- 1. Title of the training event: "Introduction to meta-analysis for environmental evidence synthesis"
- Organizer(s) name, affiliation and complete contact information, including email address
 Prof. Julia Koricheva, School of Biological Sciences, Royal Holloway University of London,

Prof. Elena Kulinskaya, School of Computing Sciences, University of East Anglia, Norwich, NR4 7TJ, UK E-mail: E.Kulinskaya@uea.ac.uk

3. Duration: 2 days (with options for participants to attend day 1 only or both days)

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4. Abstract describing the training event:

The course seeks to promote and facilitate the thoughtful and critical use of meta-analysis for research synthesis in environmental sciences. It will involve combination of lectures and practical sessions where participants will practice conducting meta-analysis using worked examples in metafor package in R. During the first day (basic level) participants will learn how to calculate effect sizes and combine them across studies using fixed and random effects models. On the second day (advanced level) more specialized topics such as meta-regression, dealing with non-independence of observations and publication bias will be covered.

- 1. Target audience: The course is suitable for both early career researchers (PhD students, postdocs) as well as more senior researchers interested in learning quantitative methods of research synthesis. Participants should have some familiarity with using R.
- 2. Maximum number of participants: 25
- 3. Room and audiovisual requirements: classroom, video projector, attendees will use their own laptops to do the practicals.
- 4. Budget required: €2500

Proposed schedule:

Time	Topic
Monday, April 16th	
11.00-12.00	Introduction to meta-analysis in environmental sciences
12.00-13.00	Session 1: Calculation of effect measures
13.00-14.00	Lunch
14.00-15.30	Session 2: Combining effects across studies
15.30 -16.00	Coffee break
16.00-18.00	Practice 1: Calculating and combining effects across studies
Tuesday, April 17th	
9.30-11.00	Session 3: Meta-regression
11.00-13.00	Practice 2: Meta-regression
13.00-14.00	Lunch
14.00-15.00	Session 4: Publication bias
15.00-16.00	Session 5: Non-independence of observations
16.00-17.00	Session 6: Dealing with missing data and variable research quality