2Bparks – Creative sustainable management, territorial compatible marketing and environmental education To Be Parks

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CREATIVE SUSTAINABLE MANAGEMENT, TERRITORIAL COMPATIBLE MARKETING AND ENVIRONMENTAL EDUCATION TO BE PARKS

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CONTENTS

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EXECUTIVE SUMMARY - INTRODUCTION

During the latest years, it has been recognized on international scale that **protected areas are only worth to create and maintain if they fulfill their stated aims**, i.e. biodiversity conservation, preservation of landscapes and seascapes, enhancement of recreational value, development of environmental services and creation of social and cultural benefits. To fulfill these aims in parallel, protected areas need sound and effective management.

The latter to become a fact needs first **"knowledge of the problems"** and **"appropriate tools"**. Is this so difficult to achieve? Actually no, but it needs time, guidance and open minds. Managers have to realize that to operate a protected area efficiently does not mean to have a phone to pick up, to produce one flyer each year and to organize excursions for students. **PA management is a multi-dimensional task that needs the same skills with managing a very competitive firm**: knowing the customers needs, knowing the enemies, knowing the advantages and disadvantages, finding the appropriate staff, evolving each day with the international trends, building and re-building strategies, restructuring, correcting and finding funds.

If we realize **the extend of protected areas on a global scale** (the total protected areas globally cover 10% of the world's land surface), but also bear in mind that **more than 30% of protected areas globally have been established within the decade 1991 – 2000**, we will end up with the conclusion that the issue of sound management is definitely urgent, but also that "park management" is still at its early childhood.

Scope of the "Roadmap for Managers and Self-Assessment Guide" is to add a small stone of knowledge in the evolution of park management worldwide.

PART 1: PA MANAGEMENT PROBLEMS

Managers of protected areas around the world face a very crucial problem. They lose control not only to **find solutions**, but, already to **identify the problems** of their protected areas. The global online library offers a wide range of tools for problems solution, but lacking the skills or avoiding spending time to identify the gaps, does not lead to the target. The profiles of protected areas are several and the problems not the same. However, there are common categories that can be, at a second stage, customized in each different environment, context and social framework.

It is a fact that the **range of problems of protected areas is huge**. Managers are asked to apply strategies with multi-parametric extensions. When applying a policy or a change, **the protected area manager needs to balance several interests**, a fact that can mislead him/her from the actual goals, i.e. to satisfy the environmental protection needs, to consider spatial planning restrictions, to mind the promotion of social development, to protect economic development and profits, to secure participatory processes and to take care of so many other parameters that will be analyzed next.

Park management is not a one-way road. **"Just forbidding" has the exactly opposite results**, leading to a huge increase of pressure: by local communities feeling that have been dispossessed of their land (demanding land back), by extractive industries and developers (arguing that locking valuable resources undermines economic and social development) and from within many parts of government (which end up questioning themselves if all these protected areas are somewhat finally necessary).

1.1.   THE LIST OF PROBLEMS

Based on the **work of the 2BPARKS partners up to now**, as well as on **critical points of the international literature**, the main problems of PA management, as listed below in descending significance, and based on the critical management activities (matched horizontally) are:

No.	Critical Management Activities	Critical Problems
1	Law Enforcement and Surveillance	Lack of Control on Human Dangers or Inappropriate Behavior to the Environment
2	Working with Local Communities	Distance among Protected Areas and the Citizens
3	Management Planning	Lack of Concrete Management Planning with Monitoring Indicators
4	Building Governance Capacity	Lack of Skills to Achieve Sound and Effective PA Management
5	Developing Sustainable Tourism	Lack of Exploitation of the Tourism Potential of the PA
6	Education and Awareness	Low Awareness and Knowledge of Citizens and Young People on the Resources, Needs and Perspectives of the Protected Area
7	Working with Regional Authorities	Distance and Conflicts among PA Managers and Local Government
8	Applying Research	Research is Either Minimum or Absent
9	Demarcation and Zoning	Land Uses are not Clear to Apply Efficient Management
10	Promoting Sustainable Resource Use	Conflicts on Natural Resources Use between Communities and Protected Areas
11	Monitoring	Lack of Control on Impacts of Management
12	Infrastructure Development	Lack of Appropriate Infrastructure
13	Financing and Fundraising	Lack of Funds for Sound Operation, Staffing and Activation of the PA Operator
14	Restoration	Degradation of Ecosystems
15	Fire Management	Loss of Forest Stock and Wildlife
16	Species Management	Degradation of Biodiversity
17	Communication, Publicity and Marketing	Low Awareness of the Non-Local Communities
18	International Networking	Isolation of Protected Area

1.2. ANALYSIS OF PROBLEMS

6.2.1 Lack of Control on Human Dangers or Inappropriate Behavior to the Environment

Enforcement is strongly associated with PA management effectiveness. **The better the enforcement is, the more effective the protected area and the more the control on human dangers or inappropriate behaviour to the environment.** Well-trained, well-equipped and motivated teams of rangers are fundamental.

But to be effective, the local enforcement effort needs to be backed by a broader environment of good and appropriate governance that ensures that penalties are enforced (link to P.4). The existence of good protected area regulations is also essential.

While a proportion of the problem can be addressed through improved community relations (link to P.2) and sometimes by new approaches to management (link to P.3), many protected areas are likely to face continual human pressures, often from well organised criminal groups.

There is no clearer evidence of the value of the natural resources protected by national parks and nature reserves than the lengths taken to steal them. It is no particular surprise, therefore, that effective enforcement activities correlate strongly with good biodiversity condition and reduction of PA management problems.

6.2.2 Distance among Protected Areas and the Citizens

It is a general conclusion internationally that the input and participation of local communities in management decisions are still not being addressed very effectively. Problems are evident both in terms of relations with local communities and also with tourists (link to P.5). The **inclusion of citizens in management decisions** can develop a quick commonly approved working and living environment (with sustainable resource use – link to P.10), and, also can develop a common fence against crime and inappropriate behaviours (link to P.1).

6.2.3 Lack of Concrete Management Planning with Monitoring Indicators

As a management tool, planning helps protected area managers to define and then achieve the mandate of the protected area under their care. As will be seen in the Management Planning is a **process** – not an event. Management planning does not end with the production of the plan, important as this might be.
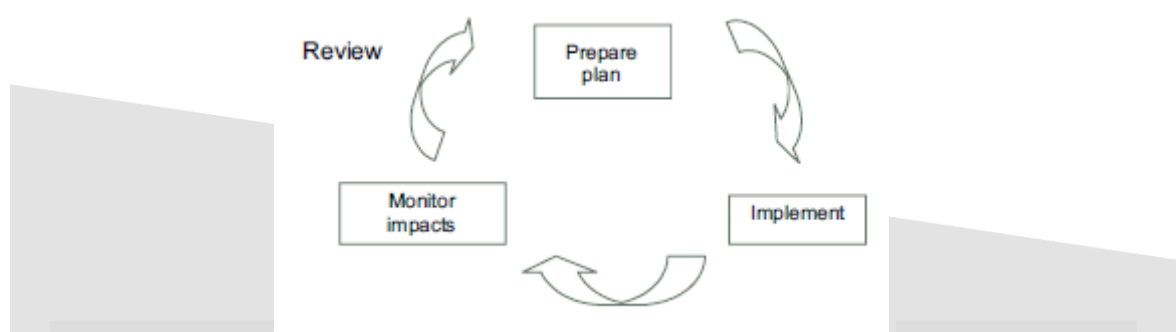
Good practice requires that **ongoing monitoring** takes place to test the effectiveness of the plan. Lessons learnt from monitoring should be used to review the appropriateness of management purposes and policies. This feedback loop may thus lead to adjustments to the original plan to keep it on the right track; or the lessons learnt can be used to develop the next version of the plan. The latter will be the case where plans are legislative documents and not easily amended during their term of currency.

Since the Management Plan is a product of a process of management planning, much more is required than a 'manual' on how to prepare a plan. **Resources, skills and organisational systems are needed to ensure success in management planning**.

The Management Plan has also to be **'participatory'**, involving the people affected by management of the protected area. Participation should take place as early in the process as possible and continue throughout. Two audiences are involved: an external one (local people, visitors and other stakeholders), and an internal one (the staff who will be charged with the plan's implementation). In both cases, the plan is much more likely to be implemented if the affected audiences are involved in its development and have a sense of 'shared ownership'.

6.2.4   Lack of Skills to Achieve Sound and Effective PA Management

The **lack of human capacity** is one of the largest factors limiting progress in PA management. The change requires connecting people at all levels in a governance system with the knowledge, skills and values that **produce sound PA management decisions**. Improving capacity for PA management often means more, however, than addressing individual skills development or improving the capacity of a specific institution. It requires **addressing the entire governance system** and **how different levels within the system interact**. This can include several interventions, such as mentoring, learning-by-doing, training, sponsored degree education, peer-to-peer exchanges and participation in interdisciplinary efforts to refine governance practices.

6.2.5   Lack of Exploitation of the Tourism Potential of the PA

The number of people taking part in outdoor activities is growing, especially in activities like hiking, cycling and water-based. There has also been a huge growth in 'soft' adventure and ecotourism or nature-tourism types of trips. 'Soft' activities are those where a more casual, less dedicated approach is taken to the activity or natural attraction, and a desire to experience it with some basic degree of comfort; whereas 'hard' adventure or ecotourism involves specialist interest or dedicated activity, and a willingness to experience the outdoors or wilderness with few comforts. The tourism industry has responded to this range of interests by developing many types of niche market packages.

Protected areas are very attractive settings for the growing demand for outdoor, appreciative activities in natural environments. Challenges for protected area managers are to ensure that **while visitors have opportunities to participate in desired activities, they are aware of and maintain the values**. Opportunities are to tap into such market demand, through target market programming, perhaps in collaboration with the private sector, both to increase attractiveness as a destination, and manage the visitors appropriately.

6.2.6   Low Awareness and Knowledge of Citizens and Young People on the Resources, Needs and Perspectives of the Protected Area

Education and awareness activities play a vital role in building support for protected areas in general and for particular management actions. There is a **very good correlation between the success of a protected area in education and awareness-raising and its overall effectiveness**. However it is unclear whether education increases effectiveness or is a natural by-product of successful management.

Considering that education programmes are often poorly developed compared with other features of management, positive interventions can make a difference.

Education activities can be a direct responsibility of protected area management or, frequently, be undertaken by local or international non-governmental organisations or by local schools and colleges. Throughout the world, protected areas are increasingly linking with local schools, including field visits.

6.2.7   Distance and Conflicts among PA Managers and Local Government

Though not yet commonly adopted, some protected area authorities share the responsibility for decisions made. Some go even further and recognise that **communities can become responsible for setting their own agendas and implementing the decisions that they take**. This process is sometimes called 'community based planning', 'collaborative planning' or 'co-management'. Co-management fulfils many of the demands from stakeholders for more

responsibility for decision-making, but it also places the onus on them to share responsibility for delivering the agreed plan.

This procedure could work within **10 steps** as follows:

1. Undertake planning activities in the context of a **district level sustainable development strategy**.

2. Begin the process by forming a steering committee for the whole programme, which focuses on appropriate sustainable development activities in the park and surrounding area. Allow this body to **self-define its planning priorities** – to define the tasks and hire the technical team.

3. Ensure that **legitimate interests are represented on the steering committee**, e.g. village representatives, union councils, religious authorities and adventure travel companies.

4. Create a series of **area-specific subgroups** to consider in detail the needs of each area. While there may be many issues in common, there are cultural differences, environmental variations, political differences and potentially different solutions available for each subgroup.

5. Establish **subgroups to work on different themes inside and outside the park**, e.g. tools for tourism management and infrastructure improvement.

6. Select the technical support team chosen, as far as possible, from local professionals. Provide internships and training opportunities wherever possible. **Capacity development within the community should be a principal objective** throughout the planning and development exercise.

7. Work through and **strengthen existing councils and village structures/organisations**. This may require training for technical planning subjects – but it will pay long-term dividends.

8. **Base the planning process in the area**. Regional/national staff should be expected to travel into the area.

9. Provide **adequate resources to facilitate participation** and involvement by local representatives. The value of the participation should be publicly acknowledged.

10. **Involve the private sector** to the fullest extent possible, including local, national and international eco-tourism and adventure travel companies.

6.2.8   Research is Either Minimum or Absent

Planning and management should be informed by **reliable data**. There are two views about the relationship between data collection and setting management objectives:

1. That, through the collection and analysis of data, management objectives are refined and agreed upon after data is collected and analysed.

2. Management objectives are set for the area and these determine what data is collected.

In practice **a protected area is established on the basis of an initial data set which is used to determine management objectives** (e.g. protect rare habitat and species). Planning processes inevitably conclude more data are required before some management options can be evaluated and decided. In many cases there is a history of earlier planning or research efforts that help to identify the key topics where further data collection is required.

Therefore data collection can almost always be informed to a considerable extent by the appropriate management objectives for the area. The stages involved are to:

1. gather available **background information** (historical data can be invaluable);

2. carry out a **field inventory** to check the information (and to acquire additional data if required); and

3. **document it** in the form of a description of the protected area (sometimes called a 'State of the Protected Area' report).

The information collected in this way should include information about the area as it is as well as about trends affecting it. The data should relate to both the physical aspects of the area, and to its social/cultural and economic significance.

Checking documentary information in the field is frequently not done because of the expenses. It can be very useful, however, to confirm the accuracy of information; for historical sites, for example, it is an opportunity to examine the current physical state and to build up an understanding of how the site evolved and was used in the past. Moreover, evidence of meaningful data collection can help to build public confidence in the planning process.

It may be necessary to define a **long-term research programme for a site**. This could apply to a range of factors where change over time is either evident or expected. The programme would form part of the Management Plan prescriptions.

It should not be expected that all the information collected for a protected area would necessarily be included in the Management Plan. A short summary should be included with the full text included as a companion document or, where this already exists, placed on the organisation's web site.

Step 2 is completed before moving through to the evaluation of this information, although in practice there is often some overlap, and iteration between these steps. As always, time and resources will determine how much effort is put into this stage.

The following is a **checklist of general types of information** that may need to be collected:

1. ecological resources and their condition,

2. cultural resources and their condition,

3. aesthetic aspect,

4. physical facilities (e.g. roads, buildings, easements, power and water supply),

5. key features of the socio-economic environment,

6. the capability of facilities in the protected area and its region to support existing and projected uses,

7. visitor characteristics and influence on the protected area,

8. predictions of the future condition of each of the above factors, and

9. land uses and planning provisions of surrounding lands and any in-holdings or leases.

6.2.9   Land Uses are not Clear to Apply Efficient Management

Management Plans for protected areas shall identify different **'management zones'** – that is geographical areas within which similar management emphases are applied and similar levels of use permitted and different uses segregated. **Zoning** is a widely used and long established method of organising resource information, and guiding management tasks, in a structured way.

"Zoning defines what can and cannot occur in different areas of the park in terms of natural resources management; cultural resources management; human use and benefit; visitor use and experience; access; facilities and park development; maintenance and operations. Through management zoning, the limits of acceptable use and development in the park are established" (Young and Young 1993).

Zones identify where **various strategies for management and use** will best accomplish management objectives to achieve the desired future of the protected area. Within each zone, the management prescriptions should be reasonably uniform but may differ in type or intensity from those in the other zones in order to accommodate multiple objectives.

Typically zoning will be used to:

1. Provide **protection** for critical or representative habitats, ecosystems and ecological processes;

2. Separate **conflicting human activities**;

3. Protect the natural and/or cultural qualities while **allowing a spectrum of reasonable human uses**; and

4. Enable damaged areas to be set aside **to recover or be restored**.

Zoning may also be invoked on a temporal basis where an area is managed according to the time of day, days of the week or months of the year, to allow for cultural events, acknowledge seasonal changes or by reference to some other trigger or causal event (e.g. breeding seasons).

By providing control over areas designed to meet different conservation and use objectives, zoning is a widely used and useful tool but **zonation of a protected area is not always required**. Zoning should simplify not complicate management.

6.2.10 Conflicts on Natural Resources Use between Communities and Protected Areas

It is important to improve the alternative livelihood of communities within or adjacent to the protected area. The provision of alternative livelihood will bring **increased income** for communities **and reduced pressure on natural ecosystems** and **reduced unsustainable use of resources**, and will consequently lead to the **protection of globally threatened species**.

6.2.11 Lack of Control on Impacts of Management

Monitoring provides the feedback loop. Its purpose is to identify whether the management plan is being implemented effectively and the objectives are being met; to learn from observation of the impacts of management; and to adapt the management actions accordingly. Where implementation runs into problems, monitoring can be used **to re-deploy resources and effort to improve implementation**.

Two aspects should be addressed:

1. **Appropriateness of management systems and processes**: measured by assessing the management inputs required and the processes used;

2. Delivery of **protected area objectives**: measured by identifying the outputs and outcomes of management.

Six main elements of the management process which can be evaluated to identify the level and location of **success or failure within the management cycle** are:

1. Where are we now? (context)

2. Where do we want to be? (planning)

3. What do we need? (input)

4. How do we go about it? (process)

5. What were the results? (outputs – i.e. the activities carried out or services provided)

6. What did we achieve? (outcomes – i.e. the actual achievements of management)

In terms of assessing management effectiveness, an **evaluation of outcomes against objectives** is the most relevant test. However, this may require significant monitoring effort in situations where little attention has been given to assessing outcomes in the past. Many objectives and management targets are not written specifically enough to suggest obvious outcomes which would indicate success. Furthermore, even where they are described clearly, our understanding of the underlying ecological processes is often an inadequate basis for claiming success. It is usually easier to conclude a measure has failed than to conclude it has succeeded.

In the past, many organisations have limited their monitoring to **"implementation monitoring"**, i.e. checking whether work has been carried out as specified in the plan. This is sometimes referred to as "efficiency evaluation" and is a fairly straightforward task.

The problem is that this information does not tell the manager if the objectives are being achieved. It can tell if the manager has been busy – not whether he or she has been effective. So it provides little understanding of the outputs of management and still less about its outcomes: it is not an informative approach. What is needed is **critical scrutiny of whether objectives are being achieved or whether they are the right ones for the site**.

6.2.12 Lack of Appropriate Infrastructure

Infrastructure in protected areas is closely related with sustainable tourism. Protected area managers have a crucial role in supporting **development of the infrastructure** in their area.

The following are needed:

- o Visitor **services and infrastructure**:
    - Sign-posting;
    - Information centres;
    - Car-parks, campsites;
    - Accommodation, shops, cafes;
    - Waste management;
    - Security;
    - Public transport.

- o **Nature tourism** opportunities:
    - Education, interpretation centres;
    - Trails, bird-watching installations;

- o **Cultural tourism** opportunities:
    - Heritage trails, interpretation equipment;
    - Historic sites, museums;
    - Infrastructure for events, festivals.

- o **Co-operation with local people/ communities** to develop rural tourism businesses:
    - Activities, guide services;
    - Accommodation, local produce and crafts;
    - Training infrastructure.

6.2.13 Lack of Funds for Sound Operation, Staffing and Activation of the PA Operator

The experience suggests some general guidelines that should be followed in developing **revenue generation strategies** for protected areas or protected area systems:

1. Fundraising strategies should begin with the development of a budget for managing the area or system at the desired level. The **aim of the strategy should be to completely cover the management costs based on the budget**. It is surprising how often entry fees and other revenue generating mechanisms have been considered or introduced without any regard to actual financial needs.

2. The preparation of a fundraising strategy should be a **consultative process that involves all interested parties**, particularly representatives of major user groups. Consensus among all involved should be reached before any elements of the strategy are implemented. The lack of consultation has created numerous difficulties in implementing fundraising strategies.

3. A **diversified funding base** provides greater security and flexibility than reliance on a single source of funding. In particular, strategies that rely heavily on entry fees and other revenues from visitors can be severely threatened by often unpredictable downturns in the tourism industry. The most effective revenue generation strategies aim to bring in a surplus in years of high visitation that can cover shortfalls in times of difficulty.

4. Strategies should aim to **reduce, but not eliminate, the level of direct government support**. It is unrealistic to believe that governments will be able to bear the full costs of protected area management any time in the foreseeable future. It is only through reducing dependence on this inadequate source of support that protected areas can succeed in meeting the costs of proper management. However, complete financial independence from government can result in reduced policy and technical support as well, and should therefore be avoided. **Even a small annual financial or in-kind contribution secures government's stake in the protected area and its management**.

5. Partnerships and co-management agreements can increase management efficiency and reduce costs. Since the aim of revenue generation is finance management, **other approaches that reduce management costs can be as valuable as money**. Beneficiaries of protected area management are often willing to contribute time and services or able to carry out management functions at a lower cost than the designated management agency. Arrangements with commercial users to collect fees and maintain records of use are good examples of how partnerships can reduce the financial cost of management without reducing its quality.

6. The **principle of equity** should apply in allocating the costs and distributing the benefits from revenue generation strategies. It is generally agreed that **those who benefit most directly from protected areas and the services they provide should bear**

most of the cost of their management. If a protected area is well managed, entry fees and fees for the use of infrastructure and services are generally perceived by users as reasonable and fair. By the same token, benefit sharing can provide a way to compensate those who have been negatively affected by the protected area's management activities. These often include traditional users of the area's resources, such as fishers or dislocated small-scale entrepreneurs. Benefits can come in the form of new business or employment opportunities or improvements to community services or infrastructure.

6.2.14   Degradation of Ecosystems

Ecosystem restoration is the "process of assisting the recovery of an ecosystem that has been degraded, damaged or destroyed" (SER Primer, 2004). Many of the world's ecosystems have undergone significant degradation with negative impacts on biological diversity and peoples' livelihoods. There is a growing realization that we will not be able to conserve the earth's biological diversity through the protection of critical areas alone. When applicable, ecosystem restoration should be an important component of conservation and sustainable development programmes so that the livelihoods of people depending on these degraded ecosystems can be sustained.

Ecosystem restoration is thus a significant contribution to the application of the ecosystem approach, e.g. in informing the negotiation of land use options and enhancement of healthy ecological networks.

6.2.15   Loss of Forest Stock and Wildlife

Fire management actions can be applied to all types of forests and woodlands and to areas designated for production, conservation, cultural activities or as protected areas and reserves. The same general approach to fire management planning should be followed in all areas. However, the specific management objectives for each environment must be taken into account and, as a result, the operational standards and actions may vary.

The key consideration in these areas is **formulation of strategic actions for the management and protection of each area**. Endangered or threatened species, indigenous values and sacred sites, water reserves for communities, and scenic and recreational areas all have social, economic or non-economic values that must be considered in the development of fire management plans.

Protected areas may require special consideration in the planning for fire suppression actions, and fire personnel may be required to use specialized tactics and suppression techniques in these areas. In many sensitive areas, the use of heavy, mechanized equipment can be damaging to the environment and can disturb the special values of the area more than the effects of a fire. In all cases, a balance should be reached in the right amount and kind of fire, the right types of prevention and response and the impacts on the area and on adjacent areas.

Fire awareness and educational activities can be very effective in involving the community and other groups in a fire management programme and in engaging the community as a responsible partner. A well-informed public will be more likely to use fire carefully and to adhere to policy and legal boundaries. It can assist in the prevention, detection and reporting of fires, work with fire personnel to control unwanted fires, and provide a source of local and traditional knowledge.

Fire prevention may be the most cost-effective and efficient mitigation programme an agency or community can implement. Preventing unwanted, damaging fires is always less costly than suppressing them. Prevention programmes that are accepted and promoted within the community not only reduce costs and resource damage, but also promote understanding of the role and impact of fire in the ecosystem.

In many parts of the world, **planned fire** is included as a component of fire prevention. It can have a very significant and beneficial impact on reducing fire severity and damage and it assists fire-fighters in suppressing fires. It also has many benefits for ecosystem sustainability, maintenance and restoration.

Fire danger rating systems have long been used to determine the level of fire danger and provide early warning of the potential for serious fires. Rating systems use basic daily weather data to calculate wildfire potential. By using forecasts, early warning can be provided many days in advance of a significant fire event.

Locally generated **early warning information** may be more useful in that it reflects local weather characteristics and vegetation conditions. Active involvement of local communities in collecting fire-weather information and disseminating warnings will create ownership and increase local responsibility and the efficiency of the early warning system.

Fire preparedness covers **detection and response to fires**. Preparedness includes training, equipping and staffing prior to the start of a fire. An effective fire preparedness programme should be based on fire and resource management planning and should take into account year-to-year variations in funding, weather and human activities. Properly trained and equipped personnel at the proper locations will increase the effectiveness of any programme.

Training is a key part of preparedness and readiness. The safety of fire-fighters is dependent on their understanding of fire characteristics and the local weather. Training in the effective use of equipment and fire suppression techniques is also important, while for supervisors and managers, training can help them better understand and effectively deploy a complex range of resources.

Providing **proper equipment** to fire-fighters is basic. Personal protective equipment such as helmets, gloves, fire-resistant clothing and safety boots should be considered an essential requirement of the programme. The tools used must enter within the financial resources of the programme, but they should be appropriate to the customs of the fire-fighters and effective in the local ecosystem.

Additional **activities need to be undertaken prior to the beginning of the fire season**. These could be characterized as preparedness actions, but are differentiated from the previous

section, which generally deals with actions to prepare resources. These pre-fire-season activities involve cooperative action with collaborators, contractors and other groups or organizations in support of the fire management programme. In many areas in which there is no clearly defined fire season, these activities will take place prior to predicted periods of elevated fire danger.

In many situations, entering into a **formal agreement** will provide a clear understanding of the roles and responsibilities of all partners. The agreement can take the form of an enforceable contract or it may be a memorandum of understanding that states the general areas in which cooperation and coordination will take place.

The holding of **annual meetings** can be specified in the agreement. This can be a very effective method of communication, ensuring that all parties receive consistent information and come to agreement. The annual meeting can be expanded to include exercises and simulations, test communications equipment and practise fire suppression techniques. Using a planned, cooperative approach will guarantee that consistent, complete information is provided to all personnel.

Fire detection is an important part of an effective fire management programme. It can be accomplished in a variety of ways: satellite imagery, fire observation towers, aerial surveillance, lightning detection systems, or monitoring and reporting of fires by the local population. When local residents understand the risk and damage from unwanted, severe fires and participate in a community-based fire management programme, they are a very effective part of the overall system.

Communication with the public is needed to inform them of the fire status and of threats to the community. Local media – radio, television and the press – as well as other traditional methods and emerging technologies of information dissemination need to be part of the total communications plan.

There are immediate rehabilitation actions that can be undertaken in conjunction with fire suppression actions. A fire line constructed along a steep slope may be very prone to erosion and further damage if immediate steps to interrupt the flow of water are delayed. Fire suppression actions may damage the environment and may need to be avoided. Many actions that are effective in stopping a fire can severely impact other resources, such as soils, wetlands, habitats and vegetation. The impacts are often long term or can promote the spread of disease, weeds and other exotic pests.

Replanting and reseeding of sensitive areas can stop an invasion by exotic and invasive species that would take advantage of a large expanse of exposed soil. In this case, the presence of the exotic species in the ecosystem may require actions that are unnecessary in areas without this species.

Monitoring and assessment are important at several levels. Monitoring of the effects of both fires and suppression activities is needed in order to achieve a balance between stopping the fire and protecting the resource. Monitoring the effectiveness of the fire organization will help managers determine if the programme is working. Cost/benefit assessments are useful in assessing the effectiveness of various types of resources.

6.2.16   Degradation of Biodiversity

The global community recognises the importance of conserving nature. The **natural systems of the planet make human life possible**, by providing energy, food, water, and other material resources; but **nature also makes life worth living** by providing beauty, inspiration, and context for human life. The degradation of natural ecosystems that has accompanied the stunning success of the human species, which today is more populous and – on average – richer than ever before, has **impoverished modern humanity**.

The **sheer diversity of species** on Earth is extraordinary. More than 1.7 million species have been identified and estimates of the total number of species on the planet, including those not yet known to science, have ranged from **8 million to 100 million** (Tudge, 2000). The estimates of how much of this extraordinary diversity of life is being lost each year are disheartening. More than 16,000 species of animals and plants are known to be threatened with extinction – one in four mammals, one in eight birds, one in three amphibians, and a considerable proportion of assessed plant groups, according to the 2007 IUCN Red List Assessment (http://www.iucnredlist.org). These figures appear even more startling if one considers that the number of assessed species is only a fraction of the total number of species estimated to exist on Earth. Similarly, many ecosystems – particularly wetlands, forests, grasslands, and coral reefs – are being degraded and destroyed, even though natural ecosystems provide humans with a wide range of valuable services.

In an effort to save species and overall biodiversity, a number of approaches to conservation have been suggested. Some approaches focus on species' habitats, ecosystems, or other area-based classifications such as hotspots, eco-regions, Important Bird Areas, Important Plant Areas, and so on. Such approaches seek to save nature in a place or region by ensuring that the ecosystem processes and structures which support nature are maintained. Although these approaches are critical to conservation of nature, they are insufficient on their own. **Just as species need well functioning ecosystems in which to live, ecosystems depend on their species**. An exclusively area-based approach can result in species being lost from the areas of concern. Conservationists have long appreciated that many species, and species groups, need particular attention, requiring species-focused conservation strategies.

In this framework, guidance has to be offered to protected area managers on how to prepare with the help of specialists **Species Conservation Strategies (SCSs)**. This guidance includes advice on how to conduct a thorough Status Review; how to develop, through broad consultation with stakeholders, a **Vision and Goals** for the conservation of a species or species group; how to set Objectives to help achieve the Vision and Goals; and how to address those Objectives through geographically and thematically specific Actions.

The value of even the most comprehensive and well-conceived SCS can only be judged by whether it achieves its Goals. The crucial challenge, therefore, is to translate the efforts made in compiling the SCS into effective action and, in particular, to ensure that the recommended Actions are implemented and their results monitored throughout the SCS's life time. It is clear that **SCSs and Action Plans alone do not save species**: strategies and Action Plans provide the context for well-coordinated and effective action, and the

processes used to develop them should consider, at every step, the most effective ways to facilitate and motivate implementation.

6.2.17   Low Awareness of the Non-Local Communities

As the result of the increasing influence of tourism, protected area management is evolving from one primarily focused around onsite management and conservation to one that more broadly **encompasses a greater range of holistic recreation and tourism experience**. In dealing with this evolution, national parks and protected area managers are now required to balance onsite interpretation activities with marketing and demand management activities.

In essence, managers need to consider how to change the way protected areas are **'marketed' to people**. This requires managers to consider changing recreation demands and visitor expectations upfront and integrating marketing strategies into communication and interpretation to promote parks effectively and to achieve more realistic expectations of what visitors can expect.

Marketing, as visitor and stakeholder communication, especially **pre-visit communication**, can be influential in a visitor's decision regarding where to go and what to do. **Strategic and tactical communication** can also influence how visitors behave by providing information in a manner that reinforces desired onsite behaviours.

Establishing experience and behavioural expectations prior to visiting a protected area is **central to ultimate visitor satisfaction** as well as environmental protection. In designing pre-visit communication that promotes park and protected area visitation, as well as shapes behavioural expectations, managers must have a framework with which to both plan and implement effective pre-visit communication strategies.

6.2.18   Isolation of Protected Area

In 1995, the European Ministers of the Environment met in Sofia and launched the Pan-European Biological and Landscape Diversity Strategy (PEBLDS), so as to strengthen environment and biodiversity conservation policies. They called "for the promotion of nature protection, both inside and outside protected areas, by implementing the European Ecological Network, a physical network of core areas and other appropriate measures, linked by corridors and supported by buffer zones, thus facilitating the dispersal and migration of species".

Ecological networks can positively influence the conditions for the survival of species populations in the fragmented natural areas and human dominated landscapes in Europe. In addition, they allow a suitable and sustainable use of natural resources through the inter-connectivity of their physical elements with the landscape and existing social/institutional structures.

PART 2: GLOBAL TOOLS FOR MANAGERS

2.1 TOOLS FOR LAW ENFORCEMENT AND SURVEILLANCE

No.	The Tools	Where to Find Them
1	U.S. Coral Reef Task Force, Working Group on Ecosystem Science and Conservation, **"Coral Reef Protected Areas: A Guide for Management"**, March 2000	http://www.coralreef.gov/about/blueprnt.pdf
2	A.S. Forbes, **"Public Safety and Law Enforcement"**, 2010	http://books.google.com/books?id=tpqme5vR0CQC&pg=PA82&dq=Law+Enforcement+in+Protected+Areas&hl=en&ei=Fqa1TvyOEZKW8gOTyt3pBA&sa=X&oi=book_result&ct=result&resnum=9&ved=0CFkQ6AEwCA#v=onepage&q=Law%20Enforcement%20in%20Protected%20Areas&f=false
3	Alexandre Kiss and Dina Shelton, **"Manual of European Environmental Law"**, 1997	http://books.google.com/books?id=PhGnpPPK-SYC&pg=PA198&dq=Law+Enforcement+in+Protected+Areas&hl=en&ei=Eay1TsbbMlOl8QP-2M2oBQ&sa=X&oi=book_result&ct=result&resnum=10&ved=0CGAQ6AEwCTgo#v=onepage&q=Law%20Enforcement%20in%20Protected%20Areas&f=false
4	Rodney V. Salm, John R. Clark and Erkki Siirila, **"Marine and Coastal Protected Areas"**, A Guide for Planners and Managers, 2000	http://books.google.com/books?id=11R4wO0BtIYC&pg=PA61&dq=Surveillance+in+Protected+Areas&hl=en&ei=Bq21TrjxJsOs8gOvuO37BA&sa=X&oi=book_result&ct=result&resnum=2&ved=0CDcQ6AEwAQ#v=onepage&q=Surveillance%20in%20Protected%20Areas&f=false

2.2 TOOLS FOR WORK WITH LOCAL COMMUNITIES

No.	The Tools	Where to Find Them
1	IUNC, **"Collaborative Management of Protected Areas: Tailoring the Approach to the Context"** – IUCN, 1996- isbn: 2-8317-0350-6	http://books.google.com/books?hl=it&lr=&id=ee0vsxLydelC&oi=fnd&pg=PA2&dq=protected+area+management+frameworks&ots=Ro3IDVzkkO&sig=dvx3W6lWb5E_coaUiRgRsz-tXJM#v=onepage&q&f=true
2	Dudley N., Stolton S., **"Partnership for Protection. New Strategies for Planning and Management for Protected Areas"**, - 1999 – isbn: 185383-6095 (paperback) - isbn: 185383-6141 (hardback)	http://books.google.com/books?id=iNSoOeQuG1UC&printsec=frontcover&dq=related:ISBN2831703506&hl=it#v=onepage&q&f=true
3	Middleton J., Thomas L., "**Guidelines for Management Planning of Protected Areas"** – IUCN, 2003 – isbn: 2-8317-0673-4	http://www.google.com/search?q=management+plan+for+protected+and+managed+natural+areas+guide+eurosite+iucn&hl=it&spell=1&sa=X&aq=f&aqi=&aql=&oq=
4	World Tourism Organization, **"Co-operation and Partnerships in Tourism – A Global Perspective"** - 2010 – isbn: 978-92-844-1371-3	http://www.unwto.org/pub/
5	Davey A. G., **"National System Planning for Protected Areas"**, - 1998 – isbn: 2-8317-0399-9	http://books.google.com/books?id=PZoBBAHiSFoC&dq=protected+area+management+frameworks&lr=&hl=it&source=gbs_similarbooks_s&cad=1

6	NATREG, **"Guidelines on Stakeholder Engagement in Preparation of Integrated Management Plans for Protected Areas"**, 2010	http://www.natreg.eu/news-events
	Hirsching – Carbers, M. and Stoll – Kleemann S., **"Opportunities and Barriers in the Implementation of Protected Area Management: a Qualitative Meta-Analysis of Case Studies from European Protected Areas"**, – 2010, The Geographical Journal, doi: 10.1111/j.1475-4959.2010.00391.x	http://onlinelibrary.wiley.com/doi/10.1111/j.1475-4959.2010.00391.x/full

2.3 TOOLS FOR MANAGEMENT PLANNING

No.	The Tools	Where to Find Them
1	De Klemm C., Shine C., **"Wetlands, Water and the Law. Using Law to Advance Wetland Conservation and Wise Use"** - IUNC, 1999 – ISBN: 2-8317-0478-2	http://books.google.it/books?id=vbdHSAuybRkC&pg=PA136&lpg=PA136&dq=planning+for+the+wise+use+of+all+the+wetlands+in+the+member+countries+territories&source=bl&ots=gbsgEc5EDj&sig=gGZUkEjOelWhNyJWF1NWCjSdgg&hl=it#v=onepage&q&f=false

2	Capistrano D., Chopra K., Cropper A., Dasgupta P., Hassan R., Leemansb R., May R. M., Mooney H. A., Pingali P., Watson R. T., Samper C., Scholes R., Shidong Z., Zakri H. A., **"Ecosystems and Human Well-Being: Wetlands and Water"**- MA Board of Review, 2005 – isbn: 1-56973-597-2	http://www.eoearth.org/article/Ecosystems_and_Human_Well-being:_Wetlands_and_Water_%28full_report%29
3	Hails A. J., **"Wetlands, Biodiversity and the Ramsar Convention: the Role of the Convention on Wetlands in the Conservation and Wise Use of Biodiversity"**- Ramsar Convention Boreau, 1997 – isbn: 2-940073-22-8	http://www.onefish.org/servlet/CDSServlet?status=ND02NDA1LjExMzE3OCY2PWVuJjMzPWRvY3VtZW50cyYzNz1pbmZv
4	Wallstrom M., **"LIFE and Europe's Wetlands - Restoring a Vital Ecosystem"**- European Communities, 2001 – isbn: 92-894-0272-5	http://ec.europa.eu/environment/life/publications/lifepublications/generalpublications/generalpub.htm#bestpractice
5	Edridge J., Jones W., O'Hara E., Phillips L., Silva J. P., **"LIFE and Europe's Wetlands - Restoring a Vital Ecosystem"** - European Communities, 2007 – isbn: 978-92-79-07617-6	http://ec.europa.eu/environment/nature/info/pubs/paper_en.htm

6	Davis T. J., **"Towards the Wise Use of Wetlands: Report of the Ramsar Convention Wise Use Project"**, Ramsar Convention Boreau - 1993 – isbn: 2940073074	http://www.ramsar.org/cda/en/ramsar-pubs-books-towards-wise-use-of21381/main/ramsar/1-30-101^21381_4000_0__#c1
7	Bishop J., Bertrand N., Evison W., Gilbert S., Grigg A., **"The Economic of Ecosystem and Biodiversity"**- 2010 – isbn: 978-3-9813410-1-0	http://www.scribd.com/doc/34273883/The-Economics-of-Ecosystems-and-Biodiversity-Executive-Summary
8	Spyropoulou R., **"Biodiversity — SOER 2010 Thematic Assessment"**- 2010 – isbn: 978-92-9213-152-1	http://www.eea.europa.eu/soer/europe/biodiversity
9	European Commission, **"Natura 2000 Conservation in Partnership"** -European Communities, 2009 – isbn: 978-92-79-11545-5	http://ec.europa.eu/environment/nature/info/pubs/paper_en.htm
10	European Commission, **"Natura 2000 Europe's Nature for You"** - 2009 – isbn: 978-92-79-11567-7	http://ec.europa.eu/environment/nature/info/pubs/paper_en.htm

11	Phillip A., **"Management Guidelines for IUCN Category V Protected Areas, Protected Landscapes/Seascapes"**- IUCN, 2002 – isbn: 2831-706858	http://www.nhbs.com/management_guidelines_for_iucn_category_v_protected_areas_tefno_127341.html
12	Sinha P. C., **"Protected Area Networks"** - 2010 – isbn: 81-7488-962-0	http://books.google.com/books?id=-s_nkg6i8rcC&printsec=frontcover&dq=related:ISBN1853834106&hl=it#v=onepage&q&f=false
13	By Committee on criteria and nomenclature commission on national parks and protected areas, **"Categories, Objectives and Criteria for Protected Areas"**- IUCN, 1978 – isbn: 2-88032-...-	http://books.google.com/books?id=HOOqVQ1x_PUC&printsec=frontcover&hl=it&source=gbs_ge_summary_r&cad=0#v=onepage&q&f=false
14	Dudley N., **"Guidelines for Applying Protected Area Management Categories"**- IUCN, 2008 – isbn: 978-2-8317-1086-0	http://books.google.com/books?id=pq4oEg58_08C&printsec=frontcover&dq=related:ISBN2831709393&hl=it#v=onepage&q&f=false
15	Dudley N., Hockings M., Leverington F., Stolton S., **"Evaluating Effectiveness. A Framework for Assessing Management Effectiveness of Protected Areas"** – IUCN, 2006 – isbn: 13: 978-2-8317-0939-0 – isbn: 10: 2-8317-0939-3	http://books.google.com/books?hl=it&lr=&id=fbJkqFX69ooC&oi=fnd&pg=PR7&dq=protected+area+management+frameworks&ots=TfMBuwnmY7&sig=dF9OUPFRM0Ujf16BrlCBLKMh4mw#v=onepage&q=protected%20area%20management%20frameworks&f=false

16	Hockings M., Kettner A., Leverington F., Marr M., Nolte C., Pavese H., Stoll-Kleemann S., Stolton S., **"Protected Area Management Effectiveness Assessments in Europe"**, Federal Agency for Nature Conservation – 2010 – isbn: 978-3-89624-006-4	http://www.cabdirect.org/abstracts/20103210881.html
17	Middleton J., Thomas L., **"Guidelines for Management Planning of Protected Areas"** – IUCN, 2003 – isbn: 2-8317-0673-4	http://www.google.com/search?q=management+plan+for+protected+and+managed+natural+areas+guide+eurosite+iucn&hl=it&spell=1&sa=X&aq=f&aqi=&aql=&oq
18	EUROSITE, **"European Guide for the Preparation of Management Plans for Protected and Managed Natural and Semi-Natural Areas"** – Eurosite, 1996-	http://www.eurosite.org/en-UK/content/evolution-management-planning-guidance
19	Davey A. G., **"National System Planning for Protected Areas"**, - 1998 – isbn: 2-8317-0399-9	http://books.google.com/books?id=PZoBBAHiSFoC&dq=protected+area+management+frameworks&lr=&hl=it&source=gbs_similarbooks_s&cad=1
20	De Lacey T., Lockwood M., Worboys G., **"Protected Area Management-Principles and Practice"**, - 2005 – isbn: 9780195517286	http://www.oup.com.au/titles/higher_ed/geography/9780195517286
21	NATREG, **"Guidelines for the Preparation of PA Business Plan"** – 2010 -	http://www.natreg.eu/news-events

22	NATREG, **"Guidelines for the Economic Evaluation of Natural Assets of the Protected Areas"** – 2010 -	http://www.natreg.eu/news-events
23	NATREG, **"Guidelines for Regional, Interregional and Cross-Border Development Strategies Creating Ecological Corridors"**, 2010	http://www.natreg.eu/news-events
24	Medail, F. and Quezel, P., **"Biodiversity Hotspots in the Mediterranean Basin: Setting Global Conservation Priorities"**, Conservation Biology, 1999	http://onlinelibrary.wiley.com/doi/10.1046/j.1523-1739.1999.98467.x/pdf
25	Hamilton, S., L. and McMillan, L., **"Guidelines for Planning and Managing Mountain Protected Areas"**, – IUCN, 2004 - IUCN Commission on National Parks and Protected Areas, ISBN: 2-8317-07773	http://books.google.com/books?id=uAeukK2Zf1wC&printsec=frontcover#v=onepage&q&f=false

2.4 TOOLS FOR BUILDING GOVERNANCE CAPACITY

No.	The Tools	Where to Find Them
1	UNEP, **"UNEP, 2009 Annul Report"** - 2010 – isbn: 978-92-807-3071-5E	http://www.unep.org/publications/contents/pub_details_search.asp?ID=4105

| 2 | Shelley Hayes and John Shultis, **"Implementation of an Exchange Programme for Protected Areas in East Asia"**, IUCN Programme on Protected Areas, 2001 | http://books.google.com/books?id=ueRtGiLCWosC&pg=PA4&dq=training+protected+area+managers&hl=en&ei=lrq1TrLpM4ax8QPknczqBA&sa=X&oi=book_result&ct=result&resnum=4&ved=0CE8Q6AEwAw#v=onepage&q=training%20protected%20area%20managers&f=false |

2.5 TOOLS FOR DEVELOPING SUSTAINABLE TOURISM

No.	The Tools	Where to Find Them
1	UNWTO, **"International Conference on Tourism and Handicrafts"** – World Tourism Organization, 2009 – isbn: 978-92-844-1306-5	http://ecosynapsis.net/RANPAold/Contenido/MainPages/preAmac/articulosPDF/sustainable_tourism_in_pa_guidelines.pdf
2	Bishop J., Bertrand N., Evison W., Gilbert S., Grigg A., **"Tourism's Potential as a Sustainable Development Strategy"**- 2005 – isbn: 978-92-844-0819-1	http://pub.unwto.org/epages/Store.sf/?ObjectPath=/Shops/Infoshop/Products/1397/SubProducts/1397-1
3	UNWTO, **"World Tourism Conference. Tourism Success Stories and Shooting Stars"** – World Tourism Organization, 2008 – isbn: 978-92-844-1278	http://ecosynapsis.net/RANPAold/Contenido/MainPages/preAmac/articulosPDF/sustainable_tourism_in_pa_guidelines.pdf
4	European Commission, **"Sustainable Tourism and Natura 2000. Guidelines, Initiatives and Good Practices in Europe"** - European Communities, 2001 – isbn: 92-894-1443-X	http://ec.europa.eu/environment/nature/info/pubs/paper_en.htm

5	UNWTO, **"Tourism and Biodiversity – Achieving Common Goals Towards Sustainability"** – World Tourism Organization, 2010 – isbn: 978-92-844-1371-3	http://pub.unwto.org/epages/Store.sf/?ObjectPath=/Shops/Infoshop/Products/1505/SubProducts/1505-1
6	UNWTO, **"Practical Guide for the Development of Biodiversity-based Tourism Products"**- World Tourism Organization, 2010 – isbn: 978- 92-844-1340-9	http://pub.unwto.org/epages/Store.sf/?ObjectPath=/Shops/Infoshop/Products/1506/SubProducts/1506-1
7	UNWTO, **"Sustainable Tourism Management at World Heritage Sites"** – 2009 – isbn: 978-92-844-1301-0	http://ecosynapsis.net/RANPAold/Contenido/MainPages/preAmac/articulosPDF/sustainable_tourism_in_pa_guidelines.pdf
8	Eagles P. F. J., Haynes C. D., McCool S. F., **"Sustainable Tourism in Protected Areas. Guidelines for Planning and Management"** - 2002 – isbn: 2-8317-0648-3	http://www.ekh.unep.org/?q=node/1832
9	UNWTO, **"Information and Documentation Resource Centres for Tourism"** – World Tourism Organization, 2004– isbn: 978-92-844-0717-0	http://books.google.com/books?id=qgL5PQAACAAJ&dq=information+and+documentation+resource+Centres+for+Tourism&hl=it&ei=UdyJTf2JB8fCswb9IZW8DA&sa=X&oi=book_result&ct=result&resnum=1&ved=0CDAQ6AEwAA
10	Cooper C. R., Shepherd R., Westlake J., **"Educating the Educators in Tourism"** – World Tourism Organization, 1996– isbn: 978-92-844-0151-2	http://books.google.com/books?id=ISOKQgAACAAJ&dq=Educating+the+educators+in+tourism&hl=it&ei=wd2JTbeNOsPItAb6wKW1DA&sa=X&oi=book_result&ct=result&resnum=1&ved=0CC0Q6AEwAA

11	UNWTO, **"International Tourism - A Global Perspective"**– World Tourism Organization, 1997– isbn: 978-92-844-0231-1	http://books.google.com/books?id=9zQ3YgEAC AAJ&dq=International+tourism-+A+Global+Perspective&hl=it&ei=gfGJTdX7AsTrsg a5grinDA&sa=X&oi=book_result&ct=result&resnu m=1&ved=0CCkQ6AEwAA
12	UNWTO, **"Indicators of Sustainable Development for Tourism Destination"**– World Tourism Organization, 2004– isbn: 978-92-844-0726-2	http://books.google.com/books?id=PeG2G2y1R6 EC&pg=PA276&dq=Indicators+of+sustainable+de velopment+for+tourism+destination&hl=it&ei=jfKJT dagBczBtAaFrc2kDA&sa=X&oi=book_result&ct=re sult&resnum=2&ved=0CDAQ6AEwAQ#v=onepag e&q&f=false
13	UNWTO, **"Tourism Congestion Management at Natural and Cultural Sites"**– World Tourism Organization, 2004 – isbn: 978-92-844-0763-7	http://books.google.com/books?id=G_zwAAAA MAAJ&q=Tourism+Congestion+Management+at +Natural+and+Cultural+Sites&dq=Tourism+Conge stion+Management+at+Natural+and+Cultural+Sit es&hl=it&ei=EvSJTbiPO8fNswat99W9DA&sa=X&oi= book_result&ct=result&resnum=1&ved=0CDYQ6A EwAA
14	UNWTO, **"Ecotourism Market Reports"** – World Tourism Organization, 2002 – isbn: 978-92-844-0534-3	http://books.google.com/books?id=mC0MAAAA CAAJ&dq=Ecotourism+Market+Reports&hl=it&ei= TvWJTeOqK8vIswbKtMWtDA&sa=X&oi=book_resul t&ct=result&resnum=2&ved=0CC0Q6AEwAQ
15	UNWTO, **"Youth Travel Matters. Understanding the Global Phenomenon of Youth Travel"** – World Tourism Organization, 2008 – isbn: 978-92-844-1239-6	http://books.google.com/books?id=AbUXAQAA MAAJ&q=Youth+Travel+Matters.+Understanding+ the+Global+Phenomenon+of+Youth+Travel&dq= Youth+Travel+Matters.+Understanding+the+Glob al+Phenomenon+of+Youth+Travel&hl=it&ei=Q_- JTc6YJ8iRswaR58GtDA&sa=X&oi=book_result&ct= result&resnum=1&ved=0CCkQ6AEwAA

16	UNWTO, **"Handbook on Tourism Forecasting Methodologies"** – World Tourism Organization, 2008 – isbn: 978-92-844-1238-9	http://books.google.com/books?id=6XMvPQAACAAJ&dq=Handbook+on+Tourism+forecasting+Methodologies&hl=it&ei=UQGKTeuxEcnHswaJkuDBDA&sa=X&oi=book_result&ct=result&resnum=1&ved=0CCgQ6AEwAA
17	Ceballos - Lascuráin, H., **"Tourism, Ecotourism and, Protected Areas"** - 1996 –IUCN– 2-8317-06-48-3	http://books.google.com/books?hl=en&lr=&id=8WGBtSYsNlwC&oi=fnd&pg=PR11&dq=Managmenet+of+Europe%27s+Protected+areas&ots=bUgkyCRIaP&sig=uBAaBAtAk2vmq-xLx13E-yRGB3Q#v=onepage&q&f=false
18	Font, X. and Buckley, R., **"Tourism Eco-Labeling: Certification and Promotion of Sustainable Management "**, CABI, 2001-isbn-085199 506 3	http://books.google.com/books?id=ETQM-i0-WkUC&printsec=frontcover#v=onepage&q&f=false
19	Nepal, K. S., **"Mountain Ecotourism and Sustainable Development"**, 2002 –Mountain Research and Development, Vol 22 No 2 May 2002: 104–109	http://www.bioone.org/doi/pdf/10.1659/0276-4741%282002%29022%5B0104%3AMEASD%5D2.0.CO%3B2
20	Bushell, R., Eagles, J., F., P., **"Tourism and Protected Areas: Benefits beyond Boundaries : the Vth IUCN World Parks Congress"**, – CABI, 2007 - Business & Economics, ISBN: 9780851990224	http://books.google.com/books?hl=en&lr=&id=8n9zfWMYP_oC&oi=fnd&pg=PR3&dq=Tourism+in+mountain+and+remote+regions&ots=QwLP1OW4PM&sig=RGmsuTtQDAzb4ODVnawdZCBrGSM#v=onepage&q&f=false
21	Lulanski T., Lulanski, V., **"The Sustainable Integration of Cultural Heritage and Tourism: a Meta-Study"**, 2011, Journal of Sustainable Tourism, Volume 19, Issue 7	http://www.tandfonline.com/doi/abs/10.1080/09669582.2011.553286

2.6 TOOLS FOR EDUCATION AND AWARENESS

No.	The Tools	Where to Find Them
1	Cooper C. R., Shepherd R., Westlake J., **"Educating the Educators in Tourism"** – World Tourism Organization, 1996–isbn: 978-92-844-0151-2	http://books.google.com/books?id=ISOKQgAACAAJ&dq=Educating+the+educators+in+tourism&hl=it&ei=wd2JTbeNOsPItAb6wKW1DA&sa=X&oi=book_result&ct=result&resnum=1&ved=0CC0Q6AEwAA
2	UNWTO, **"International Tourism - A Global Perspective"**– World Tourism Organization, 1997– isbn: 978-92-844-0231-1	http://books.google.com/books?id=9zQ3YgEACAAJ&dq=International+tourism-+A+Global+Perspective&hl=it&ei=gfGJTdX7AsTrsga5grinDA&sa=X&oi=book_result&ct=result&resnum=1&ved=0CCkQ6AEwAA
3	UNWTO, **"Tourist Safety and Security. Practical Measures for Destinations"**– World Tourism Organization, 1996 – isbn: 978-92-844-0152-9	http://books.google.com/books?id=U-sJAQAAMAAJ&q=Tourist+Safety+and+Security.+Practical+Measures+for+Destinations&dq=Tourist+Safety+and+Security.+Practical+Measures+for+Destinations&hl=it&ei=2PmJTc3zIoP4sgb1laiwDA&sa=X&oi=book_result&ct=result&resnum=1&sqi=2&ved=0CC8Q6AEwAA

2.7 TOOLS FOR WORKING WITH REGIONAL AUTHORITIES

No.	The Tools	Where to Find Them
1	IUNC, **"Collaborative Management of Protected Areas: Tailoring the Approach to the Context"** – IUCN, 1996- isbn: 2-8317-0350-6	http://books.google.com/books?hl=it&lr=&id=ee0vsxLydeIC&oi=fnd&pg=PA2&dq=protected+area+management+frameworks&ots=Ro3IDVzkkO&sig=dvx3W6lWb5E_coaUiRgRsz-tXJM#v=onepage&q&f=true

2	NATREG, **"Guidelines on Stakeholder Engagement in Preparation of Integrated Management Plans for Protected Areas"** – 2010 -	http://www.natreg.eu/news-events

2.8   TOOLS FOR APPLYING RESEARCH

No.	The Tools	Where to Find Them
1	Robert E. Manning, **"Parks and Carrying Capacity"**, 2007	http://books.google.com/books?id=Zc6U3mAS-NIC&pg=PA232&dq=applying+research+in+protected+areas&hl=en&ei=g8C1TqTFBome8gOb2-3rBA&sa=X&oi=book_result&ct=result&resnum=6&ved=0CEkQ6AEwBTgU#v=onepage&q=applying%20research%20in%20protected%20areas&f=false
2	David Harmon, **"Coordinating Research and Management to Enhance Protected Areas"**, IVth World Congress on National Parks and Protected Areas, 1994	http://books.google.com/books?id=Vcap0dsc_mEC&pg=PA1&dq=conducting+research+in+protected+areas&hl=en&ei=HMG1Tq2lGMaa8QOmlcCEBQ&sa=X&oi=book_result&ct=result&resnum=6&ved=0CEgQ6AEwBQ#v=onepage&q=conducting%20research%20in%20protected%20areas&f=false

2.9   TOOLS FOR DEMARCATION AND ZONING

No.	The Tools	Where to Find Them
1	Tundi Agardy, **"Ocean Zoning – Making Marine Management More Effective"**, 2010	http://books.google.com/books?id=F9Kx7y6rKqoC&pg=PA124&dq=zoning+in+protected+areas&hl=en&ei=fsO1Tun5JsSp8QP0o-GjBA&sa=X&oi=book_result&ct=result&resnum=6&ved=0CEoQ6AEwBQ#v=onepage&q=zoning%20in%20protected%20areas&f=false

| 2 | Nigel Dudley, **"Guidelines for Applying Protected Area Management Categories"**, 2008 | http://books.google.com/books?id=pq4oEg58_08C&pg=PA37&dq=zoning+in+protected+areas&hl=en&ei=LMS1Ts7FFcbV8QOy8-3vBA&sa=X&oi=book_result&ct=result&resnum=10&ved=0CGAQ6AEwCTgK#v=onepage&q=zoning%20in%20protected%20areas&f=false |

2.10 TOOLS FOR PROMOTING SUSTAINABLE RESOURCE USE

No.	The Tools	Where to Find Them
1	Duncan B., Capper D., Eder P., Floyd W., Harris R., Kemp R., Massey M., Mountford H., Raes C., Weisz H., Svedin A., Terry A., Vallenbroek F., **"Sustainable Use and Management of Natural Resources"** - European Environment Agency , 2005 – isbn: 92-0167-770-1	http://www.eea.europa.eu/publications/eea_report_2005_9
2	Toland J., **"Making Sustainable Consumption and Production a Reality. A Guide for Business and Policy Makers to Life Cycle Thinking and Assessment"** – European Commission, 2010 – isbn: 978-92-79-14357-1	http://ec.europa.eu/environment/waste/publications/index.htm
3	Adams W. M., Jeanrenaud S. J., **"Transition to Sustainability: Towards a Humane and Diverse World"**, – IUCN, 2008 – isbn: 978-2-8317-1072-3	http://wwf.panda.org/about_our_earth/all_publications/?uNewsID=144921

2.11 TOOLS FOR MONITORING

No.	The Tools	Where to Find Them
1	G. Ziglio, Maurizio Siligardi, Giovanna Flaim **"Biological Monitoring of Rivers: Applications and Perspectives"**, 2006	http://books.google.com/books?id=7XAXMGPSPI QC&pg=PA190&dq=Monitoring+of+Protected+Ar eas&hl=en&ei=SMW1Tr6ZCISL8gOq0sCKBQ&sa=X &oi=book_result&ct=result&resnum=10&ved=0CG 0Q6AEwCQ#v=onepage&q=Monitoring%20of%2 0Protected%20Areas&f=false
2	Ian Spellerberg, **"Monitoring Ecological Change"**, Cambridge, 2005	http://books.google.com/books?id=68ap9hdp8D 8C&pg=PA148&dq=Monitoring+of+Protected+Ar eas&hl=en&ei=8MW1Ts76FIW38QPlztCNBQ&sa=X &oi=book_result&ct=result&resnum=2&ved=0CDg Q6AEwATgU#v=onepage&q=Monitoring%20of%2 0Protected%20Areas&f=false

2.12 TOOLS FOR INFRASTRUCTURE DEVELOPMENT

No.	The Tools	Where to Find Them
1	Hudson J., Eldrige J., Jones W., O'Hara E., Silva J. P., Thevignot C., Toland J., **"Best Life Nature Projects 2009"**- European Commission, 2010 – isbn: 978-92-79-16826-0	http://ec.europa.eu/environment/life/publication s/lifepublications/bestprojects/index.htm

2.13 TOOLS FOR FINANCING AND FUNDRAISING

No.	The Tools	Where to Find Them
1	Bishop J., Emerton L., Thomas L., **"Sustainable Financing of Protected Areas: A Global Review of Challenges and Options"**- 2009 – isbn: 2831708818	http://www.nhbs.com/sustainable_financing_of_protected_areas_tefno_145478.html&tab_tag=desc
2	Phillips A., **"Financing Protected Areas. Guidelines for Protected Area Manager. Financing Protected Areas Task Force of the World Commission on Protected Areas of IUCN in Collaboration with the Economics Unit of IUCN"** - Progress Press, 2000 – isbn: 978-3-9813410-1-0	http://www.google.it/search?q=world+commission+on+protected+areas+of+iucn+in+collaboration+with+the+economics+service+Unit+of+IUCN&hl=it&source=hp&aq=f&aqi=&aql=&oq
3	NATREG, **"Guidelines for the Preparation of PA Business Plan"** – 2010	http://www.natreg.eu/news-event

2.14 TOOLS FOR RESTORATION

No.	The Tools	Where to Find Them
1	Stephanie Mansourian, Daniel Vallauri, Nigel Dudley, "Forest Restoration in Landscapes: Beyond Planting Trees", 1986	http://books.google.com/books?id=V-noMq-iPsMC&pg=PA208&dq=Restoration+of+Protected+Areas&hl=en&ei=_Ma1Tv7BFtGy8QPHlt37BA&sa=X&oi=book_result&ct=result&resnum=1&ved=0CDQQ6AEwAA#v=onepage&q=Restoration%20of%20Protected%20Areas&f=false

| 2 | J. N. Blignaut, **"Restoring Natural Capital: Science, Business and Practice"**, Society for Ecological Restoration International, 2007 | http://books.google.com/books?id=1f7ugqYMd1QC&pg=PA163&dq=Restoration+of+Protected+Areas&hl=en&ei=hse1TvGGE5HC8QOk262LBQ&sa=X&oi=book_result&ct=result&resnum=6&ved=0CE8Q6AEwBTgK#v=onepage&q=Restoration%20of%20Protected%20Areas&f=false |

2.15 TOOLS FOR FIRE MANAGEMENT

No.	The Tools	Where to Find Them
1	Geoffrey Cary, David Lindenmayer, Stephen Dovers, **"Australia Burning, Fire Ecology, Policy and Management Issues"**, 2003	http://books.google.com/books?id=mrkmBl1liKoC&pg=PT166&dq=Fire+Management+of+Protected+Areas&hl=en&ei=gcy1TqqdJYOq8AP0hpiOBQ&sa=X&oi=book_result&ct=result&resnum=10&ved=0CF8Q6AEwCTgK#v=onepage&q=Fire%20Management%20of%20Protected%20Areas&f=false
2	National Park Service, **"Management Policies – The Guide to Managing the National Park System"**, US Government, 2006	http://books.google.com/books?id=0B7U4Ar1xksC&pg=PA50&dq=Fire+Management+of+Protected+Areas&hl=en&ei=Bs21TqXiHNST8gOEopD8BA&sa=X&oi=book_result&ct=result&resnum=4&ved=0CD0Q6AEwAzgU#v=onepage&q=Fire%20Management%20of%20Protected%20Areas&f=false

2.16 TOOLS FOR SPECIES MANAGEMENT

No.	The Tools	Where to Find Them
1	Hudson J., Eldrige J., Jones W., O'Hara E., Silva J. P., Thevignot C., Toland J., **"Best Life Nature Projects 2009"**- European Commission, 2010 – isbn: 978-92-79-16826-0	http://ec.europa.eu/environment/life/publications/lifepublications/bestprojects/index.htm

| 2 | The Species Conservation Planning Task Force, **"Strategic Planning for Species Conservation: A Handbook"**, Species Survival Commission, IUCN, 2008 | http://data.iucn.org/dbtw-wpd/edocs/2008-047.pdf |

2.17 TOOLS FOR COMMUNICATION, PUBLICITY, MARKETING

No.	The Tools	Where to Find Them
1	UNWTO, **"International Conference on Tourism and Handicrafts"** – World Tourism Organization, 2009 – isbn: 978-92-844-1306-5	http://ecosynapsis.net/RANPAold/Contenido/MainPages/preAmac/articulosPDF/sustainable_tourism_in_pa_guidelines.pdf
2	European Commission, **"Sustainable Tourism and Natura 2000. Guidelines, Initiatives and Good Practices in Europe"** - European Communities, 2001 – isbn: 92-894-1443-X	http://ec.europa.eu/environment/nature/info/pubs/paper_en.htm
3	World Tourism Organization, **"Co-operation and Partnerships in Tourism – A Global Perspective"** - 2010 – isbn: 978-92-844-1371-3	http://www.unwto.org/pub/
4	UNWTO, **"Practical Guide for the Development of Biodiversity-based Tourism Products"**- World Tourism Organization, 2010 – isbn: 978- 92-844-1340-9	http://pub.unwto.org/epages/Store.sf/?ObjectPath=/Shops/Infoshop/Products/1506/SubProducts/1506-1

5	UNWTO, **"International Tourism - A Global Perspective"**– World Tourism Organization, 1997– isbn: 978-92-844-0231-1	http://books.google.com/books?id=9zQ3YgEACAAJ&dq=International+tourism-+A+Global+Perspective&hl=it&ei=gfGJTdX7AsTrsga5grinDA&sa=X&oi=book_result&ct=result&resnum=1&ved=0CCkQ6AEwAA
6	UNWTO, **"Ecotourism Market Reports"** – World Tourism Organization, 2002 – isbn: 978-92-844-0534-3	http://books.google.com/books?id=mC0MAAAACAAJ&dq=Ecotourism+Market+Reports&hl=it&ei=TvWJTeOqK8vlswbKtMWtDA&sa=X&oi=book_result&ct=result&resnum=2&ved=0CC0Q6AEwAQ
7	UNWTO, **"Evaluating NTO Marketing Activities"** – World Tourism Organization, 2003 – isbn: 978-92-844-0636-4	http://books.google.com/books?id=YINrQgAACAAJ&dq=Evaluating+NTO+Marketing+Activities&hl=it&ei=0_uJTcSrLsbvsgaS5sioDA&sa=X&oi=book_result&ct=result&resnum=1&ved=0CC8Q6AEwAA
8	UNWTO, **"Handbook on E-Marketing for Tourism Destinations"**– World Tourism Organization, 2008 – isbn: 978-92-844-1276-1	http://books.google.com/books?id=Cxp0OwAACAAJ&dq=Handbook+on+E-marketing+for+Tourism+Destinations&hl=it&ei=FwKKTe7fAdHFtAb0_O2-DA&sa=X&oi=book_result&ct=result&resnum=1&ved=0CEIQ6AEwAA
9	Mike Reid, Stephen Wearing and Glen Croy, **"Marketing of Protected Areas as a Tool to Influence Visitors' Pre-Visit Decisions"**, 2008	http://www.crctourism.com.au/wms/upload/Resources/80087%20ReidMarketingPA%20WEB.pdf
10	Font, X. and Buckley, R., **"Tourism Eco-labeling: Certification and Promotion of Sustainable Management "**, CABI, 2001-isbn-085199 506 3	http://books.google.com/books?id=ETQM-i0-WkUC&printsec=frontcover#v=onepage&q&f=false

2.18 ISOLATION OF PROTECTED AREA

No.	The Tools	Where to Find Them
1	Bonnin M., Bruszik A., Delbaere B., Lethier H., Richard D., Rientjes S., Uden G., Terry A., **"The Pan-European Ecological Network: Taking Stock"-** 2007 – isbn: 978-92-871-6119-2	http://book.coe.int/EN/ficheouvrage.php?PAGEID=36&lang=FR&produit_aliasid=2223
2	UNESCO. Intergovernmental Committee for the Protection of the World Cultural and Natural Heritage, **"Operational Guidelines for the Implementation of the World Heritage Convention. Intergovernmental Committee for the Protection of the World Cultural and Natural Heritage"** – UNESCO, 1997-	http://books.google.com/books?id=QijgRgAACAAJ&dq=Operational+guidelines+for+the+implementation+of+the+world+heritage+convention&hl=it&ei=8weKTe_6IsrasgaZk-2yDA&sa=X&oi=book_result&ct=result&resnum=4&ved=0CEMQ6AEwAw

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