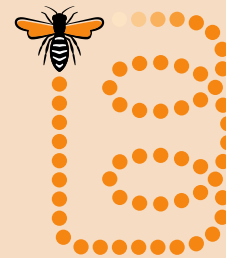




Beehives for Schools Autumn 2020



BeesMAX
Helping the Bee
Population Fight Back



What is BeesMAX?

- We are revolutionising how people learn about our pollinators
- Our methods give instant access to everyone of all ages
- We are the first to use IoT within the Beehive
- Our ethos is regeneration & renewal

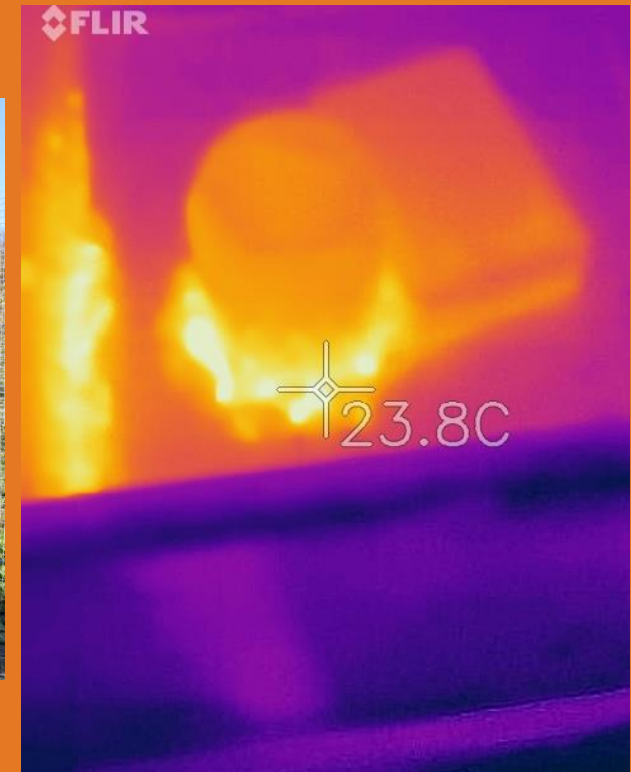




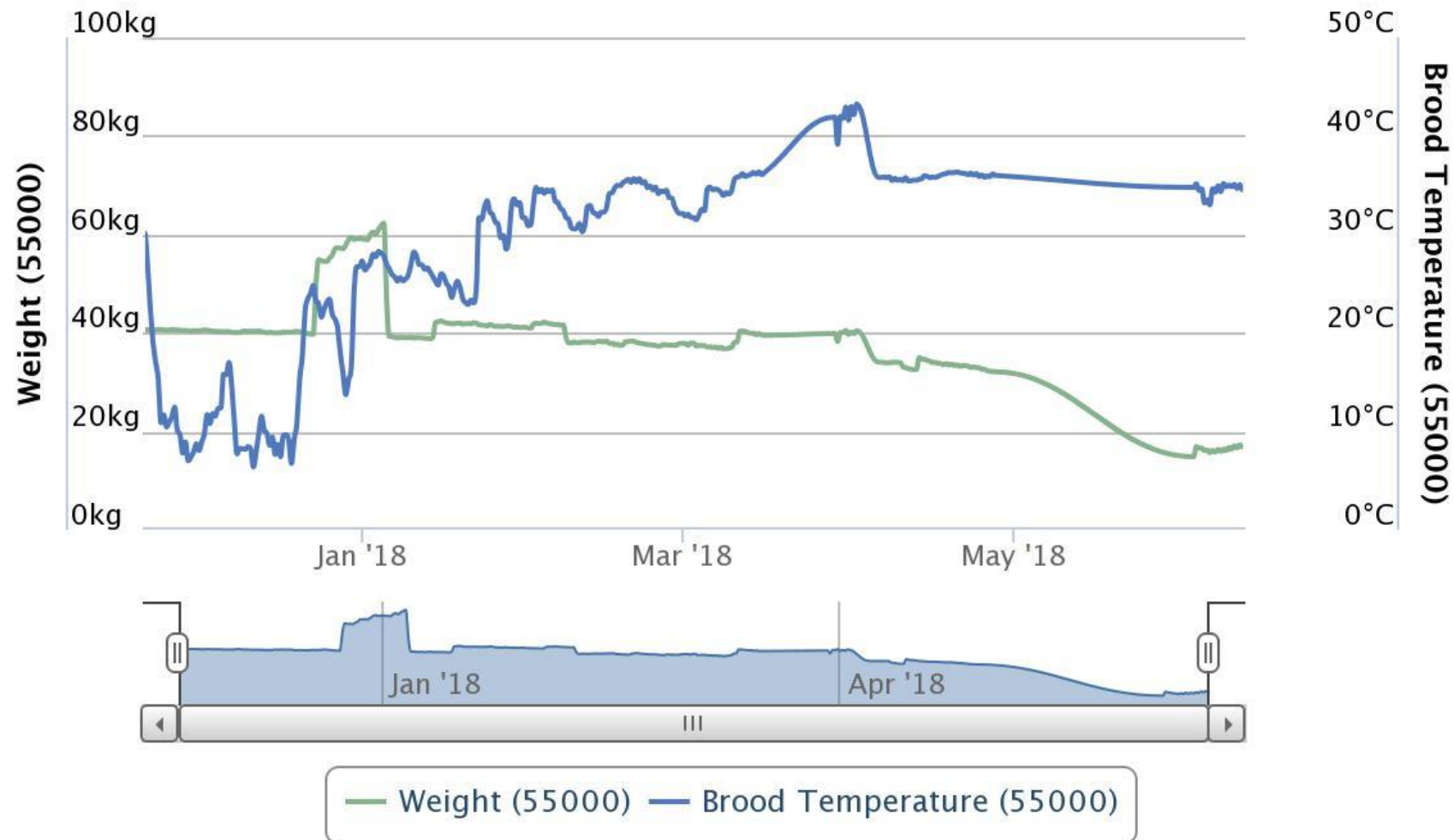
What is the proposal?

- A fully managed service
- Interaction for staff and all students
- Educational community support apiaries funded by corporates
- Research & Development
<https://www.beesmax.org/about/research-partners/>





Screen shot of our current IT system





Progress since June 2018

- 30 Arnia IoT systems now in service
- **New offices** at Barracks Farm Leatherhead
- **RHS Wisley Bee School**



Developing Partnerships

- **British Beekeepers Association**
- **British Bee Breeders Association**
- **British Horticultural Association**
- **STEM Ambassadors**





What we do & what we believe in:

- **We believe education is the route to long term sustainable regeneration & renewal**
- **We rehouse urban honey bee swarms back into the UK woodlands**



What we are not is a:

- **Cottage industry gleaning honey from the wild and selling for our own benefit**
- **Traditional hobbyist outfit that breeds unnaturally large stackable bee hives**
- **Way to collect and centralise swarms for our own financial benefit**
- **Boutique candle, cosmetics and confectionary business**



Why are our honey bees dying out?



- **Monoculture farming** creates vast swathes of countryside devoid of plant variation. The plants we grow to eat do not produce bee food such as barley, grass, wheat & corn
- **After years of crop spraying and urban pavement spraying** garden centres sell their plants pre-treated with pesticides. Virtually everything bees touch is contaminated.
- **Our milder winters** leave our early overwintered spring bees elderly and infirm. Without the suspended animation of winter (hibernation) spring bees struggle from day 1
- **Urban beekeeping** takes excessive quantities nectar and pollen from feral/wild bees
- **New invading mini-beasts such as Varroa and the Asian Hornet** upped our game to new levels of risk. In Southern Italy a new species of beetle arrived for which the only treatment is like Foot & Mouth; stand still orders, incineration of everything along with the wooden hives, bees and their honey; all buried where they stood
- **Bees typically live in old hollow trees** and woodpeckers do a great job providing the holes an homes. But our managed woodlands are now safe for use to walk through and old ancient trees falling down are not valued enough. Recently a council cut all their pavement trees down to save on possible H&S claims and ongoing arboviral costs

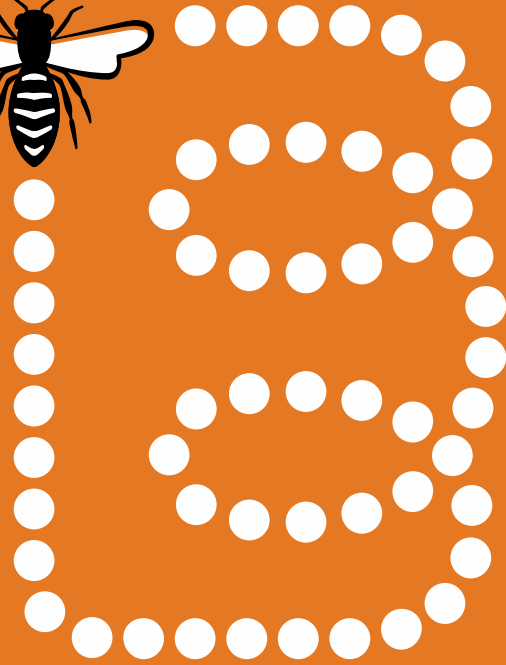


What is being done about all of this?



- **Monoculture farmers** are now being rewarded to set aside and replant perimeter land
- **Crop spraying**, some garden centres have stopped pesticide pre-treated plants. EU bans on some pesticides. This all begins the fight back against deep seated social trends
- **Urban pavement spraying** remains unchecked
- **Our milder winters** remains unchecked and is accelerating
- **Urban beekeeping**, BeesMAX is in with <https://www.bbka.org.uk/blog/schools-project>
- **New invading mini-beasts such as Varroa and the Asian Hornet**, medications are now available but it is a postal code lottery when it comes to fighting the foreign hornets
- **Increasing homes for feral bees**. This is where BeesMAX is working with the farming and country estate community through Country Land & Business Association www.cla.org.uk
- **Making the younger generation sit up and STOP, look and listen**. Education is the route to long term sustainable regeneration & renewal. This is where BeesMAX is working with the education community, bringing together good works that need pushing.
- **BeesMAX is providing woodland honey samples for the Centre for Ecology & Hydrology** <http://assist.ceh.ac.uk> proof of potential honey pesticide contamination





Thank you for listening
www.beesmax.org