A Beginners Care Guide



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Overview

This document might be called a guide, but these are merely guidelines for you to follow when caring for your Lasius niger colony. There are many ways to keep and care for ants, these tips and tricks will act as stepping stones to get you started with this amazing species.

Lasius niger are often called the best starter ant species to keep by many ant keepers in the UK, as they are extremely forgiving to beginner mistakes. I'd always recommend this species to new keepers and for people who may want to start ant keeping and watching an empire grow before your very own eyes! They're also one the most common ant species you'll find in the UK, making them very easy to obtain and there's no harm in releasing them back into the wild if you no longer wish to keep them.

<u>Housing</u>

Queen with Brood (Upon Arrival)

Great! Your queen made it to you safely and here's some information to get you started. Single queens with brood are best housed and left in the test tube they arrive in. Do your best not to disturb her too often. Keep her wrapped up, at room temperature and in the dark and away from vibrations that may otherwise disturb her or stress her out. You do not need to feed your queen anything as she raises her first set of eggs with her stored protein reserves... this is called being "fully claustral". She's perfectly happy and fine with the water she's provided with inside the test tube. In the wild, when a queen first becomes mated, she will land, break off her wings and take shelter under cover or dig a small founding chamber, similar to the test tube she's provided in so in no way is it "cruel" or anything of the sort. Ants love small and tight spaces as that's where they feel most comfortable and relaxed. Now it's time to wait and look forward to your first set of workers! Once your first workers have hatched and made an appearance, see below on what to do next!

Small founding colonies

Founding colonies with less than 20 workers are best kept in a test tube setup. During this period, it is extremely important to not disturb the colony, as the queen may stop producing and caring for her brood – this means minimal vibrations, noise or light exposure as possible. It's very tempting to check on the colony but this can be quite easily timed when you feed them. This will minimize stress at this critical stage. Do not provide too large of a nesting space for the colony, as the queen will become stressed and won't lay eggs as fast as she would in an appropriately sized nesting space. If your queen becomes low on water reserves or you're seeing mould form inside her test tube then I'd recommend connecting her up to another test tube that has been set up correctly and placing the new test tube in the darkness and covered while exposing the old test tube to light, they should move into the new one when they're ready. Please note that Lasius niger are notorious for being stubborn! They may take as little as a few hours to move or up to a few weeks. Connect the two test tubes up by using tape with a tiny bridge to the new test tube and using a needle to pierce tiny air holes that are too small for workers to escape. You can also use test tube to test tube adapters which are available online from many ant stores like AntBoyUK for example. There are many tutorials on YouTube about setting up test tubes properly and how to do a test tube change.

Small colonies

At around 20-50 workers when it becomes difficult to feed the colony without escapees, it is time to add a foraging area. I recommend a cost-effective solution; which is to use an old takeaway container. I'd recommend piercing some tiny holes in the lid to allow air flow. Be sure to wash out the container with soap and warm water before using and allow to fully dry and air out. Next, add a barrier like PTFE or other branded types like "ant I slip" or "Ant escape prevention" inside, around the top of the wall of the enclosure.

This acts as a barrier to prevent ants from crossing and escaping when the lid is open. You can also use ant-i-climb (from AntBoyUK) which is my go-to for all my personal colonies. This is effective even with humidity so it may be a better option. The application method is slightly different. Run one quick swab around the target area and allow it to dry for 10 minutes. Then proceed to spread around with a q-tip. When this is applied ensure there are no drips and it is nearly invisible from a few steps back. When reapplying ant-i-climb or PTFE you will need to wipe off the previous layer. Use a tiny ball of blu-tack to secure the covered test tube in place inside the container and remove the cotton stopper keeping the ants in. Food can now be easily provided to the colony without any escapees. Keep this container in a quiet area where it will not be affected by vibrations, noise or direct sunlight and be sure the test tube is covered so the ants remain relaxed.

100+ workers and beyond

Larger colonies of 100+ workers can be housed in ytong, acrylic, 3D printed nests or even a natural setup with substrate for ants to dig. I would recommend using ytong nests for Lasius niger. Ytong nests hold moisture better than acrylic/3D printed nests, and you can view the inside the nest, unlike a natural setup. I would suggest buying a nest and foraging arena from AntBoyUK as again, it's my go to store for all my ant housing needs. You can message the store and ask what size nest you will need for your size colony, they're very helpful. As the colony grows you will need to house the colony in larger setups.

Heating

Native species will be perfectly fine at room temperature. Their nest should be 18-25°C and their foraging arena should be 18-28°C. As this species is so hardy, being below or above this range should not be a huge concern. You must never allow the temperature in the nest to exceed 30°C as this could render the queen infertile or kill her. Try to plan ahead before any potential summer heat waves occur by keeping the colony in the coolest room in the house and out of direct sunlight and windows.

If you like, you can provide additional heat by a heat cable, but this is not essential. When providing extra heat, it is important to provide a heat gradient so the ants can place their brood in their desired conditions. Ants will move their brood to moister/drier or hotter/cooler conditions as the brood develops. Additional heat will speed up brood growth and its why ants will place their cocoons under slabs and rocks during the summer. If you do decide to use a heat source like a heat cable then make sure it's connected up to a reliable thermostat so you can control the temperatures the colony receives and to minimize the cable overheating.

Hydration

Whilst in a test tube setup you won't need to add additional hydration. However, when the colony moves into a proper nest you will need to hydrate the nest every 3-4 days depending on the brand of nest you decide on and the size. The manufacturer can help with further questions on their nests.

Feeding

Protein

Ant colonies spend a lot of time gathering insects and other protein sources. The protein is the base need for growth and expansion for the colony; as it is fed to the larvae and queens. The larvae are fed chewed up pieces by the workers, giving them everything they need to grow into adult ants. The workers themselves cannot digest solid food – only in liquid form. Even though they have mandibles capable of chewing their prey, they cannot swallow it due to a filter in their mouth. The solid food is not small enough to pass its mesh. The adult ants do not require protein the same way that the larvae do. The queen on the

other hand needs a constant supply to be able to create and lay eggs. This is resource-demanding work that requires both protein and carbohydrates.

There is a lot of choice in terms of protein. It can be in the form of insects (fruit flies, mealworms, crickets, wasps, beetles etc.), meat (free of poison or spices), eggs or something else containing protein like chicken, ham or protein jellies. Be aware of what you feed your ants. Avoid poisonous things, such as the peel of sprayed fruit and also beware that insects from your home might contain cleaning chemicals. If you're catching your own insects, remember there is a risk they are infected with disease or parasites. So be careful and always boil your feeder insects for 3-5 seconds and allow to cool before feeding them to your ants. I personally feed my colonies mealworms as they're very easy to care for and all my colonies love them. To do this, make sure they're fattened up as they're starved on the store front. Do some research on what your feeder insects eat, most eat potatoes and carrots. Dip the live feeder in boiling water for 3-5 seconds and then cut in half to allow the ants easy access to the insides. Experiment with your colony! Some colonies love different kinds of protein so find what's best for them. A mix is always beneficial to keep them interested.

If you want to feed your ants live food, make sure the food is immobilized before feeding. Unless you have a huge colony, your ants will probably suffer casualties while trying to kill their prey.

Carbohydrates

Otherwise known as Sugars. Ants will need a sugar source from either honey-water or sugar-water. There are lots of how-to videos on YouTube on how to make these. It's best not to offer too much in one go, as they come across natural sources sparingly in the wild. Founding colonies will only need a very small drop every 4-6 days, and as the colony grows you can shorten the time between feeding and increase the amount. You can offer this at the same time as offering protein.

Why not experiment by offering different fruits which are high in sugar. Apples and pears are a known favourite. Try to offer different sorts of sugar mixtures to find out what your colony likes the best.

Water

Ants, like any other pet will need to have a supply of fresh water. This is provided through the water reservoir in the test tube setup, however when the ants move out of a test tube setup you will need to provide fresh water in the foraging arena. The easiest and safest way to do this is by leaving a test tube setup in the foraging arena or purchasing a water feeder, byFormica feeders are my go-to. To make the test tube a less desirable space for the ants I make the space the ants can enter as small as possible, by filling the test tube with as much water as possible and stopping it with cotton, similar to how the ants arrive in but with no space to nest inside.

Hibernation

All native ants in the UK will go into hibernation from October when the temperature begins to cool until March when the temperature begins to warm up. The ants will naturally become less active in captivity during this period and will need to be put into an artificial hibernation. This can be achieved by keeping the colony at around 5°C - 8°C until they come out of hibernation but an un-heated room will work just fine (Not higher than 15°c). You do not need to feed your colony when they're in hibernation but access to water at all times is essential. You can offer a small amount of carbs half way through hibernation to give them the option if they want a snack but don't be alarmed if they do not take it. When taking the ants in and out of hibernation the temperature will need to be slowly adjusted. You can do this by changing the temperature in stages. For example, when putting your colony into hibernation you could move the ants to the coolest room in the house for a few days, then when they have acclimated move them to your garage, shed, etc... As long as the temperature stays above 3°C and has sufficient air flow, your colony should be fine. Make sure the ants aren't exposed to temperatures less than 3°C as they might die. There are some very useful videos on how to hibernate your ants on YouTube.

Some ant keepers will use visual cues from their local wild ants for when to put their colonies in hibernation and take them out of hibernation. Have a look for yourself when you stop seeing ants around October and when you see them again around March.

About Lasius niger

European Species - Common Garden Ant

Temperature: Nest 20- 25°C Outworld 18- 28°C

Humidity: Nest 40- 60% Outworld 30- 60%

Hibernation: Yes, from the end of October to the end of March at 5-10°C

Diet: Water (at all times). Carbohydrates like honey water/ sugar water or other.

Protein like fresh-killed insects or other.

Colony form: Monogyne (single Queen per colony) Average 7,000 workers per colony.

Founding Queen: Claustral (without feeding)

Nest type: Acrylic, Y tong, Natural setup.

Sizes: Queen- 9mm/ Worker- 3.5- 4.5mm

Bite/ Sting/ Formic acid: No

Description: Lasius niger are known as the common garden ant due to being found everywhere in Europe. They're a very tough species and perfect for beginners. They grow very quickly and you could expect a mature colony within a couple of years. I'd ALWAYS recommend this species as your first!