

Raising giant freshwater prawns — in the desert



Aquaponics instructor George Brooks, Jr., (blue shirt) with student Leo Munie tending to the aquaponics/prawns equipment. (Photos: MCC)

BY SALLY MESAROSH DECEMBER 20, 2017

Students at **Mesa Community College** (MCC) in Arizona are working diligently to raise giant freshwater prawns in several carefully constructed aquaponic systems in the college's **Center for Urban Agriculture**.

The research project focuses on using high-tech methods to improve crop yields, reduce costs and employ sustainable practices to find new ways to efficiently feed our growing global population. It also gives MCC's sustainable agriculture students with first hand, ag-tech experience.

Students, under the direction of aquaponics instructor George Brooks, Jr., are observing, recording and experimenting with the prawns' environment to determine the optimal conditions for the crustaceans and vegetation to thrive.

“If we can one day grow prawns the size of a small lobster in Mesa, Arizona, just imagine the possibilities,” Brooks said. “We can contribute to the world's food

supply and help feed billions of people while being more cost effective and resource savvy.”

Aquaponics is a symbiotic food production system where animals and plants are cultivated together in a constructed ecosystem. There is expanding interest in aquaponics as a form of aquaculture that may help produce food closer to urban centers.

“MCC is one of the first community colleges in the nation to offer a for-credit course in aquaponics,” said Brooks, who will present his findings of at the [World Aquaculture Society’s Aquaculture America 2018 conference](#) in February. “The industry is growing by leaps and bounds.”

Aquaponics is one of the courses students may take to earn an associate of applied science degree in sustainable agriculture. MCC [first offered the degree](#), the first of its kind in Arizona, during in fall 2014. The degree provides students with both the technical and small business skills needed to manage or develop a small farm or agricultural business.

The aquaponics and sustainable agriculture fields have wide implications ranging from farmers and processors to consumers and entrepreneurs who build innovative business products and services.

The industry’s annual growth rate is estimated at more than 10 percent from 2016 to 2020, fueled by an increasing demand for organic food, according to Sprout Intelligence Analysts. They add that the global aquaponic farming market was worth more than \$500 million in 2015.

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