

# THE UPPER DAUGAVA MEANDERS ON THE WAY TO THE WORLD HERITAGE NOMINATION

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**Abstract** In 2011 the UNESCO World Heritage Committee approved the Upper Daugava landscape area with nine impressive river meanders on the UNESCO Tentative List. This means that this area belongs to the UNESCO National Heritage. Although the protected landscape area “Augšdaugava” was established in 1991 and belongs to the NATURA 2000 network from 2004, the nature protection plan was designed only for the nature park “Daugavas loki” (2010–2022). The new protected Landscape nature protection plan (2023–2035) covers 52 098 ha, including the nature park “Daugavas loki”. The new protection plan presents the research results of EU habitat types, their quality, flora and fauna species lists, as well as the level of threats and challenges. Landscape planning, functional zonation and large programme of management activities are offered for Augšdaugava and Krāslava municipalities for the first time to promote tourism industry in future and protect the nature values. This area under UNESCO umbrella was nominated as mixed because of unique combination of nature, geology, long time history of different nations, their religion, culture. The nomination criteria are enriched both for nature and culture in a protection plan process, meaning that the scientific background is high and it is time to start the process to the nomination of the Upper Daugava and meanders to the UNESCO World Heritage list.

**Key words:** Upper Daugava and meanders, Nature protection plan, UNESCO criteria

## Introduction

The Upper Daugava valley with nine unique meanders (98 km from Piedruja to Daugavpils) is a depository of outstanding values of nature, biodiversity and landscapes reflecting also historical and cultural significance. This object represents a mixed – natural and cultural – world heritage value.

Nomination of the Upper Daugava and meanders as world heritage object according to the UNESCO methods consists of several stages. At first the nomination place should be recognized as UNESCO National nomination category with 5-year regularity assessment of the nomination place. The Tentative List is a tool and a pre-condition of the nomination of the site to the World Heritage List, only sites included on a State Party’s Tentative List can be nominated for inscription on the World Heritage List. Following a positive assessment by an international panel of experts, a World Heritage nomination is possible.

The Nature Management Plan for the Nature Park “Daugavas loki” 2010–2020, as well as information on the NATURA 2000 network in the region since 2004 were used as background material for the preparation of the national nomination. In 2018, according to the Nature Census project, financed by the EU Cohesions Fund, the first nature protection plan for the Landscape area “Upper Daugava” (“Augšdaugava”) and the nature park “Daugava meanders” (“Daugavas loki”) was elaborated as an integrated unit with different levels of protection (<https://www.daba.gov.lv>). Following EU guidelines (European Union Protected Habitats in Latvia, 2013), the experts prepared assessments on habitat types and quality, biodiversity of flora and fauna, quality of river Daugava, small streams, lakes and the geological character of the Daugava valley. Based on this information a very detailed territory management plan was created with the aim to develop the well-being of the population of local peoples, tourists and balanced socio-economic goals in harmony with nature values for the next 12 years (2023–2035). UNESCO’s nomination regulations provide specific criteria to be used for the evaluation of nominations at both national and global levels. Justification of outstanding universal values should be in compliance with UNESCO corresponding criteria (<https://whc.unesco.org/en/criteria/>), (Guidance on Developing and Revising World Heritage Tentative Lists, 2020). In this process, evidence of authenticity and/or integrity, as well as comparison with other similar properties, plays an important role. There are 10 accepted criteria and three of them were appropriately for the nomination of Upper Daugava and meanders in the World Tentative List (<https://whc.unesco.org/en/tentativelists/5610/>).

## Results and discussion

**Tentative List selection criteria (V): to be an outstanding example of a traditional human settlement, land–use, which is representative of a culture (or cultures), or human interaction with the environment especially when it has become vulnerable under the impact of irreversible change.** The Daugava as a natural watershed, transport and trade route has been beneficial and meaningful in cultural history. People in this region began to settle a long time ago – around 11 thousand years ago, creating rich cultural impact on the landscape. Numerous archaeological, architectural, and historical monuments indicate intense human activity since the archaic period, as shown by the remained ancient burial grounds, hillforts, castle ruins, palaces, churches, and settlements. Therefore, the territory is an excellent example of multicultural living from ancient Balts, Vikings, and Crusaders. The name Daugava (Dyna) is mentioned in the 10<sup>th</sup>–11<sup>th</sup> century in written Scandinavian Gutasaga and the waterway Daugava was the road from Varangians to Greeks. Later this waterway was taken over by Russians, Poles and Swedes. Daugava was a permanent trade route between Western and Eastern Europe until the North War (1700–1721). All these historical events are reflected in nowadays. The Krāslava city has a logo of boat with five oars presenting five nationalities living together for many years – Latvians, Poles, Russians, Belarussians, Jews. The nomination area contains about 60 archaeological, historical, and cultural monuments. Recently, four ancient mounds have been found using new technologies (Lidar).

**Tentative List selection criteria (VIII): to be outstanding examples representing major stages of earth history, including the record of life, significant on-going geological processes in the development of landforms, or significant geomorphological or physiographical features.** The river Daugava valley with its characteristic arches and typical upper flood terraces formed before 13–15 thousand years, after the Last Glacial Period. During that time the river stream was so strong that it carried great masses of sand, gravel, large stones and even cliffs, creating picturesque hills, deep ravines with springs, rivers, and large river Daugava riffles. In 45.4 km stretch from Daugavpils and Krāslava, the river is composed of nine outstanding meanders that represent unique and nowadays exceptionally rare features (Fig. 1). These unchanged geomorphologic formations belong to the context of large rivers of the world’s Northern hemisphere. The river Daugava is a key element in forming the landscape. Its course is full of riffles, banks with flat and steep slopes and nine very diverse meanders forming dynamic changing and highly three-dimensional landscape that has high aesthetic value. Especially high value of landscape is formed by ratio of woods, meadows, agricultural areas, and relief. This boreal region with its different landscape types changes with the seasons – from white winter, green and sparkling spring, rich green summer forests and flowering meadows to a brilliant palette of colours in autumn. In the territory of meanders is a very dense network of ravines with unique ecological niches for flora and fauna.

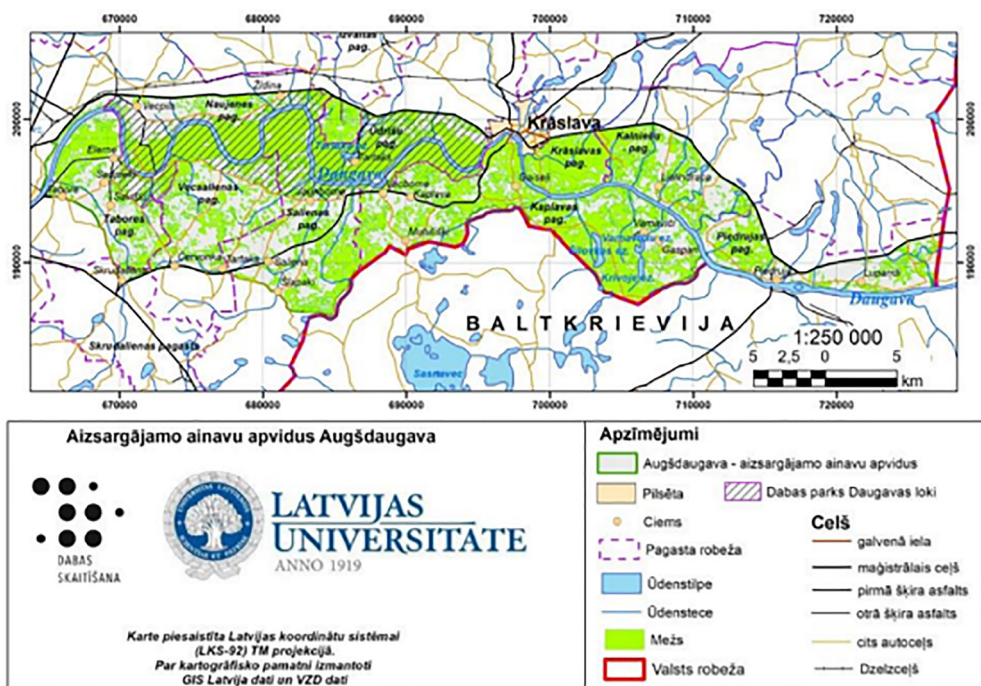


Figure 1. The UNESCO Tentative List nomination area “Upper Daugava and meanders”

**Tentative List selection criteria (X): to contain the most important and significant natural habitats for in-situ conservation of biological diversity, including those containing threatened species of outstanding universal value from the point of view of science or conservation:** The nominated area habitats host very rich and rare fauna and flora species belonging to boreal and nemoral regions. The Daugava serves as an important ecological corridor for species migration, and from this point of view its value is also high in the context of transnational species migration. The microclimate of the river valley, the highest positive summer temperatures in eastern areal of Europe and the calcareous soil types create unique plant and animal communities, and some species are at the edge of their ranges in these areas and require special attention for their protection. Since 2004 this territory is included in NATURA 2000 network. In the nomination territory there are 28 EU level protected habitat types. The most important by coverage area are: with the code 9010\* Western taiga (*veci un dabiski boreāli meži*), 9050 Fennoscandian herb-rich forests with *Picea abies* (*lakstaugiem bagāti egļu meži*), 6430 Hydrophilous tall herb fringe communities of plain and of the montane to alpine levels (*eitrofas augsto lakstaugu audzes*), 6450 Norden boreal alluvial meadows (*eitrofas augsto lakstaugu audzes*), 7140 Transition mires and quaking bogs (*pārejas purvi un sliķšņas*), 3150 Natural eutrophic lakes with *Magnopotamium* or *Hydriharition* – type vegetation (*eitrofi ezeri ar iegrimušo ūdensaugu un peldaugu augāju*), 3130 Oligotrophic to mesotrophica waters (*ezeri ar oligotrofām līdz mezotrofām augu sabiedrībām*). The area is one of the richest in species in Eastern Europe. In a comparatively small area near the town Krāslava on a meander “Priedaine”, there is located the nature monument “Sproģu grava” with 28 ravins, covering four EU importance habitats with rich list of protected species.

In the nomination territory, according to the botany experts, were found ca. 900 vascular plants species, 71 protected species. In the territory ca. 130 bird species are living, 39 of them are included in the EU Bird directive 1 attachment. There is a rich fauna of insects, about 70 species, 12 of them Annex II and Annex IV species. It is very rich in raspy/amphibians fauna – altogether 11 protected species. The site is particularly important for the conservation of all bat species. According to data, their main feeding ground is the Daugava River.

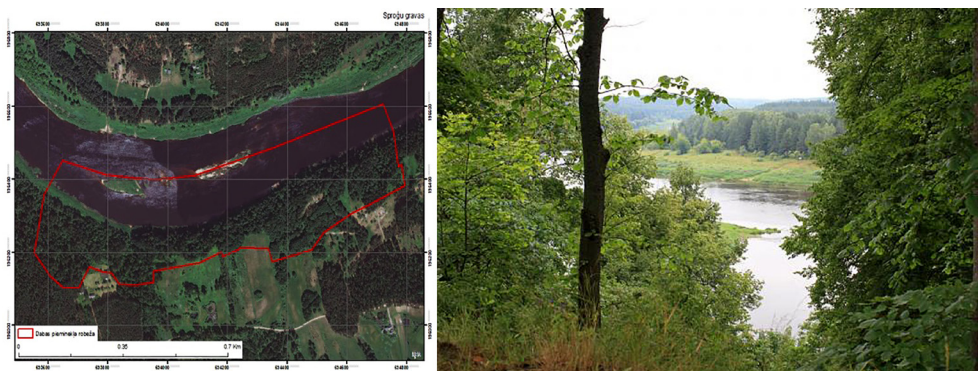


Figure 2. The nature monument “Sproģu grava”

To protect this unique area, a comprehensive management plan has been developed and is on its way to the Ministry of Environment and Regional Development for implementation. A total of 75 measures are proposed for nature conservation, society information and education, tourism/recreation activities, protection of landscapes and cultural sites, science and monitoring of management activities.

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