Beehives kept at a golf course in Southern Ontario. The club sells the honey in the pro shop, and it is used by the kitchen staff.

Farming on the Fairway

THE TRUTH ABOUT GOLF COURSE BEEHIVES

Written by & photos provided by Dr. Sara Stricker, Communication & Outreach Coordinator, Guelph Turfgrass Institute in collaboration with Paul Kelly, Apiarist, Honey Bee Research Centre, University of Guelph.

A recent trend has taken hold on golf courses around the world: proudly announcing the installation of honey bee hives in an effort to "save the bees." At first glance, it sounds like a win for conservation, where neatly manicured greens now host buzzing colonies in an era of growing environmental concern. But peel back the layers of this feel-good story, and the reality is a bit more complicated.

The truth is that honey beekeeping on golf courses in North America is not conservation. It is agriculture. European honey bees (*Apis mellifera*), the species found in virtually all domesticated hives, are not native to this continent. They were imported by European settlers in the 17th century and have since been bred for a singular purpose: to produce honey and pollinate crops for human benefit. In this sense, honey bee hives are more akin to miniature cattle farms than wildlife sanctuaries because they are a managed form of livestock agriculture designed to produce a marketable (and delicious) product.

The confusion stems partly from the "Save the Bees" movement that gained traction in the late 2000s, spurred by widespread reports of Colony Collapse Disorder — a phenomenon where entire honey bee colonies suddenly died off. With alarming headlines warning of potential food shortages (one in three bites of food depends on pollination, after all), public support surged for anything that seemed to support bee health. However, this well-meaning movement has often conflated the fate of European honey bees with that of native bees. It's a well-meaning but unfortunate misconception.

North America is home to over 4,000 species of native bees, including bumble bees, mason bees, and leafcutter bees. These species are crucial pollinators in their own right, many of them even more efficient than honey bees at pollinating native plants. They are facing steep declines due to habitat loss, pesticide exposure, climate change, and a lack of diverse forage. Unfortunately, setting up honey bee hives does nothing to aid these native species, and in some severe cases it could actually make their situation worse. One study showed that managed honey bees can outcompete native bees for nectar and pollen in urban areas with limited floral resources (MacInnis et al. 2023). It's also important to understand that the introduction of honey bees in an area does not replace native pollinator services since different bees have different specialities; native bees are better at pollinating native plants, and honey bees are better at pollinating field crops and orchards. That being said, honey bees have coexisted with native bees

Not all pollinators are bees! This Hummingbird Clearwing (Hemaris thysbe) moth is a native species which loves viburnum plants.

in North America for about 400 years, and direct competition is only a concern under extreme conditions where there are either too many honey bee hives or too few flowers.

If an organization genuinely wants to toute their "conservation efforts", the focus should shift toward supporting native species and their preferred habitats. Planting wildflower meadows and providing undisturbed nesting sites is the best way to save native bees. Bees on golf courses aren't a bad thing, but they should not be mislabelled as conservation. Honey production is valuable and important, and supporting pollination for agriculture is critical for human food systems. But let's be clear: keeping honey bees is a form of farming, not conservation.

Beekeeping on golf courses could be considered as a useful indicator of environmental stewardship. Much like the canary in the coal mine once signaled unsafe conditions for miners, the presence of healthy, productive honey bee colonies can demonstrate that the surrounding environment is being managed diligently to support sensitive insect life. Honey bees are highly susceptible to many pesticides, so their thriving nearby suggests that chemical applications are being used thoughtfully — with precision targeting, appropriate timing, and strict adherence to safety standards. Honey bees will forage over a 7,000-acre range and they are unlikely to forage on managed turf surfaces, thus there is limited risk for exposure to any pesticide use due to turf management practices.

In this way, beehives on golf courses can act as living testaments to pesticide use best practices. When managed responsibly, golf courses can balance pristine playing surfaces with a broader commitment to pollinator safety. Careful pesticide use, reduced chemical dependence, and strategic planting of forage-rich buffer zones can all contribute to a landscape where honey bees can forage without harm, producing honey without contamination. Though this approach does not directly aid native bee conservation, it does highlight how chemicals are not drifting beyond intended zones or harming non-target organisms.

The Guelph Honey Bee Research Centre makes and sells these "baby bee bungalows," designed for solitary bees.

Ground-nesting bees can make their home in roughs and naturalized areas.

HOW TO SUPPORT NATIVE BEES?

One simple way to encourage native bees is by providing nesting opportunities. Hanging bee hotels or nests can offer shelter for solitary species like mason and leafcutter bees. Leaving hollow plant stems in flower beds and gardens provides natural nesting sites for a variety of bees. In areas where it is safe, maintaining dead trees or wood piles can support carpenter bees and other cavity-nesting insects. These natural structures provide the types of habitats native bees evolved to use and these features are often missing from manicured landscapes.

Importantly, about 75% of native bee species nest underground. When a ground nest is found, often a small mound of exposed soil or a hole on the sunny side of a hill, it's crucial not to disturb the area. Golf course superintendents can flag these spots and post signage to alert players and maintenance crews to avoid the nests. Native bees prefer bare, sandy soils with minimal turf coverage, so preserving pockets of thin grass or open ground is essential. By protecting these hidden nesting sites, golf courses can play a meaningful role in safeguarding native pollinator populations while still maintaining playability and aesthetics.

Another effective way to support native pollinators on golf courses is by establishing pollinator gardens — carefully designed spaces planted with native wildflowers, grasses, and shrubs that provide essential forage throughout the season. However, it's important to recognize that pollinator gardens require ongoing maintenance to be successful. Without regular weeding, reseeding, and attention to invasive species, these gardens can quickly become overgrown and unkempt. A messy or neglected pollinator garden not only diminishes its ecological value but can also harm the reputation of the initiative, giving the impression that pollinator-friendly efforts are incompatible with the clean aesthetics of a golf course. Proper plant selection and a clear maintenance plan are crucial to ensuring that pollinator gardens remain vibrant, attractive, and effective at supporting pollinators year after year.

Both native bees and honey bees rely on a diverse array of pollen sources to maintain proper nutrition, immune function, and gut health. To support pollinators across a golf course ecosystem, it's important to plant a wide variety of species that flower at different times throughout the growing season. This ensures that bees have continuous access to fresh nectar and pollen from early spring through late fall. Often overlooked in pollinator planning are trees, which can be some of the richest sources of pollen available. Native species like maple, willow, and basswood provide critical, nutrient-dense pollen, especially in early spring when other forage options are scarce. These trees are especially valuable to native bee populations. Honey bees, on the other hand, tend to favor trees and crops that share their European origins, such as apple, cherry, and other stone fruits. By planting a thoughtful mix of native trees, shrubs, and flowering plants, golf courses can create a resilient and diverse food web that benefits a wide range of pollinators.

It's important to celebrate honey for what it is (a form of agriculture) and to understand conservation for what it entails: protecting the wild species that need our help even if they don't reward our efforts with a sweet treat.

Get connected with the Guelph Turfgrass Institute by signing up to the newsletter at www.GuelphTurfgrass.ca or connecting on social media @GuelphTurf. Learn more about sustainable beekeeping and pollinator health from the Honey Bee Research Centre at www.hbrc.ca or follow @HoneyBeesAtUoG on Instagram.

Learn about planting a bee-friendly garden.

Learn about native bees. ■