



Minutes – Steering committee meeting Research School Focus on Soils & Water: 27th of May 2019, 13:00-16:00, room Marken (B3051) in the MVM centre, Ultuna, SLU.

Participants: Karina Engelbrecht Clemmensen, Lisbeth Lewan, Prithvi Simha, Jelena Rakovic, Magdalena Bieroza, Maria Kahlert. Unable to sit: Erik Petersson, Brendan McKie, Hannes Keck.

1. Chair, secretary

Lisbeth Lewan appointed Magdalena Bieroza as chairperson and Maria Kahlert as secretary of the meeting. Prithvi will adjust the protocol.

- 2. Minutes steering committee 3rd of April 2019 (see Attachment_1) approved by all
- 3. Info on recent, ongoing and planned activities 2019/2020

3.1. Ongoing or recent

3.1.1. PhD course PNS0169, New molecular methods (5+2 ECTS). 25-29th March 2019 Maria summarized. Spent less (190 tkr) than the planned 200 tkr (160 from FoSW, 40 from Ecology). Maria suggests that we ask Ecology for 35 tkr, and then FoSW spends 155 tkr. Report & suggestions approved by all.

<u>Suggestions from committee</u>: send info next time to NJ PhD list (ask Lisbeth), and to all departments' lists, if SLU student interest is low

- **3.1.2. Career Day** 2018 Magda presented. Budget to be split between participating schools 5 schools: FoSW, Organism Biology, Ecology, Social Science Perspective, Sustainable Biomass Systems
- **3.1.3. Nitrogen course** (Course leader Anke Herrmann)

PNG0171, 4 ECTS. Report should be ready for the next FoSW meeting, Anke will attend.

3.1.4. Carbon course (Course leader Björn Lindahl)

Ongoing. Question budget: original budget 160 tkr. Björn is paid by the faculty as professor and cannot claim salary costs for himself as a course leader. Risk that the course expenses will be too low. General question how can we solve this kind of issues in the future? Costs will be lower because there was no course assistant this time, and the course did not use Sunnersta Herrgård.

- **3.1.5**. **Sustainability goals Workshop** Attachment 6. 29 of the 55 participants were PhD students. Suggestions from committee: To be held every second year as a key element education. Report approved by all.
- **3.1.6 PhD course Multivariate statistics** Ulf Grandin: Autumn 2019, 20 registrations already after first day of announcement.

<u>General question discussed by the committee</u>: Are lecturers sufficiently paid for the time it costs to prepare and hold a lectures? Within PhD education, one hour of lecture takes often a whole day to prepare. We should take this up at FUN to change to current reimbursement, which is only 2 hours preparation for 1 hour lecture (copied from basic education format).





3.2. Planned

3.2.1. Suggestions for new activities

3.2.1.1. Maria got suggestions from the Ecology and IVM PhD students to discuss:

Suggestions from

- the **Ecology PhD students** (meeting held by Hannes Keck):
- 1) Some more technical programming course on things like writing better and more robust code, testing it etc. Mainly focused on R. 9 people expressed interest
- 2) A course on advanced linear and additive models including model validation and predictions in R with a clear focus on typical ecological data problems. One week theory and examples, one week hands on exercises where you come with your own problem and discuss it in plenary. Both weeks can be taken together or separately. 9 people expressed interest
- 3) A GIS course on how to process geospatial data entirely in R. 1 week. 9 people expressed interest.
- 4) Statistics course with focus on Generalized Linear Mixed Models. Maybe also touch upon not just linear models (e.g., General additive models, GAMM)? Model selection and zero inflated models? And how to deal with overdispersion? No data

Question: what could be included. Prithvi's department is involved in a similar course already. PhD students should co-organize (and get paid!)

- 5) A course about food webs: From theory to practice. Including theoretical background, network analysis and network metrics. 6 people expressed interest
- 6) Multi Species Occupancy Modelling Learn how to model species abundance from presence / absence data using Bayesian methods. 3 people expressed interest
- the IVM PhD students (Vera, Rikard, Charlotta, James, Mattias, Malin and Jenny) (meeting hold by Mattias Sörengård)

Suggestions on FoSW courses:

- -General ones are good, writing reviewing, statistics, take the possibility to arrange courses around visiting professors.
- -Most importantly: A course on how to handle PhD/research lifestyle. Handle stress, ambitions, work/life balance, handle supervisors, project management, crisis management, career strategies etc. All for high productivity and good mental health.

-other

FoSW – Grant for research visit and courses are good.

FoSW – Lunch Seminars are good.

FoSW – Should be more visible.

FoSW – Should have physical meetings at least once a year? Networking, information, clarify visions and aims.

- Magnus Simonsson, Stephen Hillier, Jon-Petter Gustafsson, MoM (2/2019): PhD course "Mineralogy of Soils and Sediment" in spring 2020. It was previously given in 2016, and we plan to give a very similar course re-using the syllabus of PNS0134
- **E&T PhD students** (2017): ½ day to 2 day course/workshop of how to do programming more efficiently.





<u>Discussion by committee</u>: Not clear what the courses would have for content, and we need organizers. MoM will hire a researcher to work with data analysis/geostatistic, start probably 2020 (info: Lisbeth). Could be a teacher for one of the statistical courses suggested by the students. <u>Decision</u>: MoM PhD students also plan to meet, we await their suggestions to discuss everything together at the next meeting (in autumn).

- 3.2.1.2. Magda on possible **Agforee** co-operation. Suggestion to make a new start and just meet for an informal exchange of information on our activities. Decision that Magda & Maria travel to Helsinki to visit Agforee in autumn. **Magda** to organize a date.
- 3.2.1.3. Jelena got a suggestion about a **1-day-workshop: "Bli klar i tid och må bra på vägen"** ("get ready in time and stay healthy on the way") by Åsa Burman (author of a book with same title). PhD students would like to see education about how to cope with stress. Costs: academic work & stress handling 30 tkr without travels etc. **Jelena** to ask if such a workshop can be arranged in autumn. 3.2.1.4 All to decide if we do a **brainstorming** event (and if so, when and whom to invite), or if Magda and Maria go round and ask people. We will decide after summer if we need such an event.
- **3.2.2. Soil Systems course** planned for Year 4: Anke would be more than happy to run the course but preferably in autumn 2020 or spring 2021.
- **3.2.3. Uncertainty modelling** (Lisbet, Jan Seibert, Magda): Magda and Lisbet to meet in June to discuss the way forward who will lead the course, the scope and course application. Proposed date in Autumn 2020.
- **3.2.4. Catchment connectivity course** (Magda) planned for Year 4. Magda was in discussion with Mattias Eriksson (Organism Biology). They do not want to lead this course. Mattias said that there are a lot of question marks, and obviously this might need some deeper discussion from his steering group before they know how they actually want to proceed. But they are not in position to lead this course. Maybe the best is to cancel it.

Maybe Magda will ask Tomas if he is interested to organize a mini-course on carbon modeling in LCA, but that doesn't really need the involvement of two research schools, despite that our students might not be interested at all in this topic.

<u>Decision FoSW</u>: Await Jelena taking the 2 catchment courses given this year. Jelena can then give us an update on if there are issues missing in those courses that FoSW could or should cover. We then could give such a course more focused on a subject needed. Agricultural catchment course teachers, Magda offered to lead & teach it.

3.2.5. New suggestion HT2019: coordinated workshop on DNA-methods, repetition of success with UMBLA and EDNA. Maria contacted UMBLA which are interested to cooperate again. Students are interested in molecular tools. Maybe a mini-course along the workshop? FoSW steering committee suggestions to contact Ann-Marie Jönssen/Malin Strand (ArtDatabanken)/Anna Rosling (BAS)/NIFAM Karina for cooperation on the organization. Maria has started organization, and contacted UMBLA (Åke Olsson, Jan Stenlid, Sara Hallin, Björn Lindahl, Karina Engelbrecht Clemmensen, Sari Peura). Sari informed that there will be a SciLifeLab biodiversity minisymposium at SLU 8/11 and PhD course in metagenomik 11-15/11. So one possibility would be to have our workshop 7/11 with a focus on environmental monitoring and stakeholder questions. Need to be confirmed by UMBLA, and by stakeholder schedules (right now, it seems that there are no conflicts in aquatic stakeholder meetings at least (https://www.havochvatten.se/kalendarium).





- **3.2.6. PhD course Ecosystem functioning** (Brendan McKie) planned for spring 2020.
- **3.2.7** Year 3 PhD course Ecosystem services in soil and water research. Maybe just soil? Need to be discussed when Brendan is back.
- **3.2.8** Year **3** PhD course Minerals in soils and sediments and their X-ray identification and quantification. Johannes Koestel suggests to give the course 2020, before not sufficient students.
- **3.2.9 Year 3 PhD course Agriculture in practice**. Jelena informed that there is a course Agriculture for biologists at SLU. Given again, maybe join. Organizer needs to be contacted -needs to be checked who it is first. Maria did not find such a course on the SLU web and has asked the Director of Studies for the Biology-program, Tobias Vrede, for information.
- **3.2.10 Year 4. PhD course Aquatic sciences**: theory, practical methods, management, threats. This course is not planned at all yet. Suggestions to contact: Stefan Köhler (but will be on sabbatical now), Jens Fölster, Faruk Djodjic. Limnology department at UU, e.g. Gesa Weyhenmeyer. Stefan Bertilsson to give a PhD course in year 4.
- **3.2.11 Year 4. PhD course Soils Systems.** Anke happy to give the course.
- **3.2.12 Year 4. PhD course Organic micropollutants in the aquatic environment.** Lutz Ahrens happy to give course again. Should be reminded in time to perform the suggested improvements from last course evaluation).
- 3.3. Lunch seminars (Phd representatives to present)
 - * Carsten Mueller 35 participants
 - * Blue targeting 3/6 14 registered

4. Organization

- **4.1. Website** Simon Hallstan already paid for being webmaster. Jelena can join him in the task if she wants, will contact Simon about it.
- **4.2. Steering Board**: All agree to keep Lisbeth Lewan in FoSW steering committee.
- 4.3. T-shirts? Ordered.
- 5. NJ Faculty report
- **5.1. Activities report** for FoSW activities which occurred between 1st of July 2017 end of June 2019

FoSW needs to write a "self-evaluation by the school, above all in relation to the qualitative targets for the doctoral degree", plus have a report of the activities and their economy during the first 2 years. No deadline for the report yet. PhD degree learning outcomes: Attachment 3 and 4.

Activity & budget report of the first 2 years — Attachments 2 & 5. We have a) underspent 240 tkr and b) not all costs have been requested yet from the FoSW accounts. Magda to check all activities and to remind the organizers to send in the invoices as soon as possible. Still, some activities are just running now, and invoices will possibly not been sent in before after summer. Need to explain this in report to faculty. Steering group PhD students to ask their supervisors to send the invoices to get the agreed 3% reimbursement of the PhD students' salary from FoSW for 2018-June 2019. Question if we are allowed to use unused or late requested funding of the first 2 years in years 3 and 4. Lisbeth reminds that there is a risk we may not, and that we need to explain carefully causes of non-spent funding.

6. Course applications - none





- **7. Mobility grants** none. FoSW decision: Send info about mobility each time before the meeting to remind FoSW-people to send in applications 2 weeks before a steering group meeting. Maria to send an extra invitation before summer, to be decided per capsulum.
- **8. Next meeting:** 12 (a.m.), 12 (a.m.) or 16/9 (p.m.). Maria to send out a doodle to all FoSW steering committee members.
- 9. Attachments of the agenda

Attachment 1 Minutes
Attachement 2 Activities report
Attachement 3 PhD degree objectives
Attachement 4 Individual Study Plan – learning outcomes
Attachement 5 Financial report FoSW 2017-2019
Attachement 6 Sustainability goals workshop report