

## GARDEN LASIUS FLAVUS COLONY

### 04 JULY 2003

This Colony arrived today from Germany, complete with about 20-30 workers, brood, and a queen. I placed them into a tank filled halfway with moss peat, and a thin layer of sand on top of that. The ants were transported in a glass test tube with a cotton wool bung, and so I simply removed the bung and placed the whole tube into the tank, allowing the ants to settle into their new home at their leisure. A few workers have emerged from the tube and have started collecting particles of sand and peat and have placed them into the glass tube itself. I am expecting them to excavate a new nest within the tank, and then to move from the tube into the new nest within the next few days.

### 10 JULY 2003

The ants have now moved out of the glass tube and have built a nest in the right hand side of the tank. They have left the characteristic little mound that *Lasius flavus* seem to like. I watched the colony relocation take place, including the moving of the queen. I managed to take a few photos, but they are not very clear as it is not easy to focus on a running ant, but the queen can be seen making her way along the ground. A few workers have been foraging around for food, and I have placed a water source within the tank.

### 23 JULY 2003

In true *Lasius flavus* style, these ants tend to stay below ground very much most of the time, however, as there are no underground food sources for my ants, there have been workers foraging above ground in small numbers. Unfortunately the ants have not tunnelled against the side of the glass, and so I cannot see into the nest, with the exception of a tunnel that briefly shows itself against the side of the glass, before veering away into the depths of the soil. These ants are very much slower than their cousins, *Lasius niger*, the common black garden ant, and they also have differing sizes in their worker ants, not on any grand scale as can be seen in the worker and soldier castes of many tropical species of ant, but nonetheless noticeable. I do not believe that *Lasius flavus* workers do certain jobs according to their size; they all appear to share equally in the same tasks.

### 07 AUGUST 2003

The foraging habits of this colony have increased over the past few weeks, which is a sign of the presence of more brood. These ants are being frustratingly secretive and I am unable to see into the nest, however, I have seen young looking ants above the surface, but no traces of discarded cocoons; it could be that the rubbish dump of this colony is within the nest.

### 17 AUGUST 2003

They appear to be doing well, despite their shyness. There also appears to be evidence that they have had a bit of a 'ding dong' with the nearby *Myrmica* colony, as I have found dead workers of both colonies near the *Lasius flavus* nest. Oh, and this colony still refuses to

tunnel against the side of the glass, despite a black cover being placed all around the tank at below ground level.

### **31 AUGUST 2003**

There does not appear to have been anymore fights between the two colonies, which I am pleased with. I accidentally crushed a worker when I replaced the lid of the tank without realizing that the ant was on the rim.

### **08 SEPTEMBER 2003**

These ants are very secretive!! I have seen a total of 2 workers out of the nest during the past week; both were eating from a piece of orange I had placed in their tank.

### **02 JULY 2004**

It has been sometime since I have been able to update this colony journal, this is due to the fact that I have been out of the UK for some time. Still very little activity from this nest, but as mentioned before, *Lasius flavus* are subterranean foragers and therefore do not come to the surface very often; in fact in the wild they probably forage above ground for less often than mine do. In an attempt to encourage them above ground more often I have now covered the whole of the tank in a dark cloth in the hope that they may emerge onto the sand surface if it is in constant darkness.

### **10 NOVEMBER 2004**

I have just arrived back home after spending the majority part of 8 months away from home. Fortunately my best friend has been feeding my ants for me whilst I have been away. Despite his best intentions, the ants have not really received as much food as I would have hoped as he has been away a lot too. This has caused all of my colonies to suffer in their queen's egg laying capabilities. I do not intend on hibernating my ants this year as the lack of food over the past 8 months means they may not have the necessary reserves to survive a prolonged cold spell. Now that I am back home for a long time I can update these journals more often.

As is usual with this species of ant, there is not much sign of foraging workers at the best of times. It is evident that some extending of the nest has taken place since I have been away, by the fact that there is a small mound of soil around the entrance to the nest. I have seen some workers milling around on the surface, and the size of the individual workers is remarkably different; some are only 2mm in length while others are twice that size, though this is normal for *Lasius flavus*. I can see a couple of new tunnels against the glass, but these are not widely populated.

### **27 NOVEMBER 2004**

The second biggest activity I have ever seen with this colony. One worker found the fly which I had placed into their tank within about 15 minutes. She began to run excitedly over it, 'sniffing' at it with her antennae. She then ran off into the nest, and shortly afterwards about 15 workers emerged from the nest. It amazes me how these ants differ in size

within the same colony. Some of the workers were the same size, if not larger, than the ants in my *Lasius niger* colony, others were real tiny things. Their colour ranges from orange to pale yellow.

#### **24 DECEMBER 2004 (HAPPY BIRTHDAY TO MYRM!)**

Ant Room Temperature = 16.8 dc

Humidity = 58%

These ants have been quite active over the past 2 weeks, with workers foraging out of the nest more than usual. They eat a little of the wax worm I put in, but certainly much prefer the blow flies. I can't see much nest expansion, but then again I cannot really see into the nest much due to the fact that their main tunnel runs away from the glass sides of the tank.

#### **01 JANUARY 2005 - HAPPY NEW YEAR TO YOU ALL!**

Ant Room Temperature = 15.8 dc (and falling!)

Humidity = 66%

A few workers out since I placed a fly into their tank 2 days ago, but not nearly as active as they were the other day; however this does not bother me as these ants are mainly subterranean foragers and it is expected not to see them very often.

#### **22 JANUARY 2005**

Ant Room temperature = 12.5 dc / humidity 58%

Surprisingly these ants have become more active than my others; there always seems to be small numbers of workers out foraging, even when the temperature falls below 13.5 dc (when most of my other ants stay in bed!) Still not seen in huge numbers, these ants are eating quite a bit of food, which suggests to me that either the queen is still laying eggs, or earlier laid eggs have hatched into larvae. It still fascinates me when I see the difference in sizes between the workers of this colony. Though no British species of ant have a separate soldier caste, you would be forgiven for thinking otherwise of *Lasius flavus*, as this species does have different sized workers; sometimes I see workers out that are twice the size of the worker next to them. There does not seem to be any difference in the task that these larger ants do.

#### **17 April 2005**

I have been away from home for the past two and one half months during which time my ants have not received any food, other than the sugar lump I left in each tank. These ants

are going strong. I have just placed a freshly killed bluebottle fly into their tank, and they are currently dismembering it and eating their fill.

#### **20 April 2005**

Have just fed these ants with a blowfly which arrived today. There has been some evidence of minor nest expansion going on within, but very limited. About 7-10 workers converged on the fly and cleaned it out.

#### **24 April 2005**

There has been a marked activity increase in this tank today with more than a dozen workers emerging from the nest to feed. I have no idea what they have been eating up to now as they are hardly ever seen above ground. Hopefully this is a sign that the queen is laying eggs and that there is brood present in the nest.

#### **28 April 2005**

Still the activity in this nest increases; yesterday there were over 18 ants out feeding on a fly and wax worm fragment. Some of these workers are tiny, even smaller than a first generation *Lasius niger nanitic*! Evidence of the lean times they have had over the past year, but hopefully this will improve as I should be at home for most of this year (though I daren't get my hopes up - oh well, only 9 years to go and then I will be at home for good!)

#### **8 May 2005**

I have been very happy with my *Lasius flavus* colony over the past 2 weeks as they have really been very active. There have been many workers out foraging, and when a food source is located the recruitment of nest mates is quick and effective, with many workers emerging from the nest to share in the find. Where the peat that they are nesting in has dried out during my 10 weeks away, the nesting medium has shrunk slightly causing it to move away from the glass sides of the tank (this has also happened in all my other tanks). Now the ants do not just emerge from a small hole in the soil surface, but from the whole of one side of the tank. Unlike the *Lasius niger*, *Formica fusca*, and *Myrmica rubra* colonies, these ants do not seem to forage outside their tank, even though they have plenty of opportunity to do so; then again *Lasius flavus* are not active above ground foragers.

### **14 May 2005**

Yet another week in which these ants have been very active. Today I removed the dark wrappings that cover the sides of the tank, giving the ants privacy, and was delighted to see in the bottom corner a small pile of cocoons. The ants did not seem too distressed at the light entering their nest, though I only glanced in for a moment or two. I noted that the cocoons, like a large number of the workers, were very small, compared to the *Lasius niger* workers and cocoons. It is not through lack of food being given to them, but perhaps through the fact that up until the past few weeks they have not been actively foraging above ground. The reason for the increased activity above ground must be a combination of hunger, increased brood numbers, and the increase in the number of workers.

### **31 May 2005**

The above mentioned cocoons are still present, but have had some larvae placed next to them. These ants have been eating an awful lot over the past 2 weeks, including a fresh garden pea that I had placed into their tank.

### **4 July 2005**

Happy 2<sup>nd</sup> Birthday! to this ant colony. Very active at the moment with plenty of foraging going on throughout the day. The cocoons have disappeared from the side of the glass. Perhaps they have hatched already.

### **16 July 2005**

The *Lasius flavus* ants continue to be very active, with record numbers of workers foraging and recruiting to food sources. They have now come into contact with the *Myrmica rubras*, *Formica fuscas*, and *Lasius nigers*, who have all been walking into this tank. The *flavus* workers react angrily to the invading ants, but as they are slower than the aforementioned species, they never manage to catch them, though they have come close with one bold *niger* worker who had the audacity to grab a piece of fly and run back to its own nest with it. I have not witnessed the *flavus* workers having ventured into any of the other tanks, they seem quite content to forage within the confines of their own tank.

### **23 July 2005**

Not much to report this update. The ants have been very active, and hungry. I have seen a few patrolling around on the lip of the tank; this, I have learnt, generally means that an ant from a neighbouring nest has been inside the tank. Usually when I see the ants on the lip of their tank I will see a *niger* or *rubra* ant in the tank.

### **7 August 2005**

Up until this afternoon there was not much to report on this colony, but all that changed with a small piece of marshmallow. I placed the mallow in the flavus tank and was pleased to see them tucking in. However, there were also a couple of *Myrmica rubra* workers searching the tank, and they too found the piece of mallow on which the flavus were dining. One of the rubra workers grabbed a flavus worker and ran off with it to the other side of the tank, presumably where she could not call for help from her nest mates. The rubra worker, which was three times the size of the tiny flavus ant, promptly despatched the flavus worker with a well aimed sting. Another lone flavus worker attacked a group of three rubra workers, and needless to say another flavus ant bit the dust. Over the next half hour two more flavus workers were grabbed by rubra workers and carried off. One flavus worker was bitten clean in half, and another managed to escape its rubra attacker, but not without paying a price; she lost half of one antenna. As I type this update the flavus workers seem to have fled underground and there are now 6 rubra workers helping themselves to the flavus' mallow.

### **19 August 2005**

Ever since these ants were raided by the *Myrmica rubra* red ants last week, I have not seen more than 1 worker out foraging at any one time, and that was a seldom appearance. The red ants have not been able to get back to the flavus tank, but I think that the flavus workers are still very wary about coming out of the nest in large numbers as they have been doing; not even sugary treats manages to coax them out. I am not particularly worried by the drastic reduction in activity by these ants, as flavus are very much like that anyway. I am sure that when hunger drives them out, they will forage well enough.

### **27 August 2005**

Again all has been quiet this week within the *Lasius flavus* tank. Yesterday I placed a freshly killed fly into their tank, knowing that it is one of their favourite foods. I checked on them half hour later to find several ants feeding from it. Later that same day the fly had been dragged from its position to nearer the nest, perhaps for safe keeping in case the rubra s came back.

I am currently clearing out my garden shed (which will take some time as I do not have a 50 megaton nuclear tipped missile to hand, the only thing that will help clear it out I think.) Once this is done I will transfer all my ant tanks into the shed so that I can reclaim my spare room. I hope to do this before the winter sets in.

### 10 September 2005

The flavus ants have become braver over the past week, though this is probably due to them becoming hungry more than anything else. They have been feeding on flies that I have placed in their tank, and also drinking a little honey too.

### 9 December 2005

I have just got back after 2 months away from the UK, in much warmer climes. Due to the fact that the heating and electricity was isolated in the ant room when I went away, primarily to encourage hibernation.

I have seen no activity in this nest so can only assume that they are hibernating.

**Currently hibernating - journal will be updated once they wake up.**

### 5 April 2006

I have seen five workers today feeding on some honey I have put in to give them a bit of a sugar boost. They looked at the dead cockroach that I have just placed in there but she did not take much notice of it, and certainly did nothing to recruit more help. I think these ants are probably still very sluggish due to their long sleep and the cold at the moment. It will take several weeks for the ants to resume their normal activities.

### 12 April 2006

A few workers have been out during the past week as they continue to forage for food. The temperature in the ant room averages on 11 degrees during the day, and drops to about 7 or 8 degrees at night; still not warm enough for long enough to start seeing any real action in this nest.

### 7 May 2006

These ants have to be the least active of any of my colonies, even though the temperatures have been high this past week or so. I only ever see 2 or 3 workers out ant any one time, which can be really frustrating. Unfortunately I cannot see into the nest so I am unable to detect whether the queen is still alive, or whether she has died and the colony

slowly dying out. The amount of food they eat is tiny, and I do not believe they are finding enough food within the soil as they normally do in the wild. I guess only time will tell.

#### **14 May 2006**

My *Lasius flavus* have been very active as if attempting to allay my concerns about their queen. I placed a piece of cockroach into the tank the other day and about 15 ants emerged from the nest to feed. This may not sound like much but it a marked increase in their activities. Usually they do not seem to wander far from the nest but this time I had placed the meal on the opposite side of the tank to encourage them to venture out a bit more.

#### **31 May 2006**

I have been pleasantly surprised over the past few weeks to witness a marked increase in activity within this nest, including further foraging range and more workers above the ground. They have been eating quite a bit possibly indicating that the queen has resumed her egg laying from the winter shut down period.

#### **24 June 2006**

I have been away for the past few weeks and so have not been able to study these ants during that time. As I look in the tank today I see very little activity other than a few workers doing the Dockyard Bimble. Some did emerge to eat from a fly, but once these ants have eaten their fill they tend to stay underground until hunger drives them up again.

#### **23 July 2006**

Due to the fact that I have been away (again) for the past few weeks, I have not been able to see much of these ants. They do continue to be active in their foraging, but nothing more exciting than that I'm afraid.

#### **9 September 2006**

I am embarrassed to say that I had a bit of a disaster with these ants; I picked up the glass tank with wet hands and dropped it, causing it to smash and the dirt and ants going everywhere. I quickly set about collecting up all the ants and brood and put them into a pot. I was rather dismayed to note that the colony had not seem to grow in numbers hardly at all in the 3 years that I have had them; there must only have been about 50 ants, including the queen, and about 30 larvae and cocoons. So I decided to set them free into a corner of my



garden where they have already established themselves. *Lasius flavus* appear to not do very well in captivity at all. Due to the fact that these ants are seldom seen above ground I will no longer update this journal on a regular basis, unless something interesting happens.

**21 November 2006**

**HIBERNATING.**

**7 April 2007**

I have seen nothing of these ants since I released them into the garden back in September of last year, though if I am honest I really do not expect to see anything of them at all, at least until their first mating flight in a couple of years.