Honey Bees & Human Culture

Honey bees have long been valued for honey and wax-sweetness and light. Nowadays we take these for granted, but it was only a few hundred years ago that beeswax candles were an important source of light and honey was the only form of pure sugar. Honey was also fermented to make alcoholic drinks such as mead—honey wine. It is not surprising, therefore, that humans have taken a keen interest in honey bees and beekeeping, and with its modern-day importance in crop pollination the honey bee is certainly man's best insect friend. But the link between honey bees and humans goes much deeper than this. Honey bees have become part of human culture.



a. Honey and bees are mentioned in the Old Testament of the Bible and in the Quran. b. In his poem The Old Vicarage, Grantchester, English poet Rupert Brooke (1887-1915) wondered "Stands the Church clock at ten to three? And is there honey still for tea?"

c. Sussex bear Winnie the Pooh loved honey, even if the jar is spelt hunny.

d. Many people consider The Swarm (1978) the worst movie ever-so bad it is worth seeing. Michael Caine plays a scientist trying to control a giant swarm of killer bees invading the USA

Many Hollywood films feature honey bees or beekeeping, including Ulee's Gold (1997) and the 2007 cartoon Bee Movie. Not all of these are of the highest guality with The Swarm probably representing the low point. Poetry does rather better with Kipling, Brooke and Yeats, in The Lake Isle of Innisfree, all using the honey bee to evoke great depths of feeling. In popular music, I'm a King Bee, a 1957 blues song by Slim Harpo (1924-1970), received a Grammy Hall of Fame Award in 2008. It has been recorded by the Rolling Stones and Muddy Waters, among others. It's the Same Old Song was a hit for the Four Tops in 1965. Written by the Motown writing team of Holland-Dozier-Holland the lyrics begin with the honey bee duality of pleasure and pain "You're sweet as a honey bee, But like a honey bee stings, You've gone and left my heart in pain".



a. In History of Animals, Aristotle (384-322BC) correctly noted that worker bees do different tasks and that foragers are "flower constant", visiting only one type of flower on each trip.

b. In Origin of Species, Darwin (1809-1882) wrote "He must be a dull man who can examine the exquisite structure of a comb, so beautifully adapted ..., without enthusiastic admiration."

c. The hexagonal wax cells of the honey comb combine beauty with elegant engineering. They also presented a challenge to Darwin's theory. How could the instinct to build such a seemingly perfect structure exist? Darwin proposed that it could have arisen gradually via natural selection on intermediate stages, starting with spherical cells as built by bumble bees.

d. "Over then, come over, for the bee has guit the clover, And your English summer's done." These evocative lines come from the poem *The Long Trail* by Rudvard Kipling (1865-1936).

Humans have puzzled over the life of the honey bee for millenia. Aristotle was arguably the first bee scientist. Darwin devoted many pages in the Origin of Species to the honey bee. In The Life of the Bee (1900) Maurice Maeterlinck (1862-1949), who won the 1911 Nobel Prize for Literature, pondered the remarkable workings of a honey bee colony "What is it that governs here? What is it that issues orders, foresees the future, elaborates plans, and preserves equilibrium?". Modern day science may have solved some of these mysteries but has not diminished the sense of wonder and admiration eulogized by Virgil.

Did You Know?

- * Deborah and Melissa both mean bee, in Hebrew and Greek. Honey bee workers are female so it is appropriate that these are girl's names.
- * Referring to the honey bee, in *The Georgics* the Roman poet Virgil (75-19BC) wrote "A world in miniature thine admiration claims". The admiration continues to this day.
- * Many English expressions refer to honey bees. Is your workplace or school a "hive of activity"? Are you someone's "honey", a "lazy drone", "busy bee", or even "queen bee"?

Life Sciences

LASI does research on honey bees and social insects, trains students, and provides outreach to beekeepers, schools, and the public. This Information Sheet was written by Francis University of Sussex Ratnieks, Professor of Apiculture. ©2011 www.sussex.ac.uk/lasi

