Presentation of Farsund Municipality's work with Lista a unique landscape and partnership

With its open agricultural landscape and wide horizons reaching out towards the sea, Lista has fascinated and attracted residents, tourists and artists for generations. The landscape is flat, the soil fertile and the coast dramatic and beautiful. Lista has miles of sandy beaches. Visitors are today attracted by the sea, high sky, forces of nature, birds and the magnificent landscape.

Listalandet is one of the areas in Norway that was the first to become ice-free and the area therefore has a long history. For the past 5,000 years, humans themselves have been an important factor in the formation of Lista, and in the past 150 years, this has had a dramatic impact on the landscape.

The Lista peninsula makes up the southwestern part of Farsund Municipality in Vest-Agder County. The coast around Farsund Town has an archipelago, while Listalandet is completely unprotected.



Map of Lista with protected areas marked. Source: «Naturbase» the Norwegian Environment Agency's map-based environmental information

Lista was and is a well-known foreland for seafarers where it lies like a border or ridge towards the sea in the south and in the west. When viewed from the sea, the low plains appear as a ridge towards the heaths in the background. It is possible to find "paa Liste" in documents from the 1500s. The name was originally only used when referring to the flat lowlands. After Lista became the name used for a larger area, Listalandet is used to refer to the lowlands. The term "Listahalvøya" is used for the peninsula.

Listalandet consists of rolling moraine landscape, a lowland plain that is situated below the 20 meter contour. The low and flat Listalandet transforms into hilly heath landscape in the north, with mountain peaks of up to 350 meters. Listalandet was largely formed when the glaciers

displaced the Lista moraine at least 14,000 years ago and during the subsequent ice melting. The ground moraine is like a cover over the entire Listalandet.

The actual Lista moraine can today be seen as a pebble ridge towards the sea. Its large rocks and blocks make it extremely eye-catching. It can be followed from the area near Lista Lighthouse in the west over Borhaug to Østhasselneset.

From a bird's eye view, the Lista landscape looks like a patchwork, a mosaic of marshes and ponds, fields and meadows, heaths and small forests. Lista is an eastern outlet of the western Norwegian coastal heathlands. The heathlands are the result of human impact on the landscape - what is currently the latest phase in a long vegetation development that started just after the ice disappeared.



Jølle at the west coast of Lista with Jøllestø harbour. Photo: Hjort Media for Farsund Municipality.

Creation of the Lista landscape

During the first 5,000 years of the post Ice Age period, natural processes and forces, such as wind and water, caused the major changes in the Lista landscape. The sea level was both 6 meters lower and 7 meters higher than it is today. The large lines in the landscape that we now see today, were created during this period.



Most of the beach ridges we see today were created by storms during the period in which the sea level was at its highest approximately 6,000 years ago. When the beach ridges had reached a certain strength, they remained as a breakwater that protected the areas inside from the sea. Approximately 5,200 years ago, the present day lakes of Hanangervannet, Nesheimvannet, Prestvannet and Kviljotjønn became fresh water lakes and were cut off from the sea.

At the same time as the rise in the sea level in the latter part of the Stone Age (5,000-8000 years ago),

the forest also underwent a complete transformation. Warmth-loving deciduous trees migrated to Lista and made their mark on the forest. During this period before agriculture was discovered, humans lived as hunters and gatherers in Lista. It is unlikely that Stone Age humans lacked for anything in this forested landscape of shallows, lagoons, islands and straits.

The sea level has remained almost constant in the 1,000 years up to the present day. The sand beaches and dune landscape within are still continually in motion. This is a dynamic and vulnerable landscape where there is an intimate interplay between the sea, the wind, the sand and the plants that grow in the sand. The varied sand dune landscape also provides a breeding ground for a very special flora.

The manmade changes in the Lista landscape

There were also dramatic changes to the Lista landscape in the final 5,000 years until the present day; however, these changes were increasingly manmade.

About 5,000 years before the present day saw the first signs of human intervention in the heath areas. The forests were cleared. Due to humans started using grazing animals in Lista 5,200 years ago. It was not necessary to clear the forest in the lower-lying Listalandet. The large areas with coastal meadows and alder marshlands were already naturally adapted for grazing land for livestock. It was in this open landscape that Stone Age humans made their first tentative attempts to grow grain

The humans living in Lista have always had a close connection to the sea. Changes in the resource base as well as sharp population growth and knowledge of new technology, resulted in the forced development of agriculture. The first attempts at agriculture took place during the early Stone Age and then later proceeded at full pace in the Bronze Age. During the Bronze Age, the forest was cleared through logging and burning, and Lista was transformed into an agricultural landscape.

The oldest historical remnants in the Lista landscape

We know of about 1,500 permanent ancient monuments in Lista such as Stone Age settlements, rock carvings, farmsteads, homesteads, burial mounds, stone settings, hillforts and boathouses. A huge number of finds have been made, principally individual finds from the Stone Age and burial remains from the Iron Age. Lista is without doubt one of the richest areas for ancient monuments and relics in Norway.



View from the Penne rock-carving field Photo: Berit Hessel

The many monumental burial mounds are testament to chieftains and nobles having lived here in bygone days. Items from the continent made of gold, silver, bronze and glass show that Lista was not an isolated area. Throughout the entire period from approximately 9,000-10,000 years ago, people in Lista have had extensive contact with groups of people on the continent.

<u>Lista - a treasure trove of rock carvings and phallic stones</u>

More than 1,100 places with rock art have been identified in Norway. Almost 100 of these are found in the Lista area. Considering the fact that there are rock carvings in all regions of Norway, Lista can boast a relatively high percentage of them. At Jærberget, we find one of the largest fields of rock carvings in this area, consisting of 22 ship carvings and almost 70 cupholes – all concentrated on a small rocky hill belonging to the old Penne farm. They are agricultural carvings dating back to the Bronze Age.

In Lista, there are several upright standing stones or phallic stones. The rock carvings at Penne are situated between two such stones, one of which can be seen from Jærberget in Nordberg. The other is located at the outer edge of the grave field at Sausebakk, and is called Vanen.



The fertility symbol, "Vanen" by the burial field on Sausebakk Photo: Laguide.no

The historic farms in Lista and population development

The agriculture came from Jylland to Lista and Jæren during the final part of the early Stone Age and during the Bronze Age (3,900 years ago). Arable farming allowed people to become more settled and the farm was developed as a centre of operations. At the beginning of the Middle Ages approximately 1,000 years ago, the farm was the framework of people's lives. Arable farming and animal husbandry were the main industries. Fishing, trapping and other maritime industries provided additional forms of subsistence.

The end of the 1300s was a time of crisis. The population declined and farms were abandoned. The Black Death and other factors reduced the population in Lista to an estimated 700 people. The population started to increase again from 1500 and new land had to be cleared for more families. Lista was attractive due to both the agricultural areas and fishing. Many new farms were established, the large farms were split up and land consolidation was common. From the 1700s to 1900 the population increased from approximately 2,000 to approximately 5,800 and fishing became even more important.



Modern agriculture in ancient cultural landscape at Vest-Lista. Photo: Christian Landmark

The "Jærbuene" arrive in Lista

Following the Second World War, many people from Jæren (Jærbuene) leased or purchased farms in Lista. From 1946 to 1956, the Jærbuene purchased many farms and the largest farms went first. Prices started to rise after 1956 and more Lista inhabitants started to modernize operations and compete for the best land. The Jærbuene primarily bought farms from Hauge and to the west and in Vest-Lista along the flat Listalandet. These new farmers modernized and improved the efficiency of agriculture and changed the cultural landscape dramatically. The stone fences disappeared and a large amount of new land was cultivated.

Ancient farms

Lista contains many small cluster villages of different shapes and sizes, but with one thing in common – they are all originally ancient farms. By studying them, we can see that their names, structure and size have remained unchanged for hundreds of years, with some dating back to settlements and agriculture in the Bronze Age. The numbers of small farms have varied over the

years, but the borders remain the same. The farm buildings were built together in a cluster for each farm. The fields were organised as strips of enclosures whereas the uncultivated land was open common ground. This was quite normal in most of the country.



Aerial photo of clustered farmyards at Vere in 1954 Photo: Rolf Ingelsrud, Widerøe's flyveselskap og Polarfly A/S

Section of historical map from Vere Source: Norwegian Mapping Authority

The 1800s were a period of sweeping changes throughout the country as strip farming was discontinued and the houses scattered. As in the rest of the country, this happened in Lista between 1860 and 1920. The difference here was that the clustered houses were not split up like in the rest of the country. The buildings were regulated, but not moved, thus preserving the structure. Since then, people have continued building in even larger clusters, and the farm appears more like a small village.

Lista houses

The building traditions reflect a hard climate. What is special about building customs in Lista is that the outbuildings and living quarters are usually connected. These longhouses were always adapted to satisfy the needs of the period.

Whereas the old longhouses have disappeared from large areas of the country, hundreds can still be found in Lista, some as nostalgic holiday houses, others as modern homes. In several places the outbuildings have been modernised and are in active use. In other places they are used as garages, sheds or incorporated in the living area.

Lista is the only place in Norway that we find the longhouse tradition well preserved. However, if we look at other countries around the North Sea, we discover the same type of house and the same building customs. All countries around the North Sea have the longhouse in common.



The Penne house. Photo Torill Folkestad

The Penne house represents the most typical longhouse in Lista. Here the outhouse is joined lengthwise to the dwelling house. The rooms in the dwelling house are divided in the usual manner that is typical of central entrance houses, and the outbuilding usually has an indoor animal enclosure made from timber. The farms from the later Iron Age were also built using the same principles. Building houses in rows was a common practice on the old farms where communal living was the norm. The solution was to build close together in clusters in order to make the most of the space they had. In some places, the dwelling houses were built in a row with the outbuildings in a row behind them.

There are also other combinations. By studying old maps of Lista, we see that almost all the buildings are joined together in one way or another. As farms throughout the region were divided and the land split up, especially in the years after 1821, this also applied to many of the farm house clusters. Farms in Lista were regulated in such a way that each farm would own its share of the cluster area, and the buildings were usually not moved out of the old clusters.



Peat cutting at Mebergsmyra 1942 Photo: Laguide.no/NordbergFort Vest-Agder Museum – Lista

Peat cutting

In the treeless landscape, heather and peat from the marshes later became important sources of fuel. The marshland areas were normally divided between those who had farms bordering the marsh, but there were also opportunities for others to purchase plots in the marshes. The animals grazed here and peat was cut for fuel and fertilizer.

Gathering kelp and seaweed

For more than a thousand years, seaweed and kelp have been an important resource for the farmers along the coast. In Lista the farmers could double their crop by using kelp and seaweed as fertilizer. Names like "sauetang" i.e. sheep seaweed (eng: Channelled Wrack,) "grisetang" i.e. pig seaweed (eng: Common Brown Alga) and "butang" i.e. cattle seaweed (eng: Dabberlocks) shows that the seaweed was also used as animal feed.

Kelp gained new importance around 1870.

Kelp was shown to provide the cheapest raw material in the production of iodine. Therefore, the farmers started burning kelp and selling the ashes. The kelp was gathered and spread out over the ground. It was turned over repeatedly for a few weeks until it was dry enough to be burned. Afterwards, the ashes were gathered up and sold.



Gathering kelp. Photo: Anders Beer Wilse (NFM)

Eventually other operators took control of the production of kelp ashes. In the 1950s, the farmers would receive a daily wage to set up steel wire between large rocks on the seashore. These were used to hang up and dry the kelp. The bolts used to fasten the wire are still visible on rocks along the beaches of Lista. When iodine was eventually able to be produced on a more industrial scale, the basis for production of kelp ashes disappeared.



Old steel wire, a trace after kelp drying. Photo: Torill Folkestad

Kelp walls, drying sites and campfire sites can be found in Vest-Lista that are clear signs of kelp harvesting. Kelp harvesting was an important part of a farm's rights of use. When dividing land, the land court ensured that everyone was given their own "kelp plots", which were often long, narrow parcels leading down to the sea which were used for drying kelp.

Collection of rock, sand and gravel

The moraine deposits in Lista provided easy access to rock, sand and gravel for use in fences, roads, buildings and for trade. In some places quarries were constructed for gravel and in other places for rock. Sand and gravel were collected where the sea deposited sand after the winter storms. Just like kelp rights, the rights to collect sand, rock and gravel were recorded in documents when dividing land.

<u>To walk the shore for gulls</u> To walk the shore for gulls, to hunt for seagulls, was a common practice in Lista up until World War II. The shooting took place from small stone "castles" by the shoreline, called "måkestille". This hunting provided much appreciated fresh meat to the household.



Good catch from the "gull-beach" 1938 Photo: Laguide.no/NordbergFort Vest-Agder Museum – Lista

Harbours, lighthouses, fishing and boat building

Fishing and the sea have always been important sources of income for the people of Lista. These activities have also made their mark on the landscape in the form of navigational aids, harbours, maritime dwellings etc.

From ancient times, each farm had rights over the shoreline. The right to moor a boat was an important right since it provided access to the bounties of the sea. The oldest moorings were primitive mounds on the beach where rocks had been moved to the side to enable a boat to sit with a protective "rock fortification" on each side. When bad weather set it, it was normal to drag the boats onto land to protect them. In these small port farms the rocks were cleared and arranged by the people themselves with very limited means of assistance. This is perhaps precisely why they have their own charm. While larger harbours often impress with their firm defiance of the forces of nature, these small, local harbours impress with their adaptation to the surroundings and forces of nature.



The transition to larger and closed vessels from the mid-1800s also saw the need for adapted fishing ports in the form of protective breakwaters, docks and secure mooring facilities. This preferably also included areas for receiving and processing the catch.

The harbor at Jøllestø got breakwaters in 1895-1903 Photo: Torill Folkestad

During the second half of the 1800s, a total of four rescue stations were established in Lista (Kviljo in 1854, Stave in 1881, and Østhassel and Rauna in 1892). All were equipped with specially constructed lifeboats. During the same period, the harbours at Jøllestø, Stavstø, Verevågen, Snekkestø and Østhassel were improved with the dredging/deepening of the harbour basins and construction of breakwaters.

The basin between Borhaug and Tjørveneset, has always been the largest and most important harbour area in Lista. Construction of the first breakwater commenced at Brekneholmen in 1871. The breakwaters at Borhaug were completed in 1887 which then enabled boats to be on the

water all year round. From 1910-1916 the breakwater was further reinforced and extended and the harbour deepened such that the Lista Harbour took the form it has had until the present day, with strong breakwaters both from Borshavn to Brekneholmen ("Molja") and from Tjørveneset on the opposite side. Today, Lista Harbour is the largest and most spectacular government fishing port structure along the entire Skagerrak coast.

We know that boats of various sizes were built at Borshavn and Verevågen in the 1820s. It was in this period that the legendary Lister-boat was designed, a type of boat that was well-known both in the north and south. Boat building became a source of income for Borhaug. There was a great demand for the Lister-boat, and it became a prosperous industry for more than 100-years, providing many jobs, such as carpenters and blacksmiths, as well as sail-makers and riggers.

Lista Lighthouse Station and Varnes Lighthouse

Lista Lighthouse is more than just a lighthouse. It is a landscape of stone, sea and sky. At first glance it may appear barren and open, but at next glance it is full of colour and life. It is equally beautiful in the pink sunset of a summer night as on a winter morning with savage winds and a fine layer of fresh snow on the pebbles on the beaches.

There is no archipelago around the coast of Lista to provide a breakwater against the sea. In the shallow waters there is a strong current, which makes it difficult to find shelter. There is a good reason for why Lista outbuildings are built from ship timber. There have been numerous shipwrecks throughout history. On 10 November 1836 Lista Lighthouse was lit. At the same time, a small lighthouse at Varnes was built about 10 kilometres further north, as a sub-lighthouse to Lista.



The Lista Lighthouse Station had three towers in the period from 1853 to 1873. Photo: Listafyr.no

A 34-metre high stone tower was constructed in Lista. However, it was soon discovered that Lista Lighthouse could be mistaken for other lighthouses, such as Lindesnes, and therefore two new towers were built beside the first one. In 1853 three 30 metre granite towers gave Lista a powerful position. From 1853 to 1873, Lista Lighthouse was the country's largest lighthouse with its three towers and many employees.

Twenty years later, lighthouse technology had developed to such an extent that their light could identify the lighthouses. There was therefore no need for three high-maintenance towers at the station, and two of the towers were dismantled. The lighthouse was electrified in the 1930s. The lighthouse was automated in 1988, and the living quarters converted from a family space to accommodate shift workers. The last lighthouse keeper left the station in 2003, thus ending 167 years of history. Varnes Lighthouse was automated and abandoned in 1950 and a beacon was constructed instead of the original building.

Changes to the Lista landscape in the past 150 years

Modernization of agriculture combined with population growth and division of farms resulted in land clearance, drainage and cultivation accelerating from about 1850. In 1884, the Norwegian Parliament (Stortinget) began granting subsidies for water lowering and drainage work, which further contributed to cultivation. A consequence of this development was that much of the former intricate mosaic in the agricultural landscape and the large wetland areas with their rich diversity of species disappeared and the agricultural areas spread outwards. Some lakes completely disappeared from the landscape.

From making up probably 25% of the area in Listalandet, the wetlands now only represent about 10%. This means that 7,000,000 square meters of wetlands have been drained since the 1850s. Draining and new cultivation continued long into the 1990s, which included the cultivating of Veresumpen. Despite the radical changes in the landscape, Lista is still considered as has having some of the richest bird habitats in Norway.



Afforestation and shelterbelt planting.

Due to the intense exploitation of uncultivated land through burning and grazing, the Lista landscape had no trees at the end of the 1800s and planting was therefore initiated. The State Tree Nursery (Staten planteskole) was founded at Kyrrefjord in 1876, one of the first in Norway. Old pictures show many locations with a deforested cultural landscape until the 1950s, which is in stark contrast to the present landscape.

The shelterbelt forest (leskogen) is younger and organized planting commenced in 1956 with the objective of protecting agricultural areas from the westerly winds and limiting sand drift at the southernmost part of Lista. Much of the shelterbelt forest has been cleared in the last decade and the area is mostly used for grazing. Much of the shelterbelt forest was/is in the protected zone.

Jøllestø Harbor and the farms at Jølle in 1934 and re-photographed in 2015. Photo: 1934 Anders Beer Wilse (NFM) and 2015: Oskar Puschmann

World War II

During World War II, large parts of Europe were occupied territories. Norway was occupied on 9 April 1940 and as early as autumn 1940 work commenced on constructing a coastal fortification in Lista. In December 1943, thirteen areas in Norway were declared a "Festung" (fortress) by the German occupying force. A "Festung" was considered decisive to defend in order for further resistance and fighting to be possible. In principle, the fortress was to be defended to the last man. Lista was one of the areas that was declared a fortress in December 1943 and was therefore assigned resources to enable Lista to be defended to the last man.

Lista was important to the German defences for three reasons. There was an airfield, a flat beach which meant that an allied invasion was likely, and from this location the German occupying

forces controlled a supply line (sea route) past the southern tip of Norway. Both before and after 1943 this resulted in the massive fortification of the Lista area with the establishment of six coastal forts, a military airbase with two runways, heavy anti-aircraft batteries, a number of support points, multiple radar facilities, wharves and port facilities, various headquarters, prison camps, railway, roadblocks, warehouses, quarries, gravel pits etc. Lista was therefore transformed in an extremely short period from a small and quiet coastal community to a fully militarized and heavily fortified piece of land that was considered vital to the German defence of Norway in general and Agder in particular.



World War II remnants in burial mounds, along beaches and in cliffs. Photo mid.: Vest-Agder Museum – Lista video

The post-war period

Following the liberation in 1945, Norway commenced, like the rest of Europe, a comprehensive restoration and modernization project. The Lista community was again in a special position. It was decided that Lista Airbase and parts of the extensive fortifications that had been erected would be retained and used by the Norwegian Armed Forces. Therefore, not all traces of the war were immediately removed from Lista and many of the facilities had new users. Maintaining the military presence also brought with it new inhabitants from several different parts of the country. Furthermore, through emigration to the USA in the 1800s and the post-war "labour migration" to and from the USA, the inhabitants of Lista had developed a positive attitude towards "the modern world" with the widespread use of American cars and equipment. The migration of farmers from Jæren who purchased vacant farms in Lista from 1946 to 1956, together with national stimulus initiatives, provided a new impetus for agricultural operations. The modernisation of the Lista community with the associated changes to the landscape was therefore very rapid and extensive after World War II. There were also industrial initiatives, including the establishment of Lista aluminum smelter in 1971.

Farsund Municipality's partnership initiative in 1976

Towards the end of the 1960s there was a greater awareness of the negative consequences of the rapid modernisation. The present day Farsund Municipality was also established in 1965 through the merger of Lista, Farsund Town, Herad and Spind. The central government relinquished more control to the local governments and the municipalities were assigned more responsibilities. In 1965 the Norwegian Planning and Building Act was expanded to also include sparsely populated areas and the municipalities were instructed to draw up general plans for the use of municipal areas. In 1970, Norway adopted a new Nature Conservation Act with a mission statement based on the Council of Europe's definition of nature conservation. This was a break-through for the modern-day preservation of nature and the environment in Norway and the Ministry of the Environment was established i 1972. This was the first of its kind in the world.

At the start of the 1970s, Farsund Municipality found itself in a situation where the expectations of the local population, conservation interests and the many different national regulations and new statutory requirements were not easily able to be reconciled. Therefore, in 1976 Farsund Municipality's general planning committee took the initiative to establish a committee to coordinate the conservation interests in Lista with other land use interests (Lista Committee). The committee had four members - two appointed by Farsund Municipality, one by the County Governor for Vest-Agder and one by the Ministry of the Environment.

The Lista Committee had the task of preparing a draft proposal for how the conservation interests in the Lista area could be appropriately safeguarded.

In 1979, the Committee presented its recommendation in the report "Nature Conservation in Lista". The report concluded that there were significant conservation interests in the Lista area. All of the natural sciences were represented with considerable national and local interests. The beaches represent characteristic habitats that are beautifully developed and which, for this reason, make up a representative type area for coastal landscape in a national context. The major international importance of the beaches as a resting place for migratory birds was specifically mentioned and that the shoreline contained important botanical conservation interests with elements of a variety of rare plant species and vegetation types. From a



conservation point of view, the cultivation of sand dune areas, draining of wetlands and depositing of cultivation stones were among the problems for which it was important to find a solution. The same applied to the excavation of beach ridges, sand dunes etc., filling in wetlands, garbage disposal, cabin building, roads and other forms of technical intervention.

For the areas deemed most worthy of preservation there was a brief review of the conservation values, interventions made, known conflicts of interest and the consequences the recommended initiatives could have for the use of the individual areas. Some of the conflicts between nature conservation and other land use interests in Lista were agriculture, forestry, road construction, port and industrial areas, urban growth, various commercial enterprises, military purposes, outdoor pursuits and hunting. The Lista Committee found that the relationship with agriculture was particularly vital, and emphasised that there had to be a mutual adaptation between nature conservation and agricultural interests.



Protection in Lista. Photo: Jan Hausken,

The restored Lake Slevdalsvannet Photo NRK

For the continued conservation work, the Lista Committee outlined an arrangement involving dialogue between the county governor and the affected parties, meetings and inspections. Before the final conservation proposal was prepared and submitted to the ministry, all of the bodies and individuals who could be impacted by potential conservation measures were given the opportunity to provide statements. The local government would manage the conflicts of interest and weigh these up.

It is interesting to note that the Lista Committee's final report had included long quotes from the Council of Europe, Resolution 29, on the protection of Coastal areas, adopted by the Committee of Ministers on 26 October 1973. This demonstrates how updated Farsund Municipality was about important societal changes. The Lista Committee's recommendation was the starting point for Farsund Municipality's unique partnership on the Lista landscape and a working method in line with what the European Landscape Convention later has recommended.

The results achieved thus far

Today we can conclude that all of the conservation initiatives (protection orders) recommended by the Lista Committee have been implemented. In addition, the local democracy in Farsund Municipality has achieved that 29 areas are purchased from the landowners and established as Government protected outdoor recreation areas. Through land-use planning, the Municipality has also protected many other outdoor recreation areas and management plans have been prepared. It has been established a large network of paths to historical "kystveter" sites and other viewpoints. "Kystveter" were signal fire locations on the peaks near the coast, which enabled warnings of attack to be sent out over large distances. The Municipality is focusing on marking hiking paths and bike trails among other things in order to channel this traffic in the agricultural areas. A separate Coastal Trail of approximately 40 km has been established. The roads in the wind farm established in 2012 in the heath areas in the north, are used for hiking and cycling. Skjærgårdspark was established with access from both the mainland and islands. Active use of grazing has been facilitated to prevent overgrowth. Among other things, the Municipality has hired in "Coastal Goats" to keep the vegetation down along the Lista beaches.



The village Borhaug in harmony with the landscape's nature and culture heritage values. Photo: Hjort Media for Farsund Municipality.

Recently a management plan including a visitor strategy has been drawn up for the shores of Lista. The management plan is a good tool for maintaining and promoting the protection of the area, and it is the leading principle, ensuring that protection values are prioritized when conflicts of interests arise.

Below is a more detailed overview of the most important results achieved during the more than 40 years that have passed since the Municipality took the initiative to establish the unique Lista partnership. To achieve the objective to protect, manage, plan and restore the Lista landscape in a holistic and sustainable way, and to communicate and develop the natural and cultural values in cooperation with local volunteer groups, associations and regional authorities.

Landscape protection area and nature reserves

Following an extensive democratic process, the "Lista Beaches" (seven beach and sand dune areas) were permanently protected as a landscape conservation area in 1987. The objective of the protection was to preserve a unique natural and cultural landscape with special beach types and geological, botanical, zoological and cultural-historical characteristics with a very high conservation value. In 1987-88, ten vitally important lake and wetland areas were protected as nature reserves. These included shallow coves on the coast, sand dune landscapes, marsh and swamp areas, and shallow and nutrient-rich lakes. The areas have a special type of vegetation, including in connection with the sand dunes and out towards the sea and both the plant and animal life are included in this protection. In 1996 they were assigned joint status as a RAMSAR area due to their importance for migrating birds and make up what is known as the Lista Wetland

System. This total area is now nearly 1,500 hectares after Slevdalsvannet nature reserve was included in 2005. The area is of vital importance as a haven for birds along the Lista coast during periods of inclement weather. The Lista Wetland System is known for having many rare and threatened bird species and is the location in Norway where the largest number of different bird species is observed each year.

The Coastal Trail

Farsund Municipality and Lister Outdoor Council have been key stakeholders in establishing the Coastal Trail, and the general facilitation of outdoor activities. Many groups of volunteers have done the practical work.

Through agreements with the landowners, many short trails along the coast of Lista have been linked together to the continuous 40 kilometre long Coastal Trail. Completed in 2015, it gives the opportunity to hike waymarked trails the entire way from Loshavn, passing through Borhaug, Lista Lighthouse Station and Jøllestø to Varnes lighthouse. The Coastal Trail passes through one of the region's finest coastlines with beaches of sand and pebble, abundant birdlife and fresh sea breezes. The agreements make it possible to pass through pastures with cows, sheep and horses and along cultivated land in a way that far exceeds what the Norwegian principles of "the right to roam" normally allow for. One can also take various detours such as to the rock carvings (petroglyph) at Penne and Nordberg Fort.



The Coastal Trail runs through protected landscape areas and areas with bird sanctuaries. Shorebirds and migratory birds nest along this coastline. Between Lista Lighthouse Station and Verevågen the trail is wheelchair accessible. The trail is located in a conservation area of great importance for birds, especially waterfowl, ducks and cormorants. The area is also of historical interest with several installations from World War II, in addition to remnants of activities dating back to the Iron Age.

The Costal Trail at Verevågen Photo Bjørn Vikøyr

At Sausebakk stands a "Vanestein", a large rock that is a phallic symbol from the Bronze Age, approximately 3,000 years ago. In early times the rocks were used by the local fishermen to find the best fishing spots. During World War II, the Germans had positions and bunkers here. These are still intact and it is possible to walk through the bunkers. The view over the sea towards Hidra and Flekkefjord is a beautiful sight regardless of the weather. The last stretch to Varnes Lighthouse goes through a dramatic cliff landscape and gives a magnificent view along the west coast of Lista The old school road; "Vondestien" which cling to the mountain was restored in 2017

Lista Lighthouse Station



Lista Lighthouse Station. Photo: Jan Hausken

Lista Lighthouse Station and six associated buildings together with the surrounding area were protected as cultural heritage in 1994. An exhibition in the engine room shows the historical activity at the lighthouse station. Today, Lista Lighthouse Station includes a bird observatory, information centre, art gallery and lighthouse. More than 70,000 guests visited Lista Lighthouse Station in 2018.

In 1990, Lista Bird Observatory commenced the observation of resting and migrating birds at Lista Lighthouse Station, with standardized mist netting and daily migration counts. The observatory is a member-based organization associated with the Norwegian Ornithological Society (NOF) BirdLife Norway. The observatory's purpose is to document the development of bird populations by monitoring bird migration over time. This work has been supported by the Norwegian Environment Agency since 2005, and the Observatory reports annually to their national monitoring program.

Since 2015, the station has been run by the Norwegian Ornithological Society as their national bird station, with a separate station manager who is subordinate to the NOF secretary general. In addition, field workers are employed during the spring and autumn seasons. A large part of the work carried out at the station is voluntary.



The Bird Observatory and the Visitor Centre Wetland Lista offer experiences and training. Photo: NRK (Norwegian Broadcasting Corporation)

The Bird Observatory invites children, students and others to participate in their activities and has an environmental exhibition in the outbuilding of Lista Lighthouse Station. Visitor Centre Wetland Lista opened at Lista Lighthouse Station in 2015 as a nationally authorised visitor centre. One of the reasons that it was authorised was that the centre has strong local roots and good interaction with local stakeholders for the development of sustainable activities in an area with a large proportion of protected land. Emphasis was also placed on the fact that the area can offer an exciting and varied range of attractions and is a local and regional hiking destination throughout the entire year. Within a limited area, visitors are able to have scientific, cultural-historic and other experiences associated with the uniqueness of the area.



Birdwatchers counting. Photo: Ada López

The task of Visitor Centre Wetland Lista is to increase the understanding of and general insight into the functions of the wetlands as an ecosystem, as well as their value to us as human beings. It presents the international protection status of the Lista Wetland System, with a particular focus on the RAMSAR areas of Lista, the protected areas of Lista, the bird migrations and Slevdalsvannet nature reserve. The guides carefully organize the visits to this unique natural environment for any group or private person.

Visitor Centre Wetland Lista attaches particular importance to communication about nature that is directed at children and young people in order to increase their understanding of the Lista area's unique features, with an emphasis on bird life.



Bird life at Lista beaches. Photo: Jonas Langbråten



Art in the landscape at Lista lighthouse Photo: Inge Eikeland

Varnes Lighthouse and Varnes Fort

Since 1987, the art gallery "Kunstpunkt Lista", which is located in the house of the lighthouse keeper, has been a showroom for local, national and international art. The art gallery has a special focus on landscape Art. Thus, it has established several art projects in the surrounding landscape. The art gallery is also used for various events such as performance art, literature events and concerts. Once every year there is a thematic cultural historical exhibition or exhibitions of contemporary art.

Varnes Lighthouse, which was constructed in 1836, was abandoned in 1950 and the lighthouse was replaced by a beacon. The narrow paths leading up to the lighthouse were constructed by Russian prisoners of war at the end of World War II and were restored in 2018. Today, the original brick barn remains from the buildings near the lighthouse and is used as a rest area for the Coastal Trail and Vita Velo cycle route. Rest benches and information points have also been established along the path, as well as Vita Velo cycle parking. The lighthouse's boathouse on the waterfront is being restored to be able to offer overnight accommodation along the "Coastal Fairway" and for those hiking along the coastal trail. Varnes Fort originally had four canons and was a small part of the enormous Vestvollen "west wall" that the Germans constructed along Lista from 1940. Today only one canon remains. There are also homesteads and other remains of settlements scattered around the area.

New use of the World War II remnants from "Festung Lista"

During the post-war period, parts of the established military infrastructure in Lista were reused to a greater or lesser extent by the Norwegian Armed Forces. This included Marka Coastal Fort, Lista Airbase and Nordberg Fort, three locations that were later included in the Norwegian Armed Forces' protection plan. A combination of a lack of pressure to develop, close proximity to the sea and protection of animal and bird habitats and conservation areas has meant that a very large number of the other remnants from World War II at "Festung Lista" have remained more or less untouched since 1945. It should be noted that this applies to the concrete structures because all of the timber was almost immediately reused for private purposes. The timber is gone, but the Lista coast is dotted with various concrete structures built by the Germans from 1940-1945.



New use of WW2 gun position, Einarsnes. Photo: Hans Christian Lund.

The Norwegian Directorate for Cultural Heritage's World War II remnants initiative (2013-2015) financed various projects around the entire country, including the value creation project "Festung Lista". The project was a huge success and the group and network that were established have since played a vital role in the management of World War II remnants throughout the entire Agder region. As part of the project, Vest-Agder County Council, Vest-Agder Museum and Farsund Municipality produced a list of valuable World War II

remnants in Farsund Municipality in addition to those already included in the Norwegian Armed Forces' protection plan. This list was formally submitted to the municipality, as a contribution to their ongoing work with a municipal cultural heritage plan, with the objective of conservation and/or dissemination initiatives under municipal management. The regional cultural heritage management has well-founded expectations of this resulting in the improved management of selected World War II remnants within the "Festung Lista" area.

"Festung Lista" is a unique World War II remnant, both in a national and international context, and will be a natural part of the Norwegian Directorate for Cultural Heritage's focus on cultural landscapes of national interest. The development of an inner and continuous closed fortress, with the functions such a fortress requires, is very interesting from a historical perspective. An unusually high degree of preservation allows one to develop an understanding of how this type of fortress was constructed, the mentality of the German war machine, how war was fought at this time, how an occupation functions and what we as observers of this period can learn from it.

"Festung Lista" with its overlapping geography with the "Selected cultural landscape Vest-Lista" and the World War II remnant Nordberg Fort as a common dissemination point for both stakeholders, further supports the view that the area is well-suited to a commitment to preservation and dissemination.

The Lista Museum - Nordberg Fort.

Nordberg Fort is situated between the flatlands along the coastline and the mountainous inner countryside. Nordberg is a German coastal fortification from World War II and has been a protected site since 2004. As a World War II remnant, Nordberg Fort is unique in Europe, because the original wooden buildings have been preserved. The canteen shows original wall paintings from WW II, depicting the lives of soldiers and sailors.



Nordberg Fort was decommissioned in 1996 and transferred to Vest-Agder County Council in 2003. The fort is now the main site of Vest-Agder Museum – Lista, which has several other tourist destinations in Farsund Municipality, including Listeskøyta Cultural Centre, Østhassel Rescue Station, and the open air museum in Vanse and Hetland School Museum.

The Lista Museum Visitor Centre opened in 2009 in a new exhibition and communications building located at Nordberg Fort. In addition to the World War II remnants, you can experience the exhibitions of archaeological Bronze Age findings, the works of Mathias Skeibrok and the Selected Agricultural Landscapes. The museum also offers tours, activities for children and a museum shop and café. This is a popular place to visit also for the local residents and Nordberg Fort is today an important cultural centre in Lista.



Listeskøyta Coastal Cultural Centre and Museum opened in 2008 after starting as a voluntary foundation in 1981. This centre, which is located in the harbour at Borhaug, has exhibitions and activities focusing on boat building, fishing and freighting.

The past made alive – trying the boat at the old rescue station Photo: Vest-Agder Museum/Lister Viedoklubb

The old rescue station at Østhasselstrand from 1892 was given to Vest-Agder Museum – Lista in 1972. It is the only fully equipped rescue station that still exists in Norway and is used to convey an important part of maritime history.

Present day agriculture.

In Lista, the interaction between human influence and natural conditions is the key to the successful management of the unique landscape. Agricultural operations are important for keeping the cultural landscape intact. The biggest threat to the Lista landscape today is lack of use, resulting in



overgrowth of the cultural landscape. This is currently only seen in the heath areas where the number of grazing animals and traditional activities has been reduced, but may also occur in marginalised areas of Listalandet.

Farsund is Vest-Agder's largest agricultural municipality. Grain has been produced in Lista for as long as there has been agriculture here. The grain-growing area has been gradually reduced in recent years. The area has instead been prioritised for the production of livestock feed. Today, livestock feed is the largest crop produced and enables the production of milk and meat from cattle as well as meat from sheep, pigs and chickens. There is also some production of eggs, potatoes, vegetables and berries, but on a far smaller scale than climatic conditions with favourable temperatures and a long growing season for arable crops would suggest.

The protected areas along the beaches are largely privately owned as part of the farms, and the farmers are vital stakeholders in connection with the management of protected areas. Adapted grazing is desirable in many of the protected areas.



The farmers have rebuilt old stone walls. Photo: 2012- O.S. Gusdal, 2015- O. Puschmann

Selected Agricultural Landscapes

540 hectares of Vest-Lista agricultural area were designated as "Selected Agricultural Landscapes" in 2009 based on voluntary agreements between the landowners/stakeholders and the Government. In 2018, the agreement was expanded to 1,100 hectares. This expansion means that the area now extends along the entire Vest-Lista, from Lista Lighthouse Station in the south to Varnes Lighthouse in the north.

In Selected Agricultural Landscapes, environmental, agricultural and cultural heritage authorities have all combined their resources to aid the farmer. The historical agricultural landscapes are to be managed in such a manner that the historical features, aesthetic values, biodiversity and accessibility are maintained.

The criteria for selecting the landscapes were as follows:

- agricultural landscapes rich in biodiversity and historical/cultural assets
- that long-term management and presservation of the landscape were viable

Furthermore, the sites were chosen according to the following criteria: A defined and holistic area formed by continuity of management over time, representative of particular areas, or alternatively, has special qualities/characteristics and finally, provides important examples of interest for the outside world.

In order to preserve these areas and to reduce the loss of biodiversity, the regional authorities cooperate with the landowners by managing and maintaining the natural and cultural treasures in the areas. The State agencies have contributed financially and earmarked funding for this purpose, based on voluntary agreements between the landowners/stakeholders and the Government. This is to ensure the satisfactory and long-term administration of the assets that were shaped by the hard labour of our ancestors for the benefit of both the present and future generations

The hope is that these specially selected landscapes can be showpieces for the whole country. Key stakeholders have contributed towards this objective. The project has generated strong feelings of belonging in the local community. Selected Agricultural Landscapes would like the landscapes to be accessible for the public in general and for the county councils to contribute to their preservation and show these at their best so that we can all take pride in them. Selected Agricultural Landscapes are open to creativity and for taking advantage of the benefits which can be gained from tourism, local culture and trade development in the designated areas.



Lake Slevdalsvannet after restoration. Photo: Jan Erik Røer

The nature restoration of Slevdalsvannet

The Slevdalsvannet Nature Reserve was established in 2005, and consists of the actual Lake Slevdalsvann and the surrounding swamp. It is located inside the area of the former Lista Airbase and has abundant bird life. The area has been strongly influenced by human activity. In 1915 a canal was dug across Slevdalsvannet and the water level in the outlet river towards Lista Lighthouse was lowered. This provided water to the underlying areas and drained the wetland areas. The construction of Lista Airbase from 1940 and beyond claimed land and drained the area. However, 230 species of birds and 11 sub-species have been registered here. It is a migratory area and overwintering site for water rail and spotted crake, which are vulnerable species in the Norwegian bird population. Slevdalsvannet is a habitat (nesting area) for many very rare birds. The nature reserve is also one of Norway's most important areas for migratory birds, with swamp, coastal meadows, rich vegetation, amphibians and other wildlife.

Slevdalsvannet, which was previously about 20 hectares in size, has been lowered and drained on several occasions to create arable land and eventually the water level was so low that there were periods in which the lake completely dried out. The lowering of the water level and subsequent overgrowth of the swamp with reeds resulted in the water surface being no more than 0.25 hectares at its lowest point. Therefore, there was a desire to restore this important wetland area long before the area was protected.

The restoration of Slevdalsvannet was carried out by the County Governor of Vest-Agder in collaboration with the Norwegian Environment Agency and Farsund Municipality. Lista Local Branch of NOF BirdLife Norway has been an important source of knowledge in the project and has functioned as a highly skilled "adviser" to the County Governor in documenting bird life and setting conservation goals. This includes in relation to the bird species and biotopes that should be prioritised in the restoration process. Ever since the process began, Borhaug School has been an important participant and premise provider for using Slevdalsvannet to educate children and young people about nature.

A large volume of earth was dug up and removed using dredging machines, excavators, tractors and trailers, but a complete return to the original water level was not an option. Following restoration in 2014, the new water surface now makes up 1.4 hectares of the 46.2 hectare nature reserve. The area will have to be monitored for several years to



The Lake Slevdalsvannet under restoration. Photo NRK

determine the full effect, but the restoration already appears to have been a success for the bird life. Among other things, the heavily endangered lapwing, which had not been seen for several years, used the islands that were created already in the first year, and cranes and western marsh harriers have also succeeded with nesting following the restoration.

Project "Sørnorsk kystnatur"

Slevdalsvann is also one of the main projects within "Sørnorsk kystnatur" (Southern Norwegian Coastal Nature) which is part of the development programme "Naturarven som verdiskaper" (Natural heritage as a creator of value). The purpose of the project is to provide education and nature experiences through nature conservation areas. The working hypothesis is that a greater understanding of natural assets by non-experts through the increased use, including commercial, of nature conservation areas, will strengthen this protection. Through this project, Slevdalsvannet and a number of other places in Lista have established various types of observation sites,



observation sheds and wind breaks at central locations, to enable people to experience the unique bird life. The active involvement of schools was a deliberate part of the idea for facilitating bird watching as part of the project. Several of the thus far 10 structures are located close to schools and kindergartens in order to be used as teaching resources, as well as to offer hiking and attractions to the local population and tourist industry. For example, in addition to the amphitheatre at Slevdalsvannet, this also applies to the exotic amphitheatre in Nesheimvannet, close to Lista secondary school. This amphitheatre, Slevdal Amphitheatre and the aviaries near both Lista Lighthouse and Hanangervannet are also universally accessible.

Left: Bird observation and rest shed at Lake Hananger. Photo: Just-Mortensen Under: Vita Velo outdoor table and bench. Photo: Hilde S. Drønen

The "Vita Velo" Project

Farsund Municipality, Vest-Agder County Council and the Norwegian Public Roads Administration collaborate actively to establish a national touring bike trail along the entire Lista coast from Varnes in the north, via Lista Lighthouse and Loshavn, to Farsund in the east. The hiking trail is called Vita Velo and focuses on architecture and cultural heritage as well as unique experiences in the Lista landscape. It will be rest areas and bike racks with charging points for e-bikes along the entire route.



Important lessons from 40 years of collaboration on the Lista landscape

National authorities can agree to conservation initiatives and make financial resources available. Regional authorities can enforce conservation policies and have the professional expertise for what has to be done. However, without a municipality with inhabitants who understand the value of the areas that are protected and who want to preserve their nature and cultural-historic heritage through active management, manmade landscapes such as Lista cannot maintain their distinctive features.

If the initiative is to become permanent, knowledge of how the natural assets can be protected must be communicated to new generations. This is to ensure that they "inherit" the pride of their own "everyday landscape" and the willingness to make the extra effort that is required. In this way, the unique Lista landscape will be preserved as a living landscape.

Acknowledgement of this is at the heart of the unique partnership Farsund Municipality has established and in the European Landscape Convention.





Above: Boatsheds in Verevaagen harbor. Photo: Tore Haus

To the left: Demanding clearing work for the small farmers at Jølle. Photo: Oskar Puschmann

Sources

This memo is based on text contributed by Torill Folkestad (Vest-Agder County Council), Britt-Mari Langerud, Hilde Synnes Drønen, Inge Eikeland and Aud Irene Vatland (Farsund Municipality), Pål Hals (Visitor Centre Wetland Lista), Bjørn Vikøyr (County Governor of Agder) and (editor) Liv Kirstine Just-Mortensen (Norwegian Ministry of Local Government).

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