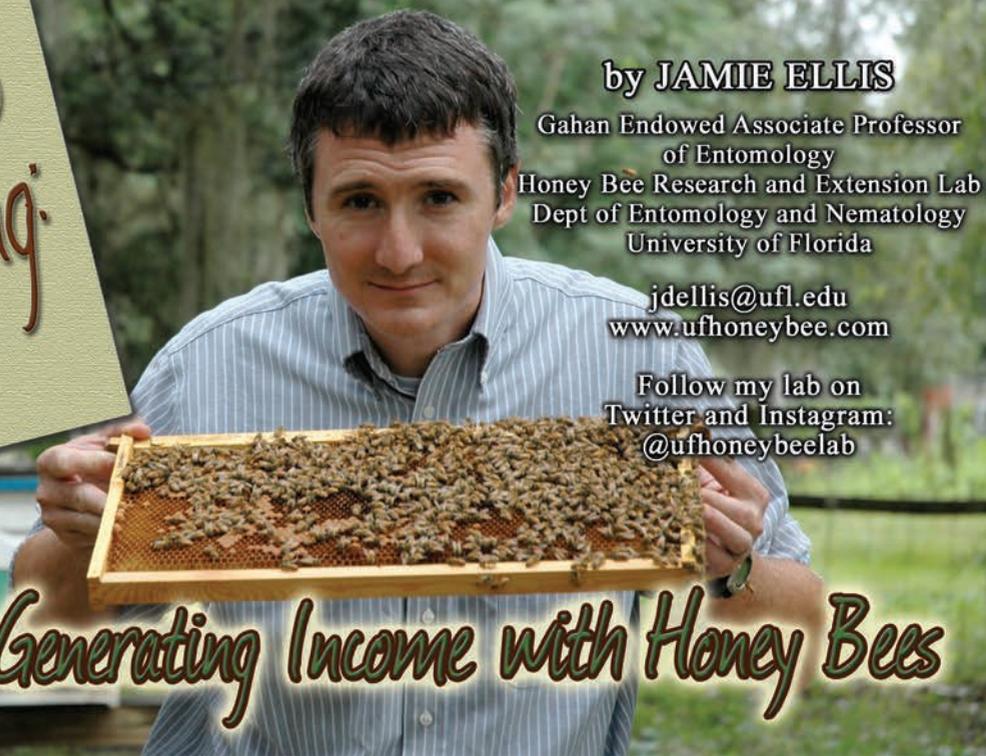


Field Guide to Beekeeping



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Ways of Generating Income with Honey Bees

Beekeeping can be a hobby for some and a full time profession for others. Regardless of the size or intent of one's operation, owning and managing honey bee colonies always costs money. Given that, it is necessary for sideline and commercial beekeepers to generate an income with their colonies. Otherwise, they will not be beekeepers very long. Furthermore, even hobbyists want a hobby that pays for itself. Thus, it seems prudent that all beekeepers, regardless of the number of colonies they manage, seek to find ways to generate income from their beekeeping enterprises.

The good news is that there are as many ways to make money with bees as there are ways to lose it. Some of the obvious ways of making money with bees include keeping bees for the purpose of producing honey or other hive products. However, bees can be a useful source of income in other ways as well. In this article, I outline the main revenue streams associated with beekeeping. Where possible, I note what a colony can contribute to income (i.e. what they can contribute to the revenue stream), but only in the gross income sense. I make no effort to outline the costs associated with generating income a specific way, information that would be necessary to highlight net income. Let us consider the production of liquid honey as an example. I will share with you the national average (in pounds and kilograms) of honey produced by managed bee colonies in the U.S. From there, you can look at the value of honey by the pound and figure out what a typical colony is capable of producing in gross value per year. I do not, however, share the management costs associated with producing that honey. This is, of course, because management strategies and associated input costs vary widely across the U.S.

I hope that this article will give you an idea concerning the revenue possibilities associated with keeping bees. In the very least, I hope it broadens financial options for you and helps you find a way to get the bees to pay for themselves. Where possible, I provide you a range of product or value produced per unit (which is usually per colony). This range illustrates what gross income is possible if marketing the product appropriately and if the market supports the value.

Honey and other consumables (see the summary in Table 1)

1) **Liquid honey** – Arguably, most people outside of beekeeping think of liquid honey (Figure 1) as the principal source of revenue for beekeepers. Of course, beekeepers know that this is not the case. However, liquid honey is the most identifiable product of bees as far as the general public is concerned. Liquid honey, as the name implies, is honey extracted from the combs, filtered and bottled in jars in its liquid form. According to the National Agricultural Statistics Service (NASS), the average honey bee colony in the United States produced 58.9 lbs (26.7 kgs) of

honey in 2015 (see **Resources** at the end of this document). The average wholesale price/lb in the U.S. for the same period was \$2.09 (range of \$1.45 - \$3.50/lb or 0.45 kg). This means that, on average, a typical honey-producing colony in the U.S. produced \$123.10 of wholesale honey in 2015. Beekeepers can get more money for their efforts by bottling and marketing their own honey, rather than selling it wholesale. The national average for a marketed lb (0.45 kg) of honey hovers between \$4 - \$15. In this case, the average colony would produce \$235.60 - \$883.50 worth of honey. Thus, a savvy businessman or businesswoman can turn a pound of honey into quite a lot of money.

2) **Comb or section comb honey** – The term “comb honey” often is used to describe any type of honey product that is or has a piece of wax comb associated with it. However, it is most appropriately used to describe a honey-filled piece of comb that bees built into small wooden or plastic sections, which is why it usually is called “section” honey. Essentially, these sections are self-contained combs of honey. Bees build the comb right in the future package. Sections range in price from \$6 - \$12/

Table 1. The gross value of honey and other hive products.		
Type of hive product	Amount produced per colony (when known)	Typical price range per pound (0.45 kg) of product ²
Liquid honey	58.9 lbs (26.7 kg) per colony (2015 national average) ¹	\$1.45 - \$3.50 wholesale \$4 - \$15 retail
Comb or section honey	40 – 80 “sections” per colony	\$6 - \$12 per section
Cut-comb honey	about 40 - 80 lbs (18.1 – 36.3 kg) per colony	\$4.50 - \$20
Creamed honey	58.9 lbs (26.7 kg) per colony (2015 national average) ¹	\$5 - \$16
Chunk honey	Combination of liquid and cut-comb honey; thus, hard to estimate, but maybe 40 – 80 lbs/colony (18.1 – 36.3 kg)	Similar to cut-comb: \$4.50 - \$20
Pollen	Extremely variable	\$12 - \$25
Propolis	Extremely variable	>\$50
Royal jelly	Unknown	>\$100
Brood	Unknown	Unknown
Venom	Unknown	Depending on quality, \$30 - \$300 per 0.035 ounces (1 gram) ³
Block beeswax	1 – 2 lbs/colony (0.45 – 0.91 kg)	\$3 - \$10
Ornamental beeswax	1 – 2 lbs/colony (0.45 – 0.91 kg)	Extremely variable
Specialty products	NA	Extremely variable

¹Based on 2016 NASS Honey Report (reporting 2015 data).
²Where possible, prices shown here are from the regional honey price report in the June 2016 issue of *Bee Culture*.
³Data for bee venom prices originate from web sources and may/may not reflect actual value. Prices for pure bee venom are rarely shown and the price points likely vary significantly.
NA = not applicable

section (usually just over a half pound (0.23 kg) honey/section when using “Ross Rounds” sections as an example). Colonies usually can only produce 40 – 80 of these sections, making the value \$320 - \$960/colony. Before you get excited, comb or section honey can be difficult to produce

and usually requires a good command of bee behavior, resource availability, and bee husbandry. Regardless, the production of comb honey can be a profitable endeavor.

3) Cut-comb honey – Cut-comb honey refers to pieces of honey-filled, capped combs that have been cut from a single,

large comb (Figure 2). The edges of the comb are drained and the comb is wrapped or packaged individually for market. In this case, the beekeeper is in control of the size of the comb cut and packaged so prices can vary significantly. Cut-comb ranges in value between about \$4.50 - \$20/lb (0.45 kg). It is not reasonable to expect to get as much weight in cut-comb from a colony that one would liquid honey. In fact, my guess is that a typical colony would produce only about a medium super of good quality cut-comb, or about 40 lbs or 18.1 kg (after subtracting out the weight of the frames and boxes), though skilled beekeepers with good bees and a good nectar flow can produce two or more medium supers per colony (80+ lbs or 36.3+ kg). This can translate into \$180 - \$1,600 in revenue.

4) Creamed honey – Creamed honey is honey that has undergone controlled crystallization (Figure 3). Honey is a supersaturated sugar solution. Consequently, the sugars can come out of solution, causing honey to granulate, or to turn into a sugar-based solid. Honey that granulates naturally usually contains large, coarse sugar crystals. Creamed honey, on the other hand, has much smaller crystals, making the final product spreadable like butter at room temperature (when everything goes right). A pound (0.45 kg) of creamed honey goes for \$5 - \$16. So, a colony producing



Figure 1 – Liquid honey. Notice all the varieties and colors of honey on display. Photograph: University of Florida.



Figure 2 – Cut-comb honey. Cut-comb honey can be easy to make and a highly prized way to sell honey. *Photograph: University of Florida.*

the national average of 58.9 lbs (26.7 kgs) of honey can produce \$294.50 - \$942.40 worth of creamed honey.



Figure 3 – Creamed honey. This is usually a great tasting and very spreadable honey. Making it right requires patience and practice. *Photograph: University of Florida.*

5) Chunk honey – Chunk honey is a piece of cut-comb honey placed into a container and flooded with liquid honey (Figure 4). To me, this is the most beautiful way to process and display honey. It is also my favorite jar of honey to purchase. Chunk honey commands a price that is higher than that for a liquid jar of honey, mainly because it includes the chunk of comb. The price range of chunk honey is similar to that of cut-comb, or \$4.50 - \$20/lb (0.45 kg). Though this is a very nice way to prepare and sell honey, it takes more effort to produce. The piece of comb is prepared the same way cut-comb honey is prepared. Thus, you get less of it per colony than you would if you were producing simply liquid honey.

6) Honey bottler/packer – A honey bottler/packer is an individual who purchases honey wholesale from other beekeepers, bottles it (some call this “repackaging”),



Figure 4 – Chunk honey. This happens to be my favorite honey product. It is in high demand with consumers. *Photograph: University of Florida.*

labels it, and sells it at market prices direct to the customer or to a vendor. If honey sells, for example, for \$2.09/lb (0.45 kg) wholesale and you can get \$8/lb (0.45 kg) when you bottle it and sell it direct to customers, it does not take long before you can turn a significant profit. Of course, you must have a large customer base or provide honey to a number of vendors in order for this to be profitable. However, I have known many beekeepers who tried to produce honey for sale and realized that it costs less money in many circumstances to purchase other people’s honey and sell it than it does to produce one’s own honey and sell it. If you keep only a few colonies and the demand for your honey is greater than the supply, you should think about being a honey packer.

7) Mead – Mead (Figure 5) is an alcoholic drink produced from the fermentation of honey. Historians tell us that honey is the first ever fermented product. People apparently had been fermenting honey long before they began fermenting anything else. Perhaps the best example of this is in the



Figure 5 – Mead. Mead is an increasingly popular specialty hive product. *Photograph: University of Florida.*

classic literature piece *Beowulf*. Beowulf and his friends fellowshiped in “mead halls,” or places where a lot of mead was drunk. Just like for wine, mead has nearly limitless quality and flavor possibilities. Every honey produced yields its own color and unique flavor to mead. There are dry meads, sweet meads, flavored meads, etc. Making mead is an art form, a hobby for some, and an important business for others. If you browse the course offerings at beekeeping educational events, you will notice that there are usually lectures and/or workshops on mead making. My guess is that the demand for mead will only grow in the future. Thus, there are emerging markets everywhere for this hive product derivative.

8) Pollen – Pollen (Figure 6a) is collected from bees entering colonies and passing through the small holes of a pollen trap (Figure 6b). The holes are just large enough to accommodate the bees trying to get back into their colony, but too small to allow the pollen pellets through with the bees. As a result, the pollen pellets are knocked off the legs of the bees and collected in a tray, usually located at the bottom or front of the pollen trap. The beekeeper can then collect the pollen. Pollen pellets usually have to be dried after collection. Freezing the pellets is recommended as well as this kills anything living that accompanies the pollen (such as small hive beetles, wax moths, etc.). Pollen pellets or the powder made from them is purchased by people and usually used for its protein or presumed medicinal properties. It is sold for about \$12 - \$25 per pound (0.45 kg). The amount of pollen that a colony can collect for human use varies based on pollen resource availability in the area. Obviously, you cannot keep pollen traps on colonies perpetually as colonies need pollen to grow. So, there is a balance between collecting pollen and allowing the bees to keep some for themselves.

9) Propolis – Honey bees collect resins, saps, and other sticky substances for use in their colonies. Beekeepers call this col-

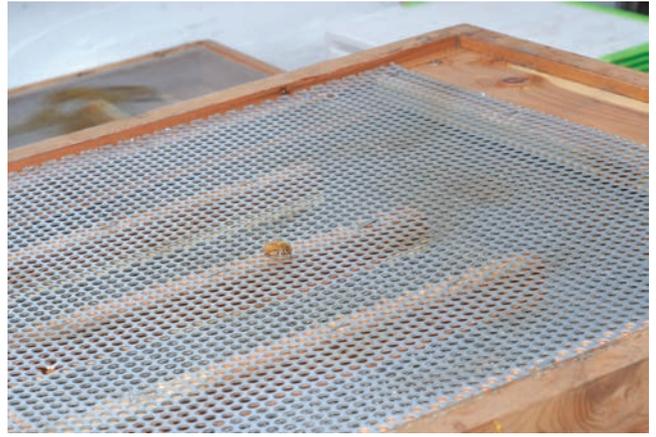


Figure 6 – Pollen (a) and pollen trap (b). Pollen pellets (like those seen in a) can be knocked off the hind legs of returning pollen foraging bees using a pollen trap (b). The bees walk through the holes in the pollen trap in order to return to the nest. The pollen is pushed off the hind legs of the bees as they pass through the trap. *Photograph: University of Florida.*

lection of materials “propolis.” Bees use propolis for weather-proofing their colonies and likely because propolis has antimicrobial activity making it important in colony level immunity. In fact, this may be their main use for propolis. As for pollen, people use propolis mainly for a series of presumed health benefits that originate from propolis. Propolis is harvested from colonies using a device called a propolis trap. Propolis traps look a lot like plastic queen excluders. They are placed on top of the uppermost super, just above the frames. The lid of the hive is replaced, but propped open so that light and air can enter the nest through the propolis trap. This causes the bees to propolize the trap to stop the light and airflow. The traps can be taken off of colonies, frozen, and the propolis popped off the trap for harvest. Propolis usually does not have to be processed in any way. A pound (0.45 kg) of propolis can sell for >\$50. Different stocks of bees use more propolis than do other stocks. Thus, the amount of propolis one can make per colony varies by the stock of bee used and the location of the bees as some plants produce more resins than do others.

10) Royal jelly – Royal jelly is a liquid food produced by adult worker bees and fed to immature queen larvae. The collection and human use of royal jelly is practiced mainly in eastern countries. One does not see much collection and use of royal jelly in western countries, though that has been changing in recent years. I suspect that the demand for royal jelly will increase. This is especially true given that many regulators are requiring certain tests be performed to determine the impacts of pesticides on immature bees, tests that require bees to be reared in the laboratory using royal jelly as a component of the bees’ diet. I think this will lead to a spike in the demand for royal jelly in the future. Royal jelly sells for over \$100 per pound (0.45 kg). It is not so easy to produce but there are strategies for doing it. Essentially, you have to get colonies to produce queens and harvest the royal jelly from the queen cells, hence the reason it is so expensive since there is so little royal jelly in a single cell.

Other hive products

11) Brood – It is not popular in western countries, but the collection and consump-

tion of bee brood is common in some eastern countries. I include it in this list just to make you aware that this is, yet again, another way to make money using your bee colonies. I have eaten a quiche in which bee brood was the main source of protein. It was good, though the larvae did not taste like chicken. I keep hearing that humans, over time, will warm to the idea of eating insects. I suggest that they are already warm to the idea, just not in some of the countries in the western world. To be honest, I doubt that there is a huge demand for bee brood in the U.S., but the best businessmen and women have a product and find ways to create the demand. Good luck.

12) Venom – Bee venom can be harvested using a special apparatus that causes the bees to sting the device and with which the venom is collected. As for other minor hive products (pollen, propolis and royal jelly), venom harvest and use is not common in the U.S. In fact, I have never seen one of the devices that is used to collect venom, neither do I know anyone who collects bee venom for sale. Regardless, venom is harvested mainly for use by allergists who can use it to desensitize people who are allergic



Figure 7 – Wax cappings (a) and block wax (b). The cappings (a) and newer comb produced by bees can be used to make blocks of wax (b). In turn, these blocks can be sold “as is” or rendered into specialty wax products. *Photograph: University of Florida.*

to bee venom. Others use it for presumed medicinal reasons or as an ingredient in cosmetics or creams. My guess is that the market for bee venom is small and most beekeepers will not consider collecting it for market purposes as a practical option. Though the harvest of bee venom may not be popular in western countries, bee venom therapy seems to be. The idea behind bee venom therapy is that bee stings lessen or eliminate certain ailments such as arthritis. I know beekeepers who provide sting services (i.e. they let their bees sting people) for customers who are trying to reap the presumed medical benefits of bee stings. I do not know what the market value of this service is, but it seems to be gaining in popularity.

13) Block beeswax – Worker honey bees secrete wax from special glands located underneath their abdomens onto a section of the abdomen called the “wax plate.” The wax flakes off the plates in scales that the bees collect with their mandibles and shape it into the wax cells and cappings of those cells. For the beekeeper, marketable wax is generated, usually, from dead-out colonies, cappings from cells containing honey (Figure 7a), and from burr comb the bees sometimes build in gaps in the nest. The wax is washed, melted, filtered and molded for use. One of the most popular uses of beeswax for beekeepers is the block of beeswax (Figure 7b). A pound (0.45 kg) of beeswax is sold for \$3 - \$10 wholesale. In most cases, wax is an “extra” for beekeepers, meaning that most beekeepers do not manage colonies to produce wax, rather they just harvest it because it is a byproduct of harvesting honey, of a lost colony, or of old/damaged combs. I suspect the average colony produces less than 1 – 2 lbs (0.45 – 0.91 kg) of wax per year for beekeeper use. Thus, the production of block wax usually is not a way for beekeepers to generate a reliable income, though it can be a great income supplement.



Figure 8 – Ornamental wax. Wax can be rendered to make candles, ornaments, and other trinkets. Its uses seem nearly limitless. *Photograph: University of Florida.*

14) Ornamental beeswax– How can block wax (#13 above) be used? It can be used to make various ornamental wax products, such as candles, ornaments, etc. (Figure 8). Before this is done, the wax usually has to be filtered with a small particle filter, sometimes bleached, and then poured into a mold or milled to produce the final product. Ornamental wax products can be of somewhat low individual value, to quite high individual value when used in art. Thus, the value of ornamental products can be quite valuable to beekeepers who are willing to put in the work to make the products desirable. It can be of such value that some beekeepers actually purchase block wax to use to render into the ornamental products. I have never seen a formal price range assigned to ornamental wax products, but I suspect that the value of the average pound (0.45 kg) of wax used for ornamen-

tal purposes is 2 – 3 times that of wax sold wholesale in blocks.

15) Specialty products including hive products: Creams, lip balms, etc. – Some of the hive products, wax, pollen, royal jelly, honey and propolis included, can be used as constituents in other products. For example, a lot of people use hive products in other products such as creams, lotions, lip balms, etc. There can be a great demand for products such as these. Generally speaking, further refining the hive products into or including them in specialty products usually increases the value of the hive products over that of just selling them individually.

Hive production and management related services (see the summary in Table 2)

16) Colony removal – A number of beekeepers make money from their beekeeping skills in ways that do not involve

Table 2. The gross value of hive production and management related services

Type of hive product or service	Amount or number produced	Typical price range per unit
Colony removal	Depends on feral bee density and number of people providing the service in a given area	\$300 - \$1,500 or more per colony removed
Pollination	Depends on number of colonies owned and used for crop pollination	\$30 - \$200+ per colony ¹
Selling colonies	Depends on number of colonies used to produce new colonies to sell	\$250 - \$350+ per single deep Langstroth colony with a queen
Selling nucs	Depends on number of colonies used to produce nucs for sell	\$130 - \$175 per five frame, deep Langstroth nuc
Selling package bees	Depends on number of colonies owned and used to produce packages	\$75 - \$120 per queenright package
Selling queens	Depends on number of colonies used to rear queens	\$20 - \$50 per production queen \$250 - \$1,500 per breeder queen

¹Prices shown here are from the regional honey price report in the June 2016 issue of *Bee Culture*.



Figure 9 – Colony removal. Removing colonies from places where they are unwanted is a good and growing business for many beekeepers. *Photograph: University of Florida.*

the management of their own hives. One of those ways is removing feral colonies from places that they are not wanted (Figure 9). Individuals providing bee colony removal services need special training and equipment in order to provide this service for others. In many states, removing bee colonies from a structure is considered pest control, in which case those engaging in this service would need a pest control license. In other states, it is not considered pest control, so the bee removal specialist can remove the colony from the structure as long as he/she is not killing the bees (at which point it would become pest control). Because of this, it is important that those engaging in this activity check with local and state laws to determine how it is legislated in a given area. Removing colonies can be

quite a lucrative business if there is a high density of feral colonies in an area. This can be the case in parts of the U.S., especially where African honey bees are present. In my experience, the average colony removal can cost the customer from \$300 - \$1,500 or more. Individuals performing this service should carry adequate liability insurance. It certainly pays to be protected.

17) Equipment manufacturer or distributor – One of the noticeable trends in beekeeping the last decade is that everyone seems to want to become a beekeeper. This has created a high demand for bees and, consequently, a high demand for beekeeping equipment. Some have seized on this opportunity by becoming equipment manufacturers and/or distributors (the latter being individuals who purchase equipment

wholesale from manufacturers and then sell it directly to the consumer). This can be a profitable endeavor as long as the demand for bees and equipment remains high.

18) Managing other people's hives – A really clever profession has been born out of the growing interest in beekeeping. A lot of people do not want to keep bees themselves, but still would like bees kept on their property. As a result of this, some entrepreneurial beekeepers have started businesses centered around placing colonies on others' properties and charging those individuals for managing the bees on their behalf (Figure 10). They usually require their customers to purchase the colony and then pay them a monthly management fee. This is a clever way to make money with bees. There seems to be growing interest in this enterprise.

19) Pollination –The principal way that many commercial beekeepers make money is by renting their colonies to growers to provide pollination services for the growers' crops (Figure 11). The fees collected for providing those colonies ranges from \$30 - \$200+/colony, though the upper price range usually only is paid for those colonies used to pollinate almonds. Providing colonies for pollination purposes can even be done on a small scale. When I first started keeping bees, I rented two of my 16 colonies to someone who grew blueberries in their backyard. I made \$40/colony. The average commercial beekeeper, who uses his/her colonies for pollination purposes, uses each colony to pollinate 4-5 different crops. The main catch with pollination is that most crops that colonies are used to pollinate are of poor resource quality (little or no nectar and poor quality pollen). Thus, the colonies have to be managed heavily to ensure adequate health and nutrition. Furthermore, colonies used to pollinate crops tend to be exposed to greater amounts of pesticides, given that these products are necessary for the control of crop pests. With a few colonies and a trailer, you can help



(l) Figure 10 – Managing hives on behalf of others. This is an increasingly popular way to make money with bees. In this scenario, the beekeeper is paid to manage someone else's colonies. Usually, the individual wants to have bees to make honey or pollinate their garden; yet, they are unwilling to keep bees themselves. Enter the willing and entrepreneurial beekeeper. **(r) Figure 11 – Pollination.** Many commercial beekeepers rent their colonies to growers to provide crop pollination services. In this photograph, the colonies are being used to pollinate blueberries (seen in the background). *Photographs: University of Florida.*



(l) Figure 12 – Selling full size colonies. This can be a lucrative business for those willing to put in the time to grow strong colonies. (r) Figure 13 – Selling nucs. Selling nucs also can be a lucrative business. There is an extremely high demand for nucs; consequently, many beekeepers are getting into the business of selling nucs. Photographs: University of Florida.

growers meet their pollination needs and make a little income at the same time.

20) Selling colonies – The growing interest in beekeeping and high colony loss rates have created a huge demand for colonies. This has led a lot of people into the business of creating and selling full size colonies (Figure 12). This is a risk/reward type business. The risk is that your colonies have to be in great health to be able to be split, grown, and sold to other beekeepers. You do not want any uncontrolled diseases/pests. Your equipment has to be in good shape, all among other things. The reward is that the average full size colony (a single, deep Langstroth brood box) sells for \$300+.

However, one's beekeeping skills have to be good to create high quality colonies with some consistency. Otherwise, your customer base will let you know.

21) Selling nucs – Beekeepers also can get into the business of creating and selling nucleus colonies, or nucs (Figure 13). Nucs are simply smaller versions of full

size colonies. The main difference between a nuc and a full size colony is that nucs are not quite as wide as their full size cousins, meaning that they can accommodate fewer frames. A typical 5-frame nuc costs \$130 – \$175. At the moment, the demand for nuc colonies seems to be at an all-time high, meaning that you would be able to sell almost everything you produce. On the other hand, producing high quality nucs comes with all of the same risks associated with selling full size colonies. Thus, you should have some experience under your belt before undertaking this endeavor.

22) Selling package bees – I am going to stick with the theme of selling bees and note that selling packages of bees (Figure 14) is a long tradition that still produces a product that is in high demand. The advantage of selling package bees, rather than nucs or full size colonies, is that the beekeeper is only investing in the production of bees and queens rather than having to produce and sell the beekeeping equipment (i.e. the hives) with the bees. The average package of bees with a queen costs \$75 - \$120. A good, strong colony can be used to generate 3-4 packages of bees per year.

23) Selling queens – Every colony, nuc, and package of bees that is sold must include a queen (Figure 15). As you might imagine, then, the production of quality queens is very important. Someone has to produce all of those queens. It might as well be you. That said, producing queens is not for everyone. It requires a good knowledge of bee breeding and selection, specialized equipment, and the appropriate training and skill. Even so, the high price of production queens (\$20 - \$50/queen) and breeder queens (\$250 - \$1,500/queen) lures a lot of new beekeepers into queen rearing seminars around the country. I feel the market is ripe not just for queen breeders who can produce lots of queens, but also queen breeders who can produce a high quality product.

ways. For example, you can be an author who writes about bees. There are many forms of literature for which this can be accomplished: documentary-style writing, fiction, periodicals (like what I am doing here ©), etc. I once was told that bees are the second most written about thing in history, behind only religion. I do not believe this to be true, but it does illustrate the point that there is a great demand and a great readership for all things bees. So, dust off your keyboard and start introducing the world to honey bees. You will become a better beekeeper for it and hopefully someone will benefit from your prose.

25) Bee-related art – Honey bees feature prominently in art. I have traveled all around the world, visiting museums of all types. It never ceases to amaze me how common it is to see honey bees or beekeeping portrayed in stained glass windows of major cathedrals, in paintings by notable artists and in sculptures from antiquity. Even today, many hobby beekeepers are artists in their professional lives, and this gives them the opportunity to combine two of their most cherished loves. The world is hungry for honey bees. One of the ways to satiate this hunger is to provide the satisfaction of seeing bees and beekeeping portrayed in art. Some of you reading this article have this skill set and have discovered that producing and selling bee-



Figure 14 – Selling package bees. Package bees also are in high demand. They tend to be seasonal in nature and command a fairly high price. Photograph: University of Florida.



Figure 15 – Selling queens. All honey bee colonies need a queen. The supply of queens is not meeting the current demand. Photograph: University of Florida.

Education and art

24) Author (bee periodicals, bee books, etc.) – You can make money with bee knowledge in non-management related

related art can be a method of increasing the income derived from beekeeping.

26) Bee-related home goods and miscellaneous items (clothes, trinkets, etc.) – Similar to what I mentioned in #25, bee-related art, you can make money portraying bees in everyday items. Since becoming a beekeeper, I have noticed bees displayed in all types of home goods from clothes to kitchen decor, from trinkets to treasures. Go to any bee meeting and someone there will be wearing socks with bees on them, serving the snack on plates designed as hives, etc. All of this has to come from somewhere. Many beekeeping events include vendors who specialize in the production and/or distribution of this bee, for lack of a better term, “stuff.” People buy it, so someone has to make it. It is a good way to supplement your beekeeping efforts, especially if you have this skill set and a creative eye.

27) Beekeeping educator – The final way that I will mention that you can make money related to your beekeeping knowledge is by being a bee educator. A lot of

beekeepers make money by traveling to local or state beekeeping clubs to provide lectures and/or workshops. I do not know anyone who does this for a living (meaning that they generate all of their income this way), but I do know a lot of individuals who supplement their income traveling and training others on the fine craft of beekeeping. It is increasingly common to be paid an honorarium when lecturing about bees and this can range from \$50 per appearance to \$1000+ per day of the event. Granted, the latter payout is rare, but welcomed for those individuals who spend nights and weekends on the road sharing the elegant world of honey bees and beekeeping with their membership.

Conclusion – I hope that something I have shared in this article gives you some ideas on how to generate a little pocket money with your bees and bee knowledge. Many of us would keep bees just for the satisfaction we get out of being associated with the bees and their hives. However, it certainly helps when

the bees are able to pay for themselves. I hope to have given you some new financial goals. Happy beekeeping.

Resources

1) The monthly periodical *Bee Culture* includes a Regional Honey Price Report in every issue. This is a great resource because it shows, in near real time, the wholesale and retail prices for honey and other hive products. The data I present on honey, wax and pollination income per colony originate from the June 2016 issue of *Bee Culture*.

2) The National Agricultural Statistics Service (NASS) posts information about honey production per colony per state. This information is updated yearly to report the previous year's trends. The link for the website is <http://usda.mannlib.cornell.edu/MannUsda/viewDocumentInfo.do?documentID=1191>. The site also can be found by googling “NASS honey” and clicking on the first link provided.

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