



Cost Action 869

Mitigation options for Nutrient Reduction in Surface Water and Groundwaters

Small meeting WG3 Mitigation options for grassland systems

*Teagasc, Johnstown Castle Research Centre, Wexford, Ireland
12 November 2008*

DRAFT REPORT

PRESENT

<i>Australia</i>	<i>Alice MELLAND</i>	<i>Ireland</i>	<i>Karl RICHARDS</i>
<i>Belgium</i>	<i>Georges HOFMAN</i>	<i>Netherlands</i>	<i>Wim CHARDON</i>
<i>Denmark</i>	<i>Brian KRONVANG</i>	<i>UK</i>	<i>Phil HAYGARTH</i>
<i>France</i>	<i>Françoise VERTES</i>	<i>UK</i>	<i>John WILLIAMS</i>
<i>France</i>	<i>Dominique TREVISAN</i>	<i>Switzerland</i>	<i>Christian STAMM</i>
<i>Ireland</i>	<i>Owen FENTON</i>	<i>Switzerland</i>	<i>Frank LIEBISCH</i>
<i>Ireland</i>	<i>James HUMPHREYS</i>		

1 AGENDA

The small meeting was organized by Karl Richards (IE) and Wim Chardon (NL), adjacent to the International Conference: "*Sustainable grassland systems in Europe and the EU Water Framework Directive*" which was held on 12-14 November (click [here](#) for website of that conference, with a [book of abstracts](#) and pdf-versions of presentations and posters). The small (1 day) meeting was attended by 13 persons from 8 countries, with Alice Melland from Australia as special guest. It had as general topic: "Mitigation options for grassland systems". After an introduction by Wim Chardon about COST 869 and the database, the following items were discussed:

- which options for grassland are now in the database with factsheets,
- which options did we overlook thus far,
- which experience do attendees have with grassland options described in factsheets,
- are statements in factsheets correct,
- how to proceed with factsheets.



2 SUMMARY OF DISCUSSION

During the discussion, the following remarks were made and general points were discussed:

- The estimation of costs mentioned in the factsheets only deals with costs made by the farmer, not to total costs (or profits) for society.
- A forum via which comment can be given on factsheets could be useful, and a link to that forum should then be made within the factsheets.
- A text that introduces a group of factsheets can be a good extension, an example is the text about *Soil tillage and crop establishment* in group 4.1 *Ploughing / tillage*
- A separate general factsheet could be written about preventing gaseous losses; a link can then be made to that factsheet from other factsheets under Pollution swapping.
- Within the list with factsheets links are also given to descriptions of BMPs (Best Management Practices), written for the SERA-17 network (USA). It is probably more safe to make a link to a pdf on the COST website than on the site of SERA-17, since that might change without notice.
- Factsheets describe improvements of existing practices, but in some countries these improvements are considered not adequate enough. An example is the factsheet *Site solid manure heaps away from watercourses and field drains* (under 1.2). This suggests to place heaps on soil not too close to surface water or drains. However, in some countries (e.g. CH, BE and NL) it is prescribed to place manure heaps on concrete, so leakage water can be collected and the risk of water pollution is further reduced. Also, in some countries heaps must always be covered for reducing ammonia volatilization. A warning on this point should be placed on the website with factsheets.
- In the list, before each factsheet it could be indicated if the option mainly deals with reducing N and/or P loss reduction.
- An overlay or filter could be added to the database with factsheets. With this filter, a user can make a selection of factsheets that are relevant for her / his own situation. Before creating the filter, potential end-users should be consulted.

The following remarks were made about specific factsheets:

- The factsheets under 5. Water management give the impression that this is only relevant for P loss, not N [*note: this was corrected after the meeting*].
- When a factsheet is written on the use of the Farm balance concept (under: *1.1 General nutrient application management*), it must be mentioned that within a farm unbalanced fertilization of specific fields can cause problems with nutrient loss.
- The two factsheets on manure heaps could be combined (under 1.2 *Manure production...*)
- idem, the factsheets on manure spreading at high risk times (under 1.2 *Manure production...*)
- idem, the two factsheets on manure incineration (under 1.3 *Manure surplus management*)
- The factsheet under 3.1 about *Optimizing soil organic matter content* could better be placed under *1.1 General nutrient application management*.
- Also under 3.1, the topic *Stop animal production (locally)* can be combined with *Optimize / reduce overall stocking rates*



- Under 3.1, the topics *Reduce dietary N and P intakes*, *Adopt phase feeding of livestock*, and *Use low phytate feed* can be combined.
- A (short) factsheet could be written on not fertilizing places where cattle regularly gathers.
- Dominique Trevisan offered to write a factsheet on: *Move feed and water troughs for cows at regular intervals*.
- Françoise Vertes suggested to ask Luc Delaby or Rémi Delagarde (INRA - UMR, Saint-Gilles, France) if they can assist with writing a factsheet on: *Reduce the length of the grazing day*.
- Alice Melland offered to review the factsheet *Minimize the volume of dirty water produced*; it can be mentioned that this option has a positive side effect that emission of other pollutants is reduced as well *[to be checked]*.

Report prepared by Wim Chardon.