

**Committee meetings times**

24th November (Submitted by 9 Nov for meeting on 24 November)

**Date application submitted**

1/09/2023

**Supervising teacher**

Mrs Hyline

**Email**

[Brown.Hyline@school.nz](mailto:Brown.Hyline@school.nz)

**Additional Teachers**

Red Rhode

**Additional Teachers**

John Sussex

**Additional Teachers**

Suzy Leghorn (Farm Manager)

**School Name**

Croad Langshan High School

**School Address**

1234 Chicken Coop Lane

Hamburgh

N.Z

**Year 1 start**

04/03/2024

**Year 1 end**

20/04/2024

**Number of students in Year 1**

60

**Year 2 start**

03/03/2025

**Year 2 end**

20/04/2025

**Number of students in Year 2**

60

**Year 3 start**

03/02/2026

## Number of students in Year 3

60

## Year Level of students

12

### 1. Investigation Title

The effect of different chick starter feeds on the growth rate of young chicks

### 2. Method - Environment

#### 2.1 Housing

There will be 3x sizes used that will be changed as the chicks grow.

- a. Day 1- 3; 40x50cm allowing them to settle without students.
- b. Day 4 – 14; 140x50cm (see photo 1 & 2)
- c. Day 14 – 28; Purpose built to allow perches etc to be added (see photo 3)

#### 2.2 Equipment per enclosure:

- a. 25x25cm heat pad (with adjustable legs) per 10x chicks – trial feed. Providing the chicks with 25cmx25cm heat pads is another welfare consideration as it ensures a warm area, therefore, reducing stress as the chicks will be calmer and more comfortable and won't need to use extra energy to keep themselves warm.  
This size heat pad is also recommended for 15-20 chicks however this investigation only had 10 chicks per enclosure this meant there was lots of heat available for each chick again reducing stress.
- b. 16-hole feeders – to reduce competition for feeding spot.  
Each enclosure also had a 16-hole adlib feeder which is checked and refilled, if necessary, twice daily. Adlib feeding provides unlimited access to feed which means the chicks do not have to compete for food and can eat whenever they are hungry which reduces stress
- b. 1L nipple drinkers with Coxiprol to their water at a preventative level for coccidiosis
- c. Untreated wood shavings from PGG
- d. Location in the resource room – has heating, natural light, and windows for air flow. Room also has a door so no students entering unless with authorised adult (teacher or Farm Manager)
- e. 3x feed choices are all chick starter crumbles and will ensure that they are getting the required nutrition. They are all over 18% protein which is the minimum requirement for growing chicks.
- f. Enclosures and weighing are at **ground level** this means that if someone accidentally dropped a chick it would fall a maximum of 30cm, instead of doing it on a desk or table where it could be falling around 1 metre. This minimises the chance of injury to the chick.

### 3. Method:

- a. Students will be given a method to follow from their teacher and will be uploaded into their Google Classroom subfolder. The method will be outlined and explained in detail to students prior to commencement of weighing.
- b. Students will be required to check in with their teacher each day to ensure they are fed and watered properly, and this will be done on a class roster system which will be visible in the classroom and will minimise student interaction with only 2 students per day. 3. The chick's location is next door to both the teachers and farm managers office. The teacher or farm manager will ensure the chicks are feed, watered and shavings changed during the weekends.
- c. Weighing of the chicks, will occur 2x per week (as 2x Year 12 Ag Classes). On these days, the boxes/enclosures will completely be cleaned out for the chicks. The biggest potential risk to the health and/or

well-being of the chicks as a result of this investigation is stress. To minimise stress and consider the welfare of the chicks weighing and cleaning their enclosures took place twice weekly to limit handling and therefore limit stress. This was done in groups of a maximum of 8 students and under teacher or farm manager supervision

**d. Weighing**

- i. Gently remove each chick from one group out of their enclosure into another smaller cardboard box to wait for weighing (when the chicks are in the other box, the enclosure is cleaned out, with heat pad, food container and water dispense washed and then are refilled) \* see student competency for handling technique
- ii. Turn on the scales and place the ice cream container on top of it, then tare.
- iii. Carefully one chick at a time, place the chick in the ice cream container, shadowing the top with your hands so they don't fly out or wriggle around
- iv. Record the weight, then place the chick back into the correct cleaned enclosure. Weights are averaged over the 10 chicks, and therefore no ID needs to be placed on them i.e. leg bands.
- v. Repeat for all 10 chicks then the other 2 feed groups
- vi. All Weighing will be conducted under supervision.

**After the trial:**

All chicks after the trial will be relocated to a pen outside, where they will still have heat pads etc. until they have grown their dark feathers – become pullets. Once pullets, they will then go into our layer enclosure and be part of the flock.

Note: If any animals fall sick, veterinarian advice will be sought from the schools vet.

**Please attach diagrams/photos**



**Photo 1**



Photo 2



Photo 3

### 3. List the type and number animals you will use

Female – One-day old Hylines. These animals will be purchased from Northern Hylines located in Wellsford <https://www.northernhylines.co.nz>. This is closest hatchery to our school which helps reduce the travel time and stress for the chicks. Other options for sourcing one-day old chicks are:

- <https://thechookyard.co.nz/>
- <https://www.bromley.co.nz/>

With 2x Year 12 Agriculture classes, 30x chicks needed adhering to the reduction method. This reduction is from 60x chicks, 30x per class. Acknowledging that a reduction in the number of chickens could mean that they will be handled more between the two classes as they will both be weighing 1x weekly. The students will be in small groups (<8) who will go with either their teacher or the Farm Manager to weigh the chicks. All students will get the opportunity to weigh the chicks for their class data over the collection period. Having a smaller group conduct the weighing will mean less noise and stress for the chicks during these weighing times. It also allows for more supervision of the students, and to help/assist them. However, by weighing twice a week, 1x per class, this will allow their enclosure to be completely cleaned out twice a week which is needed to be done.

### 4. Teachers' experience:

Mrs Hyline – Has a BSc - Animal Science. She has run school farms of following best practice which needs to be adhered to for the welfare of the animals.

Miss Rhode – Teacher of Agricultural Science for the past 3 years. Prior to her teaching career, she was a research plant biologist.

Mr Sussex – First year teacher, who lives on a farm a Sheep & Beef Station. Mr Sussex will be under supervision by Mrs Hyline.

Ms. Leghorn – Farm manager. She is a Veterinary Nurse and also has had her own lifestyle block.

### 5. Student competency

As part of their curriculum students learn about animal husbandry, behaviour and nutrition. They are Year 12, so are approximately 16 years old.

They will be explicitly taught handling techniques with hands to be washed prior (and afterwards). Best handling technique will be taught e.g., scoop chick up from underneath, gently cradling belly in one hand and place other hand over its back. The chicks won't be handled in the first couple of days at least as they get used to their new environment. And when chicks are handled for weighing the students will be supervised.

Logbook will be kept collaboratively as a class.

### 6. Will students keep a detailed logbook of their investigation?

Yes

### 7. Applicant consent

✓ I agree to the terms

Subject to approval (and any associated conditions) - by signing this application you agree to complete the investigation as stipulated. You are aware of your obligations during and after the investigation including the requirement to complete monitoring during the investigation and submit an annual statistic return no later than one month following the completion of the investigation.