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| Country | Sweden |
| Region/Province or State | Norrbotten and Västerbotten county |
| Web Address | Vindelälvenjuhtadahka |
| Date founded | 2019 |
| Size (hectares) | 1 329 118 |
| Distinguishing features | Located in the Arctic, Vindelälven-Juhtátahkka straddles two biogeographical regions as defined by the European Union: the Alpine and Boreal regions. |
| Main industries (in terms of employment) | Forestry, service/commerce, tourism, reindeer husbandry, energy production and mining. |

Straddling the Arctic Circle, the Vindelälven-Juhtátahkka Biosphere Reserve includes large parts of the Vindelfjällen nature reserve, one of the largest in Europe. The northern part of the Biosphere Reserve is mountainous, forests cover its central part, while the south is a coastal area. The area is home to two distinct cultural communities, Swedish and the indigenous Sami people and their rich cultural traditions. Activities in Biosphere Reserve include mining, forestry, and reindeer husbandry, which enjoys official protection as a traditional activity of public interest. The Sami Parliament is officially responsible for ensuring that Sami interests are defended in spatial planning, while Samernas Riksförbund (SSR), the National Federation of Swedish Sami people, works more directly to support 'samebys' on planning issues. The Sami Parliament has, moreover, drawn up an action plan for Sami livelihoods and culture to deal with climate change.

Contents

Our history

Juhtát means movement. The River Vindelälven is one of Europe's last major free-flowing watercourses. When plans were drawn up in the 1960s for the construction of a series of hydroelectric power plants on the river, major opposition to the scheme was expressed locally, regionally and nationally - and in 1970 the Swedish government decided that the River Vindelälven should remain free-flowing. The involvement of people in opposing the

scheme grew into a movement in the area, which continued even after the plans for the expansion of power generation had been abandoned. The work to incorporate the area into UNESCO's World Network of Biosphere Reserves had its roots in this very involvement and in a broad, deep-seated desire to bring together the region and the people, from the mountains to the coast, to enable a long-term positive and sustainable development of the area.

The River Vindelälven as a migration route - Juhttáhka

The River Vindelälven and its adjoining lands present a route for people, plants and animals, in both directions between the mountains and the sea. The long journey with reindeer which mountain Sami communities make along the River Vindelälven between coast and mountain is unique and one of the longest livestock migrations known today. *Juhttáhka* means migration route in the Ume Sami language. Many other animals make similar, but shorter seasonal migrations. The area's trapping pits present a clear overall picture of where cloven-hoofed game has travelled, and research into elk (*Alces alces*) shows that cervids still have the same pattern of migration today. Many migratory birds stop over on the banks of the River Vindelälven on their way to or from the mountain region. The river itself is both the birthplace and the lifeblood of salmon and brown trout. They are born and grow up there, migrate as smolt to the Baltic Sea to mature, and then return to the place where they were born and grew up, in order to breed. The river is also an important dispersal route for the seeds of many plants and, because the river is free-flowing, many mountain plants can spread a long distance down into the forest region.

People have also used the river as a migration route since the ice sheet melted c. 9000 years ago. From the point of view of dialects and human interactions, people nowadays are more closely related within a river valley than between different river valleys. The Sami have followed the reindeer up and down the river, first to hunt them and then, several hundred years later, as reindeer herders, a practice which developed over time. When settlers began to colonize the area, the river was the obvious route into the interior and towards the mountains.

The area has a range of natural resources such as forests, minerals, and river water which, since the mid-1900s, have been of growing economic significance for Sweden. When the felling of forests in the interior of Västerbotten gathered momentum in the mid-1800s, the

river and its tributaries were used to float timber to saw mills and paper mills on the coast. Since timber flotation was discontinued on the River Vindelälven in 1976, the timber has been transported by roads which run along the valley.

In particular, rationalizations in agriculture and forestry have meant that many people from rural areas have left to seek jobs in towns and cities. One result was a change in the demographic structure in large parts of the area, with the proportion of older people increasing and that of younger people decreasing. In the work to create the Vindelälven-Juhttáahkka Biosphere Reserve, it has become clear that there is a strong wish that we should endeavour to make the whole area an attractive place to live, work and visit - to draw people to the entire area.

New energy along the River Vindelälven

Vindelälven-Juhttáahkka encompasses seven sameby reindeer grazing areas, extensive forestry, a growing tourist industry, agriculture, societies, small and large companies, energy production, ongoing mining and prospecting operations, as well as protected areas. There is also recreational space for rambling, hunting, skiing, fishing, berry and mushroom picking, etc. The strong involvement and interest in the river valley has led to a large number of development projects and internationally recognized research. By bringing together ongoing sustainability work and including all the area's different projects, research, interests and stakeholders, the planned biosphere reserve can serve as an instrument and an arena in which a common strategy is devised, with further investments in long-term sustainable development.

Vindelälven-Juhttáahkka is a unique biosphere reserve for Sweden, as there are currently no biosphere reserves in the country's alpine environments. The planned biosphere reserve contains high mountain environments, mountain heaths, and large continuous areas with undisturbed mountain forests. Vindelälven-Juhtatdahka also stretches through a boreal region with forests, bogs, lakes and watercourses. Closer to Bottenviken is the coastal region which has agricultural land and is where the Vindelälven-Umeälven river system flows into a unique delta area. The settlements along the river, in small and major communities, are characteristic and specific to the locality, with features of settler culture in coastal and forest regions; the Sami presence becomes more pronounced towards the west. There are local cultural expressions and customs, such as languages, dialects and craftwork. Vindelälven-Juhtatdahka therefore has a diversity of natural and cultural environments and values that are not represented elsewhere in the network of biosphere

reserves, either in Sweden or internationally.

Using the area's unique diversity of natural and cultural environments, people's involvement, ongoing initiatives, research, and existing strategies as a starting point, the planned biosphere reserve will enable us to find new energies and resources for the work that needs to be carried out, thereby putting the area on the world map, where it belongs. Everything looks set for a long-term sustainable development of Vindelälven-Juhtátahkka.

Focal areas in Vindelälven-Juhtátahkka Biosphere Reserve

In order to stimulate efforts to find local solutions to global challenges, work on achieving the first goal, 'a model area for sustainable development', has been divided into six focal areas of clear local relevance. Focal areas make it easier to overview the work and its priorities, while also providing a clearer way of communicating what is being done in the biosphere reserve.

These are the identified focal areas:

- Diversity of cultural expressions
- Tourism industry and outdoor life for everyone
- Thriving reindeer husbandry
- Fishing in flourishing lakes, watercourses and seas
- Development of the local community
- Living landscapes

Geography of the Biosphere Reserve

The Biosphere Reserve stretches, from the mountains to the coast, through the municipalities of Arjeplog, Sorsele, Malå, Norsjö, Lycksele, Vindelns, Vännäs and Umeå in the northern part of Sweden.

[**A GIS-map of the Biosphere Reserve**](#)

Ecological Characteristics

The entire landscape in the biosphere reserve has been sculpted by the inland ice sheet. The

area includes a large number of habitats and types of land use, either in a limited part of the area or in widely scattered locations. The mountains are often barren, inhospitable, demanding environments for vegetation, but their climate is stable throughout the year. However, in recent decades, mountain environments have been affected by ongoing climate change. The mountain heaths are home to low-growing alpine and subalpine vegetation of the type that is normally impacted by long-term grazing. Reindeer are the dominant grazing species in the barren mountain region, but grazing by small rodents also has an impact on mountain biotopes. Outbreaks of the autumnal moth are a prime disturbance in mountain birch forests. These forests stretch in a belt along the entire mountain chain and therefore constitute a relatively large and extensive forest type.

Socio-Economic Characteristics

Around 110,000 people live in Vindelälven-Juhtatdahka (Figure 3, Table 5). Of these, ca. 92.5 % live in the coastal area in the Vännäs and Umeå municipalities (2016, SCB). According to Statistiska Central Byrån, SCB, (Central Bureau of Statistics) the population density in 2016 was 0.33 people/km² in the mountain region (Sorsele and Arjeplog municipalities) and 1.27 people/km² in the forest area (Vindeln, Malå and Lycksele municipalities), whereas the coastal area had 123 people/km² (Vännäs and Umeå municipalities).

Forest and agricultural properties in villages are often privately owned. Because of urbanisation it is becoming increasingly common for the owners not to live in the villages, but many maintain strong links with their local villages. They use the forests, hunt, fish and spend some of their free time there. Most new incomers to the villages run small businesses, work via the Internet, or commute to work.

The development of the Vindelälven river valley for tourism and recreation began following the decision to maintain the river's free flow. In 1975, Vindelälven was designated as one of the country's 25 so-called primary recreation areas. The wish to further develop the river valley as a tourist and recreational area has been alive ever since. The tourism and service trades in the area are today directly dependent on functioning and active businesses and industries, as these quite simply create a demand for various types of service, overnight stays and restaurants. The tourism and service sectors have considerable growth potential through strengthened marketing of the area's rich natural environment as a basis for experiences.

More detailed information about the Biosphere Reserve can be read in the [application](#) to

[UNESCO's Man and the biosphere programme.](#)