

Minutes of the Nordic Forestry CAR-ES meeting in Haukadalur in Iceland 12.-15.10.2006

Organizers: Bjarni D. Sigurdsson, Agric.Univ.Iceland.

Participants: Management group, steering committee, invited speakers: Per Gundersen, Forest & Landscape, Denmark, Jan-Olov Weslien, Skogforsk, Sweden, Bjarni D. Sigurdsson, Agric.Univ. Iceland, Magne Sætersdal, Skogforsk Norway, Leena Finér, Finnish Forest Research Institute, Finland, Hannu Ilvesniemi, Finnish Forest Research Institute, Finland, Jukka Laine, Finnish Forest Research Institute, Finland, Ari Laurén, Finnish Forest Research Institute, Finland, Eva Ring, Skogforsk, Sweden, Hreinn Óskarsson (hreinn@skogur.is), Iceland Forest Service, Brynhildur Bjarnadóttir (brynhildur@skogur.is), Icelandic Forest Research, Aðalsteinn Sigurgeirsson (adalsteinn@skogur.is), Icelandic Forest Research.

Programme

Friday 13.10.

8.00-12.00 CAR-ES business meeting, chairman Per Gundersen

The status of the CAR and the minutes from last meeting revisited.

- a) *Scientific secretary.* Ingeborg has stopped serving as a scientific secretary of CAR-ES at FSL. She sent her regards to all participants of CAR-ES, who wish her all the best in the future. Karin Hansen at FSL will become the new scientific secretary of CAR-ES.
- b) *Questionnaire.* The questionnaire has been on ice since last meeting in Finland. Per is going to work on that later this autumn and send it out to the other participants.
- c) *SNS-application.* A one-year pilot project application was sent to the SNS about the effect of shorter rotations on biodiversity, water quality and carbon sequestration. More discussed later.
- d) *Staff exchange.* Ingeborg and Per had put some work in designing forms to use for staff-exchange within CAR-ES. Not ready – Per will look at this.
- e) *Presentations at CAR-ES meetings.* Those should be made available on the CAR-ES homepage.
- f) *The buffer zone review.* Only the Finns did what promised before the Iceland meeting (produced a zero-draft). More discussed later.
- g) *Hurricane damage SNS application.* According to information given to Per, the SNS would probably not be able to fund “a full application” on top of the CAR-ES funding. Therefore, no such application was prepared.
- h) *Possible Larix project.* Nothing happened – mainly Per and Bjarni who are interested.
- i) *The CAR-ES homepage.* Ingeborg and Per had put material into the CAR-ES homepage and participants granulated Per on that. However, there is a need to put a little more work on the homepage, so it is apparent that the CAR-ES is active and alive. E.g. to put information about the 2006 meetings (Finland and Iceland) and maybe agendas, minutes, and pdf of presentations in there. Per will get somebody to help him with that.

- j) *Baltic cooperation.* Bjarni only sent the invitation to the Iceland meeting to the steering committee and the coordinators in Norway, Sweden, Finland and Denmark. It led to that the Baltic states were contacted very late. Next time, send invitation directly to possible Baltic participants.

The buffer-zone review

Not enough. Leena and Ari made zero draft – but Jan and Bjarni only just started the literature search for “their” topics.

It was agreed that there were too few Fennoscandian studies to limit the source material to that geographical region. Rather than make a passive review, CAR-ESers will make a theoretical synthesis and add relevant references where possible.

Eva Ring gave a lot of interesting information on Swedish buffer-zone studies and reviews. E.g. the Silva project report (download from fiskiriverket.se). She is currently working on a review for Swedish forest managers entitled “Forest and water”. Should be ready before Christmas.

Eva Ring was formally invited to assist in writing the CAR-ES buffer zone review. She accepted.

General discussion what to include in the buffer-zone review and how to define a buffer-zone. Agreed that “our” buffer zones are an area along all brooks, streams, ponds and lakes within forested area. Decide on which distance to use (5, 10, 20, 25 m?).

How to manage a buffer-zone. This is a very important point. To decide to have no management is also “a management”.

Buffer-zones and landscape scale problems. Usually it is only those that have running water going through their property that have to consider riparian or buffer zones. Buffer zones give environmental service also to others that are further upslope. This is an important point. There is some legislation both in Finland and Denmark about upslope water management (ditching). Landscape scale has not much been dealt with in general.

Who deals with buffer-zone issues in different countries – are there laws, etc.?

Finland: mainly “forest institutes” that deal with the issue.

Sweden: both forest and environmental institutes deal with the issue.

Iceland: environmental institutes have been asking for treeless border zones – forest/agricultural institutes have more the Scandinavian viewpoint to use wooded borderzones. Interest e.g. in the effect of higher NPP on catchments/border zones on stream NPP. No laws – but a need for recommendations.

Denmark: Interest in forest strips around agricultural land to avoid leaching.

Norway: There are general forestry recommendations for forest strips along streams.

Table 1 was redesigned and split in two tables.

Bjarni will send Per info on FAO statistics on forest areas in all Fennoscandia countries.

Per will soon send redesigned table form to all participants. All participants send the basic areal information to Per before 15 November.

Ambio the best journal for the review.

13.00- 17:00 Seminar: *Effects of afforestation on ecosystem services*.

General:

Bjarni D. Sigurdsson. Opened the seminar and gave a general introduction.

Adalsteinn Sigurgeirsson. Few facts on forests and forestry in Iceland.

Session: Carbon sequestration

Brynhildur Bjarnadottir, PhD student. Direct measurements of carbon sequestration in an young *Larix siberica* plantation in eastern Iceland.

Jukka Laine. Afforestation of cut-over peatlands and abandoned fields and their associated CO₂ fluxes.

Session: Biodiversity

Magne Sætersdal. Dispersal patterns of cryptogams on previous deforested islands in a west coast archipelago of Norway

Session: Nutrients and water

Eva Ring. Effects of prescribed burning in forest regeneration on water chemistry: a 7-year long soil-water study from central Sweden

Hreinn Óskarsson, PhD student. Effect of fertilization at time of planting on the growth, nutrition and ecto-mycorrhizal colonization of *Betula pubescens* seedlings

Saturday 14.10.

8.00- 11.00 CAR-ES business meeting continued, chairman Per Gundersen

National research agendas

Bioenergy. There will be a large bioenergy research program at Metla. Interest in Nordic co-operation. Much interest in Sweden. Norway and Denmark are not prioritizing this area. Only one project in Iceland (Northern Woodheat), a Joensuu, Scotland, Iceland cooperation.

Stump-removal. Much interest in Sweden – SLU leading. Skogforsk maybe to make an review on the subject. Research on stump-removal should preferably be on

catchment scale. Interest at Metla. Denmark – maybe to study stump removal in Christmas tree plantations.

Climate change. There will be a large climate change and forest(ry) program at Metla. Denmark and Iceland interested.

Afforestation. Interest in Denmark to study the effects of using different deciduous tree species on C, water and nutrient cycles. Some research in Finland could fit to this – e.g. on birch and Norway spruce. Interest to study more deciduous spp in southern Finland. Iceland has been doing some studies with mountain birch. Interest in Sweden and Norway. DK will suggest a ESF network (formerly COST-action) on afforestation and natural succession. The group gave names to be contacted.

Where to find information on forest experiments:

www.noltfox.se . List over forest experimental sites in the Nordic region.

FP7. Not much seems to be happening within the Nordic region. Most are waiting to know a little more. First call will be next spring – so it is important to start now!

LIFE +. There is a new Life + (formerly Forest Focus) program opening. This could be interesting, e.g. for research on methods and climate change...

The SNS application that was submitted: “shorter rotations in forestry”

Participants agreed that Jan had made fine work to get this submitted. Good project idea. Could be developed into a larger project (e.g. FP7).

Annual report (2006) and a Research plan (2007-2009) for the CAR-ES

We should present a work plan in the next annual report. We do not need to get a lot of new ideas, rather to put down what we have already decided and started the work on. Financial statements from all participants should be sent to Per before February 15, 2007.

It is encouraged to use part of the CAR-ES funds sent to each country to encourage MSc students or PhD students to do work related to CAR-ES – that can lead to a new research article or report being written.

Remember to include the sentence: “*This project contributes to the Centre of Advanced Research on Environmental Services (CAR-ES)*” in the acknowledgement chapter of relevant research articles or reports.

We should plan a larger workshop on the topic of CAR-ES in 2008 or 2009. Should be in the work plan.

All presenters at CAR-ES work meetings should be added to the participant list and should receive e-mails about what is happening in the CAR-ES with other participants. This was accepted by the group.

Next work meeting of CAR-ES?

Next meeting will take place in Bergen, Norway during 7-9 of June. Magne Sætersdal will be the host. The 9th will be an excursion day.

Staff exchange

Participants are encouraged to make small scientific missions – and ask for funding from Per. This could be used, e.g. for meeting related to the writing of the buffer-zone review or for visits of M.Sc. or PhD students between institutes.

Next steps for the review of buffer zones and other matters.

Soon – Bjarni sends Per draft for the minutes and Per distributes the final minutes

Soon – Per sends out new forms for Table 1 and Table 2 and a draft for the introduction.

Soon – Bjarni sends Per FAO information on forest areas.

Soon – Per sends out form for staff exchange

15 Nov – Participants send Per information for Table 1

15 Dec – Zero draft ready from all three groups and introduction.

Jan-Apr – Advance the manuscript.

15 Feb – Send Per the financial statements

15 Apr – First real draft of the buffer-zone manuscript should be ready.

