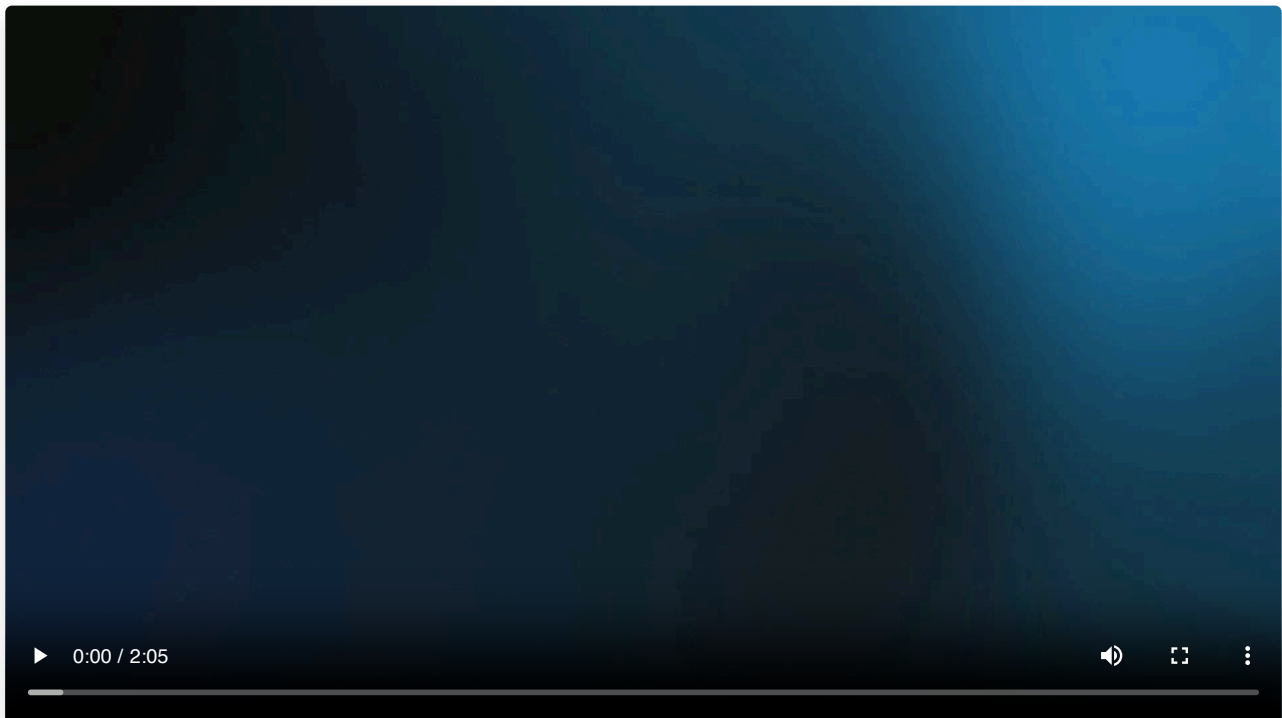


Animal Tracking Introduction

Textbook

Animal Tracking Introduction

The Autograder



Animal Tracking Introduction



For this unit, we will take on the persona of marine biologists at a fictional facility called the Skill Struck Marine Biology Field Base. The data for this unit comes from oceantracks.org and we reference their site to facilitate the storyline.

Welcome to the field base! We are excited to have you join us as a marine biologist! We study all kinds of marine life here. We want to better understand animal patterns and behavior to help the ecosystem and the planet.



For the past several years, an organization called Oceantracks have been tracking several species of marine animals. They kept track of where the animal was located every single day for most of a year. They also kept track of other information such as water temperature, the distance the animal traveled, and the

depth of the animal's movements.

Go to oceantracks.org/map to explore their findings! You can find a tutorial on how to use the site [here](#).

Think about what kind of programming was helpful to the scientists who tracked this information! In this unit, we will be exploring different principles of programming that helped make oceantracks possible.

Take a few minutes to evaluate the ability of models and simulations to test and support the refinement of hypotheses. How helpful do you think that this model is for scientists? What is it good at? What does it lack? Are there parts of the story missing?

Questions (4)

1. What are the animals that oceantracks follow? Select all that apply.

SELECT MULTIPLE

Select all that apply:

- A. White Shark
- B. Laysan Albatross
- C. Elephant Seal
- D. Sea Lion
- E. Bluefin Tuna

2. Which animal shows up as the default when you go to oceantracks.org/map?

MULTIPLE CHOICE

Choose the correct answer:

- A. bluefin tuna
- B. laysan albatross
- C. elephant seal
- D. white shark

3. Where does the data for this unit come from?

MULTIPLE CHOICE

Choose the correct answer:

- A. A fictional source
- B. A real website called oceantracks.org
- C. A local marine research center
- D. A government database

4. How can models and simulations be helpful to scientists?**Choose the correct answer:**

- A. They can make fictional stories more interesting
- B. They can provide insights without risk
- C. They are not useful for scientific research
- D. They are exactly like the real world

Answer Keys & Solutions

Questions

1. What are the animals that oceantracks follow? Select all that apply.

SELECT MULTIPLE

Correct Answers:

- | | |
|---------------------|-------------|
| A. White Shark | ✓ Correct |
| B. Laysan Albatross | ✓ Correct |
| C. Elephant Seal | ✓ Correct |
| D. Sea Lion | ✗ Incorrect |
| E. Bluefin Tuna | ✓ Correct |

2. Which animal shows up as the default when you go to oceantracks.org/map?

MULTIPLE CHOICE

Correct Answer:

- | | |
|---------------------|-------------|
| A. bluefin tuna | ✗ Incorrect |
| B. laysan albatross | ✗ Incorrect |
| C. elephant seal | ✓ Correct |
| D. white shark | ✗ Incorrect |

3. Where does the data for this unit come from?

MULTIPLE CHOICE

Correct Answer:

- | | |
|------------------------------------------|-------------|
| A. A fictional source | ✗ Incorrect |
| B. A real website called oceantracks.org | ✓ Correct |
| C. A local marine research center | ✗ Incorrect |

D. A government database

✗ Incorrect

Explanation:

This unit uses data from a separate website

4. How can models and simulations be helpful to scientists?

MULTIPLE CHOICE

Correct Answer:

A. They can make fictional stories more interesting

✗ Incorrect

B. They can provide insights without risk

✓ Correct

C. They are not useful for scientific research

✗ Incorrect

D. They are exactly like the real world

✗ Incorrect

Explanation:

Simulations help give insights without physical or financial risk.