

Jargon buster

Candling Checking the fertility of an egg or the development of the embryo by shining a light through the shell. You will see a black spot within a fertile egg, an infertile egg will appear clear inside, and a dead embryo (it does happen, unfortunately) will show up as a blood ring around the yolk or a dried spot on the inside of the shell.



Keeping chickens: broody birds

Watching your hen hatch a clutch of chicks can be one of the most enjoyable parts of poultry keeping, but what happens if you aren't ready for new arrivals? Val Moody shares her advice on coping with a broody chicken

Not only is it enjoyable to pick up your pet chickens, it is important in allowing you to identify any potential health problems early on. They will soon grow accustomed to it (in fact they will find it comforting) and even traumatised ex-battery hens can become very friendly and sociable with their owners and other humans. So it can come as something of a

shock if one of them suddenly insists on staying in the nest box and turns aggressive when you try to collect the eggs. However, there is nothing sinister about it – it simply means she has gone broody. This is when a bird becomes overwhelmed by her maternal instinct, resulting in her wanting to sit on her eggs, to hatch them and have chicks. It can occur at any time throughout the year but usually happens during the warmer, brighter months between spring and autumn – from now until October, essentially. Unfortunately, this is regardless of whether she actually has any fertilised eggs to sit on.

Each hen may go broody several times a year – it usually happens most frequently when they are two years of age – and on each occasion it will usually last 21 days (the incubation period of a chicken egg). Individual birds vary but certain breeds are more susceptible to it than others, including the Silkie, Pekin, Orpington, Wyandotte, Plymouth Rock, Faverolle, Brahma and New Hampshire Red. At the other end of the scale, some have had the broody instinct bred out of them to make them produce more eggs: they stop laying when they enter this state. However, they can still

go broody – though usually far less often than with their pure breed counterparts. Warren hybrids in particular are less susceptible, which partly accounts for them being the mainstay of battery farms.

As well as the fact that egg production ceases during broodiness in hens, there are other reasons as to why broodiness can prove problematic:

- The broody hen may be bullied by the others or become aggressive, depending on her status in the overall pecking order
- She may try and stop the others using the nest box and steal their eggs to add to her clutch
- She will likely lose weight and get out of condition as she may only eat and drink once or twice a day
- You will need to give her special attention to make sure she drinks, feeds and defecates

Using a broody hen

You may decide to put your broody bird to good use and place some fertilised eggs under her (the alternative is to use an incubator – see box, right). Start by preparing a safe and comfortable broody pen in an attached run, with a ventilated (but not drafty) nest box that measures roughly 60cm square. Place some damp sand or an upturned piece of sod at the bottom to help with humidity levels, and cover with sawdust or straw.

Do not leave the broody hen among the flock, as eggs may get broken during squabbling over nest space, and her chicks may be attacked or even killed by the others. Remove her from the main run as soon as possible, preferably at night (when she will be calm) and place her in the nest box. Ensure you dust the hen and the house with mite powder, as she will be a sitting target for the little critters. Blood sucking mites can be very dangerous to the bird and her chicks, and even if you can't see any it is better to be safe than sorry.



Broody hens: the signs

- The chicken will sit on her nest (with or without eggs) and not want to leave
- She will go into a form of trance and if removed from the nest and placed on the ground, she may remain in this stupor for some time
- Her wings will be slightly spread, and she will flatten herself over the nest
- She will pluck out her breast feathers to line her nest, and use her bare underside to help keep her eggs warm
- Her comb will often go pink or purple
- She will make muttering, growling sounds if disturbed, and may even peck to defend her nest
- When removed from the nest she will excrete large smelly droppings. She will be aware that defecating in the nest box may contaminate her eggs, and so will probably not have defecated since her last removal

You could place a few china eggs (available from kitchen-garden-hens.co.uk) under her for a day or so if you want to make certain she's serious about sitting. Once you're sure of this, remove the china eggs and replace them with fertilised eggs. An odd number of eggs – usually around nine for a small bantam or 15 for a larger hen – will fit better underneath her, as they will form a circle more easily.

Looking after her

Provide your broody hen with a supply of food and water and ensure she eats, drinks and defecates at least once a day – take her from her nest if necessary, preferably at a regular time each day. It is fundamental to do this to make sure she stays in good health.

Make sure all faeces is immediately removed from the nest box, as it can otherwise cause the eggs to become infected with any number of diseases. You should switch her standard diet of layers' feed (whether mash or pellets) for one of specially-prepared chick crumbs. The former contains extra calcium to help with egg production – which a broody hen won't require – and will pass through her digestive system too fast, causing her to defecate on the eggs. Doing this also means the chicks will have a ready source of food available to them – so make sure the crumbs are kept close to the hen just before the eggs are due to hatch so they can start to feed immediately. You should substitute a standard drinker with a shallow dish lined with stones, so that the chicks aren't in any danger of drowning. And it is a good idea to provide small grit. Strictly speaking they won't require it until they progress onto pellets or mash (chickens don't have any teeth, so it's needed to help them grind up larger pieces of food in their gizzards) but it will help to ensure proper gizzard development

Do not disturb the broody hen – she will do all the work required to hatch the eggs such as turning them and keeping them warm. If you want to candle the eggs (see jargon buster box), do it midway through incubation and dispose of unfertile or dead embryos to stop any infections developing. Chicken eggs take about 21 days to hatch. Try not to disturb the hen once they've hatched as she will need to bond with

her brood, although it's fine to gently remove any broken egg shells to allow other chicks more space to emerge. Once they are out, try to leave them alone (it is tempting to have a peek) until they start investigating their little world.

If your hen goes broody in cold weather and you want to use her to hatch fertilised eggs (bearing in mind that fertility will be low out of season, affecting the chances of successful hatching), you will need to place her in a broody pen indoors, perhaps in a garage. You should also provide additional warmth – a heat lamp works well. If you are unsure as to whether the eggs have been fertilised or not, use the candling method to check.

Interrupting broodiness

If you want to hatch chicks, having a broody hen is fine. If not, it can be a problem and you may need to intervene to get her back to normal. Unfortunately, you need to aggravate the hen and (literally) cool her down to do this. Move her out of sight of her dark, warm, cosy nest to a separate hutch or cage as soon as possible. Sometimes she will return to normal within a few days but it can take up to a fortnight.

The enclosed area should give protection from the weather and predators but an uncovered floor is fine as sitting on damp ground will cool her underside. A more extreme method of cooling the hen down is to place ice underneath her. Although her usual nest should not be visible to her, you should make sure she remains within sight of the flock so she is not reintroduced as a stranger, which could potentially disrupt the pecking order (see the February issue of *GYO*). You must also ensure that she eats, drinks and defecates, so wake her up from her trance at least once a day to allow her to do this.

Some poultry keepers believe that collecting eggs regularly – say twice a day – will deter broodiness, believing that the catalyst for broodiness is a nest full of eggs. But I have never found it to make a difference. Once she has stopped being broody she will start walking around and feeding normally.



Artificial vs. natural hatching

An incubator is useful if you want to control the timing of your hatch or don't have access to a broody hen when you want to rear chicks, as it can obviously be switched on at any time throughout the year. Some have an automatic egg turning mechanism, but others will require you to turn the eggs a minimum of two or three times a day by hand – this will ensure the egg is incubated evenly and will also prevent the embryo sticking on one side of the shell membrane. Keep the incubator in a shed or outbuilding where you will be able to maintain a constant temperature of around 16–21°C, and make sure there is good ventilation.

However, providing you have the space, hatching eggs under a broody hen is by far the best option. The chicken's natural instinct will tell her what to do, so there will be no need for you to worry about temperature or humidity levels, and no need to manually turn the eggs.

HENS GO BROODY MOST FREQUENTLY WHEN THEY ARE TWO YEARS OF AGE



Useful contacts

- **Val runs Chicken School**, which provides tailored one-to-one chicken keeping courses that are ideal for families. The Swindon, Wiltshire set-up also offers small group courses. You can learn everything you want to know about getting started keeping chickens to ensure you get the most from your hens. A free information pack is provided on all courses. For existing keepers there's also an advisory service, and a service for schools and other organisations. To find out more, call Chicken School on 01793 331 796 or visit chickenschool.co.uk
- **Candling lamps** Country Fayre, 0845 094 0560, countryfayre.co.uk
- **Chick crumbs** Smallholder Feeds, 01362 822 900, smallholderfeed.co.uk
- **Chicken grit** Omlet, 0845 450 2056, omlet.co.uk
- **Fertilised eggs** Perfect Poultry, enquiry@perfectpoultry.co.uk, perfectpoultry.co.uk
- **Heat lamps and incubators** Ascott Smallholding Supplies, 0845 130 6285, ascott.biz