The importance of sediment for biodiversity

Special Session at 7th International SedNet Event
Thursday, 7 April 2011, Venice, Italy

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Session objective

Further underpinning of the importance of sediment for biodiversity

This may enable more and better attention to sediment management by policy making and management
Session outline

• Invited key-notes:
  • Fresh water sediments and biodiversity
    Alan Covich, University of Georgia, USA
  • Biodiversity and sedimentary habitats in critical transitional zones: the Venice lagoon as example
    Davide Tagliapietra & Stefano Guerzoni ISMAR-CNR, Italy
  • Physical and biogeochemical processes as building blocks for maintaining sediment biodiversity in coastal environments
    Kate Spencer, Queen Mary University of London, United Kingdom
• Discussion, moderated by:
  Adriaan Slob, TNO, the Netherlands
Discussion

• Is sediment indeed of crucial importance for biodiversity?
  Yes it is!

• Can a ‘white paper’ help to increase awareness to this issue?
  Yes it can, but make it broader: link sediment, ecosystem functioning, ESS and biodiversity!
  Audience: river-basin managers

• Suggestions for the white paper:
  • Producers:
    Large group of experts, global, aiming at consolidated knowledge
  • Outline
    Small core group will come up with this: key-note speakers & reporter (Alan, Davide, Kate & J &os), within ca. 3 months
  • Proposed role of SedNet?
    Coordinate the effort
Needs river-basin managers:

Clear advice and guidance by scientists

- How to deal with sediments?
- What is good environmental status?
- What is relevant to measure?
  “do we have to manage all these small creatures? This scares us?”
- What instruments to use?
- ....

And: please convince all the stakeholders, not only us as managers
Other key-messages from discussion

• Go for adaptive management: ‘learning by doing’ (long term experiments are needed to look for rates of change!)
• Go for better ‘branding’: what do restored sites do for us humans. Making use of ‘charismatic species’ may also help here
• We need to better understand the relationships between biodiversity loss, ecosystem functioning (a.o. relationship between species) and ESS?