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RECOMMENDATION FOR A NATIONAL PARK
POLICY FOR ANTIGUA

by

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INTRODUCTION

Antigua is a small country, approximately 108 square miles, with finite natural resources, and a growing population totalling 75,000 in 1980. The present land man ratio is less than one person per acre. With future population estimates, this figure is expected to be reduced further by the next decade. Population growth together with rising standard of living mean more people will use these resources for holiday and recreation. In addition to the ever-growing numbers of people using these resources, pressures of another kind have arisen from the competing demands of other forms of land-use such as agriculture, industry, water conservation, and urban and tourist developments. Thus, the judicious allocation of these limited natural resources will require adroit planning by government. This planning has become important in view of present rapid economic growth which has created demands not only for limited resources but also for new opportunities and services.

Existing legislation, although recognizing the need for protection of natural areas, has been inadequate to carry out the various environmental, social, economic and conservation objectives of the country. Similarly, existing policy regarding the administration of the country's natural and

cultural heritage has not been sufficiently defined to allow for proper management. Destruction of natural and cultural areas, increasing recreation demand, outdated legislation, undefined executive responsibility and lack of management guidelines are some of the factors which have indicated the need for a new policy.

Therefore, the purpose of this paper will be to formulate a national park policy which will provide a course of action for the protection and management of the island's outstanding natural and cultural areas. This suggested policy should serve as the basis for the establishment of a National Park System. In addition, it will encourage public understanding, appreciation and enjoyment of the heritage in ways which will leave it unimpaired for future generations.

The National Park Systems (NPS) will be divided into six categories of management areas in order to provide adequate protection to the variety of resources. The categories will be named as follows: Scientific Reserves, National Parks, National Landmarks, Scenic Landscapes, Historic and Cultural Sites and Recreation Parks. The variety of protected areas should be visualized as a spectrum, from those which require fairly rigid protection such as fragile ecosystems, to those which can be used for intense outdoor recreational activities such as beaches.

OBJECTIVES

The major objectives of the paper are:

1. To examine present legislation and policy of park and recreation resources.
2. To propose recommendations for a national park policy for Antigua.

The first objective will be accomplished by reviewing the existing legislation and policy of Government pertaining to park and recreation resources. The outcome of this review will determine the adequacy of these measures to protect natural areas. The second objective is contingent on the first. If natural areas are properly protected, then there will be no need for a new policy. However, this has not been the case as even a cursory observation will reveal. Natural areas are being exploited due to the absence of stringent government mandate. Ideally such a mandate should be expressed in law, thereby affording natural areas protection and management. This objective will, therefore, be accomplished by reviewing model national park policies and then formulating one to fit the Antiguan situation.

METHODOLOGY

Data required for this study were obtained from secondary sources. These sources provided the historical or background information and formed the theoretical base. The study relied heavily on data obtained from government documents and published laws of Antigua. Information gained

from planning reports were also helpful in formulating this policy. The format for this policy was adapted from "Manual for National Parks Planning" prepared by the United Nations, Food and Agriculture Organization and "Policy for the Establishment and Management of a National Park System in Trinidad and Tobago" prepared by the Trinidad Forestry Division and the Forestry Division of the Organization of American States.

OUTLINE

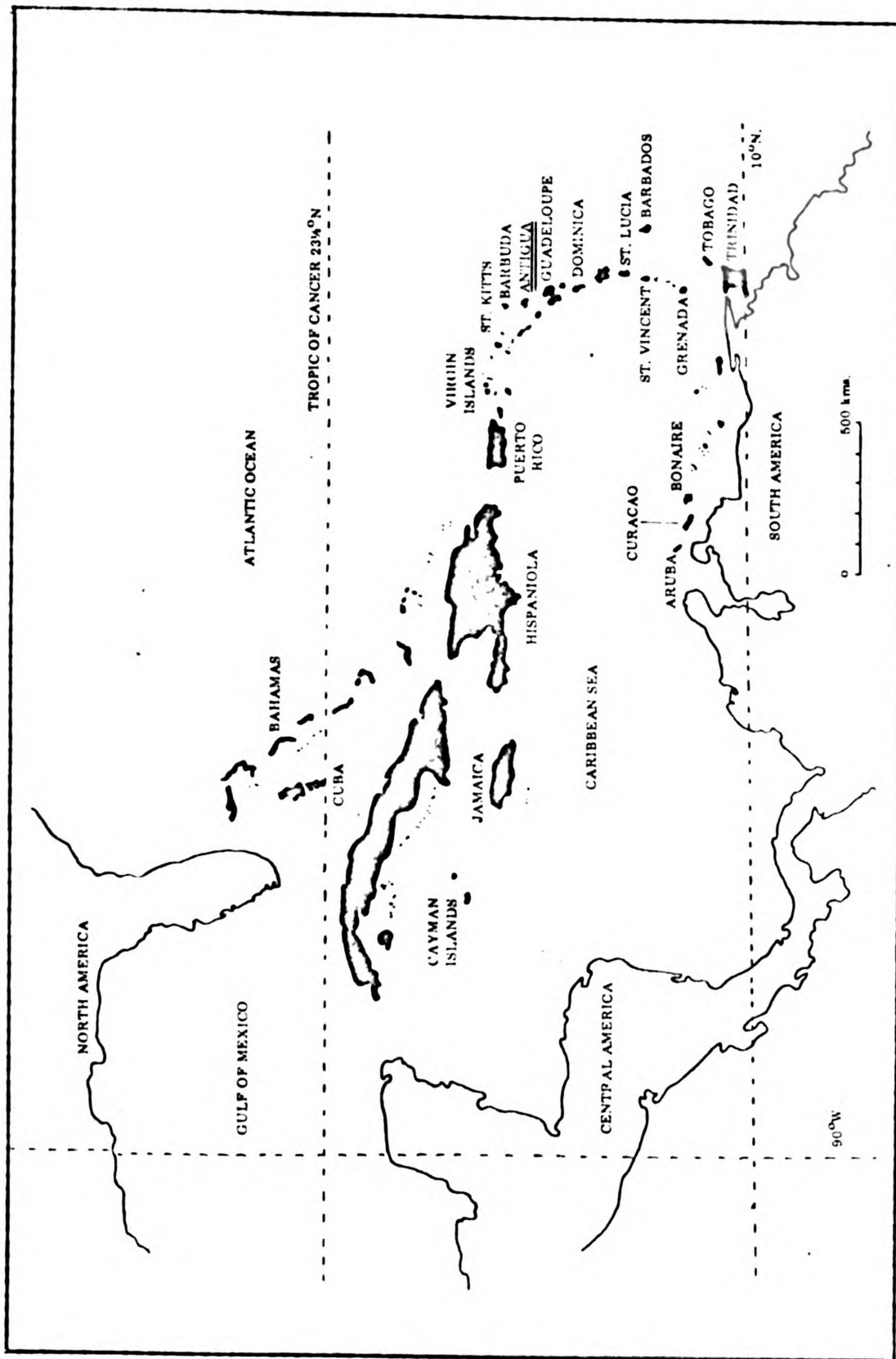
The paper will start with an overview of the island's population, climate, and regional location which will be followed by a synopsis of the state of the art in the protection of natural resources. Analyses of existing legislation and policy will be done and a proposal for new legislation and policy will be made. The paper will proceed to give a rationale for the establishment of a National Park System and then lead into the development of the NPS policy. In this section, the purpose, objectives, system's plan, criteria for selecting areas to be included in the system and the different categories of protected areas will be discussed. Following will be a description on how units of the NPS will be created. Lastly, directives on managing the system will be outlined.

BACKGROUND INFORMATION

Antigua is located at 17.03° north latitude in the midst of the Caribbean Sea and is one of the Eastern Caribbean islands. Its regional location is shown on Map I. The island is partly volcanic and partly coral, and is surrounded by superb white sand beaches which are almost entirely reef-protected. The average annual temperature ranges between 76 degrees Fahrenheit in January/February and 81 degrees Fahrenheit in August/September (Macpherson: 1977).

The island's small size has made it very sensitive to increases in population. The average population density was 694 persons per square mile in 1980. Thus, urbanization and its concomitant problems have brought into sharp focus the need for conservation and preservation of the island's natural resources. During the Colonial era, the relatively flatness of the island facilitated removal of the original forest cover by the sugar planters. Present public and private development activities have resulted in destruction of many of these resources.

Government has been slow to protect these assets adequately. Present measures to protect natural areas are provided through ordinances which call for the establishment of public parks and marine environments. While these areas were



Map 1 Regional Location of Antigua

being created, no effective measures for their ecological protection, recreational and educational uses, or management were provided. Although one area, Salt Fish Tail Reef Park, was established under the Marine Areas Preservation and Enhancement Act, no management policies were specified in the Ordinance.

It is imperative that Government take immediate action to develop a national policy if these unique natural and cultural resources are to be protected for present and future generations. Proposals for two national parks have been made by the United Nations Physical Planning Unit and the Development Control Authority. In addition, these bodies drafted a model legislation entitled, 'The Protection of the Environment Act, 1976'. This Act has the potential to provide a sound legislative base for future park and recreation plans.

The creation of a national park system should be a serious commitment, written into legislation and reversible only under the most pressing circumstances and by due legal process (Quigg: 1978). Therefore, the following section will examine the existing legislation and policy which are related to national parks, and then determine the changes needed to safeguard natural areas in perpetuity.

Model legislation

LEGISLATION AND POLICY

EXISTING LEGISLATION

This section will review and analyze existing legislation and policy relevant to the protection of the environment. Presently there is no legislation in Antigua which provides the necessary mandate for the establishment and management of national parks. However, some of the legislative acts and ordinances address certain aspects of the administration of public lands for conservation and protection. Those concerned with these functions are:

The Public Park Ordinance, No. 4, 1965

This Ordinance makes provision for the establishment of Public Parks. It deals with the preservation of natural features such as flora and fauna; and the preservation of buildings of architectural, historic or artistic interest and the protection and augmentation of the amenities of such buildings. Under the Ordinance, a Public Parks Commission is created and is responsible for the preservation and enhancement of natural beauty in designated Public Park areas; and for encouraging the provision or improvement of facilities for persons resorting to these areas to enjoy. Ample opportunities for the enjoyment of outdoor recreation is another stipulation of the Ordinance.

The Beach Protection Ordinance, No. 7, 1957

This Ordinance prohibits the removal of sand, stone, shingle or gravel from any beach or seashore in the island for building or construction purposes or for the purpose of providing ballast for vessels, except where authorized by the granting of a permit.

The Dumping at Sea Act, No. 29, 1975

The purpose of this Act is to control dumping of substances or articles from ships, aircraft, vehicle, hovercraft or marine structure of equipment into the sea. The restrictions imposed by this Act are twofold: to prevent marine pollution, so as to protect coastal ecosystems; and to preserve and enhance beach areas for recreational pursuits.

The Marine Areas Preservation and Enhancement Act, No. 5, 1972

This Act states that the Minister of Agriculture, Lands, and Fisheries may by order published in the Gazette, designate any section of the marine areas of Antigua as a restricted area under certain conditions. An area may be declared restricted when special steps are necessary to preserve and enhance natural beauty, to protect flora, fauna and wrecks found in the area, to promote public enjoyment of the area, and to promote scientific study and research.

Wild Birds Protection Ordinance, Chapter 115, No. 26, 1974

This Ordinance regulates the hunting of wild birds throughout the State during specified time periods. The

Governor may extend or vary the prohibition time for killing, wounding, taking, exposing, offering for sale and purchasing of any wild bird, or for taking, removing, injuring or destroying the nest or eggs of any wild bird. Hunting of wild birds is prohibited within the Potworks Dam and Oliver's Dam vicinities.

Town and Country Planning Ordinance, 1948

Under this Ordinance provision is made for the preparation of Statutory Development Plans. In these plans, provision may be made for the following amenities:

1. Allocation of lands for:
 - a. Community parks
 - b. Protection of marine life
2. Preservation of buildings, caves, sites and objects of architectural or historic interest.
3. Preservation or protection of forests, woods, trees, shrubs, plants and flowers.
4. Prohibition, regulation and control of deposit or disposal of waste materials and refuse, of sewage disposal and of the pollution of streams, ponds, gullies, reservoirs and the seashore.

Land Acquisition Ordinance, 1969

The Land Acquisition Ordinance is another legislation which is related to the establishment and management of a system of national parks. It authorizes the acquisition of land for public purposes and outlines the procedures and laws governing the acquisition.

ANALYSIS OF EXISTING LEGISLATION

While the present legislation provides for the establishment of marine areas, public parks and for the protection of beaches, it has not articulated the management policies necessary to assure the protection of the natural, cultural and recreational resources required for areas within a national park system. This lack of managerial mandate has resulted in the destruction of many of the island's unique and outstanding resources.

In the case of public parks, uncontrolled animal grazing and the cutting of trees for the burning of charcoal have reduced the number of plant and animal species, and in some instances, have accelerated soil erosion problems. The Wild Birds Ordinance regulates only the hunting of wild birds. No similar protection is extended to other wildlife. This Ordinance does not make any provision for the establishment of wildlife sanctuaries, without which it is difficult to enforce the Ordinance. Also in areas where hunting is prohibited, other activities such as tree plantations and quarrying have tended to destroy the habitat upon which the wildlife depend, and have inevitably jeopardized the wildlife's welfare.

Together, the Beach Protection Ordinance and the Dumping at Sea Act provide ample protection to coastal waters but do not regulate the development of shorelines. Shorelines of both inland and coastal waters are unique resources, therefore, their management is of prime importance. Pressures on these

resources are increasing, and more so, as tourism replaces agriculture as the mainstay of the economy. There are no laws governing the dumping of waste into inland water bodies and mangrove areas. Consequently, pollution has destroyed some valuable water-oriented recreation opportunities and could be fatal to wildlife species. As a sanitation measure alone, the abatement of pollution is a necessity.

The Town and Country Planning Ordinance, while providing the planning tools, is not intended for management purposes and does not address this aspect, or specifically mention national parks. Likewise, the Marine Areas Preservation and Enhancement Act provides the legislative mandate for protection and recreational use, but does not provide the institutional structures necessary to effect the management of the areas created.

EXISTING GOVERNMENT POLICY

Presently, there exists no formal government policy which deals with the establishment and management of a system of national parks. This absence may be attributable to the fact that Antigua does not yet have a Comprehensive Development Plan. Existing, however, is a Territorial Plan (Development Plan for the State) which contains broad guidelines for the use of lands and also highlights characteristics and trends of particular importance to the future development of the State (Antigua Physical Planning Department and United

Nations Physical Planning Unit: 1976). The Territorial Plan is based on the physical characteristics of the island and is the first step toward the formation of a comprehensive and integrated land use policy. In the meantime, the plan is used as a preliminary guide for the Development Control Authority (central co-ordinating authority) in carrying out its responsibilities particularly at the "short-term planning" level.

Although the Territorial Plan has not detailed a national policy for the establishment of a national park system, it has set policies for the use of the land. Some of these policies are directed towards the goals and objectives of Government in the areas of environment, conservation and protection of natural resources, and have thus provided the framework on which specific policies dealing with national parks could be based.

Supplementary to the Territorial Plan is another document entitled 'The Environment'. This report has highlighted the need to preserve or protect certain vital environmental and manmade assets having significance to the ecology and culture of Antigua. In addition, the report provided comprehensive planning with landuse guidelines for two 'Tourism Districts', one in the St. John's/Dickerson Bay region, and the other in the English Harbour/Falmouth area (Antigua Physical Planning Department and United Nations Physical Planning Unit: 1976). These areas contain the most outstanding natural and cultural

assets found on the island and have been recommended in the Territorial Plan for special protection and development for the benefit of tourism and national recreation. The report also included a model legislation entitled, 'The Protection of the Environment Act, 1976'. This Act is very comprehensive and can provide the legal base for protective measures, with special reference to buildings and sites of cultural interest and National and Marine Parks. Enactment of this legislation is still pending.

The Antiguan Government has been more aggressive in formulating tourism policies. According to the 1980-1984 Socio-Economic Development Plan, the main goals of tourism are: increase the number of tourists; generate employment; develop linkages between tourism and other sectors of the economy; utilize environmental and historical attractions to maximize economic earnings. Unfortunately these goals are not seen in the context of effective resource development which retains the aesthetic or amenity value of the landscape, and/or which creates recreational opportunities.

The above conditions have clearly demonstrated the need for new legislation and policy which will not only create national parks, but also provide protection and management.

THE NEED FOR NEW LEGISLATION AND POLICY

Several factors have contributed to the need for a clearly defined policy and legislative mandate to establish and manage

a system of national parks. Among the more critical factors are: the destruction of natural areas, increasing recreation demand, outdated legislation, undefined executive responsibility and the lack of management guidelines.

The rapid rate of alteration and destruction of the natural environment make it imperative for Government to exercise greater effort to preserve what remains. By doing this, a sound base for social and economic development will be created. Growth in the industrial, residential, agricultural, water resource, forestry, tourism, recreation and other sectors is creating increasing demand on the remaining natural areas. The impact of these uses is often incompatible with the normal evolutionary processes of natural areas. Technological advances have also augmented and accelerated the rate of destruction of natural areas.

The dwindling diversity of habitats and natural conditions is threatening the survival of many species of plants and animals. In addition, the consequences of unsound land management practices have resulted in flooding, erosion, siltation and other undesirable social, economic and environmental problems.

The shorter work week has resulted in a society with more discretionary time and consequently more time for leisure and recreation activities. Also increased education, personal income and automobiles have caused a surge in demand for outdoor recreation (Outdoor Recreation Review Commission: 1968).

The growing population, with more leisure time and living largely in cities, has not only brought about new challenges for the provision of outdoor recreation but a recognition of the need to preserve open spaces. Urbanization has generated an enormous demand for non-recreation as well as recreation uses of land and water and should put a premium on the more efficient use of land. Increased mobility has greatly enlarged recreation opportunities by increasing the accessibility of the outdoors.

Legislation, governing protected areas that have been established, is not adequate to assure proper protection and use of the country's outstanding natural and cultural heritage. For example, quarrying and other unregulated practices are allowed in some protected areas which often destroy recreational values, natural habitat and disrupt functioning ecosystems. As yet no legislation exists that creates national parks.

The management of public lands that could be considered as part of the national park system is carried out by a variety of agencies. In the absence of national policy and legislation, each agency follows its own policies which are often different in management objectives. The absence of national policy and legislation has led to a situation where no specific agency is legally or administratively responsible for implementing and coordinating the country's policy in the area of nature protection or providing and managing

areas offering diversity in outdoor recreation opportunities.

No system exists for classifying the different kinds of protected areas necessary for the execution of the environmental policies and objectives of Government. For example, no uniform definition of the term national park has been adopted by government. This has led to a wide difference in characteristics and criteria for selection of areas that have been suggested as national parks. Also management agencies have no guidelines to enable them to carry out necessary plans and programs.

The inadequacy of existing legislation and the absence of policy relating to natural area have contributed to their deterioration. In its 5-year Socio-Economic Development Plan, Government listed the utilization of environmental and historic attractions to maximize economic earnings as one of its major goals. It seemed ironic for Government to recognize the economic gains to be derived from these resources, yet at the same time, failed to recognize their finite nature or fragility. It will take political will, good management, and finance to prevent deterioration of natural and cultural resources. Furthermore, their full economic, recreation, scientific and educational values will only be realized when they are adequately protected. The following quote from Philip Quigg supports this idea:

...land conservation, far from being in conflict with development, is both supportive and essential. Yet for success in either conservation or development,

these benefits must be perceived by the people affected and by those who make decisions. However, important as it may be to maintain ecological diversity, conserve genetic resources, and preserve sample ecosystems in a natural state, vital public and governmental support for national parks and protected areas is unlikely to be gained unless the full range of possibilities is recognized. The real issue is the wise use of natural and cultural resources. The purposes for which land may be preserved are many, and conservation is no longer an isolated movement but a central factor in land-use planning and economic development (1978).

The foregone discussion has indicated that the planning of a system of national parks and protected areas must be an integral part of the national planning process (Quigg: 1978; United Nations, Food and Agriculture Organization: 1976). Natural areas, like any other major development activity, warrant effective and continuing protection. Therefore, the first step in accomplishing this will be for Government to formulate a National Park Policy which will be implemented through a National Park System. The aim of this System will be to ensure natural resources are adequately protected, developed and managed.

The following section will discuss the reasons for protecting natural areas through a NPS. More importantly, it will outline a model policy to protect the environment from excruciating pressures and thereby accomplish the main objective of the paper.

THE NATIONAL PARK SYSTEM

RATIONALE

Demographic and economic pressures have created public awareness of and appreciation for the recreational value of parks and reserves as open space, especially in cities (Australian Academy of Science: 1968; Outdoor Recreation Resources Review Commission: 1962). National parks are important for scientific studies of a country's native flora and fauna, and for the preservation of unique resources, in general. In addition, national parks are important culturally and economically. The above reasons have indicated the necessity for a country to safeguard, in perpetuity, representative samples of its many landscapes with their communities of native flora and fauna, and cultural assets (Australian Academy of Science: 1968). The establishment of a NPS will be essential to protect these resources in perpetuity. This will require a greater determination on the part of Government to express this in policy.

The Antiguan Government has been slow to protect these resources adequately. The time is overdue for critical evaluation to be made concerning the use of the island's numerous natural and cultural resources and of the future place that they can and should have in the nation's develop-

ment. There is now even greater urgency for this to be done because of increasing pressures of various kinds. Pressures have arisen from the ever-growing numbers of people desiring outdoor recreation. Pressures of another kind have arisen from competing demands of other forms of land-use such as agriculture, forestry, mining, water conservation, and urban and tourist developments. These justify the need to create national parks for the preservation of natural and cultural beauty and for the enjoyment of the people. However, care should be taken to prevent areas set aside as national parks from becoming isolated refuges for the preservation of the landscapes and communities which they contain, and to prevent their resumption for developmental purposes by government and private enterprise (Quigg: 1978). Therefore, the best way to create or establish national parks is by enactment rather than by decree.

PURPOSE

The purpose of this suggested National Park Policy will be to provide a definite course of action for programs concerned with the protection of the island's national heritage and the provision of outdoor recreation activities. Ideally, it will incorporate and integrate the intent of Government policy in a number of related areas such as environment, conservation, forestry, tourism and recreation. Further, it will provide the basis for legislation necessary to protect

and regulate the use of the country's outstanding natural heritage.

STATEMENT OF POLICY

It is recommended that the Antiguan government establish a national park policy which will read as follows: to protect in perpetuity representative samples of the country's natural heritage and to encourage public understanding, appreciation and enjoyment of the heritage in ways which leave it unimpaired for future generations (Outdoor Recreation Resources Review Commission: 1968; Thelen and Faizool: 1980). This policy will be implemented through the establishment of a National Park System.

The National Park System will consist of terrestrial and marine areas of exceptional value which will be preserved for the country's inhabitants.

National Park Systems Objectives

Areas will be established within the National Park System to meet one or more of the following objectives. A 1976 Publication of the Food and Agriculture Organization of the United Nations listed these objectives as desirable for inclusion in a system of national parks:

- Preserve and interpret buildings and/or areas that include sites and objects of historical and archeological significance. These areas or sites will be maintained in the context of the natural resources and outdoor recreation opportunities surrounding them.
- Maintain in a natural or near natural state areas that constitute examples of the country's various terrestrial and marine ecosystems, landscapes and geological formations, in order to guarantee the continuity of the evolutive processes, natural genetic succession patterns and their existence for future generations.
- Provide and protect natural resources for healthful and constructive outdoor recreation needed by the countries citizens.
- Protect, manage and improve the natural and cultural landscapes of the country in order to maintain the visual quality of the environment.
- Stimulate national and international tourism potential and consequent foreign exchange earnings.
- Preserve genetic materials as elements of natural communities, prevent the loss of any plant or animal species and maintain natural diversity.
- Protect and manage fish and wildlife resources for their important role in environmental regulation, sport and recreational activities and producers of proteins.
- Provide a variety of natural features for research, formal and informal education and study and the monitoring of environmental factors.

- Protect and improve watersheds and water courses to maintain high standards of quality, quantity and even flow; control and prevention of erosion, sedimentation and flooding; and protection of investments that depend on water supply, such as reservoirs and irrigation projects.

Criteria for Inclusion of Areas Within the National Park System Plan

Fundamental to the preparation of a plan for the National Park System are the criteria used to determine what constitute national natural and historical significance. Terrestrial or marine areas will be selected for inclusion in the plan if they represent one or more of the following:*

- an ecosystem or complex of ecosystems or vegetative associations illustrating important natural characteristics of the country.
- ecosystems illustrating the process of succession and development towards an advanced successional or climax state.
- habitats supporting an endangered, vulnerable, rare or important species of plants or animals.
- areas which are functionally linked to important biological, cultural or economic systems (nesting sites, migratory routes, fish nursery grounds, estuaries, critical watersheds, etc.).
- habitats supporting seasonal concentrations of animals or providing critical functions in the life history of a species.
- outstanding unusual or unique geological formations or features significantly illustrating geological processes.

*Thelen and Faizool, 1980; Minnesota Metropolitan Council, 1974.

- outstanding examples of the natural or cultural scenic heritage of the country.
- sites providing outstanding outdoor recreational opportunities, the quality of which will be evaluated on the basis of the natural resources and such factors as access to population concentrations, carrying capacity and economic and social development programmes.
- sites associated with events or the lives of persons which have made a significant contribution to the broad cultural, political, economic, military, or social history of the country.
- Archeological sites that provide further knowledge of the historic and prehistoric cultures and patterns of settlement.

Categories of Protected Areas

Any area or site which will be included in the NPS must meet one or more of the above mentioned criteria. However, the most effective management of the various units^{will} require the provision of a range of management options to activate the specific objectives. Within the two areas designated as NP are the finest examples of natural, cultural and recreational assets found on the island. Natural assets consist of natural areas such as beaches, mangroves, swamps, scenic areas. Cultural assets include buildings of architectural and/or historic interest, archaeological sites and forts. Hotels, yacht clubs, yacht anchorages, parks and sport fields are included in the recreational assets category. It is recommended that the recreation resources of Antigua be protected in six types or categories of protected areas. The purpose, criteria for selection and management objectives of the various categories are

described as follows:*

Category:	<u>Natural Landmarks</u>
Purpose:	To protect natural features of a unique character such as cave systems and distinctive landmarks and to ensure these features do not lose their unique characteristics.
Criteria for Selection:	Size is determined by the specific feature and the surrounding area necessary to assure its protection. The feature should be distinctive and in a natural or near natural state. Generally, these are small areas rather than ecosystems.
Management Objectives:	To provide public access for recreational uses related to the characteristics of the feature. Intense use is permitted if the feature will not be damaged or the recreational enjoyment of persons will not be hindered.
Example:	Devil's Bridge.
Category:	<u>Scenic Landscapes</u>
Purpose:	To protect scenic areas such as hilltops along highways, roads, trails, waterways, and coastlines. Protection will also be given to certain landscapes possessing special aesthetic qualities which are the results of the interaction of man and land.
Criteria for Selection:	The size of the area will depend upon the topography and complexity of the landscape. The boundaries of these areas will be set to include lands adjacent to each side of the road, trail or waterway so as to provide for the protection of the scenic integrity and related resources and to provide for recreation and education activities.
Management Objectives:	To ensure the aesthetic quality of the landscape is maintained for the enjoyment of the people.
Example:	Fig Tree Hill Road.

*Thelen and Faizool, 1980; Minnesota Metropolitan Council, 1974.

Category: Scientific Reserves

Purpose: To protect nature and natural processes in an undisturbed state and to provide areas for scientific research, environmental monitoring and related educational uses which do not disturb the ecosystems which are protected.

**Criteria:
for
Selection** Certain relatively fragile ecosystems or natural features of importance to science. The size is determined by the specific purpose of the reserve and will be such that the integrity of the ecosystems or species will not be disturbed.

**Management
Objectives:** To assure minimal disturbance of natural systems. Public use is strictly controlled in sensitive areas, providing for research and study under special conditions.

Examples: Falmouth Harbour Mangrove Swamp.

Category: National Parks

Purpose: To protect in perpetuity outstanding natural and scenic areas of national or international importance. The national park should provide for recreational, educational and scientific activities.

**Criteria
for
Selection:** National parks are relatively large land or water areas containing a complex of ecosystems. They should include the most outstanding natural or cultural resources of the country, be under strict government jurisdiction and conform to international standards.

**Management
Objectives:** To protect a complex of natural and cultural resources through a zoning system which can ensure the provision of strict protection in some areas, and intensive recreational use in other areas without disrupting the long range objective of ensuring the area is available to present and future generations.

Example: Falmouth Harbour/English Harbour Area.

- Category:** Historic and Cultural Sites
- Purpose:** To preserve and interpret buildings and/or areas that include sites and objects of historical, archeological and paleontologic significance. To maintain these areas in the context of the natural resources and outdoor recreation opportunities that surround them.
- Criteria for Selection:** The location and distribution is predetermined by the geographic occurrence of the historical resource to be preserved. These areas should be selected on the basis of their interpretive capabilities and integrity. Each historic area should contain enough land to preserve all the significant cultural or prehistoric features associated with the site and additional lands to complement the historic use and provide for compatible outdoor recreation activities.
- Management Objectives:** To protect, maintain, and, where necessary, restore the historic integrity of structures, sites, and objects significant to the commemoration or illustration of the historical story. Activity areas should be managed to protect natural resources and provide a physical base for compatible activities.
- Example:** Nelson's Dockyard.
-
- Category:** Recreation Parks
- Purpose:** To provide access to high quality recreation facilities based on natural resources.
- Criteria for Selection:** The area will contain natural features which provide opportunities for swimming, hiking, picnicking and related resource based recreational activities. They will be located to serve regional as well as national needs.
- Management Objectives:** To protect the natural resources in order to maximize public recreational opportunities on a sustained basis.
- Example:** Long Bay Public Park.

METHODS OF CREATING UNITS OF THE
NATIONAL PARK SYSTEM

The Governor will be vested with the power to proclaim any terrestrial or marine area of the state as part of the National Park System. The proclamation will be required to state the management category of the area. That is, it must state whether it is a national park, a scientific reserve or one of the other categories previously defined. The agency, the Development Control Authority, charged with the administration of the NPS will be responsible for providing technical information, assessment, and recommendations concerning areas proposed for inclusion within the System.

Areas established and managed as part of the NPS should be owned by the state (Thelen and Faizool: 1980; Outdoor Recreation Resources Review Commission: 1962). Private land, needed for inclusion within the System, may be obtained under the Land Acquisition Ordinance which allows for the acquisition of lands for public purposes. When lands are included within the Park System, powers of ownership should be transferred to the agency responsible for the management of the area. Lands and waters once vested in the NPS may only be removed by a special law calling for their total or partial removal. Special law is also required to transfer areas from

one category of management to another (The Protection of the Environment Act (Proposed), 1976).

In some cases, control of land use on private lands adjacent to areas within the Park System may be necessary to assure that activities on these are not detrimental to the implementation of the objectives of the National Park System. When such control is needed, action to attain the desired land use will be taken under the Land Development Act, 1974.

Although areas of outstanding national significance should be the property of the state, areas which are important but do not warrant acquisition for inclusion within the National Park System may be owned and managed by private non-private organizations. In such cases, Government may provide financial and technical assistance to these organizations if they are willing to undertake the operation and protection of the area, and the planned uses are deemed appropriate and would serve public needs.

The analysis of existing legislation in Antigua revealed it is not enough to mandate natural areas be created or protected. Equally important to their survival is a set of policies describing how these resources should be managed. The following section will outline policies essential to the management of a National Park System.

MANAGING THE NATIONAL PARK SYSTEM

The National Park System will be managed to carry out a variety of functions. The following will describe the policies relating to these primary management functions (Thelen and Faizool, 1980; Bannon, 1976).

PROTECTION OF RESOURCES

The protection of both cultural and natural resources was the impetus for the establishment of each unit within the National Park System and will, therefore, be the primary consideration of management. The various factors which could threaten the perpetuation of the resources will be analyzed. Then the most appropriate protection method, utilized in light of the kind of area, its objectives and significance and the fragility of the resource concerned, will be implemented. Where appropriate, measures will be taken to enhance degraded resources.

OUTDOOR RECREATION

The National Park System will be managed to provide for a wide range of recreational opportunities. These opportunities will be appropriate to the individual unit and consistent with the perpetuation of the natural and recreation

qualities of the area. Those recreational activities which are dependent on or associated with the natural resource will be encouraged. The National Park System is not intended to provide for all of the recreational needs of the country particularly those that could be met in areas lacking outstanding natural resources.

INFORMATION, INTERPRETATION AND EDUCATION

The areas within the National Park System will be managed to provide visitors with an understanding of the natural and cultural resources. This will be done in a manner that will enhance their enjoyment and appreciation of the area. Areas within the System will be utilized for educational programs particularly those involving the school. In addition, information relative to the programs, activities, plans and recreational opportunities of the various areas will be widely distributed to ensure the public is adequately informed of available opportunities.

FACILITIES AND SERVICES

Facilities and services necessary and appropriate for proper public access, recreation and understanding of the area will be provided. The kind, location, sizes and design of the facilities will reflect the resources, type of area, expected use and the cultural uniqueness of the country. Prior to the development of facilities or infrastructure

within an area an environmental impact assessment will be prepared to determine detrimental effects of such actions.

Certain facilities and services may be provided by the Government or by concessions with private enterprise. The kind of service and quality of maintenance of facilities will be set by the agency responsible for management of the areas.

RESEARCH

Research and studies concerned with obtaining knowledge and understanding of the System's phenomena will be encouraged. Emphasis will be given to undertaking research essential for management purposes. However, basic research which will expand man's knowledge of the natural environment will be permitted. The nature of the research, and how and where it will be carried out, will vary with the type of area and its management objectives. The type of research will also be regulated to ensure the protection of the resources and the safety and enjoyment of visitors.

INTERAGENCY COORDINATION

The agency responsible for the management of the National Park System will ensure there is proper coordination between the various agencies of Government and relevant non-profit organizations.

Of significance are those agencies concerned with forestry, fisheries, water resources, national physical planning, tourism,

cultural resources, agriculture, reclamation, quarrying, sports, recreation, marine affairs and natural history research. Where necessary, the agency may rely on expertise available in other agencies to assist in implementation of its programs.

ADMINISTRATING BODY

It is recommended that a Department of Parks, Beaches, Wildlife and Historic sites be created within the Ministry of Agriculture, Lands and Fisheries. This Department will be delegated the responsibility for administration, management, protection and development of the areas falling within the National Park System.

The Department will be authorized to prepare, for approval by the Minister, specific regulations, policies, plans, prohibitions, standards and procedural rules governing the administration of the various units of the System. To carry out these functions, the Department will be staffed with the required personnel necessary to operate the areas within the National Park System. These functions will include protection of natural and cultural resources, resource management, visitor use, education, research, planning, development and administration.

MANAGEMENT PLANS

A management plan will be prepared for each area within the System to express specific policies and serve as a manage-

ment guide. These plans will establish the guidelines for the protection, use, management and development of areas within the National Park System. Each plan will detail the purpose of the area, its values as regards to resources, the objectives of management and human needs that should be met. It will present a zoning scheme which will classify land and water according to their need for protection and capability to accommodate visitor use. The plan will provide a framework within which subsequent management actions and detailed planning will take place.

The management plan should be prepared by an interdisciplinary team with input from other government agencies which may affect or be affected by the management of the area. Public involvement in plan development will also be encouraged. Once the management plan has been adopted and approved any changes to it must be approved by the Minister responsible.

ESTABLISHMENT OF REGULATIONS AND PENALTIES

Regulations governing the protection, management, and use of areas within the National Park System will be established. Penalties for infractions will also be set. These regulations will be enforced by the agency and officers responsible for the management and protection of the area.

FINANCE

The National Park System will be financed from funds allocated to it by Government and through the use of special

development funds established for national parks. Fees may be charged for special services or for access to the areas to reflect the need to recover a certain portion of the costs of operation and maintenance, but will not be too high to discourage use by any sector of the public.

The agency responsible for the administration of the National Park System may accept gifts or donations when their use will further the work of the program and benefit the inhabitants of the country.

The above policies, if implemented in conjunction with the creation of a National Park System, will provide a solid foundation for a viable National Park System.

SUMMARY

In recent years growing population pressures, industrialization and the rapid depletion of both natural and cultural resources have led to a critical situation. Agricultural lands are being converted to other uses, land erosion is becoming severe, and habitat loss is resulting in reduced number of plant and animal species. In addition, environments of cultural, archeological and natural monuments, landscapes of historic interest, and unusual geological formations are being denuded. Thus natural areas which support outdoor recreation activities are rapidly being lost.

To alleviate these problems, a National Park System to protect and wisely manage these resources was recommended. The main purpose of this paper was to prepare a National Park Policy. This policy will provide protection in perpetuity for those areas of Antigua representing significant examples of natural and cultural heritage, as well as, will encourage public understanding, appreciation and enjoyment of the heritage in ways which will leave it unimpaired for future generations. To ensure these areas are adequately protected six categories of management were recommended. These categories ranged from areas requiring a high degree of protection of fragile ecosystems to beach areas which provide for inten-

sive outdoor recreational activities. The six categories are: Scientific Reserves, National Parks, Natural Landmarks, Scenic Landscapes, Historic and Cultural Sites and Recreation Parks.

Lack of Government policy and inadequate legislation have hampered the adequate protection of these resources. A proposal for new policy and legislation was made since these are keystones for the establishment of a system of national parks. The paper concluded with a description of policies relating to the management of the National Park System.

CONCLUSION

The aim of this paper was to recommend a National Park Policy which would serve as the basis for the establishment of a National Park System. The planning of a NPS is an elaborate process and, at the same time, a worthwhile venture. To be successful, the planning of a NPS must be an integral part of the national planning process. That is, the creation of a NPS must have the written consent of Government expressed in policy. Therefore, the study was basically a recommendation of policy for the protection of natural resources.

However, Antigua cannot afford, by either unwise action or neglect, to lose or impair resources of outstanding natural, scenic, scientific, or historic importance. These must be protected from misuse so that they can be passed on to future generations as nearly in their original state as possible. The damage being done to the environment is evident and one can only hope the protection of natural areas will become more attractive politically.

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