

PROTECTED AREAS A CHALLENGE FOR NORTH CYPRUS

**Adrian Phillips, with Frank Bracewell
Report and recommendations following a visit to North
Cyprus, 4-11 February 2001**

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Photographs by Peter Cant-Salkowsky

2. INTRODUCTION

This report was written following a brief visit to North Cyprus in February 2001. The principal author is Professor Adrian Phillips, an international expert in protected areas, who was invited by several Turkish Cypriots concerned about the current state of the natural environment in this part of Cyprus. He was accompanied by Frank Bracewell, a British planner who has shared in the finalisation of the report. Our CVs are at Annex A.

The terms of reference we gave ourselves were

- to carry out an analysis of the situation in North Cyprus regarding the conservation of biodiversity and landscape - and with reference to the cultural heritage, and
- to make strategic recommendations to improve the prospects for conservation particularly through the establishment and management of protected areas.

Our advice is given in a strictly personal capacity. We bring international experience but do not represent any international bodies. We have confined our analysis to the technical issues of conservation and protected areas. We have taken a strictly non-political line. Nothing in our report should be read as a comment on the political situation in the island.

In the very short time available, our analysis and recommendations are unavoidably general and preliminary. But there is a wealth of knowledge in the island about many aspects of the natural environment and cultural heritage, and of course much has been written on the topic over the years. Within the constraints of time, we were able to meet a number of the leading politicians, government officials, non-governmental experts, academics and members of the public and community leaders (see acknowledgements above), all of whom generously gave of their time and provided invaluable advice. We also consulted a number of published and un-published reports (see references, page 24). This wealth of advice has helped in drafting the following analysis and recommendations.

3. EXECUTIVE SUMMARY

We conclude that:

- 1) Protected areas are essential to conserve nature and landscapes. Their establishment is an international duty. Nearly all countries have set up (or are developing) systems of protected areas.
- 2) The Mediterranean region is a global priority for conservation, and Cyprus is among the most important parts of the region.
- 3) North Cyprus has biodiversity and landscape resources of international significance, and is relatively unspoilt.
- 4) However North Cyprus already suffers from environmental damage and will face far bigger threats to its environment in future.
- 5) General measures to protect nature and landscape and cultural heritage in North Cyprus are as yet poorly developed; and specifically much needs to be done to set up and manage protected areas.
- 6) Protected areas could provide the basis of the kind of sustainable nature-based tourism that North Cyprus needs, and to which it is ideally suited.

Therefore we recommend that:

- 7) North Cyprus should develop a proper system of protected areas of several kinds.
- 8) As far as individual protected areas are concerned:
 - Priority should be given to setting up the Karpaz National Park, but the boundaries need to be extended beyond those currently proposed and action is needed to address the needs of Dipkarpaz town,
 - A Kyrenia Mountains/Besparmak National Park should be set up for landscape protection and recreation,
 - A strict nature reserve should be set up for the Klidhes Islands,
 - A number of other turtle nesting, wetland and important plant sites should be protected as Special Protection Areas or nature reserves.
- 9) Protected areas should be developed as the foundation of North Cyprus's landscape, nature and cultural heritage based tourism, for visitors and local people.
- 10) Protected areas should be used to raise public awareness of environmental issues.
- 11) Local people should be involved in the planning and management of protected areas.

12) Effective means are required to run North Cyprus's protected areas, with a lead ministry, inter-departmental co-ordination and a national agency; programmes are also needed to develop the local capacity to manage protected areas and to make international professional linkages for protected areas management staff.

13) Responsibility must lie mainly with the Government, but NGOs and the commercial sector have an important part to play in encouraging action.

North Cyprus cannot afford to delay any longer. The commercial wave of development is now happening and it will quickly destroy its unique natural and cultural heritage. Well-managed protected areas are needed to help save them - and to provide a source of long term prosperity for the people of North Cyprus.

4. PART A - ANALYSIS

4.1 Protected Areas around the world

Countries everywhere have set up protected areas to protect wildlife and landscapes, and increasingly as part of their development. Also, under international agreements to which they belong¹, countries are required to set up and manage such places

There is an internationally agreed definition of protected areas, established by IUCN- the World Conservation Union, as follows:

" an area of land and/or sea especially dedicated to the protection and maintenance of biological diversity, and of natural and associated cultural resources, and managed through legal or other effective means." (IUCN, 1994).

This definition stresses three aspects of protected areas which are very relevant to this report:

- They must be about conservation of biodiversity,
- They may include cultural resources,
- They must be properly managed.

Within the overall definition, protected areas have been set up for a wide variety of purposes. In order to clarify a complex position, IUCN distinguishes between six categories of protected areas - see box below.

Protected Area Management Categories (source IUCN 1994)

Areas managed mainly for:

- | | |
|-----|---|
| I | Strict protection (i.e. strict nature reserve/wilderness area). |
| II | Ecosystem conservation and recreation (i.e. national park). |
| III | Conservation of natural features (i.e. natural monument). |
| IV | Conservation through active management (i.e. habitat/species management area). |
| V | Landscape/seascape conservation and recreation (i.e. protected landscape/seascape). |
| VI | Sustainable use of natural ecosystems (i.e. managed resource protected area). |

This report uses the IUCN definition of protected areas throughout and adopts the categories as a framework for some of the recommendations in Part B below (Annex C explains the categories system in greater detail). This provides the means to gain international recognition for protected areas. All protected areas recognised in this way by IUCN and the World Conservation Monitoring Centre (WCMC) based in Cambridge UK, are included in an international, internet-accessible data base held by WCMC and published periodically in the United Nations List of Protected Areas (IUCN, 1998).

Protected areas have a long history. The idea of protecting places that are special to the society concerned is deeply embedded in many cultures. However the first "modern"

¹ For example, the global Convention on Biological Diversity, and the Protected Areas Protocol of the (Mediterranean) Barcelona Convention.

protected area is usually thought of as the Yellowstone National Park, set up in 1872 in Wyoming, USA. In the ensuing 130 years, protected areas have spread around the world. The latest count suggests that more than 30,000 such places meet the international definition given above. Together these cover about 10% of the land surface of the earth, or as large as India and China together. Though many protected areas are in danger and subject to damaging impacts, as a whole the 30,000 protected areas are a great gift to the new century from the previous one. Through protected areas, many threatened species and vast areas of fine landscape have been saved; and many hundreds of thousands - maybe millions - of jobs have been created or supported in the expanding, increasingly global industry of nature-based tourism.

In recent years there have been important changes in how protected areas are planned and managed, with greater emphasis on using the full range of categories described above, on working with local people (e.g. IUCN, 1997), and on realising the economic benefits associated with protected areas (IUCN, 2000). There is also a stress on the development of a system of protected areas as against a number of separate areas planned and managed in isolation (Davey, 1998). All these trends are very relevant to the case for protected areas in North Cyprus.

Another important development has been the integration of protected areas into mainstream economic development. As the evidence of the benefits that protected areas can bestow has accumulated, so more and more they are considered as part of overall national land use and development policy. Protected areas bring jobs, enrich the quality of life, safeguard natural resources - notably biodiversity and water - and protect people against floods and drought. They also reinforce the protection of the cultural heritage, and provide research and education benefits. A system of protected areas is seen in many countries - rich and poor - as a part of a national development strategy, helping to ensure that future options for development are kept open. Such an approach is being promoted globally through the Convention on Biological Diversity, and will be reinforced at major environmental events in the next few years, such as the 'Rio+10' summit in 2002 and the World Parks Congress in 2003.

Conclusion: protected areas are just common sense, and part of good governance. They are also an international obligation. Nearly every country in the world has set up (or at least plans) a system of protected areas. That is the international context against which the position in North Cyprus has to be seen.

4.2 The Mediterranean - the context for conservation in North Cyprus

North Cyprus has also to be seen in its Mediterranean context. The Mediterranean region is a global priority for conservation. Work done by several international conservation bodies (such as IUCN, WWF, Conservation International and the World Conservation Monitoring Centre) has repeatedly emphasised the importance of the region for biodiversity protection. Its protection is a special concern for international bodies, like the United Nations Environment Programme and the World Bank. The European Union has recognised the Mediterranean as a region deserving special attention.

The region's importance arises from three factors in particular:

- **Biodiversity:** the Mediterranean is famed for: its great wealth of plant life (12,500 endemic plants, i.e. those found only in the region); its important marine habitats, (e.g. posidonia oceanica/sea grass beds); several billion migratory birds moving annually between Africa, Asia and Europe; and rare animals, such as turtles (loggerhead and green), the Mediterranean Monk Seal and sea birds (e.g. Audouin's gull). The sub-region of Southern Turkey and Cyprus is regarded as a biodiversity 'hotspot' within the region as a whole (Mittermeier et al, 1999).
- **Landscapes:** the Mediterranean is a region of great natural beauty, with an immensely varied scenery of mountains, forests, wetlands, plains, islands and sea. The dramatic and romantic nature of Mediterranean landscapes has inspired artists and drawn travellers (and now large numbers of tourists) to the region for many years.
- **Cultural heritage:** nowhere on earth can match the Mediterranean as a cradle of many of humanity's civilisations and religions, each of which has left a legacy in the landscape. Though the conservation of the cultural heritage is not the main focus of this report, many protected areas set up for protection of nature also protect cultural monuments etc. Indeed this is identified in the basic definition as a function of protected areas (see section 1 above).

But this uniquely rich heritage of the Mediterranean region is under huge threat. 410 million people live in Mediterranean countries, 40% of them by the sea (in only 17.5% of land area). A further 200 million plus tourists come to the region each year. The resulting infrastructure of industry, transport, tourism development and agricultural intensification create great pressures. The consequence, of course, is pollution, habitat degradation, species loss, landscape damage, and damage to cultural monuments.

In response, international action has been taken to protect the Mediterranean environment, notably through the Barcelona Convention. Since 1974, this has provided a framework for a range of internationally agreed measures to monitor environmental conditions and trends, reduce pollution, develop environmental capacity, etc. Under a separate but related protocol, the States of the region have agreed to set up a network of protected areas to conserve important Mediterranean marine and coastal habitats. There are many other region-wide initiatives for conservation, especially in the non-governmental sector. And, in relation to the subject of this report, 'today, most countries in the (Mediterranean) Basin are planning substantial increases in their protected area systems. This applies especially to the Levant countries of Turkey, Syria and Lebanon' (Mittermier, et al, 1999).

While North Cyprus is presently excluded from normal international contacts, the importance of its environment should be gauged in the broader context of the Mediterranean region as a whole. This can be seen if one looks at the relative importance of North Cyprus in the whole region from the perspective of natural and cultural heritage (section 3); and compares conservation measures taken in this part of the island with those adopted elsewhere in the region (section 5).

4.3 Nature and Landscape in North Cyprus

Biodiversity, North Cyprus has biodiversity of great importance to the Mediterranean as a whole. The following appear to be the most important aspects:

Birds:

- **Migratory birds:** an estimated 150 million birds migrate through the area in the autumn, nearly as many in the spring. Migrating birds concentrate especially in the Karpaz peninsula. Large numbers travel on the north-east/south-west axis, along the line of the peninsula, using this extremity of the land pointing up towards southern Turkey and Syria; others journey at right angles, using the same area as a resting point on their voyage between Israel etc. and Turkey and Europe. The Karpaz has been described as the “most underwatched hotspot for bird rarities in the eastern Mediterranean” (Flint, pers. com.).
- **Nesting birds:** the Klidhes Islands off the end of the Karpaz are the most easterly nesting site in the Mediterranean for the Audouin's gull (15/20 pairs), a Species of European Conservation Concern. The north east part of the island has an internationally important population of black Francolin.
- **Important Bird Areas (IBAs):** BirdLife International has identified three sites in North Cyprus as IBAs which deserve effective protection: the Klidhes Islands, the Karpaz peninsula and the Kyrenia/Besparmak mountain range (the latter for concentrations of birds of prey, including Bonelli's Eagle) (Grimmett and Jones, 1989; Heath and Evans, 2000). Within the EU, such sites would probably be Special Protection Areas under the EC Birds Directive.

Terrestrial Habitats and flora:

- **Terrestrial habitats:** because of the great variations in altitude in a relatively small area, North Cyprus can offer a range of varied terrestrial habitats, such as pine forests, dwarf juniper scrub, garigue scrub, limestone pavements, dune vegetation, and that of the ‘badlands’ region. Many of these are significant Mediterranean habitats. If they were in the EU, they would certainly qualify for consideration under the EC Habitats Directive as Special Areas for Conservation.
- **Endemic and other plants:** in Cyprus as a whole there are more than 100 endemic plants, and 17 (perhaps 16) in North Cyprus. There are also many other rare and beautiful Mediterranean plants; orchids are particularly spectacular.

Marine life:

- **Marine turtles:** an estimated 30% of the Mediterranean population of the critically endangered green turtle nest on North Cyprus beaches; and about 10% of the loggerhead turtles. Turtle nesting behaviour has been observed over the past 10 years in an on-going programme organised by the Universities of Glasgow and Swansea (UK), and the populations are now among the best studied in Europe

(e.g. Godley et al, 1998). This makes conservation in North Cyprus of great importance to the region as a whole.

- **Mediterranean Monk Seal:** this extremely rare marine mammal is occasionally seen off the extreme north east and north west of the North Cyprus.
- **Marine Habitats:** highly productive *Posidonia oceanica*/seagrass beds exist in places offshore up to a depth of 40m.

Conclusion: North Cyprus has a rich and varied biodiversity which is a resource of local and international importance. It deserves, and requires, protection.

Scenery and landscape

For such a small area, North Cyprus exhibits a very varied landscape. The Kyrenia/Besparmak mountain range is strikingly rugged, its apparent height enhanced by its proximity to the sea. The sweep from the cool, forested mountain tops to the shore is a dramatic feature of the first order - keeping its character ought to be a priority for planning in North Cyprus.

Also notable are the unspoilt beaches of the Karpaz and elsewhere, a rarity now in many parts of the Mediterranean and therefore all the more valuable (and vulnerable). No less valuable are some of the long-settled humanised landscapes, such as the magnificent, ancient olive groves around Kyrenia/Girne, and the small fields set among rougher terrain, such as in the Kaleburnu area of the Karpaz peninsula. The contrast between the fertile flat plains around and west of Famagusta and the impoverished, chaotic terrain of the badlands is also of great interest.

All this scenic wealth is enhanced by dramatically positioned castles, ancient villages, churches and mosques which speak to the rich and varied history of Cyprus.

Conclusion: though there is no grading of landscapes comparable to that given to endangered species, it is clear that North Cyprus has an extraordinary wealth of landscape types concentrated in a small area. This is an environmental and economic resource of the first order.

4.4 Problems, threats, challenges to nature and landscape protection in North Cyprus

The first thing to note about the North Cyprus environment is that, relatively speaking, it is unspoilt. The tidal wave of tourism and associated development pressures that has overwhelmed so many other parts of the region - especially the EU Mediterranean countries - has only just begun to be felt. The hotel at Salamis, for example, is an exception; and in this, North Cyprus contrasts sharply with the rest of the island. Moreover, the impacts of industry and infrastructure are not so evident as in some other parts of the region. Also North Cyprus has been spared the wholesale revolution in agriculture brought about by the Common Agricultural Policy which has swept away many traditional farmed landscapes in EU

Mediterranean countries. The general absence of large scale pollution (apart from the power station - see below) adds to the quality of the place.

That said, the environmental situation in North Cyprus is worrying and the threats to nature and landscape protection are growing rapidly. Furthermore the prospects for the future are alarming. North Cyprus owes some of its appeal as a relatively unspoilt area to its political and economic isolation. This presents both a general problem: how to ensure that North Cyprus can develop without destroying its unique qualities; and a specific one: how to cope with the sudden changes in economic and development prospects which would occur if a political settlement of the "Cyprus question" were achieved. We think the pressures are bound to grow and create new challenges for the development of North Cyprus and its protection. Hence the urgency of our recommendations in Part B.

The scale and variety of environmental challenges facing North Cyprus were well documented in an excellent report prepared for UNDP in 1992 by Mr. Ergun Olgun. His analysis was wide ranging, touching on all aspects of environmental policy and programmes. His conclusions seem as relevant now as they did 10 years ago - but more urgent. He said: "the threat to the natural and man-made environment emanates generally from unsustainable development practices in the form of non-replenishable and irreversible exploitation and damage".

In the time we had, we could not possibly assess the broad environmental problems in any detail, but the evidence of widespread and accelerating degradation was very clear, for example:

- Unsightly development in isolated positions near the coast (e.g. near Yeni Erinkoy and Esentepe),
- A large number of quarries in conspicuous positions along the south side of the Kyrenia/Besparmak range,
- Heavily polluting effluent from the chimney stack of the power station (elsewhere in Europe this would not be permitted, since this damages both human health and forests downwind),
- Concern that hunting has an adverse impact on resident and migratory birds and should be more tightly regulated,
- Prominent advertisement hoardings alongside main roads in open country,
- Encroachment on remaining natural wetlands (e.g. by the University of the Eastern Mediterranean on Silver Plaj),
- Abandonment and piecemeal destruction of some remarkable ancient olive groves east of Girne,
- Some poor (though also some excellent) examples of the conservation and presentation of archaeological sites,
- Unsympathetic road improvements which impose an engineering style on the landscape,
- Uncontrolled waste tipping and dumping in prominent sites and into the sea.

The basic reasons for this situation are common to many developing countries: the need to develop fast, rather low levels of environmental awareness, limited capacity for environmental management, few funds, and a weak legal/regulatory framework.

The main focus of this report is on protected areas rather than environmental protection generally. However protected areas cannot be effective on their own. To succeed properly they need to be developed within a society committed to sustainable development and the principles of Agenda 21. While we make no specific recommendations of a general kind relating to the environment, we draw attention to the following:

- Much excellent work has been done on the plants and birds of North Cyprus, for example, but there are some gaps in basic environmental knowledge. For example relatively little seems to be known about the marine environment, and archaeological knowledge is patchy and there is no overall Sites and Monuments Record. Also there is a need to integrate the environmental information that presently exists in different places to help policy makers etc.
- There are generally low levels of environmental awareness among the public, with rather small (though often very effective) NGOs, some of which may be over-dependent on expatriate members. This suggests that the topic of environmental education might figure more prominently in schools (the Department of Environmental Protection has targeted children in secondary schools since 1996). Also the universities of North Cyprus might focus more on local environmental issues and help to build local capacity in environmental management (in practice, it seems to be becoming more difficult to include environmental topics in university curricula).
- There is generally rather weak environmental protection in place, for example the effectiveness of the planning system is very compromised by the need to pay compensation in many cases where a development application is refused. Additionally we understand that, in 1969, the Kyrenia District Plan designated, for development, a large coastal zone between the coast and the foothills and extending eastwards for some 60 km from Sadrazem Koy to Esentepe. We have not had the opportunity to examine this plan but are concerned that development allocations on this scale are incompatible with sustaining the environment of North Cyprus and with the current concept of eco-tourism. We are also concerned to hear that the extensive general Rural Zone permits development to take place virtually anywhere in the countryside.

In brief, much of the environmental agenda identified by Mr. Olgun in 1992 still needs to be addressed. The issues that are specific to protected areas will be covered in the second part of our report.

4.5 Measures taken for nature and landscape protection in North Cyprus

We were not able to study legislation so the following analysis may be incomplete, but we believe it to be broadly correct and sufficiently so to support our recommendations.

The overall impression is that of several different but largely uncoordinated policies, initiatives etc. for conservation. The most prominent are:

General

There are general laws in place to control land use and development. However, because of the compensation requirements, as well as inherited plans which envisage a great deal of development (see above), the planning system does not seem capable of withstanding and guiding the tide of development pressures.

Area specific

- The proposed Karpaz National Park. This was first promoted by the National Trust for North Cyprus and has been the subject of prolonged debate over 10 or more years, both as to the case for a national park and where its boundaries should be drawn. The Forestry Department - which owns much of the land in the proposed park - and a team of experts from Turkey, have drawn up detailed proposals for the park, based on an impressively thorough analysis. Without more information, we are not in a position to assess its merits, but we share the concerns of other people that the proposed boundaries are too tightly drawn and that the management proposals may not fully reflect wider conservation interests nor those of the local community.
- The Forestry Department is also developing other ideas for national parks, though it appears that some of these would not be recognised internationally because they are either very small or have purposes other than biodiversity protection.
- The Forestry Department is also responsible for the protection and management of forest land, which is largely concentrated in the Kyrenia/Besparmak range and the Karpaz peninsula.
- Through the efforts of the KKKKD/Society for the Protection of Turtles, the Alagadi Special Protection Area (SPA) was set up in 1998 to protect a key turtle nesting site. In effect, this is the one site in North Cyprus which would be recognised by IUCN as a protected area, under Category IV. This project (and proposals for several more sites for important turtle beaches) was undertaken under the 1997 Environment Act by the Department of Environmental Protection.
- Proposals have been made by a distinguished local botanist for other SPAs for flora protection.
- There are 35 small wetland sites designated under wetland legislation, 29 of which are based on artificial water features. In practice, however, they provide very little protection against development.
- The protection against construction etc. for important historic sites, which is provided under archaeological legislation, appears more effective than the general planning laws, though enforcement through the courts is slow.

Conclusion: conservation in North Cyprus in general and protected areas planning and management in particular, are still at an early stage of development, compared to the situation in many countries in the region. Specifically there is:

- no strategic framework for conservation and protected areas,
- rather little co-ordination between departments,
- limited capacity to plan and manage protected areas,
- limited participation by NGOs,
- rather weak support at the public and political level for conservation, and
- in particular, limited awareness of the potential offered by protected areas (since there are no real 'examples' in North Cyprus to see).

4.6 Protected areas and tourism in North Cyprus

Tourism is important to the North Cyprus economy. However, the numbers overall are but a fraction of the 1.5 million tourists going to the southern part of Cyprus. In 1999, North Cyprus received some 334,000 arrivals from Turkey and some 79,600 from other countries. Of these, 36,800 were from the UK and 16,300 from Germany (TRNC, 1999). The trend has been fairly level since the mid-1990s.

As we heard repeatedly, tourism in North Cyprus is adversely affected by the difficulties of travel. There are no direct flights from European destinations; all planes must first land in Turkey. This adds to the time and cost. It is therefore significantly cheaper and more convenient for tourists to visit the southern part of Cyprus.

As a result, some key tourism planners in North Cyprus have recognised that the mass tourism market is hard to get into. Instead they plan to develop a more niche-market oriented form of tourism. As we heard from Mr. Bulent Kanol, Under-Secretary for Tourism, the emphasis has been placed on the development of North Cyprus as a destination for special interest holidays, focused on the special natural and cultural qualities of this part of the island. A number of initiatives have been sponsored by the Tourism Ministry, all focused on the north east, Karpaz area:

- the renovation of five attractive, abandoned old houses in Dipkarpaz for up-market tourism. We saw this scheme and were very impressed by the quality of the work underway. Not only does it appear to be architecturally sensitive but also tourists staying there will bring income and employment to the town. There is a similar project in the southern part of Cyprus (Leonas) and comparable schemes in many other places in the Mediterranean and neighbouring regions (e.g. in parts of Crete, at the Dana Reserve in Jordan or in rural Andalucia in Spain),
- A 'pick and press your own' olives project, aimed at the Swedish market,
- Another small project for observing and collecting rare fungi,
- Projects to boost local food and drink in the village of Mehmetcik,
- Support for solar energy at the Blue Seas hotel,
- The restoration of the San Andreas monastery as a focus for pilgrims ('belief tourists').

All these ideas are excellent in themselves and have the potential to be examples for others to follow. We applaud this approach.

To complement this kind of development, the Tourism Ministry also plan to focus larger scale development into three centres, Bafra (640 bed spaces), Yeni Erinkoy/Merina (2,500) and Kaplica 1000-2000). The approach of concentrating tourist development in this way, away from the most sensitive areas, is understandable - but these are big developments and their introduction is likely to have damaging consequences for these very sensitive and fragile environments. There is no doubt that some additional tourism development can be accepted, but large-scale development will pose a real threat to the quality of the area. We would argue that at this stage in determining the future environment of North Cyprus, and therefore its future welfare, tourism development should be limited to small scale, 'in character' buildings located in the villages which are in urgent need of such economic investment.

In restoring ruined buildings for tourism use, we were very impressed by arguments that the authorities (perhaps assisted by our suggested UNOPS-aided research and marketing project – see Annex D) should also press for comparable developments in other similar villages with Turkish Cypriot communities of long standing, such as Kaleburnu, Mehmetik and Yesilkoy.

The emphasis on sustainable forms of tourism adds to the arguments for a well run, well-defended set of protected areas as a key part of the tourism development strategy for North Cyprus. Such places are indeed critical to developing and promoting the image of North Cyprus as a special interest destination. A number of countries have based part of their tourism appeal around such places: Costa Rica in Central America for example, with its network of national parks, or Slovenia, with its magnificent Triglav National Park. Obviously there must be other attractions to bring and retain visitors (weather, food, accommodation, reasonable infrastructure and above all cultural attractions) but the appeal of national parks is strong and a core element in a nature/culture based approach to tourism. Properly developed, with facilities for visitors to enjoy and appreciate the parks (walking, cycling and horse riding trails, with good information, well-trained guides and rangers etc.), protected areas can attract a discriminating, relatively wealthy and intellectually curious sector of the tourism market. Moreover the form of recreation such visitors seek - dispersed and looking for more remote places - brings income to villages and rural communities who will often get no direct benefits from traditional sun and sea tourism. Indeed such beach-focused tourism may 'bleed' the villages of people - a phenomenon noted in some inland villages in the southern part of Cyprus. In contrast, many practical examples of how a 'win/win' relationship can be built between protected areas and tourism, are described in a publication of EUROPARC, called 'Loving them to Death?' (Europarc Federation, 1993).

Finally, it should be noted that the people of North Cyprus themselves have a right to access to beautiful beaches and countryside, and to enjoy the natural and cultural heritage of the area. Their demands for a high quality local environment can be expected to increase. They too can be beneficiaries of conservation, and policies for nature-based tourism should include provision for local people as well.

Conclusion: protected areas can bring economic benefits and status to local communities, as well as offering a high-class visitor experience.

5. PART B - RECOMMENDATIONS

Our recommendations are offered on the basis of a necessarily limited investigation but take account of best practice in relation to protected areas around the world. The strategic action required is indicated in the section titles - and the specifics set out below these.

5.1 Plan and implement a system of protected areas in North Cyprus

North Cyprus should draw up and adopt a plan for a system of protected areas. Advice on how to do this has been published by IUCN (Davey, 1998). The principal elements of the suggested system plan are set out in Annex B. As will be seen, key features are:

- a firm commitment at the highest level to protected areas,
- strategic policies for their development,
- site-by-site recommendations for individual protected areas,
- policies for the management of sites, and
- the means to implement the plan.

It is suggested that a project be developed for funding by the United Nations Office for Project Services (UNOPS) to draw up such a plan. The scope for such a project is briefly set out in Annex D.

5.2 Establish, and then manage, individual protected areas

Without waiting for the North Cyprus system plan for protected areas, action should be taken now to establish the **Karpaz National Park** as an IUCN Category II protected area, (i.e. an area to be set up and managed for ecosystem protection and recreation).

The rationale for so doing is compelling. The Karpaz peninsula has repeatedly been shown to be a uniquely important area in North Cyprus, and a key site within the Mediterranean region.

It has:

- outstanding and largely unspoilt coastal landscapes of exceptional beauty,
- phenomenal numbers of migratory birds,
- several important nesting birds,
- several plant habitats of great importance,
- several internationally important turtle nesting beaches,
- surrounding seas in which the highly endangered Mediterranean Monk Seal is occasionally seen, and
- many important cultural sites, dating from the Neolithic period onwards.

It also has the potential to:

- be the major attraction in North Cyprus for many special interest holidays (e.g. bird watching),
- include a bird observatory, whose development by Kuskor might be funded by a UNOPS project (see Annex D),
- be developed to a modest extent for low impact tourism,
- support jobs (directly and indirectly) within the local community,
- be used for conservation education for people from within North Cyprus,
- enable North Cyprus to contribute scientific knowledge (e.g. on migratory birds and turtles) to the international community.

Therefore we think that there should be action now to follow up the proposals for a national park as prepared for the Forestry Department by the visiting Turkish experts. However, while we were unable to examine those proposals, we recommend that the boundaries be extended westwards along the north coast to include:

- the important archaeological sites at Philon and Carpasia,
- Ronnas (Chelonia) Bay, which is the second most important green turtle nesting site in North Cyprus,
- Land adjoining Ronnas (Chelonia) Bay which is among the most important sites for plants in North Cyprus.

The marine environment around the park requires further study, which was not, it seems, undertaken in drawing up the proposals for the Forestry Department. Research on the marine ecosystems may well lead in time to proposals to create a marine park to adjoin the terrestrial park (see IUCN, 1999). Such research is urgently needed.

One of the reasons for the failure of the national park idea to make headway in the Karpaz is - we understand - opposition from many of the people who live in Dipkarpaz town. They hope that they will be able to sell land within the proposed national park for development, and oppose losing that opportunity, arguing that there can be both development and a national park, whose advantages they understand. Our advice is clear: if development were to take place on the privately-owned agricultural land within the proposed national park, Karpaz would not be recognised internationally as a protected area. We explained this to the Deputy Mayor of Dipkarpaz. We also argued that, with a national park conserving the undeveloped Karpaz peninsula and attracting additional tourists, there would be a strong demand for tourist accommodation, which should be provided in the form of appropriate vernacular buildings in Dipkarpaz town on land owned by the 1700 or so residents. Together with the economic activity created and sustained by the national park, such development would help the whole community much more than building in open countryside which would mainly benefit the relatively few farmers (about 150 in total) who own the agricultural land concerned.

Our recommendations for Dipkarpaz town are as follows:

- It should be excluded from the national park,
- People from Dipkarpaz with farm land within the park boundaries should be assured that there will be no attempt to stop them from continuing with current farming practices, but building development would be forbidden,
- Dipkarpaz should be developed as a 'gateway' to the park, with a view to all the people of the town benefiting from the proximity of the park,
- A plan should be drawn up for Dipkarpaz by the Planning Department to achieve this,
- This plan should involve further restoration of abandoned houses for tourism (as already pioneered by the Tourism Department), and the construction of some well-designed new tourist development,
- A visitor centre for the national park should be established in the town to draw visitors,
- The opportunity to get employment in the park (e.g. as rangers or service staff) should be offered to the people of the town,
- A proportion of the park earnings (e.g. from gate fees or sales) should be made available to Dipkarpaz for community projects,
- Technical advice should be offered by the Tourism Department to local people on how to maximise the economic and employment benefits arising from tourism to the park (e.g. on growing organic foods, running restaurants, and making and selling local crafts).

Schemes for restoring abandoned houses for tourism should be developed in other villages in the Karpaz peninsula, notably at Kaleburnu, Mehmetik and Yesilköy. Being villages with a long-standing Turkish-Cypriot population, it may be easier to attract international funding for their development.

Finally, the planning and design of roads is a critical factor in the development of the Karpaz Peninsula. As far as possible, roads should encourage drivers to take the time to enjoy the scenery, not race through it. Roads designed in this way, within and also outside the national park, will enable tourists and their cars to be better accommodated in the landscape.

After 10 years of inaction, there should be no further delay. Already the pressures for development in the area are increasing (illegally erected shacks and unregulated four-wheel drive vehicle tracks, for example). The national park should be put in place before these pressures grow any further. To wait another 10 years would almost certainly lead to the loss of the Karpaz as we know it.

We recommend the establishment of a **Kyrenia/Besparmak Mountains National Park** as an IUCN Category V protected area, established and managed for landscape protection and recreation. This proposed national park would be based upon the mountain range that runs from east of the road from Güzelyurt to Girne all the way to just east of Kantara. The core area would be forestry land, but other areas might also be included. The rationale for the establishment of this park is its fine scenery, its forests (where not destroyed by the 1995 fire), its castles etc., its geology, and its interest from the point of view of plants and birds (notably birds of prey). Moreover its visibility from Nicosia/Lefkosa would be a way of

making a 'grand gesture' and a strong 'green' statement by the leaders of North Cyprus. In a number of countries, national parks are very visible from capital cities - Rio de Janeiro, Caracas, Nairobi, Islamabad and Sydney for example. Such places become very popular to visit, and are seen almost as 'icons' for the society concerned.

The protection of the fine landscape and associated wildlife would therefore be one of the two main aims of the proposed park. This would include a reassessment of the current rash of quarries on the south side of the mountains with some consolidation into two or three larger sites. Also needed are controls over eyesores, dumping etc. which detract from the landscape quality. However, because the environment is not generally as sensitive as that of the Karpaz, it has greater potential for appropriate tourism development. Moreover, because the core areas are already publicly owned, the establishment of the park should not run into the problems encountered in the Karpaz.

The second purpose of the park therefore should be to develop it for use by walkers, riders, cyclists etc., with a main trail along the range and spur walks and rides to adjoining sites of interest. A sign for walkers has been erected near the herbarium, but much more needs to be done. Leaflets, waymarked trails, trained guides etc. should be considered as means of encouraging people to use the park - and the park should be actively promoted in tourism literature. Accommodation and catering for visitors using the park in this way would be provided in small villages on either side of the mountains, and a chain of simple mountain huts could be developed for visitors walking the full length of the high level mountain trail. There is evidence in many countries of how walking etc. can generate income in the rural areas through which the route passes. The existing herbarium is a commendable start but a visitor centre, or centres, are needed to 'tell the story' of the Kyrenia/Besparmak range.

A **Klidhes Islands Nature Reserve** should be established off the tip of the Karpaz as an IUCN Category Ia protected area, to be managed for strict protection of nature. This would ensure that the small colony of Audouin's gulls is protected from fishermen who have sometimes damaged nests etc. in the past. Normally only scientists would be allowed ashore. There are of course many such strict reserves around the world on similar small rocky islands.

In addition to the already-designated Alagadi area, a number of other **Special Protection Areas** (SPAs) should be established as nature reserves (IUCN Category IV) with the aim of protecting all outstanding and representative examples of North Cyprus's key species sites and a range of habitat types. These should include:

- all key turtle nesting beaches (other than those which would be included within - and thereby protected through - the proposed Karpaz National Park: Akdeniz, Esentepe, Tatlisu),
- any significant remaining natural wetlands (notably Silver Plaj),
- some other sites for rare plants, dune habitat and limestone pavements,
- also some marine sites might be required after study.

A proposal for establishing SPAs in North Cyprus, particularly with regard to turtle nesting beaches, as well as good advice on the legislative requirements for setting them up and running them was drafted a few years ago (Keço et al, 1993) and should be consulted.

Finally there is a need to establish one or two areas to protect the finest of the **traditional olive groves** in the islands. The extreme age of some of the trees makes these a cultural and natural asset of the first order. The ‘pick and press your own olives’ project pioneered by the Tourism Ministry (see above) might be extended to other areas, e.g. those just east of Kyrenia/Girne.

5.3 Develop protected areas as the foundation of sustainable, nature-based tourism

Up-market tourists are looking for nature and culture-based experiences (niche market and special interest holidays), and North Cyprus is ideally placed to offer this. While the Tourism Department is already promoting many of these ideas, protected areas offer a way of developing much more potential for such holidays within North Cyprus. In many countries they are already used to draw visitors who want to undertake walking, cycling, photography, bird watching, flower study and related cultural interests etc. Properly developed and promoted, protected areas can bring jobs and income to local people through the provision of accommodation and catering and the sales of local agricultural produce, drinks, crafts etc.

So tourism development, and the tourism industry, should support protected areas. In particular, Government tourism strategies for promoting North Cyprus as a nature and culture tourist destination should:

- use protected areas as a means of ‘selling’ the special interest qualities of the island,
- encourage well planned and managed tourism operations within the island where these can responsibly and sustainably encourage tourists to visit protected areas,
- respect the special qualities of protected areas and ensure that tourism does not ‘kill the goose that lays the golden egg’,
- educate visitors on the special qualities of the environment of North Cyprus,
- include provision for the local population in any nature-based tourism programmes, as well as for overseas visitors.

Private entrepreneurs are very important in the development of nature based tourism. They will not only bring money to invest in facilities but also ideas and are often well attuned to market potential. We have noted above that there are many such nature-based tourism projects in Mediterranean and other countries. A project should be mounted to identify these potential sources of private sector interest this would make a good project to submit to UNOPS for funding (see Annex D).

5.4 Use protected areas to raise environmental awareness

As noted above, there is an urgent need to raise understanding of conservation within North Cyprus. Protected areas in many countries are used as a means to increase public understanding of the value of conservation since they provide people with first hand contact with nature. Also they can be outdoor classrooms for an increasingly urbanised generation of young people.

We recommend therefore that environmental education be a function of all protected areas. In the two national parks, there should be a major focus on the topic with programmes for the local community, schools, the general public and tourists. Facilities should include centres, nature trails, guided walks led by experts, etc. Similar, but more modest provision should be made in all the Category IV nature reserves.

A related role of protected areas is to provide a place for research, both developing local scientific expertise and understanding, and also attracting overseas experts (e.g. to staff the bird observatory or undertake turtle surveys). Protected areas should be managed with that potential in mind. North Cyprus's universities should be encouraged to play an active role in strengthening the knowledge base of the natural and cultural resources in protected areas.

5.5 Involve local people in the planning and management of protected areas

It is a universal truth that protected areas fail when local people oppose them. It is also the case that local people are hostile to protected areas if they are seen as imposed on them from outside without genuine consultation. It is therefore very important that local people should be:

- involved in the planning of national parks and other protected areas from the outset, and not just told what will happen,
- consulted for their views so that these may be taken into account in developing the protected areas,
- able to benefit from the protected areas to the greatest practical extent (see proposals above relating to Dipkarpaz),
- actively engaged with the protected area planners in seeking solutions to difficult problems, especially where they are likely to lose some rights to exploit resources - there is usually a successful outcome to be found, provided there is a willingness to give and take on all sides,
- involved in the on-going business of managing the protected areas once they are set up.

Such requirements do not amount to a capitulation to every local demand, but they do imply a readiness to listen to local views, engage in serious discussion and take appropriate action in response.

There are well-established techniques and great experience in involving local communities in protected areas in this way (e.g. IUCN, 1997). International advice on these may need to be sought at an early stage in setting up any new protected area in North Cyprus, before attitudes harden (as they have done in Dipkarpaz) and public opinion becomes suspicious.

5.6 Set up an effective machinery to manage protected areas

Setting up protected areas is the easy bit - *but it is only the start, and not the finish*. Once a protected area is set up it must be managed. Unfortunately the world is full of poorly managed protected areas, often called ‘paper parks’, indicating that the park exists only on paper. North Cyprus would be failing if it set up protected areas and then did not take their management seriously.

In general the necessary requirements include these:

- Government should make a public commitment to protected areas,
- The legislation is needed to set up and manage protected areas of various kinds, (it is not clear to us if new legislation is required or if existing laws can be used),
- A government department should be given the lead. Most often the responsibility for protected areas lies with the Environment Ministry, but sometimes forestry or tourism ministries lead. Whoever leads, all other interested departments of government should be involved,
- Built development is often a major threat to protected areas. So the strict control of development under the rules of the protected area is therefore essential for environmental protection,
- The financial and other resources needed to manage the protected areas should be provided. The agency running the protected areas will need a realistic budget and a strategic plan for its work. It should be able to keep all or most of the funds it earns, such as through park fees and sales. More advice on this is available from IUCN (IUCN, 2000),
- Each individual protected area should be the subject of a management plan.

Though we did not have time to look at this question in detail, experience elsewhere suggests that the best structure for running a protected areas system is through one agency, which might be called the ‘North Cyprus National Parks and Nature Reserves Agency’. We have set out in a box below (page 23) the main features of such an agency. Such an agency, and related systems of authority and advice, are highly desirable but it may not be possible to set up all aspects of it at the outset.

A special word is needed about archaeological skills. Though this report is about ‘natural’ protected areas, practically every such site in North Cyprus contains important cultural resources. Therefore, in planning protected areas, environmental and archaeological information are both needed, and measures to protect both kinds of assets are required. When archaeologists and ecologists work together at the planning stage, they save time and resources and avoid subsequent conflicts. Also promotion and information for tourists should cover both types of resource. Such collaborative work would be greatly helped if the current incomplete records were supplemented by an archaeological survey across the whole region, perhaps funded by UNOPS, which would list all sites and put them under a Sites and Monuments record - which is a long standing need. Managing a protected area is a challenging task, requiring expertise in a range of other fields, such as ecology, marine science, ornithology, landscape, visitor management, conflict resolution and business skills. Not all these need be on staff, as there are several excellent amateur experts in North Cyprus.

Training of protected areas staff is essential, as there is an urgent need to build expertise in this sector within North Cyprus. Many countries now offer training courses for protected area managers, and requests to help staff gain access to these might attract support, e.g. from UNOPS or the UK High Commission.

Finally, protected areas in North Cyprus will need to build links with countries in the region and beyond. At present, the difficulties are great, but access to international NGO networks can be made with a little ingenuity, for example:

- several individuals in North Cyprus could become members of the expert Commissions of IUCN (on protected areas and species),
- co-operation with WWF/Turkey (DHKD) could provide access to the WWF network,
- Kuskor has access to BirdLife International,
- North Cyprus universities working on local protected areas research topics could connect to other academic bodies overseas,
- Work done on turtles by Glasgow/Swansea University shows the potential for such links to overseas institutions for technical and scientific research,
- UNOPS has indicated its interest in helping to build capacity in the field of protected areas management, which could be used to build links to countries elsewhere, especially those in Europe and the rest of the Mediterranean.

There are many opportunities to link local efforts to conserve the environment to those working on similar topics through the Internet. This provides a means to overcome some of the barriers which have beset environmental efforts in North Cyprus by giving access to a world-wide and fast growing pool of knowledge on conservation topics. As the Swansea-based turtle group have shown, it is also a good way to publicise the conservation work being done in North Cyprus.

5.7 Next Steps

We recommend that this report be immediately:

- Translated into Turkish, and
- Widely circulated in North Cyprus for comment

Thereafter, and no later than the end of this year, action should be taken by appropriate Ministries to act upon the recommendations, giving priority to:

- Setting up the Karpaz National Park with the extended boundaries we propose,
- Declaring the intent to develop a system of protected areas.

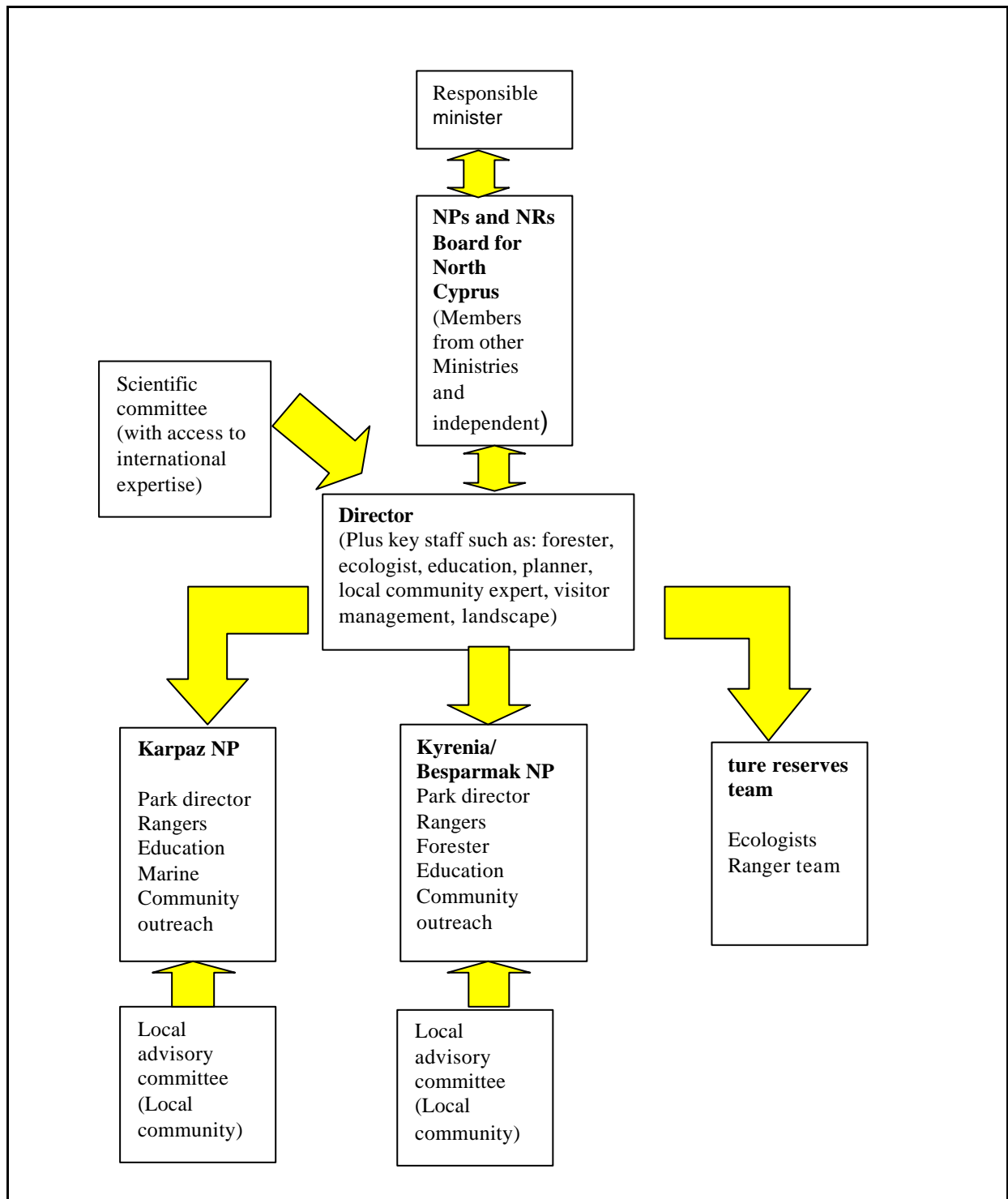
Ministries and NGOs should also begin to develop proposals as outlined above for UNOPS-funded projects (see also Annex D).

While our recommendations are addressed to the Government, support and encouragement are required from other interests. It would therefore be excellent if interested parties, such as

some tour operators and hotels already involved in niche tourism, the Association of Tour Guides, and environmentally-concerned NGOs were to come together quickly to establish an informal "ginger group". Such a group could develop a momentum in support of the recommendations in this report, encourage a positive Government response and support follow-up action.

The progressive implementation of the protected area system plan will be spread over a number of years. Over time the emphasis should switch from protected areas establishment to the management of the sites in the system.

"A North Cyprus National Parks and Nature Reserves Agency"



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Annex A

CV's of Authors

Adrian Phillips CBE is a geographer and a planner. From 1981-1992 he headed up a UK government agency, the Countryside Commission. He is now Professor of Countryside and Environmental Planning at Cardiff University and a Trustee of WWF/UK. He has been active for over 20 years in international work relating protected areas. From 1994-2000, he chaired IUCN's World Commission on Protected Areas (WCPA), the international network of protected area experts, and is now involved in this work as WCPA's Senior Advisor on the World Heritage Convention. He has addressed numerous audiences on protected area issues in all continents, participated in IUCN General Assemblies, World Conservation Congresses and World Parks Congresses since 1978, and advised governments and others on protected area issues in many countries.

Frank Bracewell OBE is a planner who has spent most of his working life in beautiful parts of Britain. He was County Planning Officer for Stirlingshire from 1972 and subsequently Director of Planning for the Central Region of Scotland. For 30 years he has been responsible for part of Loch Lomond and working to have it designated as a national park. Next year it will become Scotland's First National Park. For many years he has been widely involved in the voluntary conservation movement and since 1973 has been on the Board of the National Trust for Scotland. Since retiring from employment he is now engaged in voluntary conservation and community work and has spent a number of happy holidays in North Cyprus.

Annex B

MAIN ELEMENTS OF A PLAN FOR A SYSTEM OF PROTECTED AREAS IN NORTH CYPRUS

A plan for a system of protected areas in North Cyprus should contain the following elements:

A clear statement of objectives, rationale, categories, definitions and future directions for protected areas in North Cyprus;

An assessment of the conservation status, condition and management viability of any existing protected areas and other conservation measures;

A review of how well any existing protected areas and other conservation measures protect samples of the biodiversity and other natural and associated cultural heritage of North Cyprus;

Analysis of how protected areas in North Cyprus can contribute to global and Mediterranean priority conservation needs;

Statement of how protected areas will be integrated and co-ordinated with other aspects of national planning (e.g. with tourism development, land use, economic and social planning);

An assessment of the adequacy of the existing institutional framework for protected areas (laws, ministerial responsibilities etc.) and identification of priorities for capacity building;

Strategy for developing the protected areas system so that it better protects North Cyprus's natural and associated cultural heritage;

List of the priorities for further evolution of the protected area system - i.e. what new protected areas are needed, when and where;

Proposals for the protected area management category to which each new protected area should be assigned, and how each protected area unit will support the others;

Identification of investment needs and priorities for protected areas, and how these will be met;

Identification of training and human resource development needs for protected area management; and

Guidelines for preparation and implementation of management policies and site-level management plans.

Adapted from Davey A. (1998)

Annex C

PROTECTED AREA CATEGORIES AND MANAGEMENT OBJECTIVES

Category I

Strict Nature Reserve/Wilderness Area: protected area managed mainly for science or wilderness protection

Category Ia

Strict Nature Reserve: protected area managed mainly for science

Definition: Area of land and/or sea possessing some outstanding or representative ecosystems, geological or physiological features and/or species, available primarily for scientific research and/or environmental monitoring.

Objectives of management: to preserve habitats, ecosystems and species in as undisturbed a state as possible

to maintain genetic resources in a dynamic and evolutionary state to maintain established ecological processes

to safeguard structural landscape features or rock exposures

to secure examples of the natural environment for scientific studies, environmental monitoring and education, including baseline areas from which all avoidable access is excluded

to minimise disturbance by careful planning and execution of research and other approved activities

to limit public access

Guidance for selection: The area should be large enough to ensure the integrity of its ecosystems and to accomplish the management objectives for which it is protected.

The area should be significantly free of direct human intervention and capable of remaining so.

The conservation of the area's biodiversity should be achievable through protection and not require substantial active management or habitat manipulation (c.f. Category IV).

Category Ib

Wilderness Area: protected area managed mainly for wilderness protection

Definition: Large area of unmodified or slightly modified land, and/or sea, retaining its natural character and influence, without permanent or significant habitation, which is protected and managed so as to preserve its natural condition.

Objectives of management: to ensure that future generations have the opportunity to experience understanding and enjoyment of areas that have been largely undisturbed by human action over a long period of time

to maintain the essential natural attributes and qualities of the environment over the long term

to provide for public access at levels and of a type which will serve best the physical and spiritual well-being of visitors and maintain the wilderness qualities of the area for present and future generations

to enable indigenous human communities living at low density and in balance with the available resources to maintain their lifestyle

Guidance for selection:

The area should possess high natural quality, be governed primarily by the forces of nature, with human disturbance substantially absent, and be likely to continue to display those attributes if managed as proposed.

The area should contain significant ecological, geological, physiogeographic, or other features of scientific, educational, scenic or historic value.

The area should offer outstanding opportunities for solitude, enjoyed once the area has been reached, by simple, quiet, non-polluting and non-intrusive means of travel (i.e. non-motorised).

The area should be of sufficient size to make practical such preservation and use.

Category II

National Park: protected area managed mainly for ecosystem protection and tourism

Definition: Natural area of land and/or sea, designated to (a) protect the ecological integrity of one or more ecosystems for present and future generations, (b) exclude exploitation or occupation inimical to the purposes of designation of the area, and (c) provide a foundation for spiritual, scientific, educational, recreational and visitor opportunities, all of which must be environmentally and culturally compatible.

Objectives of management: to protect natural and scenic areas of national and international significance for spiritual, scientific, educational, recreational or tourist purposes

to perpetuate, in as natural a state as possible, representative examples of physiographic regions, biotic communities, genetic resources, and species, to provide ecological stability and diversity

to manage visitor use for inspirational, educational, cultural and recreational purposes at a level which will maintain the area in a natural or near natural state

to eliminate and thereafter prevent exploitation or occupation inimical to the purposes of designation

to maintain respect for the ecological, geomorphologic, sacred or aesthetic attributes which warranted designation

to take into account the needs of indigenous people, including subsistence resource use, in so far as these will not adversely affect the other objectives of management

Guidance for selection: The area should contain a representative sample of major natural regions, features or scenery, where plant and animal species, habitats and geomorphological sites are of special spiritual, scientific, educational, recreational and tourist significance.

The area should be large enough to contain one or more entire ecosystems not materially altered by current human occupation or exploitation.

Category III

Natural Monument: protected area managed mainly for conservation of specific natural features

Definition: Area containing one, or more, specific natural or natural/cultural feature which is of outstanding or unique value because of its inherent rarity, representative or aesthetic qualities or cultural significance.

Objectives of management: to protect or preserve in perpetuity specific outstanding natural features because of their natural significance, unique or representational quality, and/or spiritual connotations.

to an extent consistent with the foregoing objective, to provide opportunities for research, education, interpretation and public appreciation

to eliminate and thereafter prevent exploitation or occupation inimical to the purpose of designation

to deliver to any resident population such benefits as are consistent with the other objectives of management.

Guidance for selection: The area should contain one or more features of outstanding significance (appropriate natural features include spectacular waterfalls, caves, craters, fossil beds, sand dunes and marine features, along with unique or representative fauna and flora; associated cultural features might include cave dwellings, cliff-top forts, archaeological sites, or natural sites which have heritage significance to indigenous peoples).

The area should be large enough to protect the integrity of the feature and its immediately related surroundings.

Category IV

Habitat/Species Management Area: protected area managed mainly for conservation through management intervention

Definition: Area of land and/or sea subject to active intervention for management purposes so as to ensure the maintenance of habitats and/or to meet the requirements of specific species.

Objectives of management: to secure and maintain the habitat conditions necessary to protect significant species, groups of species, biotic communities or physical features of the environment where these require specific human manipulation for optimum management

to facilitate scientific research and environmental monitoring as primary activities associated with sustainable resource management

to develop limited areas for public education and appreciation of the characteristics of the habitats concerned and of the work of wildlife management

to eliminate and thereafter prevent exploitation or occupation inimical to the purpose of designation

to deliver such benefits to people living within the designated area as are consistent with the other objectives of management

Guidance for selection: The area should play an important role in the protection of nature and the survival of species (incorporating, as appropriate, breeding areas, wetlands, coral reefs, estuaries, grasslands, forests or spawning areas, including marine feeding beds).

The area should be one where the protection of the habitat is essential to the well-being of nationally or locally-important flora, or to resident or migratory fauna.

Conservation of these habitats and species should depend upon active intervention by the management authority, if necessary through habitat manipulation (c.f. Category Ia).

The size of the area should depend on the habitat requirements of the species to be protected and may range from relatively small to very extensive.

Category V

Protected Landscape/Seascape: protected area managed mainly for landscape/seascape conservation and recreation.

Definition:Area of land, with coast and sea as appropriate, where the interaction of people and nature over time has produced an area of distinctive character with significant aesthetic, ecological and/or cultural value, and often with high biological diversity. Safeguarding the integrity of this traditional interaction is vital to the protection, maintenance and evolution of such an area.

Objectives of management: the harmonious interaction of nature and culture through the protection of landscape and/or seascape and the continuation of traditional land uses, building practices and social and cultural manifestations.

to support lifestyles and economic activities which are in harmony with nature and the preservation of the social and cultural fabric of the communities concerned.

to maintain the diversity of landscape and habitat, and of associated species and ecosystems.

to eliminate where necessary, and thereafter prevent, land uses and activities which are inappropriate in scale and/or character.

to provide opportunities for public enjoyment through recreation and tourism appropriate in type and scale to the essential qualities of the areas.

to encourage scientific and educational activities which will contribute to the long term well-being of resident populations and to the development of public support for the environmental protection of such areas.

to bring benefits to, and to contribute to the welfare of, the local community through the provision of natural products (such as forest and fisheries products) and services (such as clean water or income derived from sustainable forms of tourism).

Guidance for selection:

The area should possess a landscape and/or coastal and island seascape of high scenic quality, with diverse associated habitats, flora and fauna along with manifestations of unique or traditional land-use patterns and social organisations as evidenced in human settlements and local customs, livelihoods, and beliefs. The area should provide opportunities for public enjoyment through recreation and tourism within its normal lifestyle and economic activities.

Category VI

Managed Resource Protected Area: protected area managed mainly for the sustainable use of natural ecosystems.

Definition: Area containing predominantly unmodified natural systems, managed to ensure long term protection and maintenance of biological diversity, while providing at the same time a sustainable flow of natural products and services to meet community needs. The area must also fit the overall definition of a protected area.

Objectives of management: to protect and maintain the biological diversity and other natural values of the area in the long term.

to promote sound management practices for sustainable production purposes.

to protect the natural resource base from being alienated for other land use purposes that would be detrimental to the area's biological diversity.

to contribute to regional and national development.

Guidance for selection: At least two-thirds of the area should be in, and is planned to remain in, a natural condition, although it may also contain limited areas of modified ecosystems; large commercial plantations are not to be included.

The area should be large enough to absorb sustainable resource uses without detriment to its overall long-term natural values.

A management authority must be in place.

Annex D

Outline of three possible projects for funding by UNOPS

The report refers to three possible projects which we believe are appropriate for funding by UNOPS. On the basis of discussions held with Mr. Thore Hansen, Programme Development Officer at UNOPS, there would seem to be sympathy in principle with all three ideas. It may be that project proposals 1 and 3 can best be pursued as additions to existing projects, but that is for UNOPS to consider.

Each proposal is described only briefly: more detailed work on terms of reference would be for the proposed lead body to develop in consultation with UNOPS staff.

Project proposal 1: Prepare a System plan for Protected Areas in North Cyprus.

Rationale: the reasons for this project are evident throughout our report. There is at present effectively no systematic or strategic approach to biodiversity conservation in general or to protected areas in particular, despite much good work in the government and NGO sectors. The purposes of such a system plan, and the main elements in it, are indicated in section 7 above and in Annex D respectively.

Aim: to draw up a plan for the development of protected areas in North Cyprus - see Annexes C and D.

Scope of work: If it is to be effective, the plan which is eventually developed must reflect on-ground needs and priorities, and must be "owned" by those who will have to implement it. Therefore adoption of a plan should be mainly the task of the people responsible for protected areas in North Cyprus, although other stakeholders will need to contribute to its initiation, development and implementation. It will be most effective if it evolves out of a constructive partnership between the different interests in North Cyprus, in particular the ministries, along with local government interests, NGOs, perhaps some of the universities and other stakeholders. It is also desirable to include the participation of the local people who live in and around the proposed protected areas. The ginger group that is mentioned in Section 13 could be a very effective means of consolidating support behind this initiative.

While there is no one "right" process that can be used in every case, it is highly desirable that staff in the environment, forestry, planning, archaeology and tourism departments who have knowledge or experience to contribute are able to do so. The process of plan preparation should be designed to build capacity locally. If external consultants are used, they should work alongside two or three local people.

The work schedule might include the stages outlined in the box:

Some tasks involved in preparing a plan for a system of protected areas in North Cyprus

- prepare a statement of the national level rationale for a protected area system;
- prepare a statement of the objectives and performance indicators at national level of a protected area system;
- draft a protocol for community involvement in protected area planning and management;
- appraise in broad terms the current situation with regard to biodiversity and landscape protection in North Cyprus;
- assess important biodiversity and landscape areas in North Cyprus (by and large this can be done from existing sources rather than needing any new survey work)*.
- review the available legal and other mechanisms to recognise protected areas and provide for their management, using the appropriate range of IUCN protected area management categories;
- evaluate the most appropriate means of conserving representative examples of biodiversity, and of protecting key natural heritage and associated cultural heritage resources, including whether a protected area is the most appropriate mechanism;
- identify where new protected areas are needed and in which IUCN category;
- propose the mechanisms to improve co-ordination between departments and different levels of government, and different sectors;
- establish a field seminar or workshop so that stakeholders can see for themselves protected area models which work (this may require travel abroad);
- provide a forum (e.g. newsletter, electronic notice board) for regular exchange of ideas between different departments etc., levels of government, NGOs and so forth.

** We understand that UNOPS is already considering the funding of a project to identify Ecologically Important Areas in North Cyprus, which would cover much of the work that would otherwise be involved here.*

Lead: ideally the Environment Department should prepare the submission to UNOPS and running the project, in conjunction with the Forestry Department.

Project proposal 2: Establish a Bird Observatory on the Karpaz Peninsula

Rationale: the outstanding importance of the Karpaz Peninsula for migratory birds has been noted in section 3 above. An observatory to undertake scientific work on these bird movements would be a service of national and international value.

Aim: to prepare a feasibility plan, with associated business plan, for the establishment of such an observatory; and, subject to a further stage of approval, then to implement this.

Scope of work: to examine the potential for a bird observatory in the Karpaz, taking into account: the large number of migratory birds passing through the area; the existence of a turtle research centre in the vicinity; experience of similar observatories elsewhere; the potential interest among overseas and local people in manning such a centre; the need to minimise the environmental impact of an observatory; the scientific and educational

programmes that need to be undertaken; the scope for basic type accommodation in the facility; and the funding that might be required and where that might come from. Arising out of this analysis, to draw up a proposal for approval by the authorities and with a view to securing further support from UNOPS and other interests in order to implement proposals.

Lead: Ideally, the lead should come from the local NGO, Kuskor, with advice from Peter Flint, perhaps assisted by BirdLife International and the RSPB (in the UK).

Project proposal 3: Undertake a study of the market potential for nature-based tourism in North Cyprus focused on protected areas

Rationale: it is our strong belief, based on experience around Europe and further afield, that there is a potential interest among a growing sector of the international tourist market in tourism focused on protected areas; and also that there is growing skill and experience in providing for that market among entrepreneurs in several countries in Europe. However, at present the potential of the market, and its needs, are little understood; and the potential entrepreneurs do not seem to have been approached.

Aim: to carry out a study of the market among potential visitors to North Cyprus for tourism based upon the development of a system of protected areas; and to ascertain sources of entrepreneurial investment in such ventures.

Scope of work: the work that is required has to be done mainly outside North Cyprus. It seems likely that countries like the UK, Germany, the Netherlands and Scandinavia are the most promising for the potential tourist market. These same countries, but also Italy, France, Turkey and Spain, are probably the most promising as far as the search for appropriate entrepreneurial skills and investment is concerned. A key factor will be to exercise critical assessment of what entrepreneurs can offer - looking for environmental responsibility as well as business skills. Note that the scope of this exercise is much wider than just accommodation: the whole marketing and management of a park-based experience is required.

Lead: this should lie with the Tourism Department, preferably with a consortium of tourism enterprises in North Cyprus who wish to develop their activity around the attractions which protected areas can offer.

