



Term 2, Lesson 3

Preparation for the National Nest Predation Survey

Learning Objectives:

1. Define an experimental design;
2. Explain the 3R's Principle and how it is used in scientific research;
3. Complete training prerequisites for the National Nest Predation Survey.



Experimental Design

Experimental design refers to the process of planning and organising an experiment in order to gather data and draw conclusions to answer a research question.



The 3 R Principle

The 3Rs is a concept that refers to the guiding principles for the ethical use of animals in scientific research. The principles aim to minimise the use of animals in research, reduce their suffering and improve their welfare.



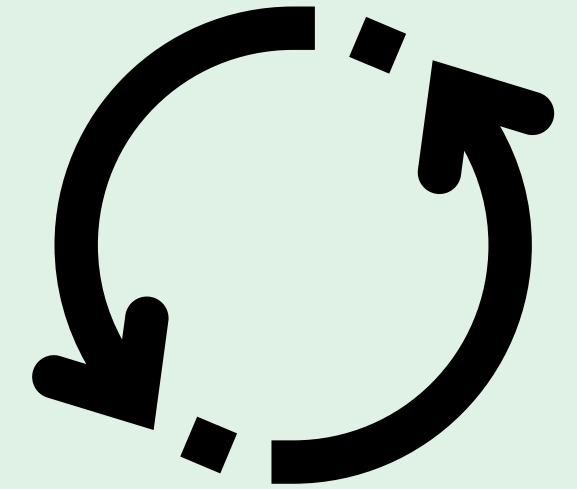
Replacement

Refinement

Reduction

The 3 R Principle

1) Replacement - aims to find alternative scientific methods that can replace the use of animals.



2) Reduction - focuses on minimising the number of animals used in research.



Photo: Dr Donald McKnight

3) Refinement - aims to improve the welfare of the animals used in research, through refining experimental procedures and protocols to minimise pain, distress or suffering.



National Nest Predation Survey

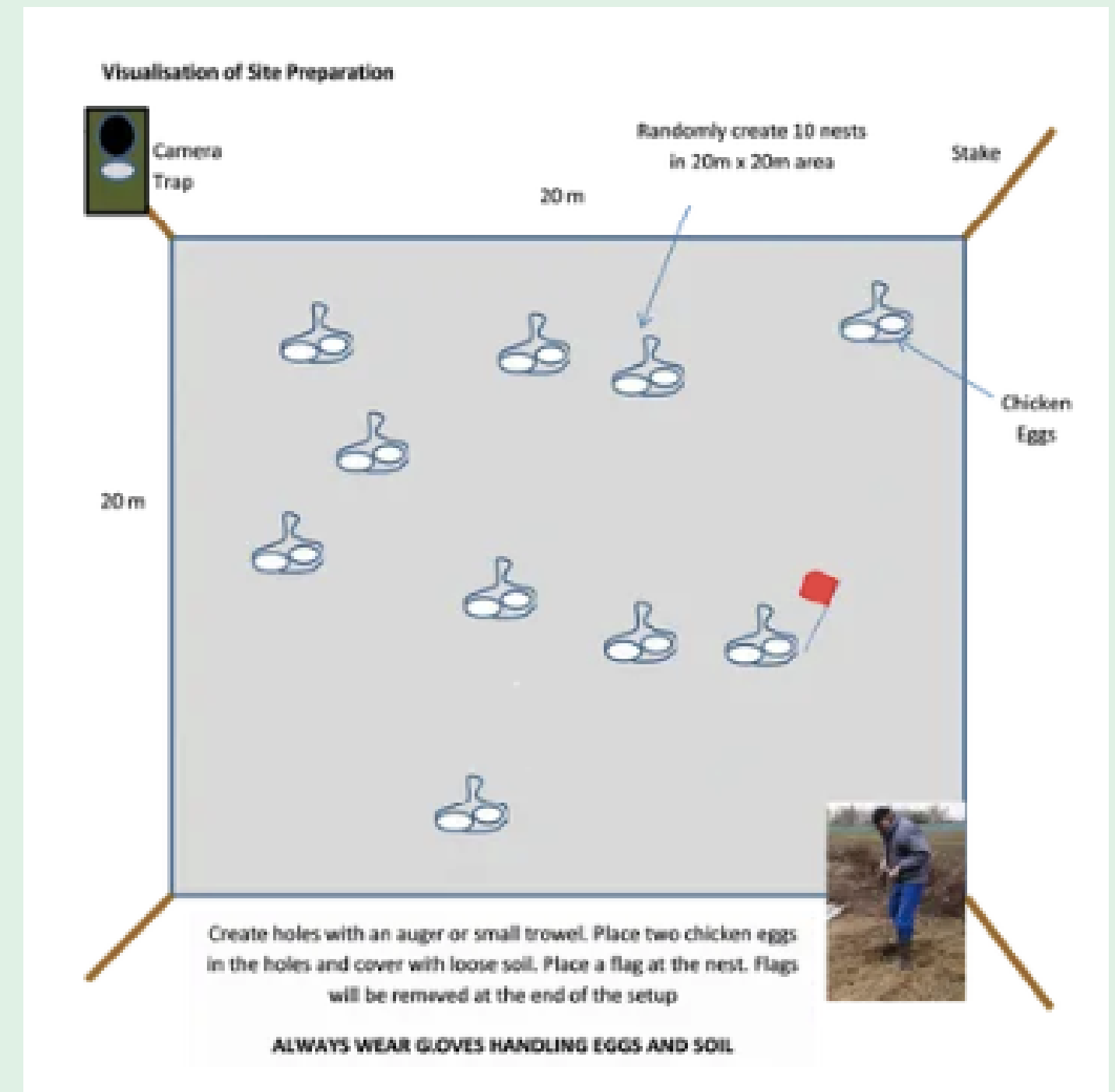
Nest predation rates on turtle nests are very high in many parts of the country, largely due to introduced foxes.

The National Nest Predation Survey encourages communities to measure nest predation rates. The nest predation rates will then be used to develop a national interactive 'hotspot' map to determine region specific estimates of nest predation.



National Nest Predation Survey

The National Nest Predation Survey involves the creation of artificial nests by placing chicken eggs underground and monitoring predation rates.



Classroom Activities

Activity 1 -

- Complete the Experimental Design worksheet to test your knowledge on experimental designs and the 3R principle.



Classroom Activities

Activity 2 -

- As a class, coordinate with the local council to organise your involvement in the National Nest Predation Survey.



Classroom Activities

Activity 3 -

- Identify potential risks associated with the survey and complete a risk assessment.
- Complete the National Nest Predation Survey quiz.



Classroom Activities

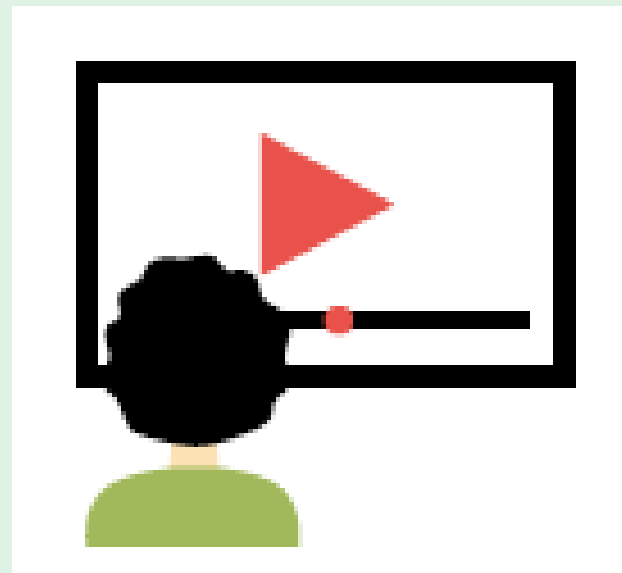
Activity 4 -

Video: Conducting the NNPS

<https://youtu.be/624skxfMhYM>

Video: How to dig artificial nests

<https://www.youtube.com/watch?v=4C1nvkzylq4&t=2s>



Classroom Activities

Activity 4 - Continued

- Reflect on the information in the two videos and complete the Video Reflection Handout.

