Human Impact on Marine Life Lab Report

Instructions: In the Human Impact on Marine Life Lab, you will help rehabilitate a rescued sea lion by making sure she is eating enough food to sustain her energy levels. Record your observations in the lab report below. You will submit your completed report.

(30 points possible)

Name and Title (1 point)

Include your name, teacher's name, date, and name of lab. Brady Kondek, Mr. Scheibel, November 9th, 2021 Human Impact on Marine Life Lab Objective(s) (2 points)

In your own words, what was the purpose of this lab?

The purpose of this lab was to help make the point clear in regards to human impact on marine life, and what can be done to help them.

Hypothesis (2 points)

State your hypothesis: To get her back to her goal weight, Snappy should eat _____ percent of her body weight per day.

To get her back to her goal weight, Snappy should eat around 10% percent of her body weight per day.

Procedure

Snappy is a rescued sea lion who was found tangled in some fishing nets. She was brought to Marine Sanctuary Inc., and needs to heal and gain weight before being released back into the ocean. In this lab, you will help her recover by determining how much food she should eat and collecting data on her weight and length each week.

Data (10 points)

Note: You may have between 5 and 7 weeks of data, depending on Snappy's speed of recovery.

Week	Daily Diet (kg)	Snappy's Length (m)	Snappy's Weight (kg)
1	0	1.4	82
2	6.2	1.4	81
3	20.5	1.4	83
4	20.6	1.4	84
5	20.6	1.4	87
6	20.6	1.4	90
7			

Conclusion (15 points)

Your conclusion will include a summary of the lab results and an interpretation of the results. Please answer in complete sentences.

- 1. What is Snappy's trophic level on the food web? What does that mean in terms of her eating habits?
- 2. By the time energy from the sun has reached Snappy and the food she eats, how much of that original energy is still available to her?
- 3. What impact did human actions have on Snappy, both in the wild and in the rehabilitation center?
- 4. How did you determine how much food to feed Snappy each week? Using the information from your data table, describe how did the amount of food Snappy was fed each week impacted her weight gain.
- 5. What are some actions you can do to reduce the human impact on animals like Snappy?

Answers:

1. Snappy is a tertiary consumer. She feeds on both primary and secondary consumers such as sardine, mackerel, anchovy, etc.

2. By the time the energy has reached Snappy, she still has 10% of the energy that is passed on.

3. In the wild, humans at some point caught Snappy and brought her into captivity. In captivity, she was given food to help her grow to where she needs to be.

4. I determined the food amount by knowing that sea lions need between 5 to 10 percent of their body weight in food. Since Snappy needs to gain more weight, the more is better right now (therefore, I decided on 10%).

5. To help animals like Snappy, fixing/preventing ocean pollution would go a long way. One of the main problems marine animals face in the ocean is pollution. Other things that could help include reducing waste, using less energy, and fishing responsibly.