

Minutes

CAR-ES meeting, June 7-9, 2007 in Bergen

Participants in main meeting: Jan-Olov Weslien, Line Boberg, Olof Widenfalk, Lars Högbom, Skogforsk, Sweden; Bjarni D. Sigurdsson, Jon August, Agric.Univ. Iceland; Magne Sætersdal, Skogforsk Norway; Leena Finér, Jukka Laine, Ari Laurén, Anna Tolvanen, Finnish Forest Research Institute, Finland; Per Gundersen, Forest & Landscape, Denmark.

Biodiversity theme:

We had 10 presentations from 5 countries spanning issues from lichens, ants and beetles to inventory methods and 'most protection per Euro' (see program) which was very informative.

We concluded the section with a *general discussion where the major issues were:*

- *Need for a synthesis; need to communicate:* Last 10 yr of Nordic biodiv. research – what have we achieved? - Currently forestry might have become tired of the issue and think there is no conclusion! Format could be anything from a synthesis talk at a symposium, a synthesis paper, or a discussion paper for a newspaper or magazine. Important questions: What have we achieved? Wouldn't it be wise to evaluate what we have done? (Delay minimum 10 yr from companies run away and implement a new practice to signs of improvement can be evaluated). Zonation – is that wise? Restoration what do we gain? Research on biodiv. more integrated in NFI.

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What is it worth to spend money on?

Jan has the lead on this issue. No promises.

Issues, notes from the discussion:

- Importance of coordinating process, biodiv. and biogeochem. studies on same spots
- Move to landscape level.
- Monitoring is important – extinction depth model not very well proved
- To find/prove trends in habitats (e.g. increase dead wood) – do species react?
- Where to spend the money to save/gain biodiversity?

Riparian synthesis

Status: The progress since last meeting was limited to drafts on a few parts of paper.

Thus we devoted a whole afternoon to come into depth with the content. The emphasis of the paper was perhaps not clear enough for us to keep the work and writing focussed.

Major decisions were:

- 1) to focus paper on *Forest by the Water* rather than just the riparian zone.
- 2) Length of streams and rivers should be based on 1:50000 scale maps.
- 3) Survey of national practice, recommendation, certification and legislation related to FbW and buffers.
- 4) Section contents and length were detailed and an update has later been circulated by PGU

5) Deadline for draft chapters October 8th to PGU.

Short rotation pilot project

Aim: To model the effect of reduced rotation length on ES. Hypothesis was that N leaching would increase, C sequestration increase and biodiversity (CWD and vascular plants) decrease.

Approach: Rotation lengths 90, 75 and 60 compared over 300 yr by use of site index as surrogate for change in rotation in already established models.

Progress as expected. Might be able to apply to SNS for a real project already Sept. 1. PGU mentioned that partners in a subproject of the EFORWOOD EU project also were interested in coming to the rotation scale with impacts on Ecosystem Services. Thus it might be possible to catch partners for an FP7 project if a suitable call should come up.

National research agendas (hot issues, for information),

IS:

- New project on water vs vegetation (effects on water quality, biodiv. etc) on a range of sites from degraded to old forests – inspired by CAR-ES.
- Restoration of birch woodlands, old-growth as reference (soil, fauna, plants).

NO:

- Landscape change due to forest regrowth in formerly grassed mountain pastures (effects on biodiv. aesthetics (peoples preferences), bio-energy potential)

SE:

- Management and water: Eva Ring write overview and a handbook.
- N fertilisation – new regulation discussed companies want to apply more.
- N effects on growth 15N studies – 7% increase in S-SE observed.
- Stump removal and env. – Env. Assessment report coming.
- Bioenergy
- Effect of selective cutting in key habitats? – conflict forestry vs environmentalists – is protection needed or not to be studied in exp.
- Optimal selection of set aside areas – most biodiv. for the money.

FI:

- Bioenergy incl. technology, economy but also env.
- Water Framework Directive (WFD) (use and restoration of riparian zones, artificial ponds...used in agriculture sceptic if it is relevant in forests)
- Nutrient loss vs forest management schemes (incl. stump removal)
- Cost efficiency of diff. forest practices for env. protection
- Analysis of long-term water data (e.g. 6 weeks earlier snowmelt, DOC increase).
- Floods – if increased can water be stored in forests (4m high water for a month)?
- Climate change effect on forest ecosystems; METLA has a major project on all type of responses
- Feasible use of peatland forests

DK:

- Bioenergy (broadly)
- Water yield from forest (compared to open land) and
- Water quality, restoration measures in the landscape
- Afforestation (C, water, biodiv.)
- Synthesis activities in EFORWOOD on all ecosystem services vs management (report under way)

Discussions during this session lead to a list of minor tasks (below)

Stump removal (proposal)

This is a hot issue in SE and FI and some interest in DK. OSCAR is preparing an EU proposal with emphasis on the technology side. The DK OSCAR group will lead this proposal and PGU had convinced them that they need an Env. WP. Info on major METLA and SLU (and Skogforsk) projects and experiments were exchanged.

(Update after meeting: PGU provide the DK coordinator with a WP-description and contacts etc. However, due to very short notice and much activity around midsummer where most people were of communication apparently did not work out very well for the whole project. Thus the chances a probably quite low, but now we are better prepared for a new go).

Potential new activities (waiting list)

Biodiversity synthesis (see above)

Hurricanes – the environmental effects due to large scale damage.

Bioenergy and the environment

Life projects are possibilities.

Encourage publication of other countries research in info-series (Resultat fra Skogforsk, Videnblade fra SL DK osv) can be translated.

Update from secretariat since last meeting

- PGU showed a PowerPoint on status and outlook produced for Nordic Directors meeting earlier this year.
- Secretariat, finally Karin Hansen has been appointed secretary for the group (unfortunately she was unable to attend this meeting). She has plans to be visiting Skogforsk regularly as an exchange of staff (she lives in Stockholm, but work (remotely) in Hørsholm, DK).
- Exchange of staff, a small Excel sheet to fill out to apply for support from the CAR for short scientific missions were presented and approved.
- So far we had limited success in inviting Baltic partners although they at times have shown interest. PGU will ask Niels Elers Koch about the importance of this for SNS.

Reports to SNS have been criticised for all CARs since they do not show the activities of the whole CAR area and how these are coordinated by the CAR. There may be a need for more information also financial in the 2007 report. PGU will take contact to Olav Gislerud (responsible in SNS) on this. So that we can give the right information. PGU will send draft report in January 2008 each country to improve.

Remember to emphasise the value of the information exchange.

Open workshop/conference in yr 5 will be an important issue on the next meeting, but we already decided that:

- 1) Theme is Ecosystem Services from forests (with a focus on the Nordic/Baltic countries).

- 2) However we will have 1-2 invited speakers and we will our selves give key-notes.
- 3) We will make a special issue.
- 4) We need to decide on size, venue, etc. at next meeting, keep in mind possibilities.

Next meeting(s)

In Copenhagen **8-9-10 November 2007:**

- Water quality issues
- Climate change (Finnish projects on effect on water, Climaite)

Spring meeting in Sweden on Bioenergy and Ecosystem Services (Water, Biodiv. C-seq), dates to be decided.

Follow up tasks

Contributions to the Forest by the Water paper by 8th Oct.

Did we agree to circulate our publications on Env. Services from our research in info-series (Resultat fra Skogforsk, Videnblade fra SL DK osv) to encourage translation / transformation..... If we didn't we should, otherwise the proposal above is not possible.

Lars Högbom

- Send info / links to work by Eva Ring
- Circulate report: Env. Assessment of Stump Removal

Lena Finer

- Circulate papers on 'ants' biogeochemistry' (not sure if all were interested)

Per Gundersen

- Send Reforeu proposal to Magne
- Send 'in stream N process' ref. to Lena
- Involve relevant partners in Stump removal EU proposal
- Circulate the Excel for the application for support
- Circulate EFORWOOD report on Env. Services when public

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