

COST 626, Oulu meeting

Inter WG Seminars - WG1/WG2: Data Model Integration

The following notes were taken during the InterWG1/WG2 seminar in Oulu. Some of the discussion was quite amorphous and does not really help for finalizing the state-of-the-art-report whereas other topics clearly generated tasks to be done as soon as possible. COST activists related to tasks, please go ahead! The editorial board should keep the rest in mind when going over the final report.

- Martin's report on Data Model Integration
- Measurement grid vs. modeling grid
- Helmut has a high resolution natural laboratory river data set (5 cm grid, 18 m long, 2-5 m wide, riffle pool, woody debris etc.) -> measurements vs. modeling
- Different approaches: Governed by technical possibilities or governed by understanding and interpolation (working with reduced datasets)
- Predictive capacities require measurements and modeling
- Image processing and particle tracking technologies are missing, used to derive boundary conditions for CFD models
- Temporal aspects are neglected in preference curves
- What is yield of different techniques in terms of quality and quantity of fish data
- Small fish (< 10 cm) do not allow radio tracking
- Transponder techniques for passive tracking of smaller fish
- Irregular data sampling and interpolation vs. cross section sampling
- Depth and velocity treated as combinations vs. independent
- Volume-Percentages of depth velocity combinations as habitat availability
- -> bi- or multivariate preference functions (Yann calls it signature)
- **Task:** Literature lists, all contribute
- Describe the data collecting techniques and data processing techniques in more detail (advantages, disadvantages, failures), use figures
- Cross-Links between measuring and modeling
- **Task:** add another column to "physical parameters" on how to measure them, instrumentation, responsible person: **Helmut Mader**
- **Task:** Fish data sampling and: **Mari, Teppo** and **Ari** have a table already
- **Task:** Fish data processing to preference data sets: **Ari, Yann, Teppo**
- **Task:** Benthic species, sampling procedures, identification, links between species and physical attributes: Part B of Report of WG 1 by **Peter Goethals**
- **Task:** Benthic species habitat modeling: **Klaus** contribution
- **Chapter 3,4,5,6 will be written in ... sentences by the Austrians**
- **Larry** sends a nice picture to Martin B
- Uncertainty: State of the art is that quantification of uncertainty is not provided regularly, multivariate models do provide it, **Anton writes a small chapter**
- Validation is being written by **Kjetil**.