IUCN Conservation Outlook Assessment 2017 **(archived)**
Finalised on 10 November 2017

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# Los Alerces National Park

## SITE INFORMATION

Country:
Argentina
Inscribed in: 2017
Criteria:
(vii) (x)

Site description:

The Los Alerces National Park is located in the Andes of northern Patagonia and has a western boundary, which coincides with the Chilean border. Successive glaciations have moulded the landscape in the region creating spectacular features such as moraines, glacial cirques and clear-water lakes. The vegetation is dominated by dense temperate forests, which give way to alpine meadows higher up under the rocky Andean peaks. The property is vital for the protection of some of the last portions of continuous Patagonian Forest in an almost pristine state and is the habitat for a number of endemic and threatened species of flora and fauna. © UNESCO

## SUMMARY

# 2017 Conservation Outlook

**Good**

The values of the property are in good condition and stable and the property is overall well managed. Although latent threats related to invasive species, livestock grazing, climate change and impacts from tourism are affecting the property, the level of pressure remains low and sufficient human and financial resources are available to address these issues; however, these resources need to be guaranteed in the longer term. While tourism impacts currently remain low, demand is expected to increase following the inscription of the property on the World Heritage List and this will require additional management measures.

## Current state and trend of VALUES

**Good**
**Trend: Stable**

The property was inscribed on the World Heritage List in 2017 and at that time its values were considered to be in a good and stable condition (IUCN, 2017; World Heritage Committee, 2017).

## Overall THREATS

**Low Threat**

Several threats, including invasive species, livestock grazing, climate change and impacts from tourism are affecting the property; however, overall the level of pressure remains low. Hydropower infrastructure located in the buffer zone considerably altered parts of the property; however, given that this infrastructure significantly predates the inscription of the property on the World Heritage List, its current level of threat to the Outstanding Universal Value is also considered as low. While tourism impacts currently remain low, demand is expected to increase following the inscription of the property on the World Heritage List and

this will require additional management measures.

## Overall PROTECTION and MANAGEMENT

**Mostly Effective**

The property is overall effectively managed thanks to adequate human and financial resources and despite growing pressures from increasing visitation and other threats, such as fires. The property is considered one of the best equipped parks in southern Argentina with an outstanding group of rangers and fire-control personnel. Management effectiveness evaluations have been undertaken a number of times and the management plan for the property is currently being updated following the most recent management effectiveness evaluation undertaken in 2016.

# FULL ASSESSMENT

## Description of values

### Values

### World Heritage values

► **Majestic natural landscape**
**Criterion:(vii)**

The property conserves a variety of landscapes and an extensive system of interconnected, natural clear-water lakes and rivers. These waters display spectacular colours with shifting hues of green, blue and turquoise according to the intensity of sunlight and the time of the year. Crystal-clear rivers and lakes are surrounded by lush temperate Valdivian forests in an environment of mountain ranges, glaciers and snow-capped peaks. The Alerce forest is a celebrated feature of this majestic landscape; the forest is particularly remarkable along the northern arm of Lake Menéndez which contains the Millennial Alerce Forest, located amidst a rainforest environment of ferns, moss, lichens, vines and bamboo, and with the largest and oldest tree being nearly 60 metres tall and approximately 2,600 years old (World Heritage Committee, 2017).

► **Globally important undisturbed areas of Patagonian Forest with elements of Valdivian Temperate Forest**
**Criterion:(x)**

The property contains globally important undisturbed areas of Patagonian Forest, influenced by elements of Valdivian Temperate Forest, which is a priority ecoregion for biodiversity conservation worldwide. The Valdivian ecoregion has developed in marked biogeographic insularity, in which important speciation processes have taken place. This is evidenced by the

presence of relict genera and even taxonomic orders, as well as numerous endemic and threatened species: 34% of woody plant genera are endemic, of which 80% are known from only one species, and some are relict having survived periods of glaciation. The endemic and globally endangered Patagonian cypress or alerce (Fitzroya cupressoides, EN) is the second longest living tree in the world (World Heritage Committee, 2017; IUCN, 2017).

## Other important biodiversity values

### ► Diversity of mammal species

The fauna of the property includes most of the mammals occurring in this part of the Andes. The globally endangered huemul or southern Andean deer (Hippocamelus bisulcus, EN) is the largest native deer of the Andes. Other examples of the 23 native mammals noted in the nomination include the puma (Puma concolor, LC) and two threatened smaller cats: the kodkod or guigna cat (Leopardus guigna, VU) and Geoffroy’s cat (Leopardus geoffroyi, LC). Other distinctive fauna includes the ‘Monito del Monte’ (Dromiciops gliroides, NT), a nocturnal marsupial which is monotypic, endemic to Patagonia and a ‘living fossil’ which can be linked to ancient and extinct marsupials (IUCN, 2017).

### ► Avifauna

The avifauna of the property includes 133 confirmed species, including charismatic species of global conservation concern, such as the Andean condor (Vultur gryphus), Chilean flamingo (Phoenicopterus chilensis) and the spectacled duck (Speculanas specularis), all near threatened according to the IUCN Red List (IUCN, 2017).

# Assessment information

## Threats

### Current Threats

**Low Threat**

Several threats, including invasive species, livestock grazing, climate change and impacts from tourism are affecting the property; however, overall the level of pressure remains low. Hydropower infrastructure considerably altered parts of the property's buffer zone and has a visual impact in the vicinity; however, given that this infrastructure significantly predates the inscription of the property on the World Heritage List, its current level of threat to the Outstanding Universal Value is also considered as low.

#### ▶ Livestock Farming / Grazing

**Low Threat**
**Outside site**

Livestock grazing is restricted to areas within the Los Alerces National Reserve which has been included as part of the property's buffer zone. The total affected area is reported to be around 22,000 ha, with 1,000-1,200 large animals present. Grazing is not permitted within the Los Alerces National Park; however, some challenges with compliance have been reported (IUCN, 2017).

#### ▶ Tourism/ visitors/ recreation

**Low Threat**
**Inside site, scattered(5-15%)**

Tourism is not excessive at this stage, but is growing (IUCN, 2017). Visitor numbers surpassed 170,000 in the 2013-2014 season, with most of them arriving between January and March (State Party of Argentina, 2016). Carrying capacity assessments have been undertaken for high visitation areas, such as the Millennial Alerce Forest Trail, and necessary regulations

are in place. However, tourism demand is expected to grow further following the inscription of the property on the World Heritage List, which will require additional management responses, especially in light of the new paved road and the growing populations nearby (e.g. Esquel) with visit potential throughout the year (IUCN, 2017).

### ► Invasive Non-Native/ Alien Species

**Low Threat**
**Inside site, extent of threat not known**
**Outside site**

Several introduced animal species are present in the property, including European red deer, wild boar, European hare and feral livestock, including cattle and sheep but also predators like feral cats and dogs. The introduced American mink is known for major impacts on avifauna through nest predation and spreading of organisms across water bodies. With regards to feral livestock, concerns also relate to potential disease interactions with wild animal populations, as well as potential human health risks (IUCN, 2017). While some of these concerns are significant, overall the threat from invasive animal species to the Outstanding Universal Value of the property currently remains low.

### ► Invasive Non-Native/ Alien Species

**Low Threat**
**Inside site, widespread(15-50%)**
**Outside site**

The freshwater systems within the property have suffered from past introductions of several non-native trout and salmon species. Native species are known to be impacted by both predation and competition besides more complex habitat alterations (IUCN, 2017).

### ► Dams/ Water Management or Use

**Low Threat**
**Outside site**

A dam is located within the Los Alerces National Reserve which was built in the 1970s and therefore significantly predates the inscription. The infrastructure has significantly changed the visual integrity and ecology of a considerable part of the property (IUCN, 2017), with the reservoir areas

extending into the Los Alerces National Park and even more significantly into the Los Alerces National Reserve which had been originally proposed as part of the nominated area, but was included in the buffer zone of the property by the World Heritage Committee Decision (World Heritage Committee, 2017). Considering that this infrastructure predates the inscription, the current level of this threat is assessed as low; however, IUCN in its evaluation of the nomination noted that “such large infrastructure development overall is a significant negative impact on integrity, and would clearly be inappropriate if proposed as a new activity in any natural World Heritage Site” (IUCN, 2017).

### ► Habitat Shifting/ Alteration, Droughts, Temperature extremes

**Low Threat**
**Inside site, throughout(>50%)**
**Outside site**

Some effects of climate change have already been observed in the broader northern Patagonia region, including decrease in recorded rainfall, increased flammability in vegetation areas of medium productivity (shrublands) and retreat of glaciers (State Party of Argentina, 2016). However, overall current impacts on the Outstanding Universal Value of the property remain low, though monitoring is recommended based on the overall glacier melting potential in the larger region.

## Potential Threats

**Low Threat**

Wildfires have previously been recorded within the property (IUCN, 2017). Although currently not considered a significant threat, they might become one if their frequency and intensity increases, also in association with growing visitation.

### ► Fire/ Fire Suppression

**Low Threat**
**Inside site, scattered(5-15%)**
**Outside site**

Wildfires have previously been recorded within the property (IUCN, 2017). Although currently not considered a significant threat, they might become

one if their frequency and intensity increases, also in light of high visitation.

### ► Habitat Shifting/ Alteration, Temperature extremes

**Low Threat**
**Inside site, throughout(>50%)**
**Outside site**

Potential displacement of forest boundaries and habitat shifting due to climate change have been recognised as some of the most important threats in the nomination dossier (State Party of Argentina, 2016). On the other hand, the fact that the property includes a complete environmental gradient represents a significant contributing factor to the resilience of the property against future impacts of climate change (State Party of Argentina, 2016).

### ► Water Pollution

**Low Threat**
**Inside site, scattered(5-15%)**

Increasing use of oil-powered boats in the Arrayanes and Futaleufú Rivers, although forbidden, is regarded as potentially threatening to the fragile underwater ecosystem.

## Protection and management

## Assessing Protection and Management

### ► Relationships with local people

**Some Concern**

A total of 209 permanent and temporary residents (according to a 2012 census) live in Villa Futalaufquen (State Party of Argentina, 2016), which is the only settlement in the Los Alerces National Reserve, included as the buffer zone of the property. During the evaluation mission, a very high percentage of residents expressed an overall sense of excessive restrictions with regards to the Los Alerces National Reserve and a lack of opportunities to influence or be considered in decision making (IUCN, 2017). Some longstanding land claims over some areas within the National Reserve also remain unresolved. Therefore, while the majority supported the nomination

of the Los Alerces National Park, they opposed the inclusion of the National Reserve as part of the nomination (IUCN, 2017). Since the World Heritage Committee decided to inscribe only the National Park as the World Heritage property and to include the National Reserve as its buffer zone (World Heritage Committee, 2017), it is hoped that some of these tensions will be resolved in the near future as they may also be influenced by other commercial interests such as housing. Some good examples of collaboration between the park management and local businesses (e.g. management of sports fishing in the reserve, lodging) can be further documented and replicated.

### ► Legal framework

**Mostly Effective**

Legal protection of the property is provided by Decree No. 105,433 of 1937, endorsed by National Law No. 13,895/37 and National Law No. 19,292/71 (State Party of Argentina, 2016). The area has National Park status, one of the three categories of maximum protection regime in Argentina.

### ► Enforcement

**Mostly Effective**

The level of enforcement in relation to development activities in the National Reserve is considered good overall, though there are a number of isolated cases of non-compliance due to the land-tenure conflict (IUCN, 2017). Also, tourism visitation exceeds the management and control capacity of staff during summer, especially with the soon-to-be paved road that will allow constant and rapid movement from one area to another.

### ► Integration into regional and national planning systems

**Mostly Effective**

Some parts of the property comprise the core zones of the Andino Norpatagónica Biosphere Reserve, which is undoubtedly the most significant effort to bring together several protected areas and surrounding lands on the Argentine side of Northern Patagonia under a coherent umbrella (IUCN, 2017). However, challenges to integrate the federal and state visions on management remain, although significant scientific data exist on landscape connectivity within the larger Patagonia region both in Argentina and Chile

(Premoli et al., 2004).

### ► Management system

**Highly Effective**

The property is part of the federal park system centrally managed by the National Parks Administration (APN), recently attached to the Ministry of Environment. Los Alerces is well equipped both in infrastructure and personnel to undertake monitoring and control activities, despite the increasing pressures and the normal maintenance needs; it is probably one of the best equipped parks in southern Argentina with an outstanding group of rangers and fire-control personnel within the APN (IUCN, 2017). The management plan complies with the national guidelines and is currently being updated.

### ► Management effectiveness

**Mostly Effective**

Los Alerces National Park has systematically applied management effectiveness assessments based on national guidelines (Management Effectiveness Methodology – MEG) developed under the WCPA framework and the recommendations of former studies (Rusch, 2002). 2011 and 2012 assessments for all the areas in the Patagonia region were undertaken and conclusions include that the Los Alerces National Park falls within the global average value, with several aspects showing room for improvement including public use and natural heritage. A new cycle of evaluation was initiated immediately before the inscription in 2016 aimed at providing recommendations for the updating of the management plan, where significant improvement was denoted.

### ► Implementation of Committee decisions and recommendations

**Data Deficient**

In its Decision 41COM 8B.8, the World Heritage Committee requested the State Party of Argentina “to carefully monitor the operations and impact of the Futaleufú Dam, reservoir and associated infrastructure to avoid, and/or mitigate adverse impacts on Outstanding Universal Value, and to ensure that ongoing routine maintenance or any planned upgrades are subject to rigorous prior environmental and social impact assessment” and “in

cooperation with the State Party of Chile as appropriate, to consider the potential future extension of the property to include additional areas along the ecoregional corridor of the Andino Norpatagónica Biosphere Reserve that would enhance the conservation of the natural values of the Valdivian Temperate Forests and associated habitats of the ecoregion as a whole" (World Heritage Committee, 2017). However, it is too early to evaluate the response to these requests.

### ► Boundaries

**Mostly Effective**

The original nomination included two adjoining protected areas – the Los Alerces National Park and the Los Alerces National Reserve. However, in its evaluation IUCN recommended that the National Reserve be included as part of the buffer zone and not as part of the World Heritage property, due to the fact that its natural integrity has been more significantly affected by past and current threats (IUCN, 2017). The World Heritage Committee followed this advice and inscribed only the National Park as the World Heritage property and the National Reserve as its buffer zone (World Heritage Committee, 2017).

### ► Sustainable finance

**Mostly Effective**

The park has a steady budget allocated by the central government and in correspondence to the park's revenue. Although some specific needs are still to be fulfilled (e.g. patrol cabin maintenance, vehicle renewals, etc.), the overall financial situation is assessed as relatively good.

### ► Staff training and development

**Mostly Effective**

The Argentinian staff development programme is most likely one of the best in the world and in the region. Access to capacity development activities is secured as staff can register for international courses (yet to be studied for financing) and other local opportunities; the well-known Ranger School sits within the region near Nahuel Huapi where rangers can access it more easily; however, budget and personnel limitations still pose a challenge to broaden

opportunities.

### ▶ Sustainable use

**Mostly Effective**

The only use within the national park is tourism; on the contrary, the National Reserve, which forms the buffer zone of the property, allows livestock grazing, which is well regulated, but its effects on plant species need to be closely monitored (IUCN, 2017).

### ▶ Education and interpretation programs

**Highly Effective**

Los Alerces National Park has a specific department for environmental education, oriented mainly to education and interpretation for visitors; there are a number of alliances with tourism lodge owners, operators and interpreters, all being trained by the park staff on the main values of the property as well as on information protocols to reinforce monitoring of the threats in the park.

### ▶ Tourism and visitation management

**Mostly Effective**

The property has adequate infrastructure (e.g. trails, cabins), materials and vehicles to allow rangers a fairly good control of tourism. However, the high season is especially challenging as tourists move from one area to the other without time restrictions, since the only control points are the entrances. The heavy demands placed on staff during these peak visitation times leave little time for other activities like biological monitoring. More control cabins are needed and better control of the carrying capacity, currently controlled by entrance and lodging records.

### ▶ Monitoring

**Mostly Effective**

There is ongoing monitoring of both land areas and rivers throughout the year, depending on the season. Patrols are organised by the management and the transects change frequently. Monitoring will be specifically included in the updated management plan for follow-up, but it is currently assessed

through the management effectiveness evaluation.

▶ **Research**

**Highly Effective**

There is an impressive amount of research by private institutions, academia and NGOs both in the region and at the national level. The park has a protocol/guidelines related to research within the area, closely linked to the conservation objectives and particularly to the millennial forest, small and large mammals, fish (native and invasive species) and valuation of services.

### Overall assessment of protection and management

**Mostly Effective**

The property is overall effectively managed thanks to adequate human and financial resources and despite growing pressures from increasing visitation and other threats, such as fires. The property is considered one of the best equipped parks in southern Argentina with an outstanding group of rangers and fire-control personnel. Management effectiveness evaluations have been undertaken a number of times and the management plan for the property is currently being updated following the most recent management effectiveness evaluation undertaken in 2016.

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

**Some Concern**

Although most of the threats occur specifically within the property boundaries, migration and visitation policies in nearby communities are rapidly increasing the pressure on the park.

## State and trend of values

### Assessing the current state and trend of values

#### World Heritage values

### ► Majestic natural landscape

**Good**
**Trend:Stable**

The property was inscribed on the World Heritage List in 2017 and at that time its values were considered to be in a good and stable condition (IUCN, 2017; World Heritage Committee, 2017).

### ► Globally important undisturbed areas of Patagonian Forest with elements of Valdivian Temperate Forest

**Good**
**Trend:Stable**

The property was inscribed on the World Heritage List in 2017 and at that time its values were considered to be in a good and stable condition (IUCN, 2017; World Heritage Committee, 2017).

## Summary of the Values

### ► Assessment of the current state and trend of World Heritage values

**Good**

**Trend: Stable**

The property was inscribed on the World Heritage List in 2017 and at that time its values were considered to be in a good and stable condition (IUCN, 2017; World Heritage Committee, 2017).

### ► Assessment of the current state and trend of other important biodiversity values

**Good**

**Trend: Stable**

The population of south Andean deer or huemul (Hippocamelus bisulcus, EN) living in the Los Alerces National Park is considered extremely important for the conservation of the species in the Andean-North Patagonia region, and is considered to be in good condition and stable. The ongoing monitoring programmes within the framework of the ‘APN Huemul Conservation Programme’ show that the population includes fawns and juveniles, which

suggests that if their living space is not limited, the population is in a condition to expand (State Party of Argentina, 2016). The other biodiversity values of the property are considered to be in good condition and stable.

## Additional information

### Benefits

#### Understanding Benefits

- **Health and recreation, Outdoor recreation and tourism**
- **Contribution to local economy, Direct employment, Tourism-related income, Provision of jobs**
- **Environmental services, Carbon sequestration**

# REFERENCES


| № | References |
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