Shiretoko

Outstanding Universal Value / Valeur universelle exceptionnelle

(ix) Ecosystem / Ecosystème

Productive interaction between terrestrial and marine ecosystems with unique sea ice characteristics Interaction productive entre les écosystèmes terrestres et marins sous l'effet des glaces marines

(x) Biodiversity / Biodiversité

Important area for maintaining the biodiversity due to the fact that northern and southern species coexist, and as a result a wide range of fauna and flora that include many rare and endemic species live here

Région importante pour le maintien de la biodiversité du fait de la coexistence d'espèces septentrionales et méridionales, qui permet une grande variété au niveau de la faune et de la flore, avec en particulier des espèces. rares et endémiques

The Sea Ice Sustains an Abundance of Life

The coastal areas of Shiretoko in the Sea of Okhotsk are located in the lowest latitude in the world where sea ice can form. The formation of sea ice promotes upwards and downwards convection in the ocean water by cooling the surface layer of ocean water, which raises the nutritive salts that accumulate at the lower levels of the sea up to the surface level. Once spring arrives, the surface layer is bathed in enough sunlight for photosynthesis, and phytoplankton proliferates explosively using nutritive salts. The vast quantities of plankton produced in this way form the starting point for the food chain that sustains the rich ecosystems of Shiretoko, linking the ocean, rivers and forests.



Sea ice seen from the bottom

Life Supported by Integrated Ecosystems of Ocean, Rivers, and



The ocean of Shiretoko fosters marine life such as plank ton, fish, seabirds, dolphins and whales. Salmon species such as chum salmon and pink salmon swim upstream from the ocean and serve as an important food source for brown bears and birds of prey. Fish that remain partially uneaten also provide food for animals like foxes, before finally being returned to the soil where they provide nourishment for the forests. In this manner, a dynamic food web that encompasses the ocean, rivers, and land has formed in Shiretoko. Moreover, at Shiretoko, northern and southern species coexist and intimately interact one another to form a rich ecosystem. It is also a crucial habitat for the survival of globally endangered birds, such as Blakiston's fish-owls, Steller's sea eagles, and white-tailed eagles.

Protection and Management of Shiretoko Protection du Patrimoine Naturel Mondial de Shiretoko

The World Heritage Committee has pointed out challenges confronting Shiretoko. These include countermeasures against Yezo sika (endemic subspecies of sika deer), tourism management, formulation of management plan for marine areas, and for salmon species to reduce impact by dams and develop countermeasures. The River Construction Advisory Committee, Marine Area Working Group (hereafter WG), Sika Deer and Terrestrial Ecosystem WG, Proper Use of Nature and Ecotourism review meetings, and others have been established under the Scientific Committee to address these issues.

Examples of Efforts / Exemples d'actions





Countermeasures against Yezo Sika Mesures contre la prolifération des cerfs sika d'Hokkaido

In recent years, there has been a sharp increase in Yezo sika within the World Heritage property, leading to effects on the ecosystem that include changes to the vegetation. In order to mitigate their impact, the Ministry of the Environment and others from the national government, as well as the relevant local governments have been controlling the deer population by harvesting, based upon the Sika Deer Management Plan in the Shiretoko Peninsula and advice from the Sika Deer and Terrestrial Ecosystem WG. In areas where population control is being carried out, it has been confirmed that the vegetation is gradually recovering.



The Elevated Boardwalk and the Regulated Utilization Areas Passerelle surélevée, système de zone à utilisation régulée

The walkways at Shiretoko Goko Lakes had problems including such examples as they were often closed on account of the frequent appearance of brown bears and the negative impact on vegetation resulting from visitor congestion. In order to resolve these issues, an elevated boardwalk that could be safely walked without the danger of coming into contact with brown bears was installed. In 2011, regulated utilization system was adopted pursuant to the Natural Parks Law. Visitors are required to apply for permission to go to the aboveground walkways during congested periods. Through these efforts, the mpact on vegetation is reduced while also natural landscapes and biodiversity are maintained.

Shiretoko Ecotourism Strategy

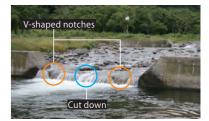
Stratégie ecotourisme de Shiretoko In 2013, the Shiretoko World Natural Heritage Site Proper Usage / Eotourism Investigative Commission prepared the Shiretoko Ecotourism Strategy. It aims at sharing future objectives for promoting tourism to Shiretoko and methods for achieving this among all of the stakeholders. The Strategy invites anyone to freely offer proposals on new tourism uses and the establishment of new rules so that more open local initiatives will be promoted.

Protected Areas in the Property	
Shiretoko National Park Special Protection Zone :	23,526 ha
Special Zone:	15,110 ha
Onnebetsudake Wilderness Area :	1,895 ha

(Under jurisdiction of MOE)

Balance between Maintaining Marine **Biodiversity and Fishing Activities** Maintien de la biodiversité dans les zones marines, équilibre avec les activités de pêche

The Multiple Use Integrated Marine Management Plan, which aims to reconcile the conservation of ecosystems with a sustainable fishing industry, was formulated in 2007 by the Ministry of the Environment and the Hokkaido Prefectural Government. Through this plan, *voluntary* restrictions by fishery operators" were incorporated into the management of the World Heritage property and a management style was achieved that strikes a balance between maintaining marine bio-



mprovement of river constructior Improving River Constructions Amélioration des constructions fluviales

On some of Shiretoko's rivers, salmon and other fish species could not swim upstream to spawn because of check dams, weirs, and other artificially constructed structures (river constructions). Therefore, based on the recommendations of the River Construction WG (currently River Construction Advisory Committee), improvement works were carried out such as by installing fishways for 13 river constructions for which improvements were deemed to be appropriate. As a result, the spawning ranges upstream of the constructions have expanded and the numbers of eggs produced have increased.