Los Glaciares National Park

SITE INFORMATION

Country:
Argentina
Inscribed in: 1981
Criteria:
(vii) (viii)

Site description:

The Los Glaciares National Park is an area of exceptional natural beauty, with rugged, towering mountains and numerous glacial lakes, including Lake Argentino, which is 160 km long. At its farthest end, three glaciers meet to dump their effluvia into the milky grey glacial water, launching massive igloo icebergs into the lake with thunderous splashes.

© UNESCO
SUMMARY

2014 Conservation Outlook

Good with some concerns

While the outlook for conservation of the site’s geological processes and geomorphic features is good, the outlook for the site’s natural phenomena and scenic beauty is one of continued slow deterioration due to the on-going impacts of introduced species, climate change (receding glaciers and wildfires), and uncontrolled tourism development in the buffer zone.

Current state and trend of VALUES

Low Concern
Trend: Deteriorating

Values related to natural phenomena and scenic beauty are in a slow process of deterioration due to introduced species, receding glaciers, uncontrolled tourism development in the buffer zone, and wildfires; values related geological processes and geomorphic features are in good condition and are stable.

Overall THREATS

Low Threat

Introduced species, climate change (receding glaciers and increased wildfires) in the Park, and uncontrolled tourism development in the buffer zone have already caused significant impacts to terrestrial and aquatic ecosystems, which form an integral part of the site’s exceptional natural beauty. There are few threats to the site’s geological processes and geomorphic features, aside from ongoing climate change, which is causing most of the glaciers in the Park to recede.

Overall PROTECTION and MANAGEMENT

Mostly Effective

General protection and management of the Park is mostly effective. The Park is
well integrated into the national protected system and the local Advisory Commission provides a mechanism for regular consultations with Provincial and Municipal authorities. However, challenges remain for the ecological restoration, fire control, and tourism management programs.
FULL ASSESSMENT

Description of values

Values

World Heritage values

► Exceptional natural beauty modeled by the glaciations phenomenon
   Criterion:(vii)

As a whole, the Los Glaciares National Park is a natural environment largely modelled by the glaciation phenomenon. It is located in the stunningly beautiful setting of the Andean Patagonian Forest, with a preponderance of Nothofagus sp. flora and significant endangered or vulnerable fauna of an endemic nature or with a restricted distribution, such as the Patagonian huemul (Hippocamelus bisulcus), the torrent duck (Merganetta armata), and the Magellanic woodpecker (Campephilus magellanicus). This landscape is completed by the impressive Andes mountains, such as the Fitz Roy (Chaltén) and the Torre, and extensive glacial lakes, such as the Argentino and the Viedma, whose setting distinguishes and highlights the beautiful glaciers fed by the Ice Fields. The climax of such outstanding beauty is reached in the area where the Perito Moreno Glacier descends. This glacier shows a vast front up to 60 metres high, slowly and constantly moving towards the Magallanes Peninsula shore, with some periodic calving of bluish icebergs falling with a loud cracking into the waters of the Argentino lake (Draft SoOUV, 2010).

► Geological, geomorphic and physiographic phenomenon caused by the advance and retreat of the glaciations
   Criterion:(viii)

The Los Glaciares National Park is an outstanding example of a geological,
geomorphic and physiographic phenomenon caused by the advance and retreat of the glaciations that took place during the Pleistocene epoch in the Quaternary period, and the neoglaciations corresponding to the current epoch or Holocene. These events have modelled the landscape of the area and may be recognised by the lacustrine basins of glacial origin, the moraine systems deposited on the plateaux, or by more recent systems pertaining to the current valleys, and, in short, the 10 glacier tongues fed by the Ice Fields of the Andes, namely (from north to south): Marconi, Viedma, Moyano, Upsala, Onelli, Spegazzini, Mayo, Ameghino, Moreno, and Frías. A significant feature of this process is the on-going advance of the Perito Moreno Glacier, which differs from the glacial retreat shown by the fluctuations of this phenomenon in the Los Glaciares National Park and Patagonia in general (Draft SoOUV, 2010).

**Other important biodiversity values**

► **Other international designations**

The Park lies within a WWF Global 200 Eco-region and a BirdLife-designated Endemic Bird Area lies within the Park’s buffer zone. (BirdLife, 2012; WDPA, 2011)

**Assessment information**

**Threats**

**Current Threats**

**Low Threat**

Introduced species, climate change (receding glaciers and increased wildfires) within the Park, uncontrolled tourism development adjacent to the Park, and illegal hunting have caused significant impacts on both the terrestrial and aquatic ecosystems, which form an integral part of the site’s exceptional natural beauty. Climate change is causing most of the glaciers in the Park to
recede.

▶ **Invasive Non-Native/ Alien Species**

- **High Threat**
  - Inside site
  - Outside site

  Introduced species including feral cattle, horses, sheep, dogs and cats; rainbow and lake trout; and the European hare have had a significant effect in altering native habitats, and competing with local species, but there has been some recuperation of native habitats and local species in recent years (BirdLife International, 2012; Tarina.net, 2012; WDPA, 2011).

▶ **Habitat Shifting/ Alteration**

- **Very High Threat**
  - Inside site
  - Outside site

  Climate change is causing most of the glaciers of the park to recede (with the notable exception of the Perito Moreno Glacier which continues to advance), and is increasing the frequency and severity of wildfires (losglaciares.com, 2012; Daily KOS, 2012; Draft SOUV, 2010).

▶ **Tourism/ Recreation Areas**

- **Very Low Threat**
  - Outside site

  Tourism development around the Park detracts from the natural setting and modifies native habitats and associated fauna (BirdLife International, 2012).

▶ **Commercial hunting**

- **Very Low Threat**

  Historically, there has been intense hunting of foxes, pumas, and guanacos. Given the number of ranches surrounding the Park, it is probable that some hunting of these predators continues in the National Reserve to the east of the Park (logglaciares.com, n.d.). This is a low threat for World Heritage values, but a significant threat for the terrestrial ecosystem.
Livestock Farming / Grazing

Data Deficient
Inside site
Outside site

Cattle and sheep grazing in the buffer zone has a detrimental effect on native vegetation and associated fauna. Reference

Potential Threats

Low Threat

Construction of new dams and real estate sales in and around the Park could cause further deterioration to both terrestrial and aquatic ecosystems, which form an integral part of the site’s exceptional natural beauty.

Dams/ Water Management or Use

Low Threat

There were plans to construct a dam on the Rio Leona would raise the level of Lago Viiedma and inundate much of the steppe environment in the Park and reed beds that are an important habitat for waterfowl (BirdLife International, 2012). On August 30, 2012, it was announced that the dam on Rio Leona will not be constructed because of the damage it would cause on the Lake. Instead, a new one is expected to be constructed more than 70 km from the first one, down the Santa Cruz River, outside the area and the buffer zone. http://www.lu23.com.ar/index.php/noticias/provinciales/5558-represas

Housing/ Urban Areas

Very Low Threat
Inside site
Outside site

Real estate development in the National Reserve (buffer zone) and the El Chalten area in the Park would reduce native habitat and impact local fauna, especially birds (BirdLife International, 2012).

Protection and management
Assessing Protection and Management

▶ **Relationships with local people**
  Mostly Effective

There is some tension between conservation and tourism development which at times results in conflicts with local people. In 2002, a local Advisory Commission was established made up of representatives of national, provincial and municipal entities, NGOs, the Chamber of Commerce, the Association of Tourist Guides, a Scout Group and others. This commission provides advice to the Park on various functioning and management issues. (Draft SoOUV, 2010).

▶ **Legal framework and enforcement**
  Highly Effective

The Los Glaciares National Park is a unit of the National System of Protected Areas in Argentina (Law No. 22.351 dealing with the National Park Administration). It was created in 1937 when Law No. 13.895 was enacted, while National Law No. 19.292 of 1971 established its current limits, including the division of the area into a National Park and a National Reserve (Draft SoOUV, 2010).

▶ **Integration into regional and national planning systems**
  Highly Effective

The Park is well integrated into the national protected system and the local Advisory Commission provides a mechanism for regular consultations with Provincial and Municipal authorities (Draft SoOUV, 2010).

▶ **Management system**
  Some Concern

A preliminary management plan for the Park was developed in 1997, but is still in the process of being updated, so the Annual Operations Plans provide short-term guidance for management. Ecological restoration, fire control, and tourism management programs remain a challenge (losglaciares.com, 2012;
WDPA Data Sheet, 2011; Draft SoOUV, 2010).

▸ **Management effectiveness**  
**Data Deficient**

The last independent management audit was conducted in 2001 and no recent information is available (Auditoria, 2001).

▸ **Implementation of Committee decisions and recommendations**  
**Data Deficient**

No Committee decisions have been taken on this site since 1986.

▸ **Boundaries**  
**Highly Effective**

Final boundaries for the Park were set in 1945 and are known to local inhabitants (Draft SoOUV, 2010).

▸ **Sustainable finance**  
**Data Deficient**

No independent information is available.

▸ **Staff training and development**  
**Highly Effective**

Ranger staff are well trained and have access to occasional in-service training opportunities. Reference

▸ **Sustainable use**  
**Mostly Effective**

The major use of the Park is for tourism, which overall is carried out sustainably (WDPA, 2011; SOUV, 2010; losglaciares.com, 2012; Martin and Chehebar, 2001).

▸ **Monitoring**  
**Some Concern**
Monitoring is restricted to the status of glaciers and the endangered huemul deer. No overall biological monitoring program is in place (WDPA Data Sheet, 2011; SOUV, 2010; Secretaria del Ambiente y Desarrollo Sustentable, 2005).

Research

Some Concern

Regular studies of the receding glaciers have taken place by 4 research teams since 1990; partial inventories of fauna exist (mainly birds); and for the last 20 years the Park has participated in a regional study of the endangered huemul deer. There is no integrated, on-going research program for the Park or research facilities, but scientific support for management is provided by the Regional Technical Delegation Office for Patagonia of the National Parks Administration in Bariloche (WDPA Data Sheet, 2011; Draft SoOUV, 2010; Secretaria del Ambiente y Desarrollo Sustentable, 2005).

Education and interpretation programs

Highly Effective

Local organizations assist the Park administration in developing and implementing educational programs (IUCN Consultation, 2012).

Tourism and interpretation

Highly Effective

Tourism is the major use of the Park (around ½ million national and international visitors/year) and infrastructure (hotels, lodges, campgrounds, hiking and horse trails, mountain huts, tour boat and glacier hike facilities) is abundant. Interpretive programs (information center, guided lake and glacier excursions, mountain climbing guides, guidebooks, brochures, and signs) are implemented by the Park and concessionaires (IUCN Consultation, 2012; WDPA Data Sheet, 2011; Gregorio, 2010)

Overall assessment of protection and management

Mostly Effective

General protection and management of the Park is mostly effective. The Park is well integrated into the national protected system and the local Advisory
Commission provides a mechanism for regular consultations with Provincial and Municipal authorities. However, challenges remain for the ecological restoration, fire control, and tourism management programs.

► **Assessment of the effectiveness of protection and management in addressing threats outside the site**

*Some Concern*

The Park Administration is responsible for management of the National Reserve (effectively the buffer zone for the Park), but have made slow progress in addressing the most severe threats (presence of introduced species and uncontrolled growth of tourism).

► **Best practice examples**

Llamas have been introduced to replace horses in carrying supplies to mountain climbing base camps, thereby reducing trail erosion (IUCN Consultation, 2012).

**State and trend of values**

**Assessing the current state and trend of values**

**World Heritage values**

► **Exceptional natural beauty modeled by the glaciations phenomenon**

*High Concern*

*Trend: Deteriorating*

The natural phenomena and beauty of the site have suffered degradation due to receding glaciers (with the notable exception of the Perito Moreno Glacier which continues to advance), impacts on vegetation and endangered species from feral livestock and exotic species, wildfires, and uncontrolled tourism development in the buffer zone (WDPA, 2011; Tarina.net, 2012; BirdLife International, 2012).
Geological, geomorphic and physiographic phenomenon caused by the advance and retreat of the glaciations

Low Concern
Trend: Stable

The geological processes and geomorphic features of the site remain intact. However, ongoing climate change is causing most of the glaciers in the Park to recede (losglaciares.com, 2012; Daily KOS, 2012)

Other important biodiversity values

▶ Other international designations

The Park lies within a WWF Global 200 Eco-region and a BirdLife-designated Endemic Bird Area lies within the Park’s buffer zone. (BirdLife, 2012; WDPA, 2011)

Summary of the Values

▶ Assessment of the current state and trend of World Heritage values

Low Concern
Trend: Deteriorating

Values related to natural phenomena and scenic beauty are in a slow process of deterioration due to introduced species, receding glaciers, uncontrolled tourism development in the buffer zone, and wildfires; values related geological processes and geomorphic features are in good condition and are stable.

▶ Assessment of the current state and trend of other important biodiversity values

High Concern
Trend: Deteriorating

Values related to other international designations (WWF Global 200 Eco-region in the Park, and BirdLife-designated Endemic Bird Area in the buffer zone) are being slowly degraded by introduced species, uncontrolled tourism development, and wildfires.
Additional information

Key conservation issues

▶ Introduced species
  Local

  Feral cattle, horses, sheep, dogs and cats; and introduced rainbow and lake
  trout, and the European hare have had a significant effect in altering native
  habitats, and competing with local species. (Bird-Life International, 2012;
  Tarina.net, 2012)

▶ Climate change
  Local

  Climate change is causing most of the 42 glaciers of the Park to recede (with
  the notable exception of the Perito Moreno Glacier which continues to
  advance), and increasing the frequency and severity of wildfires
  (losglaciares.com, 2012; SOUV, 2010)

▶ Uncontrolled tourism development
  Local

  Tourism development around the Park detracts from the natural setting and
  modifies native habitats and associated fauna (Bird-Life International, 2012;
  IUCN Consultation, 2012).

Benefits

Understanding Benefits

▶ Outdoor recreation and tourism

  The Park attracts around ½ million tourists per year and is a major driver of
economic develop in Santa Cruz Province.

Summary of benefits

The Park has significant conservation values that are recognized at the global level, and is a driver for economic development through tourism at the provincial level.

Projects

Compilation of active conservation projects

<table>
<thead>
<tr>
<th>№</th>
<th>Organization/individuals</th>
<th>Project duration</th>
<th>Brief description of Active Projects</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>National Parks Administration</td>
<td></td>
<td>Restoration of huemul deer populations as part of a bi-national effort with Chile.</td>
</tr>
<tr>
<td>2</td>
<td>LANIGLA-CONICET</td>
<td></td>
<td>Monitoring of the Park’s glaciers.</td>
</tr>
</tbody>
</table>
## REFERENCES

<table>
<thead>
<tr>
<th>No</th>
<th>References</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>WDPA Data Sheet. 2011. UNEP-WCMC</td>
</tr>
</tbody>
</table>