

From fish to fertilizer

A Kentucky company thinks outside of the net with innovation

By **Tim Hughes**
Division of Biofuels

As kids, many of us were informed that the Native American Squanto instructed the Pilgrims on how to use dead fish to fertilize their corn fields as a means to improve production and crop growth. Whether this is a documentable agronomic history lesson or folklore, it is fitting that today these methods are being used with the invasive Asian Carp. Located in Tri City, Kentucky, the owners of Blue Shore Fishery, Dr. Lan Chi Luu and her partners purchased and renovated the former

Purchase Area Aquaculture Cooperative in Graves County, specifically for the processing of Asian Carp harvested from the region's waterways. Blue Shores Fishery also owns two other fish facilities in Kentucky, RCB Fish Company and Fin Gourmet and are bringing innovation to the Commonwealth.

The Asian Carp have become invasive and a nuisance in many Kentucky tributaries. The fish compete with more desirable aquatic species for the same feedstuffs, have had little market demand and have created dangerous boating environments due to their tendency to jump out of the water when startled. The fish are extremely fast growing and prolific, with some of the harvested fish exceeding 100 pounds. Because of the abundance of the carp and assistance through the Kentucky Cabinet for Economic Development, Luu decided to relocate to western Kentucky and cast her net.

Since Asian Carp are so large and yield considerable waste products that are not desirable for food production, Luu started looking for other options rather than just sending the fish remnants to a landfill. With the help and guidance of Scott Laszkowski, of LEI Products of Madisonville, and Loretta Daniel, with Murray State University, they started working on drying various biomass resources and blending the fish carcasses and byproducts of the process with wood chips. Once mixed, the byproducts are then sent through the drying unit or Bioburner®, which is an extremely efficient and environmentally advanced biomass based hydronic heating system. The final result is a very fertile soil amendment that can be marketed to gardeners and other horticulturalists for crop production.

To learn more and to see the process a video can be viewed at <https://www.youtube.com/watch?v=YmcYNBGVdQ4>. They are still testing and perfecting the appropriate ratios and biomass sources, but the collaboration seems to be further improving the business opportunities for Blue Shore Fishery. Learn more about Blue Shores at <http://www.blueshoreusa.com>.



ABOVE: *The final product is shown.* Photo courtesy of Fin Gourmet.
TOP RIGHT: *The Bioburner® sits outside and is portable for use.* Photo by Bill Lunsford.