

Nature Conservation study trip to Latvia 2014

The Nature Conservation Unit, County Administrative Board,
Östergötland, Sweden







1. Aim with the study trip and choice of destination

The study trip was planned by and for the Nature conservation unit at the County Administrative Board of Östergötland. When we were planning the study trip, we wanted the trip to give us knowledge and inspiration to our work at the unit. During the trip the different locations that were visited should somehow have a connection to as many of our tasks at our everyday work as possible.

At the department more than 30 employees work, divided in five groups, depending on working tasks. The aim with the study trip was therefore also to get people from different groups a chance to talk with each other in a way that we often don't have time for, both about the visited locations and the nature values and conservation measures that had been executed, and more private to get to know each other better. The purpose of this is to get a better working climate and better cooperation between the groups which will give more interchange of knowledge and a more effective performance.

Latvia has many similarities with Sweden when it comes to different nature habitats and climate. The Latvian nature conservation have worked or are planning on working with similar conservation measures as we do in Östergötland, but there are also some differences on how to reach the goal. Latvian and Swedish nature conservationists therefore can learn a lot from each other. Of course, there are other locations than Latvia that could offer this, but at our department some of the employees have been working in Latvia and have great location knowledge and good contacts with Latvian colleagues. This was a perfect foundation to find locations and Latvian colleagues that could guide us and give us an instructive and pleasant study trip. To all our Latvian colleagues that guided and discussed nature conservation and measures with us – **Paldies!** (Thank you!)



2. Program

23 April

12.30 Departure by bus to Stockholm.

16.30 Boarding the ferry

17.00 Departure by ferry to Riga

17.00 – 19.00 Lectures about Latvia

- Latvian history in short, 15 min
- Nature conservation history in Latvia, 15 min
- Forests of Latvia, management and nature conservation, 15 min
- The Woodland Key Habitat Survey (WKH), 15 min
- Co-operation between the twin bird lakes Tåkern and Engure, 15 min
- The saproxylic beetle fauna in Latvia, an odyssey of dream animals, 15 min
- The complete, comprehensive and concise Latvian language course, 5 min

19.00 – 19.30 Internal meetings:

- LIFE Oak Restore
- Tåkern visitor center
- River restoration projects 2014
- Natura 2000 database

19.30 Dinner and then evening by yourself

24 April

11.00 (local time) Arrival Riga. Departure from the ferry terminal with bus.

13.00 Arrival to **Engure Nature Park**. **Roberts Silinš**, manager of Lake Engure NP meets us and takes care of us the whole day, lunch in the field.

13.30 Introduction to Engure NP and the bird station.

- The LIFE+ COASTLAKE project was launched in the autumn 2013. It involves Engure and Pape lakes. In the project it is planned to undertake lake restoration measures in both lakes (removal of biomass, etc). The project is now in its investigation phase. The long-term objective of the project is to improve the conservation status of the Bittern (*Botaurus stellaris*)
- Facilities for visitors

14-16.30: Excursion to Lake Engure

- Meadow restorations
- Calcareous fens
- The bird lake

16.30-17.00 Coffea/tea

18.00 Check in at Valguma Pasaule, <http://valgumapasaule.lv/>

18.30 Dinner

20.00 Sauna

25 April

06.00 Departure from Valgum Pasaule, early morning excursion. A whole day in and around **Kemerī National Park** with **Janis Kuze**. http://www.kemerunacionalaisparks.lv/?r=35&n_par_nacionalo-parku Janis Kuze is an ornithologist and did, among many other things, the WKH survey and the management plan of Kemerī NP. Field lunch during the day. Rubber boots are needed!

- Beaver influenced forest (WKH) near Smirdgrāvis, early bird morning with possibilities for, for example interesting woodpeckers.
- Lake Kanieri with spruce wet forest
- Remeandered river Slampe in Dunduru meadows, LIFE+ project HYDROPLAN <http://hydroplan.daba.gov.lv/public/eng/>
- Black alder wet forest (WKH) – floodplain of river Lielupe, Odini forest from the edge, not entering.
- Broad leaved wet forest close to river Vēršupīte (next to Meža Māja)

15.30 Coffea/tea

15.45 Departure from Kemerī NP

17.30 Check in at the Hotel Ezeri, Sigulda

18.00-19.00 **Rolands Auziņš** welcomes us. Rolands was project manager of the WKH survey, has been the manager of the Nature Conservation Agency in Latvia and is now director of the Nature Conservation Agency in Vidzeme Region, where **Gauja National Park** is located. Short introduction to the Nature Conservation Agency, Gauja NP <http://www.gnp.lv/en> and the tourism cluster project.

19.30 Dinner

20.30 Sauna

26 April

07.30 Breakfast

08.30 Departure from the hotel. A full day excursion in **Gauja NP** with **Viesturs Larmanis**, Latvian Fund for Nature http://www.ldf.lv/pub/?doc_id=27928, forest ecologist deeply involved in the WKH project and several Life projects connected to management of high conservation value forest habitats.

- Restoration of *Osmoderma eremita* habitat in park or in afforested wooded meadow, young boreal forests (40-100 years old) planned for burning. Forest restoration discussions between Latvian and Swedish experts. Life FORREST. <http://for-rest.daba.gov.lv/public/eng/>

12.30-13.30 Lunch in Sigulda

13.30-14.30 Turaida Castle <http://www.turaida-muzejs.lv/?lang=en>

13.30-16.30 Broad leaved Ravine Forest (WKH)

16.30 Departure from Sigulda

17.30 Arrival to Hotel Monica in **Riga** <http://www.monika.centrumhotels.com/>

18.00 Free time in **old Riga**, incl. dinner on your own

27 April

Early flight:

06.00 Breakfast

07.00 Transfer from hotel Monica

09.15 Flight departure from Riga, arrival 9.30 at Arlanda local time.

10.35 Train departure from Arlanda, arrival to Linköping 12.58.

Late flight:

17.30 Transfer from hotel Monica

19.10 Flight departure from Riga, arrival 19.25 at Arlanda local time.

20.17 Train departure from Arlanda. Arrival to Linköping 22.54



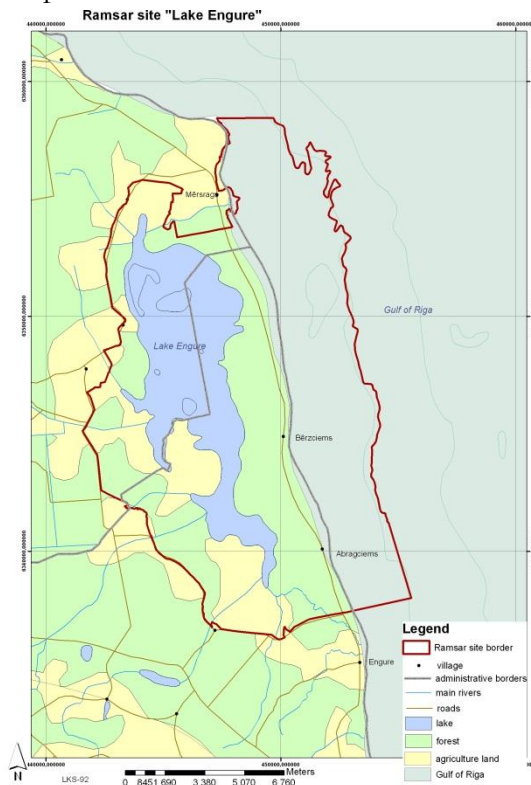
3. Trip report

24 April

Engure Nature Park

Immediately after arriving at Riga Port, at 11 a.m. local time, the waiting bus took us the two-hour ride to the Engure Nature Park and the shore of Lake Engure – a lake very similar to Lake Tåkern in Östergötland. Roberts Silins, ranger of the park since 16 years, met us by the lake. After a short lunch outside the visitors centre he introduced us to the lake of birds and thereafter guided us through grazed forest by the lake and into recently restored large grazed lakeshore meadows.

Engure is similar to Lake Tåkern in size and many other aspects, but it is narrower and longer shaped.



Birds are the main focus of the protected area but, like at Tåkern, there are also other conservation values such as a rich flora of submerged macrophytes (e.g. *Chara*-species) and rich fens with a rich flora of orchids (for instance *Dactylorhiza baltica*, “baltnycklar” which does not occur in Sweden). A management plan for the area was made in 1999.

Roberts Silins told us that the number of ducks and geese generally have decreased during the last decades, which is also the case for Black-headed gull, *Larus ridibundus*, which shows a decline from a maximum of 36 000 pairs to ca 5000 pairs today. The decline of this key species for bird-richness in shallow naturally nutrient-rich lakes, apparently have lead to the decline of many other bird-species that breeds in protection its colonies.

Species that is expanding at Lake Engure is among others Great egret, *Egretta alba*, 160 pairs breeding 2014, 1 pair in the 1980-ties) and Savi’s warbler, *Locustella luscinioides*.

At present there are a LIFE-project on Bittern, *Botaurus stellaris* and restorations are made to expand channels and lagoons within the great reed-bed areas of the lake.

Since the last 4 years there is no government financed management of the lake. All management actions are made with NGO-resources and fundings from EU. The financing situation is similar in other protected areas in Latvia. There is an Engure fund to run management, information, restoration etc. The fund owns 78 cattle, machines for restoration and management. Today 80 ha of grazed open meadows is managed, and the plan is to restore another 30 ha during 2014. A goal for the future is to have 200 ha grazed meadows. EU-subsidies for grazing is among the lowest in EU, around 75 Euro/ha.

60% of the Engure Nature Park is on government land, 40% on private land. No clear cuttings are allowed in the park, but other types of forestry is possible in the forest areas. No compensation has been paid to private land owners. The park has 4 zones, with different level of protection: 1. Villages, 2. Nature areas with light protection, 3. Nature with larger protection 4. Strictly protected zone.

After the introduction a long guided tour took place. The forest close to the lake, north of the visitors centre were grazed by Konik horses (Polish primitive horse), while the meadows by the shore were grazed by a cross-breed cattle rather similar to highland cattle. You could see that the horses were efficient grazers of grass and bushes, and so were the cattle. Even alder-bushes were grazed due to hard grazing pressure, and the meadow looked up to me nice from a wader point of view. The animals were kept outdoor all year round.

The restored grazed meadows along the lake had a high bird biodiversity and we passed them on a trail to a nice newly built bird watching tower. The bird fauna both have similarities and differences compared to Lake Tåkern, the high number of Great egret felt for example exotic to us. The conclusion from our group was that the restoration of the meadows has been very successful and that the plans to extend the grazed meadows could improve the area even more. Possibilities for improved management that could be discussed in the next management plan is to cut away some of the trees in the grazed forest to make the forest more open, to widen the open grazed meadows and to retain all dead and fallen trees in the forestry management.

A 200 ha large calcareous fen was visited and impressed us a lot. Unfortunately it is overgrowing with taller vegetation and pine trees due to lack of management. There was a mutual understanding between Roberts Silins and the group that a restoration including cutting away the pines and introduction of grazing or mowing is needed in order to preserve the extraordinary natural values in the fen. Since we have the same management needs in many Swedish calcareous fens maybe a common project between our countries could be developed? (Olle Jonsson)





Restored grazed shore meadows and newly built bird watching tower and boardwalks in Engure NP.



A highland cattle looking breed and Konik horses are grazing the meadows and forests in Engure NP.



Lars Gezelius, Claes Svedlindh and Roberts Silins, experienced ornithologists, discussing the restauration of Lake Engure. Olle Jonsson looking for specialized molluscs at the overgrown calcareous fen in Engure NP.

25 April

Kemer National Park

Beaver influenced forest near Smirdgravis and Lake Kanieri with Spruce wet forest

The day started early in the morning after eating breakfast at Valgum Pasaule. The bus started at six a clock from the nice place which has earlier been used as a pension for higher officials in the Soviet Union. Some of us took an early morning walk and saw the fog lift and met both tawny owl and common sandpiper.

The first stop with the bus was close to a swamp forest and wetland dammed by beavers. Everybody wore rubber boots according to instructions which really was necessary. Janis Kuze, who made the management plan of Kemer NP, guided us along the edge of the flooded area where the trees, mostly birch, had died as a result of the beavers deeds that have elevated the water level noticeably. The dead swamp forest has created good conditions for woodpeckers with a lot of food as insects in the dead trees. We saw and heard the drumming of several woodpeckers, e.g. we saw Lesser spotted and heard Three-toed. Janis said that all Nordic woodpeckers live in the area.

The effect of the beaver dams are big and apparent both through the big amount of water that stay in the area and creating the wetland and also through the benefits of the wetland for a lot of species for example birds and amphibians. The species we noticed on our wet walk through the area included; frogs, Crane, Mute swan and Garganey. On our way back to the bus we walk through a drier forest of spruce and among the old trees we found *Lycopodium clavatum*. One estimate says that the population of beavers in Latvia is around a half million individuals, an impressive amount compared to Sweden. Since the landscape in Latvia is relatively flat the impact of the beaver dams on land areas are relatively large.

We continued to the lake Kanieri which also is situated in the National Park of Kemer. The bedrock in the area consist of dolomite lime which in one end of the lake represent the lake floor while in the opposite side of the lake the bedrock is covered by six meter deep layers of mire. The average depth in the lake is around one meter. On this site they have during the last years with economic contribution from Life prepared several good arrangements for visitors. We used and saw a nice boarded foot walk, information signs and the bird observation tower at our visit.

Our guide told us that earlier the land areas around the lake have been grassed but that management has ceased since some years. Earlier during the Sovjet time hunting also was common in and around the Lake Kanieri. Nowadays hunting is forbidden in the area to protect wildlife.

Along the walking trail through a nice Spruce wet forest Nicklas Jansson found the rare beetle *Peltis grossa* in a dead birch stump. An interesting find in a nice nature conservation area. A little bit further on along the trail on the inside of the reed restoration of an overgrown lime fen was taking place. The area is going to be much more open and will make the habitat much better for many of the rare species which lives in it. (Maria Taberman)





Dead standing and fallen trees and an abundance of water make the beaver influenced forest in Smirdgravis difficult to walk. Thomas Johansson finding his way.



Mattias Ibbe, Per-Erik Larsson looking for woodpeckers in Smirdgravis. Giant tree in the Spruce wet forest close to Lake Kanieri.



*Nicklas Jansson found the rare beetle *Peltis grossa* close to Lake Kanieri.*

Re-meandered river Slampe

...On small dirt roads the journey went on, deeper and deeper into the Kemer National park. Every farm we passed had at least one stork nest, often situated on an electricity pylon.

The coffee break, which consisted of coffee, egg sandwich and some yogurt, took place alongside another woodpecker hotspot. A few weeks earlier Janis had spotted six different species of woodpeckers at this site! This time, the woodpeckers did not want to cooperate. Although, Lesser spotted eagle (!), Bittern, Marsh harrier and Snipe were some of the birds that showed off during the break.

Nature's landscape engineer number one, the beaver, has dammed the river at the current area, resulting in permanent flooded forest and meadows. This turns the forest in to "optimal woodpecker habitat" with a lot of standing dead and dying wood. And the grassland goes from open grazed areas suitable for Great snipe to reed belts where Great reed warblers, Bitterns and Water rails are thriving. In this way the beaver is creating variation and important structures in nature, in turn resulting in higher biodiversity.

Thanks to EU-funded LIFE+ project HYDROPLAN some very interesting restoration projects are ongoing in the current area. Some resembling of what is being done in the Swedish LIFE+ project UC4LIFE. The nature here consists of the Skudrupite river (a tributary to the Slampe river) with surrounding wet meadows and floodplain forest. In the seventies the stream was straightened and digged "Soviet style", but is today partially restored to a meandering river with functional hydrology and floodplain. And the restoration work is continuing!

The aim with the restorations is to create fertile floodplain meadows used as nesting sites for Corncrake and feeding grounds for the endangered Lesser Spotted Eagle and Black Storks among other species. The wet meadows are managed with help of semi-wild cattle and Konic horses that seems to handle confrontations with the wolves in the national park quite good. The carcasses from cattle and horses that die a natural death are left as food for eagles and wolves. We actually saw some paw prints which looked like a wolf.

The project also has supported local farmers with drainage of neighboring farmland. It's important to clarify why and where the restorations will lead to flooded land to avoid conflicts with local people, Janis told us. (Mattias Ibbe)



Re-meandered river Slampe with the former channel in the background.

Black alder wet forest (Odini forest) and Broad leaved wet forest close to Meza maja

The afternoon was spent on the floodplain of river Lielupe with its flooded meadows and black alder wet forests. The black alder wet forests in Odini are really extensive, covering many square kilometers. They are very rich in dead wood and biodiversity and normally very difficult to approach. This spring was particularly dry though and we could pass by foot. Most years, canoeing is the only way to survey the forest. On our walk back we followed the mowed meadows of Lielupe and then we stumbled on a Woodcock nest with chickens, however they seemed fine when we left them after a short photo session. We also heard the call from a Hoopoe, which felt quite exotic. The small water ponds that were spread on the meadows were inhabited with Edible frogs *Rana esculenta* (exotic as well).

The rest of the day continued on the theme wet forests. We were shown wet forest consisting of Black alder, Black alder and Spruce, Black alder, Ash and a touch of Oak. All served in a mish mash of dead wood, spiced with a fantastic moss flora. We also saw a nest hole made by the Middle Spotted Woodpecker, lost from Sweden since the eighties (last seen in Bjärka-Säby south of Linköping) and an incredibly large Grass snake (*Natrix natrix*).

After a long and fantastic day we had to let Janis go, jumped onto our bus and continued to the Spa Hotel...

(Mattias Ibbe)



The Black alder wet forest in Odini is rich in dead wood and water.



*Lisa Johansson in the Broad leaved wet forest close to Meža maja. Janis Kuze watching the abundant moss *Anomodon viticulosus* in the same forest.*

Lecture by Rolands Auzins, Director of Nature Conservation Agency in Vidzeme Region

On 25 April 2014 at Hotel Ezeri, Sigulda

The evening's lecture included four main topics:

1. Latvia Nature Conservation Agency
2. Gauja National Park
3. Tourism Cluster Project
4. Nature Interpretation examples from Vidzeme

Latvia Nature Conservation Agency

The Nature Conservation Agency sorts under the Ministry of Environment in Latvia. It employs 130 persons. Mr Auzins has his master in forestry. During 1996, he headed the Woodland Key Habitat Inventory project carried out by the State Forest Service. Today he is Director of the Vidzeme Region Conservation Agency, including Gauja National Park.

The Woodland Key Habitat Inventory project (WHK) gave good results and methods that are still in use. It also induced new management ideas. Before the WHK was carried out, there was no dead wood or eco conservation trees left after cutting. Now it is standard measure, even in commercial forestry. The forests in Latvia are owned to 8% by the Environmental Ministry and 30% by the State forestry company. The rest is private or communal land.

The work of the Agency includes for instance producing planning documents and carrying out law enforcement. They staff scare of illegal salmon fishers with fireworks at night or give them a fine amounting to €700! They have good contacts with the police.

The Agency's inspectors are also involved in nature interpretation. Every year there is a Forestry Day in the Schools and days with rubbish-cleaning in nature.

In answer to questions from the audience, Mr Auzins explained that nature conservation is not very popular in Latvia among politicians or private land owners. Earlier the Agency's acting Ministry used to be called only Ministry of Environment – now it is Ministry of Environment and Regional Development. Earlier the Green Party had the minister in this ministry but not any longer. It will be interesting to see what happens after the elections this fall.

Gauja National Park

Management of land in Gauja National Park is carried out through renting out land to farmers and NGO's who mow or graze them. The Agency does some burning of forest as restoration measure but receives no state funding for this. The lack of funds results in very little management done.

Gauja National Park is 92000 hectares in size, mostly forest. It became a park in 1973 and about half of the land belongs to the state. The Agency has only two Directives for its work in the park and none of them include working with cultural heritage. National Parks in Latvia are divided into different zones which range from strictly protected to no restrictions at all.

During Soviet times it was not allowed to call anything "National", but later on they found writings by Lenin mentioning "Protecting nature through state reserves and National Parks"...

Tourism Clusters

Within the park, there are 12 municipalities. Some of these are cooperating in creating so called Tourism Clusters. The clusters aim to develop tourism together with the Agency. They wish to increase the income from tourism with respect for nature values.

The Gauja National Park is well known, a brand name. In all hotels within the area, there is a film shown that advertises the park. At local markets the park is advertised as well. For the celebration of the 40 years since the park was established, a beautiful photo book was produced, showing the varying seasons of the park. (The varying seasons are shown in the park's logo as well!)

Nature Interpretation in the Vidzeme region

The Vidzeme Nature Conservation Agency carries out nature interpretation of different kinds. One activity is to include the local society by handing out forms where they can report their own monitoring of species and biotope change. They report back to the Agency when they've seen special lichens, birds etc. The form can also be downloaded via internet.

Another action is bringing Music, Science and Art together. Every year they choose a "Hero Species". Then artists and NGO's create artworks, write poems, perform music, carry out workshops and so forth. The performances and workshops are held like festivals somewhere in a forest or a meadow during July or August. Thousands attend!

Concluding his lecture, Mr Auzins thanked Tommy Ek for his active participation in collecting valuable knowledge for nature conservation in Latvia.

(Notes taken by Ellen Hultman)

26 April

Gauja National Park

Oak habitats close to Ungurmuiza

We start the day with a bus trip to Ungurmuiza manor. During the trip Tommy Ek tells us about Gauja national park, the “Switzerland” of Latvia. The river Gauja is one of the southernmost rivers which is undisturbed from dams. Or it is at least 400 km to the first dam. You can find salmon and trout in the main river as well as in other small rivers. On the slopes along the Gauja river there are old growth deciduous forests and ravine forests. We can notice that the landscape along the road has many similarities to a south Swedish agricultural landscape; a variety in open fields, small forests, solitary trees, small dams and many avenues (allées).

After some time we arrive to the first stop at Ungurmuiza manor with a wonderful park of old oaks. The park and its surroundings are one of the project areas of “Forrest” Life+ project. The project homepage tells us: “In February (2014) ancient and existent park of Ungurmuiza experienced some major changes. In order to restore and create a new living place for Hermit Beetle (*Osmoderma eremita*) tree cutting works were started”. 14 Latvian nature conservationists and researchers met us for an interesting morning in field. Several organisations were represented. Fruitful discussions between all of us were organized by Viesturs Larmanis, Latvian Fund for Nature, and Tommy Ek who worked together for many years in the Latvian Woodland Key habitat survey. The result of the ongoing restoration was the subject of the discussion.

Osmoderma eremita in Latvia is known from about 300 trees around Latvia. Only a few localities have a large amount of trees and enough numbers of old hollow trees to host the beetle. There are only six places around Latvia which is large enough to be sustainable for this beetle fauna. Ungurmuiza is one of these places and here are 200 hectares which is or possibly can be suitable habitats.

Ideas from discussions in small groups: Life+ Forrest started in 2011. One of the focus areas has been restoration of suitable *Osmoderma eremita* environments. We notice that there could have been some more bushes left in the area. We discussed a dense part of the forest that was not yet opened up. It could have been classified as spruce forest (9050) or could have been opened up (step by step) to a bit denser broad-leaved environment. Some young oaks are coming in the most open parts, good for the future as there need to be many young oaks to produce one single old one in the end.

Leave more branches in small heaps in favor of the insect fauna. Grazing would probably have very positive effects. You should see the whole area around this manor as an *Osmoderma eremita* area. Preserve a semi-opened oak landscape. Do not drive too close to the old oaks which might be harmed and die from injuries on their roots. Beside oaks there could also be left some alder which also can be suitable habitats. Some other tree species are transformed into hollow trees faster than oaks, even if oaks maybe reaches the highest age. There are 4 km to nearest *Osmoderma eremita* site and “artificial hollow trees” could be useful. Some discussions about the rather dense canopy that is present even after the thinnings. Viesturs Larmanis tells us that there are even some legal reasons why they haven’t created a more open environment. The restoration on this site was made in a short time.

We conclude in this discussion that there are mostly similarities between the Latvian and Swedish *Osmoderma eremita* sites and that the problems are the same. There are often too small amounts of hollow trees and too small areas of oak habitats. We agreed that it is very favorable with grazing after restoration. Create oak regeneration but do it in a new area and probably not precisely among

the old oaks! Plan the cuttings by marking the exact trees that should be cut and learn to know the entrepreneurs that will carry out the restorations, it is crucial that they know how you like to have the result and what the purposes are.



Fruitful group discussions of the ongoing restorations in Ungurmuiza. The forest ecologists Tommy Ek and Viesturs Larmanis planning the discussions.



Pine forests west of Cesis

The second stop of today is in the sandy pine forests west of Cesis. These forests are interesting from a Swedish perspective due to the density of trees. Even if the single trees are rather thin the volume of the forest stands are high. Perhaps two times as high as a similar (managed) Swedish pine forest. The forest is also a nice example of a pine forest on sand. 300 hectares are being restored also in the Life+ Forrest project. Most of the area will be treated with prescribed burning. We discussed the experiences from prescribed burning as a natural part of forest ecology. In the county of Östergötland there has been prescribed burning in at least one nature reserve per year during last five years. In Latvia there are less experience from prescribed burning, they have some knowledge of former wild fires. The aim in this sandy forest is to get rid of a thick layer of plant litter. Some trees will die but stretched out over a time span. Many organisms will benefit from the fire for example the *Pulsatilla vernalis* which former has been more common in Gauja National Park. There are localities close to Belarus where forest fires have been beneficial to this species.

In Sweden the aim usually is to have a 30-70% death of trees after a controlled burning. From Swedish point of view we think there is just small need of preparation. The fire is able to create openings in the forest if needed. We consider the day of today (26 April) as example of an ideal day for controlled burning. It is 20 degrees and no wind. You could manage to burn about 20 hectares a day. There need to be a low intensity burning. There are ambitions to do some logging before the

controlled burning but for the nature conservation values it is maybe not necessary! There are a lot of trees but there will be too much branches on the ground and it is a good start with many trees from which some part can be resin coated, some will die and some will survive and get really old. In the end Viesturs reflect that the dry pine forest with lichens (*Cladonia*) on the ground is rather rare in Latvia and also will benefit from the controlled burning.

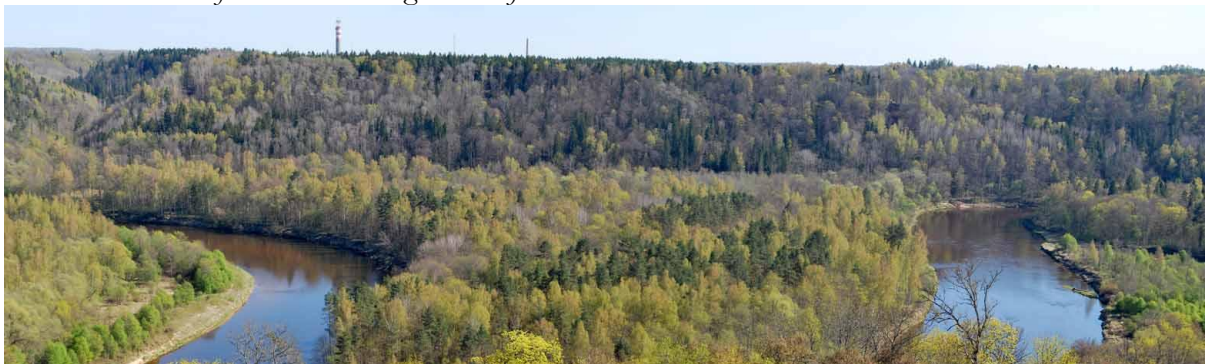


Wide and deep knowledge of many aspects is shared when discussing prescribed burning of a pine forest west of Cēsis.

In the afternoon we had an interesting walk in the broad leaved ravine forests next to Gauja river close to Turaida castle. It is an interesting walk on a newly established steep path close to ancient trees with lungwort (*Lobaria pulmonaria*) and *Neckera pennata*. Some other species are *Ranunculus cassubicus*, *Asarum europaeum*, *Chrysosplenium alternifolium* and *Actaea spicata*. Some “dangerous trees” with high nature conservation values is unfortunately marked to be cut down. In the very bottom of the ravine we find a wonderful small stream. We finish the day in the surroundings of Turaida castle with nice old tree avenues. (Jens Johannesson)



Broad leaved ravine forests surrounding the Gauja river





Turaida Castle



Riga

In the evening an excursion of Riga was held by Tommy Ek and Lars Gezelius. The famous Jugend houses on Elisabetas and Albertas iela were pointed out and the old town with its medieval houses, churches and squares was shown. The excursion ended with a group picture at the Swedish Gate.



Beautiful Jugend house in Riga. The Swedish gate in the old town.



Riga – a mixture of traditions and modernity.

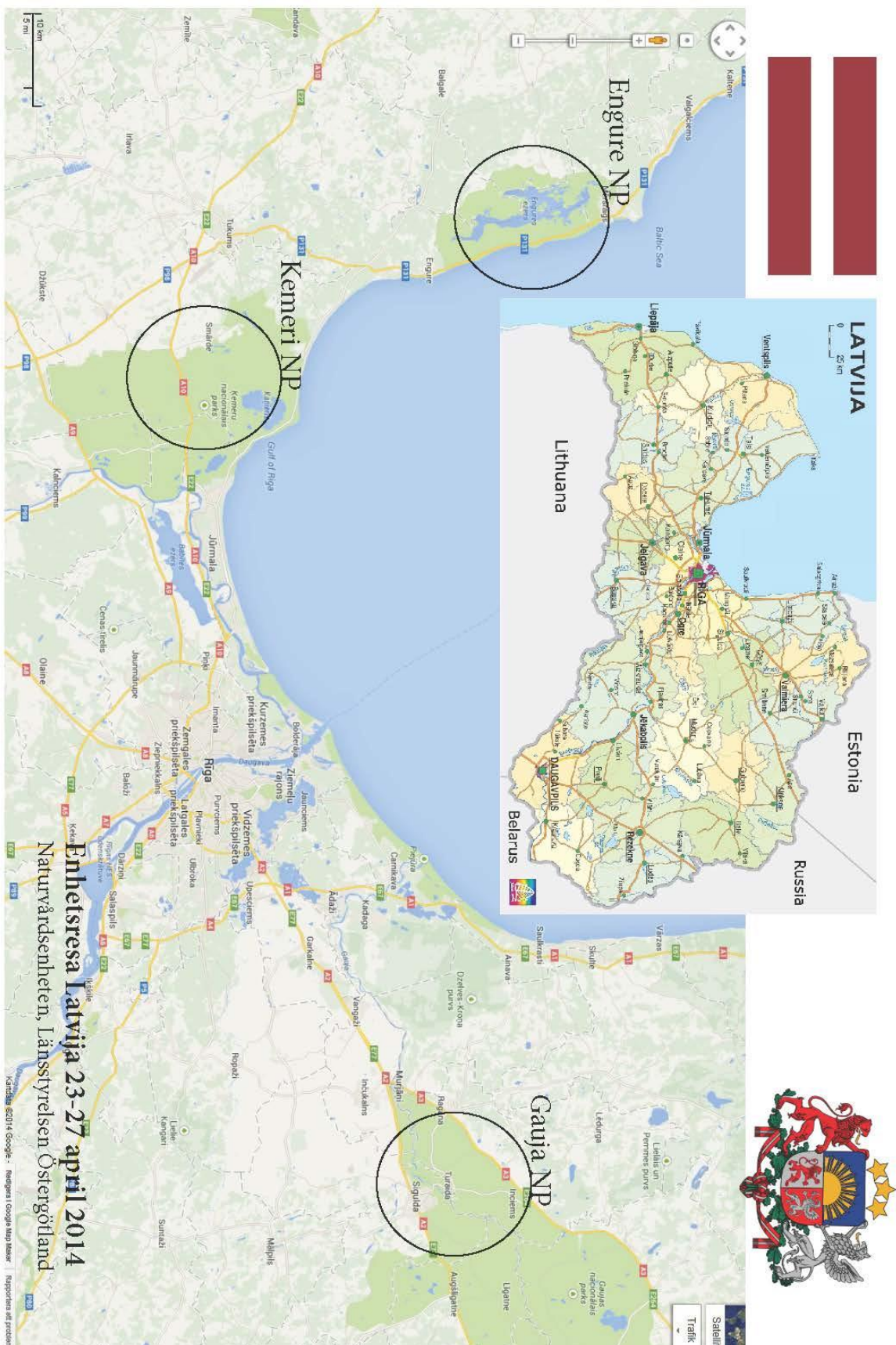
5. Conclusions/trip evaluation

The following bullet-points were written down individually short after the trip:

- There are larger Natura 2000 sites in Latvia than in Sweden - we should chance our conservation plans and make the sites larger.
- There should be many projects we could work together with.
- It's good to leave the County of Östergötland and Sweden to learn how others work and understand ourselves.
- We don't have to travel far away to learn new things. We could take a trip to "Säfte" and have coffee there.
- Unbelievably well done trip.
- It was very good that several colleagues had so good knowledge about Latvian nature, culture and history.
- It would have been good if there had been drinking water on the bus as there was little opportunity to buy water during our trip.
- Good fellowship
- Interesting to learn about differences and similarities in nature conservation management and funding, both in comparison between Sweden-Latvia, and between the three Latvian national parks we visited.
- The discussion with our Latvian colleagues was both interesting and inspiring.
- Where were all the pastures and cows? Lots of overgrown agriculture landscape but few open pastures could be seen under several hours of travel besides in Engure.
- All the White storks felt very exotic. Why don't we have them at home? How can we get a landscape with more wetlands in Sweden?
- The wetland forests were interesting but on our next trip we should have different areas of interest.
- Different natural conditions need different forms of nature conservation management. If the landscape is flat there can be flooded forests.
- Well planned logistics
- Interesting to learn about nature management measures. I thought that we should be more courageous and try different measures.
- Inspiring to discuss for example prescribed burning but it should have been more group discussions about different questions. There was too much focus on bird watching.
- The trip was very good for fellowship- we got to know each other. Good accommodations and nice evenings together.
- Good networking for future projects.
- Very good for better fellowship at work.
- Very inspiring to have short discussions about nature conservation with colleagues from other places – that should be part of all our "department-trips" both abroad and in Sweden.
- Good mix of different habitats and places to visit.
- Inspiring to exchange experiences with colleagues- we can both give and take.

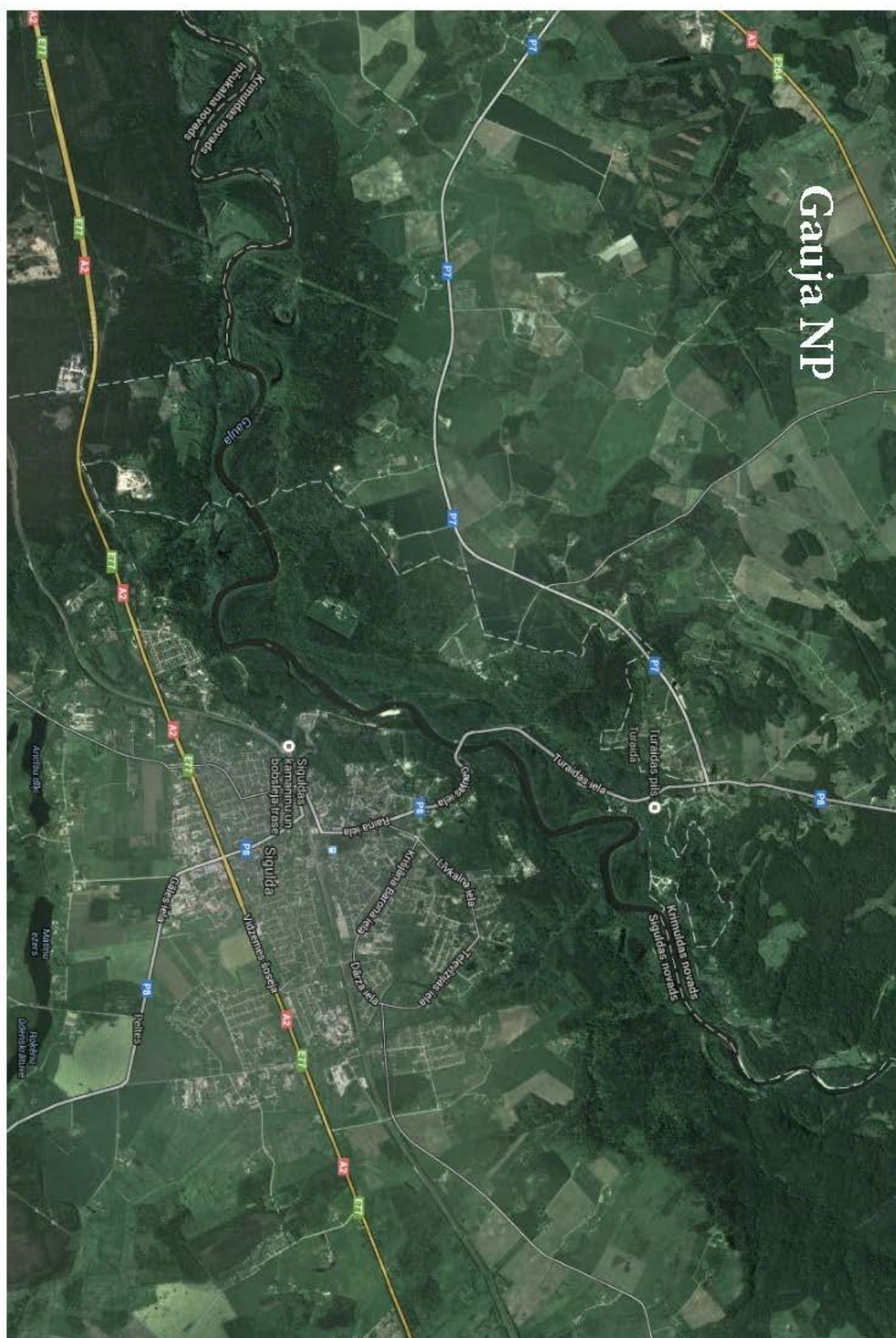
- I'd like to learn more about the work of Latvian administrative authorities
- +Exchange of knowledge between Sweden-Latvia.
- +Nice to get to know our departments colleagues personally.
- -There were some activities that were not accessible for all of us due to physical disabilities.
- Nice to come back to some places and see which development has been taken place in Latvia and within nature conservation and nature tourism.
- Inspiring, instructively, future collaboration?
- +Good fellowship
- +Nice to be together and learn lots of new things at the same time
- +It will benefit future collaboration within our department.
- -Too much focus on forests
- NICE
- Interesting and inspiring to learn about how history and land use shape a landscape-that is how Sweden and Latvia differ regarding area of deciduous forests and amount of dead wood
- Both travel arrangements and program worked perfect! Keep in mind what the successful concepts of the arrangement were like when it is good to get help from the travel agency, what can be arranged by us etc.
- It was very good to meet and discuss with our Latvian colleagues, but there was too little time. It would have been good to have time to understand their work both concerning content, methods and conditions.
- Interesting that our thoughts concerning nature conservation were so alike.
- Inspiring about using "half-wild" grazing animals for nature conservation.
- We should have more exchange about prescribed forest burning.
- Very good arrangements
- Interesting and inspiring in many ways.
- Exciting to learn about how they attract people to come to Gauja- nature and culture in collaboration.
- On some places we had too little time- it would have been nice to stay a little longer and get a deeper understanding.
- For an "office worker" it was very nice to be able to be out in nature on work hours.
- Interesting and inspiring to learn how Latvia works with hydrological rebuilding and which impact the beaver is allowed to have on hydrology.
- Good with the group discussion with Latvian nature conservation colleagues. Exchange of experience.
- Fun trip – a good mixture of serious activities and leisure.
- Exchange with Latvian colleagues
- It's a shame that there is not as much collaboration with Latvia as it has been before. We could on different areas help to develop nature conservation management. It's maybe time to start new projects for example on water courses or calcareous fens.

6. Maps









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UL=upper left

UR=upper right

ML=middle left

MR= middle right

LL= lower left

LR= lower right