

## WAR AND BEES-- military applications of apiculture

It would probably be easier to enumerate the cultures which do **not** chronicle some kind of use of bees as weapons since this motif is so pervasive. Most of these accounts are historical rather than mythical. One of the earliest of these, from the first century B.C., records the misfortunes of a Roman campaign, led by Pompeii the Great, against the Heptakometes in Asia Minor[1]. Interestingly, it is not the bees themselves that are employed in this instance but, rather, their honey. About one thousand of Pompeii's Roman troops were passing through a narrow mountain pass when they encountered a cache of honey. The soldiers, accustomed to raiding and looting to augment their provisions, halted their advance and eagerly devoured the honey-- and soon became afflicted with delirium and violent seizures of vomiting and purges! In such a condition they were easily defeated by the local Heptakomete defenders who took their cue to attack. It seems that the honey had been left in the soldiers' path not in an act of flight from the advancing forces but as a poisonous bait to stupefy them.

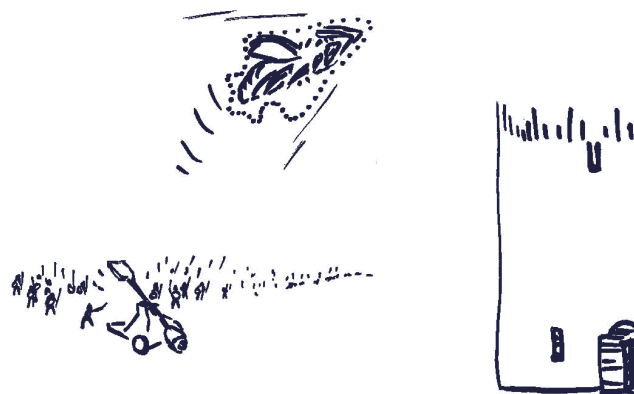
The locals would have been well aware that honey produced during certain times of the year was naturally poisonous. Honey yielded from the nectar of such plants as *Rhododendron ponticum* and *Azalea pontica* contain alkaloids that are toxic to humans but harmless to bees. After the offending blooms have stopped flowering, beekeepers in areas where these plants are common (such as the area of present-day Turkey where this incident occurred) routinely remove this toxic honey so it doesn't contaminate subsequently produced stores. The poisonous honey is then fed back to the bees during time of dearth-- if it hasn't been used first for national defense[2].

(South and Central American Indians used similar honey for ceremonial purges and perhaps for "vision questing"-- see notes following Chapter Two, "The Honeymoon's Over". Deaths have been reported in New Zealand which were attributed to the consumption of honey originating from the "wharangi bush", *Melicope ternata*[3]. Another New Zealand plant, *Coriaria arborea*, produces nectar that is safe for incorporation into honey but furnishes toxic honeydew[4]. Other locales where toxic honey has been reported on occasion include Mexico *Datura spp.*, Hungary *Datura spp.*, belladonna=*Atropa spp.* and *Hyoscamus niger*, Brazil *Serjania lethalis* and the southwest U.S. *Gelsemium sempervirens*[5].)

Mead, an intoxicating drink made from a honey base has also been used to gain tactical military advantage. In 946, the Slavic St. Olga, on the occasion of her son's funeral, provided limitless quantities of mead. She invited her enemies only, who, presumably, had somehow been instrumental in the death of her child, and five thousand inebriated 'mourners' were slain in their stupor by Olga's allies. Similarly, in 1489, 10,000 Tatars were dispatched by Russians whom the Turkish invaders had been pursuing. The Russians left mead behind in their flight and returned after sufficient time for the Tatars to drink themselves into a daze[6].

Of course, there are plenty of instances when bees have been used in the more obvious way, as "meat-seeking missiles". The Romans, for instance, having prudently learned not to exact a tax of honey in Asia Minor also learned, in the great Roman tradition of imitation and innovation, to use bees in the wars they waged. They were less deceptive in this than the Heptakometes, however, and instead of employing the subterfuge of poisoned honey they simply sent beehives catapulting into the ranks or fortifications of their enemies. The unleashed fury of the bees, enraged when their hives were smashed, is credited with being the decisive stroke of more than one battle. Turn-about being fair play the Dacians,

of what is today Romania, defeated the armored legions of Rome, at least temporarily, with their own salvo of skeps[7].



Jumping to the eleventh century, Emperor Henry I's troops, commanded by General Immo, defended their fortifications by launching a barrage of beehives at the siege forces of Duke Geiselbert of Lorraine and sent them scurrying. King Richard is recorded as having used hives of bees as catapult-launched bombs against the Saracens during the Third Crusade in the twelfth century[8]. In 1289 in Gussing, Hungary, an Austrian invasion lead by Duke Albert was repulsed with a fusillade of hot water, fire and bees thrown from the battlements of the city[9]. In 1513 under the reign of Emmanuel the Fortunate, King of Portugal, a General Baruiga was turned from Tauris in Xantiane by the Moors-- who threw hives down on his troops from the citadel's walls[10]. In the 18th century battle of Alba Graexa, the Turks, who had succeeded in breaching a wall of the city, found to their dismay that the inhabitants had piled beehives there as a barricade and were thus prevented from entering the city. Bees have even been used in naval battle: in the Mediterranean Sea the crew of a small corsair vessel, only about fifty men, boarded and captured a much larger galley manned by 500 soldiers-- after the pirates cast beehives from the masts of their ship down onto the crew of the galley, who had intended to apprehend **them**[11].

Military application of bees has continued into modern times. In a novel approach practiced by the Tiv of Nigeria, bees were kept in special horns also containing powdered poisons. Thus dusted to increase the efficacy of their own venom the bees would be released in the heat of battle to attack the Tiv's enemies (it is not, however, recorded why the bees do not succumb to the poison themselves or how the bees distinguish between the Tiv and their foes[12]). During the American Civil War, Union troops were almost routed when southern artillery shattered a row of hives in a yard through which they were passing. Bees pitched at the enemy or booby trapped to topple over with trip wires were used to the advantage of both sides during skirmishes in World War I[13]. There are even some reports that the Viet Cong used sabotaged *Apis dorsata* nests against Americans during the Vietnam war[14]. And, in a footnote to the war in South-East Asia, what was presumed to be a biological warfare agent turned out, in fact, to be the 'yellow rain' produced by *Apis dorsata* during massed defecation flights[15].

Bees have been used for personal protection as well as national defense. The Classical Roman poet Vergil is said to have thwarted soldiers from looting his valuables by storing them in his beehives. The town of Beyenburg (which translates to "Beetown"), in northern

Germany, is said to owe its name to an episode in which a marauding band was foiled in its plundering when they attempted to enter the local convent. The nuns turned loose their bees and sought shelter, leaving the bees to drive off the intruders. Similarly, in 1933, again in Germany, an old beekeeper who was being robbed by three thugs managed to upset a hive. All four men were stung, but the beekeeper, accustomed as he was to receiving stings, was little the worse for it. The three thieves, however, took flight-- but were so well marked by the wounds they'd received that they were easily identified and apprehended by police shortly thereafter[16]. Daniel Wildman, a showman of 18th century England, is reported to have fended off the attack of three large mastiffs by casting swarms of bees at the animals as they rushed towards him[17] (in my opinion, a mistreatment, for mere entertainment, of both the dogs and the bees).

Such tales could not be expected to remain within the confines of the strictly credible and have found a place as well in the annals of folklore. A fairly straightforward telling of an incident in the life of the sixth century Saint Gobnat of Ireland has her shaking the bees out of one of her hives to ward off a gang of cattle rustlers. In more colorful accounts the bees are miraculously changed into soldiers and the hive from which these myrmidons issued is transformed into a brass helmet[18]. In another Irish account, bees were at the root of a dispute that ended in war. Congal, the heir to the throne of Ulster, was stung in the eye by a bee while a guest in the house of Domnall, king of Ireland. He was blinded (and was known by the moniker "Caech", meaning "One-eye", thereafter). His kinsmen demanded the forfeiture of the eye of Domnall's son as retribution but Domnall ordered that the colony of bees should be destroyed instead-- to ensure that the guilty bee would perish. (Evidently, Domnall was a better king than he was a beekeeper, as any beekeeper knows that a bee dies after it stings.) The Ulstermen were not satisfied with Domnall's verdict and eventually carried their grievance to the battlefield (where they were soundly defeated)[19]. Punitive edicts similar to that issued by Domnall have been recorded elsewhere: in 864 the Council of Worms in western Germany decreed that a swarm of bees should be publicly executed by suffocation in retribution for the death of a man who had been stung[20].

The New World, too, has its own version of a tale of bees in warfare. The ancient Quiche Maya are said to have repelled a siege by posting mannequins along the parapets of their city. The sham warriors were outfitted with cloaks, spears and shields, even war bonnets for the gourds that served them as heads-- and which were full of wasps, horseflies and bees that the defenders had collected. When the advancing army was close to the battlements the gourds were smashed and the assailants were overcome by the stinging insects[21].

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