## **BRIGHT HORIZON HAMSTER RESCUE**

# **HAMSTER PREGNANCY & BIRTH**

## **A SURVIVE & THRIVE GUIDE**

#### Your hamster is pregnant, or has given birth.

You're shocked and confused. Perhaps you offered a home to a hamster, or rescued one, and didn't have any reason to think she'd be pregnant, or maybe you've noticed some possible pregnancy signs.

Or perhaps your hamster escaped and came into accidental contact with a male, or you were led to believe that hamsters can live together. However you got here, we'll help you make it right.

We'll keep this as simple as we can, and focus on what you can do to help your hamster and her pups survive and thrive. We'll use only evidenced science and the real experiences of ethical carers, and try to deal with myths and misinformation.

#### THE MOST COMMON AND MOST URGENT: YOUR HAMSTER HAS GIVEN BIRTH. HERE ARE THE EMERGENCY ESSENTIALS!

SEPARATE THE MALE/ALL OTHER HAMSTERS!	Hamsters must never be housed together, but if yours have been, you must immediately remove and separate all adults. Dad will try to impregnate mum again swiftly, and mum may well allow this (in dwarf species especially), but will also fight him and others, often to the death. Males play no part in raising pups in nature, and are chased off by the female. In captivity, they can't leave the female's territory and the results can be catastrophic. In a confined space, every hamster and baby can be fatally injured.
DO NOT DISTURB OR Touch Mum or Pups	If mum feels threatened, she may kill the pups and/or eat them. This is evolution's efficient way of ensuring that she doesn't waste precious energy and nutrients feeding young that a predator will get. It does not make your hamster "bad" or "violent": it's clever nature, and just not something humans are okay with because we raise our young in a different way.  Do not attempt to count the babies until they emerge from the nest themselves, and do not lift up bedding or items to sneak a look. At this stage - and for TWO WEEKS - providing everything mum needs provides for the babies.
MAKE SURE MUM HAS LOTS OF SOFT BEDDING	Mum's instinct is to make a deep burrow, with a nursery chamber where she will spend most of her time.  Soft, safe, suitable bedding is essential for her to feel instinctively secure. If she doesn't have this, add the bedding to the other side of the enclosure from the pups, gently and quietly. She will collect it herself.
PUT THE ENCLOSURE IN THE QUIETEST PLACE	If your hamster usually lives in a busy or noisy part of your home, you will need to gently and carefully move the entire enclosure to your quietest, warmest, least busy space. NEVER remove mum or pups. If the enclosure is too big or heavy, you will need to change the activity level in the room she's in.
REMOVE WHEEL AND SAND	Bathing sand can be harmful to both mum's nursing nipples, and the pups' sensitive hairless skin if brought into the nest. Wheels can be dangerous if mum decides to "show" the pups how to use it: captive hamsters see wheels as a natural behaviour to teach their babies, and can take them for a ride by their scruffs, which has obvious dangers.
OFFER LOTS OF FRESH WATER & EXTRA FOOD	Mum had just used up a lot of her body's resources, and will need more to nurse the pups. Make sure there is plentiful food and water; try to only disturb for food once a day.

#### With these critical things taken care of, let's take a deeper look at the fascinating new world you're now in!

#### **PREGNANCY**



The common signs of pregnancy are the same in all five captive hamster species. They are:

#### Swelling around the middle of the abdomen around a week before birth

Pregnant hamsters start to "show" in the second half of their pregnancy. Some don't look very pregnant at all, while others look like beach balls! This is down to the size of the litter they're growing. The "baby bump" shows in the central part of their torso: the "apple shape". Swelling in the lower abdomen is not a pregnancy and needs veterinary attention.

#### **Enlarged or more visible nipples**

Hamster nipples are arranged in a wide horseshoe shape around their underside. Males do not have nipples at all. Your hamster's belly may look unusual, with raised bumps in a regular pattern: if it's the first time you've thought about or looked for your hamster's nipples, they can be mistaken for a lump or injury. You can get a clear look at her nipples by offering her a treat, and looking underneath as she reaches up for it. The nipples may never be visible on very furry hamsters, and you must not handle her to feel for them.

#### **Nestbuilding/Changes in behaviour**

A pregnant hamster will usually attempt to build a nursery chamber. If they have suitable soft bedding, they will pile this up or burrow deeply into it. In an established burrow, they'll often build an "extension" or suddenly upturn and reconstruct their existing one. If they don't have much bedding, they will usually head for a corner, or an area under an object in their enclosure. Set this right as soon as possible with lots of soft, safe bedding. Placid hamsters may suddenly become territorial, and charge or vocalise when even their familiar carer touches or moves things in their home. Most show an increase in activity: this can include a lot of patrolling (walking the enclosure perimeter checking the security), unusual digging at the base or sides of the enclosure or hides, and hoarding materials in one area.

#### **HOW CAN I BE SURE MY HAMSTER IS PREGNANT?**

Unless you are lucky enough to have visiting vet specialising in exotics, you can't.

It is strongly recommended that a potentially pregnant hamster is NOT removed from their familiar enclosure or physically examined, as this is extremely stressful for her. Her instincts are very strong: find a safe place, and build a nest. Disrupting that process is unwise. Your best course of action is to act as if she is, and prepare her environment for birth and babies until the species-specific pregnancy period is over (and ideally a little longer to be certain: see the table below).

SYRIAN	Syrian hamsters have the shortest pregnancy (gestation) of all of the captive species. Their average pregnancy is 16-17 days, but up to 21 days is fairly common.  Syrians can give birth to up to 20 pups, or as few as two, but the average is 8-10.
RUSSIAN/ CAMPBELLS DWARF	Average pregnancy is 18-21 days, and average litter size is 3-4.  Dwarfies can become pregnant again within an hour of giving birth, and in nature would wean one litter to immediately have another. If a male was still living with your female after she gave birth, she is almost definitely pregnant again.  Russians and Campbells are two separate species that have been interbred by humans, and as a result have all kinds of genetic issues to be aware of. You can learn more here: <a href="https://docs.google.com/document/d/10zomBkwRul4WKhJb1LHqffoqFiNLeaCKAHvAlhsXxzo/edit?usp=sharing">https://docs.google.com/document/d/10zomBkwRul4WKhJb1LHqffoqFiNLeaCKAHvAlhsXxzo/edit?usp=sharing</a>
ROBOROVSKI	Robos have the longest pregnancy of all captive species, at 20-22 days. They give birth to 4-6 pups on average.  They are also unique in that they can "pause" a pregnancy: studies haven't discovered how, or reached a definite conclusion on why, but from observation, it can happen when they have dependent pups, or if their environment doesn't feel safe to them. One robo gave birth 42 days after her last possible exposure to a male!
CHINESE	Chinese hamsters are pregnant for 18-21 days, and have an average of 4-6 pups.  They're extremely fertile, keen to mate, and have fewer courtship rituals than other species so even very short accidental exposure is likely to lead to pregnancy.

## **CARE ESSENTIALS: YOUR PREGNANT HAMSTER**

Your mum-to-be is now preparing for birth. The way you care for her needs to support her instincts, and help her to feel completely safe. Even if you're very familiar friends under normal circumstances, as far as her hormones are concerned you are now a predator and a threat. Treat her with absolute respect.

#### **READY THE ENCLOSURE**

Do not deep clean the enclosure, or mess around with it more than is necessary to adapt it for safety and comfort. It is her safe space, and she will make the decisions about the way it's arranged.

LOCATE: In your quietest space in your quietest, warmest room, away from other pets, children and noises from appliances and devices.

ADD: Extra soft, safe bedding so that she can make her nursery

**REMOVE:** The wheel when she starts to show/at around 10 days in, and the sand as soon as her nipples start to change.

#### **PREGNANCY DIET & NUTRITION**

Pregnancy in hamsters is quick and intense. Your pregnant hamster will need the best nutrition to support her rapidly growing babies, and her own body.

We recommend that you look for a species-specific, "complete" food of the highest quality available. Good, ethical food companies will be happy to advise you if you contact them. You can supplement her diet with extra vitamins by offering fresh food: here is a guide to safe foods.



Avoid offering excessive protein: there's evidence that this can cause the unborn pups to grow too large for a trouble-free labour and birth. This is especially important for Russian dwarf/Campbells. Mum needs a normal amount of protein that a complete food will provide.

#### **LABOUR & THE BIRTH**

Hamsters, like all mammals, can give birth very quickly or it can take several hours. As fascinating as it may be to try to watch her or "help", it is absolutely essential that she is left completely alone to allow her instincts to take over.

A hamster in going into labour may become agitated, restless and unsettled. In mid-labour, she may pant or vocalise, scratch as though itchy, and move differently. There may be vaginal bleeding or discharge visible, as with any mammal birth.

Almost always, she will give birth in the nest she has made, but in some cases she may give birth elsewhere then relocate the pups by carrying them in her mouth.

She gives birth to pups one by one, cleaning each one and moving them to her underside so they can feed.

If mum chooses to leave a newborn in the open, this can be a very distressing situation for us as spectators: it can be accidental, but is often because she senses that something isn't right with that pup.

The rejected newborn pup's best chance is to be placed with the others, and this is the ONLY TIME YOU SHOULD INTERVENE.

Quietly and carefully, pick the pup up with a warm spoon, making no human contact with them, and place them in the nest, or nest entrance.

## BIRTH TO TWO WEEKS: THE "INVISIBLE" STAGE

For at least the next two weeks, let nature take its course and leave the family in complete peace until the babies begin to emerge and explore.

The pups do not need anything from us. Your job is to provide mum with everything SHE needs. Mainly, that's peace and quiet, the right nutrition to support her health, and the health and growth of the pups through her milk.

Mum will be very hungry: make sure you're using a complete, specialist food for her species. Now that she has given birth, she needs extra protein to regain the muscle and strength her body gave to the babies. Cooked plain chicken, edamame beans, cooked egg and dried mealworms will be well received.

Hamster pups are born hairless, with closed eyes and ears, weighing between 0.5g (robos) and 3g (Syrians). They are completely dependent on their mother and need only her milk for the first fortnight. They begin to bellycrawl at around 7 days, when hair begins to grow, and develop rapidly in the second week.

If any pups die in this time, mum will clean things up herself, and their energy will go back into making her and the surviving pups healthy. Studies suggest that 20-25% of pups born never leave the nest, but the study is 40 years old and before optimum hamster care was properly understood. If we are looking after babies well, we will never know the true numbers: disturbing them is highly likely to raise the fatality rate.

You may hear sounds, and worry about what they mean: squeaks, snoring, and little choruses are all sounds humans can hear. A lot of their sounds are above our hearing range. Whatever you hear, you must leave the nest alone! Intervening will cause more damage than nature taking its course.

A distressed, injured or abandoned pup that mum has placed **outside the nest and not retrieved by Mum within two hours** can be handled, and sometimes successfully hand-reared. Seek veterinary advice immediately.

By 14 days, they will be starting to walk, and will begin to leave the nest and explore the world. This is a very exciting time for us, as we can finally see how many babies there are, and what they look like.

Mum will usually collect any pups that wander too far and return them to the nest: 10-14 days is a stressful time for her because they are starting to become independent, but her instincts tell her to keep them in the burrow. As much as you may want to help her as she runs around scruffing and taking them home, tampering with the babies at this point can still trigger her cull reflex and potentially cause her to harm pups. Until the babies have completely weaned - three weeks is safe - DO NOT ATTEMPT TO HANDLE THEM OR MUM.

## THE 2-4 WEEK STAGE: EMERGING, WEANING & LEARNING

At approximately 14 days - sometimes a little earlier - the pups are tiny, clumsy mini versions of their parents. They'll begin to explore, and to eat voraciously, sometimes tussling over food and resources. Everything is new to them, and mum will still be showing them how to interact with their environment. She needs to stay with them until they are an absolute minimum of 4 weeks old. Pups removed from their mother's teaching before this age lose the benefit of their natural learning period and can develop behavioural issues such as lifelong fear or aggression.









Pups are typically weaned by 3 weeks of age but Mum can still nurse them until 4 weeks. From 8 days old the pups will start to eat food that Mum brings back to the nest. Throughout pregnancy, birth and as the pups grow we offer a good quality seed mix. Once the pups are born, some extra protein like cooked chicken or egg will help mum with her milk. Similarly porridge is also a great addition to their diet. When the pups have started to emerge from the nest offer enough fresh food for all of the pups as well as Mum. Once they are split into sexes we often give them their fresh food directly to avoid arguments or you can lay it in a long line so they can't argue over it! Around 3 weeks after birth the mother will start to discourage weaning and encourage independent feeding.

#### **HEALTH CHECKS & HANDLING**

Now you can count and check the pups, and begin to interact with them. You can handle pups from the point where they are confidently roaming the enclosure by themselves (around 21 days). If mum becomes overly anxious, stop immediately, and never force them to interact on your terms. A jug or container with a ventilated lid for handling/health-checks is an essential. Chasing or grabbing the pups can give them a lifelong fear of human hands.

Make a list of the pups you have, and weigh them in a container so that you can keep a record of their development and notice/adapt for any who may not be thriving. Markings can change, but they will have distinguishing features even at this age. NEVER mark the pups with any dye or ink, as this is often toxic.

Reliable sexing is difficult until 4 weeks, and whilst some pups may have obvious nipples, the main way of sexing - "anogenital distance" - isn't 100% clear at this age. Focus instead on their overall health: eyes, teeth, movement skills, and emerging personalities.

**You can clean the enclosure at 3+ weeks:** it will be quite smelly by now! Before 3 weeks, it's strongly recommended that you don't alter the scents and terrain at all.

#### **RISKS AND DANGERS AT 2-4 WEEKS**

- Falls: Pups won't throw themselves off things intentionally, but accidents are common. Reduce the risk by keeping the enclosure level, placing deep soft bedding under items they may climb, and providing enough wheels that they're not all trying to use the same one and throwing their siblings around. Deep bedding, lots of different safe digging substrates, minimal heights (never use shelves in the enclosure), and soft landings.
  - **Smothering:** it's rare, but not unheard-of, for pups to crush or suffocate each other. Ensure every hide has good ventilation: the pups often sleep in a pile, and will instinctively move position if air is running low. It's hard to know when to intervene and pup-mountains look scary! so if in doubt, gently move the nearby bedding so they wake naturally and reposition.
  - **Playfighting injuries:** again, these are very rare: playfighting is a normal (and amusing) part of their socialisation and development, but on the odd occasion there'll be some accidental injuries incurred. Every litter has "that one pup" who loves to pounce on siblings and instigate playfights: you'll get to know which one and to keep an eye. Sometimes, a very boisterous baby may need to be separated early. Ask the advice of a vet or established rescue if you're unsure.

## THE 4-6 WEEK STAGE: SEXING, SEPARATING, SOCIALISING, SAFETY

All hamster species have reached the start of puberty by 5 weeks old. Just like people, they develop at their own individual rates, but there is a risk of sibling pregnancy from this point. It's not always what we can SEE - some male hamsters won't have visible or enlarged testicles straight away, but they're still fertile and looking to mate.

With hormones, can come increased aggression, and there is an increased risk of tussles that lead to injury.

**Our most important job is to prevent further pregnancies.** So at this stage, we separate the siblings into same-sex groups, and mum from them all. We also get prepared for the possibility of fighting by getting emergency enclosures ready.









#### **GETTING READY TO SEX THE LITTER**

In Week 4, prepare two separate enclosures for the males and the females. Separate mum first (see below) so that she isn't distressed by the handling process. By this stage she is usually grateful for the return to solitary peace and quiet!

**RESEARCH YOUR HAMSTER'S SPECIES**, and look at as many images of their undersides and sex organs as you can to familiarise yourself with what to look for. We won't go into detail here: to cover all five species in enough detail would make this guide very long indeed. There are many resources online.

**TEAM UP:** Ideally, sexing hamsters is a two-person job. Two sets of eyes and two opinions reduces the margin for error. It's also helpful to have one person handling the babies, and another to video as they are handled so that you can watch it back frame-by-frame to be sure.

They are not used to being handled, and often squirmy: the second person can be there to catch or recapture any who get a little too lively!

**IN A HAMSTER-PROOFED ROOM**, handle the babies at a low height over their original enclosure for safety. If you're not an experienced handler, it can be easiest to get a large glass jug, jar etc and pop each baby into it so that you can view their underside without them wriggling free or nipping, or being traumatised by this early contact.

**GIVE THE PUPS AN ALL-OVER HEALTH CHECK**: as sexing and separating is essential, combine it with a full check for each baby, and make notes. Weigh them - a kitchen scale is perfect - and check teeth, eyes, paws, and their bodies. Note down any distinguishing markings too.

**SEPARATING MUM:** Her body has been through a lot: now she's weaned her babies, check her weight, and take a look at her nipples and genital area for any signs of swelling, injury, mastitis or infection. Pups "love-nip" their mother sometimes so make sure any little wounds are healing well. This is a stressful day for Mum: ideally, get her original enclosure clean and set up just how she's always liked it. She can have her sand and her wheel back. She may appear a little confused for a short while, but she'll very quickly busy herself with creating a new territory and enjoying the solitary space she instinctively prefers.

## 6-8 WEEKS: SOLITARY LIFE, AND FINDING SAFE SUITABLE HOMES

By this point in you and your (now many) hamsters' journey, daily life and care will be taking a lot of space and time. The final stage - separating all of the hamsters into their own enclosure - has the biggest impact on that. A lot of equipment is needed, and costs can really start to add up.

Despite this, **NO HAMSTER SHOULD BE REHOMED PRIOR TO 8 WEEKS**. This early, secure and settled socialisation period is critical to their mental and psychological development, and their lifelong wellbeing. Far too often, accidental litters are rehomed to young because the long-suffering human who has cared for them all for so long is struggling to keep up with their ever-increasing care.

**IF YOU ARE STRUGGLING, PLEASE CONTACT A SPECIES-SPECIFIC RESCUE**, who will be able to advise, assist if they can, and/or refer you on to other rescues that can help you. Rescues are often under pressure themselves, so the earlier you contact them, the more likely it is that they'll be able to plan for space, or provide you with the resources and contacts you need to ensure that all of the babies find safe, loving homes instead of falling into inappropriate hands.

IF YOU LOOK FOR HOMES YOURSELF, here are the essential things you need to know if you want them to thrive, and survive.

#### - NEVER ADVERTISE FOR FREE:

Always ask for a token amount. People who are unwilling or unable to pay this, will be unwilling or unable to pay for the lifelong care and specialist equipment that all hamsters need and deserve.

#### - CHECK YOUR REHOMERS OUT:

Ask for pictures, ask care questions, and check the pictures are genuine by asking for a dated sign or something identifiable in the picture. Follow the rehoming standards that ethical rescues use, which they will be happy to share. The UK minimum welfare standard for hamsters can be found in our Adopters' Guide.

#### - AVOID HOMES WITH VERY YOUNG CHILDREN:

Hamsters are not suitable companions for young children, and are not gifts or toys.

#### - ILLEGAL LIVE-FEEDING NETWORKS

Sadly this is very real, and very active in rodent circles. A very small element of predator animal owners either enjoy watching, or believe it is healthy for, their animals to be given living prey, and hamsters are targeted. Beware of anyone offering to take the entire litter or several, or trying to get them for free/a low price.

Feeder networks share information on what "works" on rehomers, and will often show you stolen images of amazing enclosures, and work together if one person's contact attempt fails, by learning from the previous attempt. If you are in any doubt, refuse the handover and contact a rescue. If you think you have uncovered a live feeding ring, REPORT IT.

### **8 WEEKS ONWARDS**

**Hamsters must live alone from 8 weeks.** By this point, they are essentially adults, capable of surviving by themselves, reproducing and living fully independent and solitary lives.

It can feel bittersweet separating the "babies" completely, and to begin with they are often a little disorientated! Within 24 hours, they begin to relish their own space and territory, and it's at this point that their true personalities emerge. The confident, sassy baby can often turn out to be the self-contained, shyer adult, and vice versa. It's all part of their healthy development, as well as essential for their safety.

#### Photo credits:

Hamstercareguide: pregnant Syrian illustration