

The Queen's Life

By: Alex Surcica, Research Assistant, Horticulture

Finally, warmth! Golden sunlight is awakening life. Everywhere, buds explode in myriad colors and sweet aromas. This time I am sure spring is here. Even my refuge¹ is no longer cold. Now, I can visit all my blooming treasures: heathers, crocuses, primroses, poppies, vetches and many others. Oh, in my excitement over my garden I forgot to introduce myself...

My name is Beatrix and, this spring, I am very busy. First, I must find a new home². There I hope to start my future family — and I want a BIG family! Why do I have to find a new home? It's a long story. I'll tell you as I sunbathe in these brilliant dandelions.

I was the youngest princess in a rather large royal family — a couple of hundred members³! Sadly, I never knew my father, who died before I was born. In fact, my siblings never knew him either. Fortunately, my beautiful mother, the queen, made sure that we had all the love and care we needed. Growing up, our main entertainment was to play in “wild” gardens and meadows.

My sisters and I were never fond of modern, ordered gardens. You know, those “clean” gardens with large concrete patios and straight-edged concrete walks, over-manicured lawns⁴, geometrically shaped hedges, sterile exotic flowers⁵, and healthy trimmed trees. Those gardens lacked the fascinating and colorful bugs, worms, butterflies, birds, and other animals that made us feel at home. I guess you could call us old fashioned...

The love for gardens was a way of life⁶ for my family. Because there is always something to do in the garden, we started working early in the morning and finished late in the evening, regardless the weather. Each of us took special interest in a couple of blooming plants; we all had favorites. This made our work nurturing plants and gathering food more efficient.

Certainly, our enthusiasm for gardening grew out of our mother's sacrifices. She started our family by herself, searching tirelessly for food and taking care of my older sisters when they were young. As they grew, my sisters selflessly helped my mother by bringing food and taking care of us, the heirs. They also protected our home from enemies⁷. Our most frightening enemy was a relative, a distant cousin⁸. Before I was born, she tried to dethrone my mother; her plan was to enslave my sisters and make them raise her brood. Luckily, my family was strong enough to defeat her.

Time passed and I grew into a princess – a beautiful princess, if I do say so myself. One late summer, when I was tending a patch of foxgloves, I met the father of my future children. It was love at the first sight; he was so handsome in his gold- and black-striped cape. He courted me fervently. We were not the only ones experiencing this bliss...almost all my siblings were in love. Our gardens were more full of joy than ever, and everywhere you could see couples abuzz with excitement.

Unfortunately, fall eventually arrived. Our gardens were less rewarding. The colder temperatures forced us into shelter. It was a bare and tragic time; the father of my future offspring, my mother, brothers, and many of my sisters did not survive the winter. In addition, only a few of my surviving sisters will be able to overcome rivals and establish new families this spring. My mother was once one of the successful survivors, and, with your help, I hope to be one too!

Buzzing you, Beatrix, a Bumblebee Queen

¹ The young mated bumblebee queen will overwinter buried in the soil, usually on a north-facing slope. Thus, any the unseasonable warmth will not disturb her 9 months dormancy. Once the spring comes, the queen will search for a nest where she will lay eggs in a wax comb. From the eggs will hatch larvae, which will develop in pupae and adults.

² Very opportunistic, the bumblebee queen will accept almost any shelter free from dampness and extreme temperature. They prefer abandoned underground mice nests.

³ Depending of the species and level of stress, the queen forms a bumblebee colony of 100-400 workers, and 100-300 reproductives, males (drones) and young queens. Produced early in the season, the workers only gather pollen and nectar and take care of the queen's brood. However, once the queen loses dominancy because of age or weakened health, some workers will lay eggs that hatch all males.

⁴ Extensive lawns threaten bumblebee nesting habitats.

⁵ Exotic or hybridized plants usually produce less nectar, which is flight fuel for the bumblebee.

⁶ Bumblebee colonies rely exclusively on flowers for pollen (source of protein for the larvae and pupae) and nectar (source of carbohydrates).

⁷ The main parasites and predators of bumblebee colonies include bumblebee wax moth caterpillar (*Aphomia sociella*), a two-winged fly larva (*Brachomia devia*), the threadworm (*Sphaerularia bombi*), ants, and mice.

⁸ The Cuckoo bee queen (*Psithyrus spp.*), who looks like a bumblebee queen but lacks the pollen baskets, acts as a parasite and it doesn't produce its own workers.

Article part of ***“Understanding Bumblebees: Making a Case for Conserving Native Pollinators”*** series