

Protected Areas Management Effectiveness Information Module

Methodology Description

Valdiviana Ecoregion Argentina

Information on this methodology was extracted from Rusch (2002)

1.1 Organisation

WWF/Fundación Vida Silvestre Argentina

1.2 Primary reference

Rusch V (2002) 'Estado de situación de las áreas protegidas de la porción Argentina de la ecoregión Valdiviana'.

1.3 Brief description of methodology

The methodology was developed by Fundación Vida Silvestre Argentina and WWF to assess the status of the protected area of the Valdiviana Ecoregion, based on the application of questionnaires and interviews to the protected area managers and staff. It also includes a literature review and field survey (Rusch, 2002).

1.4 Purposes

- ✓ to assist in prioritisation or resource allocation
- ✓ to raise awareness and support

1.5 Objectives and application

The stated objectives are:

- a) to offer to the community an independent and objective tool to evaluate the advances in the implementation of the protected areas of the region and
- b) to offer a mechanism to direct policies, efforts and conservation actions on the part of responsible state and/or private organisations which administer the parks, to improve their management.

In addition, the results of this analysis will contribute to generate awareness of the state and the objectives of the parks, and will allow the establishment of action priorities within the conservation organisations that decide policies, and implement or finance programs of protected areas (international organisations, national, provincial, municipal governments and NGOs). Objectives such as to improve particular aspects of management efficiency within each area are secondary in this study.

1.6 Origins

‘Through its Global 2000 Program, WWF identified the Valdiviana Eco-region or the Temperate Valdiviana Forests of Argentina and Chile as one of the high-priority sites for conservation of world-wide diversity (Dinerstein *et al.* 1998). All agree that a proportion of the protected areas of the Valdiviana region are ‘Paper Parks’, due to little or no implementation (of park management). When analysing the percentage of land protected in each subregion, or each type of vegetation, the numbers seem reassuring, but when the lack of implementation is considered, this the situation is not so promising, Therefore evaluation of the state of implementation of the Protected Areas is one of the high-priority actions to guarantee its conservation (Laclau 1998; 2002; Vila *et al.* 2000).

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1.7 How the method is implemented

Risk matrixes were built (Lemos de Sa *et al.*, 1999) where each protected area was positioned in squares corresponding to the degree of implementation/management on one axis and the degree of threats/vulnerability on the other.

Data was collected through four steps: literature review, questionnaires, interviews, and field survey.

1.8 Elements and indicators

The selection of indicators was based on work by de Faria (1993) and Cifuentes and Izurieta (2000a) and on the IUCN-WCPA Framework. The WWF Score-card scheme, developed for the Paranaense Forest Eco-region (Chalukian, 1999), based on the 1999 Brazilian survey (Lemos de Sá *et al.* 1999) was also used, to allow comparison with protected areas of other regions of the country.

There are indicators of management, implementation, and threats. The first two refer to six elements: legal; administrative; design and planning; political; research, knowledge and education; and actual use. The indicators of threats relate to the degree of isolation and conflicting activities or projects within or outside the protected area.

Another independent indicator was analysed: the significance of the area for conservation, which was considered extremely important to evaluate the state of implementation and management and the vulnerability of the protected area regarding its importance to the conservation of the region.

The degree of threat has been corrected using the factor of vulnerability, considering the actual PA area, as the degree of threat increases with the decrease in PA area.

Indicators for the Valdiviana methodology

Aspects (broad)	Aspects	Indicators
A. Management and implementation	Legal	Land tenure Legal status (legal instrument of creation or support) Limits demarcation
	Administrative	Field staff (involved in activities of control and protection, legal action, socialization, communication, extension and education) Administration: assigned staff and sufficient staff Technical staff (existence or not) Infrastructure Equipment and materials Financing and budget (permanent and external funding)
	Design and Planning	Design of the system and the PA Planning tools PA Zoning
	Political	Context (institutional support) Local participation and attitude regarding the PA objectives
	investigation, knowledge and education	Existence of information Research Management of information about natural and cultural resources Monitoring and evaluation Environmental education, extension and communication programs
	Actual use	Actual use of the PA
B. Threats and vulnerability	Buffer zone situation	Buffer zone (existence or not) Degree of isolation Predominant land use in the buffer zone Conflicting projects (regional development plans)

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	PA situation	Percentage of altered area within the PA Water system protection Illegal activities Use of resources
	Importance of the area	Significance (for conservation)

The indicators are also grouped according to the scheme of Hockings *et al.* (2000):

Context: significance; internal and external threats; vulnerability and context

Planning: legislation and policy; design of the system and of the PA; management planning

Inputs: funds; field, administrative and technical staff; equipment and infrastructure

Processes: planning implementation; research; information management; monitoring and evaluation; staff training and capacity; environmental education; resources management; participation.

1.9 Scoring and analysis

Each indicator varies in a 5-point scale, from 0 to 4. When there is no information the indicator is annulled. The determination of aggregate values is calculated as the average of the individual values. Although most of the information is expressed as scores (from 0 to 4), in some cases it is expressed as a percentage of the optimum. The value "4" always represents the optimal value for both threat and management indicators.

For the PA degree of implementation, the following percentage scale was used:

- unsatisfactory: less than 35% of the optimum
- minimally satisfactory: 36–50%
- moderately satisfactory: 51–75%
- satisfactory: 76–90%
- very satisfactory: 91– 100%