

**A STRATEGY FOR CONSERVATION THROUGH
THE SUSTAINABLE USE
OF WILDLIFE IN THE
NORTHERN TERRITORY OF AUSTRALIA**

**PARKS AND WILDLIFE COMMISSION OF
THE NORTHERN TERRITORY**

TABLE OF CONTENTS

FOREWORD.....	1
1. GOAL	2
2. OBJECTIVES.....	2
3. GUIDING PRINCIPLES	3
4. BACKGROUND	4
4.1 Uses of wildlife in the Northern Territory	4
4.2 An international perspective.....	5
4.3 Conservation and sustainable use.....	6
4.4 Ensuring conservation benefits.....	6
4.5 Opposition to wildlife use.....	7
5. ACTIONS UNDER THIS STRATEGY	7
5.1 Management Programs	7
Objective 1.....	7
5.2 Information	8
Objective 2.....	8
Objective 3.....	9
5.3 Aboriginal Use.....	10
Objective 4.....	10
5.4 Co-operative Management.....	11
Objective 5.....	11
5.5 Public Awareness and Accountability.....	12
Objective 6.....	12
6. ADMINISTRATION	12
7. FURTHER READING	13
8. GLOSSARY	15

FOREWORD

When the Government of the Northern Territory adopted *A Conservation Strategy for the Northern Territory* in 1994, it established a set of guiding principles for advancing both nature conservation and environmental protection. That strategy recognised that Territorians use and value wild plants, animals and ecosystems in a variety of ways. It also recognised the need to integrate conservation into other forms of productive land-use, and provided a broad framework for doing so.

One of the four goals established in *A Conservation Strategy for the Northern Territory*, which is a fundamental goal of our Government's policies, is the sustainable utilisation of natural resources. Use of natural resources has increased the prosperity of people living in the Northern Territory, and can continue to do so if resources are used sustainably, without damaging the integrity of the ecosystems involved.

Towards these ends, our Government has endorsed a series of national strategies including: the *National Conservation Strategy for Australia*; the *National Strategy for Ecologically Sustainable Development* and the *National Strategy for the Conservation of Australia's Biological Diversity*. However, none of these gives clear guidelines and directions about the sustainable use of wildlife.

This document, *A Strategy for Conservation Through the Sustainable Use of Wildlife in the Northern Territory of Australia*, addresses that omission. In keeping with the goals of the Parks and Wildlife Commission's *Wildlife Utilisation Policy*, it establishes a goal, objectives and a set of guiding principles for initiatives taken under this *Strategy*. It also identifies a series of actions which can and will be taken, in a positive and responsible way, to achieve the objectives. The *Strategy* will be reviewed and updated regularly to take account of such new information as may become available.

Minister for Parks and Wildlife

1. GOAL

The goal of this strategy is:

To enhance the conservation of Northern Territory plants and animals through the development of programs incorporating their sustainable use.

2. OBJECTIVES

To achieve the Goal, six objectives are defined that fall into five broad areas - Management Programs, Information, Aboriginal Use, Co-operative Management, and Public Awareness and Accountability. Various actions are identified for achieving these objectives (see ACTIONS UNDER THIS STRATEGY), and all are subject to the eight guiding principles below. The objectives are:

Management Programs

1. To develop, test and implement management programs incorporating sustainable use.

Information

2. To gather information needed to formulate, implement or improve management programs involving sustainable use.
3. To identify species and habitats whose conservation can be enhanced by management programs incorporating sustainable use.

Aboriginal Use

4. To ensure that Aboriginal people can maintain traditional uses of wildlife and have the option to develop commercial uses on a sustainable basis.

Co-operative Management

5. To investigate options for enhancing the role of landowners in wildlife management through co-operative management agreements.

Public Awareness and Accountability

6. To make information available to the public on conservation, sustainable use, and the operation of management programs incorporating sustainable use.

3. GUIDING PRINCIPLES

The implementation of actions taken to achieve the objectives of this *Strategy* will be subject to the following eight guiding principles:

1. All uses of wildlife should be sustainable and should not be detrimental to the conservation of species or their supporting ecosystems.
2. Sustainable use of wildlife is a legitimate means of satisfying the subsistence, spiritual, cultural, commercial and recreational needs of the Northern Territory's people.
3. Conservation of wildlife and natural habitats on private lands will be enhanced if landowners and regulatory agencies have common goals, and co-operate to achieve them.
4. Economic benefits derived from using wildlife sustainably, create commercial incentives for landowners to conserve wildlife and natural habitats and to co-operate with regulatory authorities pursuing conservation goals.
5. Landowners must be key beneficiaries from any use of wildlife that takes place on their lands.
6. Management programs that provide for wildlife use need to be: adaptive; based on the best available knowledge; and provide for regulation, monitoring, reporting, review and adjustment.
7. The unique relationship between Aboriginal people and wildlife is a special case that must be safeguarded at all times.
8. When evaluating sustainable use management options the enhancement of wildlife conservation will be the overriding consideration.

4. BACKGROUND

4.1 Uses of wildlife in the Northern Territory

For at least 40,000 years Aboriginal people in the Northern Territory have used a great variety of wild species for a diverse range of purposes. Many of these uses continue today and are linked directly to the maintenance of culture and tradition.

With European settlement of the Northern Territory during the 1800's, uses of wild species increased. Crocodiles and fish were exploited commercially for distant markets. Many native plants were used as food for exotic grazing animals, some of which, like the water buffalo, roamed wild.

Today people in the Northern Territory use wildlife regularly. Uses range from strictly subsistence to fully commercial and they include both consumptive (removing wildlife permanently from the wild) and non-consumptive (viewing, photography, ecotourism) uses. They generate a variety of direct and indirect benefits to individuals and to the Northern Territory population as a whole. They also provide opportunities for economic development, particularly in remote areas.

Examples of consumptive uses and their benefits are many and varied. Aboriginal people harvest a great many species for food, shelter, recreation, medicines and cultural activities. Aboriginal arts and craft, made from animal and plant materials, are in demand nationally and internationally, and represent an important source of income and employment for many communities. In remote communities "bush tucker" provides a critically important nutritional component of the diet. Hunting and fishing are major recreational activities within the Northern Territory and are increasingly incorporated into the tourist industry. Native plants are used for grazing cattle. Many species are displayed in zoos and other centres of research and education. Native birds and some reptiles are common pets within and outside the Northern Territory. The flowers, leaves and fronds of native plants are used for floral arrangements.

One of the most successful sustainable use programs involves crocodiles. Through a combination of captive breeding, harvesting wild eggs and "problem" animals, an industry producing skins and meat has been established and sustained. Payments to landowners provide incentives to conserve crocodiles on private lands, and there is general acceptance in the community that wild crocodiles are a valuable asset to the Northern Territory, that should be maintained in large numbers, despite their predatory nature.

Other current activities and programs also have sustainable use components. This *Strategy* will bring together existing consumptive uses of wildlife and work to ensure that current and future uses are sustainable. The advantage of using this *Strategy* as an umbrella is that it allows the problems of sustaining use to be systematically and consistently addressed.

Non-consumptive uses of wildlife are to a large extent linked to viewing and photographing plants and animals, in natural landscapes. The *Northern Territory Tourism*

Development Masterplan identifies ecotourism focusing on wildlife and the outback ethos as a major future direction. This *Strategy* does not deal with the non-consumptive uses of wildlife.

4.2 An international perspective

To many people the word "conservation" conjure thoughts of protecting animals and habitats, particularly in National Parks and reserves. Indeed, around 10% of the world's land surfaces are now located in some form of protected area. The maintenance of these areas, primarily for the non-consumptive use of wild species is, and should remain, a major international priority - a sound investment against future uncertainties.

However, recent interest in the conservation of biodiversity has heightened global awareness of the need to address realistically the conservation problems posed by diminishing wildlife and wildlife habitats on lands *outside* protected areas. The 90% of the world's land surfaces outside protected areas and often privately owned or managed, still represent the major storehouse of the world's biodiversity. They are also ecologically essential to the maintenance of many species that reside in protected areas for only part of the year.

Wildlife conservation on these lands is constrained by economic and humanitarian needs. People need food and usually endeavour to improve their quality of life. All Governments encourage development for these purposes. Agriculture, aquaculture and most forms of development typically erode or replace the natural biodiversity we try to conserve.

The concept of conservation through sustainable use accepts that wildlife and natural habitats on private lands are competing for their existence against other forms of productive land-use, or are vulnerable to being placed in that position. It allows the problem to be addressed pragmatically by making wildlife commercially valuable to landowners, and controlling the extent of use to ensure sustainability.

Conservation through sustainable use is a concept endorsed by the *World Conservation Strategy* and its successor *Caring for the Earth*: two global overviews of conservation compiled by the International Union for the Conservation of Nature and Natural Resources (IUCN), (also known as the World Conservation Union), World Wild Fund for Nature and the United Nations Environment Program. It is fundamental to *Our Common Future*, a global review of conservation and development carried out by the World Commission on Environment and Development, in response to an urgent call from the United Nations General Assembly. It is supported by Recommendations of the IUCN, and Resolutions from the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES).

Yet, there can be no disputing that the *uncontrolled* use of wildlife for commercial purposes has often resulted in serious wildlife conservation problems. Some people still consider *conservation* and *use* to be mutually exclusive activities (see Opposition to wildlife use).

4.3 Conservation and sustainable use

Humans have a long history of destroying or replacing items that they do not own, use or understand, and an equally long history of conserving items to which they attribute a positive value. In this regard, wildlife is no different from other items that people have conserved, or chosen not to conserve: buildings, paintings, knowledge, religious icons and so on.

The underlying problem with wildlife conservation on private lands, is the fact that most landowners must use their lands to produce products that can be eaten, sold or bartered - commercially valuable products. As most wildlife has no direct use or value to landowners, it is replaced at an alarming rate around the world, particularly by crops and domestic animals.

The expectation that landowners will embrace conservation, at their own cost, for no benefit to them, is at best unrealistic. The continuing loss of biodiversity on private lands around the world supports this view. Most Governments cannot compensate landowners for not producing marketable products, nor can they afford to place all lands within the National Park estate. Indeed, the economy and well-being of many nations, including Australia, depend on the community benefits gained through agricultural production.

Wildlife on private lands, like agricultural crops and domestic animals, is a renewable resource that can be used sustainably. Some species have a sufficiently high market value to ensure landowners can receive economic benefits from them. In such cases, the benefits provide tangible incentive for landowners to conserve wild species and their supporting ecosystems.

4.4 Ensuring conservation benefits

With careful planning and responsible management, sustainable use programs can benefit conservation in a variety of ways. The major benefit is the maintenance of healthy intact habitats to support the species being used. However, there are many more subtle conservation benefits. Management programs that incorporate sustainable use can:

- Reduce conflicts between conservation and development interests.
- Create long-term income-earning capacity from habitats that may otherwise have no economic value and are vulnerable to being destroyed or replaced for other forms of gain.
- Create economic incentives to rehabilitate habitats degraded through unsustainable use, feral animals or noxious weeds.
- Undermine illegal trade in wildlife.

- Provide economic and employment opportunities for people, particularly indigenous people for whom employment in wildlife industries is consistent with the maintenance of hunter-gatherer traditions and culture, in remote areas.
- Increase the knowledge of species and ecosystems.
- Quantify the responses of wildlife to use, which can help assess the conservation risks of increased mortality from any source.

4.5 Opposition to wildlife use

Not all people can or should be expected to support conservation programs involving sustainable use. Some are acutely aware of conservation problems that have been caused by unregulated use driven by high demand. Others subscribe to religious doctrines opposed to animal use. Proponents of animal rights philosophies argue that humans have no moral right to use animals. Aboriginal people cannot use species with which they share totemic relations.

These are complex and sensitive issues in a multicultural society adopting a diversity of religions, cultures, morals and traditions. In any final analysis those charged with the responsibility of conserving our biodiversity, need to act now, using the best information and technology available. To delay conservation actions until all people reach consensus on a single philosophical approach to conservation, may be to delay it indefinitely!

5. ACTIONS UNDER THIS STRATEGY

To advance each of the six objectives, the following actions will be undertaken under the broad categories of Management Programs, Information, Aboriginal Use, Co-operative Management and Public Awareness and Accountability.

5.1 Management Programs

Objective 1

To develop, test and evaluate management programs incorporating sustainable use.

Management Programs can be approved by the Northern Territory Government under the *Territory Parks and Wildlife Conservation Act 1993*. Such programs provide a legal basis for all parties to follow an agreed set of actions and procedures and are a key element of this *Strategy*. Programs involving the export of wildlife or wildlife products from Australia are subject to further approval by the Commonwealth Minister of the Environment under the *Wildlife Protection (Regulation of Exports and Imports) Act 1982*.

Trial Management Programs will be formulated and used to guide experimental

management and foster co-operation between landowners and regulatory authorities. All management will be: adaptive; based on the best available knowledge; and, provide for monitoring, regulation, reporting, review and corrective actions (Guiding Principle 6). Actions to be taken are:

- Develop and test a *Trial Management Program* for the conservation of cycads that provides for sustainable use.
- Develop and test a *Trial Management Program* for the conservation of Red-Tailed Black Cockatoos that provides for sustainable use.
- Develop and test a *Trial Management Program* for the conservation of Magpie Geese that provides for sustainable use.
- Develop and test a *Trial Management Program* for native timber species that makes provision for their sustainable use.
- Review the current Commonwealth approved *Management Program* for crocodiles, and revise as needed to ensure it:
 - meets the guiding principles of this *Strategy*;
 - fulfills obligations made in Australia's proposal to CITES for an unqualified Appendix II listing of Saltwater Crocodiles;
 - adopts the most efficient and cost-effective approaches to population monitoring and the management of problem crocodiles.
- Prepare a report assessing the degree to which feral wildlife populations can or should be managed under this *Strategy*.

5.2 Information

Objective 2.

To gather information needed to formulate, implement or improve management programs incorporating sustainable use.

The success of management programs involving sustainable use depends on the extent to which they account realistically for each of the main groups of variables involved: biological, social and economic. From a biological perspective, it is essential that a species can withstand harvests of a specified level without detriment to their wild populations or supporting ecosystems. The impact of a harvest can only ever be determined by testing: hence the importance of monitoring, review and adaptive management.

As discussed below, successful programs will depend on many people, particularly

landowners. It is critical that the programs take account of current social and economic systems. Off-reserve conservation programs are much more likely to achieve long term conservation if they provide economic and social, as well as environmental, benefits.

Biological information on status (past and present distribution and abundance), population dynamics and responses to harvesting are considered a priority for the evaluation of ongoing *Management Programs*, the development of *Trial Management Programs* and the identification of other species suitable for conservation through sustainable use. Actions to be taken are:

- Analyse the distribution of cycads in the Northern Territory and quantify factors affecting that distribution.
- Develop a monitoring program for Red-Tailed Black Cockatoos.
- Review and refine as necessary the monitoring program for Magpie Geese.
- Evaluate the impacts of harvesting on Magpie Geese.
- Review and refine as necessary the monitoring program for crocodiles.
- Establish information priorities needed to implement and assess trial harvests of Saltwater Crocodiles.
- Assess the levels of use currently being made of wild dugong and sea turtle populations.
- Review monitoring programs for wild dugong and sea turtle populations.
- Assess cost-effective methods of inventory and monitoring of native timber species subject to commercial use or suited to management through sustainable use.
- Assess harvest information needs with regard to the responsible monitoring of plant and animal populations subject to use.

Objective 3.

To identify species and habitats whose conservation can be enhanced by management programs incorporating sustainable use.

Some wild plants, animals and habitats are used commercially now in the Northern Territory. Others were used historically, or may have potential to be used, based on established uses in other parts of Australia or the world. Establishing uses or potential uses of wild species, and assessing the vulnerability of the species' habitats to being replaced by other forms of land use incompatible with the maintenance of those species, will assist in developing priorities for new programs incorporating sustainable use.

Proposals to use native plants and animals for commercial purposes arise continually. In many cases such proposals are impractical due to the limited distribution or rarity of the species involved, but for others, it can lead to management programs generating tangible conservation and economic benefits. The ability to rapidly assess biological "feasibility", in even the most preliminary terms, depends directly on the existence of data bases containing general information on the distribution and abundance of fauna and flora within the Northern Territory and the processes that may threaten them. Analyses of such information form part of a proposed bioregional approach using a variety of means to ensure sound conservation. Actions to be taken are:

- Develop a data base for collating information on existing and potential uses of flora and fauna in the Top End that is linked to the status of habitats occupied by the species.
- Prepare a report on habitats considered most vulnerable to being replaced or lost on private lands, with an assessment of key species that may be subject to use now or suitable for management programs incorporating sustainable use.
- Develop and maintain general data bases on the distribution and abundance of flora, fauna and habitats within the Northern Territory.

5.3 Aboriginal Use

Objective 4.

To ensure that Aboriginal people can maintain traditional uses of wildlife and have the option to develop commercial uses on a sustainable basis.

The relationship between Aboriginal people and wildlife is a special one, intimately connected to the maintenance of culture, tradition, religion, traditional law, health and land ethic. It is almost impossible to define the relationship in non-Aboriginal terms, and thus Aboriginal people themselves must be the key players in management initiatives. Co-operative management programs may be particularly robust, because they allow Aboriginal goals, knowledge and skills to be integrated with the latest wildlife management technology, as appropriate. Actions to be undertaken are:

- Encourage Aboriginal organisations and leaders to identify wildlife use problems or goals they feel would benefit from management programs involving sustainable use.

- Continue to advance co-operative management projects involving sustainable use, including:
 - co-operation with Aboriginal people from Cape Arnhem (northeast Arnhem Land) with regard to sea turtle conservation and use;
 - co-operation with Aboriginal people from the Maningrida area (north-central Arnhem Land) with regard to the trial harvesting of crocodiles;
 - co-operation with Aboriginal people in the documentation of wild plant and animal uses (Top End generally);
 - co-operation with Aboriginal people on the sustainable use of trepang (coastal Arnhem Land).

5.4 Co-operative Management

Objective 5.

To investigate options for enhancing the role of landowners in wildlife management through co-operative management agreements.

Co-operation between regulatory authorities and landowners is a fundamental principle of this *Strategy*, and is particularly important where the culture and traditions of major stakeholders are based on different perceptions of wildlife. In general the rural population views wildlife differently from the urban population, as a consequence of different cultural and traditional values.

The underlying theme of co-operative management is mutual respect for different wildlife values. The involvement of all stakeholders on an equal basis in the identification of management goals, planning processes and the implementation of programs is vital to the success of co-operative management.

The role of Government in co-operative management is usually the provision of technical information and advice, which in the case of Aboriginal Landowners, can be integrated with Aboriginal skills, knowledge and goals. Actions to be taken are:

- Investigate options for the development of co-operative wildlife management programs and agreements incorporating sustainable use, between the Parks and Wildlife Commission of the Northern Territory and both Aboriginal and non-Aboriginal landowners.

5.5 Public Awareness and Accountability

Objective 6.

To make information available to the public on conservation, sustainable use and the operation of management programs incorporating sustainable use.

It is important that the public is well-informed about wildlife conservation and sustainable use so that they can evaluate objectively the progress of management programs. It is also important that the programs meet the highest standards of professional implementation. Actions to be taken are:

- Ensure management programs and relevant information relating to management decisions are made available to the public.
- Promote an awareness of plant and animal uses and values through publications (posters, books, identikits), talks and presentations.
- Ensure that management trials are carried out professionally and that the results are published in appropriate technical and scientific journals.

6. ADMINISTRATION

The Parks and Wildlife Commission of the Northern Territory is responsible for the management of all wildlife in the Northern Territory. The Commission will be the lead agency implementing this *Strategy*, which will be governed by the Commission's *Wildlife Utilisation Policy*. The *Territory Parks and Wildlife Conservation Act 1993* provides the Commission with the legal framework for implementing the *Strategy*.

The export of wildlife and wildlife products from Australia is also subject to the requirements of the Commonwealth *Wildlife Protection (Regulation of Exports and Imports) Act 1982*. This Act is administered by the Australian Nature Conservation Agency and is the legislation which enables Australia to fulfil its international obligations under CITES.

Under the *Wildlife Protection (Regulation of Exports and Imports) Act 1982* products derived from Australian wildlife may be exported if a management program meets listed criteria, and is approved by the Commonwealth Minister of the Environment. With the exception of fish and plants, the export of live Australian wildlife for commercial purposes is not permitted under the Act, regardless of the merits of the management program or conservation benefits that may flow from it. With this restriction Australia adopts much stricter domestic measures than are required under CITES.

7. FURTHER READING

A variety of reading material is available on conservation, wildlife management and the sustainable use of wildlife. The list below is not exhaustive, but should provide interested readers with sound background material.

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8. GLOSSARY

(from the Macquarie Dictionary, 2nd ed. 1991)

Conservation - *n.* **1.** the preservation of areas which are significant, culturally or scientifically, in their natural state. **2.** the management of the natural environment to ensure that it is not destroyed in the process of development **3.** the preservation or conserving of natural resources, as water, coal, etc.

Conserve - *n.* **1.** to keep in a safe or sound state; preserve from loss, decay, waste, or injury; keep unimpaired.

Development - *n.* **1.** the act, process or result of developing. **2.** a developed state, form or product. **3.** evolution, growth, expansion. **4.** a fact or circumstance bringing about a new situation. **5.** a building project, usu. large, as an office block, housing estate, shopping complex, etc. **6.** the preparation of vacant land for building by the provision of roads, sewage, etc.

Environment - *n.* **1.** the aggregate of surrounding things, conditions, or influences. **2.** the particular influences on personal development as work conditions, home situation, etc. **3.** the biological conditions in which an organism lives, esp. a balanced system. **4.** a situation involving a specified factor or factors.

Sustain - *v.t.* **5.** to keep up or going, as an action or process: *to sustain a conversation.* - **sustainable**, *adj.*