Asian giant hornets are, as the name suggests, native to temperate and tropical eastern Asia, including parts of Japan, China, India, and Sri Lanka. They are most commonly encountered in rural areas of Japan and one former subspecies was called the Japanese giant hornet. In September 2019, a nest of Asian giant hornets was discovered and destroyed on Vancouver Island, British Columbia and in December the Washington State Department of Agriculture confirmed a dead specimen had been found in Washington. That was the first record of this species in the United States. At this time, Asian giant hornets are not known to occur outside of Washington state and Vancouver Island and are not present in Pennsylvania. It's not clear if the hornets are established and reproducing in North America or how widespread they are in the Pacific Northwest, although given the lack of specimens, it's likely that they are not widely established. DNA evidence showed that the hornets in Washington and Vancouver were unrelated and came from different nests, which suggests there may have been multiple independent introductions of the wasps. Because they were only discovered a few months ago, official news about them is scarce, although there will likely be an effort to find and eradicate them from North America before they spread too far

顾名思义，亚洲大黄蜂原产于温带和热带东亚，包括日本，中国，印度和斯里兰卡的部分地区。它们在日本的农村地区最常见，以前的一个亚种被称为日本大黄蜂。 2019年9月，在不列颠哥伦比亚省的温哥华岛上发现并摧毁了一个亚洲大黄蜂巢，12月，华盛顿州农业部证实在华盛顿发现了一具死者标本。这是该物种在美国的第一个记录。目前，尚不知道在华盛顿州和温哥华岛以外会出现亚洲大黄蜂，在宾夕法尼亚州也不会出现。目前尚不清楚黄蜂是在北美建立和繁殖的，还是在西北太平洋地区广泛传播的，尽管缺乏标本，但它们可能尚未广泛建立。 DNA证据表明华盛顿和温哥华的黄蜂是不相关的，并且来自不同的巢，这表明可能有多次独立的黄蜂的引入。由于它们仅在几个月前才被发现，因此关于它们的官方消息很少，尽管可能会努力在它们扩散得太远之前从北美发现并消灭它们。

Asian giant hornet queens are among the largest wasps in the world and can grow in excess of 2 inches with a wingspan of 3 inches. However, they are only seen outside the nest when they are hibernating or in the spring before workers have emerged. Asian giant hornet workers (Figures 1, 2) can grow to 1.5 inches in length and are similar in size to other wasps that occur in Pennsylvania and may be confused with Asian giant hornets. Asian giant hornets are strikingly colored, with yellow heads, a black thorax, and yellow and black or brown striped abdomens.

亚洲大黄蜂女王/王后是世界上最大的黄蜂之一，其翼展可以达到3英寸，可以超过2英寸。 但是，它们仅在冬眠时或在工人出来之前的春季才在巢外看到。 亚洲大黄蜂工人（图1、2）可以长到1.5英寸长，其大小与宾夕法尼亚州发生的其他黄蜂相似，并且可能与亚洲大黄蜂相混淆。 亚洲大黄蜂的颜色惊人，头顶呈黄色，胸腔为黑色，腹部呈黄色和黑色或棕色条纹。

Asian giant hornets typically build their nests underground, usually in abandoned rodent burrows in forests, often in association with pine roots (Figures 3–5). Nests are sometimes constructed in dead, hollow trunks or roots of trees, but these are never more than 3 to 6 feet above the ground. Aerial nests are rare – of 1,756 nests examined in Japan, only three were constructed above ground. Because of their subterranean nesting habit, locating the nests of Asian giant hornets can be very difficult.

亚洲大黄蜂通常在地下筑巢，通常在森林中被遗弃的啮齿类动物洞穴中，通常与松树根结合在一起（图3-5）。 巢有时建在枯死的空心树干或树木的根中，但高度不得超过地面3至6英尺。 空中巢是罕见的-在日本检查的1,756个巢中，只有3个是在地上建造的。 由于它们有地下筑巢的习惯，因此很难找到亚洲大黄蜂的巢。

While Asian giant hornets do not occur in eastern North America, there are a number of other large wasps that may be confused for them, including European hornets and cicada killers. European hornets (Vespa crabro) (Figure 6) are the species most commonly mistaken for Asian giant hornets as they are similar in size, shape, and color. However, they can be distinguished by a number of features including the color and of the abdomen (banded yellow, black, and brown in Asian giant hornets vs black anteriorly and yellow posteriorly with rows of black teardrops in European hornets) and thorax (mostly black with a yellow spot between the wings in Asian giant hornets vs black and reddish brown in European hornets) and the forward facing eyes of Asian giant hornets, which appears as a larger gap between the rear of the eye and the rear of the head compared to European hornets.

尽管亚洲大黄蜂没有出现在北美东部，但还有许多其他的大黄蜂可能对它们感到困惑，包括欧洲大黄蜂和蝉杀手。 欧洲大黄蜂（Vespa crabro）（图6）是最常被误认为亚洲大黄蜂的物种，因为它们的大小，形状和颜色相似。 但是，它们可以通过许多特征来区分，包括颜色和腹部（亚洲大黄蜂呈带状的黄色，黑色和棕色，而欧洲大黄蜂则呈黑色，后排呈黄色，后排呈黄色）和胸部（大部分为黑色） 在亚洲大黄蜂的翅膀与欧洲大黄蜂的黑色和棕红色之间的翅膀上有一个黄色斑点）和亚洲大黄蜂的朝前眼睛，与后面相比，在眼睛的后部和头部的后方之间的间隙更大 欧洲大黄蜂。

European hornets typically build their nests inside of natural cavities such as hollow trees and sometimes inside the walls of buildings (Figure 7), although they occasionally build exposed aerial nests in protected places such as in barns or under overhangs as well (Figure 8). Their nests are usually six feet or higher above the ground, unlike Asian giant hornets, which are generally build nests in the ground or within six feet of the ground. For more information about European hornets, please refer to this Penn State Extension fact sheet .

欧洲大黄蜂通常在自然空腔（例如空心树）内筑巢，有时甚至在建筑物的墙壁内筑巢（图7），尽管它们偶尔在受保护的地方（如谷仓中或悬垂物下方）筑起裸露的空中巢（图8）。 它们的巢通常在地面以上六英尺或更高，这与亚洲大黄蜂不同，后者通常在地面或地面六英尺内筑巢。 有关欧洲大黄蜂的更多信息，请参阅宾州州立大学简介。

Thirteen species of yellowjackets (Vespula species) occur throughout North America, 10 of which are found in eastern North America. Most yellowjackets are have abdomens that are banded with yellow and black, but are smaller in size (up to 0.5 inches) so unlikely to be confused for Asian giant hornets. However, queen southern yellowjackets (Vespula squamosa) (Figure 9) are larger than other species (up to 0.65 inches) and are sometimes confused for Asian giant hornets when they are active in the spring. Southern yellowjackets can be distinguished from Asian giant hornets by their smaller size, differences in coloration, and the distinctive longitudinal stripes on the prothorax, which also distinguish southern yellowjackets from other Vespula species. Yellowjacket species in North America can be differentiated based on the pattern of the gaster (the "abdomen" of bees, wasps, and hornets); examples of different gaster patterns can be found here, here, and here. Different yellowjacket species preferentially build their nests in the ground or in aerial situations, such as under house eaves.

北美有13种黄夹克（维斯普拉物种），其中10种在北美东部发现。多数黄夹克的腹部上缠有黄色和黑色，但体型较小（最大0.5英寸），因此不太可能与亚洲大黄蜂混淆。但是，南部的女王yellow鱼（Vespula squamosa）（图9）比其他物种大（可达0.65英寸），有时在春季活跃时对亚洲大黄蜂感到困惑。南方黄jack的体型较小，颜色差异以及胸廓上明显的纵向条纹可以将它们与亚洲大黄蜂区分开，这也使南方黄jack与其他Vespula种类区分开。北美黄ja的种类可以根据胃的类型（蜜蜂，黄蜂和大黄蜂的“腹部”）进行区分。可以在此处，此处和此处找到不同加油机模式的示例。不同的黄夹克物种优先在地面或空中情况下（例如屋檐下）筑巢。

Eastern cicada killers (Sphecius speciosus) (Figure 10) are native wasps that are similar in size to Asian giant hornets. However, they can be distinguished from Asian giant hornets based on coloration and behavior. Cicada killers have the terminal abdominal segments completely black instead of banded with yellow and lack any yellow on the head.

东部蝉联杀手（Sphecius speciosus）（图10）是原生黄蜂，其大小与亚洲大黄蜂相似。 但是，根据颜色和行为，它们可以与亚洲大黄蜂区分开。 蝉杀手的末梢腹部完全是黑色的，而不是带黄色的，头上没有黄色。

Both Asian giant hornets and cicada killers nest in the ground. However, cicada killers typically nest in exposed areas (e.g., lawns) and often create an obvious pile of dirt at the nest entrance (Figure 11), while Asian giant hornets typically nest in forested areas. Additionally, cicada killers are solitary, so each female digs her own nest. Cicada killers may nest communally, with many nests in a small area that has the right soil substrate, while Asian giant hornets do not.

亚洲大黄蜂和蝉鸣杀手都筑巢。 但是，蝉鸣虫通常会在裸露的区域（例如草坪）筑巢，并经常在巢穴入口处形成明显的污垢（图11），而亚洲大黄蜂通常会在林区筑巢。 此外，蝉的杀手是孤独的，因此每个雌性都挖自己的巢。 蝉的杀手可能会共同筑巢，许多筑巢都位于土壤基质合适的小区域，而亚洲大黄蜂则没有。

Baldfaced hornets (Dolichovespula maculata) (Figure 12) are native wasps that are important predators on caterpillars, flies, and other soft bodied insects. They can be distinguished from Asian giant hornets by their smaller size, black and white coloration, and aerial nests that are commonly found on tree limbs and house eaves (Figure 13). For more information about baldfaced hornets, please refer to this Penn State Extension fact sheet ..

秃顶黄蜂（Dolichovespula maculata）（图12）是天然黄蜂，是毛毛虫，苍蝇和其他软体昆虫的重要捕食者。 它们可以与亚洲大黄蜂区分开来，它们的体型较小，黑色和白色，并在树枝和屋檐上常见到空中巢穴（图13）。 有关秃顶大黄蜂的更多信息，请参阅宾夕法尼亚州立大学扩展说明..

There is no accepted common name for Vespa mandarinia in English. Asian giant hornet is the common name most frequently used for the species in English and so is the name used throughout this article. Japanese giant hornet was used for a nowdefunct subspecies of V. mandarinia that occurs in Japan (it is now recognized to be just a color morph instead of a valid subspecies). In their native range, V. mandarinia is referred to as "great sparrow bee" (Japanese, osuzumebachi), "tiger head bee (Chinese), and "general officer hornet" (Korean). Since 2008, some Japanese media outlets have also referred to the species as "murder hornets" (satsujin suzumebachi), a name that a viral New York Times article used in the headline and throughout the article. As far as any entomologist in the United States can tell, "murder hornet" was not used in English prior to the NY Times article. Therefore, it is not recommended to refer to V. mandarinia as "murder hornets". "Asian giant hornet" is somewhat problematic as Vespa velutina has the common name "giant hornet", which may lead to confusion. Until the Entomological Society of America (which governs the use of common names for insects in the United States) decides on the official common name for V. mandarinia, the author suggests the use of "sparrow wasp" or "sparrow hornet" as it is distinctive, reflects a name used in the wasps' native range and does not carry the sensationalist tone of "murder hornet".

Vespa mandarinia没有公认的英文通用名称。亚洲大黄蜂是英语中最常用于该物种的通用名称，因此本文中使用的名称也是如此。日本巨型大黄蜂被用于在日本发生的现已不复存在的柑桔弧菌亚种（现在被认为只是一种颜色变种，而不是有效的亚种）。在其本土范围内，普通话V. mandarinia被称为“大麻雀”（日语，osuzumebachi），“虎头蜂”（中文）和“大黄蜂”（韩语）。自2008年以来，一些日本媒体也将其称为“大麻雀”。将该物种称为“杀手大黄蜂”（satsujin suzumebachi），这是病毒性《纽约时报》文章在标题和整篇文章中使用的名称，据美国任何昆虫学家所知，“大黄蜂”并非在《纽约时报》之前的文章中使用英文，因此，不建议将普通话V. mandarinia称为“杀手大黄蜂”，“亚洲大黄蜂”有点麻烦，因为Vespa velutina的通用名是“ giant hornet”。在美国昆虫学会（决定在美国使用昆虫的通用名）决定V. mandarinia的官方通用名称之前，作者建议使用“麻雀黄蜂”或“麻雀大黄蜂”。 ”，因为它与众不同，反映了黄蜂的原生范围，不带有“谋杀大黄蜂”的耸人听闻的基调。

Like other social wasps, Asian giant hornets are an annual species that build new nests every year. When winter arrives, the current seasons' nests die out and the only individuals that survive are overwintering queens. When overwintering queens emerge in the spring, they seek out protected areas in the ground to begin building a nest, which often includes abandoned rodent burrows. Unlike other social wasps which build exposed aerial nests (e.g., baldfaced hornets) or nests in protected aerial spaces such as hollow tree trunks (e.g., European hornets), Asian giant hornet nests are always in the ground. While queens are building their nests and raising the first broods of workers, they feed on tree sap (Figure 14) where they outcompete other insects, including other hornet species. The nests grow slowly through the spring and summer until they reach a peak population of around 100 workers in August. The queen begins to produce males and queens in September. Males and queens leave the nest in October and early November to mate. Interestingly, queens fight off the males, which results in a large percentage (up to 65%) not being fertilized. Both fertilized and unfertilized queens overwinter, but only fertilized queens go on to found new nests the following year. After males and queens are produced and begin to leave, the colony falls into disarray until it eventually dies off with the coming winter.

像其他社会黄蜂一样，亚洲大黄蜂是一年生的物种，每年都会建造新的巢穴。冬天到了，当前季节的巢穴就消失了，唯一幸存下来的人就是越冬的女王。春季出现越冬女王后，他们在地面上寻找保护区以开始筑巢，巢通常包括废弃的啮齿类动物洞穴。与其他社交黄蜂不同，它们会在裸露的空中筑巢（例如秃顶的大黄蜂）或在受保护的空中空间（例如空心树干）（例如欧洲的大黄蜂）中筑巢，而亚洲大黄蜂巢总是在地下。皇后在筑巢并饲养工人的第一批血统时，他们以树液为食（图14），它们在竞争中胜过其他昆虫，包括其他大黄蜂。整个春季和夏季，燕窝生长缓慢，直到八月份达到约100个工人的高峰。女王从九月开始生产雄性和雌性。雄性和雌性在10月和11月初离开巢穴进行交配。有趣的是，女王/王后与雄性作斗争，结果导致很大一部分（高达65％）未受精。受精皇后和未受精皇后都越冬，但只有受精皇后在第二年继续发现新的巢穴。在雄性和雌性被生产出来并开始离开之后，殖民地陷入混乱，直到最终随着即将来临的冬天死亡。

Asian giant hornets, like other social wasps, are predators of other insects. For reasons that aren't clear, Asian giant hornets switch from other prey sources to honey bees beginning in August and peaking in September and October. This switch may be related to the size of the colony (colonies are largest at this time, so the largest number of worker hornets can be recruited to raid the target honey bee colony) or the production of reproductive queens and workers. Japanese honey bees (Apis cerana japonica), which have coevolved with Asian giant hornets, have defenses against them. Specifically, the worker bees form a ball around the hornet, buzz their wing muscles to create heat, and raise CO2 levels so that the invading hornet is killed (Figure 15). This form of defense works because the hornets die at temperatures above 115°F, while honey bees can survive temperature up to 122°F.

像其他社会黄蜂一样，亚洲大黄蜂也是其他昆虫的捕食者。 出于未知的原因，亚洲大黄蜂从其他猎物来源转而从八月开始到九月和十月达到顶峰。 这种转变可能与殖民地的规模有关（此时殖民地最大，因此可以招募最多的工人大黄蜂来袭击目标蜂群）或繁殖后代和工人的生产。 与亚洲大黄蜂共同进化的日本蜜蜂（Apis cerana japonica）可以防御它们。 具体来说，工蜂在大黄蜂周围形成一个球，嗡嗡嗡嗡叫他们的翅膀肌肉产生热量，并提高二氧化碳含量，从而杀死了入侵的大黄蜂（图15）。 这种防御方式之所以有效，是因为黄蜂会在高于115°F的温度下死亡，而蜜蜂可以在高达122°F的温度下生存。

However, western/European honey bees (Apis mellifera), which are the species used in commercial honey production and did not coevolve with Asian giant hornets, do not form balls around hornets in this manner. Rather, individual guard bees attack the hornets in the air away from the nest. In this contest, the much larger hornet always wins. Because the hornets are targeting bees for protein, they only utilize the muscle-rich bee thorax and discard the head, abdomen, and legs. After the bee is killed, the hornet prepares the thorax into a "meat ball", which is carried back to the nest. While an individual hornet can kill many bees in this manner, it is not likely to destroy the honey bee colony. However, when three or more hornets from the same nest attack the same honey bee hive, they can enter a state that has been referred to as the "slaughter phase". The trigger for this phase is unclear, but it has only been observed when more than two hornets are present. Hornets in the slaughter phase do not return to their nest after killing a bee or at all for the rest of the day, but rather drop the corpse and kill the next bee they capture. If the attack is still ongoing when night falls, the hornets return to their nest but then continue to attack the same honey bee colony the following morning. The slaughter continues until the colony is decimated and only a few bees remain. The hornets then enter the "occupation phase", where they enter the honey bee hive and predate the pupae and larvae, as well as the bees they had previously killed. During this phase, the hornets make continual trips from the occupied hive to their nest for several days to up to two weeks as they devour the honey bee brood. If they enter the slaughter phase, a group of 20–30 Asian giant hornets can kill 5,000–25,000 honey bees in a few hours. However, Asian giant hornets only fly 0.5– 1.25 miles (1–2 km) on average (and never more than 5 miles (8 km)) from the nest in search of food and there is some evidence that hornets do the worst damage to honey bee colonies that are less than 0.5 miles (1 km) from the nest and that, while nests further away may be molested by one or a few hornets they are not generally slaughtered. If Asian giant hornets become established in North America, it's not clear how they will impact honey bees and American bee keepers, although there probably will be some impact if they become widespread. Beekeepers in Asia have implemented a variety of strategies to combat Asian giant hornets and deter/eliminate attacks that enter the slaughter phase. Presumably, some or all of these strategies can also be implemented in North America if necessary.

然而，西方/欧洲蜜蜂（Apis mellifera）是商业蜂蜜生产中使用的物种，并且不与亚洲大黄蜂一起进化，因此不会以这种方式在黄蜂周围形成球。相反，单个的保护蜂会在远离巢穴的空中攻击黄蜂。在这场比赛中，大黄蜂总是获胜。由于大黄蜂将蜜蜂作为蛋白质的靶标，因此它们仅利用肌肉发达的蜜蜂的胸腔而丢弃头部，腹部和腿部。蜜蜂杀死后，大黄蜂将胸部准备成“肉丸”，然后运回巢穴。虽然单个大黄蜂可以这种方式杀死许多蜜蜂，但它不可能破坏蜜蜂群体。但是，当来自相同巢穴的三个或更多大黄蜂攻击相同的蜜蜂蜂巢时，它们会进入一种被称为“屠宰阶段”的状态。此阶段的触发因素尚不清楚，但只有在存在两个以上的大黄蜂时才能观察到。宰杀阶段的大黄蜂在杀死蜜蜂后或一天的其余时间内根本不会返回巢穴，而是将尸体放下并杀死捕获的下一只蜜蜂。如果夜幕降临时，袭击仍在进行，则黄蜂将返回巢穴，但第二天早晨将继续袭击同一蜂群。屠杀一直持续到殖民地灭绝，只剩下几只蜜蜂。然后，黄蜂进入“占领阶段”，进入蜂巢，并早于the和幼虫以及之前杀死的蜜蜂。在此阶段，黄蜂会吞噬蜜蜂，连续几天从被占领的蜂巢到其巢穴，持续长达两周。如果它们进入屠宰阶段，一群20–30个亚洲大黄蜂可以在几个小时内杀死5,000–25,000只蜜蜂。但是，亚洲大黄蜂平均仅能从巢穴飞0.5- 1.25英里（1-2公里）（并且从不超过5英里（8公里））来觅食，而且有证据表明，大黄蜂对鸟巢的破坏最严重距离巢不到0.5英里（1公里）的蜂群，虽然巢较远，却可能被一个或几个黄蜂mole扰，它们通常不会被杀死。如果亚洲大黄蜂在北美建立起来，它们将如何影响蜜蜂和美国养蜂人还不清楚，尽管如果它们广泛传播可能会产生一些影响。亚洲的养蜂人已经实施了各种策略来对抗亚洲大黄蜂，并阻止/消除进入屠宰阶段的攻击。据推测，如果需要，这些策略中的某些或全部也可以在北美实施。

Asian giant hornets, like other social wasps, can be defensive when they feel their nest is threatened or when they are defending a food source, such as an occupied honey beehive. However, they do not seek people out just to sting them for no reason like some human-hating guided missile. Stings from Asian giant hornets, when they do occur, are extremely painful. There is some evidence in the scientific literature that Asian giant hornet stings may cause skin necrosis and hemorrhaging. However, it should be noted that the reports are likely based on rare, extraordinary events (because if it wasn't an extraordinary event, it wouldn't be published), so it's not clear how common those reactions are. Asian giant hornets have been reported to kill 50 people a year due to sting-induced allergic reactions and, more rarely, multiple organ failure due to a large number of stings. This statistic is often alarming for people. However, for perspective, an average of 62 Americans are killed every year by bees and wasps for the same reasons. Further, the reported death count is from across the entire range of Asian giant hornets, which includes large swaths of eastern Asia. In Japan, where they are most common and abundant, an average of 21 people from 2000–2018 died per year from all wasp, hornet, and bee sings combined, with Asian giant hornets accounting for only a subset of those deaths. The venom of Asian giant hornets isn't even as deadly as some native wasps on a per volume basis; for example, southern yellowjacket venom has an LD of 3.5 mg/kg compared to 4.0 mg/kg for Asian giant hornets. However, Asian giant hornets are large and deliver a proportionally large volume of venom per sting, so on a per sting basis are delivering more venom. That being said, it's not clear that Asian giant hornets are "more deadly" or more likely to induce an allergic reaction than honey bees, yellowjackets, and other social wasps.

与其他社会黄蜂一样，亚洲大黄蜂在感觉自己的巢受到威胁时或在捍卫食物来源（如被占领的蜂蜜蜂箱）时也可以采取防御措施。但是，他们并不会像某些令人讨厌的制导导弹那样无缘无故地寻求人们的st杀。一旦发生，来自亚洲大黄蜂的刺痛会非常痛苦。科学文献中有证据表明，亚洲大黄蜂net伤可能会引起皮肤坏死和出血。但是，应该指出的是，这些报告可能基于罕见的非常规事件（因为如果不是非常规事件，就不会被发布），因此尚不清楚这些反应的普遍性。据报道，由于giant引起的过敏反应，亚洲大黄蜂每年可杀死50人，而且由于大量st引起的多器官功能衰竭更为罕见。这个统计数字经常令人震惊。但是，从角度来看，出于相同的原因，每年平均有62名美国人被蜜蜂和黄蜂杀死。此外，报告的死亡数来自整个亚洲大黄蜂的范围，其中包括东亚大片地区。在日本，它们是最常见和最丰富的地区，从2000年至2018年，每年平均有21人死于所有黄蜂，大黄蜂和蜜蜂唱歌，而亚洲大黄蜂仅占这些死亡的一部分。按体积计算，亚洲大黄蜂的毒液甚至不像某些本地黄蜂那样致命。例如，南部的黄夹克毒液的LD为3.5 mg / kg，而亚洲大黄蜂的LD为4.0 mg / kg。但是，亚洲大黄蜂很大，每只deliver毒成比例地释放大量毒液，因此，每只ing毒都释放出更多的毒液。话虽如此，目前尚不清楚与蜜蜂，黄夹克和其他社会黄蜂相比，亚洲大黄蜂是否“更致命”或更有可能诱发过敏反应。

Asian giant hornets do not occur in Pennsylvania or eastern North America more generally, so control information is unnecessary at the time. If they do become established here, this section will be updated to reflect the best current strategies. If you live in an area Asian giant hornets are found and wish to control them, please refer to the USDA publication "New pest response guidelines, Vepsa mandarinia, Asian giant hornet", which includes sections on "Survey and eradication" and "Control options" and details ways in which beekeepers in Asia protect their honey bee colonies from attack.

亚洲大黄蜂通常不会在宾夕法尼亚州或北美东部出现，因此当时不需要控制信息。 如果确实在这里建立，则会更新本节以反映当前最佳策略。 如果您生活在一个发现亚洲大黄蜂的地区并希望控制它们，请参阅USDA出版物“新的有害生物应对准则，Vepsa普通话，亚洲大黄蜂”，其中包括“调查和根除”和“控制选项”部分 ”，并详细介绍了亚洲养蜂人如何保护其蜂群不受攻击。