

## TETRAMORIUM IMPURUM COLONY JOURNAL

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### 08 SEPTEMBER 2003

My new Tetramorium impurum Colony has settled in well. They consist of about 20 workers, a whole heap of brood, and one queen. They quickly moved from the glass tube that they arrived in and made a new home under a piece of slate that I had placed into the tank, the ends of which they have started to plug up with sand/soil they are digging up from elsewhere in the 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. There has been a massive mite infestation within this tank, so much so that the sides of the glass and lid were covered in them. As far as I am aware it is a mite which lives in damp, humid conditions and it has certainly been that in the tank. I have managed to kill 99% of them, though a few stubborn ones remain, wandering about. I have also removed the lid of this tank to allow the soil to dry out a little (so far no ants have made a bid for freedom). Ant activity has increased very much in the tank with the building of a new nest by the ants; this is the most active I have seen them. This is good news as it may well be an indication of healthy colony growth. The presence of the mites does not seem to bother or harm the ants at all.

### 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. These ants are still fairly active considering the little food they have had. I gave them a piece of 'Angel Cake' yesterday, and they swarmed over it, obviously very hungry. I noticed that they still had pieces of food that I placed into their tank a few months ago, which they had kept buried under small mounds of soil. A hole in the top of the mounds made it appear as if the ants ventured into these little 'larders' and fed as required. All of the mites have disappeared now as I left the lid off the tank when I went away (a little risky I know, but it had paid off big time!).

### 27 NOVEMBER 2004

Typical with these ants, they immediately started to bury their prey (a fly which I had just placed into the tank). About 15 ants were working on it, though I noticed that the fly was being broken open as it was being buried. About 5cm away is another mound of soil which covers a wax

worm carcass placed in the tank about 7-10 days ago. It was interesting to note that the ants finding the soil particles to cover the fly, never once sneaked the soil from the wax worm mound.

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

Ant Room Temperature = 16.8 dc  
Humidity = 58%

This colony still remains active despite the falling temperatures. They tend to forage in very small numbers, but once a food source is found they recruit actively. I have also noticed that there are larger workers being produced now. A good sign!

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

Ant Room Temperature = 15.8 dc (and falling!)  
Humidity = 66%

I have not seen anything of these ants in the past week; they have not even found the fly that I placed into their tank 2 days ago. I have made it rain in the tank today (which I always try to do whenever it rains outside as I am sure the ants can detect the atmospheric conditions, and can tell when it is going to rain – and why disappoint them!). I normally find that my ants forage more intensely after a rainfall, so hopefully they will find the fly and eat it.

#### **22 JANUARY 2005**

Ant Room temperature = 12.5 dc / humidity 58%

**Hibernating!!**

#### **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 have woken up and are foraging in small numbers. They gratefully received a piece of freshly made Ant Jelly which they are tucking into at the moment. I have just ordered some blowflies to feed them with; they should arrive in a few days time.

#### **20 April 2005**

The blowfly pupae have arrived and three of them had already hatched. I placed one of these into the tank which was almost immediately found by a foraging worker. The next time I checked there were about 20 workers burying the fly under a pile of "rubble".

### **24 April 2005**

There are now two piles of “rubble” in this tank resulting from the ant’s strange behaviour of burying their food. Every so often they will open the top of the mound and climb inside, presumably to eat.

### **28 April 2005**

Not much to report from this tank today. A few workers have been dipping into the ‘larders’ they have created. Once they get one or two ‘larders’ going (my colony has 2 at the moment) they seem to forage a lot less, presumably because there is no need to.

### **8 May 2005**

I am sorry to say that there is nothing new to report on this colony; they really have been quite lazy this week.

### **14 May 2005**

Yet another week where I have seen nothing of these ants – however; today I removed the dark wrappings that cover the sides of the tank and was able to peer into part of the nest. I saw a fair number of pupae and larvae in various chambers, and what were clearly groups of young workers, judging by their light colour. As soon as the light invaded the nest, workers rushed to and thro to remove the brood out of sight; quite an impressive thing to watch.

### **31 May 2005**

At last! These ants have been very active this week following their feeding on a bluebottle fly. They have buried it in the usual way and keep coming back to it. I have noticed that the average size of these workers seems to be increasing.

### **4 July 2005**

These ants have been very active over the past 3 weeks. They have created a mound with two holes in it in the centre of the tank, but unlike their food mounds, there appears to be no food under this. I thought perhaps it was new entrance to the nest, but this does not seem the case; I guess their must be something under it all. Have also seen some pale coloured young workers; obviously the queen is doing well!

### **16 July 2005**

Not too much to say about these ants on this update. I gave them a piece of jam tart (strawberry) which they covered up with soil, after having a bit of a feast on it beforehand. The covering up task took 2 days to complete. Have seen several paler, callow ants wandering

around, and several more larvae and pupae within the nest tunnels; the brood chamber is just under the surface. The queen is well hidden away.

### **23 July 2005**

The Tetra's have been very active this week and there are now 7 small mounds in their tank where they have buried food. They frequently open these mounds up to feed, and then close them down again afterward. Several more callows have been spotted outside the nest this week, with more larvae present in the nest. No sign of any winged ants though.

### **7 August 2005**

This colony is fast approaching their second birthday, but other than that not much more to say, the same as last week really. I find it interesting to note that these ants have never foraged beyond their own tank, unlike most of my other colonies. I did find a *Formica fusca* worker in the Tetra tank last week, but she did not come into contact with any of the Tetras that I am aware of. I have seen a large number of callows over the past 2 weeks.

### **19 August 2005**

The Tetra's seem to be slowing their above ground activity a little over the past few weeks; however, there still have been a fair number of workers out, feeding from their buried food stores. I took a peek into the next the other day and saw three chambers full of brood at various stages of development, but mainly pupae. I have also noticed since obtaining them that this species of ant do not seem to mind sending out very young workers to forage away from the safety of the nest; many species prefer to send out their older, more experienced workers.

### **27 August 2005**

When you look into the tank of this species of ant, you will see that the top of the soil is covered in little mounds of soil. These are not entrances to the nest but lots of little food stores, some of which are a couple of months old, yet the ants still feed from them. It is interesting watching them make a hole in the top of one of the mounds, feed from whatever is within, and then close the top again. It's a good idea I think, especially when I am away from home and unable to feed them. Still, many callows and young ants seen foraging on the surface.

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**

Just had a peek inside the nest of these ants; as with some of my other species all I can see into is a small portion of the nest. I saw brood at various stages, which were immediately taken away into the deeper parts of the nest as the light hit the brood chambers.

The workers have been busy burying, uncovering, eating, and reburying their food over the past 2 weeks.

### **25 September 2005**

These ants seemed to have either spread their nest through the whole width of the tank, or they have moved to the opposite side. I say this as I have seen that they have a brood chamber against the glass, above the side covering of the tank. This means that the brood chamber is in perpetual daylight, though it does not seem to bother them. They take the brood away at night, and bring them up to the exposed chamber in daylight hours. This may be along similar lines as to what my *Lasius niger* ants have been doing for the past few months; moving the brood to a chamber that receives most sunlight, and therefore, warmth. This aids in brood development. Perhaps they are doing it to ensure that this batch of brood (pupae stage) "hatch" before the winter sets in.

On the colony page I have added a photograph of the new chamber.

### **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 one worker today walking around the tank. She 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, but there have been signs that they have been out when I was not looking, perhaps at night;

food I have placed into their taken has been partially covered up with soil particles. 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**

A little bit more activity from these ants over the past week or so; mainly foraging and burying their prey, as they frequently do. I have not noticed any further nest expansion, but then again it is hard to tell as these ants do not seem to build mounds but rather take the soil further afield for dumping.

### **14 May 2006**

There has been a lot of burying of prey this week with several ants foraging throughout the tank. I find it is better to give these ants smaller pieces of prey so that burying is an easier task.

### **31 May 2006**

The Tetra's have been very busy since the last update with nest expansion, resulting in a small mound being created against the side of the glass tank. I was able to take a quick look into one of their brood chambers and was very happy to see new larvae resting there; obviously the queen is alive and well. Increased prey consumption continues.

### **24 June 2006**

I have been away for the past few weeks so have not been able to study these ants during that time. Over the past 2 days the activity within the Tetra tanks has been the busiest I have ever seen it with a large number of workers out foraging and storing up food. Some of the ants are quite a bit larger than others, and there are also a large number of paler, younger workers out and about. I also noticed that a spider had taken up residence in the tank and had built a strange web, which wasn't the traditional kind but more of a blanket across the surface of the soil within the tank. I have since removed the spider and cleaned up the web. As far as I can see there have been no ants caught, but I didn't want to run that risk.

### **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. They do still continue to be among the most active of the colonies I have to date.

### **6 August 2006**

Still extremely active, but I have seen no signs of the much hoped for possibility of a batch of winged ants being produced this year.

### **9 September 2006**

There have been hundreds of workers attacking food sources when found by foraging workers, and with plenty of brood also in the nest it seems that this colony is flourishing very well. During the dormant hibernation period this year I plan to move the ants to a bigger tank. Incidentally; this colony celebrated its 3<sup>rd</sup> birthday yesterday.

### **26 September 2006**

This colony has a lot of eggs and other brood in their tank which they tend to stack in a chamber that is right at the 'sunny' end of the tank, obviously to encourage faster growth. They still continue to eat everything I place into their tank, or at least bury it for later consumption.

### **21 November 2006**

Not much activity from these ants of late, though I have seen small numbers of workers burrowing into the 'larder mounds' they have created on the surface of the soil. A couple were also eating from some Ant Jelly that I had placed into their tank last week. I have also noticed that the brood that was kept in a chamber just below the top of the soil have been removed, presumably into the deeper, warmer parts of the nest.

### **27 December 2006**

**HIBERNATING!**

### **6 February 2007**

Still hibernating but I just wanted to add that at long last I have cleared out the garden shed, something I have been meaning to do since last spring, but were too lazy to do it. Well, now the shed is clear and the tank has been moved from the house. The shed is not heated in any way and therefore is colder even than the ant room with its radiator switched off and window open. The shed also has a comfy chair in it for me to sit back in, relax and watch the ants - once they wake up that is. (A picture of the tanks in the shed can be found on the "My Ant Colonies" page.)

### **20 February 2007**

These ants have emerged from hibernation already and have started to venture out of the nest. I have placed pieces of banana, apple, mealworm, and tuna into their tank, and they have had a bit of the mealworm and banana, burying the latter as they normally do. I also watched them get “trapped” above ground when the temperature started to drop (it was early evening) below 5 degrees. The ants, which were eating from the piece of banana, found themselves unable to move due to the cold, and had to wait until morning when the temperature rose enough to allow them to move. Ants, unlike honeybees, are unable to shiver and therefore their bodies shut down when it gets too cold.

### **9 March 2007**

The activities of these ants have slowed a little again over the past week, but it is still pretty cold out in the garden shed, and after their feast last week I guess they are not ready to forage again just yet; though I did put a piece of mealworm into their tank the other day and this has been completely buried.

### **7 April 2007**

Activity has increased both inside and out of the nest with quite a bit of foraging going on. I removed the plastic sides of the tank and was able to see one of the tunnels very busy with ants moving larvae around. The tunnel unfortunately bends out of sight and so most of the nest, including the queen, is hidden from view. I gave them a dead fly which they seemed to enjoy, and have buried it as per their normal modus operandi.

### **28 April 2007**

I looked at the tank today, including removing the side coverings and taking a peek inside the nest. This colony is so busy at the moment, with more ants than I can count moving through the tunnels, and a lot of larvae present in various chambers. I even saw the queen wandering about within the nest – the first time I have seen her since I obtained the colony almost 4 years ago. They have been eating a lot of food lately, and I plan on feeding them as much as I can so that the queen will lay many eggs, perhaps even some fliers, which they have not produced so far.

### **17 May 2007**

Today there has been a mass of activity in the Tetra tank; in three of the corners of the tank the ants are simultaneously building large mounds of earth, but not in the same way that they do to bury their food, but this soil has come from under the ground, and it they are not covering food, but entrances to the nest. There is a fourth mound being built along one side of the tank also. There are hundreds of ants frantically building these mounds; obviously a lot of nest expansion going on all at once. Could it be that it is almost the mating season and perhaps there have been some flying ants born in this nest? I took a peek into to the nest and there are a lot of brood



within, but I saw no evidence of any flying ants, however, if they are present they could well be deeper within the nest. Quite why there has been four lots of such frantic activity in opposite ends of the tank I do not know, but one thing is obvious; the nest covers the whole of the tank underground! The mound on the far corner of the tank is already an inch high.

### **22 May 2007**

The mad activity has slowed now, though there are still a lot of workers continuing the digging to a smaller degree. I haven't seen any sign of winged ants in the nest so far, but then again the main chambers of the nest are away from the sides of the glass tank and out of sight. There are quite a few larvae in the new tunnels just below the surface of the ground. I will keep a close eye on this colony over the next few weeks.

### **17 June, 2007**

What can I say about these ants? They are constantly active with nest expansion them foraging. Today I placed a piece of cockroach in the tank and within moments they were swarming all over it, even though there are a large number mounds in which already a lot of food is stored. By about 10.00 AM every morning the ants bring up the larvae and pupae and place them just below the surface and against the glass of the tank, allowing me a full view of their brood chamber. I do find though that these ants appear to be very sensitive to disturbances in the stratum, which is particularly emphasized by the fact that the wooden floor of the shed in which they are in seems to enhance the noise of my footsteps. Therefore I have to almost tiptoe around the shed for fear of disturbing them. No matter how careful I am, even the slightest disturbance upsets them and they quickly remove the brood from the chamber and taken deeper into the nest out of sight.

### **13 July 2007**

Not much else to report on this colony other than the brood chambers are still packed with larvae and pupae, and the workers still swarm all over any food I place into their tank. No winged ants noticed this year, though a huge part of the nest is hidden from view away from the glass sides of the tank, so you never know, there could be some present in there.

### **5 August 2007**

Still very active, still lots of brood in the chambers, though I believe many of them have hatched as there are not nearly as many as there have been, and over the past few weeks the pupae having been turning from white to orange, a sure sign that they are about to 'hatch'.

### **15 August 2007**

There has been a very marked decrease in the number of brood present in the nest over the past 10 days, and this suggests to me that many of them have eclosed into adult ants. Next month is the 4<sup>th</sup> anniversary of my obtaining this colony from Antstore. Again, as I have mentioned about another colony in their journal; it amazes me that considering these ants have no lid on their tank, that there is no evidence that they have ventured out of the tank.

### **9 September 2007**

Yesterday was this colony's 4<sup>th</sup> birthday and they are still going strong. The brood chambers are constantly full of larvae and pupae, and that is only the chambers I can see; there are many more hidden away from view. The workers are constantly eating or foraging for food, and never seem to waste even the smallest amount of food. I do expect the activity and egg laying rate to decline soon due to the impending autumn and winter here.

### **6 October 2007**

I have not seen anything of these ants over the past few weeks, and it appears that they have not been foraging at all; food that I have been placing into their tank has gone untouched and unburied, something that is wholly out of character for these ants. Due to the fact that the outside temperature, particularly at night, has been dropping, it is probable that these ants are preparing for hibernation.

### **22 October 2007**

Hibernating!

### **15 April 2008**

I have not seen much of these ants since the last update, though I do not get to check on the as often as I like. No longer hibernating and foraging a little. I notice that they have not been burying their food lately, though this may simply be due to the fact they are still sluggish from hibernation.

### **08 May 2008**

These ants seem to be quickly attaining the level of activity they had prior to hibernation last year, which is very encouraging to see. I am not sure how long the queen of this species lives for, but as she is at least in her fifth year, I do not think she has much longer left. Many workers are still foraging and feeding which indicates that there may be a good level of brood in the nest, in turn indicating the presence of the queen.

### **16 May 2008**

Over the past few days there has been a very large increase in activity, mainly with nest reconstruction and expansion. The soil particles that the ants have brought to the surface have been piled up about 7 inches high!

### **13 June 2008 (Muwk!)**

This colony continues to expand the nest and place a large amount of brood right up against the sides of the glass tank they are living in. A couple of days ago my Tapinoma colony died out and so I placed their nesting box into the tank of the Tetramorium, with the plastic tubing leading in to it resting next the main entrance to the Tetra nest. It was a just in case they decided they like that better and move in, allowing me to see this large colony a lot better. Several days later I checked, not expecting to see much, when I saw something that surprised me; they had created a system of tunnels in the sand of this new nesting box. The main nest is still in the tank, as are the brood, but I am now hoping that they may decide to move into the slim-line ant farm altogether. I will be keeping a close eye on these ants over the next week or so.

### **9 August 2008 (Autshi! Gimme muwk!)**

Although I often see one or two ants in the upright ant farm I placed within their tank, they have not moved in, despite having made an extensive array of tunnels within. I no longer see brood placed against the glass of the main tank as I used to, but then again this is more than likely due to the fact that for the past few weeks the side covering has been kept off from the tank. The workers themselves are constantly busy with foraging, eat, and nest maintenance.

### **09 November 2008**

HIBERNATING!

### **4 February 2009**

I have been meaning for a long time now to transfer this colony from their glass tank to a more traditional slim style ant farm to allow me to see inside the nest, but knowing how many ants there are in the colony I knew it would be a difficult task. Therefore I decided to wait until the very cold weather was upon us before doing so. Over the past couple of days it has been very cold with lots of snow on the ground (stow! :-P) and so I decided now was a good time. I went into the garden, cleared away a patch of snow and gently emptied the contents of the tank onto the ground. I then had to sift through all the dirt as carefully as I could to find and capture the ants. After about 10 minutes I knew I was getting close as I saw a few very slow moving ants emerging from the soil. They were very slow due to the cold. Ants, unlike bees, cannot shiver and so when their body temperature drops they become very docile (hence why I waited until now to do this). I collected the ants I found and put them in a jar. As I progressed further I

started to find larvae, then suddenly I broke open a large clump of soil to find loads of larvae, loads of worker ants, and her Regalness, the queen, who was looking very unimpressed.

Once I was sure I had as many of the ants as I could, I tidied up after myself, poured the ants into a Starter Kit foraging area and connected it to the slim style ant farm. Knowing that putting them back in the shed would cause them a lot of possible harm, due to the fact that they would not be able to create a new nest to shelter them from the cold, I decided to keep this colony in my living room. As they warmed up they became more active until they were busily collecting all the larvae and depositing them around the queen, who they had hidden away. The set up is now on my mantelpiece on the living room, and the ants are now exploring their new surroundings. They have yet to find the main nesting box and have built a temporary nest in the dry soil that covers the bottom of the foraging box. One day they will move into the nesting box and I will be able to clear out the foraging box and use it for its intended purpose (the feeding area).

### **7 February 2009**

The ants have completely hidden themselves and their brood and queen away. I have a feeling they are nesting in a large lump of soil that I placed into the foraging tank due to the large number of eggs and ants it had in it (it was easier to do that rather than try and pick out every larvae myself, plus I didn't want to risk handling them and damaging them.) They have yet to discover the nesting box but I guess it will take time, perhaps not until the colony population starts to expand again. I will feed them tomorrow and see how they react to that.

### **15 February 2009**

The Tetra's seem to have nested either underneath the large lump of soil, or actually in it! I can see freshly dug pieces of soil around the base of it. I see quite a few workers out and about with dirt particles in the jaws, depositing them beneath the lump of soil. They still haven't ventured out into the nesting box yet :-S

### **8 March 2009**

These ants have moved into the nesting box and are very active in burying and eating the food I have put in their tank. They seem to be quite at home now.

### **14 March 2009**

Nest expansion still continues as does a lot of foraging and burying of food. They have found a piece of something (not sure what it is) buried in the sand and have been eating it; whatever it is, it is obviously tasty. (I think it might be a piece of UNBL ;-P)

### **05 April 2009**

These ants continue to establish themselves in their new home, but seemed to have abandoned the usual practice of burying their food. I am not sure why. Perhaps it's because in their new foraging tank the soil is far shallower than in their previous home. I have noticed a worker or two from the nearby *Lasius niger* colony wandering around in this tank, but as yet no clashes seen.

### **25 April 2009**

No more wandering *Lasius niger* workers seen in this tank and only a few Tetra workers have been foraging lately. Again, they are not burying their food anymore, though sometimes a half-hearted attempt is made by one or two workers, but this usually gets abandoned after a while. They seem to be expanding the nest a little though, which is encouraging.

### **13 June 2009**

Very little activity seen with these ants, though a bit more nest expansion possibly seen.