

From rats to robber flies: active pest control ancient Egypt – Catherine Bishop

Pests ultimately shaped the growth and development of ancient civilisations, affecting every aspect of daily life. They were natural threats to ancient Egyptian households and granaries – sites of food storage – battled by the ancient Egyptians' use of traps, cats, fumigation, and calls to invoke divine intervention.

Pest control primarily focused on insects (beetles and moths) as they were the main source of damage to ancient Egyptian agriculture. Rodents also posed a persistent threat to food supplies, invading homes, granaries, and other storage facilities.

Rats and mice were seen doing the most damage - responsible for damage to architecture and a general loss of grains. However, insect infestations had several severe knock-on effects. For example, primary insects (insects that bore through the husks of grain) forged a path for larger infestations of secondary insects (those that are only able to feed on damaged grains) in granaries (Panagiotakopulu, 2001, 1238). Damage to grains, no matter how miniscule it might be, allowed the development of mould and disease. Moreover, grains with large infestations became entirely inedible – even to animals. Infested grains were often fed to horses and other animals, yet, if infestations were bad enough, this would have made the animals sick and therefore, made the entire grain store useless (Panagiotakopulu, 1999, 549). The environment of Egypt, however, suited these animals incredibly well – with appropriate microclimates, abundant food supplies, and reduced light and limited space in granaries paving the way for insect population explosions (Waldbauer, 2003, 198). This all meant that ridding ancient Egypt of the insect pest epidemic was a difficult task.

With this in mind, it is easy to see the necessity for immediate intervention in the form of traps, cats, fumigation, and divine methods.



Figure 1: UC16773 - an ancient Egyptian rat trap (The Petrie Museum of Egyptian Archaeology, UCL (CC BY-NC-SA 3.0), 18/02/21).

The evidence of traps is limited, yet examples date from the early periods of Egyptian civilisations through to the Graeco-Roman period. The most well-known of which is UC16773 (The Petrie Museum of Egyptian Archaeology, UCL, see fig. 1). This Middle Kingdom example was found at Lahun, built to trap rodents (likely the Bandicoot rat) (Petrie, Sayce, and Griffith, 1891, 8 – 9., for more information of its design and use, see Drummond, Janssen, and Janssen, 1991, 91 - 98). Unfortunately, due to its composition and design, any other examples are likely to be fragmentary and, thus, overlooked. However, the architectural layout of storage structures would have

aided the use of similar traps – funnelling rodents down corridors.

Water traps are also likely to have been used in ancient Egypt. This method was described by Marcus Terentius Varro in his writings on agriculture in the contexts of Greece and Rome (Book 1: LXIII). He describes their use, explaining that grain was laid out and exposed to the sun with water placed around the grains; pests were then attracted to water, away from the dryness and heat, and would drown in water traps. Despite the Classical contexts of his writings, it is likely that this method was also used in Egyptian contexts due to the interconnected nature of the Graeco-Roman world.

Another area of pest control which is lacking in the archaeological record is using mousers, where cats used their natural instinct to hunt rats and mice, in turn, protecting stored grain from rodent infestations. This often happened naturally, where cats attached themselves to villages, serving as

mousers (Brewer, Clark, and Phillips, 2001, 1); however, they could have also been cared for, and seen as pets. For example, a cat is featured on the walls of the tomb of Baqet III (BH15) in its position of 'pest destroyer' (Malek, 1993, 50). This was likely one of the earliest and most common methods of limiting rodent populations throughout ancient Egyptian history.

Levinson and Levinson (1989) also discuss fumigation as a technique of pest control, although this is an area lacking in research. The Ebers Papyrus (trans. Ghalioungui, 1987) provides the earliest evidence of this, mixing frankincense, storax, and myrrh (all of which are insecticides) together to repel animals. House E at Amarna illustrates its use, with fumigation compounds infused with cinnamon bark – able to kill 98% of the Angoumois grain moth (Malleon, 2013, 6). This was confirmed by the research of Dibs and Kingauf (1983, 449 - 452), testing the effects of various fumes on insects. During this experimentation, they noted toxic damage to grains, reducing the likelihood and frequency that this method was used.

The role of religion in pest control must not be overlooked. Gods like Renenutet, Anubis, Horus, and Khepri were responsible for the safety of the general food supply (Levinson and Levinson, 1989, 481). This can be seen through textual records of prayers and mantras, including Ebers Papyrus number 848 (trans. Ghalioungui, 1987, 215), which lists a prayer to Horus to protect the supply of grain. Moreover, pictorial evidence, such as an image of a priest spearing a beetle (noted by Levinson and Levinson, 1985) supports the notion that religion was tied with pest control in ancient Egypt.

Infestations in ancient Egypt were an epidemic in and of themselves – tackled by water traps and repellents, cats, as well as attempts to call upon the gods for divine intervention. In all cases of active pest control, the role of religion was present, directly seen within divine methods, and through priests taking part in pest control and the use of resins, often understood to be divine incense.

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