

The Nature of Askala Meadow and the Paimionjoki River: Ecosystems and the Effects of Power Plants

An ecosystem is a whole consisting of living organisms and the non-living environment within an area that is relatively uniform in its environmental conditions. Askala Meadow and the Paimionjoki River form ecosystems influenced by an abundant supply of water and nutrients, Finland's transitional climate, and the strong impact of human activity in the area.

Askala Meadow is a traditional biotope that was formed through the free grazing of livestock in the area. The animals fed on naturally occurring vegetation, thereby keeping the area open. Meadows are characterised by an abundance of sunlight. They provide habitats for many rare plant and animal species. Pollinators, in particular, benefit from flower-rich meadows. The meadow's non-living environment consists of hilly terrain bordered by the river. Traditional biotopes always require human management in order to survive, and the impact of human activity is clearly visible at Askala.

The Paimionjoki River is a large river that flows into the Archipelago Sea and originates in Somero. The Paimionjoki is a turbid and regulated river. Its ecosystem is threatened by eutrophication caused by intensive agriculture and other industrial activities. Eutrophication is caused by nitrogen and phosphorus compounds entering the watercourse.

The Askala Power Plant has a major impact on the ecosystem of the Paimionjoki River. The power plant prevents fish from migrating further upstream beyond Askala. As a result, salmon, for example, have disappeared from the Paimionjoki River. For most of the time, the river downstream of the Askala Power Plant is dry, making the river's natural functioning impossible. To improve the condition of the river, an environmental flow has been proposed to allow water and fish to pass the Askala Power Plant. The determination of the environmental flow began in autumn 2021, and its implementation is currently underway.

The ecosystems of Askala Meadow and the Paimionjoki River are diverse and irreplaceable in many respects. The Paimionjoki River Valley is a Natura 2000 protected area, which obliges the protection of the area.

Sources:

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