The Incubation Project Information Pack













Contents Page

2	Introduction
3-4	Incubator Information
5	Chick Development
6	Check Ups
7	Frequently Asked Questions
8	Terms and Conditions
9	Contact Details

Introduction

The incubation project for chickens lasts 21 days and an additional week after hatching so the children get time with the chick once it has hatched. For ducks, the hatching process is longer, therefore the process is longer.

During this project, the staff from Aldenham will visit the school 3 times. The Ist visit will be an introduction. An adult duck and chicken will be brought along so the children can discuss the difference between the two animals. The staff will also set up the incubator and explain to the children what the incubator does/ how this replicates what a mother hen would do in the wild.

10 days after this visit, the staff will return for the 'candling' of the eggs. There will be a powerpoint to describe to what candling is and why it is important. They will also discuss why the egg is the size and shape it is and how different eggs come in many shapes and sizes.

Lastly the staff will visit to collect the chicks. The children will be given a small quiz or a group activity dependant on the age group. They will discuss with the children what they liked the most about the project and what they have learnt.



The Incubator

On arrival everything will be set up by the Aldenham Staff. The teachers will be debriefed on how the machinery works etc.

Throughout the incubation some changes may appear on the digital display screen, these are explained below along with the course of action needed to remedy and prevent any more issues.



Normal operation – Temperature, number of days remaining until the hatch is due and turn system status are continuously displayed.

- I. The asterisk "*" adjacent to the temperature reading shows when the heater power is on. When warming the asterisk will be continuously on, once warmed up the asterisk will slowly flash as the heater is pulsed to maintain the correct temperature.
- 2. Automatic turning is on this symbol "/" rotates at the corner of the display.
- 3. POWER LOSS DISPLAY If power has been interrupted due to a power cut (or when first switching on) a "P" is shown flashing in the corner of the display. Press OK for 2 or more seconds to clear the indicator. If the reason for the power loss is not known check the power cable connections are secure.

T * 37.5C DAY: 28 P /



4. HIGH TEMPERATURE ALARM DISPLAY – If the measured temperature goes up by more than 2 degrees the alarm will sound immediately and "H" will be displayed. Press OK to silence the alarm for 30 minutes.

T 39.8C

DAY: 17 H/

If the high temperature problem rectifies itself the "H" remains on the display to show this has happened. Press OK to clear the indicator. Check the incubator is not (and has not been) in direct sunlight or too near a heat source such as a room heater.

5. LOW TEMPERATURE ALARM DISPLAY – If the measured temperature goes down by more than 5 degrees after 60 minutes "L" will be displayed and the alarm will sound. Press OK to silence the alarm for 30 minutes.

If the low temperature problem rectifies itself the "L" remains on the display to show this has happened. Press OK to clear the indicator. Check the incubator is not (and has not been) in a cold draught or that the room temperature has dropped significantly.

T * 32.1C

DAY: 15 L/



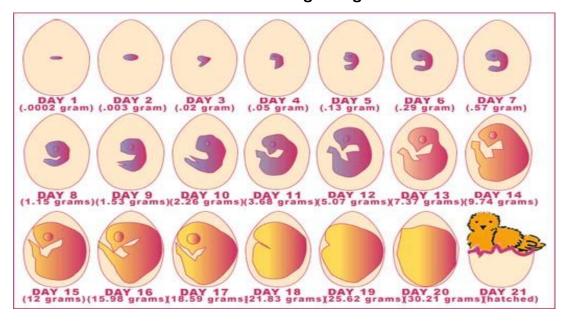
Chicks Day Development

Day I	The chick's nervous system, head and eye begins to form.
Day 2	The heart and ears begin to develop. At the end of the day the heart begins
	to beat.
Day 3	The nose, legs and wings begin to form.
Day 4	The tongue begins to form.
Day 5	The reproductive organs develop and gender is determined.
Day 6	The beak and egg tooth begins to form.
Day 7	The comb begins to form. The mouth opening appears.
Day 8+9	Feathers begin to form.
Day 10	Beak begins to harden.
Day 11+12	Tail feathers appear and toes fully harden.
Day 13	Scales and claws appear.
Day 14+15	Gut draws into the abdominal cavity.
Day 16+17	Feathers cover the body. Beak and scales becomes firm. Chick begins to
	position its beak near the air sack.
Day 18	Growth is nearly complete.
Day 19	Yolk sac begins to enter the chick's body.
Day 20	Chick has absorbed all the yolk sac and are gathering strength for hatching!
Day 21	Hatch Day!

For an animation that shows this click here:

http://www.youtube.com/watch?v=PedajVADLGw

Please note it can take a chick a full 24 hours to hatch. Please do not be alarmed if it seems to be taking a long time





How can we check that the chick/duckling is developing properly?

As ducklings are bigger at the time of hatching the length of time for incubation is a week longer than in chicks, some duck eggs can take up to 35 days to hatch. The developmental milestones are all the same as the chick but are more spread out over the time frame.

Candling

Between 7 and 10 days into the incubation we will come back to the school and talk about eggs. As part of this process we will 'candle' the eggs. The term 'candling' comes from when farmers had to use candles to see inside/through the eggs. However now there is electricity we can use a high powered light to check on the development of the chicks. If there are any infertile eggs present at this time, they will be removed.



If only a few of your eggs hatch, do not be concerned; this is quite common. Embryos can fail late into the incubation; those that are alive at candling will not necessarily hatch. If for any reason the eggs are not fertile or do not hatch, there will be incubation happening at Aldenham at the same time, and fertile eggs/hatched chicks from Aldenham can be brought over to your school.

The Hatching Process



The chick will 'pip'. (pipping, is the term used for breaking through the membrane) the air sack inside the egg, allowing it to take its first breath.

After this the chick will begin to 'pip' the egg itself, it will start in one area and proceed to circle the egg and pip all the way around. It can take anything up to 24 hours to be completely out. Once it is out it needs to remain in the incubator until it dries.

After hatched the chick will rest for a few hours, if you have any concerns please contact us.

Weekends

Over the weekend the incubators will be perfectly safe to be left alone, please ensure that last thing on the Friday afternoon the water well is topped up completely.



Frequently Asked Questions

The duckling/chick has only just come out but its nearly home time?

If the chick/duckling begins to hatch or is out of the egg but is not dry and it is near the end of the day please don't be alarmed. The chick/duckling yolk sac will keep him fed and hydrated for 24 hours before you need to supply water and feed. The chick/duckling will be perfectly fine left overnight in the incubator.

Where do the eggs come from?

Eggs come from an Animal and Plant Health Agency (APH) approved free range laying producer, either Aldenham Country Park, or another local farm. In line with compliance of registration, all parent stock, housing, health, welfare and records are inspected annually to ensure all free-range criteria is met. Bio-security measures are in place for visitors and staff, and children encouraged to wash their hands with soap, not hand gel, after handling the chicks and eggs.

What if our chicks don't hatch?

As mentioned before, if the chicks do not hatch there will be some available at Aldenham that can be brought over to your school if possible.

What if our chick comes out and they have health problems?

If your chick looks unwell after they've hatched you need to contact Aldenham straight away. Staff will come out as soon as possible to help.

Can we keep the chick for a bit longer?

Once hatched you are able to keep the chicks for one week at your school, then Aldenham staff will come and collect the chicks. If you wish to keep the chicks for a longer period of time this needs to be agreed at the start of the project with an agreed additional cost.

Can we keep them for the rest of their lives?

This is not possible as Aldenham picks eggs specifically for the farm. Chickens need specialist care that may not be provided in a school setting. However if you would really love some chickens at your school, we may be able to sell you some chickens that we already have at the farm, this can be discussed if you decide you'd like to become a chicken farmer!

Can we come and visit them?

Yes! We would be thrilled to have schools come back and check up on their chickens as well as all the others animals we have at the park.

What happens to them when they leave?

When the chicks leave your care, they come to safe hands of Aldenham Country Parks qualified and trained staff. Here they will receive all the care and attention they need. They will also be able to socialise with other chickens and if they are hens they may even have chicks of their own one day!



Price List

The Incubation Project – Including all equipment, and three visits from Aldenham staff (1. set up, 2. talks and candling session, 3. collection of chicks)	£300
The Incubation Project (without talks) – Including all equipment, and two visits from Aldenham staff (for set up and collection of chicks, please note that the candling session will not take place)	£180
Extra eggs – 7 additional eggs	£15

To book, or for more information, contact our Education Team on 0203 642 4588 or email martine@aldenhamcountrypark.co.uk

If you are interested in any of our other Outreach, or Education opportunities, do please look on our website, where you will find our Education brochure and leaflet.





Terms and Conditions

Health and Safety

When you book you will receive a copy of our Risk Assessment however we advise all schools/groups to carry out their own. Aldenham Country Park has put in place all recommended safety measures and the risk of contracting any illness is very low. All group leaders must ensure their group carries out all the hygiene precautions.

Cancellation Policy

We require a £50.00 non-refundable deposit; any extra monies will be refunded provided the visit is cancelled at least I week prior to our visit. Cancellations less than 7 days before the visit cannot be refunded however can be rescheduled.

Damages

We require a £50 refundable deposit prior to arriving in school, this will be returned on chick collection day if upon inspection we are satisfied that all equipment is returned in good working order.

Alternatives

We could offer a different package that does not include any educational visits, this would be slightly less expensive but **please note** that this option does not allow us to candle your eggs and as such we cannot guarantee chicks at the end of the project.

Press photo from Barnet today 24/02/2014



Visit two - Wonderful world of eggs session 12.02.2014





Contact Details

For any more information on how incubation fits in with the school curriculum or for the lesson plans that the staff will be following on the 3 visits, please email the address below and this information can be sent over to you.

If you have any queries or problems with the incubator or chicks then please get in contact at the number below and ask for the education team.

Telephone: 0203 642 4588

Email: <u>martine@aldenhamcountrypark.co.uk</u>

We hope you enjoy your Incubation Project and find the experience both educational and fun!

