# Annual report for SNS research projects

Submit the report to sns@slu.se by 24:00 CET, 1st of March, 2020 and 2021, at the latest.
The report should not exceed 2000 words (including words in the template).

**Please adjust the box size according to the length of your answer.**

| | |
|---|---|
| 1. Project title: | Conservation of resistant ash (*Fraxinus excelsior*) genotypes in Nordic and Baltic regions to maintain full range of ecosystem-services provided by this keystone species. |
| 2. Reporting year: | 2019 |



| | |
|---|---|
| 3. Project coordinator: | Mateusz Liziniewicz |
| Email: | Mateusz.liziniewicz@skogforsk.se |
| Address: | Ekebo 2250, 268 90 Svalöv |



**Activities during the reporting year:**

4. Project status

a) Does the project develop according to the plans?
b) Describe the activities during the reporting year

## Project Activities

A) A kick-off meeting for the project was organized in April 2019. The action plan was discussed during the meeting.

B) All partners have collected the seeds from resistant ash clones. The seeds have been sawn in the facilities of respective institution:

- Denmark 77 half-sib families collected, 12 shared with Norway
- Lithuania, 44 half-sib families collected plus 70 half-sib families collected earlier
- Norway, 14 healthy half-seed families collected,
- Sweden, 23 healthy half-seed families collected, 9 shared with Norway

The selection of healthy trees was done with the public involvement by advertising actions in different mass-media.

C) During the kick-off meeting we agreed upon going to Ireland to see and discuss the issue of vegetative ash propagation. The idea germinated into a project plan that has been supported by SNS grant for networking.

## Project development

Project is going according to plan. One deviation from the plan is that the evaluation of the seedlings will be done 1 year after germination not 1 and 2 years after germination. The deviation is due to the biology of ash seeds that germinates earliest in the second spring after they are sawn. Initially we thought to use so called green seeds that have ability to germinate next spring after sawing. However, such seeds have a low germination rate. Thus, we collected mature (brown) seeds that will germinate in the spring 2021 after 2 years dormancy. This property of ash seeds has not been carefully considered in planning process. The study is important for the project partners and will be followed up after project finished with other financial resources.

| 5. List the published outputs during the reporting year (peer-reviewed articles, other publications): |
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| 6. List other practical outputs during the reporting year (websites, policy recommendations, conferences, scientific meetings, large-scale project applications, research training etc.) |
|---|
| The plans and ideas behind the present SNS projects on 2. generation ash seed orchards were presented to peer scientists and forest stakeholders as part of the oral presentation 'Breeding of European ash (Fraxinus excelsior) in the face of ash dieback' held at the international conference 'Genetics to the rescue - Managing forests sustainably in a changing world' (Lene Rostgaard Nielsen).<br><br>The importance of ash preservation and the SNS project was presented during Ädelskogsdagen organized by Skogstyrelsen in Höör with a title "Kampen att rädda Asken" (Mateusz Liziniewicz, Michelle Cleary).<br><br>Mari Mette Tollefsrud presented the project at a NordGen Forest Working group on Genetic resources, 27/08 meeting in Åland. Title: Status of work on Fraxinus excelsior, from a Norwegian genresource perspective. |

## Economic report

| 7. Received grant from SNS for the reporting year (SEK): |
|---|
| 350 000 sek |

### 8. Transfer of SNS funds to project partners

| Country | Partner organization | Sum (SEK) |
|---|---|---|
| Denmark | | 0 |
| Finland | | 0 |
| Sweden | | 0 |
| Norway | | 0 |
| Iceland | | 0 |
| Other countries (specify) | | 0 |
| **Total SUM** | | **0** |

### 9. Costs

| | SNS funding | External funds* | Total* |
|---|---|---|---|
| Travel and hotel | 15 232 | | 15232 |
| Meeting costs | 6880 | | 6880 |
| Consumables | 574 | | 574 |
| Salary | 89 088 | | 89088 |
| Communication | 0 | | 0 |
| Other costs (specify) | 0 | | 0 |

| | | | |
|---|---|---|---|
| **Total SUM (SEK)** | **111 774** | **587 000** | **698774** |

* If possible, provide details otherwise summarize the total sum for external funds and total.

| Optional: Comments to the economic overview: |
|---|
| 350 000 sek, the grant has been kept by Skogforsk and will be transferred to the participants in the 2020 as it has been by mistake considered as the total sum that was allocated to Skogforsk. In 2020 the share for 2019 and 2020 will be transferred to the partners according to the project plan.<br><br>This SNS project has to be considered as a piece of a big project that aims to preserve ash in the Nordic and Baltic Landscape. The project was used as a leverage in many applications to several financing bodies. In Sweden, new grants for a sum of ca. 3.2 mln sek was acquired under a year 2019 from Stiftelsen för Strategis Forskning (SSF), Förening av Skogsträdförädling, Stina Werner Stifftelsen and Partnerskap Alnarp.<br><br>In Norway, the SNS grant support the project Genressurser i Norsk ask (supported by Landbruksdirektoratet, Fylkesmannen I Møre og Romsdal and NIBIO ).<br><br>In Denmark, the SNS found is used in the project AshAdapt aiming at study population genomics of natural populations of F. excelsior across Europe. |

**I hereby declare that the above statements are true to the best of my knowledge**

Main applicant's signature, place and date

| (Signature) | (Institution) | (Day / Month / Year) |
|---|---|---|
| [signature] | Skogforsk | 28-2-2020 |

Signature of the head of the main applicant's research institution

| (Signature) | (Institution) | (Day / Month / Year) |
|---|---|---|
| [signature] | Skogforsk | 2/3-20 |

Thomas Kraft, Föräldlingschef
(Printed name, function)

Second applicant's signature, place and date

| (Signature) | (Institution) | (Day / Month / Year) |
|---|---|---|
| [signature] | University of Copenhagen | 28/2-2020 |

Third applicant's signature, place and date

| (Signature) | (Institution) | (Day / Month / Year) |
|---|---|---|
| [signature] | NIBIO | 28/2-2020 |