

Curriculum vitae

Worker Honey Bee *Apis mellifera*

Address: 2900th Cell, The Hive, The Orchard

Home pheromone: Queen mandibular pheromone

Work pheromone: 2-heptanone

Email: Apismelifera@beemail.com



Personal statement

Having served my queen and my hive for most of my life I am now looking to wind-down and assume the role of an undertaker bee until I am unable to serve my queen and leave the hive to retire in the orchard. I have worked hard for my queen and my sisters over the last 6 weeks, completing all tasks to a high standard staying focused on the job in hand, for the greater good of the colony.

Key Skills

- Hard Working
- Working well with a team or alone
- Communication skills
- Taking a great deal of pride in all jobs and tasks
- Selfless
- Family orientated

Employment History

Forager (Day 22 – present)

Achievements and Responsibilities:

- Carrying half my body weight of pollen in the scopa hairs and pollen baskets, otherwise known as corbiculae, on my hind legs whilst travelling up to 5 miles
- Collecting nectar from flowers using my long tongue, called a proboscis, and storing it in my honey stomach
- After collecting the nectar and processing it I either deposit it in the honey store or give it to a nurse
- Performing the Waggle Dance for my foraging team to communicate the location of resources
- Navigating using the sun, always returning to the hive safely
- Avoiding predatory species, such as spiders
- Being prepared to use my modified ovipositor which is barbed to sting enemies with venom if I feel myself or the colony's lives are being threatened (although I have never had to use it)
- Gathering water for the hive in my crop
- Gathering propolis, otherwise known as bee glue or bee penicillin, used for several purposes including sealing cracks in the hive

Guard & Ventilator (Day 18 – 21)

Achievements and responsibilities:

- Inspect all bees that enter the hive by their scent to check they belong to my colony, I do this by examining their front legs and antenna
- Being prepared to sting and remove any intruders
- Spreading a thin layer of water on the rims and tops of sealed brood cells for the water to evaporate and cool the hive
- Fanning my wings inside the nest to help ventilate and cool the nest

Hive builder & general handy bee work (Day 12 – 17)

Achievements and responsibilities:

- Producing wax flakes through the glands in my abdomen, then chewing them till they are pliable for building
- Building hexagonal wax cells
- Help the nectar to ripen into honey by aerating the nectar with my wings creating an airflow to allow water to evaporate from the nectar
- Storing food
- Maintaining cleanliness of the hive

Nurse (Day 3-11)

Achievements and responsibilities:

- Tend to the young brood by feeding them honey and pollen otherwise known as bee bread
- Feeding the brood Royal Jelly made up of water, protein, sugar, vitamins and minerals
- Feeding the general worker bees Royal Jelly for three days then bee bred until they pupate at 21 days
- Feeding queen bee larvae Royal Jelly until they pupate after 16 days
- Feeding male drone larvae Royal Jelly for 3 days then bee bred until they pupate at 24 days

Housekeeper (Day 1-2 straight after metamorphosis)

- Cleaning cells in preparation for eggs or food storage
- Maintaining the temperature of the brood at around 34-35 °C by vibrating my wing muscles

Education

Explosives Detection

- Held in a specially designed bee harness so I could stay still and focus
- Trained by a scientific officer to stick out my proboscis when I smelt explosives vapours, I did this to obtain a nectar reward
- After I had been trained, which took only several minutes, I travelled in a transportation box to various sites to detect explosives
- I had a camera that could zoom in on my proboscis to see if I was sticking it out
- After 4 days I was returned to the hive and my colony to continue serving for my queen



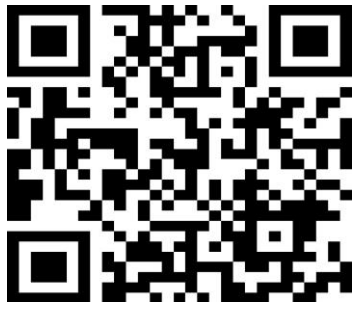
Hobbies & Interests

My main hobby is to perform, I enjoy dancing especially the Waggle Dance. My Waggle dance lets the other foraging bees know the direction and distance the best pollen carrying flowers are.

I am most interested in flowers especially yellow flowers, this of course depends on the time of year and availability of the flowers. My favourite spring flowers are dandelions, but they can be hard to come by.

Reference

- The Queen – Work pheromone: queen retinue pheromone
- More available on request



To access QR codes, scan with smart phone camera.

Eskov, E. 2019. *The Origin and Organization of the Bee Colony Apis mellifera L.* Cambridge: Cambridge Scholars Publishing.

Georgia Tech College of Computing. 2011. *The Waggle dance of the Honeybee.* [Online Video]. YouTube Available from: <https://www.youtube.com/watch?v=bFDGPgXtK-U>. [Accessed 18 December 2019].

Los Alamos National Lab. 2008. *Scientists train honeybees to detect explosives.* [online video]. YouTube. Available from: https://www.youtube.com/watch?v=_T7d0bze4kM. [Accessed 18 December 2019].

Morse, R. A. 1994. *The new complete guide to beekeeping.* New York: The Countryman Press.

Page Jr, R. E., & Peng, C. Y. S. 2001. Aging and development in social insects with emphasis on the honey bee, *Apis mellifera L.* *Experimental gerontology*, 36 (4-6), pp 695-711.

Vidal-Naquet, N. 2015. *Honeybee Veterinary Medicine: Apis Mellifera L.* 5M Publishing.

Waring, C. 2014. *The Bee Manual: The Complete Step-by-Step Guide to Keeping Bees.* Sparkford: Haynes Publishing.