# MRC Ecological Risk Assessment Training Program

### Report Writing

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## Overall Objective

- To present the essential elements in preparing a good scientific report
- To provide practice at writing reports for the ERA Training Program

#### Research

No matter how good or important the results are, it is not complete until written up and published

## Scientific writing

- \* Four questions
  - What was the problem studied?
  - How did I study it?
  - What did I find?
  - What do these findings mean?
- The answers become
  - Introduction
  - Methods
  - Results
  - Discussion

### Title/Authors

- Title
  - Needs to be a label not a sentence
  - Avoid 'wasted words' (e.g. 'Studies on ....', 'Investigations of ....')
- Authors
  - Include those who have actively contributed
  - Authors take intellectual responsibility for research results

#### **Abstract**

- Very important often the only part read
- Needs to be short (150-200 words)
- Is a summary of the information:
  - States the principal objectives and scope of the study
  - Describes methods used
  - Summarises the results
  - States the principal conclusions
- Should be stand-alone, don't need to go to the article
- Often too much detail presented
- Avoid references

#### Introduction

- Contains a description of what you did
- Goes from general to specific
- Contains nature and scope of the problem
- Indicates how this study fits with the problem
- Reviews the pertinent literature
- Finally presents the aims and objectives of the study and/or report

#### Materials & Methods

- Contains a description of how you did it
- Put different parts of the study under separate sub-headings
- **Examples**

#### Results

- \*Contains a description of what you found in your experiments
- Should present only fact (not interpretation)
- Present results in logical sequence that corresponds to objectives
- Best if short
- Make sure Tables and Figures are clear and understandable
- Do not include material that does not relate to the objectives

#### **Discussion**

- \* Contains a description of what your results mean
- Shows the relationships between results observed
- Shows how the results agree or disagree with the previously published literature
- Often useful to start with a set of dot points, then use these to start the paragraph

### **Conclusions**

- Most often quoted part of the paper
- State conclusions summarising the evidence
- Add ideas for future research and questions not answered by this work

#### References

- Try to restrict to journal articles not reports (latter too difficult to find)
- \*Use format specific for the journal
- Check citations and text
- Avoid errors in citations, reference not in text('Ghosts')