

SUSTAINABLE FORESTRY 3rd Workshop

October 18-21 2018 - Alutaguse Parish - Estonia

REPORT



Flying squirrel habitat



CONTENT

Background	3
Context	3
Results of the 1st workshop, 17-20 March 2016, Milverton, UK	3
Results of the 2nd workshop, 10-13 November 2016, Tara National Parc, SRB	4
Forests and Woodlands in Estonia	4
The region ALUTAGUSE PARISH	6
The workshop - elements of the meetings	7
Participants.	7
International Buffet	7
Market of initiatives	8
Field trips and issues arising	8
1st stop The AS Estonian Cell Pulp Mill:	8
2nd stop: Puiduaida Kohvik Craft Workshop at Avinurme:	9
3rd stop: Flying Squirrel Habitat:	9
Reflections on the side visits	10
Plenary and policy context	13
Presentation of conclusions of first two Sustainable Forestry workshops held in the UK and Serbia	13
What is the European Forest Policy and how relevant is it? (Juliette Augier, FR)	13
The Challenge of Moving to Sustainable Forestry in Estonia	13
Group Discussions about Estonian Forestry Management and the 4 key Principles	14
Pressures and Solutions	16
Annexes	20
Annex 1: List of Participants.....	20
Annex 2: Detailed Programmes.....	20
Annex 3: Presentations during the Market of Initiatives	22

Project kindly supported by:



Background

Sustainable forestry is one the topics Forum Synergies is focusing on. Initially four workshops were planned to cover main European forest types. The first two were held in the UK and Serbia in 2016 and this report covers the third which examined at forestry in Northern Europe.

After an inaugural meeting in 2012 a small working group started to plan the activities and set up a workplan. This group brought together representatives from 4 countries who agreed a programme to deliver four workshops based around the following topics:

- To raise **awareness** of the different services provided by sustainable forest management Kingdom
- To analyse **strategies** of how forests can be a lever for local development in rural communities
- To share **experiences** of how rural communities are involved in looking after woodlands
- To give local actors and authorities better **access** to practical knowledge about sustainable forest management

What we want to achieve:

- To understand and communicate what sustainable forestry means in practice.
- To disseminate the **EU Forestry Strategy** amongst practitioners and civil society.
- To help formulate realistic, complementary and consistent **policies in and between member states**.
- Propose **actions** and recommend **support**.

Context

We have identified so far these **main elements** which are important factors in the context of sustainable forestry and which will have to be taken into consideration in the process of discussions:

- Sustainable management across the main European forest types (Mediterranean, Central European, temperate, Scandinavian)
- Dissemination of good practice at stakeholder level
- State Action Plans and programmes
- Member state coordination/cooperation/consistency at the stakeholder level and where appropriate try to link up rural development funding between and across state boundaries to improve consistency of management, sustainability and communication
- The role of forests at the heart of Europe's Green Infrastructure and in delivery of the 2020 Biodiversity Strategy
- Promotion of woodland and wood products and the communication of forestry benefits to decision makers and civil society.
- The cultural role of woodlands to communities and in the landscape
- The role and importance of small woodland owners
- The development of information systems
- Climate Change mitigation
- Forestry policy coordination at the National and European levels
- The impact of forests as a source for "green electricity", renewable resource
- The "access to forests" as an upcoming conflict between big companies and small owners.

Results of the 1st workshop, 17-20 March 2016, Milverton, UK

In the first workshop we discussed many different aspects and definitions of forest management and resolved not to strive for any standard definitions of sustainable forest management, but rather to focus on the values and principles which may guide the efforts to achieve sustainability, which we see as a process rather than a static measurable condition.

We therefore agreed upon four key principles :

- A Holistic respect for the health of woodlands and forests as natural organisms and systems, which have a validity and even sanctity in their own right, regardless of human intervention
- A sense of stewardship of forests on behalf of humankind now and in the future, rather than selfish or short-term exploitative use of forests
- A sense of communal responsibility for, and pride in, the forests; and of fairness in the provision and

allocation of forest-based benefits and resources

- A global perspective, based on care for all the world's forests and on awareness of the fragility of global ecosystems and climate.

These principles need to be held against the competing interests in forests from those who make a living from woodland products to those people who live in and around them through to the wildlife that depends on the habitats that woodlands create and maintain.

We need dialogue about all these interests to ensure that they are complementary and not competitive.

Results of the 2nd workshop, 10-13 November 2016, Tara National Parc, SRB

30 participants from 10 countries met in the Tara National Park in Western Serbia to discuss the state of forestry in the Balkan Region. We were keen to see the condition of forests and understand how sustainable and resilient they were in the face of many rapid changes. In the context of a post Socialist environment we wanted to understand how forestry was operating within protected areas, how it was working for private woodland owners and what contribution it was making to the sustainable development of mountain communities.

Over the two full days of the workshop we visited the National Park and areas of High Nature Value as well as small local businesses that were dependent on forestry. Overall, we found that, while the forestry sector was functioning, there were many challenges and problems that seemed to be growing rather than receding. For example, relatively few private owners manage their woods except for some firewood and there is a drift of younger people to the cities leaving an older population behind which is exacerbating this issue.

There seems to be very little support for forestry from the National Government and so state forests and national parks have to be self financing. This is being achieved but in the Tara National Park the authority is increasingly having to juggle timber sales with the management of public access whilst combating the effects of climate change such as increased droughts, fires and damaging beetle infestations.

Overall, it was a fascinating insight into an important rural sector in a country that aspires to join the EU. Other than designating Natura 2000 sites there is no obvious driver to increase Government engagement in the forestry sector. However, there will be funds to support and encourage investment to boost the economy. This will need to be handled very carefully as there is a real risk that external investment would lead to greater efficiency and higher yields but deliver fewer jobs and less money being retained in the local economy.

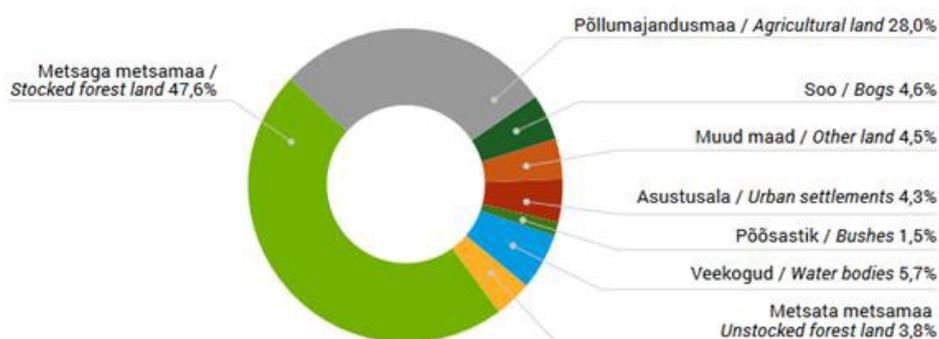
Forests and Woodlands in Estonia

Woodland Coverage and woodland types

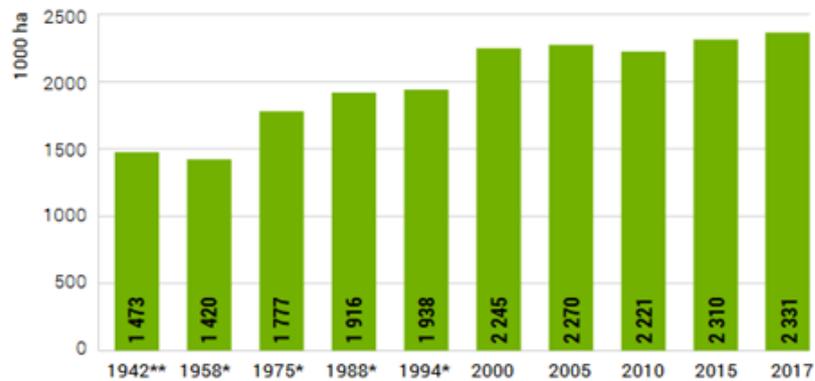
Coverage. Nearly half of Estonia is covered with forests, the total forest land area is 2 330 000 hectares.

During the 20th century forest area has increased and tree cover has expanded on abandoned agricultural land and on drained wetlands. In the past decades, forest area has remained rather stable.

Main woodland types The main tree species growing in Estonia is pine, making up 32% of the forest area, second comes birch making up 30% of the area and third comes spruce with 17,5%. The area of coniferous forests has decreased and the area of deciduous forests has increased in the past decades.



Joonis 1.4.1.1 Metsamaa pindala muutumine
Figure 1.4.1.1 Changing of forest land area



Woodland Ownership

The state owns 51% of the forest land and most of it is managed by the State Forest Management Centre RMK. 48% of the forest land is privately owned, 60% of private lands belong to private individuals, rest of it belongs to forest companies. Around 1% of the forest land still has unclear ownership status..

There are 13,1% of the forest under strict protection with an aim to protect forest biodiversity and old growth forest species, forest felling is not allowed in these areas. Another 12,5% of the forests is classified as „protection forests“ which means that management activities are allowed but they have additional restrictions due to environmental protection functions these forests provide. Commercial forests make up 74,4% of the forest area. Most of the protected forests are situated on State land, with 25,3% of it being strictly protected.

Authorities in charge of Forests and woodlands

The States forests are managed by the **State Forest Management Centre RMK**. It is also responsible for conservation and recreation activities on the State land. RMK holds FSC certificate on responsible forest management and last year, its felling volume was 4,3 million cubic meters. The felling volumes have increased in the State Forest in the past years and have reached their maximum.

The Ministry of the Environment is responsible for implementing the Forest Act and other legislation on forestry, also it is responsible for making forest development plans after every ten years. These plans set the main objectives and course of development in forestry sector.

The Ministry of Rural Affairs is responsible for implementing Estonian Rural Development Programme and its financial schemes for forest owners. Many different activities are financed under the plan, for example the compensation mechanisms of Natura 2000 network, infrastructure support for reconstructing forest roads and drainage, supporting tree health and help to create new woodland on forest disturbance areas etc. The financial mechanisms are administered by through the **Estonian Private Forest Centre**.

The Environmental Board is responsible for issuing felling permits and **Environment Agency** does the national forest inventory.

Challenges

Age structure. The overall area of protected forests in Estonia is big but the age structure is uneven and there are many young forest stands and not so many mature stands. This means that the protected forest network does not provide sufficient habitat for old growth forest species. Many of these old-growth forest areas have been mapped as woodland key habitats but many have not been found and can easily end up in a clear-cut.

9.1.4 Kaitstava metsamaa jagunemine arenguklasside järgi

9.1.4 Distribution of protected forest areas by development classes

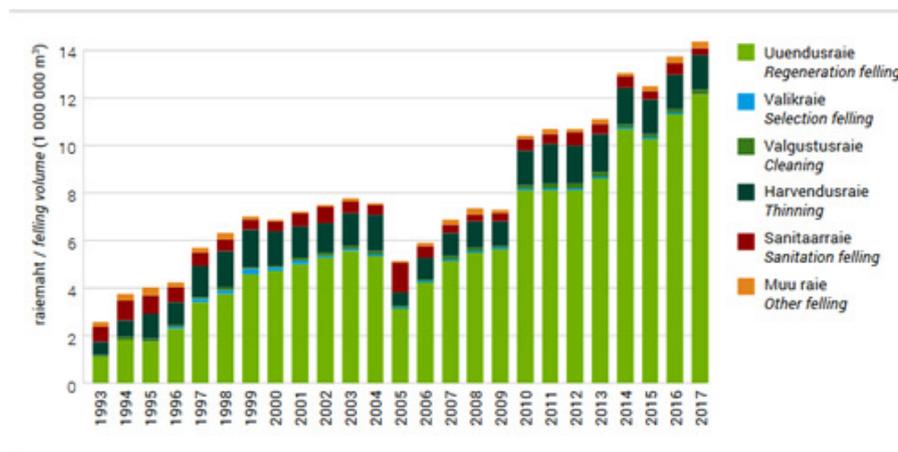
Arenguklass Development class	Kokku Total		Riigimetsa Majandamise Keskus State Forest Management Centre		Teised Others	
	Pindala Area (1000 ha)	%	Pindala Area (1000 ha)	%	Pindala Area (1000 ha)	%
Lagedad ja selgusetad alad Unstocked and reforestation areas	20,0	3,4	11,1	2,6	9,0	5,1
Noorendikud / Young stands	33,2	5,6	17,3	4,1	15,8	8,9
Latimetsad / Pole stands	28,9	4,8	23,7	5,7	5,2	2,9
Keskealised / Middle-aged	228,1	38,2	164,2	39,1	63,9	36,1
Valmivad / Maturing	73,2	12,3	48,7	11,6	24,5	13,8
Küpsed / Mature	213,1	35,7	154,5	36,8	58,6	33,1
Kaitstavad metsad kokku Total forests under protection	596,5	100,0	419,6	100,0	177,0	100,0

Allikas: SMI 2017, Keskkonnaagentuur / Source: National Forest Inventory 2017, Estonian Environment Agency

Clear Cutting. Currently the felling volumes are at their height in Estonia and the main felling type in Estonia is clear cutting. The clear-cutting rate has never been so high in the history and the effects of it to the environment are yet to be seen. Clear-cuts cause fragmentation of the forest landscape and can make it impossible for old-growth forest species to spread. This has been one of the main reason the flying squirrel is in danger of extinction in Estonia.

Joonis 3.4.2.1 Raiemaht raieliigiti aastail 1993–2017

Figure 3.4.2.1 Felling volume by felling types in 1993–2017



The region ALUTAGUSE PARISH

Alutaguse parish is situated in the Northeast part of Estonia around 180 km from the capital city of Tallinn. Alutaguse is one of the densely forested corners of Estonia, similar in appearance to the taiga. Swamp, mire, and dry boreal forests predominate here. Pine and birch forests are most widespread. There are a large number of treeless mires and very few meadows. The fauna of Alutaguse area resembles that of taiga to the extent that some incidental arrivals here – wolverine, Siberian jay and the great grey owl – are characteristic taiga species.

Extensive forests in Alutaguse are also home to flying squirrels and a large bear population. Golden eagles and white-tailed eagles nest here relatively frequently. Most of the 40 breeding pairs of osprey in Estonia have congregated in the Alutaguse and Karula regions. Mires are a natural part of the Alutaguse landscape. Estonia's largest mire system is situated here. The western part of the landscape region includes the protected Muraka and Ratva Bogs and Sirtsu Mire.

Human inhabitation is relatively recent and sparse in the Alutaguse region. Traditional occupations in Alutaguse include iron smelting from bog-ore, fishing (on the Narva River and along the shores of Lake Peipsi), lumbering, rafting, and woodworking. The villages around Avinurme are particularly famed for the latter. Since there was little farmland, but a great deal of forest, woodworking craftsmanship was passed down from generation to generation. Over time, villages became specialised in one type of product. Avinurme fairs were known throughout Estonia.



The workshop - elements of the meetings

Participants.

This was a two day event, based in Matsu Talu in Alutaguse Parish Eastern Estonia.

Around 30 participants from 11 European countries met and exchanged views about sustainable forest management. On the opening evening the workshop started with welcomes and introductions and a short briefing about the Field Trips which required an early start the next morning.

The first full day was given over to Field Trips to get a better understanding of Estonia, its forestry industry and how it operated. Beforehand the participants had been briefed about the findings of the first workshop, particularly the difficulty of making a single definition of Sustainable Forestry. This had resolved “not to strive for any standard definitions of sustainable forest management, but rather to focus on the values and principles which may guide the efforts to achieve sustainability, which we see as a process rather than a static measurable condition. The participants at that first meeting agreed four key principles which would be referenced throughout the workshop programme. They are:

- Holistic respect for the health of woodlands and forests as natural organisms and systems, which have a validity and even sanctity in their own right, regardless of human intervention
- A sense of stewardship of forests on behalf of humankind now and in the future, rather than selfish or short-term exploitative use of forests
- A sense of communal responsibility for, and pride in, the forests; and of fairness in the provision and allocation of forest-based benefits and resources
- A global perspective, based on care for all the world’s forests and on awareness of the fragility of global ecosystems and climate.”¹

The parties returned to the hotel in the late afternoon and held working groups and then a plenary session to discuss issues raised by the field trip in the context of the Key Principles, before enjoying an international buffet supper.

International Buffet

All participants were invited to bring special food or drinks typical of their local area. During the “international buffet”, these specialities were personally presented by the participants and the stories behind gave a further insight into different European customs and cultures.

Day 2 started with the conclusion of the plenary session from the previous evening followed by detailed presentations about the first two workshops, the impact of the EU Forestry Strategy and an introduction to Forestry in Estonia.

¹ Sustainable Forestry 1st Workshop 2016 March 17 - 20 2016 - Milverton - UK Summary Report

Market of initiatives

This was followed by the **Market of initiatives**. During this session we offered the participants an opportunity to share their projects and experience with others in a "market place" environment. Sitting at a table they could put posters, leaflet etc. in order to present their initiatives.

The 'market' was organised in two rounds with 4 presentations running in each concurrently. The other participants visited these tables to listen and discuss the presentations before changing after approx. 20-25 minutes. The atmosphere of a fair or a "market place" opened the space for some lively discussions and exchange of experiences in small groups.

A detailed programme is in Annex 2

A list of presentations with short descriptions is in Annex 3

After lunch and the Group photo the Workshop split into 4 Working Groups to discuss and reach conclusions about Estonian forestry management in terms of the 4 Key Principles. The Groups were encouraged to walk outside to help foster these discussions. The conclusions were reported in plenary.



After a coffee break the Workshop split into 3 groups to consider the pressures on Estonian forestry at a international, national and local level and offer appropriate solutions. The groups again reported in plenary.

The final session was dedicated to distilling the work into a single straightforward message and receiving feedback from the participants.

Field trips and issues arising

This first day was dedicated to understanding forestry in Estonia and the getting first hand experience of the industry and its economic, social and environmental components. Participants were asked to assess what they saw in terms of the 4 Key Principles so they could form conclusions about how sustainable forestry was in Estonia and whether change was required to make it more so.

1st stop The AS Estonian Cell Pulp Mill:

The AS Estonian Cell Pulp Mill is in Kunda about 110km west of Tallinn close to the Baltic coast. It was established in 2006 by the Austrian Heinzl Group and, at the time, represented the second largest foreign investment in the country. This year it has become profitable as it has paid off the initial investment as well as various upgrading costs.

The Mill produces pulp mechanically and processes 440m³ of timber annually to produce 173m³ of high quality Bleached-Chemi-Thermo-Mechanical aspen pulp. This is the raw material for printing and writing paper, paper board and tissue. The effluent and unused lignin is used to produce biogas which helps power buses. Waste water is free of sulphur and chlorine which means that anaerobic treatment is possible. Arisings such as bark and sent to a biomass plant.

The Mill turns over 87m euro pa and employs 93 staff.

The Mill only uses Aspen (*Betula tremula*) which makes up 7% of Estonian forests. Current annual growth is 15m/m³ pa and the annual amount harvested varies between 0.8-1.0m/m³. Traditionally aspen was regarded as poor quality wood not really suitable for harvesting however it is excellent for use as pulp because it is quick growing and produces white wood. This is good for copy paper because it is easy to bleach to the required standard. Wood is primarily sourced from Estonia but when supplies are low they also use Russia and Latvia. Approximately 40% comes from State Forests and 50% from private owners and 10% from abroad. Timber of about 30 years old is preferred because after that age rot and discolouration can be problematic. All wood used is 'controlled' and 50% is FSC/BSC certified. It is company policy to encourage and increase the used of certified wood. The timber costs 40 euro/m³ delivered in although the price can fluctuate. A 1 euro premium is paid if it is certified.

Mechanical pulp processing is very energy intensive and the Mill uses 26Mw/hour of electricity which is about 2.5% of Estonian demand. 16M/m³ of gas is used for the driers but approximately half comes from on site derived biogas.

The process of creating the pulp starts with the raw timber which is chipped, washed and dried at 70 degrees to 10% moisture content. It is then refined which essentially crushes the pulp through 0.5mm rollers before being bleached with peroxide (which produces O and H₂O). It is then baled and packed before distribution. Bales are 220kg and two are produced every minute. Two types are produced; fully bleached or paper and less bleached for board. 250Kg of dry wood (500kg undried) makes each bale. Approximately 550tonnes are processed daily.

The pulp is exported to Sweden by sea (40%), and by lorries to mainland Europe (35%) and Russia (25%).

The Mill operates 24 hours a day using three 8 hours shifts. This works out at a 42hr week accounting for rest periods after night shifts. New workers require 4-6 months training which means that recruitment can be challenging. The Mill holds two months wood supply (65k tonnes).

From an environmental point of view the Mill pays for the effluent it produces

6000/m³ of waste water is treated daily which approximates to 12/m³ per tonne of wood used. After treatment some is treated on site and the rest discharged to sea along a 12km pipe with the last 4km being out to sea. The water effluent contains some suspended fibre, some carbon and some heavy metals. However the main environmental concern is Biological Oxygen Demand (BOD).

2nd stop: Puiduaida Kohvik Craft Workshop at Avinurme:

The Workshop has a cafe and shop attached and this is where we stopped for lunch.

The workshop produces a wide variety of wooden products including kitchen utensils, childrens toys, ornaments and sauna equipment. The business is family owned and uses local craftsmen. Due to its location and natural conditions, the Avinurme area has strong woodcraft and business traditions, based on knowledge passed from generation to generation. The family that runs the centre have been woodcraftsmen for many, many years.

Most of the wood is sourced locally except for juniper that comes from the West Estonian islands and is derived from the restoration of alvar habitats.

The shop and cafe caters mainly for tourists in the summer months and also hosts workshops for traditional activities such as woodcraft and making bread and butter. As well as making and selling tourist souvenirs it also produces traditional wood products for the home and sauna which have a ready local market.

<https://puiduait.ee/en/>

3rd stop: Flying Squirrel Habitat:

We were met by flying squirrel expert Uudo Timm who drove us into the woods near Matsu Talu. We visited two protected areas specially designated for the flying squirrel. We were shown some nest trees that were equipped with motion sensitive cameras. Although the animals are nocturnal participants were able to see camera footage of the squirrels jumping on and off the nest tree and entering to the nest. Some squirrels also have radio collars allowing Uudo to chart their location. However, the main evidence for the presence of flying squirrel comes from excrement below the nest trees.

Uudo explained why the flying squirrel is threatened by current forest management practice in Estonia, with habitat loss and fragmentation major factors. Squirrels need areas of relatively close canopy forest to allow them to glide between trees as they do not like being on the ground, felling in protected areas

has broken up blocks of suitable habitat and effectively isolated populations of the squirrel and restricted their range. In addition squirrels favour old aspen trees for their nests and with the current market for young aspen there is a fear that the supply of suitable trees will decline significantly over the next ten years. Although these threats are serious they can be reversed if policy and protections were applied and enforced, but without fairly quick action there is a high risk that the flying squirrel will become extinct in Estonia within the next 10 years.

Reflections on the side visits

On our return we split into three Groups to reflect on the sustainability of what we had seen and how well they fitted with the 4 key Principles.

Group 1

The Group felt that the Mill was of social and economic benefit because it provided employment and also a market for low quality wood. It was also noted that the Mill was now profitable and the turnover of 1m euro per worker was regarded as good.

However there were environmental issues raised because of the outflow to sea, especially the potential for heavy metals to be discharged, and the need to take relatively young aspen which seriously disrupts the natural forestry ecosystem. The group felt that this could be addressed by better regulation and enforcement at Government level to ensure a supply of wood whilst safeguarding protected areas.

The carbon footprint was also raised as a significant issue.

The Group felt that Craft Workshop demonstrated a good multilateral approach catering for tourists in the summer and keeping the cafe open for local people during the winter. This with the emphasis on traditional products, employment of local craftsmen and use of local wood was regarded as a good example of a small scale sustainable enterprise.

However, there was concern that the small scale might produce too much CO₂ especially as some of the wood required could not be sourced locally and therefore had to come some distance by road.

Finally the Group was very concerned about the impact of forestry management on the Flying Squirrel and its habitat. There are significant issues about cutting that severs areas of habitat and therefore isolates populations. This situation is now so severe that the only practical solution is to strategically acquire and protect areas of older forest with surrounding and corridor areas. They should be allowed to age naturally so that suitable habitat areas can expand and are able to link up over time. The fear is that the Flying Squirrel is likely to become extinct in Estonia within five years unless it is given urgent attention through Government commitment, action and funding.

On the other hand the Group felt that the introduction of nest boxes and cameras was very positive as they helped to raise the profile of the species. They also felt that these could be combined with photographic tourism and 'bloodless hunts' for squirrels and other indigenous wildlife.

Overall the Group felt that the Pulp Mill was broadly sustainable because it had a plan to become greener and the will and resources to make it happen. In contrast the Craft Workshops were small scale and although operating a successful business were constrained by its very nature from making many changes. However, there was real concern about the Flying Squirrel which is lacking proper protection and management. Suitable habitat is being lost, populations are being isolated leading to inbreeding. It is now known in less than 50 local areas and unless immediate action is taken to protect it it will die out within a few years.

Group 2

Group 2 felt that the Pulp Mill was keen to give an impression of striving for sustainability citing the use of on-site generated biogas as an example. Clearly there is a social benefit from the employment it brings both directly and to the forest industry but there was a view that it needed to be more aware and responsible of the impact of their timber supply and the need to maintain forest standards and champion protection.

The Group however felt that there were practices that could not be defended such as the direct discharge to the sea. Although we had been told it was monitored nothing was said about the results so it is not clear whether this is a problem or not. The Group was also concerned about the bleaching of the lignin in the final product and whether this was truly necessary, could the group offer a price incentive or marketing initiative for unbleached pulp for example? Maybe schools could be encouraged to use unbleached paper?

The Group noted that the Mill provided a market for low quality timber but set this against the clear conflict with the needs of the Flying Squirrel.

Concerns were also raised that some of the environmental costs were hidden because timber was purchased delivered in so the transport costs and associated CO2 emissions were not included in the company's calculations. Some timber comes considerable distances from other countries where timber and other prices are lower thus making it economical to transport heavy loads a long way. There was also concern about the high proportion of State grown timber that was used and whether the low price represented a 'state aid'?

The Group also noted that 'long term contracts' had been cited as a reason for a lack of environmental action. There was also a view that this relationship with Government could impact on small scale woodland owners and producers through exclusion from markets and/or pressure to sell land. It was felt that this could be addressed with sufficient political will.

The Group also noted that the sanctions for pollution were on the basis of exceeding limits and felt that there ought to be a reward system for being below pollution thresholds.

In relation to the Craft Workshops the Group was pleased that scrap wood was used but was concerned that it was not sourced sustainably. There was an acknowledgement that the products inevitably used a lot of glue. Concern was also voiced about the use of Juniper which, although native, is slow growing, represents an important habitat component which was not locally sourced. That said, there was considerable support for the positive social impact the Craft Workshop and Cafe had.

However, the Group's greatest concerns related to the visit to the Flying Squirrel habitat. In particular they highlighted

- The felling rotation that removed current and potential habitat and prevented the establishment of replacements.
- Drainage which heavily impacts different habitats within the forest ecosystem
- Coupe sizes that can be too large, poorly planned and contiguous. This means that operations within adjoining ownerships open up areas that are too large. This needs to be better organised, properly planned and controlled. It was suggested that felling should be restricted by location rather than by volume so that contiguous felling was not allowed within a certain time or through the requirement to leave defined buffer strips.
- There is an issue where commercial companies get preferential treatment for felling permits which encourages selling and more consolidation.
- The need to encourage aspen within longer rotational eg conifer stands as this would allow the growth of older trees suitable for Flying Squirrel. However, the felling of the conifer would need to be done on a continuous cover basis so as to preserve the integrity of the habitat.
- The need for a positive message to be aired about the Flying Squirrel and its plight.

Group 3

The third Group was quite critical of the Pulp Mill feeling that it lacked a sense of stewardship and a holistic view. It seemed very business orientated with no consideration of the impact of its operations beyond its immediate site boundaries. This is shown by the shifting of responsibility onto suppliers and relying on someone else's FSC accreditation. Half the wood brought in is from FSC sources (which include some protected areas) with the other half is from so called 'controlled wood' which includes areas of potential biodiversity and habitats that have not been officially mapped.

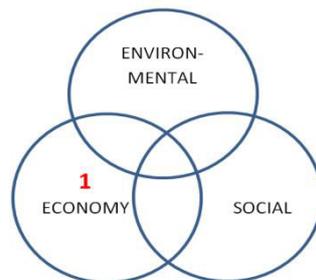
The Mill uses a disproportionate amount of Estonian assets from water, electricity through to 80% of 30 year old aspen but pays 7m euros in green taxes. There is no regard of the impact of their activities on the Estonian environment in general or the long term future of the Flying Squirrel in particular. However, the Group did acknowledge the importance of the Mill in terms of employment.

It was noted that the Mill pays no business tax in order to encourage reinvestment and the only tax burden is on the emissions. This was regarded as a false trade off that allowed them to abdicate responsibility for environmental degradation by giving the Government funds which are not ploughed back into that environment. There was a feeling that the Mill owners needed to step up and press the Government for more sustainable policies that would ameliorate the impacts of their industry. There was also a view that the Mill could take a direct role in Flying Squirrel conservation.

On a broader scale the Group wondered whether the EU should be pushing for more environmental sustainability by

- Raising awareness about global (not just European) issues,
- Possibly imposing an EU environmental tax on resource use,
- Looking at raising the carbon 'price'
- Promoting a global database of products with their environmental footprint paving the way for labelling/accrediting products in the way that high fat and energy efficient ones are.
- Stricter, wider and more transparent application of FSC rules.

Overall the group felt the Mill was geared principally to economic outcomes

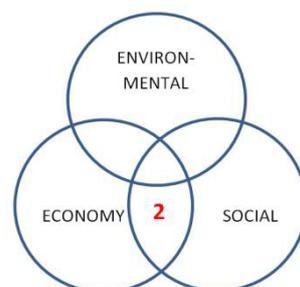


The Group was also slightly sceptical about the Craft Workshop and asked whether its products were really necessary? As with the Mill they did not detect a wider or holistic view of the forest or the other products that it could provide and would have like more information about the actual sources of the wood, what was the involvement of the community in cutting the wood and do they (the workshops and local people) have a wider global perspective on wood and forest management?

However, there was employment for 25 local people (as opposed to 88 for the Mill) and there was clear and enthusiastic local engagement with it.

To possibly improve the situation the Group felt that there was a need for small business advisors providing a wider sustainable view and advice of the positive impact on businesses that embraced environmental values and products.

Overall the Group felt that the Workshops met economic and social needs but not environmental ones.



At the Flying Squirrel site the Group felt that habitat management would result in a mixed age forest that would benefit other species. In contrast the Mill uses the forest but does not sustain it in the wider sense.

However there is no obvious economic aspect to conserving the squirrels which is probably essential to its long term sustainability. That said there is a clear holistic view of the squirrel and its place within the natural environment. The Group questioned what efforts were being made to increase public or industry awareness of the squirrel and its plight.

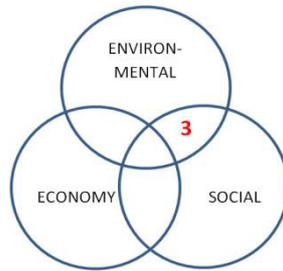
Flying Squirrels are also capable of being a key or mascot species for Estonian forests and it is therefore a shame that there is no coherent national plan or mechanism to maintain the population even in the short term.

The Group felt that such plan ought to incorporate

- Continuous Cover Forestry.
- Continuous Forestry Corridors to differentiate the age of aspen trees in the forest.
- “Golden Section”: selecting exactly which trees will be cut.
- Ecotourism as income.

- Non-timber products and services as income

Overall the Group felt that the Flying Squirrel areas met environmental and social needs but not economic ones.



Plenary and policy context

Presentation of conclusions of first two Sustainable Forestry workshops held in the UK and Serbia (Gwil Wren, UK)

Gwil gave an overview of the first two workshops setting out the pathway to agreeing the 4 Principles in the UK Workshop and how they had been applied in the Serbian Workshop.

The UK workshop examined issues of forestry in a National Park with issues of public access, landscape protection and invasive species such as rhododendron and Grey Squirrels. The workshop concluded that it was not possible to agree a single definition of sustainable forestry and instead opted to formulate 4 Principles against which forestry should be measured and assessed to gauge its sustainability. It was also agreed to use these 4 Principles as the foundations for the future workshops.

In the Serbian Workshop the issues also revolved around forestry in National Parks where timber sales had to help cover the Park costs. Climate change is a significant factor with an increasing frequency of dry years leading to more fires and a build up of damaging pests like the spruce bark beetle. There is little political engagement at either local or national level meaning that the Park has to finance itself largely through timber sales. About half the land is owned publicly and managed by the National Park with the rest in private hands. Unfortunately rural depopulation and poor land ownership records mean that coherent management across the Park is difficult particularly when managing the fire risk. The workshop concluded with several recommendations such as having a reliable land ownership register, raising awareness among local people and politicians and securing more robust financial support.

What is the European Forest Policy and how relevant is it? (Juliette Augier, FR)

Juliette had been working on an Evaluation Study of EU Forestry Measures and provided an overview of forestry from a pan-European perspective.

She emphasised that forestry unlike farming or fisheries is not an EU competency and is therefore the preserve of national governments. That said the EU as an overseeing organisation does seek to bring coherence and co-ordination across the continent and between national states. Furthermore, the management of forest is of key importance to bring action on other issues for which the EU has competency, such as the preservation of the biodiversity, the attenuation of (and adaptation to) climate change, and rural development (given that forestry is a key economic sector rural areas).

To address the growing challenges and demands on forests, the EU published in 2013 a New Forest Strategy, seeking for an improved cooperation on forest related issues among the EU Member States. Besides, forestry measures were introduced into Pillar 2 of the Common Agricultural Policy, to provide financial support and encourage countries to help meet the aims of the Strategy. However, the choice to implement those measure is let to Member State and/or regional authorities: for instance, Sweden, Finland and Estonia chose not to implement those measures, and choose to act based on national policies only.

In the Member States where they were implemented, the forestry measures brought significant financial means (7 050 M€ spend between 2014 and 2017) for the preservation of forest ecosystem and to support the forestry sector. Some of the key outputs of the measures are:

- Between 2007 and 2013 about 290,000 ha was afforested which represents one third of the total increment in the EU forest area in that period. However, between 2014 and 2020 about 565,000 ha will be afforested.

- The large scale implementation of surveillance systems and restoration campaigns (557 000 ha restored in 2007-13), Ensuring the continuity of forest ecosystem services, and the maintenance of the production capacity, together with the adaptation of settlement to climate change and improvement in the productivity, through the use of specific species and improved seedlings.
- Support to small forest companies in rural areas.

That said, more could be done to deliver measures to enhance non-productive investments in forests, for the management of forest ecosystems and for the development of non-productive activities. More synergies could also be developed within the Natura 2000 policy, which can also give access to financial support to forest holders, for the maintenance of forest ecosystems and of the ecosystem services they provide.

A link to the presentation can be found [here](#), the whole report can be found [here](#)

The Challenge of Moving to Sustainable Forestry in Estonia

(Liis Kuresoo, ELF, EE)

Forestry in Estonia is under stress at the moment and pressure for felling is very high. This is particularly for spruce with a higher volume being cut than is being added by growth. Inevitably this is leading to cutting at younger ages with a knock on impact on the long term health of the forests.

The favoured harvesting method is clear cut but there is insufficient re-planting to match the amount felled and although there is natural re-generation it tends to be dominated by deciduous trees with spruce forming the under storey.

In terms of protection 13% of the forests are strictly protected for nature conservation with a further 12.5% where restricted felling is allowed. The remaining forests are regarded as commercial. However, many of the protected forests are regenerating clear cut areas and only 1/3 of the strictly protected areas are old growth forests rich in biodiversity. Additionally all the protected areas are pine dominated meaning that there are no protected spruce areas which increases the pressure on that species.

In Estonia only 2% is natural forest but unfortunately not all of that is protected and there is poor data about where it is located or and no mechanism to protect it. In particular forest roads and drainage ditches are very damaging to these old forests.

There is also a loophole in the law that allows felling in Natura 2000 sites and even allows management payments to continue after clear cutting.

Consequently wildlife is declining in Estonian forests such as the Flying Squirrel which used to be very common. The decline started between 1918 and 1945 but has accelerated rapidly in the last 30 years meaning that it is now on the brink of extinction in Estonia. Six species of fungi have become officially extinct in the last 50 years and 11 species are seriously declining. There is also a general decline in forest birds.

Group Discussions about Estonian Forestry Management and the 4 key Principles

We divided into groups to consider and discuss the pressures that Sustainable Forestry is facing in Estonia and by extension northern Europe and measure these against the 4 principles of forest sustainability that were identified at the first workshop.

Group 1

Principle 1 A holistic respect for the health of woodlands and forests as natural organisms and systems, which have a validity and even sanctity in their own right, regardless of human intervention

The Group felt that the first priority for forests in Estonia was people and what the forests provide for them such as jobs and produce. Therefore the 'respect' should be understood in that context with respect for woodlands as a natural entity being secondary.

This view was formed because of the human inclination to control ecosystems rather than being a component of them. Consequently there will always be change.

There have been clear examples of this where the use and care of the forest is driven by people for people. That said the Group felt that forests in Estonia were viewed positively which had to be a benefit to their long term future.

Group 2

Principle 2 A sense of stewardship of forests on behalf of humankind now and in the future, rather than selfish or short-term exploitative use of forests

This Group felt that the dilemma was how to add value to the forest which was not related to timber as the main commodity. The current situation meant that even smaller timber was being marketed with consequent long term damage to the structure of the forests and its wildlife.

For example more could be made of the forests as sources of food from hunting and fungi foraging and even providing extensive grazing for farm animals. They gave the example of Cameroon where trees are planted to support honey and alcohol production.

There needs to be recognition that forests can provide other services too such as recreation, eco system services like carbon sequestration, air quality and flood mitigation. However, achieving this was impeded by poor connections and relationships between people and forests. While there was a proportion of people who were closely involved with forests and their management there was still a large number who were not and unless there was improved education, understanding and appreciation of forests this disconnect would persist and the management of forests would continue to be one dimensional and the current problems would perpetuate.

It was felt that rural depopulation was a significant issue and also that protection needed to feed down from the top and not be left to those on the ground.

Group 3

Principle 3 A sense of communal responsibility for, and pride in, the forests; and of fairness in the provision and allocation of forest-based benefits and resources

The Group thought that communication between stakeholders was very important in order to meet the aspirations of this principle. People needed to be able to share common interests and goals and communities needed to demonstrate a passion for preserving forests which should be transmitted directly to democratic representatives, land owners and managers. Each needed to be able to tell the other what they wanted from the forests so that common sustainability goals could be developed and respected. These discussions could also deliver untapped resources, increased public participation and innovation like promoting branding and trading e.g. Fair Trade Forest Goods and Products or an exchange of areas for different purposes to improve environmental and forest coherence.

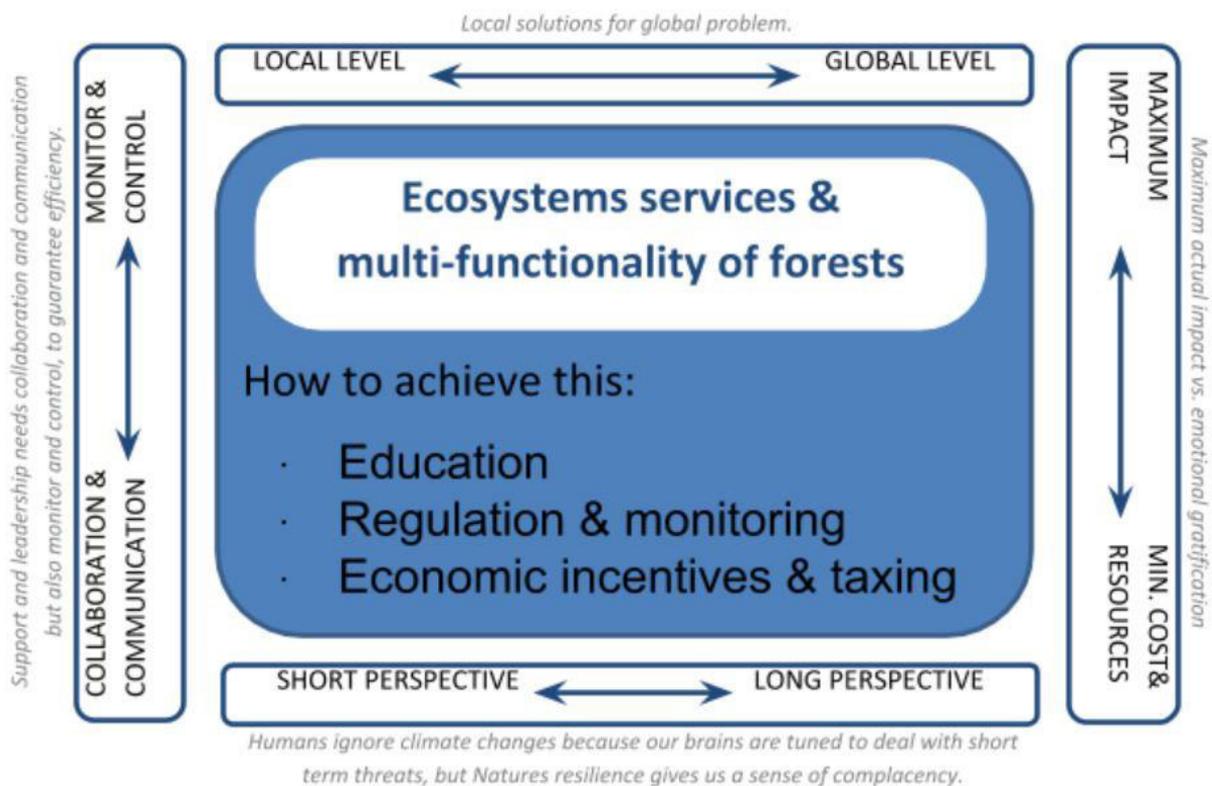
Group 4

A global perspective, based on care for all the world's forests and on awareness of the fragility of global ecosystem and climate.

The Groups views were summarised in one sentence:

“Environmental education, economic incentives and taxing, regulation and monitoring, do not fully support forests as ecosystem services providers and multi-functionality providers.”

They proposed this model



Pressures and Solutions

The Groups discussed the pressures acting on Estonian forestry and offered potential solutions

a) Group 1: Pressures and Solutions at a regional and international level

The Group identified various issues that impacted on Estonian forestry from outside the country.

The global economy and the power of money was identified as a major pressure. Countries are expected to 'grow their economies and often sustainability is ignored. This manifests itself in

- A lack of cultural appreciation of the forests as a national resource at Government level
- Poor and inadequate information gathering
- Under resourcing of compliance monitoring of laws and regulations
- Slow decision making at Government level
- Inconsistencies of approach at a national level
- Relative weakness of NGOs and woodland owners regarding their ability to influence decision makers.
- Lack of challenge and an acceptance of 'green-washing' by industry.
- The strong draw and influence of cross border trade and demand for commodities.

In terms of solutions the Group felt that the best chance of change would come from strong grass roots co-operation between landowners and NGOs which could help resist some of these pressures and provide a 'push back' for a changed approach. Already there are small projects aimed at buying strategic areas of forest to help build influence.

b) Group 2: Management in sustainable forestry & climate change

What would be the forestry ideal?

- 1/ Prevent and help to mitigate climate change, be sustainable.
- 2/ Continue to provide ecosystem services, social and cultural benefits.

3/ Provide wood and other economic resources and services.

Problems / pressures	Solutions
Lack of knowledge and lack of stewardship:	
<ol style="list-style-type: none"> 1) People do not feel connected to the forest and lack stewardship. 2) Lack of knowledge on all levels: <ol style="list-style-type: none"> a) Academic b) Industrial c) Political d) Consumer level 3) Lack of access to relevant data hinders support possible actions to reduce environmental problems. 	<ol style="list-style-type: none"> 1) Increase awareness on problems and possible solutions. 2) Empower people: <ol style="list-style-type: none"> a. Environmental education b. Information about local forest & habitats c. Get people involved in forest management d. Start a new “Participative label” forest certificate that would involves local people in forest certification. 3) Research on best forest management practices and optimizing wood production with low environmental impact (case studies, how-to’s, best practices)
Economical and political pressures:	
<ol style="list-style-type: none"> 1) Short term benefits are rewarded in both systems (econ. & political) over long term needs. 2) Non-economic benefits are not recognised to their full value. For example: <ol style="list-style-type: none"> a. Risk reductions and environmental catastrophe prevention is not recognised in the value of the forest. b. Recreational, cultural aspects are not rewarded. c. Current economic model does not enable to add a price tag on activities and efforts done to prevent climate change. d. Consumer level 3) Current economic & tax model does not support sustainable forestry. 4) Current afforestation support benefits clear-fell more than continuous cover forestry. 5) There are investment barriers from currently acquired technology to more environmentally friendly technology 	<ol style="list-style-type: none"> 1) Connection and cooperation between forest managers, conservationists, industry and policy makers to organise policy and enforce best practices. 2) Tax benefits: <ol style="list-style-type: none"> e. Payment or “kick-back” on taxes for environmental services provided. f. Tax CO₂ instead of uniform VAT g. Tax reduction on eco-friendly houses. h. Show which part of a persons' income tax goes to providing environmental services. 3) Support companies in shifting from current heavy-large scale machinery to smaller emerging technology. 4) Enable consumers to understand the whole life cycle of every products (for example by adding all steps in production and all CO₂ used to a product-unique block chain.
Environmental, cultural and other types of problems:	
<ol style="list-style-type: none"> 1) Often there is no connectivity between different forest areas: forest does not function as an ecosystem and cannot adopt to climate change. 2) Too fast rotation of CO₂ in the “growing-logging-consuming” cycle. 3) FSC does not seem to be strict enough or not well controlled enough. If it is unclear what value it provides the help FSC offers today might diminish in the future. 	<ol style="list-style-type: none"> 1) Multifunctional corridors to connect larger forest areas and also cities (bicycle road + green belt). 2) Nation (or EU) wide understanding where it is most critical to have forest and support this area. 3) Graded certificate (from 1-5) instead of 0-1 system.

c) Group 3: Local Communities and Forestry

Pressures**1) Big Companies**

Heavily wood orientated
 Inflating land values
 Loss of multi-functionality and biodiversity
 Constantly shifting baselines
 Lack of benefit for local communities

2) Living Standards

Needs v luxuries
 Urbanisation removing need for rural jobs

3) Insufficient funding for environmental protection

Disproportionate division of money
 Local people not encouraged to help
 Lack of awareness

Solutions

Possible land purchase tax for foreign companies
 No clear-cutting around settlements and promotion of continuous cover combined with stringent protections and nurturing of local genetic resources.
 Improved mapping and record keeping

Market and promote more natural ways of living
 Learn from the past to protect the future. Celebrate culture and community

Redistribution of Government funding to support the environment
 Information and legislation for public consultation
 Provide visual stimulation - forests today shown in contrast to forests in the past and future

Summary and Closing Statement

In October 2018 36 participants from 10 countries met in Alutaguse Parish in Estonia to discuss the state of forestry in Estonia and northern Europe. This was the third workshop in a series of four. Starting in 2016 these workshops have so far involved nearly 100 people from 20 countries.

Participants were welcomed by Forum Synergies and their local partners ELF (the Estonian Fund for Nature) who were keen to show us the pressures and impacts forestry was having on the rural environment. Over the two days of the workshop visits were made to a modern industrial pulp mill, a traditional craft enterprise and the woodland habitat of the endangered Flying Squirrel.

Participants showed great interest in the sustainability of the pulp mill operation and in particular its high energy requirement and the fact that it utilised 30 year old aspen. Traditionally this had been a difficult timber to sell but now, partly due to the demands of the mill, it was being harvested at a fast rate and there was serious concern that this would reduce the amount of older aspen upon which the Flying Squirrel depended. Indeed it is feared that unless there is a significant change in forestry management and protection the Flying Squirrel will become extinct in Estonia within 5-10 years.

Although forest habitats in Estonia are protected there appeared to be a rather random system designation and protection which can lead to clear felling in and around protected areas. This is causing increasing concern because of the apparent economic priority on timber production and sales over environmental or social importance. Participants were clearly concerned that if felling rates exceeded natural regeneration or replanting that the long term value and heritage of Estonian forests would be seriously damaged.

As part of the workshop there were also presentations about various projects around Europe as well as an insight into the EU's Forestry Strategy and what impact it was having. Interestingly although the Strategy had led to financial support for forestry being made available under Pillar 2 of the Common Agricultural Policy, Estonia was one of three countries which had declined to take advantage of it.

Participants discussed the Pressures on Estonian forestry in some depth and there was a general consensus that Government policies for short term economic objectives were damaging and leading to potential long term degradation of the forests. This would affect local communities, wildlife and the general environment in Estonia. There was agreement about the lack of awareness of these long term impacts which needs addressing urgently.

The average age of the participants was lower than the previous workshops and this perhaps reflected a higher level of concern about the long term which was evident in the agreed closing statement:

“We believe that the intrinsic natural value of the forests of Estonia are undervalued and the primary focus on timber production is short sighted and misplaced.

It is our view that the Estonian people should be given a greater opportunity to be involved in the future of their iconic forests and be encouraged to undertake alternative and sustainable activities like health promotion, tourism, wildlife protection and climate change mitigation.

We encourage the Estonian Government to establish a National Forest Plan that incentivises sustainable activities, protects vulnerable habitats and species and benefits all aspects of this national resource.”

Forum Synergies and ELF are grateful for the financial support provided by the Estonian Foundation for Civil Society and Ülemiste shopping centre in the preparation and running of this workshop.

Annexes

Annex 1: List of Participants

First name	Last name	Organisation	Country
Simone	Matouch	Forum Synergies	AT
Šimon	Hrbek	Mendel university in Brno	CZ
Justin	De Bondi	MTÜ Eikellegimaa/ Elav Tartu	EE
Marion	Kade	Forest Stewardship Council Estonia	EE
Volha	Kaskevich	ELF, Bahna	EE
Maarja	Kõrkjas	The University of Tartu	EE
Liis	Kuresoo	Estonian Fund for Nature	EE
Kätlin	Kurg	Keskkonnaamet (Republic of Estonia Environmental Board)	EE
Triin	Libe	Palupõhja Nature School	EE
Mattias	Luha	Püsimetsaühistu & Forestly	EE
Merilin	Mühlberg	Tallinn University of Technology	EE
Tarmo	Tüür	ELF	EE
Juliette	Augier	Alliance Environnement	FR
Dalampira	Evropi Sofia	Aristotle University of Thessaloniki	GR
Nikos	Ioannidis	Aristotle University of Thessaloniki	GR
Lydia Maria	Petaloudi	Aristotelian University of Thessaloniki	GR
Nikolas	Theofanous	Aristotle University of Thessaloniki	GR
Dainis	Kreichbergs	ZS "Andulaiši"	LV
Jonathan	Bradley	Verdant Ecology	UK
Patrick	Cook	Butterfly Conservation	UK
Wendy	Couch	University of East London	UK
Gwil	Wren	EuCAN CIC/Forum Synergies	UK
Rostyslav	Kos	NGO "Karpatske Kolo"	UKR
Liridon	Syla	NGO "Commune"	XK

Annex 2: Detailed Programme

Day 1: 18 October 2018 Arrival

14:00 - 18:00 Participants Arrive

20:00: Welcome and dinner

Day 2: 19 October 2018 Discovering the region and activities

Day 2 will be dedicated to understanding the situation in the region - from policy framework to local reality. The Field Visits will give an opportunity to discover how important and sustainable forestry is in Estonia. Each stop will focus on one of the three main constituents of sustainability (economy, social and environmental) but the activities observed will affect also the other two in some way. We hope to discover and understand how these factors interact in each locality and see what tensions and synergies there are or could be.

At the end of the day we intend to have a clearer view on :

- elements of sustainable forest management
- the role of local communities in sustainable forest management
- sustainable forest management in protected areas
- where forestry is and is not sustainable

7:30 Breakfast - we will have to leave promptly, so please be ready to leave at 08:25

8:30 - 16:00: Field visits with lunch

Stop 1 PULP MILL

Stop 2 CRAFT WORKSHOPS (Lunch)

Stop 3 FLYING SQUIRREL SITES

Coffee break on return to the hotel at 16:00

16:15 - 17:00: Opening the workshop

- Introduction to the workshop from Gwil Wren (UK, Forum Synergies)
- Origin and objectives of workshops
- Previous workshops
- Introduction to Forestry in Estonia and the Field Visits from Liis Suresoo (ELF)

17:00 - 18:00: Working groups

3 working groups will discuss the main sustainability issues/questions/ideas raised from each field visit and *Group representatives will bring findings to the plenary*

18:00 - 19:00: Plenary - feedback on field trips

- Short feedback by each working group
 - debate and exchange
-

20:00 Dinner & international buffet

Day 3: 20 October 2018: Coordination policies (national and European), local initiatives, regional initiatives and sustainability in woodland management

09:00 -10:15 Plenary: Introduction and policy context

(1) Presentation of conclusions of first two Sustainable Forestry workshops held in the UK and Serbia (Gwil Wren, UK)

- Influence of Man - Impact of forestry practices, policies, local culture,
- Influence of Nature - Forestry and climate examples of the impact of climate, fires, bark beetles, disease, drought
- What is regional cooperation and possibility for sustainable forestry and the services it provides?
- What are the national policies related to sustainable forestry and the services it provides?
- The 4 Principles

(2) Effects of EU support to the multifunctionality of forests: insight from the evaluation study of the forest measure under Rural Development Programmes (Juliette Augier, FR)

(3) Introduction to Forestry in Estonia (Liis Kuresoo, ELF, EE)

10:15 - 10:45 Coffee break

10:45- 12:45 Market of Initiatives

This is an opportunity to discuss and understand a wide range of forestry based work. Participants are invited to bring details of their own local projects and initiatives which are discussed in short 20 minute sessions in small groups. Participants are free to circulate among the topics that interest them

12:45 - 14:00 Lunch, family photo

Part 1: 14:00 - 16:00

We divide into groups to consider and discuss the pressures that Sustainable Forestry is facing in Estonia and by extension northern Europe and measure these against the 4 principles of forest sustainability that were identified at the first workshop.

The session will examine in detail the purpose and importance of forestry in Estonia and how it is practised. We will explore any identified issues that relate to climate change such as drought, major storms, high winds and long term change in weather patterns, all of which could have very serious consequences for woodlands and forests. We will examine the importance of forests in the delivery of eco-system services like carbon sequestration, climatic control and soil stability to counter erosion and rapid water run-off.

All these points have vital importance for the management of woodlands, for farmers and for national economies.

We will also consider

- (1) The choice and provenance of tree species.
- (2) Which forest management regimes will best conserve soil and water, resist wind and tolerate periods of drought
- (3) The role of active management in the prevention of large scale forest fires.

WG1 .(Session 1 - PRESSURES)

Group 1 - Regional cooperation in forestry

Group 2 - Management in sustainable forestry and climate change

Group 3 - Local community and forestry

These will be reported in plenary

Coffee break

Part 2: 16:00 - 18:00

This session will seek to discover solutions that can be delivered practically or through policy at Regional, National and EU level.

Introduction to working groups

WG 2. (Session 2 - SOLUTIONS)

Group 1 - Regional cooperation in forestry

Group 2 - Management in sustainable forestry including nature and climate change

Group 3 - Local community and forestry

18:00- 19:00 Plenary: Finding the synergies

This plenary session will seek to bring together the themes and examples which have been offered in the market of initiatives and the working groups.

The findings of the Workshop will be combined into a Final report which will be completed early in 2019.

19:00- 19:30 Plenary: Commitments & homework, planning of 4th workshop

Official closure, 20:00 Dinner

Day 4 21 October 08:00 Breakfast and Depart

Annex 3: Presentations during the Market of Initiatives

1. **Examples of continuous cover forestry practice in Estonia**
Liis Kuresoo, ELF, EE
2. **Sustainable Forestry in Belarus**
Volha Kaskevich; ELF, Bahna, EE

3. **The idea behind Püsimetsaühistu and Forestly**
Matthias Luha; Püsimetsaühistu & Forestly, EE
4. **Multifunctional agriculture and sustainable forestry: a case study about an innovative business in Greece**
Evropi Sofia Dalampria; Aristotle University of Thessaloniki, GR
5. **A case study of short food chains supporting local communities.**
Nikos Ioannidis; Aristotle University of Thessaloniki, GR
6. **A student's initiative on Sustainable Forestry in Greece**
Lydia Maria Petaloudi; Aristotle University of Thessaloniki, GR
7. **Evidence for an extinction debt in woodlands.**
Jonathan Bradly; Verdant Ecology, UK
8. **Butterfly conservation in the UK**
Patrick Cook; Butterfly Conservation Research on Continuous Cover Forestry and Biodiversity, UK
9. **Tourist and cultural events providing in the forests of Vytvytsya united rural community.**
Rostyslav Kos; NGO "Karpatske Kolo", UKR

Contact persons:

Forum Synergies
Simone Matouch
www.forum-synergies.eu
[info\(@\)forum-synergies.eu](mailto:info(@)forum-synergies.eu)

Sustainable Forestry Working Group:

Gwil Wren
EUCAN CIC
[gwilwren\(@\)gmail.com](mailto:gwilwren(@)gmail.com)

Estonian Fund for Nature:

Liis and Siim Kuresoo
[liis.kuresoo\(@\)elfond.ee](mailto:liis.kuresoo(@)elfond.ee)

