Changing livestock diets: Here's how crickets will help address agricultural sustainability challenges

During the late summer and early fall, you can hear the commotion in a customized, food-grade shipping container on the 165-acre property, where as many as 350,000 of the farm's tiniest residents can't contain their ruckus. The noisemakers are crickets — specifically adult males wooing mates — and they (and their potential sweethearts) are being raised expressly to feed the livestock that Thorpe Farms' owner, Cory Priest, also raises.

They are part of a uniquely hyperlocal food chain: Priest also grows vegetables, and the scraps from his veggie patch feed the crickets, which, once they mature, are gobbled up by Priest's chickens and turkeys. The crickets, of course, also lay eggs, guaranteeing a more-or-less perpetual food supply. When baby crickets reach maturity, they are flash-frozen, then later thawed and fed to Priest's chickens.

Follow the latest news and policy debates on sustainable agriculture, biomedicine, and other 'disruptive' innovations. Subscribe to our newsletter.

SIGN UP

What makes the process even more unusual — and holds promise for many other farmers — is that this circle of life hinges on a high-tech system. The food container was customized by the Ontario startup Bug Mars and is outfitted with incubators and habitats. Eight separate cameras, as well as other sensors, are embedded within the container and collect data such as temperature, air quality, cricket movement, pest invasions. That data is sent to a tablet where Bug Mars' proprietary platform processes it for Priest, who uses the knowledge to optimize the health and yield of his crop.

This is an excerpt. Read the original post here