

COMMENTARY: *Bees In Ancient Egypt*

by Richard Lobban, Rhode Island College, Providence, RI 02908.

I would like to acknowledge the suggestions of Joyce Haynes, Timothy Kendall, and Judy Wong (Boston Museum of Fine Arts) and the assistance of Myra Blank (InterLibrary Loan, Adams library) in the research for this manuscript.

INTRODUCTION

This article explores the history, role, and significance of bees (*Hymenoptera sp.*), bee keeping, and bee products in the ancient Egyptian Nile.¹ Earlier articles have dealt with cattle and the accumulation of wealth for the ruling classes in ancient Egypt (Lobban 1989) and with the complex set of factors accounting for the rise of the pig taboo in ancient Egypt (Lobban 1994). These, and other animals, were revered by, and lived closely with, the ancient Egyptians. Consequently, they all have a greater importance and symbolism than one might expect.

BEES AND BEEKEEPING IN EGYPTIAN HISTORY

It is most probable that wild honey was gathered in ancient Egypt before proper domestication took place. Zeuner (1963:496) suggests that smoke was blown into the hive and honey removed without damaging the colony. Probably the oldest notation of domestic honey in ancient Egypt occurs late in the Old Kingdom, in a relief from the Temple of Ne-Usere-re at Abusir near Cairo in the Vth dynasty, about 4,500 years ago. This relief, now in Berlin, shows an Egyptian recovering honey from clay hives and sealed into a honey pot (Free 1982:92). There is another case in the VIth dynasty during the reign of Pepi II, at about 2,300 BC. At this time, a Prince Sabni of Aswan was reported to have traveled south to Nubia with 100 donkeys laden with honey, oil, cloth, and other items, which were apparently gifts for the Nubians (Trigger 1976: 59). The quantity of honey is uncertain, and it is also not clear if it was collected from the wild or cultivated.

During the New Kingdom (1570-1070BC), it was common for the nobility to have villa gardens that included pools, flowers, fruit trees, and a row of beehives (White 1963:73). Beehives could also be considered as part of the private agricultural holdings of New Kingdom temples (Kemp 1972:658). Also at this same time, among the tomb goods of the XVIIIth Dynasty pharaoh Tutankhamen, there were two jars labeled as "honey of good quality" for his travel to the afterlife (Free 1982:93). Slightly later, at the vast temple and palace complex for Ramses III at Medinat Habu, opposite the Theban capital, a list of royal officials and workers included three beekeepers (Kemp 1972:666). And beekeeping in horizontal, conical hives are portrayed in the limestone relief of the Theban tomb of Pubes during the XXVIth Dynasty (Woldering 1963:216).

Beekeepers are also shown in the Late Period (525-343) tomb of Ankhor (Manniche 1987:88--89). In this instance a beekeeper is depicted blowing smoke into a series of eight conical clay hives. The hives would be mounted in a wall; one end was left open for the bees to enter, and the other was kept closed until smoke was blown in and the honey removed. This technique is still used in Egypt today.

Beekeeping was also noted for both Lower and Upper Nubia, just upstream of the Egyptian Nile. (Trigger 1976:130)² Thus, for virtually the entire history and extent of ancient Egypt, bees and bee products were used. It is not precisely clear when the production of domestic honey exceeded that of wild honey, but it must have been at a very early time. The Egyptians also practiced migratory beekeeping to follow the bloom and nectar flow. With hives placed on rafts, the ancient Egyptian beekeepers began their annual voyage in Upper Egypt in October and gradually drifted down the Nile to reach Memphis in early February, where their honey and wax would be sold (Free 1982:94). This practice is maintained in the United States today with half of all commercial beekeepers following

cyclical movements that relate to the seasons of plant flowering (Mairson 1993: 76). Not only could the beekeepers keep up honey production, but they played a critical role in plant pollination. Today, the Fayoum region of Egypt is famed for its apiaries located near orchards and olive groves. The popular and delicious honey creates a lucrative rural industry as Fayoumi honey sells through Egypt and in the nearby urban area of Cairo (Hewison 1986:11).

Probably the best single writer on insects in ancient Egypt is Ludwig Keimer (1931-1937), whose work was published in a series in six editions of the Annals of the French Antiquities Service. These articles cover insects including bees, wasps, grasshoppers and locusts, butterflies, beetles, scarabs, flies, praying mantises, and meal worms. The insects are depicted especially on jewelry, amulets, charms, ostraca, rings, and pendants.

BEE AND WASP SYMBOLS IN ANCIENT EGYPT

According to ancient Egyptian legend, bees are a creation of god.

The god Re wept and the tears from his eyes fell on the ground and turned into a bee
The bee made [his honeycomb] and busied himself with the flowers of every plant;
And so wax was made and also honey out of the tears of the god Re.³

The most significant symbolic expressions of the bee, wasp, or hornet is in the *nesubat* name given to pharaohs.⁴ This name, as with other titles connoted that the Pharaoh was the "Lord of Two Lands," that is, of Upper (southern) Egypt and Lower (northern) Egypt. From the very earliest time, the King of the North, or Lower Egypt, was represented as *bat* a sacred bee (Budge 1987a:22). When the First Pharaoh of the First Dynasty of the Old Kingdom, King Menes from Upper Egypt, took over to rule both regions, he accepted the bee as a fundamental part of the symbols for royalty. Customarily, the name of the Pharaoh was contained within a cartouche, upon which the bee or reed was inscribed. In the *nesubat* form of the Pharaoh's title, the glyph for "reeds" indicated the pharaoh's authority of the land of the south/Upper Egypt and the bee glyph denoted the Pharaoh's rule over the north/Lower Egypt (Budge 1977:84-85). To carry this metaphor further, in the IInd Dynasty, Pharaoh Neferkara was celebrated as ruling at a time "when the Nile flowed with honey for eleven days" (Budge 1987a:28). The use of the bee/reed combination of symbols continues through many of the Pharaohs in Dynasties IV to XI.

In another form, first seen in the Vth Dynasty, the bee glyph was matched with the duck glyph with the same intention of showing the all-important political unity of the Egyptian Nile valley. The bee/duck combination was especially common in the XIIth, XIIIth, and XVIIth to XXth Dynasties. Given their great political and religious importance, the bee or wasp also appeared in jewelry, figurines, carnelian amulets, and necklace pendants (Budge 1987a:267).

DIVERSE USES OF BEE PRODUCTS

It is important to recall that honey was the only sweetener known in ancient Egypt. Although widespread today, sugar cane was not found in Egypt in antiquity. Honey, or *aba-t* or *bit* was used in making a mead wine, much as the Ethiopians still make their *taj* with honey today. Honey was certainly used as a sweetener in baked and cooked foods (Budge 1977:75, 116). A mixture of aromatic spices and honey was formed into pellets that were used as breath sweeteners (Budge 1977:74). The Ebers Papyrus gives a recipe for headaches that requires various seeds, spices, and honey (Budge 1977:198-200)⁵. Honey was also considered by the ancient Egyptians to have medical value especially for ailments of the eyes and respiration. (Free 1982:93).

Beeswax was sometimes used by ancient Egyptians in cosmetics, wig waxing (Free 1982 :93), and for mixing with paints to make them more permanent (Manniche 1987: 14). Painting with beeswax during the Roman occupation of Egypt 32 BC to ca. 350 AD was extremely popular. Waxed writing tablets may also have been used, as they were in Mesopotamia; after records were noted the surface could be smoothed and reused (Zeuner 1963:498).

Romans in the Nile valley continued the mummification skills of ancient Egyptians, but they became more elaborate by attaching painted mummy portraits onto the shrouded body. The portraits were made with colored beeswax using the encaustic technique on wood or linen (D'Auria et al. 1988:205-211). Ground pigments were added to the beeswax, which, according to James, "produced a more robust portrait with a luminosity and enrichment of color reminiscent of modern oil-painting" (1979:244). Mummy portraits became especially popular in Roman towns, such as Arsinoe in the Fayoum, which is still famed for its apiaries. Some mummy cases were also coated with wax to seal out moisture. Similarly, beeswax was sometimes used to cover the eyes, ears, and nose of the deceased during the process of mummification. Indeed, the common term "mummy" is derived from the Arabic word *mummiya* meaning bitumen, which in its original Farsi language form meant "wax" (Budge 1987a:201).

Perhaps even more remarkable is the claim that honey was even used in the process of preservation and mummification itself. In one instance, the deceased was supposedly buried in a coffin-sized sealed jar filled with honey, which apparently functioned as an anaerobic preservation of the body. The most celebrated of such cases was none other than Alexander the Great himself, who requested this on his deathbed. (Budge 1987a:208).⁶

Beeswax was also easily sculpted for fine details in metal work such as in jewelry, statuary, and weaponry. From the time of the Egyptian Bronze age (in the New Kingdom and Ptolemaic periods), the "lost wax" (cire-perdue) process was used regularly. With greater strength than pure copper, bronze had quickly become preferred (White 1970:110). This technique used molten metals such as bronze, copper, silver, and gold, which were poured into a baked clay mould-jacket built around the figures or objects first sculpted in beeswax. Either the mould was heated to melt out the wax or molten metal would instantly burn out the wax and fill every detail (James 1979:226). When cool, the clay would be discarded and a precise copy of the original beeswax carving would be made. One can truly say that without bees and beeswax the Bronze Age in Egypt might not have come, unless another substance could be found to substitute for wax, or it could have been imported from abroad. It is very seldom that the role of bees is adequately recognized in bronze casting by the "lost-wax" process, which typically loses the bees in the process as well. Upon reflection on the great number and diversity of metal objects known from this period one can begin to appreciate the critical role of bees as wax producers. The museums filled with daggers, spear points, sculpture, figures, bed feet, arrow points, door hinges, and many other objects are greatly indebted to them.

Wax and wood sculptures were also gilded with gold leaf (Budge 1987a: 307). Amulets of religious significance were often made entirely of wax or of wax wrapped around a core of Nile mud. Popular among these were sets of four wax mummiform amulets of the "four sons of Horus" which were wrapped within the mummy bindings (D'Auria et al., 1988:171, 222). These "sons of Horus" were likewise represented in the four canopic jars into which body organs were placed in the funerary ritual. "Corn mummy" amulets made of Nile mud and plant seeds to symbolize the potential for resurrection and rebirth also had wax masks covering the head and face (D'Auria et al., 1988:245). Because of this it is believed that wax was considered to have had magical properties of its own. In another related use, candles, as well as wax sculpted to be burned at religious ceremonies

(Budge 1977:117). It is also reported (Redford 1992:383) that the Pharaoh would make wax images of Seth, Apophis, and his political enemies and then burn them to ward off their feared evil powers. The role of wax candles in church services is still a strongly enduring tradition in modern times. In Psalms 68:2 of the Bible, one's enemies can be cursed "as wax melts before the fire" in a ritual that has a similar relation to the practice of sympathetic magic as seen in ancient Egypt or in African *Vodun* (voodoo) today. Increasingly, scholars have come to recognize that the ancient Greeks had many deep ties to ancient Egypt. For example, the Greeks also used horizontally mounted clay cylinders as hives as did the Egyptians. Similarly, the Greeks used honey as a sweetener, medicine, and preservative for corpses, such as Alexander himself. Romans were also known to use beehives for military purposes when they would be thrown against their enemies, who would be put in such confusion that Roman arrows would easily find their targets (Zeuner 1963:504).

BEES AS A METAPHOR OF SOCIAL AND POLITICAL ORGANIZATION

Given the role of bees in their close link to pharaonic legitimacy in royal names, one begins to wonder why such a humble insect would be elevated to such prominence on the cartouche (royal insignia) of so many pharaohs. We can speculate that the natural structure and organization of bee colonies and hives was a metaphor for pharaonic authority. Indeed, the work of Zeuner (1963: 506) offers much food for thought in this respect. He notes that there are many convergent features between the social organization of bees and humans. These include a caste-like social organization, division of labor, a "working class" sacrifice for community, permanent settlement, food production, and essentially self-domestication. Of course, Zeuner is hardly the first to make such an observation. It was recognized by many, including William Shakespeare, who noted in *King Henry V*, that honey bees were "creatures that by a rule of nature, teach the art of order to a peopled kingdom ... [that has] the singing masons building roofs of gold; the civil citizens kneading-up the honey " The hive was a model of architectural perfection with its geometric and regular honey comb. The division of labor of workers and drones was not to be challenged either inside the hive or by external aggressors, who would meet a formidable mass resistance. The ruling queen was godlike, obediently served and groomed, and had absolute authority. The matrilineal descent and the prominence of the Pharaoh's Queen mother as practiced by the ancient Egyptian rulers would find a happy harmony between the natural social order of bees and that which they sought in their own kingdom. Indeed, could it be that the word for bee, *afabat*, or honey, *abat*, who endlessly slaved to produce more honey for their queen is related to the word for servant, *abata*. The word *abata* lingers on in very similar form and meaning in modern Arabic and Hebrew. Of course, in English the expression "busy as a bee" suggests a similar assignment to endless labor.

CONCLUSION

Bees and their products in ancient Egypt are associated very consistently with pharaonic authority. Wax played an important role in painting, decoration, and ritual; and honey sweetened breath, and foods. Without beeswax there would have been none to lose in the "lost-wax" process that was critical to the Egyptian Bronze Age. Perhaps bees are even symbolic of the hierarchical social and political order of the model kingdom for the pharaohs. In any case, without bees, life for the ancient Egyptians would not have been the same. As the millennia passed, ancient Egypt was replaced by Islamic society in the 7th century. But the enduring quality of bees was still preserved in a verse in the Islamic holy book, the *Quran*, which has a chapter entitled "Bees" (Surah XVI, An-Nahal, v.68). A theme of this chapter is the idea of "duty," "usefulness," and "divine order" (Pickthall, n.d.: 195-203).

At present the widely popular Middle Eastern mystic, Kahlil Gibran, author of the *The Prophet*, reminds us:

Go to your fields and your gardens, and you shall learn that it is the pleasure of the bee to gather honey of the flower,
 But it is also the pleasure of the flower to yield its honey to the bee.
 For to the bee a flower is a fountain of life,
 And to the flower a bee is a messenger of love,
 And to both, bee and flower, the giving and the receiving of pleasure is a need and an ecstasy. – Gibran (1923:73)

NOTES

1. The ancient Egyptians apparently had only one known glyph/determinative, or symbol, to express this general type of insect, whether bees, wasps, or hornets. It may be that wasps were called *kheb* and bees were an *Iabat* (Budge 1987b: Vol. 1, pp. 39, 539). Clearly, they were differentiated in practice, but scholars have endlessly debated which one is the precise referent. Keimer (1937) considers that "bees" may also have been known as *bj.t*, *tkk.t*, or *ff*. Keimer (1936, Tome XXXVI: 89-114) also raises the question whether the "bee" glyph was a determinative sign for "flies" or for all "flying" insects.
2. Trigger is quoting Save/Soderbergh 194 I: 199- 200).
3. This is quoted from Free 1982:93.
4. Relative to etymology, the following three ancient Egyptian words *nesuba-t* (Pharaoh's name), *afaba-t* (bees), and *aba-t* or *bis* (honey), all make use of the same "bee" glyph (Budge 1987b: Vol. 1, pp. 39, 119). Although glyphs may be used strictly for their sound value, it seems otherwise in this case because the words are linked in the other ways discussed. The Coptic language which has descended from ancient Egyptian still uses the word *al* for flies and bees, although honey bees are clarified by the term *af ebio*, with *ebio* meaning honey. The Coptic language distinguishes wild honey, Nubian (date) honey, and sycamore honey (Vycichl1984:38). Modern Arabic words for bee and honey, respectively, *nahlat* and *asal*, have no apparent relationship.
5. Budge is quoting from the Abers Papyrus, Pl. 47, lines 5-10.
6. Budge is quoting from an Islamic writer named Abdel Latif, but this practice must be considered as unusual, if it took place at all.
7. In Arabic, "slave" or "servant" is *abid* and in Hebrew it is *abata*.

REFERENCES

- Budge, E. A. W. 1977. *The Dwellers on the Nile*. New York: Dover Books.
- _____. 1987 a. *The Mummy, a handbook of Egyptian Funerary Archaeology* (first published in 1893). London: KPI Books.
- _____. 1987b. *An Egyptian Hieroglyphic Dictionary*, 2 vols. New York: Dover Books.
- D'Auria, S., P. Lacovara, and C. Roehrig. 1988. *Mummies and Magic*. Boston: Museum of Fine Arts.
- Fraser, H. M. 1951. *Beekeeping in Antiquity*. London.
- Free, J. B. 1982. *Bees and Mankind*. London: Allen and Unwin.
- Gibran, K. 1923. *The Prophet*. New York: Knopf. (1973 edition).
- Hewison, R.N. 1986. *The Fayoum, a practical guide*. Cairo: American University in Cairo Press.
- James, T. G. H. 1979. *An Introduction to Ancient Egypt*. New York: Harper and Row.
- Keimer, M.L 1931-1937. *Pendeloques en Forme d'Insectes de l'Egypte, Faisant Partie de Colliers Egyptiens Ancienne*. *Annates du Service des Antiquites de l'Egypte*. Imprimerie de l'Institute Francais d'Archeologie Orientale, Le Caire, Tomes XXXI-XXXVII.
- Kemp, B. J. 1972. *Temple and Town in Ancient Egypt*. In P.J. Ucko, R. Tringham, and G. W. Dimbleby, pp. 657--680. *Man, Settlement and Urbanism*, Cambridge, MA: Schenkman.
- Kritsky, G. 1993. *Beetle Gods, King Bees and Other Insects of Ancient Egypt*. *KMH*, 4(1): 32-39.
- Lobban, R. A. 1989. Cattle and the Rise of the State in Ancient Egypt. *Anthrozois* 2: 194-201.
- _____. 1994. The rise of the pig taboo in ancient Egypt. *International Journal of Middle East Studies* 25(3).
- Mairson, A. 1993. America's Beekeepers, Hives for Hire. *National Geographic* 183(5), May, pp. 73- 93.
- Man niche, L. 1987. *City of the Dead: Thebes in Egypt*. Chicago: University of Chicago Press.
- Paton, D. 1925. *Animals of Ancient Egypt: Materials for a "Sign-List" of Egyptian hieroglyphs*. Princeton: Princeton University Press.
- Pickthall, M. M. n.d. *The Meaning of the Glorious Koran*. New York: Mentor Books. New York.
- Redford, D. B. 1992. *Egypt, Canaan, and Israel in Ancient Times*. Princeton: Princeton University Press.
- Save-Soderbergh, T. 1941. *Agypten und Nubien: Ein Beitrag zur Ceschichte Altagyplischer Aussenpolitik*. Lund.
- Trigger, B. G. 1976. *Nubia Under the Pharaohs*. Boulder Westview Press.
- Vycichl, W. 1984. *Dictionnaire Etymologique de la langue Copte*. Leuven: Peeters.
- White, J. E. M. 1963. *Everyday Life in Ancient Egypt*. New York: Perigree Books.
- _____. 1970. *Ancient Egypt, Its Culture and History*. New York: Dover Books.
- Woldering, I. 1963. *The Art of Egypt*. New York: Greystone Press.
- Zeuner, F. E. 1963. *A History of Domesticated Animals*. New York: Harper and Row.