



2nd Joint staff training event 10.6. – 14.6.2019 in Sweden

Network of knowledge for efficient private forests Net4Forest

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Contents

1	Monday 10 th of June	3
	Tuesday 11th of June	
3	Wednesday 12 th of June	9
4	Thursday 13 th of June	12
5	Friday 14 th of June	13
6	ATTACHEMENTS	15





1 Monday 10th of June

This training activity started in the morning with bus transportion from a hotel nearby the Arlanda airport. The first excursion stop was at a site of the 14000 ha large forest fire from year 2014 namned "Västmanlandsbranden" (Figure 1). The host on this site was forester Magnus Petersson from the Swedish Forest Agency. He described how the forest fire had started and later spread in a much-uncontrolled way before it finally was stopped.

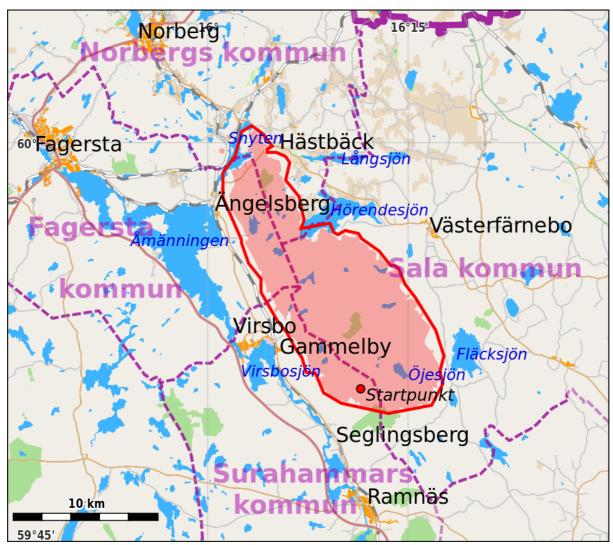


Figure 1. The extent of the forest fire in Västmanland 2014. The red dot is where the fire started. Image from Wikipedia.

The experiences from this fire has increased Sweden's preparedness for large forest fires in general. One experience was that local farmers can be an important resource with their up to 10 m³ tanks towed by farm tractors, normally used to spread liquid fertilizers on farm fields. In this case, the tanks can be filled with water which is spread from roads into the forest.





An exercise was done to evaluate how well this area had reforested. The site was soil scarified combination with mechanized seeding. The result was very good, and future stand treatments were discussed (Figure 2-3). A foreseen problem is ungulate browsing, and a fenced demonstration area was shown where no ungulates can browse on the trees. Also, the role and organization of the Swedish Forest Agency was presented, as well as the most important parts of the Swedish Forest Act.

After continuing the bus trip to SLU and the School of Forest Management in Skinnskatteberg, a number of presentations were made. The School of Forest Management and their focus was presented, followed by presentations of the SLU faculty of Forest sciences, Swedish forest and forestry in general, and all Net4Forest's participating organizations.

The group was accommodated in guest rooms belonging to SLU. The same accommodation was used up until Thursday morning.



Figure 2. A small part of Västmanland forest fires site.









Figure 3. A tree counting exercise in the reforested forest fire area.

2 Tuesday 11th of June





The day started with a field tour on the subject of Water and Forestry by Johan Törnblom SLU. The tour focused on good habitats for brown trout in a restored creek next to the School of Forest Management. The conclusion was that it is possible to combine healthy watersheds and large trout populations with active forestry and hydropower if some important measures are taken (Figure 4).



Figure 4. The group's contribution to river restoration activities.





The excursion continued with minibuses out to the 6700 ha large Snefringe forest common (Figure 5-6). Its part time manager Eric Sundstedt presented the specific and not so common cooperative ownership of this forest common. The organization given the task to do the operational work on Snefringe forest common is the forest owner association Mellanskog. Mellanskog is one of four major forest owner associations in Sweden. Two employees at Mellanskog, Per Bengtsson and Anders Westerlund presented the concept of forest owner associations in general, and more specifically Mellanskog. This was followed by visiting one of the harvesting contractors working for Mellanskog at a thinning operation in the forest of Snefringe. The operational planning and instructions given to the operator was discussed. It was concluded that the responsibility for many important aspects, like the choice of trees to harvest is delegated to the operator. He has to follow instructions like how large share of the basal area that should be removed, and how many "3-5 m high environmental stumps" and other environmental trees that should be left on the site, the width on environmental zones close to water, and so on.



Figure 5. Learning from Snefringe forest commons.







Figure 6. Field discussions about forest management of Snefringe commons.

After that, an example of how to earn money from "other functions of forests" and the cultural heritage from historical forestry work was visited. It was "Kolarbyn" close to Skinnskatteberg and a fireside dinner was prepared in the same way as forest workers did in the past (Figure 7).





Figure 7. Fireside dinner at Kolarbyn Ecolodge

Kolarbyn Ecolodge is Sweden's most primitive hotel. There is no electricity, no showers, nothing fancy at all, just natural mysteriousness. And that is precisely why some people love this place. There are twelve well-camouflaged cabins. All covered in mud and grass. Bilberries and mushrooms grow wild on their roofs. As natural as it can be. Some guests have called them mud-holes or hobbit houses. Kolarbyn gives an opportunity to experience how forest workers and charcoal producers lived in the forests hundreds of years ago.

3 Wednesday 12th of June

The day started with a visit to a final felling harvesting site at the forest company Sveaskog. The forester Sara Norgren presented Sveaskog in general and specifically the work Sveaskog does when planning a final felling. The layout of the main extraction roads as well as the environmental considerations was discussed. We viewed an example of saving cultural heritage where charcoal production had taken place. Marking the remnant was done by





making 1.3 m high stumps from surrounding trees. The function of this marking is to notify soil scarification operators, making him leave this part untreated. Harvesting on this site was meant to stop an ongoing bark beetle attack of the stand. It was now harvested some years earlier than the original plan. At this site, it was Sveaskog's own machines that were working and both the harvester and forwarder operator answered questions (Figure 8).

In the afternoon the project leaders from all countries had a meeting, and at the same time the rest of the group visited the Setra sawmill in Skinnskatteberg.







Figure 8. Visiting the harvesting site of Sveaskog.

Sveaskog is a Swedish state-owned forest company, and the largest forest company in Europe. We had a long interesting discussion on how to maintain ecological values of forest during the logging operations, what machines are used to log forests, etc.





4 Thursday 13th of June

The day started with a common bus transport to StoraEnso pulp and carton mill in Fors, north of the town of Avesta . A general presentation of StoraEnso as such and more specific of the factories producing carton was done by the mill manager Richard Morén. In total StoraEnso is one of the world's leading producers of carton board. A surprise for most of us was that more than 40% of the production in this specific mill ended up as cigarette packages. However, demand for this product decreases about 1 percent per year, but demand for other products is increasing instead. The visit continued thereafter with a guided tour in the mill and at the logyard (Figure 9).. The problems with their not optimal debarking-drum was discussed, but it was also concluded that it is a very long lifetime on such heavy industry components, so they have probably to live with it several more years before a new one will be installed.

The study trip continued after lunch with a visit to the tree nursery in Nässja (Figure 10). The nursery (nowadays also owned by Stora Enso)was introduced by its manager Pia Emas. The production chains for different types of seedlings was described and demonstrated by Ronja Jägbrant and Madelene Gyllner. Also a new method to protect seedlings from the Pine weevil was discussed and presented. Its name is Conniflex, and it is in principle a mix of glue and sand that covers the stem on the seedling https://www.conniflex.se/en-gb/. At the moment, a Conniflex treated seedling is almost twice as expensive as without treatment, but it is expected that the cost will be reduced in the future. The day ended with bus transport to Gimo Herrgård for accommodation and a common dinner.



Figure 9. After the guided tour of StoraEnso Fors mill





Figure 10. Visiting Nässja tree nursery -

5 Friday 14th of June

The day started with a bus transport to Jälla naturbruksgymnasium where Magnus Holt presented the school that has students aged 16 to 18 years (Figure 11). In total, the teaching is focusing on many different craft trades. The student population will increase in 2019 from 450 to about 800 in total, when more trades education will be offered. The information was then focusing on the forest machine driver education, and an educational site in field was visited. At this site all participants in this training event got the opportunity to drive a forwarder in forest terrain. Most were also allowed to operate the crane, and it was concluded that operating cranes is more complicated than driving (Figure 12).

Planning was also discussed on this site. A specific focus was given to the depth–to-water maps, and how they facilitate and improve the operational planning.







Figure 11. Hosting by Jälla naturbruksgymnasium.



Figure 12. Exploring the harvesting site (left) and the training exercise on a forwarder (right)

After eating a field lunch, the bus headed north of Rimbo, Uppland to an estate owned by Skogssällskapet. There, Jan-Olov Weslin and Per Westerfelt from Skogforsk (The Forestry Research Institute of Sweden) hosted us during the afternoon at their demonstration area. This area demonstrates various types and levels of environmental consideration in clearcut forestry. Participants viewed the high stumps, green tree retention, and buffer zones that were saved on a (for Uppland) unusually large clearcut (>20 ha), and got to try an exercise in habitat assessment. Most of us were delighted to try out assessing key habitats, since this





activity involved walking around a stand and discussing with other participants what constitutes important biodiversity habitats and not.

The day ended with bus transportation back to the hotel at Arlanda airport where the whole training event started. The majority of the group had a social event and a dinner in the town of Uppsala in the evening.

6 ATTACHEMENTS:

- Program schedule
- Attendance list
- Communication of the project's activities





The program of 2nd transnational staff training event: 9-15th June 2019 in Sweden







Erasmus+ project: Net4Forest 2nd transnational staff training event: 9-15th June 2019 in Sweden

Sunday 9.6.2019

Arrival of participants to Arlanda/Stockholm. 20 single rooms are booked

at hotel Best Western Arlanda Hotellby (https://www.arlandahotellby.se/welcome.aspx).

Monday 10.6.2019

08:00	Bus transfer from hotel Best Western Arlanda Hotellby
	(https://www.arlandahotellby.se/welcome.aspx) to the Sala forest fire site
	(the bus arrives 07.55 and departs at the absolute latest 08.15!)
10:30-12:30	Meeting with SKS (Swedish Forest Agency), minitour of burn site,
group/team	exercises
12:40-14:00	Transfer to Nya Serveringen, Ängelsberg, Lunch
14:00-14:30	Transfer to Skinnskatteberg
14:45-17:15	Presentation of Project Partners and their organizations, Swedish forestry,
	SLU & the School of Forest Management
17·15-	Accommodation in the Yellow Pavilion at SLU Skinnskatteherg

Tuesday 11.6.2019

field

08:30-10:30	Forestry and Water, group exercises in the river channel next to Yellow
Pavilion (Johan	Törnblom, SLU).
10:45-11:15	Transfer to Snefringe
11:30-13:30	Presentation of Snefringe Forest Commons (Eric Sundstedt), Lunch in the

13:30-16:00	Mellanskog + 1 st Thinning
46.00.47.00	- C

16:00-17:00	Transfer to Kolarbyn, Skinnskatteberg
17:00-19.00	Fireside dinner at Kolarbyn

19.30 Accommodation in the Yellow Pavilion at SLU Skinnskatteberg.

Wednesday 12.6.2019

09:00-11:30	Sveaskog, visit to forest harvesting site/machines
12:00-13:15	Lunch in Skinnskatteberg, Restaurang Station
13:30-15:00	Visit to Setra Sawmill in Skinnskatteberg
15:00-	Free time, Accommodation in the Yellow Pavilion at SLU Skinnskatteberg
13:30-17.00	"Project Leaders" meeting at Skogsmästarskolan





Thursday 13.6.2019

07:45-08:55	Transfer from Yellow Pavillion to Fors, north of Avesta
09:00-11:30	Visit to StoraEnso Fors Carton Mill.
11:45-12:50	Lunch, Restaurang Arken, Fors
13:30-15:00	Visit to Svenska skogsplantor Nässja seedling nursery
15.00-17.00	Transfer to Gimo, Uppland (northeast of Uppsala)
17:00-	Accommodation at Gimo Herrgård
19.00-	Common dinner

Friday 14.6.2019

08:00-09:00	Transfer to Jälla forest harvesting site
09.00-12:15	Visit + exercises at harvesting site, test driving Jälla's forwarders
12:15-12:50	Lunch (field lunch, sallad)
13:00-16.00	Excursion to Skogforsk field demo site; exercise in habitat assessment
16.00-17.00	Transfer to Uppsala and Arlanda
17:00-	Accommodation close to Arlanda. 20 single rooms are booked at hotel
	Best Western Arlanda Hotellby

(https://www.arlandahotellby.se/welcome.aspx).

Saturday 15.6.2019

Departure of participants from Arlanda/Stockholm



The main excursion areas in the study tour as well as the position of accommodations (all marked with stars on the map)





Attendance list



Network of knowledge for efficient private forests KA2-VET-3/18

Network of knowledge for efficient private forests Second transnational joint staff training event

9.6. - 15.6.2019, Sweden

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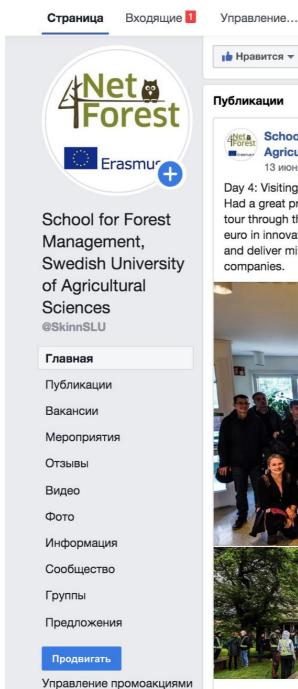
Статистика

▶ Поделиться

Инструмент...

Communication of the project's activities

The project activities had been communicated using on a page of School for forest management, SLU-Skinnskatteberg on Facebook.



School for Forest Management, Swedish University of **Agricultural Sciences**

13 июня в 22:34 ⋅ 🕥

Уведомления

Подписки ▼

Day 4: Visiting StoraEnso Fors Carton Mill and Nässja seedling nursery. Had a great presentation about the company and an excellent guided tour through the pulp-and-paper mill. The company invests millions of euro in innovations. The tree nursery is managed by the female team and deliver millions of seedlings to StoraEnco and other forest companies.





Мероприятия

Информация Сообщество

Предложения

Отзывы

Видео Фото

Группы



