IUCN Conservation Outlook Assessment 2014 (archived)
Finalised on 23 August 2014

Please note: this is an archived Conservation Outlook Assessment for Shirakami-Sanchi. To access the most up-to-date Conservation Outlook Assessment for this site, please visit https://www.worldheritageoutlook.iucn.org.

Shirakami-Sanchi

SITE INFORMATION

Country: Japan
Inscribed in: 1993
Criteria: (ix)

Site description:

Situated in the mountains of northern Honshu, this trackless site includes the last virgin remains of the cool-temperate forest of Siebold’s beech trees that once covered the hills and mountain slopes of northern Japan. The black bear, the serow and 87 species of birds can be found in this forest. © UNESCO
SUMMARY

2014 Conservation Outlook

Good

The World Heritage values of the site are well protected, few significant threats are evident and so the conservation outlook is good. There are never-the-less some identified issues that need to be addressed, particularly exploring opportunities for further enhancing the integrity of the site and for its potential extension.

Current state and trend of VALUES

Low Concern
Trend: Stable

It is apparent that the wilderness condition of the virgin beech forests in the property as listed is being well maintained. Ecologically, the beech forests include the full ecological diversity including some larger mammals (bear and serow) and a threatened species of bird (black woodpecker). Whilst their presence in the property has been maintained, there is concern that their maintenance is dependent on the contribution made by suitable habitat in surrounding forests and that on-going forestry operations in those forest represent a longer-term threat to the ecological integrity of the property.

Overall THREATS

Very Low Threat

Shirakami-Sanchi is remarkably free of current threats and potential threats remain either very low threats or data deficient. The forest environment of the site appears stable and not the subject of any immediate threats. The topographic constraints of the site, local community support and the support of the wider community auger well for the current stable condition being maintained.
**Overall PROTECTION and MANAGEMENT**

**Effective**

Overall, the protection and management regime has to date effectively protected the ecological and wilderness condition of the site. Notwithstanding, there are some issues that deserve attention and there are some opportunities for improving the integrity of the site and fine-tuning management. The extent of the property deserves to be reviewed for possible extension and the management system deserves to be streamlined.
FULL ASSESSMENT

Description of values

Values

World Heritage values

► Remnant old growth temperate forests
  Criterion:(ix)

  The property comprises a wilderness area of predominantly oldgrowth temperate forest, the largest remaining virgin beech forest in East Asia. It is the last and best remnant of the once more extensive cool-temperate beech forests that have covered the hills and mountain slopes of northern Japan since eight to twelve thousand years ago. Shirakami-Sanchi is dominated by beech accompanied by diverse vegetation that escaped simplification during the earths’ glacial stages by shifting its distribution towards the south, resulting in a virtually undisturbed, pristine climax wilderness forest. The property covers approximately one third of the Shirakami mountain range and comprises a maze of steep sided hills and summits. The undisturbed wilderness condition of the area is wild and rare in eastern Asia with no other protected area in Japan containing a large unmodified beech forest like that found in the property. The extent of its pristine forest without extrinsic development sets the property apart in densely populated, long-inhabited Japan and across Asia (SoOUV, 2013).

► The last relic of cool-temperate beech forests of Northern Japan with associated species
  Criterion:(ix)

  The property is the last and best relic of the cool-temperate beech forests that once covered northern Japan. A member of the genus dominant in cool-
temperate forests in the northern hemisphere, Siebold’s beech (Fagus crenata) comprises the mono-specific canopy and the forest contains the main species of the ecosystem including black woodpecker (Dryocopus martius), Japanese serow (Capricornis crispus), Japanese black bear (Ursus thibetanus japonicas), Japanese macaque (Macaca fuscata) and dwarf bamboo (Sasa kurilensis) (SoOUV, 2013).

Other important biodiversity values

▶ Scenic forested mountain landscape

Walking tracks provide opportunities for viewing extensive forested mountains in wilderness condition. The scenic attributes of dense intact forest are enhanced in winter with a usually very abundant snow cover on the main mountain range. Several impressive waterfalls add to the scenic beauty of the property.

Assessment information

Threats

Current Threats

Low Threat

The only identified current threat is on-going forest logging operations in adjacent forested lands. These have some impact on visual qualities associated with the property but more importantly, compromise any future expansion of the property/protection into the adjoining forests.

▶ Logging/ Wood Harvesting

Low Threat

Outside site

There are some reports of forestry operations in adjacent forests having a
visual impact on the Shirakami landscape. (Law 2011)

**Potential Threats**

**Very Low Threat**

There is considerable uncertainty about the identified potential threats but never the less it is important to periodically review these in case predictability can be refined. Climate change is regarded as one of the most important potential threats. The future ecological integrity of the site could be threatened by changes in landuse of adjacent forest lands.

► **Flight Paths**

**Very Low Threat**

**Inside site**

Previously a problem but Japanese parliament banned flights. Reversal of policy could reinstate this threat to the wilderness qualities of the property. (Law 2011)

► **Hyper-Abundant Species**

**Low Threat**

**Outside site**

Deer is currently absent from the site, however, the populations in other areas have been increasing and distribution range is approaching the site. Monitoring is ongoing and possible options in case of increasing population are being discussed.

► **Earthquakes/ Tsunamis**

**Very Low Threat**

**Inside site**

**Outside site**

All of Japan is vulnerable to the frequent earthquakes. Shirakami is in a region less prone to earthquakes but it remains vulnerable. In a steep mountain landscape with high rainfall, landslides are the most likely impact of any earthquake. (Google Earth records) Earthquakes are of course part of the natural processes operating in this landscape.
Temperature changes

- **Data Deficient**
- **Inside site**
- **Outside site**

The very high rainfall and snowfall that dominates the climate of Shirakami Sanchi is driven by the warm current up the west coast of this section of Honshu. Any change in the temperature or behaviour of the current could have significant threats to the existing ecology of the property. Some models forecast that beech distribution will shift to higher elevations. (Yoshida quoted in Law 2011)

Tourism/ visitors/ recreation

- **Very Low Threat**
- **Inside site**

Whilst there is not presently any proposal for significant expansion of tourism in the site, such development could represent a threat to some values of the site.

Protection and management

Assessing Protection and Management

- **Relationships with local people**
  - **Effective**

Reports suggest an effective relationship with local people having played a role in establishment of the property. Local people are now reported to be dissatisfied with the benefits from the site. (IUCN Evaluation 1993, Law 2011, IUCN consultation 2013)

- **Legal framework and enforcement**
  - **Highly Effective**

The legal framework appears adequate (IUCN 1993).
Integration into regional and national planning systems
  Data Deficient

Management system
  Effective

Management of Protected Areas in Japan involves a number of Government Ministries, Agencies and the relevant Prefectures. This results in a complex management system but it functions well with strong links, communication and cooperation. The entire property of Shirakami-Sanchi is part of the national forests owned and managed by the National Government. The managing authorities of these protection systems; the Ministry of the Environment, the Forestry Agency and the Agency for Cultural Affairs, jointly formulated the Shirakami-Sanchi World Heritage Area Management Plan in 1995. (SoOUV, 2013).

Management effectiveness
  Highly Effective

Management appears to be very effective in maintenance of ecological and wilderness conditions of core area. (various references in Law 2011, IUCN consultation)

Implementation of Committee decisions and recommendations
  Highly Effective

The one decision of the Committee post listing, invitation to host a mission, was implemented. (UNESCO WHC website 2014)

Boundaries
  Some Concern

Boundaries are acceptable for the most part but there are definite opportunities for improvement and for extension of the property. (Law 2011, IUCN Consultation 2013) The relative small size of the property could in time be a threat to the ecological integrity of the site, especially larger mammals such as bear, depending particularly upon land use of surrounding forests.
Sustainable finance

Effective

Finance appears limited but adequate. (IUCN consultation, 2013)

Staff training and development

Effective

Appears adequate (IUCN consultation, 2013, Law 2011).

Sustainable use

Highly Effective

Use of the property appears to be sustainable.

Education and interpretation programs

Highly Effective

Offsite education and interpretation is very good (Law 2011).

Tourism and interpretation

Effective

On site tourism is limited both by management controls and the limited opportunities available in the mainly untracked wilderness property. (Law 2011, IUCN Consultation 2013)

Monitoring

Data Deficient

There are reports of active monitoring exercises within the property but no information is available in documentation about whether that monitoring is systematic and linked to review of management.

Research

Effective

The Shirakami-Sanchi World Heritage Area Scientific Council, comprised of
experienced scientists, was set up in 2010 and the Scientific Council is promoting the adaptive conservation management of the property and ensuring that management decisions are made within the context of the latest scientific knowledge available (SoOUV, 2013).

**Overall assessment of protection and management**

**Effective**

Overall, the protection and management regime has to date effectively protected the ecological and wilderness condition of the site. Notwithstanding, there are some issues that deserve attention and there are some opportunities for improving the integrity of the site and fine-tuning management. The extent of the property deserves to be reviewed for possible extension and the management system deserves to be streamlined.

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

**Effective**

The one case of a perceived threat from outside the property - clear fall logging in adjacent forest - appears not to have been effectively resolved because of jurisdictional constraints (Forest Agency land). There are no serious internal threats to the integrity of the property but there are clear opportunities to improve the long-term ecological integrity, especially ecological integrity for larger animals and black woodpecker.

► **Best practice examples**

Notwithstanding the small size of the property, it does demonstrate an exceptional commitment to wilderness protection that has been totally effective in protection of the wilderness condition for the twenty years since inscription.
State and trend of values

Assessing the current state and trend of values

World Heritage values

► Remnant old growth temperate forests
   Good
   Trend: Stable

   The property comprises a wilderness area of predominantly oldgrowth temperate forest, the largest remaining virgin beech forest in East Asia. All reports indicate that the wilderness condition has been maintained. (Law 2011, IUCN consultation 2013)

► The last relic of cool-temperate beech forests of Northern Japan with associated species
   Low Concern
   Trend: Stable

   The property is the habitat of rare bird species such as the black woodpecker (Dryocopus martius), and large mammals such as the Japanese serow (Capricornis crispus) and Japanese black bear (Ursus thibetanus japonicas), which require a diverse forest environment including old-growth forest. There is some concern, given the small size of the property, that it does not provide adequate protection for these species. (Law 2011)

Other important biodiversity values

► Scenic forested mountain landscape

   Walking tracks provide opportunities for viewing extensive forested mountains in wilderness condition. The scenic attributes of dense intact forest are enhanced in winter with a usually very abundant snow cover on the main mountain range. Several impressive waterfalls add to the scenic beauty of the property.
Summary of the Values

► Assessment of the current state and trend of World Heritage values
  Low Concern
  Trend: Stable

It is apparent that the wilderness condition of the virgin beech forests in the property as listed is being well maintained. Ecologically, the beech forests include the full ecological diversity including some larger mammals (bear and serow) and a threatened species of bird (black woodpecker). Whilst their presence in the property has been maintained, there is concern that their maintenance is dependent on the contribution made by suitable habitat in surrounding forests and that on-going forestry operations in those forest represent a longer-term threat to the ecological integrity of the property.

► Assessment of the current state and trend of other important biodiversity values
  Low Concern
  Trend: Data Deficient

Walking tracks provide opportunities for viewing extensive forested mountains in wilderness condition. The scenic attributes of dense intact forest are enhanced in winter with a usually very abundant snow cover on the main mountain range. Several impressive waterfalls add to the scenic beauty of the property. The main reference to any threat that might impair the outstanding scenic attributes of the property is the reports of visually significant logging operations outside but in view of and associated with the property. (Law 2011)

Additional information

Key conservation issues

► Complexity of the management system
  National
The involvement of multiple agencies via a Liaison Committee to provide day-to-day operational management is unnecessarily complicated for such a small site. Management could be simplified and made more efficient by declaration of the property as a national park and management vested solely in the Dept of Environment.

▶ **Size/Ecological integrity of property**

**National**

The property is relatively small but is inhabited by larger mammals and some rare and threatened species. The concern is whether the property is of sufficient size and habitat composition to ensure long term ecological viability independent of surrounding forests that are open to on-going timber harvesting operations. There appear to be opportunities for expansion of the property to include additional old growth beech forest and additional habitat of important species like the black woodpecker.

**Benefits**

**Understanding Benefits**

▶ **Is the protected area valued for its nature conservation?**

The site was to be logged by Forest Agency Japan in 1980s, though local people insisted to protect the area for local ecosystem services and biodiversity. It is really a success story of nature protection in Japan.

▶ **Sacred natural sites or landscapes**

Wilderness is valued by Locals and Nationals and was the basis for initial protection of the area.

▶ **Outdoor recreation and tourism**

There is a low level of tourism to the property, limited to walking of the few designated trails. Better tourism development programmes would enhance benefits both for local and global communities.
Contribution to education

The two visitor centres provide an outstanding education service to visitors and through websites and publications, to the wider community.

Soil stabilisation

Much of the property is very steep and the forest cover provides a valuable soil stabilisation service.

Water provision (importance for water quantity and quality)

The pristine forest conditions serve a valuable service in maintenance of water quality.

Projects

Compilation of active conservation projects

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<tr>
<th>№</th>
<th>Organization/ individuals</th>
<th>Project duration</th>
<th>Brief description of Active Projects</th>
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<tr>
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Compilation of potential site needs

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<tr>
<th>№</th>
<th>Site need title</th>
<th>Brief description of potential site needs</th>
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<tr>
<td>1</td>
<td>Scoping study of the prospects for extension of the property to include additional forests of conservation importance.</td>
<td>Review of the threats has identified forest changes taking place in adjoining forests and some stakeholders consulted point to the desirability and opportunity for extensions, particularly to include habitat of the black woodpecker. There is also a case to be examined for inclusion of existing track-head facilities and other lands to provide additional tourism and recreation opportunities associated with but outside the wilderness zone of the property.</td>
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<td>2</td>
<td>N.A.</td>
<td>Study of the habitat conservation needs for the Black Woodpecker and the role that could be played by an extended Shirakami-Sanchi property. Documentation points to the desirability of adding additional black woodpecker habitat to the property.</td>
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### REFERENCES

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<tr>
<td>3</td>
<td>IUCN (1993) Shirakami Evaluation</td>
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<td>8</td>
<td>WHC (2003) Periodic Reporting Shirakami</td>
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