

**European Mountain lake Ecosystems: Regionalisation,
diaGnostics & socio-economic Evaluation**

EMERGE

20

SCPs

Neil Rose

ENSIS-ECRC, University College London

EMERGE PROTOCOLS: SCPs
Neil Rose

1. Top and bottom sediments from lake districts.

- From all lake district sites in 12 districts.
- 0.2g **dried** sediment to be sent from top (0 - 0.5cm) and bottom samples in separate bags - **see sediment protocols regarding bottom samples.**
- Samples should be dried such that they cannot be contaminated e.g. freeze dried or in a drying cabinet in a clean laboratory
- Bags to be clearly labelled with site name (or code) and sediment depth.
- All samples from within a lake district should be sent at the same time.
- Send samples within 2 weeks of completing sampling.

2. Sediment cores

- Full cores from Romania, Bulgaria only. Bulked samples from Redo and Ladove (see sediment coring protocol).
- 0.2g **dried** sediment to be sent from every level. Each sample in a separate bag.
- Bags to be clearly labelled with site name (or code) and sediment depth.
- % water content and wet density data for the sediment core to be sent **with** the samples.

3. Sediment traps

- From WP3 sites (3 x high frequency- Redo, GKS, Paione; 3 x low frequency Lochnagar, Ladove, Redo)
- If possible 0.1 - 0.2g of each trap sample to be sent **dried - not filtered**. Each sample should be placed in a separate bag.
- Bags to be clearly labelled with site name (or code), depth of trap and sampling interval.
- Along with the samples send a data sheet as follows:

Site Name	Site Code	Trap Depth	Start Date	End Date	Trap Area	Total dried sediment
Round Loch	SCOT1	15m	4/9/2000	18/9/2000	200 cm ²	5.639g
Round Loch	SCOT1	15m	18/9/2000	2/10/2000	200 cm ²	4.937g

4. Bulk deposition samples

- From WP3 sites. Fortnightly from Lochnagar & Paione. Monthly from GKS, Redo, Ladove.
- As much volume as possible to be filtered (GF/C) for SCPs.
- During dry periods, wash the walls of the collector with deionised water and filter the washings. However, be sure to record the original volume in the collector (i.e. 0 ml for no rainfall).
- Use as small a diameter filter as possible.
- Fold each filter in half (sample inside) and place each in a separate bag labelled with site name, 'bulk deposition' and sampling interval.
- Along with the samples send a data sheet as follows:

Site Code	Start Date	End Date	Collector Area	Total vol. collected	Filtered volume	Rainfall (mm)
SCOT1	4/9/2000	18/9/2000	200 cm ²	2500ml	2000ml	53.2 mm
SCOT1	18/9/2000	2/10/2000	200 cm ²	0 ml	Washed	0 mm

5. Water column sampling

- From WP3 - Redo and Ladove only.
- 4 or 10 depths; 4 times a year.

- Filter as much volume as possible (>100 litres if possible).
- Use GF/C filters. Use as small a diameter filter as possible. Use as few filters as possible.
- Along with the samples send a data sheet as follows:

<u>Site Name</u>	<u>Site Code</u>	<u>Sample Date</u>	<u>Sample Depth</u>	<u>Filtered Volume</u>
Round Loch	SCOT1	4/9/2000	1m	100 litres
Round Loch	SCOT1	4/9/2000	5m	105 litres

DATA SHEETS TO ACCOMPANY SAMPLES AT ALL TIMES!!