so.

### APPENDIX III

# UNITED NATIONS EDUCATIONAL SCIENTIFIC AND CULTURAL ORGANIZATION

# INTERGOVERNMENTAL COMMITTEE FOR THE PROTECTION OF THE WORLD CULTURAL AND NATURAL HERITAGE

# Excerpts from: OPERATIONAL GUIDELINES FOR THE IMPLEMENTATION OF THE WORLD HERITAGE CONVENTION

(adopted by the Committee at the first session and amended at its second session)

### INTRODUCTION

- 1. The cultural heritage and the natural heritage are among the priceless and irreplaceable possessions, not only of each nation, but of mankind as a whole. The loss, through deterioration or disappearance, of any of these most prized possessions constitutes an impoverishment of the heritage of all the peoples of the world. Parts of that heritage, because of their exceptional qualities, can be considered to be of outstanding universal value and as such worthy of special protection against the dangers which increasingly threaten them
- 2. In an attempt to remedy this perilous situation and to ensure, as far as possible, the proper identification, protection, conservation, presentation and rehabilitation of the world's unique and irreplaceable heritage, the Member States of UNESCO adopted in 1972 the Convention concerning the Protection of the World Cultural and Natural Heritage. This Convention, which complements and in no way competes with heritage conservation programmes at the national level, provides for the establishment of a World Heritage Committee and a World Heritage Fund. Both the Committee and the Fund are now in existence.
- 3. The World Heritage Committee has four critical functions:
  - to draw up a World Heritage List, comprising those properties, cultural and natural, which the Committee considers to be of outstanding universal value in accordance with criteria adopted by it;
  - (ii) to prepare a List of World Heritage in Danger consisting of those properties on the World Heritage List which, for their protection, require major conservation measures and for which assistance has been requested by the States Parties concerned;
  - (iii) to determine in what way and under what conditions the World Heritage Fund resources can most advantageously be used; and
  - (iv) to assist Member States, as far as possible, in the protection of their properties of outstanding universal value.
- 4. The responsibilities of the World Heritage Committee are immense. But there can be no more important challenge and no more worthwhile task

than an endeavour, on behalf of the peoples of the world, to assist States in protecting for future generations those cultural and natural properties which are of outstanding universal value.

# I. Establishment of the World Heritage List

# A. General Principles

- 5. The Committee agreed that the following general principles would guide its work in establishing the World Heritage List:
  - (i) The World Heritage List, in view of its importance not only for the work related to the Convention, but also for educational and public information purposes, shall be considered as a separate entity. The criteria for the inclusion of properties in the List, therefore, shall enable the World Heritage Committee to act with full independence in evaluating solely the intrinsic merit of a property and not its suitability for assistance by the World Heritage Fund.
  - (ii) The Convention provides a vehicle for the protection of those cultural or natural properties or areas deemed to be of outstanding universal value. It is not intended to provide for the protection of all properties and areas of great interest, importance, or value, but only for a select list of the most outstanding of these from an international viewpoint.
  - (iii) The outstanding universal value of cultural and natural properties shall be determined according to two sets of criteria:

one set of criteria for cultural property,

one set of criteria for natural property.

- (iv) Cultural and natural properties shall be included in the World Heritage List according to a gradual process and no formal limit shall be imposed either on the total number of properties included in the List or on the number of properties any individual State can submit at successive stages for inclusion therein.
- (v) When a property included in the World Heritage List has deteriorated to such an extent that it has lost those characteristics for which it was inscribed thereon or when further research has shown that the property is not, in fact, of outstanding universal value, that property shall be deleted from the List. In this connection, it is hoped that the reports to be submitted by States Parties under the terms of Article 29 of the Convention will provide sufficient information for the Committee to decide on the continuing eligibility of the properties for inclusion in the List.
- (vi) The property included in the World Heritage List should be marked with the World Heritage Emblem adopted by the Committee ... However, this emblem should be placed in such a way that it does not visually impair the property in question.

6. The definition of "universal" in the phrase "outstanding universal value" requires comment. Some properties may not be recognized by all people, everywhere, to be of great importance and significance. Opinions may vary from one culture or period to another. As far as cultural property is concerned, the term "universal" must be interpreted as referring to a property which is highly representative of the culture of which it forms part.

# B. Criteria for the inclusion of cultural properties in the World Heritage List

- 7. Outstanding universal value will be recognized when a monument, group of buildings or site as defined in Article 1 of the Convention submitted for inclusion in the World Heritage List is found to meet one or more of the following criteria. Therefore, each property nominated should:
  - represent a unique artistic or aesthetic achievement, a masterpiece of the creative genius; or
  - (ii) have exerted considerable influence, over a span of time or within a cultural area of the world, on developments in architecture, monumental sculpture, garden and landscape design, related arts, town-planning or human settlements; or
  - (iii) be unique, extremely rare, or of great antiquity; or
  - (iv) be among the most characteristic examples of a type of structure, the type representing an important cultural, social, artistic, scientific, technological or industrial development; or
  - (v) be a characteristic example of a significant style of architecture, method of construction or form of town-planning or traditional human settlement that is fragile by nature or has become vulnerable under the impact of irreversible socio-cultural or economic change; or
  - (vi) be most importantly associated with ideas or beliefs, with events or with persons, of outstanding historical importance or significance.
- 8. In every case, consideration must be given to the state of preservation of the property (which should be evaluated relatively), in comparison to the state of preservation of other property dating from the same period and of the same type and category.
- In addition, the property should meet the test of authenticity in design, materials, workmanship and setting; authenticity does not limit consideration to original form and structure but includes all subsequent modifi cations and additions, over the course of time, which in themselves possess artistic or historical values.

### C. Criteria for the inclusion of natural properties in the World Heritage List

10. Outstanding universal value will be recognized when a natural heritage property - as defined in Article 2 of the Convention - submitted for inclusion in the World Heritage List, is found to meet one or more of the following criteria. Therefore, properties nominated should:

- (i) be outstanding examples representing the major stages of the earth's evolutionary history. This category would include sites which represent the major "eras" of geological history such as "the age of reptiles" where the development of the planet's natural diversity can well be demonstrated and such as the "ice age" where early man and his environment underwent major changes; or
- (ii) be outstanding examples representing significant ongoing geological processes, biological evolution and man's interaction with his natural environment. As distinct from the periods of the earth's development, this focuses upon ongoing processes in the development of communities of plants and animals, landforms and marine and fresh water bodies. This category would include for example (a) as geological processes, glaciation and volcanism, (b) as biological evolution, examples of biomes such as tropical rainforests, deserts and tundra, (c) as interaction between man and his natural environment, terraced agricultural landscapes; or
- (iii) contain unique, rare or superlative natural phenomena, formations or features or areas of exceptional natural beauty, such as superlative examples of the most important ecosystems to man, natural features, (for instance, rivers, mountains, waterfalls), spectacles presented by great concentrations of animals, sweeping vistas covered by natural vegetation and exceptional combinations of natural and cultural elements; or
- (iv) be habitats where populations of rare or endangered species of plants and animals still survive. This category would include those ecosystems in which concentrations of plants and animals of universal interest and significance are found.

It should be realized that individual sites may not possess the most spectacular or outstanding single example of the above, but when the sites are viewed in a broader perspective with a complex of many surrounding features of significance, the entire area may qualify to demonstrate an array of features of global significance.

- 11. In addition to the above criteria, the sites should also meet the conditions of integrity:
  - (i) The areas described in 10(i) should contain all or most of the key interrelated and interdependent elements in their natural relationships; for example, an "ice age" area would be expected to include the snow field, the glacier itself and samples of cutting patterns, deposition and colonization (striations, moraines, pioneer stages of plant succession, etc.).
  - (ii) The areas described in 10(ii) should have sufficient size and contain the necessary elements to demonstrate the key aspects of the process and to be self-perpetuating. For example, an area of "tropical rain forest" may be expected to include some variation in elevation above sea level, changes in topography and soil types, river banks or oxbow lakes, to demonstrate the diversity and complexity of the system.

- (iii) The areas described in 10(iii) should contain those ecosystem components required for the continuity of the species or of the objects to be conserved. This will vary according to individual cases; for example, the protected area for a waterfall would include all, or as much as possible, of the supporting upstream watershed; or a coral reef area would be provided with control over siltation or pollution through the stream flow or ocean currents which provide its nutrients.
- (iv) The areas described in 10(iv) should be of sufficient size and contain the necessary habitat requirements for the survival of the species

# D. Format and content of the nominations for inclusion in the World Heritage List

- 12. The nominations to be submitted by the States Parties to the Convention must include all the necessary information and supporting documentation to enable the Committee to decide on the eligibility of property for inclusion in the World Heritage List.
- 13. Nominations by States for inclusion of cultural and natural properties in the World Heritage List must be presented in the form of a closely argued case, supported by full documentation and bibliography. The same printed form shall be used for the cultural and natural heritage. Such a form shall request the following type of information and documentation:
  - (i) Specific Location

Country.

State, Province or Region.

Name of property (local and eventually other names).

Exact location on map and indication of geographical co-ordinates.

### (ii) Juridical Status

Owner.

Legal status.

Responsible administration.

## (iii) Identification

Description and inventory.

Maps and/or plans.

Photographic and/or cinematographic documentation.

History.

Bibliography.

### (iv) State of preservation/conservation

Diagnosis.

Agent responsible for preservation and conservation.

History of preservation/conservation.

Proposed projects for preservation/conservation.

Means for préservation/conservation (legal, technical, administrative and financial ones, etc.).

Management plans.

(v) Justification for inclusion in the World Heritage List

For *cultural property* the justification should be based on the criteria listed in paragraph 7. For *natural property* the justification should be based on the criteria listed in paragraphs 10 and 11.

14. A nomination form shall be furnished to States Parties accompanied by explanatory instructions. The initial form shall be used until changes become necessary.

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# II. Granting of International Assistance from the World Heritage Fund

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# B. Procedure for consideration of requests for international assistance

- 18. The Committee agreed to adopt the following procedure:
  - (a) The Director-General, on behalf of the Committee, shall inform States Parties that they may submit requests for international assistance which, according to the terms of Article 21(1) of the Convention, "should define the operation contemplated, the work that is necessary, the expected cost thereof, the degree of urgency and the reasons why the resources of the State requesting assistance do not allow it to meet all the expenses" concerning:
    - (i) properties included in the World Heritage List or nominated for inclusion therein:
    - (ii) the identification of property which, according to Article 13(2) may be financed "when preliminary investigations have shown that further inquiries would be justified";
    - (iii) the training of staff and specialists at all levels in the field of identification, protection, conservation, presentation and rehabilitation of the cultural and natural heritage; and
    - (iv) support for national or regional centres for the training of staff and specialists referred to in Article 23 of the Convention;
  - (b) The Secretariat on behalf of the Committee, shall be responsible for:

registering each request;

assisting in completing the requests (if necessary);

translating and reproducing the requests.

The requests for technical cooperation shall be processed according to the same calendar as that adopted in the case of nominations to the World Heritage List.

# C. Order of priorities for the granting of international assistance

19. Without prejudicing the provisions of the Convention, which shall always prevail, the Committee agreed on the following order of priorities with respect to the type of activities to be assisted under the Convention:

emergency measures to save property which is in immediate danger of total destruction or disappearance;

preparatory assistance, for drawing up nominations to the World Heritage List and requests for technical co-operation;

projects which are likely to have a multiplier effect ("seed money") because they:

- stimulate general interest in conservation;
- contribute to the advancement of scientific research:
- contribute to the training of specialized personnel;
- generate contributions from other sources.
- 20. The committee also agreed that the following factors would in principle govern its decisions with respect to assistance under the Convention:
  - (i) the urgency of the work and of the protective measures to be taken;
  - (ii) the legislative, administrative and financial commitment of the recipient State to preserve and manage the property;
  - (iii) the cost of the project;
  - (iv) the interest for and exemplary value of the project in respect of scientific research and the development of economic conservation techniques;
  - (v) the educational value both for the training of local experts and for the general public;
  - (vi) the cultural and ecological benefits accruing from the project; and
  - (vii)the consequences from the social and economic points of view.
- 21. Properties included in the World Heritage List shall be considered as being of equal value. For this reason, the criteria proposed above make no reference to the relative value of properties. The criteria related to scientific interest covers, inter alia, the proposed use on the project of new methods and techniques in conservation, i.e. "pilot projects" carried out with the most economical means which would have an exemplary value. By "educational value" is meant the training opportunities that would arise for local staff and the impact which the project would have on the awareness and appreciation of the general public, not only in the country in which the property is located, but on a world-wide scale.

# D. Preparatory and emergency assistance

22. The Committee decided that a special procedure would be followed in the case of requests for preparatory and emergency assistance: Such requests shall be submitted for approval to the Chairman who will decide, in consultation with the Director-General, on the type and extent of assistance to be granted. In this connection, the Committee decided that this assistance could take the form of expert services or equipment or, in exceptional cases, of financial grants. The Committee will determine at regular intervals the funds to be allocated for these purposes. The budgetary ceiling for each preparatory assistance project was fixed by the Committee at 15.000 Dollars.

# E. Standard agreement to be concluded with States receiving international assistance

23. An agreement will be concluded between the Committee and the State Party receiving assistance under the Convention. Under this agreement, the recipient State will undertake to continue to protect, conserve and present the property safeguarded with the assistance provided under the Convention.

....

### IV. Recommendations to States Parties

- 28. When setting the boundary of a property to be nominated to the List, the concept of a buffer zone around the property may be applied where appropriate and feasible. In such instances the nominations would include:
  - (a) a precise definition of the surface area of the property itself, including the sub-surface area where necessary; and
  - (b) an indication of the buffer zone around the property itself (i.e. the natural or man-made surroundings that influence the physical state of the property or the way in which the property is perceived).

Such buffer zones would be determined in each case through technical studies and provided with adequate protection.

- 29. As far as possible, States Parties should include, in their submissions, properties which combine in a significant way cultural and natural features of outstanding universal value.
- 30. In order to ensure efficient execution of projects, for which assistance has been granted from the World Heritage Fund, a single body whether national, regional, local, public or private should be entrusted with the responsibility of executing the project in the State Party concerned.

# APPENDIX IV

# Substantive Definitions for Protected Areas from Some International Documents

# 1. Excerpts from:

African Convention on the Conservation of Nature and Natural Resources, 1968 (IUCN-CL 800000(U-968091500)).

### Article III - Definitions

"Conservation Area" means any protected natural resource area, whether it be a strict natural reserve, a national park or a special reserve;

- (a) "strict nature reserve" means an area:
  - under State control and the boundaries of which may not be altered nor any portion alienated except by the competent legislative authority,
  - (ii) throughout which any form of hunting or fishing, any undertaking connected with forestry, agriculture or mining, any grazing, any excavation or prospecting, drilling, levelling of the ground or construction, any work tending to alter the configuration of the soil or the character of the vegetation, any water pollution and generally, any act likely to harm or disturb the fauna or flora, including introduction of zoological or botanical species, whether indigenous or imported, wild or domesticated, are strictly forbidden,
  - (iii) where it shall be forbidden to reside, enter, traverse or camp, and where it shall be forbidden to fly over at low altitude, without a special written permit from the competent authority, and in which scientific investigations (including removal of animals and plants in order to maintain an ecosystem) may only be undertaken by permission of the competent authority.
- (b) "national park" means an area:
  - under State control and the boundaries of which may not be altered or any portion alienated except by the competent legislative authority,
  - (ii) exclusively set aside for the propagation, protection, conservation and management of vegetation and wild animals as well as for the protection of sites, land-scapes or geological formations of particular scientific or aesthetic value, for the benefit and enjoyment of the general public, and
  - (iii) in which the killing, hunting and capture of animals and the destruction or collection of plants are prohibited except for scientific and management purposes and on the condition that such measures are taken under the direction or control of the competent authority;
  - (iv) covering any aquatic environment to which all of the provisions of section (b)(i-iii) above are applicable.

The activities prohibited in "strict nature reserves" under the provisions of section (a)(ii) of paragraph (4) of this article are equally prohibited in national parks except in so far as they are necessary to enable the park authorities to implement the provisions of section (ii) of this paragraph, by applying, for example, appropriate management practices, and to enable the public to visit these parks; however, sport fishing may be practised with the authorization and under the control of the competent authority.

- (c) "special reserve" means other protected areas such as: -
  - (i) "game reserve" which shall denote an area
    - (a) set aside for the conservation, management and propagation of wild animal life and the protection and management of its habitat.
    - (b) within which the hunting, killing or capture of fauna shall be prohibited except by or under the direction or control of the reserve authorities.
    - (c) where settlement and other human activities shall be controlled or prohibited;
  - (ii) "partial reserve" or "sanctuary" which shall denote an area
    - (a) set aside to protect characteristic wildlife and especially bird communities, or to protect particularly threatened animal or plant species and especially those listed in the Annex to this Convention, together with the biotopes essential for their survival,
    - (b) in which all other interests and activities shall be subordinated to this end;
  - (iii) "soil" or "forest" reserve shall denote areas set aside to protect such resources.

### 2. Excerpts from:

Convention on Conservation of Nature in the South Pacific, 1976 (IUCN-CL 800000(U-975061200)).

### Article I

For the purpose of this Convention:

- (a) "protected area" means national park or national reserve;
- (b) "National Park" means an area established for the protection and conservation of ecosystems, containing animal and plant species, geomorphological sites and habitats of special scientific, educative and recreational interest or a natural landscape of great beauty, which is under the control of the appropriate public authority and open to visits by the public;
- (c) "National reserve" means an area recognized and controlled by the appropriate public authority and established for protection and conservation of nature, and includes strict nature reserve, managed nature reserve, wilderness reserve, fauna or flora reserve, game reserve, bird sanctuary, geological or forest reserve, archeological reserve and historical reserve, these being re-

serves affording various degrees of protection to the natural and cultural heritage according to the purposes for which they are established.

# 3. Excerpt from:

Convention on Wetlands of International Importance Especially as Waterfowl Habitat, 1971 (IUCN-CL 800000(R-971020200)).

#### Article 1

- For the purpose of this Convention wetlands are areas of marsh, fen, peatland or water, whether natural or artificial, permanent or temporary, with water that is static or flowing, fresh, brackish or salt, including areas of marine water the depth of which at low tide does not exceed six metres.
- For purposes of this Convention waterfowl are birds ecologically dependent on wetlands.

# 4. Excerpts from:

Convention on Nature Protection and Wildlife Preservation in the Western Hemisphere, 1940

# (IUCN-CL 800000(U-940101200)).

Description of the terms used in the Wording of this Convention

### Article I:

1. The expression "National Parks" shall denote:

Areas established for the protection and preservation of superlative scenery, flora and fauna of national significance which the general public may enjoy and from which it may benefit when placed under public control.

Article III expands on this definition:

"The Contracting Governments agree that the boundaries of national parks shall not be altered or any portion thereof be capable of alienation except by the competent legislative authority. The resources of these reserves shall not be subject to exploitation for commercial profit.

The Contracting Governments agree to prohibit hunting, killing and capturing of members of the fauna, and destruction or collection of representatives of the flora in national parks except by or under the direction or control of the park authorities of for duly authorized scientific investigations.

The Contracting Governments further agree to provide facilities for public recreation and education in national parks consistent with the purposes of this Convention."

The expression "National Reserve" shall denote:

Regions established for conservation and utilization of natural resources under government control, on which protection of animal and plant life will be afforded in so far as this may be consistent with the primary purpose of such reserves.

- 3. The expression "Nature Monuments" shall denote: Regions, objects, or living species of flora or fauna of aesthetic, historic or scientific interest to which strict protection is given. The purpose of nature monuments is the protection of a specific object, or a species of flora or fauna, by setting aside an area, an object, or a single species, as an inviolate nature monument, except for duly authorized scientific investigations or government inspection.
- 4. The expression "Strict Wilderness Reserve" shall denote: A region under public control characterized by primitive conditions of flora, fauna, transportation and habitation wherein there is no provision for the passage of motorized transportation and all commercial developments are excluded.

This definition is complemented by Article IV which adds:

"The Contracting Governments agree to maintain the strict wilderness reserves inviolate as far as practicable except for duly authorized scientific investigations or government inspection or such uses as are consistent with the purposes for which the area was established."

## 5. Excerpt from:

Council of Europe, Committee of Ministers Resolution (73) 30 on the European Terminology for Protected Areas, 26 October 1973. (IUCN-CL 800405(R-900006000)).

The different categories of protected areas:

Protected areas could be divided into four categories, called A, B, C and D, the first two being strictly protected areas, the other two being less strictly protected.

It would be wrong to suppose that each of these categories is a self-contained unit; there is sure to be some overlapping among the factors mentioned earlier.

The categories might be described as follows:

### Category A

For this category, the only factor admissible is that of *scientific value*. The category would comprise areas under complete protection where all human activities are prohibited. Access is allowed only in the case of scientific research workers and requires a special permit.

The sole concern is therefore the fundamental one of the protection and natural development of the various biotopes, scientific research being permitted on clearly-defined conditions.

### Category B

Scientific value is again important with this category. The conservation of the natural heritage (flora, fauna, subsoil, water etc.) is compulsory in such areas, and any artificial intervention which might modify their natural appearance, composition and evolution is prohibited. However, some amenity provision is permissible in clearly-defined zones subject to strict rules. *Various traditional* 

human activities may be tolerated provided they are compatible with conservation aims. No non-traditional human activity is permissible. Visitors may be allowed to enter on condition that they comply with strict rules.

# Category C

Areas would be assigned to this category mainly on account of their cultural and aesthetic value, protection of the landscape and the ecological balance being taken into consideration. However, these areas may also be of subsidiary recreational value.

Traditional human activities are allowed, subject to certain rules; some non-traditional human activities are tolerated but strictly controlled.

As this category is often of relevance to human recreation, some *recreational provision* as well as *non-motorised public movement* are permitted in clearly-defined zones on condition that they are in accordance with the area's aims.

# Category D

The areas in this category are usually large tracts of land which are primarily intended for recreation but where the principles of nature conservation are observed. They may include natural monuments, private estates, villages etc. Such areas are therefore primarily of recreational value (rest and relaxation) and also of cultural, aesthetic and natural value.

Planning an area for recreational purposes **will** entail some amenity provision (for cultural, sporting and recreational pursuits). *Traditional and/or new human activities* are normally permitted on condition that they are compatible with the area's aims. *Non-motorised public access* is generally unrestricted but may be controlled in certain zones of particular interest (natural monuments, flora, fauna etc.). *Motorised traffic* is controlled in accordance with the aims of protection.

# 6. Excerpts from:

..Guidelines in Establishing National Legislation on Wildlife and National Parks, 1971; in Wildlife and National Park Legislation in Asia, FAO Legislative Studies No. 1; and in Wildlife and National Park Legislation in Latin America, FAO Legislative Studies No. 2 (1971, Rome)

The term "strict natural reserve" should denote an area:

- (a) placed under the control of the state, the boundaries of which must not be altered, nor any portion subject to allocation except by the competent legislative authority;
- (b) set aside to permit the free interaction of natural ecological factors without any outside interference whatsoever, excepting that judged indispensable by the competent scientific authorities for the safeguarding of the very existence of the reserve;

- (c) throughout which any form of hunting or fishing, any undertakings connected with forestry, agriculture or mining, any grazing, any excavations or prospecting, drilling, levelling of the ground or construction, any work involving the alteration of the configuration of the character of the vegetation, any water pollution, and, generally, any act likely to harm or disturb the fauna or flora, and the introduction of any exotic animal or plant species is strictly forbidden;
- (d) where it is forbidden to reside, enter, traverse or camp and which it is forbidden to fly over, without a special written permit from the competent authorities, and in which scientific investigations may only be undertaken by permission of those authorities.

The term "national park" should denote an area:

- (a) identical with (a) "strict natural reserve" above;
- (b) set aside for the protection and conservation of outstanding natural animal and plant communities, geological formations and areas of natural scenic beauty, for the enjoyment of present and future generations in a manner consistent with the management of the resources, and for scientific, cultural, educational and economic purposes. When occasionally outstanding historical and archeological remains or sites are found within and forming part of the significance of the areas as defined in the previous sentence, these features or sites may be managed as part of the resources of the national park;
- (c) in which hunting, killing or capturing of fauna, destruction or collection of flora and other objects is prohibited except for scientific and management purposes, and on condition that these purposes are pursued by, or under the control of, the park authorities.

The activities prohibited under "strict natural reserves" (c) and (d) should also be prohibited in national parks, except where they are necessary to enable the park authorities to carry out the provisions of paragraph (b) above, or to enable the general public to visit national parks.

The term "sanctuary" (wildlife sanctuary, game reserve, wildlife refuge, etc.) should denote an area:

- (a) set aside for the conservation and management of wildlife and the protection and management of its habitat;
- (b) within which hunting shall be prohibited except by, or under the direction or control of, the reserve authorities:
- (c) where settlement and other human activities are restricted or prohibited.

The term "special reserve" (nature monument, national monument, etc.) should denote an area:

 (a) set aside to protect wild animal or plant species (special emphasis is given to species threatened with extinction) either as individuals or as populations and, in the case of wild animals, to ensure sufficient habitat for their survival;

- (b) set aside for the protection of outstanding geological formations, historical and archeological objects or sites (that sites or objects of historical and archeological significance may also occasionally be included in national parks has been mentioned under national parks);
- (c) in which all other interests and activities are subordinated to this end.

### **Footnotes**

- For definitions of some of the scientific terms used in this document, reference might be made to such dictionaries as: The Dictionary of Environmental Terms, by A. Gilpin. 1976. (Routledge and Kegan Paul: London and Henley). Henderson's Dictionary of Biological Terms, (Ninth Edition) by S. Holmes. 1979. (Longman: London and New York).
- These names include: Biosphere Reserve, Biological Reserve, Bird Sanctuary, Conservation Area, Conservation Park, Federal Biological Reserve, Fauna and Flora Reserve, Forest and Faunal Reserve, Forest Sanctuary, Faunal Reserve, Game Reserve, Game Sanctuary, Natural Area, National Faunal Reserve, National Game Reserve, National Nature Reserve, National Park, Nature Reserve, Nature Park, Provincial Park, Protected Region, Reserve, Strict Nature Reserve, State Park, Strict Reserve, Wildlife Management Area, Wildlife Reserve, Wildlife Sanctuary; 1980 United Nations List of National Parks and Equivalent Reserves (1980) (IUCN, Gland, Switzerland).
- For further discussion of the CNPPA categories, see pages 18 and 26 of these Guidelines and Appendix I.
- 4 World Conservation Strategy, Introduction, Para. 3 and 4 (1980) (IUCN, Gland, Switzerland).
- 5 *Id.* at Introduction, para. 6.
- 6 K. Miller, Planificacion de Parques Nacionales para el Ecodesarrollo (1980) (FEPMA, Madrid, Spain); published in Spanish. Quote taken from English version: Planning National Parks for Ecodevelopment Vol. 1, 15 (unpublished).
- 7 World Conservation Strategy, Introduction, para. 7 (1980) (IUCN, Gland, Switzerland).
- 8 The discussion on benefits has been taken in part from material in Philip Quigg, Protecting Natural Areas An Introduction to the Creation of National Parks and Reserves, 8-10 (National Audubon Society/International Series No. 3, 1978), see, also K. Miller supra, note 6; English version at 12-18.
- There are many other conventions which although not dealing with protected areas directly, concern nature conservation. The most notable example is the Convention on International Trade in Endangered Species. Another Convention worth noting is the Antarctic Treaty. This instrument provides significant conservation benefits. Philip Quigg, *Id.*, at 21-25, includes short summaries on the major international conventions and programmes related to protected natural areas, from which portions of the summaries in this part of the text are derived. Also, for a chart detailing the status of and parties to multilateral conventions of environmental importance, see. D. Navid, "Status of Multilateral Conventions Relating to Environmental Protection" (1976, Rev. 1980) Ref.: IV IPCE/12, (IUCN, Gland, Switzerland).
- 10 See, Appendix III for excerpts from the "Operational Guidelines for the Implementation of the World Heritage Convention". Further information is available on this convention from IUCN, Gland, Switzerland, or UNESCO, Place de Fontenoy, 75007 Paris. France.
- 11 See, Appendix IV. For further information, write IUCN, Id.
- 12 See, Appendix IV.
- 13 *ld*.
- 14 *Id.*
- 15 Id. For further information write to Secretary General of the Council of Europe, BP 431 R6,67006 Strasbourg, Cedex, France.
- 16 See, Appendix II for excerpts from "The Biosphere Reserve and its Relationship to Other Protected Areas", (MAB Project No. 8, 1979). For further information, write UNESCO, Place de Fontenoy, 75007 Paris, France.
- 17 The Directory is available from IUCN, Gland, Switzerland.
- 18 Material for the discussion of non-legal predrafting considerations has been taken, in part, from *National Parks Planning*, FAO Forestry Paper No. 6 (Rome, original in Spanish, French version published in 1976, English in 1978),
- 19 For a discussion of interim protection measures, see, page 57.
- 20 The stages of drafting are more completely discussed in G.C. Thornton, *Legislative Drafting*, 1970 Edition at 94-116. 1979 Edition at 102-126 (Butterworth, London).
- 21 Compatability of legislation and potential conflicts are further discussed in relation to intergovernmental coordination and applicability of other laws on pages 49-51.
- 22 Australia and Japan have some of the most extensive legislation relating specifically to marine parks, though several other jurisdictions refer to them.

For useful information on some of the considerations and principles special to marine parks, see, also, Food and Agricultural Organization of the United Nations (FAO), Etude juridique pour la wise en place et l'organisation d'aires protégées marines et cotidres en Méditerranée -- Action au Niveau National. (Prepared for the Legal Office of FAO, based upon the work of M. Ch. du Saussay and M. Prieur), 1980, (Rome); and Promotion of the Establishment of Marine Parks and Reserves in the Northern Indian Ocean Including the Red Sea and Persian Gulf (Proceedings of the Regional Meeting of IUCN, March 6-10, 1975, Teheran, Iran), (IUCN, Gland, Switzerland).

- 23 Ideally, a commitment to conserve the country's living resources could be incorporated in the constitution. The commitment could lay down 1) the obligation of the State to conserve living resources and to act responsibly towards the biosphere, 2) the rights of citizens to a healthy, stable and diversified environment, and 3) the corresponding responsibilities of citizens to such an environment.
- 24 See, the discussion of international conventions in Part One III, of this report, and Appendix IV.
- 25 Management plans and institutional arrangements are further discussed on pages XXX
- 26 Attached as Appendices I, II and III, are excerptsfrom criteria for involvement in three international programmes: the IUCN Commission on National Parks and Protected Areas (CNPPA) criteria which are used for qualification on the United Nations List of National Parks and Equivalent Reserves, the Biosphere Reserves, and the World Heritage
- 27 The IUCN/CNPPA phrase used for interim protection or conservation units is "resource reserve", See, Appendix I.
- 28 Interim regulations are discussed further in Section IX, "Prohibited and Regulated
- Activities for Protected Areas", pages 51-59.
  29 For further discussion of the levels of planning for wildlands systems, see, K. Miller, supra, note 6; English version at 210-213.
- 30 See, discussion on page 30.
- 31 Management plans for national parks are further discussed, along with examples of portions of actual plans, in National Parks Planning, supra, note 8. Also the International Affairs Division of the U.S. National Park Service has developed a useful and informative Suggested Table of Contents and Topic Outline for Management Plans for Protected Areas, available from that Division, U.S. National Park Service, Washington, D.C. 20240, U.S.A.
- 32 These zones are discussed in National Parks Planning, Id., at 11, 12. This publication notes that in Latin America as in other parts of the world acceptance is increasing for a zoning system whereby "parks" might be divided into as many as seven separate and distinct management zones, which might be labelled and defined along the following

Primitive-Scientific Zone: These lands represent the most important and often the most fragile natural values within the park. Nothing in the way of human activity will be permitted within this zone that will degrade these values. Only those structures, necessary for management and preservation of the wilderness qualities of this zone will be permitted. Most often this will consist of only a simple unobtrusive guard outpost. Primitive Zone: These natural environment lands often abut the Primitive Scientific Zone. They too contain outstanding natural features. However, the lesser overall environmental quality of these lands and/or the need to make the park's significant features available to visitors brings about the need for this zone. Primitive zone lands also serve as transition or buffer areas, often separating Primitive Scientific Zones from more accessible park zones. Exotic plants and animals will not be introduced and if possible will be eradicated in this zone. Physical development will be restricted to rudimentary trails, simple campsites, guard outposts, and minimal research facilities. Roads and motorized vehicles will be prohibited.

Extensive Use Zone: This classification is necessary to provide visitors with high quality park environment that is easier of access. Within this zone, park roads (usually one-way), trails, simple campgrounds, scenic overlooks, and vista clearing will be permitted. Development, however, will preclude facilities that will encourage high density use such as visitor centres, hotels, ski lifts, etc. Every effort will be made to reduce the environmental impact of physical development on this zone. As with the Primitive Zone, these lands will often function as a buffer or transition to more protected zones. Intensive Use Zone: This is the zone of high-density visitor and management use. Such lands, usually comprising a small percentage of the park's total area, designate lands to be used for two-way roads, visitor centres, visitor supply stores, formal campgrounds, overnight accommodations and park administration offices. These are the lands that are most affected by visitor use. As with development in other zones, extreme care must be taken to lessen the impact of physical development on park values. Caution must be exercised to prohibit development either in kind or in degree that will hint of urbanization. Facilities for public use placed in this zone should be the minimum required to promote visitor enjoyment and safety as well as resource protection.

Historic-Cultural Zone: This classification is given to lands within the park boundary containing nationally and internationally significant archeologic, historic or contemporary cultural resources. This classification is important, for it directs attention to the importance of protecting and interpreting these vestiges of the nations cultural heritage. Often it becomes desirable to provide a setting for these zones with abutting Primitive or Extensive Zone lands. Physical development will be only that necessary for the preservation, restoration and interpretation of cultural values. Public use activities are generally limited to sightseeing and education.

Zone of Recuperation: Lands within park boundaries that have been altered by the introduction of exotic animals, plants, mining, cutting, burning, colonization, farming, etc, bring about a need for this zone. Once the future management goal for these lands has been determined ... an action programme will be set in motion, directed at recuperation. In some cases restoration to original land forms may be necessary. Installations and equipment necessary to facilitate the implementation of these programmes will be permitted within this zone.

Special Use Zone: This zone is used for designating lands required for basic management services such as employee housing, maintenance and storage facilities, water and electric plants, communication towers, sanitary land fills, borrow pits, etc. Insofar as possible these installations will be visually and acoustically isolated from visitor use areas. This zone also is used to designate lands which support land use practices incompatible with park objectives. In the latter case these designations are transitory being only necessary until corrective action can be taken through park management or land acquisition programmes.

- 33 See discussion, page 91.
- 34 Enforcement is discussed in greater detail on pages 59-63.
- 35 For a useful discussion of transnational protected areas, both theory and existing arrangements, see, du Saussay, C., "Les Aires Protégées Transfrontalières" presented during the 3ème Congrès de la Société Francaise pour le Droit de l'Environnement, Nice 16, 17,18 October 1978.
- 36 See, pages 30-34.
- 37 See, pages 34-39.
- 38 See, page 29.
- 39 See, discussion of Conservation Funds on page 51.
- 40 See, pages 49-51.
- 41 For general drafting principles on these as well as other matters, see, G.C. Thornton, Legislative Drafting, note 20.
- 42 See Id., 1 st Edition at 291, 2nd Edition at 306.

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