#### Lasius umbratus

A big thank you to Dermy for finding a huge chunk of my missing journal from its first entry on the day I got them until 7 October 2013. There is then a gap until 3 August 2014.

## 2009

#### 21 April 2009

The colony I have decided to chronicle on here is my Lasius umbratus which consists of an umbratus queen with 30 or so Lasius niger workers which I obtained from Antstore, in Germany, on 8 March 2009.

Lasius umbratus queens are unable to start their own colonies, so once mated they look for a Lasius niger nest and try to trick their way inside. Often, they are discovered and killed by the niger workers. However, some do make it and establish themselves within the nest away, I believe, from the colony's own queen. Somehow, she convinces the niger workers that it is in their best interest to kill their own queen and accept her as their own, and this is what they do. The niger queen is disposed of and the umbratus queen takes over as colony queen. She then starts to lay her own eggs which, obviously, create umbratus workers. Slowly, over time, the niger workers die out as they naturally do and the nest becomes more and more umbratus until there are no niger workers left.

To the naked eye Lasius umbratus are virtually identical to Lasius flavus.

My colony arrived in the usual glass test tube that Antstore ship their ants in and I placed it into the foraging tank that is attached to a glass slim ant farm via a length of plastic tubing. They quickly moved into the thin ant farm (or the nesting box as I call it) but are even now still nesting on the surface of the sand. In the words of the late Steve Irwin, "They have naughty little bottoms!"

When I first got the ants, there was a small bunch of eggs. There are now several little clumps of eggs, a group of larvae and some cocoons. I am looking forward to see if the cocoons are niger of umbratus.

The niger workers were obviously once part of an established colony as the workers are vary large.

#### 25 April 2009

The queen has been churning out eggs like there's no tomorrow! There are 3 fairly large piles of eggs, which tend to be stuck to the inside of the glass sides of the nesting box, above ground level (they are still nesting on the surface of the sand and it doesn't seem to bother the queen one bit. There are several piles of larvae and 3 or 4 cocoons still yet to eclose. The workers are constantly foraging and eating and I can see them feeding the larvae and queen on their return to the nest.

#### 28 April 2009

Today I noticed my ants doing something that they also did yesterday:

As mentioned above they are living on the surface of the sand in the nesting box (which is attached to the foraging box by about 40cm of clear plastic tubing), with their queen and larvae happily on the surface too.

Last night (and tonight) I turned on my central heating as it was getting a little chilly. As the living room (where I keep my umbratus) was warming up the workers starting moving some of their older larvae and cocoons into the tubing. Several workers went into the foraging box and judging by their behaviour they were patrolling aggressively for anything that might harm their brood whilst it was 'outside the nest'. It was really interesting to watch. ;D

#### 09 May 2009, Saturday

As I type this journal entry on my laptop (whilst trying to look at my ants, drink a cup of tea, play X3TC on my desktop and eat a custard doughnut;D), my Lasius niger/umbratus are having a bit of a lazy day. They are massed in one corner of the nesting box, still on the surface, and cleaning/protecting their brood and queen. The queen certainly deserves a rest; the amount of eggs she has laid over the past couple of weeks has been enormous. There are 4 separate piles of eggs, larvae and cocoons all developing vary well.

They still continue to bring some of the larvae out into the plastic tube if I turn the central heating on, and it is always vary interesting to watch, and you can tell when they are about to do it. A couple of workers will leave the nesting box and travel into the foraging box. They wander about and then return to the nest, and that's when the brood is bought out.

I am about to feed them now, or vary shortly anyway, as I need to take the crickets out of the freezer and let them stand for 15 minutes until they are thawed out.

## Saturday, 16 May 2009

The pile and number of eggs just keeps growing to the extent that I have given up counting.

The ants are constantly foraging and eating (as I type this they are tucking into a piece of wax worm) and I guess the larvae just keep opening their hungry mouths.

They are still living on the surface of the sand in the nesting box. Now if only I could convince them to eat some Fraggs broth! ;D

## Saturday, 23 May 2009

The ants have separated the brood into 4 distinct piles of eggs and larvae, with 5 cocoons placed at the far end of the nesting box (still on the surface) which 4 or 5 workers constantly guard. The queen is still looking vary plump! (Must be the Fraggs broth I fed them)

#### 5 Jun 09, Friday

Have 4 or 5 umbratus workers now and a few more larvae have developed into cocoons. I love the way the workers sort out the larvae according to the instar they are at; there are currently 3 or 4 piles of larvae, several clutches of eggs and several cocoons.

The workers have built a wall that runs across ways on the surface of the sand in the nesting box, effectively creating 2 areas. There also appears to be a chamber that is cut straight into the sand.

#### 13 June 2009, Saturday

The larvae have been put into groups according to age and size, with the larger older larvae being away from the queen, and the cocoons being furthest from her. The smaller larvae are in the same area as the queen, and the eggs are by her feet. Plenty of workers tending to all the brood, with the umbratus workers tending to stick with the younger brood.

#### 17 June 2009, Wednesday

A lot of activity (foraging and brood rearing) in this colony. More and more of the larvae are turning into cocoons, which will mean more and more yellow, adult umbratus workers are on the way.

## 20 June 2009, Saturday

Just fed these ants with some wax worm and a fresh garden pea (oddly enough ants seem to love them) There are about half a dozen ants eating it.

There are about 12 cocoons in the "cocoon area," and the queen has just pushed out a load more eggs. ;D

## 27 June 2009, Saturday

The number of cocoons has doubled now; about 30 from what I can see. Still loads of larvae in separate piles according to age. When this lot become adults the colony size will have trebled. ;D

I fed them a fat juicy fly yesterday which they devoured, and now they are tucking into a cricket. I plan on get a few tubs of medium sized locusts this week to use as ant food.

#### 2 July 2009, Thursday

The pile of cocoons is ever growing and I watched some workers bury a batch of larvae in the sand. They do this as larvae require to be against a hard object in order to weave their cocoons.

Sometimes, if the larvae cannot be buried you'll often see a worker ant standing over a larva in order for the larvae to press itself against the ant to spin its cocoon.

Some of the yellow umbratus workers have been foraging outside the nest.

#### 3 July 2009, Friday

It's Friday! No work for 2 days! w00t!

I watched a worker uncover a buried larva who had spun a cocoon. Interestingly, I noted that when first spun, the cocoons are a little translucent. I could still see the contents of the larvae's stomach in the middle.

It was also interesting to see that as the worker was removing the sand from the new cocoon, she was placing it onto a nearby larva which was ready to make a cocoon.

## 5 July 2009, Sunday

There are now about 50 cocoons at the far end of the nesting box. A new group of larvae has been moved near to the cocoons which, I guess, are next in line to become cocoons. Two more groups of larvae are located in the upper section of the nesting box (still on the surface) which are vary much smaller and younger, and finally there are two large batches of fresh eggs. The queen stays out of site a lot now.

Yesterday I gave these ants a chopped up locust and they went made for it. Again, some yellow umbratus workers joined their niger step-sisters in collecting food for the larvae and queen.

#### 12 July 2009, Sunday

The number of brood grows by the day it seems. There about 50 cocoons, two piles of larvae, with perhaps 50-100 in each pile, and two vary large batches of eggs. I also witnessed some larvae being buried in the sand as they prepare to spin themselves a cocoon; the larvae prefer to be buried as this makes cocoon-making a lot easier. Once the cocoon is complete, the worker will uncover it and place it into the cocoon pile. New umbratus workers are being "born" evary day more or less. If the umbratus queen does not tarry, then this will be a vary large colony.

#### 18 July 2009, Saturday

At least this colony seems to be doing well. The egg pile grows ever bigger, the larvae piles grow ever bigger, and there are more and more yellow umbratus workers emerging from their cocoons. I have just watched 3 umbratus workers help a new sister out of her cocoon, and there are 3 yellow-white fresh workers sitting nearby.

## 19 July 2009, Sunday

Well, I have removed the Lasius emarginatus workers from their ant farm and cleaned it out, filling it up with moist peat. I then attached it to the umbratus nesting box so that they now have a double nesting tank set up; one with sand and the other with peat. Now they can choose which they would prefer to nest in. If the move out into the peat then I shall remove the sand from the other, fill it with moist peat and then reattach it in anticipation for a larger colony.

## 19 July 2009, Sunday - UPDATE

OK. They seem vary excited about the addition to their nest set up, and already a couple of Lasius niger workers are collecting bits of peat

and depositing them into the plastic tubing that runs between the two nesting boxes. They have already figured out that their foraging box is now accessed via the new nesting box.;D

#### 25 July 2009, Saturday

The queen of this colony needs to have a rest; still she is churning those eggs out.

They are now used to the fact that the trek to and from the nesting box and the foraging box has been doubled due to the appearance of a second nesting box. So far they have not done much with the nesting box other than use some of the peat to create walled entrances at either end of the small plastic tubing that links the two nesting boxes up. The other day they moved all the cocoons into the plastic tube, treating it as a chamber of the nest.

The number of Lasius niger workers has noticeably dropped as they die off from 'old age' (though I never see the dead bodies anywhere), but the numbers of yellow umbratus workers is increasingly dramatically.

I have noticed that Lasius umbratus workers do not seem to have such naughty bottoms as the Lasius niger workers do. ;D

## 31 July 2009, Friday

Still more cocoons, still more larvae, still more eggs and many more yellow umbratus workers now present, some of which forage far and wide.

## 3 August 2009, Monday @22:30

Evary cocoon has been carried out and piled up in the plastic tubing that runs between the two nesting boxes. They seem to do this at least once a day. The cocoons are mainly carried by the larger black workers and then tended to by the smaller yellow workers.

#### 10 August 2009, Monday

I think the queen has either stopped her egg-laying or has reduced it as I can see no fresh eggs in this colony. Saying that though, the queen has moved into a hidden chamber so it is possible the eggs are in there with her. There is still a lot of cocoons and larvae present, and the colony is still living on the surface of the first nesting box.

There are many more yellow umbratus workers now and they often forage out of the nest.

#### 11 August 2009, Tuesday

Just gave these ants some locust and 5 minutes later there was a stream of yellow umbratus workers and black niger workers emerging from the nesting box, but wait! What's this? They are nowhere near the food I just put in for them. Instead they are all concentrating on something on the ground, but there's nothing there. Ah, I know what it is.

I saw an old piece of ant jelly on the ground when I was filling up their water dispenser, and so I placed a few drops of water on the dried up bit of ant jelly. It has obviously soaked up bits of the ant jelly and run into the sand. There are ants evarywhere, all cramming to get at it and ignoring the juicy locust. Interesting.

## 15 August 2009, Saturday

There has been quite a bit happening in this colony over the past few days. The first thing I have noticed is the large increase in adult umbratus workers being born, with still more cocoons and larvae being placed around the nesting box. The queen put in another appearance yesterday but has now gone back to wherever she hides.

There has also been a lot of nest expansion going on in the new nesting box, though where they are putting the soil I do not know. I have seen some ants emerging from a new hole with soil in the jaws and then taking it away to the middle of the nesting box and compacting it down so that now mound shows. Interesting.

One Lasius niger worker run down the plastic tubing between the right nesting box and the foraging tank so fast that it tripped and slid halfway down the tube before it managed to sort itself out. ;D

#### 17 August 2009, Monday

Hot Potatoes!!! One of the Lasius niger queens that I obtained from the latest mating flights died, so, yesterday, I put her body in the Lasius umbratus feeding box. There were a few niger and umbratus workers eating from a piece of custard doughnut, that I put in their tank a few hours earlier, about 2 inches away from the dead queen. One niger worker walked past the dead queen and on sniffing it immediately pounced on it and started attacking. It was obvious that, as she done this, she released an alarm pheromone as the niger workers on the piece of cake suddenly stopped eating and lifted their heads, waving their antennae about. Then these niger workers rushed toward the source of the alarm and also started attacking the dead queen. The umbratus workers, who I find to be less aggressive, did not pay much attention at first, but carried on eating as if nothing had happened. However, soon enough a few umbratus workers got their Dr Marten boots on and joined in the fray.

The queen was eventually dragged across the feeding tank and up the slope that leads to the opening of the tube to the nesting box. The entrance to the nesting box is about 2 inches up the side of the glass side of the feeding box, and the tube is about 11 inches long. To aid the ants in getting in and out of the feeding box I have made a little slope for them which leads to the floor of the feeding box at an angle of about 50-60 degrees. The slope is made from a nail file.

This morning the dead queen is at the far end of the middle box and is still being dismembered by niger and umbratus workers. The contents of the dead queen's thorax and abdomen should provide a nutritious food source for the umbratus queen and larvae.

#### 18 August 2009, Tuesday

There has been about 20 or so new umbratus workers born over the past 24 hours and still there are more cocoons and larvae present. Still no sign of any more eggs so maybe the queen has stopped laying for now. There is still nest building going on in the right hand nesting box with entrances in the soil at both ends of the box. Yesterday they were swarming around some locust and cake I gave them.

## 22 August 2009, Saturday

I found an injured male Myrmica ant a couple of days ago (could even be one of my M. rug males having flown outside), and put him into the umbratus feeding tank. Within a couple of minutes, he was found by a L. niger worker and within 10 minutes several more L. niger/umbratus workers joined in. The male was eventually dragged up the tube into the middle nesting box and taken into a tunnel entrance immediately below the tube port, never to be seen again. I wonder if that male ant ever lived it down that he was duffed up by a bunch of girls? ;D

The colony has expanded its nest into the second nesting box but the larvae and cocoons are still on the surface of the sand in the first nesting box. I am not sure where the queen is living.

## 27 August 2009, Thursday

Well, there has been a lot of activity here over the past few days. Two big fat flies flew into my room so I swatted then and put them both into the umbratus tank. Moments later they were both smother in yellow and black ants alike. They certainly love those flies.

A little while later there was an almost panic rush to get the cocoons from the sand nesting box into the plastic tube. The ants moved them so quickly that I was actually quite shocked and wondered what on earth was going on. Had something got into their nest and alarmed them? Half hour later the queen emerged from her chamber and stood on the surface of the sand where the cocoons had been. Ah! I see! It was a "Quick, tidy the place up! The queen is coming!" It reminded me of

Drew, on hearing his mum coming up the stairs, rushing around to make his room tidy like he had been told to before she came in.;D

The following morning the queen had retired back to her chamber to recline on her chaise-longue like Madam Récamier. There was now a large mound of obviously newly-hatched-from-egg stage one larvae where she had been. She's still laying loads of eggs. w00t!

The pile of cocoons grows ever larger.

#### 31 August 2009, Monday

By far my most active colony of the 5 I have; workers constantly foraging, extending or repairing the nest, as well as cleaning up. The queen often emerges for a leg stretch and is always accompanied by half a dozen or so Lasius umbratus workers. It is, generally, speaking the umbratus workers who seem to tend to the queen more so than the niger workers. I wonder if it is anything to do with the fact that the queen, being umbratus herself and therefore the natural mother to the umbratus workers, has more of an attachment to the umbratus workers than to the nigers. The niger workers by no means ignore her and there are always some near her and constantly tending to her brood.

It is odd seeing the umbratus workers alongside their bigger (generally about twice as big) niger step- sisters. It's almost like soldiers amongst workers.

They have been eating a lot recently too, which is good to see. They love bluebottles and houseflies. They also loved the honey-water I gave them, though it seems Lasius niger have a sweeter tooth than their umbratus step-sisters.

## 4 September 2009, Friday (w00t!)

Still a lot of activity in this colony with marked increase in the number of ants involved in expanding the nest into the second nesting box. Though there has been a lot of digging going on, the particles of soil that the ants are bringing up are tiny, which suggests to me that the soil is dry, so I may have to dampen it down this weekend, which is

going to be vary difficult to be honest due to the number of ants scurrying about on the surface.

They have been gorging themselves on freshly killed flies (the big fat sort) and no wonder; the number of larvae present is increasing. The queen has made a few royal visits above ground, looking vary regal, and attended by groups of umbratus workers who fuss over her evary moment of the day. It is interesting to note, as I think I have done before, that the umbratus workers seem to be the ones that tend the queen the most.

#### 12 September 2009, Saturday

Just fed these ants two flies. It is vary interesting watching the workers stream out of the nest, fill their crops with food and then stream back into the nest and head straight for the larvae to feed them. It got me wondering; how does each worker decide which larvae to feed first? Obviously if one larvae is already being fed then the worker will choose another, but as I watch the workers it is not a case of feeding the first larvae you approach. How does a worker ant know which larvae have already been fed? Can they detect a larva who has yet to be fed? Consider the way that a larva is determined to become a soldier or a queen; one of the deciding factors is the amount of food they are fed. Larvae destined to become soldiers and queens are fed more food than those destined to become workers, but how does a worker determine which one is to become a soldier or queen? And once a worker decides such and such a larva will be fed the extra, how do other workers know this larva has been chosen? It really is such fascinating material.

## 17 September 2009, Thursday

These ants have been vary busy lately and it seems they have created enough of a nest in the second nesting box to keep their cocoons within. Last night they were streaming out of the new nest moving their cocoons into the plastic tubing between the two nesting boxes.

#### 19 September 2009, Saturday

As ever, this is by far my most active colony. The numbers of Lasius niger workers are below about 15/20 at the moment, but there are loads, and I mean LOADS of umbratus workers. The nest expansion is still going on though I have not had a look inside yet. It must be quite extensive as they placed all of the cocoons inside at times, and there are a lot of cocoons.

The queen is alive and well and she has laid yet another batch of eggs which are constantly licked by the workers. I have also seen an increase in callow ants over the past week.

I love this colony.

#### 9 October 2009, Friday

These ants are so awesome! They are still extending their nest and now have a little mound around the main nest entrance, the tunnel of which is about 1cm in diameter.

I gave them a fly yesterday and within minutes it was smothered in yellow ants with the odd black here interspersed here and there. The queen came to the surface for the first time in about 3 or 4 weeks (at least from what I have seen anyway). I think she had slowed down her egg laying now as the winter approaches.

## 18 October 2009, Sunday

The two brood chambers I showed in the photographs in the previous updates are still filled with brood of all stages of development, whilst others are kept outside the nest in the plastic tube between the two nesting boxes.

I have just ordered some more Insect Protein Jelly from Edu-Sci for them as I am running low. Yesterday I filled their water bowl up but put too much in and it overflowed, covering the cotton wool. I thought it would soak in, which it did, but not enough, and when I checked this morning there were two ants in the water. One umbratus worker lying motionless on the surface, and one Lasius niger worker lying dead on the bottom of the water pool.

I fished them both out and the umbratus worker immediately stirred and after I gently blew on her to dry her off, she walked about and I place her back into the foraging box where she was greeted by her sisters.

The Lasius niger worker was motionless and I tried for half an hour to revive her by placing her on a piece of kitchen towel and blowing gently on her, but it made no difference. Her legs and antennae were curled up in that typical dead insect manner. So I asked God to bring her back to life and she twitched!!!! Moments later she stood up and washed herself. I put her back into the foraging box and kept an eye on her as I was aware that her colony scent could have been washed away due to the fact that she had been completely submerged in water. She attracted a bit of attention from her nest-mates but they seem to recognise her and accepted her back.

I have just put in two blobs of insect protein jelly and all ants are tucking into it. w00t!

#### 20 October 2009, Tuesday

The Insect Protein Jelly that I ordered from Edu-Sci at the weekend arrived at my place of work today (thanks Edu-Sci, great service!). I had to explain to people at work what it was for.

This protein jelly is different to the last lot I ordered (a year ago); the last lot was yellow, this one is white and has a vanilla smell and taste to it. Just put a blob of it into the umbratus tank. They like!

## 25 October 2009, Sunday

Today I sprayed some water onto the surface of the soil in the nesting box of this colony. As soon as it started the ants ran indoors and stayed there until I stopped. A minute of two later they streamed out of the nest looking about them and sniffing the ground. There was a flurry of small digs in the damp soil and then they went back to do their ant things.

The larvae are looking really well fed now and I can see that there will be some vary well developed workers hatching soon.

#### 31 October 2009, Saturday - HALLOWEEN

At long last the umbratus had moved evarything into the new nesting box, allowing me to detach the old one, remove all the sand, completely fill it to the brim with soil, and replace it.

Before I removed it I peeked inside the new nesting box to ensure that all the brood and queen were in there, and indeed their brood chambers were full and the royal chamber was occupied.

I gently removed the old nesting box, not forgetting to place the rubber bung in the now open end of the plastic tubing, after all, I don't want the ants exploring my room. I removed all the old sand, washed out the nesting box, dried it out and then filled it to the top with soil. I poured in some water and left it overnight to soak into the soil.

This morning I checked the nesting box and all seemed well. I topped it up with fresh soil where the water at caused the soil to drop a little, replaced the lid and gently reattached it to the occupied umbratus nesting box. So now the umbratus have box nesting boxes as they did before, but this time both are filled with soil rather than one with sand and the other soil. I did this as it is pretty obvious to me that umbratus prefer soil to sand, which is good as it makes seeing them so much easier.

As I typed this the ants are excitedly exploring the new nesting box, though to get anywhere into it they will have to dig as the soil is past the outlets. Already they are running back and forth with soil in their jaws that they have removed.

Yesterday I fed them with some protein jelly to keep them busy whilst I removed the sand nesting box.

## 1 November 2009, Sunday

Woke up this morning to find that the umbratus have been digging into both nesting boxes overnight; the mound in the main nesting box is now almost to the lid of the box.

#### 8 November 2009, Sunday

My umbratus have been vary busy digging into their new nesting box, which I completely filled with soil after removing the old sand out of it. They seem so much happier in soil than in sand. When I peek at the new nesting box I can see a small tunnel going into the box which then disappears out of site. Further along I can see a fairly large chamber with a few ants moving about in it. The mound of soil in the other nesting box is getting bigger and now has reached the lid of the box.

#### 11 November 2009, Wednesday

I have just fed my umbratus some fresh protein jelly and, as usual, they are swarming all over it and there is a long line of ants from the jelly back to the nest. With the mound that the ants have created, the entrance to the nest has moved and is now situated on the gentler slope of the hill. The entrance hole is vary large for an ant and I can see them filing down into the mounds, along a tunnel which then disappears behind the black covers on the side of the glass. It is vary interesting watching the busy highway of ants as they enter and exit the nest.

## 22 November 2009, Sunday

These ants continue to expand their nest and eat their way through their allowance.

They continue to do vary well.

## 4 December 2009, Friday

My umbratus have been vary good over the past few weeks and have loads and loads of larvae in all their chambers. The queen resides in the biggest chamber, which is also the deepest chamber in the nest and she constantly has loads of workers surrounding her. I wonder if she ever likes some "me time". xD

#### 13 December 2009, Sunday

My umbratus are currently having their dinner; locust and protein jelly, though they are taking more notice of the jelly due to its high sugar content

I have just ordered a different sort of Ant Jelly from Edu-Sci, this one being made of Brown sugar and is labelled as "high protein". I shall report on here how they like it when it gets here.

#### 16 December 2009, Wednesday

The "high protein" brown sugar ant jelly arrived today and I have just put some into the umbratus feeding tank. Two workers are currently inspecting it.

Ten minutes later....

They really seem to like it. w00t!

#### 21 December 2009, Monday

Yesterday I gave my ants some raw carrot and cucumber, just to see what they would do. They buried the cucumber in soil particles and just climbed over the carrot. I haven't seen them eating any of it.

I was just helping them toward their 5-a-day;D

# 2010

## 7 January 2010, Thursday

Today I noticed the foraging tank was getting a bit dirty from all the sticky leftovers from the ant jelly, and that the midden pile in the corner was becoming hairy with mould. So I emptied and washed it out and put some clean soil in. They are now exploring the new layout of their foraging tank.

#### 27 January 2010, Wednesday

Not much to update on this colony other than there are loads of cocoons and larvae present. I can't see any more eggs so it's possible that the queen has come to the end of her egg-laying cycle for this season. I expect her to resume in March time.

#### 5 February 2010, Friday

Today I fed my ants with some chopped up locust as I usually do evary few days. Normally the ants do not go too mad for it as there is generally always food in the foraging chamber for them. Usually when I put locust in the tank the ants eat it but do not make a big thing out of it and only a few workers eat from it.

Today, after only a few minutes after putting the locust into the tank, the ants were swarming over it in large numbers. I wonder why the sudden interest in it. There are a lot of 2/3 stage larvae present so I guess the larvae are just getting more and more hungry

## 15 February 2010, Monday

I have just ordered a new flavour of ant jelly from Edu-Sci; this one is banana flavour. I'll have to be careful that I do not get tempted to eat it myself. ;D

I have also ordered some dried flies. I am not a fan of using dried food for ants but I thought I would get some and experiment with soaking some overnight and then feeding them to the ants, just to see what happens.

## 16 February 2010, Tuesday

Just received the banana flavoured Ant Jelly and dried flies from Edu-Sci. I only ordered them online yesterday afternoon, so that is an impressive level of service.

The dried flies are not quite what I expected. I thought they would be dried whole flies, like those big ones you get coming into your house,

but this is tiny chopped up bits of fly. However, I will give it a try. First without soaking them. I will let you know how it goes with all 3 colonies.

#### 4 March 2010, Thursday - HAPPY BIRTHDAY, GOBLIN!

These ants still eat like there is no tomorrow and their brood pile has decreased due to the cocoons hatching. I haven't seen any new eggs yet but the queen is alive and well, so I expect she will resume her spring egg-laying vary soon. They are busy expanding the nest. I have just given them some brown sugar ant jelly, but I can't wait for those big fat house-flies to start coming into the house from outside. Ants love them!

#### 25 March 2010, Thursday

Got back yesterday after 10 days away from home and fed my ants.

These ants are now starting to live in the second nesting box I gave them some time ago. Before that they were just creating a new home but confining themselves to the first nesting box and the plastic tubing that goes between the two. Today I looked into the second nesting box and saw a chamber full of larvae. There are still some cocoons in the plastic tubing, loads of workers (many of which are newly hatched) and some larvae, workers and the queen in the original nesting box.

## 3 April 2010, Saturday

More brood are in the second nesting box as well as the first nesting box and the tube between the two. There are no signs of the dead Lasius niger queen I gave them last week, so I guess that must be in the bellies of the larvae by now.

I am surprised that there are surviving Lasius niger workers from the host colony still within this colony.

#### 4 April 2010, Sunday

Just gave these ants some of the ultra-fast spiders that you can find in your gardens, the ones that are normally running across brick walls or pavements.

They are currently tearing one apart and have just found the others I put in there.

#### 1 May 2010, Saturday

I gave these ants a big fat juicy fly that flew into my house yesterday. They swarmed over it and started to dismantle it. When I looked into the ant farm today I saw chunks of fly in the various chambers with several worker adults feeding from them at the same time.

I can't see the queen today as she is well hidden away somewhere, or perhaps she has gone on a royal visit to one of the other ant farms

## Friday 14 May 2010

A huge fly flew into my house today. It's now umbratus food. Ants go mad for those big fat house- flies

## 15 May 2010, Saturday

The number of cocoons in this colony is huge. There are at least 4 large piles of them throughout the nest and many other chambers that I cannot see that probably house more (as well as the queen).

Just had to rescue one worker that was stuck in some protein jelly juice

This colony is at least 15 months old (from the point the umbratus queen took over) and yet there are still at least 12 of the original Lasius niger workers still alive. Just goes to prove how long worker ants can actually live for.

#### 21 May 2010, Friday

Saw the umbratus queen yesterday. First time in several weeks. w00t! ;D

#### 22 May 2010, Saturday

I am away from 23 May to 5 Jun and so will not be able to update this journal during that time.

On peeking into the nest today I noticed a fresh batch of eggs in one of the upper chambers. As I mentioned yesterday, the queen put in an appearance. I have noticed that whenever she wanders out of her royal chamber after having been hidden for a while, a new batch of eggs will appear. It's as if the workers have kicked her out of the royal chamber whilst they clean it up.;D

#### 5 June 2010, Saturday

Just got home after 2 weeks away which means these ants have not been fed for 2 weeks. They are now tucking into a juicy fly. There are 2 large piles of newly laid eggs. w00t! ;D

## 15 June 2010, Tuesday

The queen has been vary busy - there are so many new eggs that I think she must have turned herself inside out! ;D

They have eaten so many flies lately that I am surprised all the workers can move to get out of their beds evary morning;D

This is my favourite and most successful of my current colonies. They are doing so well.

## 16 June 2010, Wednesday

I woke up this morning to discover that the umbratus workers are building a small mound of soil in the foraging chamber which has a lot of little holes leading into it. None of the niger workers are taking part. The soil in the foraging tank is only about 1cm deep so it will be interesting to see what they do with it. They have built it where some water was spilt.

#### 26 June 2010, Saturday

Today I am updating via iPhone from Marwell Zoo.

These ants are so active in the foraging tank now and they are building tunnels under the water box. There are so many ants in the foraging area now that they cannot move without bumping into another ant almost.

#### 29 June 2010, Tuesday

These ants have been so naughty over the past couple of days. Because they are so much more active at the moment they are exploring evary nook and cranny of their foraging box. As a result, they are finding ways to squeeze out using the tiny gaps between the lid and the tank. I often find 1 or 2 niger/umbratus workers running about on the outside of the tank.

## 9 July 2010, Friday

These ants are so naughty! Evary time I fill up their water bowl they dump a load of dirt into it. The water soaks into the dirt, spills over the sides of the bowl and soaks the soil around the bowl. They then pile soil into the water and then once the water has soaked up they dig into the soil. They have created loads of tunnels around the water bowl.

#### 31 July 2010

These ants are still being vary naughty with their water supply. I changed the lid I had for an egg cup to prevent the water soaking out onto the soil in the foraging tank where they keep dragging soil into it. Now they are carrying soil particles up into the egg cup and placing it on the damp cotton wool there and have made a little hill with holes in it.

These umbratus workers are obviously learning naughty things from the niger sisters.

#### 16 August 2010, Monday

Today I was using the grill in my kitchen not realising that there was a tea-towel on top of it. A few minutes later I could smell burning and when I look the towel was smouldering and was about to burst into flames.

The smell of burning spread throughout the whole house and obviously my Lasius umbratus detected it as they erupted into a mass of activity as if they were trying to discover the sources of the burning smell and wondering whether it would be heading their way.

They are calming down now that the smell is fading. Was interesting to watch time though.

#### 21 August 2010, Saturday

Please note that this will be my last update for this journal until Christmas time as tomorrow I will be working away from home.

There is still a load of eggs, larvae and cocoons developing in this colony and the number of workers continues to grow. I am expecting the egg laying rate of this colony to slow vary soon due to the fact their fresh food intake will drop significantly whilst I am away and due to the winter approaching.

## 29 August 2010, Sunday

OK, despite the fact that I said the above on my last journal update, I have had the unexpected pleasure of a week at home starting yesterday, so I thought I would make an update or two during that time. I am away again on Sunday 5 Sep 10 and so the above writing in green is still quite extant.

Today I gave my umbratus 2x house flies and 1x "daddy-long-legs" (crane fly) - and before anybody comes out with the old fable that the crane fly is the most poisonous insect in the world but simply does not

have the fangs to deploy that poison: that is false. That fact refers to the spider often called the "daddy-long-legs", not the crane fly.

Anyhow, they have tucked into all three with much gusto. I have noticed that have put a small number of cocoons into the tube that links the nesting box number 1 to the foraging box. The proplem is that some of the cocoons keep rolling down the length of the tube as they have placed them too near the sloping part of it.;D

#### 4 September 2010, Saturday

Please note that this will be my last update for this journal until Christmas time as tomorrow I will be working away from home - and this time I mean it (I think).

The workers have been bringing all the cocoons out of the nest and into the tube between the nesting box and foraging box. Sometimes they have even piled them at the bottom of the ramp leading from the far end of the tube into the nesting box itself. Whenever they do this there are always plenty of workers standing guard over them.

Plenty of larvae present in the first nesting box and the queen spends most of her time in her favourite spot - the tube between the two nesting boxes.

## 9 October 2010, Saturday

I managed to get a few days at home for this weekend which is an unexpected bonus.

I purchased a tub of wax-worms on the way home and have just given my Lasius umbratus one. It is the first bit of insect protein they have had for about 6 weeks, so they are vary hungry and appear to be enjoying it. In fact, they are swarming around it so much that I have had to put another one in

Can't see the queen just yet but looking into the next there are several batches of eggs, loads of larvae and callow ants.

#### 12 November 2010, Friday

I am home for 5 days. w00t!;D

My umbratus colony are doing well. Loads and loads of Larvae but no cocoons. The ants were initially sluggish as there was no heating on in the house, but when I turned it on they became vary active.

Just chopped up 3 wax-worms for them and now they are on a feeding frenzy. Can't see the queen but she often disappears for days on end.

#### 13 November 2010, Saturday

Just seen her Majesty. She's in the middle of the nest, which is unusual for her. :D

#### 18 December 2010, Saturday

I am back home for 2 weeks! w00t!

My Lasius umbratus seem to be doing well, loads of brood present. Because the house was empty and no heating on they were quite sluggish, but now they are warm and tucking into some freshly killed wax worm.

Can't see the queen but I am sure she is safe.

## 23 December 2010, Thursday

I gave my Umbies some more cricket today. I chopped a cricket's head off and placed the body into the foraging tank. The body was still kicking its legs about for nearly ten minutes, and the umbies were attacking it with such tenacity. One or two of the workers were clinging onto the legs of the dying cricket as they twitched violently, causing the ants to cling on for dear life.

#### 24 December 2010, Friday - Update

I do have some crickets really

Just fed them some, and they are swarming around it now. I also gave them a treat; a piece of Quality Street candy (chocolate with orange cream centre). The Lasius niger workers within the colony went straight to it, whilst the Umbies went to the crickets. Those L. nigers really do have a sweet tooth. xD

#### 27 December 2010, Monday

Just fed these ants with a mixture of cricket, wax-worm and orange segment. I am trying to over- feed these as much as I can as I go away in 1 week for about 3-4 months, so I need to plump them up.

# 2011

## 2 January 2011, Sunday

First journal entry of the year and perhaps the last for a while as I am away from home from today until mid-April.

Just fed my ants for the last time until I am next home. I have placed a whole tub of protein jelly in their tank with an ant-sized hole in the lid in an attempt to keep it as fresh for as long as possible.

## 25 February 2011, Friday

Home for the first time since Christmas, albeit just for the weekend. Just checked on my Umbies. They are vary sluggish at the moment as there has been no central heating on for them. There seems to be a vary slight drop in worker numbers but still a lot of larvae. I believe because of the cold and time of year their brood development has slowed down a lot.

Can't see the queen at the moment, but not too worried.

#### Friday 8 April 2011

Got home last night and checked my Umbies. There seems to be a lot less larvae about, no cocoons, and no greater number of workers. It is possible that many larvae have died due to poor diet as I have been away and not able to feed them, or it could be that the cocoons are hidden away.

Anyway, there are piles of first instar larvae about and the queen is alive and well. I have just fed them some wax worm which they are swarming over now.

#### 24 April 2011, Sunday

Just fed my Umbies a fly and a hover fly. They are swarming over both. I noticed they were also looking on their water bowl which had dried out. I put some more water in there and now they are drinking from it.

## 2 May 2011, Monday

Today I go away from home again so I need to put in a whole tub of Ant Jelly to last them until I get back.

Next update: When I get home next.

## 14 May 2011, Saturday

Today I added a second foraging tank onto my Lasius umbratus set up, so now it consists of:

Ant Farm----Second (large) foraging box.

One Lasius niger worker and one Lasius umbratus worker have discovered it. There's food and ant jelly waiting for them in there, as well as a new water reservoir.

## 2 June 2011, Thursday

This colony is still doing vary well and they have a huge pile of cocoons, some larvae and two large batches of eggs. The queen is still doing well and the ants are eating for Sweden! ;D

#### 4 June 2011, Saturday

Loads of brood still present in the nest and the queen's abdomen is back down to its normal size. I can see two large clumps of eggs on the nest. I gave them some strawberry Angel Delight yesterday but they didn't seem to like it.

I will place a picture of the current state of the cocoon chamber when I log on with my laptop.

#### 5 June 2011, Sunday

I'm sitting here playing on my laptop and my ant farm is on the desk behind my laptop. As I type this I am watching the umbies do their daily task of bringing out all the cocoons from the nest into the long plastic tubing linking the main nesting box to the first foraging box. It's pretty cool watching then do thus.

## 1 October 2011, Saturday

Managed to get home today for 2 days (leave home again tomorrow).

This colony is doing vary well; so many brood I can't count and about 200-300 workers. The queen is there somewhere but I can't see her at the moment.

I just fed them some wax-worm and moths; their first fresh food for about 4 weeks.

They still have loads of ant-jelly left so they have had plenty to eat in my time away. Their water supply is 2/3 full still.

#### 2 October 2011, Sunday

Just had a bit of a scare; looked into the umby nest and saw the queen abdomen and nothing else, surrounded by ants. I thought, "Oh noes, she's dead and they have dismembered her!" Then I saw her move and saw the rest of her body. Phew! ;D

#### 16 December 2011, Friday

Well, I am now at home, so I am.

Just taken a look at my umbies. There has been a drop in the number of workers but not as much as I had expected. There are still loads of larvae present but I can't see the queen. She often hides and so I am not that concerned yet.

They are a bit sluggish due to the cold and the fact that there has been no heating on, but the heating is now on in my house and I have chopped up 3 crickets for them. They have not found them yet.

#### 25 December 2011, Sunday

My umbies woke up today to find that the Ant-Santa had brought them presents of sugary delights which they are tucking into now. >.<

They have been a bit naughty in that they have caused their water supply to leak out onto the floor of the foraging tank. I guess they were having a bit of a party last night. ;D

## 28 December 2011, Wednesday

I woke up this morning (at 5:30!) to find a worker ant drowning in the juices of a cut up wax worm. I immediately set about to rescue her by getting a piece of kitchen towel and touching the ant with it. The juices covering her were soaked up and the ant stuck to the paper. I gently blew on her then placed her in the foraging tank. Within 1 minute there were 5 of her friends on her, cleaning and examining her. There's not much movement from her at the moment but hopefully her friends will be able to revive her.

#### 29 December 2011, Thursday

She never made it. She is still on the piece of kitchen bowl in the foraging area. Other ants examine the body from time to time as if trying to get a response. She must have been drowning for too long before I managed to rescue her.

# 2012

#### 1 January 2012, Sunday

I have had this colony for almost 3 years now, having obtained them from Antstore in March 2009. At the time the colony arrived with a Lasius umbratus queen, brood, and some 30 Lasius niger workers. They are still doing well today though there are no more Ln workers, it's all completely Lu now.

They don't seem to have been that hungry over the past couple of weeks but I put this down to the time of year. I have just given them a couple of chopped up crickets.

## 3 January 2012, Tuesday

This is my last week at home before I travel away from home again on Sunday.

I have just given my umbies some Raspberry conserve. I have noticed that my ants seem to prefer to eat food directly off the ground rather than having it put into little plastic tops.

## 5 January 2012, Thursday

Just gave my Umbies some roast chicken breast. They seem to like it.

#### 26 February 2012, Sunday

Haven't been home to see my ants since 8 January, and won't be home until April. I hope they are okay. Because all the heating would have been off at home whilst I am away I am hoping it has got cold enough for them to either go into light hibernation or at least for their activities to slow down enough so as not to require much food.

#### 26 March 2012, Monday

Well, I got home on Saturday evening and yesterday I went into town and brought some locusts for my ants. I checked out all the cricket tubs but saw no dermestids in amongst them

My ants seem to be doing well, there appear to be no decrease in population and there are plenty of larvae present; hopefully many of them will become larvae vary soon.

I can't see the queen but she often hides away and although there are plenty of wide tunnels to be seen, there are, I guess plenty more hidden away in the centre of the soil, and that is where she probably is.

These ants seem to prefer to build tunnels that are wide and serve as chambers as well. The tunnels are on several levels from the top of the nesting box to the vary bottom. They still live in the inner most nesting box and although they venture into the other one, they rarely live in it.

## 31 March 2012, Saturday

I have some fruit in my fridge and so i am going to give a piece of each to my umbies and see what they prefer. I am going to give them;

1x piece of red grape 1x piece of green grape

1x piece of blueberry 1x piece of strawberry

## 7 March 2012, Saturday

Last day at home today. Tomorrow I travel away from home again and won't be back until August. My umbies have frustrated me over

these 2 weeks that I have been home since they have eaten vary little; and considering I have been away for 3 months and not been able to feed them, it is frustrating to see this happen. However, there are plenty of larvae and ants present and the queen seems well.

Hopefully they will be fine over the next 4 months. Later this year I go away for 8 months!

#### 31 July 2012, Tuesday

Only two weeks to go and I will be home for three weeks and will be able to see my Umbies for the first time since April. I bet they are hungry >.<

#### 11 August 2012, Saturday

Hey my awesome Umbies! I'll be home in about 11 hours! Can't wait to see you. Hope you are all well. What would you like me to bring you back to eat?

## 14 August 2012, Tuesday

Home!

KK, the foraging tank stinks! and it's stinking the room out. I need to empty it, wash it, and put some fresh stuff in there, but the proplem is that there are so many ants in the foraging tank that it's nigh on impossible to remove them all.

I am just doing some spring cleaning in this room then I am going to attempt to pick up evary single ant and clean out the tank.

So I cleaned out their two foraging tanks today, one of which stank. There were still about 50 ants in the main tank when I emptied it out but I employed an idea of bunging up the tubes running into the tank to prevent more ants from coming in and then I emptied out the contents onto the floor and scooped all the ants up. I cleaned their tanks and reattached them before returning the ants back. They seemed to have settled already, though some were discussing what had happened over a drink or two.

#### 15 August 2012, Wednesday

Great! The new foraging tank I am using is not ant-proof and today when I came downstairs there were about half a dozen ants on my desk. I'll have to get some PTFE or whatever it's called from AntsUK.

The ants are still exploring their two new foraging tanks and there is still a fair few on the water trough.

#### 16 August 2012, Thursday

Well, my awesome Dermy bud, you are closer to the truth than you think >.<

I managed to use an electrical gadget to prevent more escapees. I always have an external USB Hard drive attached to my labtop so that regular backups can be made in case anything goes wrong (and it's saved me a lot of aggravation in the past). I found out that the lid in one corner of foraging tank number 1 did not fit quite right and there was enough of a gap for the umbies to crawl out of. I put my external hard drive on top of the tank over that corner and that seems to have closed the gap. No more naughty umbies on my desk.

Today I put two rocks in one of their foraging tanks that I found outside. They found them to be vary interesting and they were swarming over them both for over an investigating it and having a sniff of it.

I fed them some cricket, mealworm, wax worm, raisin and traffic light cream cake today, all of which they tucked into.

## 22 August 2012, Wednesday - Happy Birthday Andrew Pope

I now have quite a number of mealworm beetles that have hatched from the large/pupae I had when I brought this tub. I have just given the umbies their first bettle and they are examining it now. I also gave them a piece of strawberry yesterday and they have buried it >.< Oh, and this is mine..

#### 24 August 2012, Friday

Hi Dermy! ;D

I just gave my ants a fresh piece of TESCO raspberry, and they are swarming all over it.

#### 27 August 2012, Monday

My last week at home before I disappear until next May

#### 28 August 2012, Tuesday

Unusual. My umbies are bringing their cocoons out of the nest and placing them in a pile on the soil of one of their foraging tanks.

#### 29 August 2012, Wednesday

Again my naughty umbies are taking cocoons out of their nesting box and placing them next to a brick in the first foraging tank >.<

## 2 September 2012, Sunday

I am leaving home today with the possible exception of one night at home in the middle of this month I will not be home again or see my Umbies until May next year. I have put two pots of protein jelly in their tank but that will not last them. I am hoping they'll hibernate this winter or at least go into a semi-hibernation state.

The coach I'm on has a sign saying no pets. I have a tub of beetles in my bag

I feel a bit like Dermy when he goes to his nan's and takes his Dermestid beetles with him >.<

#### 19 September 2012, Wednesday

Unexpected night at home tonight. The Umbies are doing well. There are loads of cocoons in the tubing between the nesting box and foraging box, and I can see some new 1st instar larvae.

#### 7 October 2012, Sunday

This post is a bit late as I have actually spent the last 4 days at home, the last 4 days that I will be home until May 2013. I am now away from home.

The Umbies seem to be fine - loads of cocoons, quite a few 3rd instar larvae and a number of 1st instar too.

I didn't see the queen until my vary last day at home. She looks well. I have left them with two tubs of ant jelly, plenty of water and a strawberry cream candy to help them over the next eight months.

# 2014

## 3 August 2014

First of all, apologies for the huge gap in this journal but I had lost my original journal. If it wasn't for Dermy all of the entries up until now would have been lost forever. Thanks Dermy!

I have just returned home from 6 months out of the country. Before I went the colony consist of about 100 workers, one queen and loads of brood. Now the brood numbers have increased dramatically, though the colony population size is still much the same. During the four and one half years I have had this colony their growth has been vary slow due to the fact I spend so much time away from home that they do not get the right amount of food. Hopefully over the next few years I will be at home a lot more and be able to get this colony to grow to its true potential. I am home for a good period of time I will be able to give them plenty of food which will cause their colony, hopefully, to flourish.

#### 8 August 2014

This colony has been so active since I got home and started feeding them proper amounts of food, giving them; wax worms, flies, crickets and fruit beetle larvae, which are quite large – they loved that!

There is a huge amount of brood; eggs, larvae, and cocoons scattered throughout the nest. I can't see the queen but she often hides herself away, but I will keep checking though. There is a new batch of eggs so I assume she is still doing well.

#### 18 August 2014

This colony has been so busy over the past few weeks and their hunger has increased dramatically, probably due to the large number of hungry larvae that are in the nest. In fact, they are so hungry that if I don't give them fresh food for more than 2 days the start climbing all over the glass walls of the foraging tank, something they don't usually do. Problem with this is that they are more likely to discover small holes between lid and tank and get out, which is in fact what they have been doing. These ants have been almost as naughty as Lasius niger. However, when I put new food into the tank they vary quickly stop trying to get out and satisfy themselves with the food provided. Today I gave them a fruit beetle larva, a fat fly, which they loved, some cricket and a hover fly.

I am also pleased to say that I have spotted the queen; she is now living in the second nesting box where most of the eggs seem to be kept. The soil in this nesting box is damper than that of the main nesting box. They have been putting most of the cocoons into the small tube between the first and second nesting boxes.

I have brought myself a nice camera and have ordered a macro lens for it to take close up pictures, hopefully, of my ants. It should arrive on Wednesday.

#### 22 August 2014 – Happy Birthday Andrew Pope

My umbratus continue to be busy with brood rearing and, for the queen, egg laying. They have been eating a lot of food lately and not surprising considering the large number of larvae.

I have moved this colony's nest to my spare room which gets a lot lighter than down in my living room as it is a south facing room. It will also enable me to hibernate them this year as I can keep the window open and isolate the central heating from that room, enabling the temperature to reflect that outside. It's also given me a lot more room on my computer table for other things.

I got my camera with a macro lens. The results are not as good as I expected but be honest I think I am expecting too much of myself. I have only just started photography and though my camera and macro lens came to a total of about £800, which seems a lot, I won't get Alex Wild standard pictures as he is a professional and his equipment probably runs into the thousands of £s. However, I am learning how to take better pictures, and you can see these on the main website on the My Ant Photos page.

### 29 August 2014

I think my ants prefer it in my spare room as their foraging tanks gets a lot more natural sunlight on it, the nesting box also gets a little sunlight on it which I am sure will keep the nest nice and warm. The window is always open and so the temperature in the room tends to stay much as it is outside, perhaps a degree or two warmer. I think this is a much better environment for them. I could move them to the garden shed but what about if somebody breaks into it and stelas or smashes the farms up? It's safer in my spare room.

I took a peek at them last night, without putting the light on but using a torch to see in the darkness. I noticed that the umbratus were vary active, with a lot of them having decided to eat from some cream of a fresh cream cake I put in there the other day. I have managed to get some better pictures of them due to the more natural light, though they are still far from impressive.

These ants have also been placing their cocoon into the long tube that runs from the main nesting box to the foraging box, though they seem to keep them near the nest than the foraging box.

I gave them a fruit bettle grub, some cricket pieces and some pieces of meal worm. I also gave them some protein jelly too. Lots of brood still in the nest.

#### 13 September 2014, Saturday

Just got back after two weeks away and checked these ants. I noted that many of the large chambers they have are empty of ants and brood; it gave me a bit of a start as I thought they had all died or something. But then I noticed that the larvae are on the soil surface within the darkness of the nesting box cover, and that the cocoons and queen are in the second nesting box. I have noticed that since moving the set up into my spare room, which is a south facing room, there is a presence of condensation inside the chambers, it seems they do not like this vary much. I'll keep an eye on this in case it starts to cause proplems.

I have just fed them with my last cricket, some fruit bettle grub and protein jelly. That have discovered all three and are swarming the three bits of food.

# 21 September 2014, Sunday

The amount of brood in this tank is huge. There is a vast amount of larvae on the top of the soil in the first nesting box (which is always totally covered) and piles of cocoons on the tube between the two nesting boxes. The other day these ants were extremely naughty when they emptied the whole of the water reservoir into the bottom of the foraging tank causing all the soil to become saturated. They started building holes and tunnels in it but I had to remove all the soil as it started to stick where it had made buried food wet. It took about an hour to remove all the soil and sift all the ants out of it >\_<

Just now I gave them a crane fly ("daddy-long-legs)n which I generally feed my ants at this time of year as they are abundant now.

#### 4 October 2014, Saturday

Well, yesterday I almost had a disaster which was narrowly avoided. I had fed my Lasius umbratus in the morning but had not replaced the lid properly; I didn't check it – lesson learnt.

A few hours later when I went to the ant room to check on them I saw large amounts of Lasius umbratus workers roaming about on the surface of the table thing that the ant farms stand on, Lasius niger farm included. It was immediately obvious that a lone worker had found something on the table and recruited its friends, but I knew it couldn't be food as I am always careful to clean up any food spills. Then I noticed a dead Lasius niger ant and it dawned on me what had happened.

Evary so often those naughty Lasius niger send out a worker to sneak out of the nest and look around on the table. Unfortunately, this poor worker must have bumped into a Lasius umbratus worker. Whether this umbratus worker first killed the niger worker, or immediately ran off to get its mates, or, and this is most likely, there were more than one umbratus worker out, and will one or more attacked the niger worker, another umbratus worker must have run back to the nest to get help. The umbratus colony was certainly in a state of alarm and were running about evarywhere both in and out of their set up. Fortunately, there were no other niger workers about and the one they attacked was not able to get back to raise the alarm, otherwise there would have been a large fight with many casualties. I managed to pick up all the umbratus workers and place them back into their set up, and this morning there are no more wanderers. I was vary luck there!

I have noticed that since placing the ant farm in my room near the window the umbratus workers have moved all their larvae out of the main nesting box and placed them either in the second nesting box, the tube linking the two nesting boxes, or on the surface of the soil in the main nesting box. I think this is because the sun shines directly onto the main nesting box and it's either getting too warm or too much condensation is building up once the sun moves along and the temperatures drop inside. I'll have to look into this further and see what I need to do.

#### 25 October 2014, Saturday

I have neglected my ants over the past three weeks due to the fact I have been away a lot of work related courses. Now they have finished I should be home a lot more often.

The population seems to have taken a dip though there are still a lot of brood present. I was worried a little as I hadn't seen the queen for some weeks and wondered if she was still alive. I am happy to say that one checking the nesting boxes today I saw her quite clearly in one of the upper chambers.

I have just fed them with some wax worm and black cricket which they are currently swarming over.

Activity has slowed a little as I prepare them for hibernation, but still plenty to see going on.

### 2 November 2014, Sunday

Not much to report really. Still plenty of worker ants out foraging and still loads of larvae and a small amount of cocoons in the nest. I also noticed a lot of callows too, some of which were evidently only just having been eclosed. Still no sign of the queen though, but I did see a group of ants all turned inwards but I couldn't see what they were surrounding. Chances are it's the queen.

Just fed them with some cricket, wax worm and half a tub of protein jelly.

### 15 November 2014, Saturday

Just took a look in the nest of these ants and was vary pleased to have seen the queen after she has been hiding from me for a few months! She is at the vary bottom of the nest in a chamber that descends into the clay granules at the bottom of the farm. She is surrounded by slow moving workers, including most of the callows. It would seem to me that these ants are in a semi- hibernation phase. There are still lots of ants and brood spread throughout the nest, including right near the surface, but it seems the queen and callows have decided to move way deep into the nest. The number of callows is vary large and it would seem that all the cocoons have eclosed as all I

can see are larvae, and no eggs. Perhaps the queen has now seized egg production for this year.

Though my ants are kept in my spare room with its constantly open window and isolated from the central heating, because it's a south facing room it still gets fairly warm, certainly warm enough for the ants to forage. The sun shines directly into the foraging tanks so any ants in there are more active though those in the nest. However, October and November have been quite mild so far, but once the winter really creeps in I hope it will get colder in the ant room.

I have just fed them with some black crickets, Wax worms and a large blob of vanilla ant jelly.

Oddly these ants seem to ignore any food I place on dishes, but rather appear to prefer their food placed directly on the soil n their foraging box.

### 30 November 2014, Sunday

Although I am trying to hibernate these ants in my spare room the ants are sometimes quite active, as they are today, because the ant room is a south facing room and therefore can sometimes get quite warm. Today it's almost 19\*C in there. Just took a look in the nest of these ants and all, literally all, of the callows are huddles together at the vary bottom of the nest around the queen.

There are still many older workers and larvae in the other chambers of the nest. I note that there are no cocoons and no eggs, so it's probable that the queen has stopped laying eggs now.

It's supposed to be getting vary cold over the next few weeks, so I'll see how the ants get on with their hibernation. Though not as cold as it gets in Dermy Land >.<

### 14 December 2014, Sunday

These ants are now hibernating. I will wake them up in February 2015.

# 2015

### 15 February 2015, Sunday

Well, though these ants have been in a hibernation of sorts they haven't really hibernated in the true sense of the word. The remained in their nest a lot of the time but were less active within the nesting box than my Lasius niger were. However, they were more active outside the nest, in the foraging box than the nigers. It seems that Lasius umbratus do not mind foraging in slightly cooler temperatures as compared to Lasius niger.

I have decided to give them a bit of a boost now by providing them with a heating strip for their nesting box. I have placed the heating strip underneath half of the second nesting box, the one they tend not to use so much. Doing this makes it easier to observe the effect of the heat on the ants; will they move into the second nesting box? The box sits on the heating strip, which is a simple 10-watt thing, but no more than one half of the nesting box is on the heating strip as it is vary important that they ants are able to get away from the heat source if they wish. Saying that though, the strip only really gets hand warm so it's not like they are going to cook. It'll be vary interesting though to see how they react to the heat, that is, will they move all their eggs over the heat source? Will the dig down to attempt to get nearer the heat source? In fact, the mat has only been on for a few hours and already the ants are much more active in their nest. The only thing I will have to watch out for is condensation. I have the heat strip on a timer which comes on at 8AM and turns off at 10PM. I am interested in seeing how the heat strip affects egg-laying and brood development.

### 2 March 2015, Monday

Okay, so I have woken these ants up by giving them a heat mat and closing the window in the ant room, which has brought the temperature up to a cosy 20\*C. Now these ants are extremely active. I gave them some cockroach, darkling beetle and brown sugar ant jelly yesterday, which they swarmed over. A fair few larvae but no cocoons present so far this year. I also changed their water as it was starting to smell.

I am going to see if I can get this colony to at least triple in size before the hibernation phase at the end of 2015. I am going to try one of Dermy's OFCs (Over Feeding Challenge) that he often uses on his dermestids.

### 7 March 2015, Saturday

It's a nice day outside, one could be forgiven for thinking it was later spring already, but it's another 2 weeks before we go from winter to spring.

My Lasius umbratus have been vary active this week and are constantly eating, even more so that those naughty Lasius nigers. They still seem to love the ant jelly more than anything else I give them, but I continue to give them insect food as often as I can.

I saw the queen the other day though she was vary difficult to find due to the fact that she is constantly covered by worker ants it seems. But she is alive and well and looking plump.

One of my Lasius niger workers was in the umbratus foraging tank today, but I don't think she was seen.

# 4 April 2015, Saturday

I have just given my Lasius umbratus 2 crickets and 2 wax worms. This makes a total so far of 31 PIC in my Dermy-style OFC.

There are quite a few larvae in this next but not vary many cocoons. I also brought a new heat mat for them which gets a little warmer than their previous one. I gave their previous one to my

cockroaches. I have to be honest and say that it appears that Lasius umbratus are not heat lovers in the same way that my Lasius niger are. When their heat mat comes on (it's on a timer, off at night, on during the day to mimic the fact that it's colder at night in real life), the nigers take all their cocoons to the bottom of the nest, as the heat mat is underneath the nesting box. But my umbratus tend to keep their cocoons near the top of the next as if though they prefer to keep them cooler rather than warmer. I'll keep an eye on this and see what happens if I remove the heat mat soon.

### 12 April 2015, Sunday

I have just given my Lasius umbratus 2 crickets and 2 wax worms. This makes a total so far of 36 PIC in my Dermy-style OFC.

My Lasius umbratus are nowhere near as active as my Lasius niger; in comparison these lot are vary slow. I have noticed that they do not like light and heat as much as the Lasius niger and these tend to forage more at night. They have spread themselves throughout the two nesting boxes and have been more active in the unheated box than the heated one. I'll continue to keep an eye on this.

I have also notice a colony of Springtails living in the foraging box of this colony, but they do not seem to bother the ants any and the ants do not bother them. I have been told they are good to have as they help break down waste material. I haven't notice any on the ants or in the nest.

# 16 May 2015, Saturday

I woke up last Sunday, bearing in mind my two ant farms are about one foot from my bed, and I glanced bleary eyed over at my ant farms. I notice a Lasius umbratus worker running about on the table top. This didn't alarm me as it's not unusual for an ant or two to get out of their nests and explore their new found surroundings. Then I saw another. "Hmm, two! Naughty ants!" I thought to myself. Then I saw another, and another, then a whole bunch of them! *ZOMG!!! A mass break-out*! I quickly jumped out of bed and took a closer look. There were yellow ants

evarywhere! I had fed them the previous night and had not replaced the lid properly. It took me about an hour and one half to get them all back into their nest using the shaving brush method. It's normally the Lasius nigers who have to have their bottoms smacked for being naughty, but this time it was the turn of the Lasius umbratus. I believe I managed to collect them all (about 70-80 ants got out) as I haven't seen any more lose ones running about on the table or floor.

Oh, the shaving brush method mentioned above is simply a way I collect stray ants. I just get a clean and dry shaving brush and lightly sweep it over the ants. The automatically seem to cling to it. I then hold the brush with the ants on it over their box and tap them into it. It seems to work better with Lasius niger than with Lasius umbratus as the latter tend to roll about under the brush rather than grabbing it as the nigers do, but they get the idea eventually.

### 6 June 2015, Saturday

Have fed these ants several times over the past week, giving them waxworms, flies, crickets, ant jelly and morio worms. They have been busy, but not as active as the Lasius niger are. Still, they are up and active earlier than I am at even at 5:15 AM when my alarm goes off. Saw the queen the other day looking healthy.

# 1 July 2015, Wednesday

During the past month the umbratus colony has had an explosion of activity with workers foraging in large numbers and eating loads of food. When I peeked inside the colony I saw piles upon piles of larvae; no wonder they are so hungry. The queen is looking fine and dandy and is busy churning out those eggs. I uploaded another video clip of these ants which showed the tubing that emerges from their nesting box to the foraging bin. At first it was quiet but then I put some ant jelly in and you see several excited ants rush into the nest. Over the next 6 or 7 minutes the ants come running out in large numbers to have a piece.

#### 6 August 2015, Thursday

These ants have been constantly foraging and have over taken the Lasius niger colony in foraging activity. I looked into the nest and saw huge amounts of larvae which would account for the busy foraging activity. These ants are eating me out of house and home >.<

### 9 August 2015, Sunday

Today I fed my Lasius umbratus four waxworms and a piece of ant jelly. Still they are like a tide of ants when I put food in. Something tells me I am going to have to increase their feeding. I have peeked inside their nest and there are a lot of cocoons from the larvae that were present. I can see a whole chamber of first instar larvae and a few older ones so the feeding frenzy will probably continue for some weeks.

A few escaped yesterday when I left their lid off after getting distracted; only about ten so it was easy and quick enough to scoop them all back in.

### 27 August 2015, Thursday

Bad ants! Bad! Well, if I am honest it was my fault. I had fed them and once again had failed to replace the lid of their foraging box afterwards, and I went out. When I got back home and checked on them, what did I see? Ants evarywhere! Took a few hours to scoop the wandering workers back into their nest. There were about 100 ants out of the 400 or so that live in this colony. Still loads of cocoons and larvae are present, but the feeding frenzy they have been doing over the past couple of months appear to be settling down now.

# 26 September 2015, Saturday

I have now moved these ants into the Winter Room, a spare room in my house which as the window constantly open and the heating isolated in order to reduce the temperature in and around the ant farm close to that outside in order to encourage hibernation, even if it's just a semi-hibernation phase. They have been ion there for a week now and the lower temperatures have caused a lower amount of activity.

#### 31 December 2015

These ants are currently hibernating with vary little activity; therefore, I will not update this journal until they wake up – probably in March.

# 2016

### 3 April 2016, Sunday

Welcome to the 8th year of the Lasius umbratus colony.

This week I turned on the heating and closed the window in the ant room to get these ants out of hibernation, though to be honest they hardly went into hibernation as it was. They remained quite active and still foraged in large numbers. When food was found they recruited in large numbers too; quite a contrast to the Lasius niger 5 colony which only out a few ants for the whole winter period.

I have just fed them some cockroach and protein jelly, and I will be feeding them a lot over the next few weeks as they have a lot of larvae on the nest, which will get vary hungry as they become more active.

# 26 June 2016, Sunday

Oops, sorry, didn't even realise I had not updated this, or my other journals for 2 months. I tend to update them regularly on the forum and keep forgetting to transpose those updates onto here.

These ants have become so active over the past two months, it's incredible. Whenever I put food into the tank they swarm all over with hundreds of ants emerging from the nest to feed. I have put some clips up on my <a href="YouTube channel">YouTube channel</a>. Lots of brood present throughout the nest. No fliers this year, though I wasn't really expecting any if I am honest, as I need to give them a lot more food than I am doing now for that to happen, but I do plan on trying next year.

Oh, one bit of advice: If you ever decide to film your ants by taking the lid off the foraging tank and placing them camera up close, make sure the camera strap is not hanging into the tank itself. Yes, I did that yesterday and when I went back ten or fifteen minutes later the camera was covered in little yellow ants >.<

# 29 September 2016, Friday

Again, I apologise for the lack of updates. It just seems I have such little free time to update these journals. I will try harder to do these more often. Thank you to evarybody who reads these journals.

This colony is doing well and the queen continues to lay more eggs, though it does seem she is slowing down now as the colder weather approaches.

Had a bit of a break out the other week, perhaps about 50 ants or so. I didn't re-apply the escape-proof coating on the inner lip of the tank and so they got out. Much easier to collect up again than when the Lasius niger escaped. They continue to eat constantly on a diet of protein jelly and freshly killed insects, including flies, cockroaches and crickets. I have seen they often move their cocoons into the tube that links the first nesting box with the foraging tank as it dips low above the heat mat. I need to turn that off as the winter sets in.

# 12 December 2016, Monday

They have all but moved out of the second foraging box and into the first one, as the first one is nearer a radiator, and with winter setting in they are looking for the warmest part of the nest. Lots of rood present but I think they are slowing their development due to the time if year. I am considering attaching one of my acrylic horizontal nests to this set up with a form of heating to see what they do. Problem is, I don't want them flailing it up with soil. Yet again they have draining all the water from their water trough by filling it up with dirt. So annoying! Queen still going strong after 7.5 years.

# 2017

#### 13 June 2017, Tuesday

Welcome to the 9<sup>th</sup> year of the Lasius umbratus colony. Please accept my apologies for the huge delay in updating this journal. So much has been going on in my life over the past 6 months, including my leaving the Armed Forces after 24 years service, renovations to my house, and various other things that have taken up my time. Currently I am taking 6 months out to relax and enjoy life before I start looking for work again, so hopefully I'll be motivated enough to keep on top of the journals this year. So, on with the journal.

KK, so these ants remained active during the winter months since they are kept indoors. They were in the spare room but that spare room has now been converted into a bedroom, which a police friend of mine now rents from me. I have had some renovations to my house which included the building of a small utility room at the rear of my house in which I keep, among other things, my ant colonies.

There were larvae in the nest during the winter months but they appeared to go into a state of stasis, pausing their development. Once the spring came then things really started getting busy in the nest. There are now currently about 200 cocoons in the colony right now, lots of larvae and eggs, and the queen's abdomen is so swollen with eggs that I can see the white elastic tissue which connect the abdominal plates together. Normally you can't see the white tissue between as they are hidden by the plates. But when the abdomen becomes swollen the plates move apart and the white tissue becomes visible.

The ants are eating like mad now, and I have started an overfeeding challenge like Dermy used to do with his dermestids. I gave them a big blob of protein jelly yesterday. This morning there was no sign of it whatsoever. I have been giving them large Cuban Burrowing cockroaches, and within a few days all that is left is a completely cleaned out shell.

So, again my apologies for the delay in updating this journal. If you read them regularly and you see I am falling behind in the updates,

don't be afraid to email me and tell me to do some more updates. Thank you.

#### 18 June 2017, Sunday

It's 30\*C in the ant room today, despite the windows and doors being open – it's hot outside. The have stopped bringing their cocoons into the plastic tubing for now, perhaps it's too hot to be placed in the light. Wow, these ants are hungry and thirsty, constantly eating and drinking. I put down a large blob of green jelly the other day and it was consumed within a few hours. Normally they can make it last a few days. Indicates the presence of lots of hungry larvae.

### 22 June 2017, Thursday

It's been vary hot over the past week, with the temperature in the ant room reaching 33\*C+, even with windows and doors open. The ants have been vary active indeed with many of them drinking water from their water bowl, which I have had to top up daily over the past week. This would be a combination of the higher temperatures leading to quicker evaporation and, of course, the ants being thirstier. However, it's possible that the ants are not just drinking the water but perhaps depositing it in the soil of the nest. I also noticed some more callows in the nest today. Any day now and most of those 200+ cocoons will 'hatch'.

# 23 June 2017, Friday

It is much cooler today, though these ants are no less busy. I gave them a large Cuban Burrowing cockroach for their dinner yesterday. They are still eating it up. Lots of callows eclosing now, though still large piles of cocoons present in the nest.