Project 009

Wakooshi Gen 2 Nest Setup

Steve Cowles (June 2023)

Introduction

This document covers a long-term project to experiment with the Wakoosi Gen 2 modular next system.

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Purpose

The Wakoosi Gen 2 range is an interesting concept. Basically, it is a series of modules which can be plugged together to build a customer next to your own configuration. In principle, you can start off small and grow your nest as your colony grows, this makes it ideal if you are working on a tight budget although buying one module at a time would work out very expensive due to postage which is beyond Wakooshi's control.

I've decided to have a go at this, assuming the small colony of Lasius Niger (queen and maybe around a dozen workers plus some brood) which I'm using survive long enough to draw any conclusions.

As the nest will only grow at the same speed as the colony, this project will be a slow burner (years rather than months), but I will pop back with an update whenever I add any modules. I will be buying mine in batches as and when I can afford to do so to minimize the postage cost.

Gen 2 Introduction

I found the range a little confusing to start with, this is probably because I was over-thinking it. Basically, it can be summarized as follows

- Each module is individually priced, these prices appear to be quite competitive
- Modules have holes which will allow the ants to pass through, different modules have different numbers of these holes
- All modules are compatible and can be connected together providing the ports (holes) line up
- Modules can be connected with either open connectors which allow the ants to pass through, or closed connectors which block the holes
- All connections are temporary, you can undo them and reconfigure or re-use as you wish
- Most modules have a red cover included, usually removable
- S1 modules are the smallest, S2 are twice their size, this continues up to S6, these are basically full-sized nests in their own right
- An outworld connection is available using the same type of connector
- Connections are very easy to make, a connector slots into the two modules to be connected and fixes them together
- The wide range of modules available mean the next can cater for most species

Step 1 – Getting Started

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Equipment Used

Starter Kit

This is important so get one. It will provide you with a small set of connectors (open and closed) and a pipette to hydrate the cell for your queen.

S2 Starter module

The smallest home for the queen available in the GEN 2 range. I acquired this in an eBay job lot, so it was my starting point. It has a small lid to remove for feeding, very small but

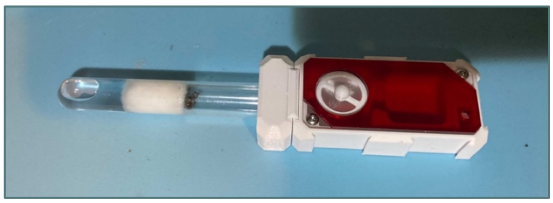
manageable. The queen will be housed in a small bed which can be hydrated with a pipette without removing the red cover, there is also room for the first workers (20-30 depending on species). This module has only one port (hole) for connection to other modules.

Test Tube Adaptor

Available in several sizes so check your tube before ordering, the tube simply plugs in and is held securely.

How it looks

This was easy, feeding has also been straightforward offering food on small pieces of baking paper using tweezers, water is coming from the 100mm test tube.



I have covered the tube up and will leave it for a few days before encouraging the queen into the module. The workers spend time in the module, but I have not seen the queen in there yet and the brood have been left with her.

We are currently enjoying unusually hot weather and I'm rehydrating the nest every few days being careful to add only a little water to avoid a flood, I find that a blunt 1ml syringe is the easiest way to do this as it allows an accurate measure. The results are pleasing so far.

Step 2 – Adding Water

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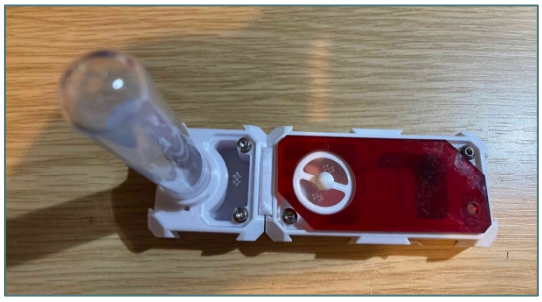
Equipment Used

S1 Water Module

I close this as I wanted to add an integral water feeder and get rid of the test tube without increasing the footprint of the overall setup and more than necessary, the queen have moved in of he own accord, this setup will prevent her from moving back out again so it is a significant step since this will now. The water module has only one port and is very easy. The water level is clearly visible and there is a small clear plastic viewing cover.

How it looks

This how looks far more like a ‘proper’ nest and the ants seem to have adapted to it quickly. I’ve seen them going into the water feeding area, the queen will depend on the workers for liquids from now on.



I’m not really expecting any expansion for a significant time now as the colony needs to grow to fill the current space first. It may happen this year, or they may end up hibernating as they are, it will depend how productive the queen is and I’m hoping that this current setup will allow me to feed them with minimal disturbance.

Alternative Options

This current setup basically the offers almost the same features as a single module setup using the Wakooshi S3 starter module which would be slightly cheaper, I’m planning to try one of those with another colony to see how they compare and may document that in the future.

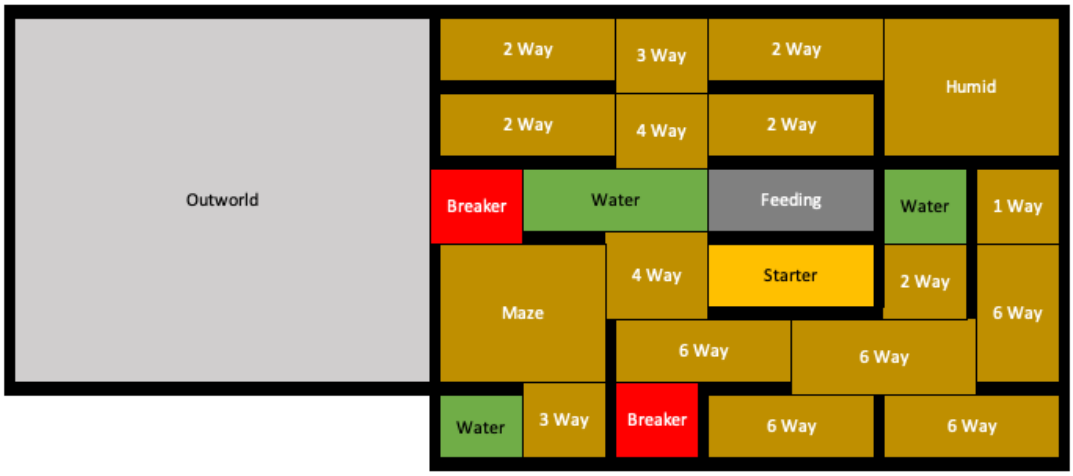
My ‘End Game’

From the outset of this project, I have had an end-goal in mind, obviously it may change along the way, and this is one of the benefits of this system as it offers a lot of flexibility.

I would like to create a nest with a clear main throughfare through it (basically a horizontal and vertical line in the diagram), some ‘dead-end’ nesting areas, and some good vantage points to watch what is happening, I intend to do this with a combination of S2 and S3 modules. I also plan to stop at a point where transfer to a larger ‘single’ nest is the most cost-effective way forwards, this will allow me to clean the modules to use again for a different colony, the breaker at the bottom of the diagram is positioned to ease the transfer to a new nest.

My current view of this is shown below, I may update this as the project progresses and I learn more about the product range, ‘walls’ have been added to show solid borders which ants cannot cross.

This would house a large colony and is quite ambitious, I will probably not get that far but we can dream and goals can be good motivators


Outworld
2 Way
3 Way
2 Way
Humid
2 Way
4 Way
2 Way
Breaker
Water
Feeding
Water
1 Way
Maze
4 Way
Starter
2 Way
6 Way
6 Way
6 Way
Water
3 Way
Breaker
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6 Way