

Insects, Elk, and the Rise of Alternative Proteins

Brands look to alternative proteins for healthier and more sustainable meat options.

Consumers' willingness to try these unusual proteins and cuts of meat likely goes hand-in-hand with the growth of the foodie culture, which **Sharon Olson**, executive director of the **Culinary Visions Panel**, describes as people who want to try something novel when dining out. "They like to experiment with those items because they're **new and different**, but there's a **familiarity** to them. They might be game meats, but meat is meat and it's interesting," she says. "The insects, on the other hand, I look at that as pure culinary adventure."



Here are three statements that shouldn't come as a shock to anyone in the foodservice industry: Today's diners are increasingly health-conscious, they care more about where their food comes from than generations past, and a rapidly growing number consider themselves "foodies" with a taste for culinary adventure. So what do you get when this trifecta of consumer behaviors unites? It's the perfect backdrop for alternative proteins to thrive, even in a limited-service setting.

Twisted Root Burger Co. has become the South's go-to destination for uncommon proteins at fast-casual prices. Serving exotic meats like venison, elk, lamb, rabbit, ostrich, camel, duck, boar, kangaroo, emu, wagyu beef, and alligator, chef Jason Boso says more than 15 percent of the brand's total menu mix is made up of these outside-the-box options. The lineup of game meats is typically served in burger form or on salads, and is even combined to create mash-up products like the Dork Burger, made with a mix of boar and duck meats. Looking toward the future, Boso says, he also wants to introduce items like venison and ostrich chili cheese fries.

While Twisted Root began experimenting with alternative proteins as a way to have some culinary fun and play around with its menu, customer demand for the items has grown rapidly. "It surprised us how much people wanted to try these unique meats and how consistently they did," Boso says.

The proteins are particularly popular with health-conscious consumers and gym-goers because game meat is generally leaner and lower in fat and calories than domesticated meats like pork and beef. Though some exotic proteins are higher in cholesterol, they contain less saturated fat and more heart-healthy fats, including omega-3 fatty acids.

According to the U.S. Department of Agriculture, meats like elk and bison are also loaded with vitamins and minerals such as iron, while elk is also low in sodium and is a good source of niacin, vitamin B-6, vitamin B-12, and zinc. Venison contains less fat than chicken, and also boasts the highest protein and lowest cholesterol content of any major meat.

But game meats aren't the only alternative proteins that brands are experimenting with: Edible insects are creeping onto fast-casual menus, too. Cookie Martinez, who began serving edible insects at her Colombian street food eatery of the same name in Toronto in 2013, says insects are easy to prepare and incorporate into everyday menu items. Her cricket and mealworm empanadas, for example, use the same recipe as her traditional Colombian empanadas, but are stuffed with roasted crickets or mealworms instead of proteins like chicken. For guests with a sweet tooth, she offers "Crittles," a brittle-like candy made with sugar and crickets. "It's so easy to incorporate it, so why not?" Martinez says.

Crittles aside, edible insects offer diners a number of healthy benefits, says Robert Nathan Allen, founder of nonprofit organization Little Herds, which is dedicated to bringing edible insects to market. Not only are they packed with protein—crickets contain 20.5 grams in every 100-gram serving—but they're also filled with minerals like iron, calcium, magnesium, zinc, and the omega-3s and -6s found in many seafoods. (Like seafood, insects can trigger a similar allergic reaction, so sensitive diners should check with a doctor before chowing down on the critters.) And though they're a complete protein just like many other animal proteins, they're unique in that they're a good source of soluble fiber, which humans can typically only get via plant sources.

While insects like crickets rank high on the list of healthy protein alternatives, they're also extremely eco-friendly to produce. "Generally speaking, you're able to raise more of them in terms of actual edible volume with less land," Allen says. Insects naturally crave cramped, dark environments. "Whereas we can't cram a bunch of cows and pigs together—or shouldn't cram a bunch of cows and pigs together—with insects, that's not the case."

Insects are also more efficient at converting feed into edible biomass, since their cold-blooded nature doesn't require them to use calories to regulate their body temperature. That means every 10 pounds of feed will yield nearly 9 pounds of cricket, compared to only 1.5 pounds of beef.

In addition, insects are more water-efficient than traditional livestock and produce significantly less greenhouse gas emissions. "They're able to do a lot more with our input resources and available space without as many of those negative outputs," Allen says, adding that edible insects meet the criteria for everything today's customers say they're looking for in food.

"This industry is starting in a time where our broader food culture conversations are already about where our food comes from, how it gets to our plate, [and] what effect it has on our body and our planet," he says.

Many game meats are a free-range and more natural alternative to traditional livestock farming. In fact, a growing consumption of venison is seen by some as a way to curb the overpopulation of deer, which can have a damaging effect on natural ecosystems and the forestry, agriculture, and transportation industries.

In recent years, Austin, Texas, has seen an uptick in the number of small, local farms, and the acceptance of outside-the-box proteins like goat, lamb, and quail have come along with the growth, says chef Mark Buley. These are just a few of the proteins Sour Duck Market—a fast-casual offshoot of Buley's full-service restaurants, Odd Duck and Barley Swine—will serve when it opens in Austin later this year.

The concept will also offer off-cuts like lamb neck and goat belly, which typically aren't used in a limited-service setting. "It's oftentimes just the result of us talking to the farmers and ranchers we deal with and saying, 'What do you have a lot of right now that you need to move?'" Buley says. "And then we'll figure out something to do with that. It's a symbiotic relationship with some of these small farmers."

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But while a growing number of diners may consider themselves daring by eating items like crickets or even ostrich, Allen says there's still a long way to go for edible insects to make the transition from being seen as creepy crawlies to viable food sources.

He says two primary approaches can help make crickets and company more mainstream: Americanizing the dish—much in the way sushi became more acceptable over time by incorporating ingredients like avocado and cream cheese—or breaking it down to its lowest level so customers don't think twice about eating it. Wayback Burgers did the latter in 2015 with a limited-time Oreo Mud Pie Milkshake featuring Peruvian chocolate-flavored cricket powder.

No matter the path insects and exotic game meats take to becoming more widely accepted, brands still face other issues, both from sourcing and pricing perspectives. Because ordering product correctly and efficiently continues to pose a challenge, Twisted Root stays in constant communication with local ranchers, Boso says.

Sour Duck Market's Buley says using smaller animals like duck, goat, and quail requires some creativity to ensure every possible bit of meat is put to good use. But because many game meats pack more flavor, Buley says, "it only takes a few ounces to really make an impact on a dish."