Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

# The Great Feed Trial Lab

**Purpose**

The purpose of this exercise is to give students hands on experience handling livestock and how to conduct a multi week lab. Students will have the opportunity to take data and graph the data.[[1]](#endnote-1)

**Procedure**

 **Materials**

1. 10 chicks (Cornish game hens grow fast and are inexpensive)
2. 2 cages with bottoms
3. 2 water dispensers (with large capacity)
4. 2 feed troughs or dishes
5. Scale
6. Small box for scale
7. 50 lbs of game bird grower feed 22-23% protein (High Protein)
8. 50 lbs of chick grower 18% protein (Low Protein)
9. *Terramycin* soluble powder for disease prevention

**Sequence of Steps**

1. Mix *Terramycin* in water and prepare the cages.
2. ![C:\Users\Angela\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.IE5\DRP2N1IJ\MCj04242300000[1].wmf]()Randomly select five chicks to place in each cage.
3. Pre-weigh the chicks and record initial weight on Data Table 1.
4. Determine the average weight of the 5 chicks in each cage and record.
5. ![C:\Users\Angela\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.IE5\DRP2N1IJ\MCj04242300000[1].wmf]()Label the cages “high protein” and “low protein”
6. ![C:\Users\Angela\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.IE5\DRP2N1IJ\MCj04242300000[1].wmf]()Pre weigh the feed troughs and then determine the weight of the feed when at a full level. Record on Data Table 2.
7. Record data every week including average chicken weight and weight of feed.

**![C:\Users\Angela\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.IE5\DRP2N1IJ\MCj04242300000[1].wmf]()**

**Observations**

**Data Table 1**

|  |  |  |
| --- | --- | --- |
| **Week** | **High Protein Feed****AVERAGE CHICK WEIGHT** | **Low Protein Feed****AVERAGE CHICK WEIGHT** |
| **Initial** |  |  |
| **1** |  |  |
| **2** |  |  |
| **3** |  |  |
| **4** |  |  |
| **5** |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

**Data Table 2**

|  |  |  |
| --- | --- | --- |
| **Week** | **High Protein Feed****Feed Weight** | **Low Protein Feed****Feed Weight** |
| **Initial** |  |  |
| **1** |  |  |
| **2** |  |  |
| **3** |  |  |
| **4** |  |  |
| **5** |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

**Conclusions**

1. Using complete sentences, describe the data you collected.

2. What conclusions (if any) can be drawn from this experiment?

3. Why is protein an important component of animal feed rations?

4. What medication did you administer to the animals and why?

5. What are some possible errors that could have occurred in this experiment?

6. What specific things could improve this experiment if repeated in the future?

7. Why is this information significant to the agriculture industry?

**Teacher Notes:**

1. More chicks typically cause problems.
2. Spring is the best time for this lab since chicks require care on Saturdays and I can care for them when I return from a field day.
3. The medication (*Terramycin*) is important because we want to prevent illness.
4. You can compare breeds as well.
5. I don’t know why but kids have an attraction to chickens!
1. Combes, Brian(2008). The Great Feed Trial Lab. *Hanford High School* [↑](#endnote-ref-1)