



## Hatching and keeping Pilgrim goslings

I've had so many enquiries about the intricacies of hatching and rearing Pilgrim goslings that I've put together some information that has certainly been helpful to me<sup>1</sup>. I am NOT an expert or a professional hatcher, nor am I a scientist; I simply hatch several batches of goslings every season and hope to get better at it as time goes on.

Please note that Pilgrims are rare for a reason; these and other rare breed goose eggs are not anything like as easy to hatch as chickens or ducklings, nor are they as easy as all white breeds of geese. The laying season is short – from mid February at the earliest (and often weeks later) to the end of May (or possibly into June if you are lucky). Fertility can be erratic, although I have had very good fertility in my birds, and eggs from birds in their first laying season may produce eggs from which goslings are more easily hatched, but they will be smaller and not produce great breeding birds, although they will still make lovely pets.

### The autosexing Pilgrim goose

So what does that mean? Simply that the sex of the true Pilgrim gosling and goose can be identified by its colour.



These are some of our Pilgrim goslings at around 6/7 weeks (there are 4 Aylesbury ducklings in there too to confuse things). It's absolutely obvious which are the males and which the females. The females are grey, and the males are white, with some traces of light grey on their back, wings & tail. The female also has brown eyes, the male blue-grey eyes.

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<sup>1</sup> Chris Ashton's 2012 book "[Keeping Geese](#)" published by Crowood Press has provided me with invaluable information – I strongly recommend you buy a copy.



This was our Pilgrim family in 2012, the youngsters having lost all fluff and in full feather. You can see the difference in size between the adult gander (front right) and the young ganders on the left, and also between the adult female and the young female sitting in front of her in the middle of the photo.



This lovely image of newly hatched Pilgrim goslings taken by Tony Daly shows the male on the left and the female on the right, clearly showing the yellow/pale grey of the male and the darker olive–grey colour of the female and her (temporarily) dark beak.



**On receiving hatching eggs:** When you get your eggs, store them overnight in a cool room, pointed side down, and then bring them up to room temperature before putting them under your broody (usually a bantam, hen or Muscovy duck) or into the incubator. Make sure the eggs are not cracked (candling will enable you to check for hairline cracks) before putting in the incubator.

**Incubation:** Your incubator should be brought up to 37.4-37.6 degrees Celsius. Dry incubation up to pipping stage is recommended for hatching Pilgrim eggs in the UK, in order to achieve the necessary weight loss through evaporation of water from the egg through the porous shell, so I don't put any water in the incubator channels. Pilgrim geese have an average incubation period of 30 days, but experience tells me this can be 28 –34 days within a single batch. Don't cram the eggs in too tight or the dividers might crack the shell. Do check that the incubator is working each day – if a fuse blows or you have a power cut etc it can all go for a ball of chalk if you don't deal with it within 12 hours. A [mains failure alarm](#) is invaluable.

**Candling and testing for fertility:** At 5-7 days you can candle your eggs to see if they are fertile. You should be able to see a little nucleus with red veins radiating outwards. If you have any clear eggs, throw them out now. Check again in another week, and again in week three. If you see a red ring or big black spot it means that the eggs have stopped developing or died in shell; get rid of those too. There are some great images/examples here: <http://shilala.homestead.com/candling.html>  
<http://www.backyardchickens.com/LC-candling.html>

Egg weighing is highly recommended for goose eggs, which should lose 14-15% of weight during the incubation period. Weigh your eggs before incubation. On day 14 weigh again – you are aiming for a loss of 7% in weight at this point. If that's the case, continue to incubate as you have been. If the eggs are too heavy, reduce the humidity (you could put the eggs under a broody if you have one available). If they are too light, increase the humidity by adding some water to the incubator. Further advice about that is in the Brinsea incubation handbook downloadable for free here: <http://www.brinsea.co.uk/information/free-downloads/39/>

**Hatching:** Hatching waterfowl is trickier than for chicks, so for those experienced with poultry, waterfowl are a bit more demanding. The crucial factor is attaining adequate humidity. Once the eggs have pipped (usually day 28) I move them from a forced air incubator to a still air incubator which I use solely as a hatcher. This does not have any humidity gauge, but I fill the



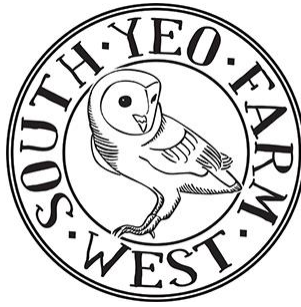
channels with water. High humidity is essential at this point to keep the membranes moist and stop the goslings getting stuck to their shells. 65% is the absolute minimum and probably too low, and much more (80% plus) is better.

If you have just the one incubator, two to three days before hatching is due, stop your automatic cradle (if you have one), stop turning the eggs manually (if you don't) and remove any dividers. Fill the water channels. Don't forget to ensure adequate ventilation at this stage – again check your instructions - or you may get late death in shell. A helpful article on this is here – read to the end for the crucial bits: <http://www.domestic-waterfowl.co.uk/incubation.html>

**Be patient:** Don't be premature in chucking away eggs that haven't hatched after the majority of goslings are under a heatlamp, safe in the brooder. Sometimes it's not death, but late hatching up to 72 hours after the first lot are out. Yes, some birds are out of their shell and bobbing about, fluffy and dry in 12 hours, some take much longer - patience is an irritating necessity with this activity (not one I'm good at). If you are concerned that the membrane is drying out round a semi hatched bird and it's sticking hard to the bird, DO intervene or it will suffocate - the membrane dries out (particularly in a fan driven incubator) and acts like deadly glue. But apart from this and removing any goslings that are nice and dry and fluffy, DON'T OPEN THE INCUBATOR UNLESS ABSOLUTELY NECESSARY! If you do, you get rid of all that nice humidity you worked so hard to create. Leave a minimum of 6 hours between openings, and more is highly desirable, and if you have opened it, add more warm water to channels and remove any empty shells at that point.

### **Brooding:**

From the incubator/hatcher put the goslings in a brooder (home made, posh shop-bought or an adapted hamster cage or rabbit hutch etc) somewhere safe – away from cats, dogs, magpies and rats. I can't stress this enough – some years ago I lost 18 one-week-old ducklings in a single night from an outside shed that I thought was rat proof and wasn't. Rats can get through fairly narrow gauge mesh, so you may have to adapt your brooder if it's not in a 100% safe place. In the brooder your goslings should be under heat for 2-3 weeks depending on the weather, and if the weather is warm, you can get away without heat during the day, towards the end of that period, and put them in a caged run on grass so they can enjoy their much needed greenery. Start the temperature in the brooder at 32 degrees (a garden thermometer is good for checking this) and reduce by one degree a day by slightly raising the heatlamp. If they are clustering together you know they are too cold, if acting normally they are warm enough, if they are spread out at the extreme edges



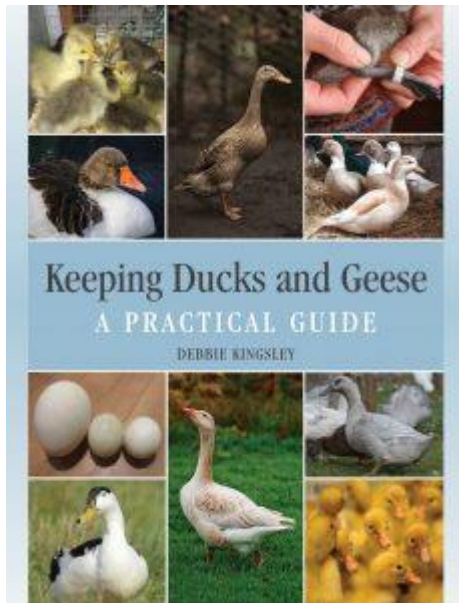
of the brooder they are too hot. Use a ceramic bulb rather than an infrared bulb in your heatlamp as there is less chance of splayed legs, and the goslings get a more natural light pattern – i.e. it's dark at night, not 24 hours of red glare. Ceramic is the more expensive choice but I've found it to have a positive effect on the health of the goslings.

**Rearing:** Make sure that the goslings have access to drinking water in a purpose made drinker at all times, but don't give them a bowl of water to swim in until they start to feather up as they can easily drown as they don't produce their water repelling oil, nor have the appropriate waterproof feathering until they are about 8 weeks. Feed goslings on waterfowl starter crumbs for a few weeks, (an egg box makes a cheap food container), then move onto growers pellets. They should also have access to greens – some freshly cut grass clippings and dandelion leaves. From the beginning, make sure their food is close to their drinker. It is VERY messy and the brooder will need daily cleaning out. I use wood shavings on top of antisplay mats, but some people recommend chopped straw to avoid birds chewing the sawdust in their first days. Make sure their drinker is refreshed regularly and isn't clogged up with feed or sawdust, preventing access to the water or making things mouldy. At 3-4 weeks old, now off heat, they can go outside, but again in a predator-proof pen and hut. Once they are 8 weeks old they need deep water to dip their heads into (shallow buckets are good, the rubber type for feeding horses), and preferably enough to swim in. Once geese are eating grass and grain (mixed corn – wheat/maize) they will need access to sand and grit to enable their gizzard to break down the feed.

**Foot care:** Like ducks, geese can go lame if they need to step up and down or walk on stoney or rough surfaces – their feet were made for water and grass, so if there is a step into/out of your goose hut, do make sure you give them a gentle ramp to go in and out (chickens don't need this, although their chicks do). A ramp is also helpful into a pond or sink etc, and do put a large stone in any pond/sink so that they can get out again. They need clean straw once a week in their hut, and the old straw is fantastic on the compost heap. They need foxproof runs, grass, feed (mixed corn in winter and when the grass is not lush and sweet), adequate housing and water. They must be shut up at night or the fox will get them – it's just a matter of time - and foxes can take full-grown geese in the morning or the afternoon as well as at dusk, so do check your fences – it is arduous to foxproof a whole garden or paddock but a necessity in most places.



BOOKS: My book *Keeping Ducks and Geese – A Practical Guide* (October 2021) is published by [The Crowood Press](#). You can buy the books [direct from us](#), from The Crowood Press, in bookshops and from the usual online retailers.



**Keeping Ducks and Geese – A Practical Guide** is stuffed with all the things we've learned about how to keep and look after these great birds (good and bad) in our thirty plus years of having them. It covers the legal stuff, choosing breeds and bringing them home, housing and fencing, nutrition, breeding and hatching, health and welfare, security and pest control, dispatching, raising for meat, using for craft and even some favourite and unusual recipes. Rammed with our own colour photos (those of you who have been to the

farm will recognise all kinds of things) and by other brilliant keepers from all over the place, it also includes information on 80 breeds of ducks and geese to be found in the UK. I've been lucky enough to be able to include wonderful historic black and white photographs by James Ravilious too, my favourite photographer, thanks to [Beaford Archive](#). 192 page hardback with 290 photos.

### Useful weblinks

<http://www.pilgrimgeese.org.uk/>

[http://ashtonwaterfowl.net/pilgrim\\_geese.htm](http://ashtonwaterfowl.net/pilgrim_geese.htm)

<http://www.stepleducks.co.uk/geese.htm>

<http://poultrykeeper.com/goose-breeds/pilgrim-geese>

<http://www.backyardchickens.com/t/491013/goose-incubation-hatching-guide-completed>

[http://www.smallholder.co.uk/news/1176578.Hatching\\_waterfowl\\_eggs/?ref=mr](http://www.smallholder.co.uk/news/1176578.Hatching_waterfowl_eggs/?ref=mr)

If there are any FAQs I've not dealt with, let me know and I'll add the information, if I know the answer!

## Debbie

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Male goslings on the left x 2 with orange beaks, 3 females on the right with dark beaks & darker fluff