TURTLES IN SCHOOLS

TERM 2 WORKBOOK

1 Million Turtles

COMMUNITY CONSERVATION PROGRAM

TURTLES IN SCHOOLS

Produced by the
1 Million Turtles Community
Conservation Program
and funded by
The Foundation for National
Parks and Wildlife.

In the pages that follow, you will find a comprehensive set of lesson plans. Our initiative is not just about imparting knowledge but fostering a deep connection between students and their natural environment and instilling a sense of responsibility and awareness of freshwater turtles and their conservation.

As we embark on this educational venture, we extend our gratitude to educators, students, and all those who champion the cause of conservation. The Turtles in Schools Program is not just a curriculum; it is a movement to inspire the next generation of environmental custodians.

Thank you,

1 Million Turtles Community Conservation Program

LESSON 7

TERM TWO

UPLOADING NNPS DATA TO TURTLESAT

- Learning Intentions
- Background
- Activities
- Curriculum Mapping

Photo credit: Marilyn Connell

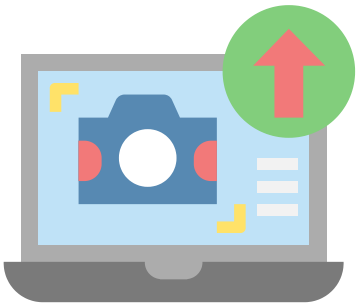
Learning Intentions

(1) Upload the data collected from the National Nest Predation Survey to TurtleSAT;

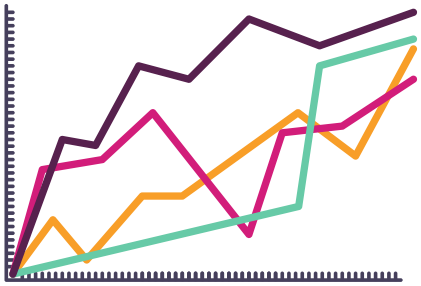
(2) Graph dependent and independent variables in a line graph and discuss the relationship between the two;

(3) Interpret findings from the National Nest Predation Survey data;

(4) Appreciate the role citizen scientists and apps play in collecting broad-scale scientific data and how this data can be used by researchers, stakeholders and policy makers in decision making around conservation policies and environmental management.



Upload

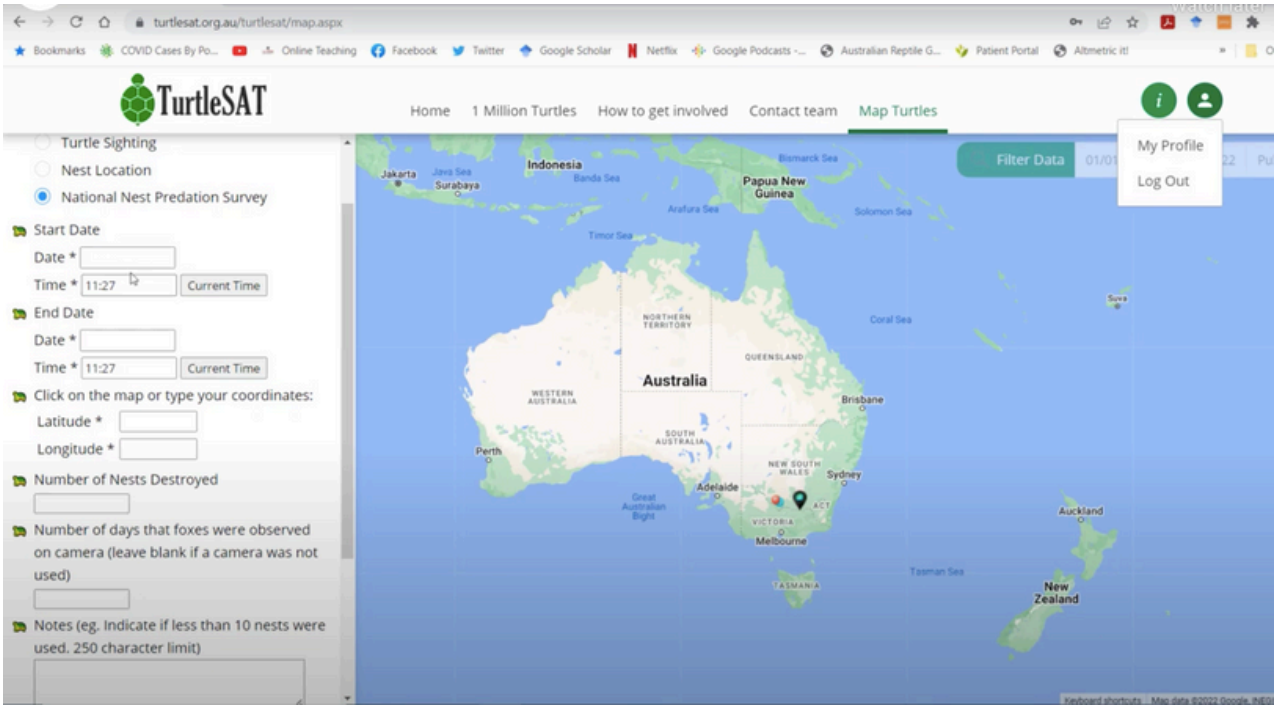


Graph

Appreciate

Background Information
Uploading NNPS Data to TurtleSAT

Citizen scientists like you have been collecting valuable data on nest predation rates through the NNPS. By uploading your data to TurtleSAT you contribute to a broader database used by researchers, conservationists, and policymakers to inform conservation strategies and management decisions. Your efforts play a crucial role in enhancing our understanding of turtle populations and ecosystems.

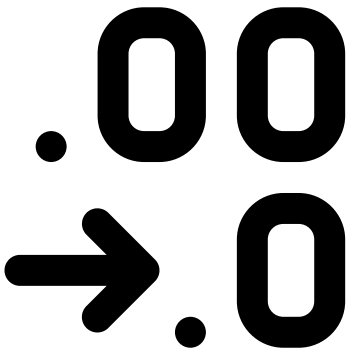


Background Information

Fractions, decimals and percentages

In science, we often use fractions, decimals, and percentages to describe parts of a whole or compare quantities. These mathematical tools help us analyse data, interpret results, and draw conclusions from experiments and observations.

Fractions in Science: In science, fractions are used to represent parts of a whole or parts of a group. For example, if we have a total of 10 turtle nests and 3 of them are predated, we can write this as 3/10. This fraction tells us that 3 out of the total 10 nests were predated.



Decimals in Science: Decimals are another way to express parts of a whole in science. They are used when we need to be more precise about measurements or quantities. Decimals are useful for recording and comparing measurements in experiments, such as measuring lengths, volumes, or weights of substances.

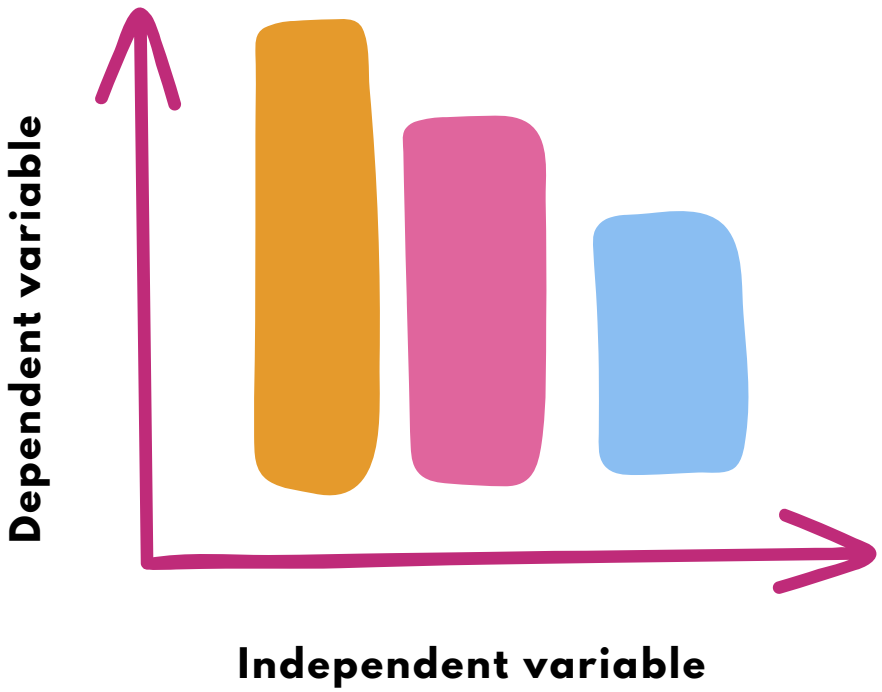
Percentages in Science: Percentages are widely used in science to show proportions. For example, if we conduct the NNPS experiment with 100 fake nests, and find that 75 out of 100 nests were predated, we can say that the nest predation rate is 75%. Percentages are essential for interpreting results, communicating findings, and making comparisons in scientific studies and experiments.

Background Information Variables

A variable is something that can change or vary in an experiment or investigation. It's like a piece of the puzzle that can be different from one situation to another. Scientists use variables to understand how things work and to solve problems.
There are two main types of variables: independent variables and dependent variables.

Independent variable: *a variable that is unchanged by other variables being measured.*

Dependent variable: *the variable that changes as a result of the independent variable.*



Classroom Activities

ACTIVITY 1

(1A) In the worksheet below, calculate the number of nests destroyed and write each as a fraction, decimal and percentage.

(1B) Fill in the blank box with your nest predation data. Write the value as a fraction, decimal and percentage.

ACTIVITY 2

(2A) Watch the following video on how to enter data from the NNPS into TurtleSAT.

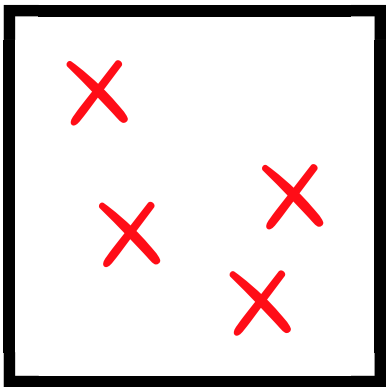
Link to video: [https://www.youtube.com/watch?v=v8xerXL-v3A&t=182s] (Copy and paste into browser)

(2B) Enter your data from the NNPS into TurtleSAT. Check your data to ensure you have documented the following, as per the NNPS guidelines:

a. Number of nests destroyed
b. Number of nights that the camera was deployed (if you used a camera)
c. Number of day/nights that at least one fox was observed on camera
d. Dates when you started and ended the survey
e. Location (your GPS coordinates) or you can tap on the site location on the TurtleSAT map.

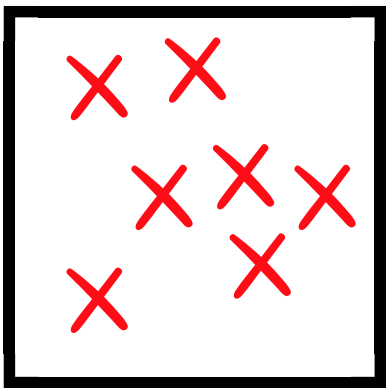
Percentage of Nests Destroyed

Calculate the number of nests predated (X) in the plots below and write the value as a fraction, decimal and percentage. Assume each plot started with 10 nests. The first has been started for you.



Fraction **Decimal** **Percentage**

$\frac{4}{10}$



Fraction **Decimal** **Percentage**

_____

In the box below, plot your nest predation data from the NNPS. Write the value as a fraction, decimal and percentage.

Fraction **Decimal** **Percentage**

_____

Classroom Activities

ACTIVITY 3

(3A) Identify independent and dependent variables from the NNPS.

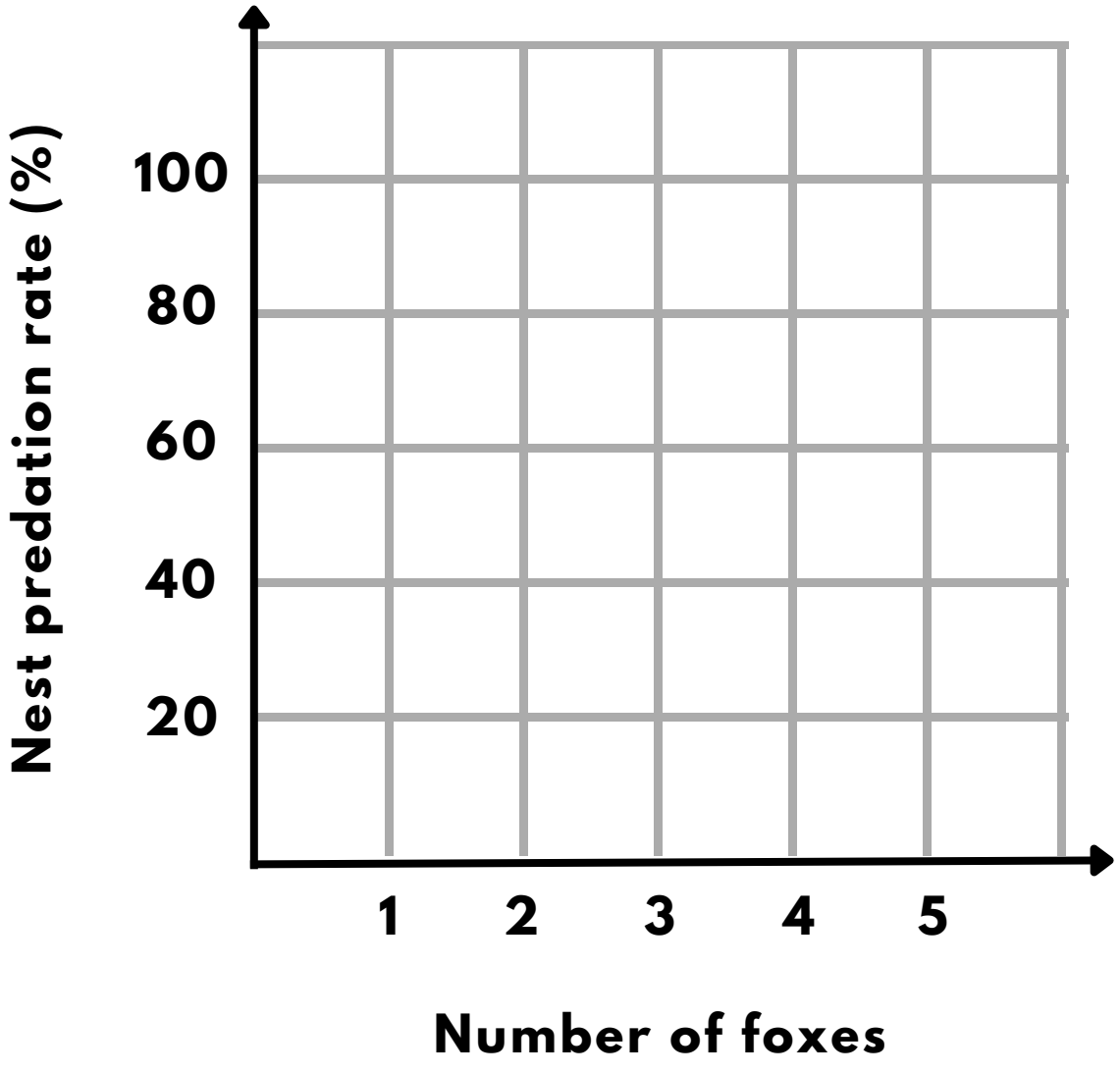
(3B) In the worksheet, graph the number of foxes and the nest predation rate.

(3C) Interpret the line graph. Describe what the trend of the line means in the context of freshwater turtle nests and fox predation.

Graphing Data

Below is nest predation data. Draw a line graph of the data.

Number of foxes	1	2	3	4	5
Nest predation rate (%)	50	90	100	95	100



Interpret your findings

Explain the trend of the line graph above. Describe what the trend means in the context of freshwater turtle nests and fox predation.