

**Paul C. And Edna H. Warner Endowment Fund for Sustainable Agriculture
Report Form**

Enhancing Sustainability of Freshwater Prawn Production in Ohio

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Summary:

An Ohio company, EnviroFlight, has developed a new freshwater shrimp/prawn feed that is completely animal by-product free. This on-farm demonstration project compared growth, production, and sales of freshwater prawn fed a traditional sinking catfish pellet with prawn fed the newly developed EnviroFlight Shrimp feed.

What was done?

On the farm of an experienced freshwater prawn producer, two half-acre freshwater prawn ponds were stocked and fed either a traditional sinking catfish diet, or EnviroFlight's new freshwater prawn diet. Prawn were cultured from June to September, 2012. Prawn were harvested and production data collected and compared (see chart). Prawn from both ponds were sold for \$12.00/lb whole on ice using pond-bank sales.

What were the results?

	Pond One Purina	Pond Two Enviroflight
Number prawns stocked	8200	8225
Prawn harvested (lbs)	400	430
Estimated Survival	88%	94%
Average individual size	18/lb	18/lb
Cost of feed	\$0.39/lb	\$0.30/lb
Feed fed	1500 lbs	1800 lbs (extra week in pond)
FCR	3.8	4.2
Cost of feed/pound of FWP	\$1.46/lb prawn produced	\$1.26/lb prawn produced

No growth, production or sales differences were noted between the two ponds. The only difference was the prawn raised on the EnviroFlight diet were noticeably paler in color. The customers did not appear to notice or care, but one experienced prawn chef felt that the pale color was a positive marketing attribute, as it looked more like marine shrimp.

How have the results contributed or will they contribute sustainable agriculture?

Prawn farmers in Ohio (n=20) and other states are very interested in using the EnviroFlight diet. It is locally produced, contains no animal by-products, and is cheaper than commercially available aquaculture diets. The information is also being shared at the US Prawn Growers annual meeting in Mississippi so prawn growers nationally can be made aware of this new diet and its application in raising a more sustainable seafood product.



