

BEE VET

An Interview with a British Bee Vet: Dr. Chris Palgrave Dr. Tracy Farone



(Preview: In this and the next two BV articles, I will be presenting perspectives on the importance and skill of understanding **coinciding** global and local impacts in the management of agricultural animals, such as honey bees. To accomplish this, I will do some consulting, share what I have learned with you and discuss the meaning of emerging diseases.)

Just about anyone who loves animals and/or wanted to be a veterinarian has read James Herriot books, like *All Creatures Great and Small* and *The Lord God Made Them All*. These books follow the life and adventures of a British veterinarian doing farm calls in the English country side. Recently, I had the good fortune to catch wind of a certain English gentleman, Dr. Chris Palgrave, who sure sounded like the James Herriot version of a veterinarian who happened to also fancy bees. Once I heard of a possible British Bee Vet, I just had to reach out to Dr. Palgrave and get his thoughts on bee medicine and how things go in the UK. Turns out Dr. Palgrave has been both an academic and agricultural veterinarian, who happens to give talks on honey bees, and writes regularly for *BeeCraft*, a British version of *Bee Culture*. Hmm... Big world, small world, we

were soon able to sit down over the wonders of Zoom and discuss things like how to treat EFB, the Amish country side of Pennsylvania, heather honey from the Scottish Highlands, the World concern of African Swine Fever and that many Texans really do wear spurs, boots and cowboy hats. Below is a summary of some of the topics we chatted about.

Dr. Palgrave grew up in the country side of Norfolk in Southern England. He remembered being immersed in a culture of nature, food and farm, always donning boots and milking cows. He noted that the “agricultural land butted up to the nature reserves in the area, which may seem like an uncomfortable juxtaposition between conservation and farming, but it seemed to work.” Dr. Palgrave thought he was going to become a farmer but ended up becoming a farm vet. He attended veterinary school at Edinburgh University in Scotland (the University famous for cloning “Dolly” the sheep) and was first introduced to honey bees there. Dr. Palgrave also received a PhD from Edinburgh for his studies in pathology, with research in African Swine fever, which is currently an emerging disease of great concern worldwide. Dr. Palgrave then spent some time in the States, practicing as a large animal veterinarian in my home state of Pennsylvania. In PA, he worked with Amish communities “with the only motorized truck in the valley” but he said he really enjoyed his time serving the community and it reminded him of home in England. Dr. Palgrave then completed a residency at North Carolina State University and returned to the UK to teach and work in the veterinary Universities there including, the University of Edinburgh, the University of Bristol and the University of Surrey near London. It was during his time in Bristol, that he became interested in keeping and learning more about honey bee medicine.

Dr. Palgrave explained that by 2015, the Royal College of Veterinary Surgeons started to get more and more questions about honey bees. This led to a formal letter and call to veterinarians who may have knowledge of honey bees, which resulted in the first meeting of the British Bee Veterinary Association (BBVA). Around the same time, Dr. Palgrave became a beekeeper himself and



Dr. Chris Palgrave with a wooden Layens hive.

did a few interesting things with his honey, “Three Hares Honey,” in that the honey per bottle is harvested, extracted and bottled as single hive honey... “Not the most efficient way to collect honey,” Dr. Palgrave admitted with a grin. But he explained that it was an enjoyable conversation starter in “connecting people with food and place and origin”.

England and Wales have a National Bee Unit (NBU) that is made up of full and part time honey bee inspectors that inspect hives, monitor sentinel hives in ports and other high-risk locations and help beekeepers prevent and manage diseases, much like apiary inspectors in the U.S. These individuals are trained bee scientists and keepers, but not veterinarians. (Scotland has its own bee inspection service, headed by a veterinarian.)

Dr. Palgrave shed some light on the history of the formation of the NBU in the 1940’s with WWII and sugar rationing. Beekeepers, of course, wanted sugar to feed their bees and were allowed an extra al-



A view of the Exe Valley near Dr. Palgrave's home in England.

lowance but, as one can imagine, this led to a massive increase in backyard “beekeepers”. However, inexperienced beekeepers also led to a massive outbreak of AFB. Therefore, the government created the NBU to police the sugar situation and the extra beekeepers to get the AFB outbreak under control. Dr. Palgrave explained that today AFB is not a large concern for British beekeepers, but EFB is more of a persistent problem. Any hives with AFB are quickly destroyed in the UK.

Antibiotics, however, are banned in the UK, so there is currently no legally mandated role for veterinarians to play with honey bee medicine,

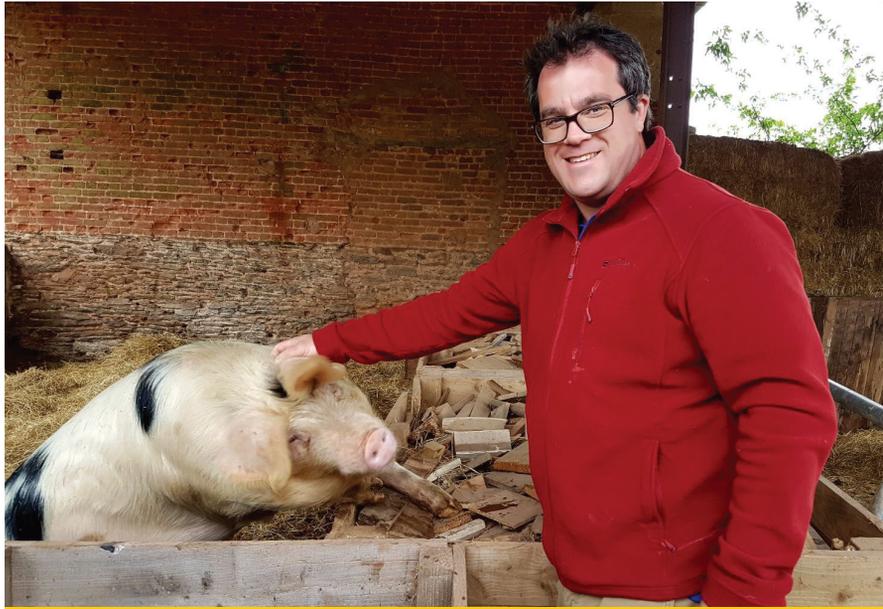
with one possible exception. Health certificates for honey bees to be exported from the UK require a veterinary signature (unlike the U.S.). Dr. Palgrave’s understanding is that veterinarians can work with the NBU on any health certificates that may need to be issued.

Dr. Palgrave went on to explain what he feels are the main challenges in the UK for veterinarians wanting to work with honey bees. “We know we can bring a lot to the table as

veterinarians, but how are we to best serve the beekeeping community without a perceived need because ‘honey bee medicine’ is already being done by someone else. I think part of the solution lies in recognizing that as veterinarians we are experts in animal husbandry, science, health, welfare and production. We also perform the role of trusted friend, counselor and confidant! We have much to offer beyond what people may think of as ‘medicine’ and can



Dr. Palgrave and son collecting a swarm from a compost bin.



Dr. Palgrave is an agricultural veterinarian and has done important research on Swine Fever in hogs.

work very effectively alongside our colleagues in the bee inspectorate.”

“Traditionally, veterinarians don’t know a lot about bees.” But Dr. Palgrave noted strides in veterinary continuing education, including through the BBVA, and the increasing recognition of honey bees as agricultural animals. “People are asking more (vets) about bees, there is a slow process of recognition that some of us are doing bee things,” Dr. Palgrave noted.

As in the U.S., Dr. Palgrave rates *Varroa* and its viruses as a top honey bee medical concern in the UK. Recognizing local adaptability and seeking *Varroa* resistant queens may be part of the solution for managing

Varroa and improving the health of colonies more broadly. He also believes EFB, CBPV and possible invasive pests (like small hive beetles and Asian hornets) are among the top medical challenges facing British bees.

Most of the 30,000ish beekeepers in UK are hobbyists with only 450-500 commercial beekeeping operations and little migratory beekeeping compared to the U.S. While the challenges of commercial migratory beekeeping are largely absent from the UK, Dr. Palgrave explained that the keeping of bees in the UK has been done in a similar manner for many years. Many beekeepers’ measure of success is largely judged

by how much honey each hive can produce; they work their bees hard and utilize basic hives, a throwback to timber shortages in the war. However, Dr. Palgrave wonders if “bees have been left behind” in advances we have made in the recognition of the welfare needs and treatment of other agricultural animals. Particularly for backyard hobbyists, other indicators like survivability may be better measures of a beekeeping operations’ success. Veterinarians may play a role in promoting increases in animal welfare and health by evaluating operational protocol that may improve long term sustainability for the bees and beekeeper alike. He also believes veterinarians and beekeepers have a responsibility to consider the wider implications of beekeeping activities on the local environment and wildlife populations.

Dr. Palgrave shared some of his thoughts on how veterinarians can better establish relationships with beekeepers, “We need to start with education of the veterinarians. More bee yards at universities and more bees in the veterinary school curriculum to upskill the vets. Vets hold a certain position in peoples’ hearts and in society as being trusted as part of the family and we can develop that for bees, but first we need to establish credibility through education.”

Dr. Palgrave believes a three-pronged approach, utilizing government, clinical and academic circles could help establish true working relationships within the industry. “Getting Chief Veterinary Officers (in government) speaking about bees along with chickens, hogs and cattle. Veterinary practitioners could advertise their interest in bees to current clients. Veterinarians in research could adapt existing tools and methodology developed for other animals to the study of bees, without reinventing the wheel.” Dr. Palgrave admitted that he is “a little jealous” of the situation in France, the U.S. and other countries, where he believes there has been considerable progress in developing veterinary beekeeper relationships. “(In Britain) We’re still working hard to raise awareness within the profession and develop our relationship with the beekeeping community, but it’s inspiring to see how much has been achieved in North America in a relatively short period of time.”



Comb honey made from heather.



Dr. Palgrave’s single hive origin honey, Three Hares Honey. Each jar is a bit different.