





Over the past five years, the buzz about the honey bee has caught the attention of sustainability-oriented hotels across the globe. Dozens of urban hotels worldwide have started working with beekeepers to place beehives on their rooftops. In doing so, hive hotels shed light on sustainability as a component of business operations that addresses environmental sustainability and social responsibility to the local and global community. For their efforts, hoteliers reap a

hyper-local product truly unique to their location that features the nuanced flavors of the floral landscape surrounding their properties. The now familiar phrase "think globally, act locally" aptly points to the work these hive hotels conduct in their beekeeping practices. Whether intended or by chance, these hotels have become environmental advocates in their own right by supporting

a critical link in our planet's ecosystem

— the honey bee.

the UZY about EES

An estimated one-third of our global food supply relies on the ecological services provided by pollinators such as the honey bee. Buzzing away unassumingly in our gardens, orchards, and farms, bees forage for a natural buffet of nectar and pollen and facilitate the transfer of pollen grains between plants that is critical for pollination.

The honey bees that have become long-term guests at hive hotels represent just one of hundreds of bee species in the animal kingdom, each with its own complex web of interdependent relationships that lie at the foundation of our ecosystems, both wild and cultivated. But threats to honey bee populations have garnered significant attention, likely due in part to the economies these bees support. Certain agricultural landscapes, such as the sprawling orchards of almond trees in California, depend so heavily on bees

1 University of California-Berkeley, *Pollinators Help One-third Of The World's Food Crop Production*, ScienceDaily, 2006.

that commercial beekeepers are brought in with their hives each season to facilitate pollination.²

In recent years, population declines for these crucial pollinators have raised concerns about the coinciding impacts on our food supply and ecosystem functions. Colony Collapse Disorder (CCD), in which a hive experiences a near or fully complete loss of its adult honey bees, has seen the disappearance of an estimated 25% of managed honey bee populations between 1990 and 2011.³ No direct cause is yet determined. Threats such as parasites, deteriorating nutrition from declines in plant diversity, and pesticide use have been identified as possible contributing factors.⁴

² Elizabeth Grossman, Declining Bee Populations Pose a Threat to Global Agriculture, Yale 360, 2013.

³ National Resource Defense Council, Why We Need Bees: Nature's Tiny Workers Put Food on Our Tables. March 2011.

⁴ Pollinator Partnership, The North American Pollinator Protection Campaign Scientists Report on Honey Bee Stressors.

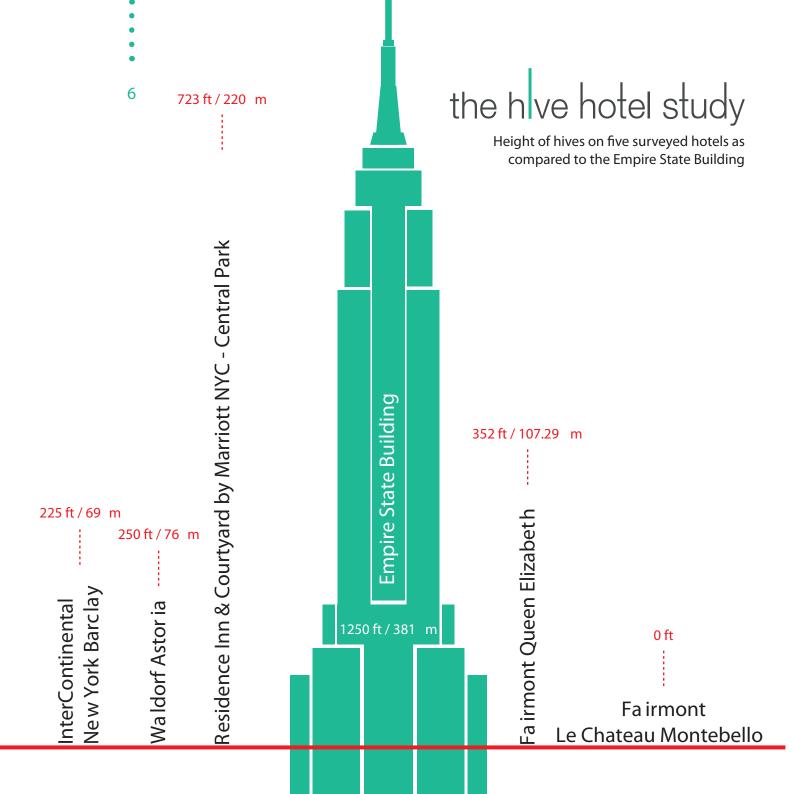


According to New Jersey beekeeper Eric Hanan of Bee Bold Apiaries, "the accidental introduction of parasitic mites in the mid 1980's [wiped out] over 90% of the bees in the wild. Beekeeping is so important since managed honeybee colonies are the only way to help ensure the honeybees' survival. Without the pollinating services that the bees provide, we'd be left with grave challenges in producing many of the foods we take for granted."

Supporting the health of these pollinator populations helps foster a secure food system for the future. With the ever-growing urban and local food movement, hive hotels have a significant role to play within cities and most notably can become active and contributing members of the community by supporting a critical ecosystem service.⁵

⁵ An ecosystem service is a provisioning service from any type of benefit to people that can be extracted from nature. Source: National Wildlife Federation.



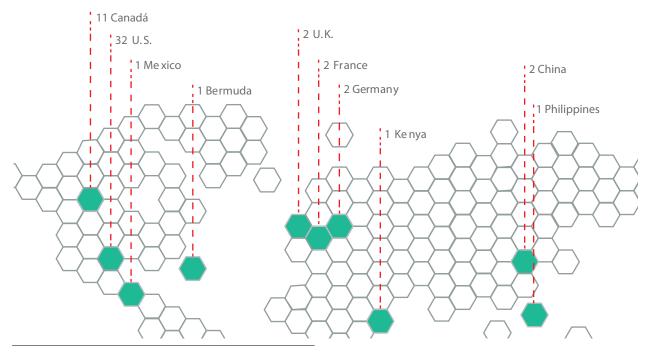


Greenview identified a base list of 55 hive hotels globally.⁶ 18 hotels responded, supported with follow-up interview questions to provide an overview of urban hotel beekeeping and gain insight for helping disseminate the practices. The hive hotels documented in this study share a common thread: economy of space. Located in urban environments, these properties do not have access to the sprawling fields and meadows

that one might associate with the natural habitat of the honey bee. Without access to land, hotels have made creative use of rooftop spaces for gardens and in the case of hive hotels residential bees.

Rooftops are the most common location of the hives, though some hotels do place hives at the ground level. As with most metropolises, expansion means reaching for new heights- literally.

Hive hotel list



6 Study limited to hotels located in urban environments, understanding that many eco-resorts and nature lodges may practice beekeeping but were not surveyed.

When it comes to height, the "queen bee" hotel with the highest documented hive is the Residence Inn & Courtyard By Marriott New York/Central Park, which opened in late 2013 and is the tallest hotel in the Western Hemisphere. The "Broadway Bees" as they are affectionately known, live 723 ft (220m) above the ground on the 67th floor. The hotel's Area General Manager Timothy McGlinchey indicated that with no documentation of a managed hive previously existing at this height the endeavor has both research and educational value. He believes that "urban beekeeping on hotel rooftops is arguably one of the best places to build awareness of the importance of bees along with other important environmental issues."

Some of these urban properties have been hosting bees since 2008. Hotels now donning the beekeeper hat (hopefully complete with protective veil) did so through a combination of innate curiosity, research, partnership with a local beekeeper, and a desire to act as a sustainable business.

Over seventy-five percent of surveyed hotels contracted a third-party beekeeper to care for and maintain the hives on property. In supporting these small beekeeping enterprises, hive hotels foster the growth of a robust local economy and again demonstrate the prioritization of community care and responsibility.

A Guide to Beekeeping in Hotels: Getting Started

- 1) Do your research. Familiarize yourself with current findings on wild and managed bee populations, and learn about their importance in our ecosystems.
- **2)** Reach out for help from the experts. Contact a local beekeeping association in your area and express your interest in becoming a hive hotel.
- **3) Survey your site**. Assess your property's space availability, wind speeds, proximity to local flora, and other environmental factors.
- **4)** *Bring in a beekeeper*. Whether internal staff or on contract, designate a beekeeper to manage the wellness of your hives.
- **5)** *Spread the word.* Educate your guests, staff, and the community-at-large about your bees and the broader sustainability framework they represent.

Other New York City hotels have taken notice of bees, with the InterContinental New York Barclay, InterContinental Times Square and the Waldorf Astoria hosting beehives of their own. Europe has also embraced the "honeycomb culture," with luxury hotels such as the Mandarin Oriental Paris and St. Ermin's Hotel in London also hosting hives. The most notable hotel group to generate buzz in this movement is Fairmont Hotels

& Resorts. Fairmont now has over 22 beekeeping hotels worldwide, making them the hotel company with the highest number of properties working to address CCD. Perhaps it may not come

as a surprise that Fairmont properties would be naturally concerned with CCD since one of the four key sustainability priorities for the company is *biodiversity*. But what is impressive to note about Fairmont is that each property uniquely adopted and embraced beekeeping as a propertylevel initiative.

Allison McCabe, the Business Analyst for Sustainability at Fairmont, notes "The Royal York was the first hotel in Canada to have rooftop beehives to support the 'plight of the honeybee' and since then this initiative has really caught on. Because our colleagues are so engaged,

they continue to set the bar and creatively advance our sustainability efforts."

Often corporate sustainability initiatives attempt to drive change from a top-down approach working through the pipeline of the organization. Conversely the Fairmont network of hive hotels is a property driven initiative fostered by idea sharing among its hotels, who use the company's Sustainability Data Management System as a means of collaboration. This network provides a growing internal resource for the company and sets an industry precedent for successful sustainability change management.



Hotel beekeeping generates enthusiasm in guests and staff alike. Hoteliers and executive chefs in urban environments consider it a sweet deal in the way of local food procurement. If looking for a sweetener for morning coffee and tea, what could be more local than honey harvested from the hive a few stories up?

Two-thirds of the hotels surveyed in the study also tote an herb or vegetable garden on site,

number of hive

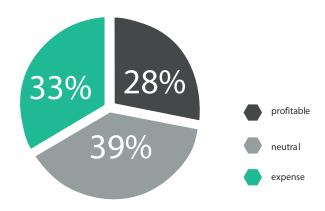
and all creatively make use of their harvested honey as a tool of engagement with guests, staff, and the community-at-large.

More than ever before, people are embracing the idea of "going local." The same is true of the hospitality industry. Hotels striving to keep in time with societal trends emphasize local sourcing in their restaurants and storefronts. Artisan foods like wine, tea, and even cheese have

Year of installment for surveyed hive hotels



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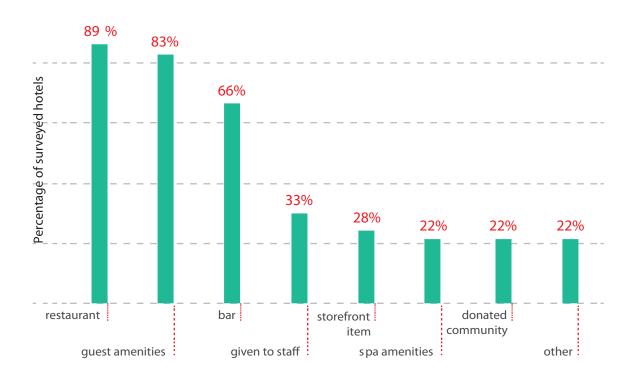
long been closely linked with the land that nourishes the crop's growth.

The term *terroir* refers to the nuanced range of flavors that results from the land on which these foods are grown. Like fine wines, honey has the culinary clout of terroir in that its hyper-local flavors capture the subtleties of the immediate floral landscape. Each bee colony creates a honey with a flavor all its own derived from the unique medley of plants from which the bees have harvested nectar. In the essence of its aromas and flavors, honey exemplifies how deeply a sense of place can impact our food and the culture that grows up around it. It is the natural environment expressed in the flavor of our food.





Uses of honey in hive hotels



Percentages reflect total number of hive hotels using honey in this capacity. Nearly all surveyed hotels responded with more than one use of honey. The "other" uses of honey included media gifts, banquet recipes, a home-brewed honey lager beer, and pastries.

Hive Hotels: List of Urban Hotels Practicing Beekeeping

| Hotel* | City | State | Country |
|-------------------------------------|------------------|-------|-------------|
| Brown Palace Hotel | Denver | СО | U.S. |
| Calistoga Ranch | Calistoga | CA | U.S. |
| Carmel Valley Ranch | Carmel | CA | U.S. |
| Crowne Plaza Lord Beaverbrook Hotel | Frederiction | NB | Canada |
| Fairmont Battery Wharf | Boston | MA | U.S. |
| Fairmont Beijing | Beijing | | China |
| Fairmont Chateau Whistler | Whistler | ВС | Canada |
| Fairmont Copley Plaza | Boston | MA | U.S. |
| Fairmont Dallas | Dallas | TX | U.S. |
| Fairmont Empress | Victoria | BC | Canada |
| Fairmont Jasper Park Lodge | Jasper | AB | Canada |
| Fairmont Le Chateau Frontenac | Québec | QC | Canada |
| Fairmont Le Château Montebello | Montebello | QC | Canada |
| Fairmont Mayakoba | Playa del Carmen | QROO | Mexico |
| Fairmont Mount Kenya Safari Club | Nanyuki | | Kenya |
| Fairmont Newport Beach | Newport Beach | CA | U.S. |
| Fairmont Olympic Hotel | Seatle | WA | U.S. |
| Fairmont Polliser | Calgary | AB | Canada |
| Fairmont Raffles Makati | Makati City | | Philippines |
| Fairmont Royal York | Toronto | ON | Canada |
| Fairmont San Francisco | San Francisco | CA | U.S. |
| Fairmont San Jose | San Jose | CA | U.S. |
| Fairmont Somona Mission Inn & Spa | Sonoma | CA | U.S. |
| Fairmont Southampton | Southampton | | Bermuda |
| Fairmont The Queen Elizabeth | Montreal | QC | Canada |
| Fairmont Vancover Airport | Richmond | ВС | Canada |
| Fairmont Washington DC, Georgetown | Washington DC | | U.S. |
| Fairmont Waterfront (Vancover) | Vancover | ВС | Canada |
| Fairmont Yangcheng | Jiangsu | | China |
| Four Seasons Atlanta | Atlanta | GA | U.S. |
| Hilton Cincinnati Netherland Plaza | Cincinnati | OH | U.S. |

| Hyatt Cologne Germany | Cologne | | U.S. |
|---|-------------------|----|---------|
| Hyatt Regency Atlanta | Atlanta | GA | U.S. |
| Hyatt Regency Minneapolis | Minneapolis | MN | U.S. |
| Hyatt Regency on the Hudson Jersey City | Jersey City | NJ | U.S. |
| InterContinental Boston | Boston | MA | U.S. |
| InterContinental New York Barclay | New York | NY | U.S. |
| InterContinental Times Square | New York | NY | U.S. |
| Jumeirah Frankfurt | Frankfurt | | Germany |
| Kingsgate Marriott Conference Center | Cincinnati | OH | U.S. |
| Le Meridien Philadelphia Hotel | Philadelphia | PA | U.S. |
| Lodge at Glendorn | Bradford | PA | U.S. |
| Mandarin Oriental Paris | Paris | | France |
| Marriott Downtown Magnificent Mile | Chicago | IL | U.S. |
| Montage Deer Valley | Park City | UT | U.S. |
| Provenance Hotel Lucia | Portland | OR | U.S. |
| Provenance Hotel Deluxe | Portland | OR | U.S. |
| Provenance Sentinel | Portland | OR | U.S. |
| Residence Inn & Courtyard by Marriott NYC / Central Park | New York | NY | U.S. |
| Salish Lodge & Spa | Snoqualmie | WA | U.S. |
| Sawgrass Marriott Golf Resort & Spa | Ponte Vedra Beach | FL | U.S. |
| St. Ermin's Hotel (Marriott "Autograph" Collection) | London | | U.K. |
| Waldorf Astoria | New York | NY | U.S. |
| Westin Paris - Venôme | Paris | | France |
| Woodsland Park Hotel | Surrey | | U.K. |
| | | | |

^{*} Hotels in bold font received and responded to survey.

Surveyed hive hotels creatively put their one-of-a-kind artisan product to use: from menu sweeteners to honey cocktails, gift shop items to spa amenities, pastries and even a honey lager beer at one property. Some donate their harvested honey to the community or distribute it to staff. This syrupy byproduct of beekeeping gives wings to broader sustainability conversations in the industry.

A product so closely tied to the natural landscape speaks to the complex and interconnected nature of the food and energy system. Like our buzzing metropolises, the hive needs high-intensity inputs to meet its unyielding energy needs. And similar to the communities that comprise our urban centers, the colony's success depends on the collaboration of countless individuals working in harmony toward a common goal.

At the InterContinental New York Barclay,

in addition to culinary benefits, the bees act as a conversation piece that educates the hotel's younger guests on sustainability. The hotel has created a unique 'Barclay the Bee' character and hosted a special event with The Honeybee Conservancy.

For Hervé Houdré, General Manager of the InterContinental New York Barclay, the bees represent much more than just a honey byproduct, but a larger sustainability message to the city of New York. "The primary reason we are beekeepers is to support the local ecosystem and sustain these important endangered pollinators."

Other properties have designated "bee teams," such as the Fairmont Waterfront in Vancouver, Canada, where the team volunteers time to facilitate tours and educate local elementary schools on the importance of biodiversity.



BEE - Friendly Practices: sustainability in action

Urban beekeeping means "bee-ing" smart about what we grow, how we grow, and how we consume it. Providing additional space for these pollinators on the rooftops of urban hotels opens up doors into discussions on concerns about industrial agriculture systems, climate change, food justice and social equity.

These hive hotels have taken steps far beyond playing host to another pinstriped, cosmopolitan guest and the rest of the hotel industry can embrace the movement. A quiet movement is circling the hospitality industry and this sweet trend is catching on with global potential. The next frontier can extend further into hospitality, travel & tourism— as hives are also appearing in restaurants, theme parks and airports.

Even the White House is embracing bees!

Through this study, urban hotel beekeeping can begin to cross-pollinate as a best practice, offering hotels a medium to cultivate innovation, connect with the local community, advance sustainability, meaningfully engage guests

and staff, and *bee* part of the solution for positive global change.

About Greenview

Greenview was founded in 2008 to play a pivotal role in advancing sustainability through increasing the prevalence of metrics, measurement and reporting. Greenview serves the hospitality, meetings & events, travel, and tourism industries at the organizational level, with core services including Corporate ESG Advisory & Reporting, Sustainable Event Services, Destination Reporting, and Industry Research. Greenview maintains its finger on the pulse of sustainability though its Greenview Portal, an online hotel tool to consolidate, track, measure and obtain actionable guidance on sustainability. For further information visit www.greenview.sg.



About Kelly McGlinchey

Kelly McGlinchey is the Director of Food Education for Butter Beans, a NY-based organization that aims to improve the health of our communities through seasonal, nutritious food. She has worked as Sustainability Project Manager for the Interstate Hotels New York City Marriott property clusters at Times Square and Central Park, helping to institute sustainability practices in hotel operations from local food procurement to rooftop beehives. Kelly earned her Bachelor of Arts in Environmental Studies at Dartmouth College, and has served on delegations to the United Nations Commission for Social Development and the United Nations Framework Convention on Climate Change. As a "foodie" and environmental advocate, she believes that by building connections to our food and the land that sustains it we can effectively create positive change in our global communities.

About Jennifer Moon

Jennifer is a sustainability consultant at Greenview. She has a diverse background in hotel management, organizational sustainable development and change management. She has experience working in corporate ESG reporting, green meetings & events and industry research for travel & tourism. Jennifer is an active participant of the Hotel Association of New York City's Sustainability Committee and NYC & Co's Sustainable Development Committee. She has earned a Bachelor of Science degree from the Cornell University School of Hotel Administration and a Master of Science degree from Columbia University in Sustainability Management. She is a fair trade coffee enthusiast who sincerely believes that urban sustainable development is the answer to building happier, more connected communities.

