IUCN Conservation Outlook Assessment 2014 (archived)
Finalised on 15 June 2014

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

Shiretoko

SITE INFORMATION

Country:
 Japan
Inscribed in: 2005
Criteria:
(ix) (x)

Site description:
Shiretoko Peninsula is located in the north-east of Hokkaido, the northernmost island of Japan. The site includes the land from the central part of the peninsula to its tip (Shiretoko Cape) and the surrounding marine area. It provides an outstanding example of the interaction of marine and terrestrial ecosystems as well as extraordinary ecosystem productivity, largely influenced by the formation of seasonal sea ice at the lowest latitude in the northern hemisphere. It has particular importance for a number of marine and terrestrial species, some of them endangered and endemic, such as Blackiston’s fish owl and the Viola kitamiana plant. The site is globally important for threatened seabirds and migratory birds, a number of salmonid species, and for marine mammals including Steller’s sea lion and some cetacean species. © UNESCO
SUMMARY

2014 Conservation Outlook

Good with some concerns

The values of the site are intact despite a number of external threats. The site enjoys sound legal protection, has adequate planning in place and sufficient resources to address issues of concern. The State Party have adopted a range of active management interventions and continue to adapt management to accommodate changing circumstances. Of concern is the lack of clear data on the conservation status of some species within the site such as Steller Sea Lions. Notwithstanding the regional population showing signs of increase it is concerning that deterrent measures have not been effective and culling continues within the property to mitigate conflict with local fishers. Similarly it is important that efforts continue to improve coordination between countries involved in commercial fishing to achieve sustainable marine stocks including critical species such as Walleye Pollock. Of more significant concern is the potential impact of climate change on the sea-ice dynamics and ecosystem productivity which are a central part of the site’s OUV. Improved research and monitoring is recommended to better understand the nature of the existing threats and emerging trends.

Current state and trend of VALUES

Low Concern
Trend: Stable

It appears, based on some initial monitoring, that the modification and partial removal of some dams have increased the amount of spawning upriver. However, observation during a site visit by members of the IUCN Salmonid Specialist Group during Spring 2013 indicated the dams are still negatively affecting stream habitat for salmonids, and overall salmonid abundance remains low. The presence of dams is preventing natural channel braiding and impeding ground water flow. The culling of the Steller Sea Lions by the fishing industry needs to be carefully monitored so that there continues to be an increase in the
numbers of this species. Cooperation between the governments of Japan, China and Russia, whilst being voluntary, is in place. The need for this to be ongoing is crucial in controlling the numbers of Walleye Pollock that are harvested in and around the waters of the site. Control of the invasive Sika Deer populations is taking place in conjunction with the rest of Hokkaido. Whilst all of these programmes are successfully achieving their outcomes, it remains critically important that the continuation of all of these strategies remains in order to protect the World Heritage values for this site.

**Overall THREATS**

*High Threat*

A range of threats currently exist for the site centred on fishing and related culling impacting on indicator species like Steller Sea Lions and Walleye Pollock. In addition fishing and river dam infrastructure is impacting salmonid life cycles, population health and the integrity of the stream habitat. The State Party has implemented programmes to monitor key species populations and is undertaking a number of management interventions. However, both the Steller Sea Lions and Walleye Pollock populations are dependent on financial considerations and political factors outside the control of the site. The development of a successful ecotourism industry poses a potential threat but with adequate planning and monitoring, should have minor impact on the values at the site. Climate change has a significant potential to impact on the site’s OUV especially related to sea-ice dynamics. Climate changes will need to be monitored over the long-term and adaptive management strategies put into place.

**Overall PROTECTION and MANAGEMENT**

*Some Concern*

The State Party continues to build upon measures in place to protect and manage the site. There is an improvement in effective cooperation between agencies. The Regional Liaison Committee and Scientific Council have set up a governance framework as a workable collaborative vehicle for management. The 2009 update of the overall Management Plan (Management Plan for the Shiretoko World Natural Heritage Site) has strengthened integration of marine and terrestrial components and provides for an appropriate management planning framework. Included as sub-plans are Sika Deer Management and Multiple Use Marine Areas which provide more detailed planning frameworks.
There have been measures now taken to improve the condition of wild salmonids at the site, including modification and partial removal of some dams, a removal of a hatchery facility on the Rusha River, and investment in some monitoring of salmonid spawning in the Rusha River. However, more action and monitoring still need to be carried out. The management of marine resources relies on a number of factors. The first is the continued collaboration between Japan, Russia and China to develop joint planning and sustainable fishing agreements which can be monitored to ensure on-going conservation of marine stocks. The culling of Steller Sea Lions has been carried out through a quota system since 1994. Since 2006 there has been no data to show the numbers culled or the population trends of the Steller Sea Lions within the site. The adoption of a quarterly management method, with additional data should provide a better assessment of the impact of annual culling.
FULL ASSESSMENT

Description of values

Values

World Heritage values

► Outstanding example of the interaction of marine and terrestrial ecosystems
  Criterion:(ix)

Shiretoko provides an outstanding example of the interaction of marine and terrestrial ecosystems as well as extraordinary ecosystem productivity, largely influenced by the formation of seasonal sea ice at the lowest latitude in the northern hemisphere, occurring earlier here than in other sea ice areas. Phytoplankton develops on the nutrients supplied by the sea ice. Phytoplankton is the primary producer in the marine ecosystem, and thus is the essential source of food in the food chain for krill and zooplankton, then small fish, crustacea and shellfish. These in turn become food sources for the marine and terrestrial species. (IUCN Evaluation, 2005; SoOUV, 2013)

► Extraordinary ecosystem productivity
  Criterion:(ix)

The sea ice contributes to the high productivity of the ecosystem due to the double-layered water structure of the Sea of Okhotsk, with the surface and lower layers of the water having a large difference in salinity; limited exchange of sea-water with the open sea, maintaining the layers; and cold air from Siberia providing a chilling effect on the sea-water. (IUCN Evaluation, 2005)
Important habitat for both marine and terrestrial species, a number of which are threatened or endangered
Criterion:(x)

The site is an important habitat for a number of endangered and endemic species. Combining northern species from the continent and southern species from Honshu, the property supports a range of animal species. Shiretoko is globally important for a number of salmonid species and for a number of marine mammals, including the Steller Sea Lion (Eumetopias jubatus), which is endangered on the IUCN Red List of Threatened Species; Walleye Pollock (Theragra chalcogramma) and a number of cetacean species. The site is an Important Bird Area (Birdlife International, 2004) in recognition of its significant habitat for globally threatened sea birds and its importance to migratory birds. There have been 264 species of birds recorded on the Peninsula with nine of these species listed on the IUCN Red List of Threatened Species including Blakiston’s Fish Owl (Ketupa blakistoni) and the plant species Viola kitamiana (IUCN Evaluation, 2005; WHC Decision 29COM, 2005; SoOUV, 2013).

Assessment information

Threats

Current Threats
High Threat

A range of current threats to the site have been identified, in particular to the protection of significant species which are declining in their numbers due to external impacts. These threats include the continued culling of Steller Sea Lions exacerbated by insufficient data to adequately assess the outlook for the population within and adjacent to the site; dams and other water control infrastructure that is impeding salmonid life cycles; and uncoordinated and unsustainable fishing practices between China, Japan & Russia thereby impacting on key species such as Walleye Pollock. All of these threats have programmes to monitor and improve their individual situations and whilst all
have shown improvements, if the strategies are not continued, the threats to these species will increase significantly. Operations to control numbers of the invasive Sika Deer are ongoing. The State Party have committed to carefully monitoring all ongoing programmes. All have been shown to have made improvements; however, most of these are dependent on factors outside of the site and therefore may be tenuous in their long-term prospects.

► **Dams/ Water Management or Use**  
  **High Threat**  
  **Inside site**

13 dams originally constructed on 5 rivers within the site are slowly being removed. (SOC Report, 2008). Three years after modification, the status of 2 salmonid species (Pink salmon: Oncorhynchus gorbuscha and Chum salmon: Oncorhynchus keta) was monitored in relation to their upstream run and number of spawning beds. This was carried out on the Sashirui River; Chienbetsu River; Iwaubetsu River; and Rusha River. In all cases it was reported that the number of salmonid species’ spawning beds upstream from the constructions had increased. (State Party Report, 2012) Whilst the salmon hatchery on the Rusha river has been decommissioned, three dams that were constructed to protect the hatchery remain and are still impeding the migration of salmon to their spawning grounds and negatively impacting stream habitat. A visit during spring 2013 by two members of the IUCN Salmonid Specialist Group included an assessment of the current state of the river. It was concluded that progress was made, but substantially more still needs to be done (IUCN SSG 2013 Trip Report). The Shiretoko WHS is one of only a few places where wild salmon naturally spawn in Japan. Research has indicated that returns are very low compared to natural reference sites in the region. (IUCN Stakeholder consultation – IUCN SSC Salmonid Specialist Group, IUCN, 2012)

► **Fishing / Harvesting Aquatic Resources**  
  **High Threat**  
  **Inside site**  
  **Outside site**

In order to limit the number of Steller Sea Lions being culled the State Party has introduced the regulation of reinforced nets, use of deterrents and monitoring of catch limits. Monitoring Asian populations of Steller Sea Lions
has shown a slow recovery (1.2% increase p.a. since the early 1990s). Despite the slow recovery in regional populations, Sea Lions continue to be culled within and adjacent to the World Heritage site in accordance with quotas and guidelines set by the Hokkaido Fishing Coordination Commission. A new system for quarterly management introduced in October 2010 was introduced for a 5-year period. The new system, according to the State Party, allows for flexible management based on migration and damage conditions in the Hokkaido fisheries ground (State Party Report, 2012).

▶ **Fishing / Harvesting Aquatic Resources**  
**High Threat**  
**Inside site**

A Cooperation Program on sustainable use of ecosystems was signed between Japan and Russia in May 2009 in an effort to enhance cooperation and communication between the two countries to enable exchange of scientific information and to address issues of unsustainable harvesting of Walleye Pollock. The State Party reports that Walleye Pollock levels have not returned to pre-1989 levels however they have stabilised. Monitoring, legal regulation and voluntary management by fishing cooperatives continue. (IUCN SOC, 2012).

▶ **Livestock Farming / Grazing**  
**Low Threat**  
**Inside site**

The ongoing impact of Sika Deer grazing is being monitored by the Kushiro Nature Conservation Office. Furthermore the Sika Deer and Terrestrial Ecosystem Working Group is managing deer populations in accordance with the 2006 Sika Deer Management sub plan to manipulate population size through humane control programmes. These measures are being undertaken in collaboration with the Hokkaido government to achieve population control within the site and outside it but in areas bordering the site. (UNESCO, PR, 2011; IUCN SOC, 2012).

▶ **Temperature changes**  
**High Threat**
Inside site

Initial discussions have taken place involving the Kushiro Nature Conservation Office, the Hokkaido Regional Forest Office, and the Hokkaido Government through the Scientific Council in order to better understand climate change impacts on Shiretoko with particular reference to the significant risk to the sea ice. (State Party Report, 2012). Climate change impacts on sea ice dynamics need to be better integrated into broader natural resource monitoring programmes (IUCN SOC, 2012).

▶ Shipping Lanes

Very Low Threat

Inside site

The State Party reports that international shipping currently has a minimal impact upon the site’s values but the investigation of enhanced navigation systems by The Ministry of Land, Infrastructure, Transport and Tourism will be undertaken to determine the need for a Particularly Sensitive Seas Area (PSSA) (SP Report, 2012)

Potential Threats

Data Deficient

There are two main potential threats to the site. The first is the development of tourism and the impact of increasing numbers of visitors. At the present time there is a strategy being developed to manage the increase in visitor numbers whilst protecting the values of the site. This “Basic Plan on the Proper Use of the Apical Region of the Peninsula Zone of the Shiretoko National Park” sets out appropriate uses and policies, in relation to issues such as the management and maintenance of mountain trails and the regulation of boats to minimise impacts on seabird populations. (IUCN Mission, 2008).

The second potential threat arises from climate change. The long-term impacts of climate change should be assessed by development of a monitoring programme which identifies both long and short term impacts of climate change and specifically monitors parameters such as the extent of sea ice and the impacts on populations of key indicator species (IUCN Mission, 2008)
Tourism/ visitors/ recreation

Low Threat
Inside site

Tourism is an increasingly important issue with high season visitation in the summer months but an increasing number of tourists also visiting the property in winter, particularly to view sea ice. Tourism has increased significantly following inscription of the site. (IUCN Mission, 2008)

A Shiretoko Ecotourism Strategy was prepared in 2010 in an effort to foresee negative tourism impacts that may arise with an increase of visitors to the site. Its main aims are to protect natural values, stimulate local development and promote high-quality nature-based visitor experiences. (IUCN SOC, 2012)

Protection and management

Assessing Protection and Management

Relationships with local people

Some Concern

Periodic reporting from the State Party identifies relationships with tourists as only fair, but good with all key stakeholders.(UNESCO PR, 2011) Of ongoing concern is how effectively the conflict between the fishing industry and the culling of the Steller Sea Lions is being managed (IUCN SOC, 2012).

Legal framework and enforcement

Mostly Effective

The site is legally covered by a number of National laws and regulations, including the Nature Conservation Law (1972), the Natural Parks Law (1957), the Law on Administration and Management of National Forests (1951) and the Law for Conservation of Endangered Species of Wild Fauna and Flora (1992). The marine component of the site is managed in accordance with, among others, the Regulation of Sea Fisheries Adjustment in Hokkaido based on the Fisheries Law. (SoOUV, 2013). The lack of binding legislation and the reliance on collaboration between Japan, Russia and China is the only means at present of monitoring to ensure sustainable fishing agreements are in
place which enable on-going conservation of marine stocks (IUCN SOC, 2012).

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

   The Ministry of the Environment, the Forestry Agency, the Agency for Cultural Affairs, and the Hokkaido Government in collaboration, developed the Management Plan for the site and manage the site on the basis of the plan. A Regional Liaison Committee has been established to promote conservation management through collaboration and cooperation with the local community. Similarly a Scientific Council has been established and promotes adaptive conservation management that reflects scientific knowledge. (UNESCO PR, 2011)

▶ **Management system**
   **Mostly Effective**

   The State Party reports that the management system that is in place is fully adequate to maintain the site's Outstanding Universal Value. (UNESCO PR, 2011)

▶ **Management effectiveness**
   **Mostly Effective**

   The State Party reports that there is excellent coordination between all levels of administration involved in the management of the site, with management systems being fully implemented and monitored. (UNESCO PR, 2011)

▶ **Implementation of Committee decisions and recommendations**
   **Some Concern**

   The State Party is continuing to implement decisions and recommendations of the WHC, in particular its efforts to improve the management and protection of the site. The 2009 update of the overall Management Plan has strengthened integration of marine and terrestrial components and provides for an appropriate management planning framework. (IUCN SOC, 2012). The remaining areas that require further progress are: the ongoing conflict between the fishing industry and the culling of the Steller Sea Lions; the completion of removal of all dams on the rivers of the site to enable natural
salmonid spawning to be carried out unimpeded, particularly in the core area of the site including the Rusha River; the need for continued cooperation between Japan, China and Russia to ensure sustainable harvesting of the Walleye Pollock; control of Sika Deer populations in the site and the rest of Hokkaido, and continued efforts to address the issues of climate change’s impact on the site’s OUV. (IUCN SOC, 2012)

**Boundaries**

*Some Concern*

The terrestrial boundaries are logical and protect key terrestrial features while the marine boundaries extend 3 km from the shoreline, corresponding to a 200 m depth. (SoOUV, 2013) The protection of the Walleye Pollock, in the surrounding seas is dependent on cooperative efforts between Japan, China and Russia. (State Party Report, 2012)

**Sustainable finance**

*Some Concern*

100% of funding for the site comes from Governmental sources with 78% from National/Federal government; 10% from the Regional/Provincial/State level and 12% from the Local/Municipal level. The State Party reports that current funding is adequate but if improved would enhance management of the site. (UNESCO PR, 2011)

**Staff training and development**

*Some Concern*

The level of staffing (currently 86% are full-time employees) is below an optimum level to adequately manage the site, particularly in the field of education. Whilst there are some training opportunities for staff, there is at present no opportunities for local expertise to be developed. (UNESCO PR, 2011)

**Sustainable use**

*Serious Concern*

The negative impact of the fishing industry’s culling of the Steller Sea Lions, and the unsustainable harvesting of Walleye Pollock by Russia are both
current threats to the OUV of the site. The State Party reports that these impacts are being lessened due to on-going measures addressing these threats. (State Party Report, 2012).

**Education and interpretation programs**  
**Some Concern**

There appears to be limited education and awareness programmes in place. (UNESCO PR, 2011).

**Tourism and interpretation**  
**Some Concern**

The State Party reports that interpretative materials and displays provide ‘excellent’ awareness of the site, however it is doubtful that visitors to the site understand the global significance of the OUV of the site (UNESCO PR, 2011).

**Monitoring**  
**Some Concern**

There is ongoing monitoring of the areas identified by the WHC to ensure sustainability of Walleye Pollock, populations; monitoring of the level of culling of Steller Sea Lions, monitoring for increased salmonid spawning numbers and greater use of upstream reaches for spawning following dam removal, and levels of Sika Deer in the site. (State Party Report, 2012). There appears to be no general monitoring activities of OUVs of the site. (UNESCO PR, 2011).

**Research**  
**Some Concern**

There is ongoing research being undertaken at all levels by relevant administrative organisations, local governments, and related bodies, but none that is specific to management needs and/or improving the understanding of Outstanding Universal Value. (UNESCO PR, 2011)
Overall assessment of protection and management

Some Concern

The State Party continues to build upon measures in place to protect and manage the site. There is an improvement in effective cooperation between agencies. The Regional Liaison Committee and Scientific Council have set up a governance framework as a workable collaborative vehicle for management. The 2009 update of the overall Management Plan (Management Plan for the Shiretoko World Natural Heritage Site) has strengthened integration of marine and terrestrial components and provides for an appropriate management planning framework. Included as sub-plans are Sika Deer Management and Multiple Use Marine Areas which provide more detailed planning frameworks. There have been measures now taken to improve the condition of wild salmonids at the site, including modification and partial removal of some dams, a removal of a hatchery facility on the Rusha River, and investment in some monitoring of salmonid spawning in the Rusha River. However, more action and monitoring still need to be carried out. The management of marine resources relies on a number of factors. The first is the continued collaboration between Japan, Russia and China to develop joint planning and sustainable fishing agreements which can be monitored to ensure on-going conservation of marine stocks. The culling of Steller Sea Lions has been carried out through a quota system since 1994. Since 2006 there has been no data to show the numbers culled or the population trends of the Steller Sea Lions within the site. The adoption of a quarterly management method, with additional data should provide a better assessment of the impact of annual culling.

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

Some Concern

There are three main threats outside the site. The first is the culling of the Steller Sea Lions as a result of conflict with the fishing industry at the site and in surrounding seas. A balance between the protection of the species and the economic damage, (estimated at 1.2m USD p.a.) is being addressed with the introduction of a number of measures including the regulation of reinforced nets, use of deterrents and monitoring of catch limits, however, to date none have been completely effective in achieving co-existence between
fishing and Sea Lions. The second threat concerns the unsustainable harvesting of Walleye Pollock in the surrounding seas. The State Party reports on enhanced cooperation with the Russian Federation to address this issue with the signing of The Cooperation Program on sustainable use of ecosystems in May 2009. Since then, several joint workshops and symposiums have been held. In addition, a joint statement among researchers from Japan, China, and Russia was adopted and a researchers’ network: the “Amur Okhotsk Consortium”, has been established. According to The State Party, whilst Walleye Pollock levels have not returned to pre-1989 levels they have stabilised.

The third threat relates to the unknown impact of climate change on the OUV of the site. Whilst The State Party reports on a series of initial discussions through the Scientific Council to better understand climate change impacts on Shiretoko, further measures need to be undertaken to understand climate change impacts and assess vulnerability (IUCN SOC, 2012).

State and trend of values

Assessing the current state and trend of values

World Heritage values

▶ Outstanding example of the interaction of marine and terrestrial ecosystems

Low Concern

Trend: Stable

The former Management Plan of 2004 was revised in December 2009 and integrates terrestrial and marine management at a general level whilst dealing with specific issues and threats in sub plans. Each year the Scientific Council monitor the plan to ensure that the values of the site are not adversely affected. The recommendation to explore the obtaining of a Particularly Sensitive Sea Areas (PSSA) designation for the marine component of the property, with a view to giving it an added layer of protection, has been considered unnecessary at this stage as, according to the State Party, impacts of international shipping on the property’s values are currently minimal. (State
Extraordinary ecosystem productivity

**Data Deficient**

**Trend:** Data Deficient

The site’s OUV is directly related to the sea-ice that contributes to the high productivity of the ecosystem due to the double-layered water structure of the Sea of Okhotsk. Efforts to understand the impact of climate change on what is the southern-most occurrence of sea-ice, is unknown but could impact significantly on its vulnerability and therefore recommends that the State Party increase efforts to understand the impacts of climate change and create strategies to minimise its impact. (IUCN SOC, 2012)

Important habitat for both marine and terrestrial species, a number of which are threatened or endangered

**High Concern**

**Trend:** Improving

The revision of the management plan for the site was completed in 2009 and incorporated former stand-alone plans into one comprehensive plan. This Management Plan deals with all key management issues, including the removal of structures across rivers inhibiting the movement and spawning of Salmonids; the culling of the invasive species, Sika deer; the monitoring of population numbers of key indicator species like Walleye Pollock and Steller Sea lion. Nonetheless management interventions are having variable impact for example Steller Sea Lion deterrent methods have to date proven largely ineffective (SP Report, 2012). Observation during a site visit by members of the IUCN Salmonid Specialist Group during Spring 2013 indicated the dams are still negatively affecting stream habitat for salmonids, and overall salmonid abundance remains low. (IUCN SSG 2013 Trip Report).

Summary of the Values

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

**Low Concern**
Trend: Stable

It appears, based on some initial monitoring, that the modification and partial removal of some dams have increased the amount of spawning upriver. However, observation during a site visit by members of the IUCN Salmonid Specialist Group during Spring 2013 indicated the dams are still negatively affecting stream habitat for salmonids, and overall salmonid abundance remains low. The presence of dams is preventing natural channel braiding and impeding ground water flow. The culling of the Steller Sea Lions by the fishing industry needs to be carefully monitored so that there continues to be an increase in the numbers of this species. Cooperation between the governments of Japan, China and Russia, whilst being voluntary, is in place. The need for this to be ongoing is crucial in controlling the numbers of Walleye Pollock that are harvested in and around the waters of the site. Control of the invasive Sika Deer populations is taking place in conjunction with the rest of Hokkaido. Whilst all of these programmes are successfully achieving their outcomes, it remains critically important that the continuation of all of these strategies remains in order to protect the World Heritage values for this site.

Additional information

Key conservation issues

▶ Conservation of marine life and in particular the culling of the Steller Sea Lion and sustainable harvesting of Walleye Pollock

National

The Fisheries industry in the area exists in parallel with the conservation of marine life. The threatened and endangered species in particular need to be protected and monitored.

▶ Protection of salmonid species

Local

River constructions impact on the ability of these species to run upstream and spawn and prevent natural surface and ground water flow that negatively
affects spawning and rearing habitat for the species. The removal of these structures is important to facilitate movement of the species as well as improve their habitat, so long as there is no negative impact on the livelihoods of the locals.

▶ **Presence Of Sika Deer**

Local

Population density of the Sika Deer has a negative impact on the natural landscape on the entire peninsula and in places, significant changes to the original vegetation.

▶ **Ecotourism - management of numbers of tourists, vehicle use etc.**

Local

Ecotourism has been developed but needs to be monitored for numbers of visitors, use of private vehicles, shuttle buses etc., education of staff to protect the area from negative impact by visitors.

▶ **Climate Change**

Global

Climate Change may negatively affect the sea-ice at this lowest latitude in the Northern Hemisphere. The impact needs to be monitored and assessed.

**Benefits**

**Understanding Benefits**

▶ **Fishing areas and conservation of fish stocks**

The fishing industry linked to the site has been on-going for a considerable amount of time and according to the evaluation report, is a vitally important industry in the region. Sustainability within this industry will help to ensure valuable economic input to the region while attempting to safeguard conservation of the natural values.

▶ **Outdoor recreation and tourism**
Shiretoko is becoming increasingly popular with tourists in summer and more and more during the winter to view the sea-ice. The successful implementation of the ecotourism strategy will be the key to balancing tourism and conservation and capturing benefits. This strategy would incorporate protection of the natural values of the property, with high quality nature based experiences for visitors, thus providing a balance between local economic development and protection of the OUV of the site. Aside from economic benefit well managed tourism would contribute to education by informal dissemination of information and knowledge-sharing. There is currently little educative/interpretative material available.

Summary of benefits

The importance of a sustainable fishing industry at the site and in the surrounding waters is a major benefit within Japan as the industry sustains numerous local livelihoods. Finding a balance between traditional fishing practices and sustaining the flagship threatened species critical to guarantee this benefit. The scenic and cultural values of this area coupled with wildlife viewing and recreational opportunities should be realized through a sustainable ecotourism programme. Ecotourism could offset livelihood dependency on fishing.

Projects

Compilation of active conservation projects

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<th>Organization/individuals</th>
<th>Project duration</th>
<th>Brief description of Active Projects</th>
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<tr>
<td>1</td>
<td>Sika Deer Working Group (July 2004) Kushiro Nature Conservation Office Sika Deer and Terrestrial Ecosystem Working Group</td>
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<td>Formulated Sika Deer Management Plan in the Shiretoko Peninsula -Developing indicators for monitoring Sika Deer grazing impacts -Managing deer populations in accordance with the 2006 Sika Deer Management sub plan to manipulate population size through humane control programmes.</td>
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<td>2</td>
<td>River Construction Working Group (July 2005) The River Construction Advisory Committee (2009)</td>
<td>-Meetings held to determine impact assessment of 100 river constructions -to provide technical advice on construction work, and scientific advice on monitoring and evaluation</td>
<td></td>
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<td>3</td>
<td>Shiretoko Eco-tourism Association (2004) est. “Shiretoko Ecotourism Strategy” in 2010</td>
<td>Set up a plan whereby ecotourism would be developed in conjunction with locals. Its aims are to reduce impact on the local environment, control excessive use of the site and provide a high-quality experience. Establish common rules for guides and their employers.</td>
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## REFERENCES

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<th>No.</th>
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<td>IUCN (2012). Stakeholder Consultation</td>
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<td>9</td>
<td>UNESCO (2011) Periodic Reporting Section II Shiretoko UNESCO Paris, France</td>
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