The Fish Side of our grant.

Pairing Aquaculture with Agriculture.

Looking at sustainable fish, vermiculture, and insect rearing at Forestdale Farm to improve revenue, yields, and soil health

FORESTDALE FARM
FLAGSTAFF ARIZONA

WESTERN SARE
Sustainable Agriculture Research & Education

Catfish Production



Catfish and measuring board at the start of the experiment

- **We looked at how Catfish can be sustainably managed on small farms. The waste from rearing these fish is an excellent nutrient for plants and soil health. In addition, catfish can be sold as a marketable commodity increasing revenue.**



An overview of the catfish pond and experimental beds on the farm

- **For part of this experiment, we used a pond to rear catfish and irrigated 3 different raised beds to see the benefits of paring these systems.**

Red Wiggler and Mealworms A sustainable fish food



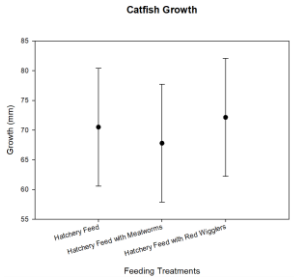
Mealworms raised and used in feed treatment



Red wigglers raised and used in feed treatment

- **Mealworms and Red Wigglers are good options to rear on farms to create sustainable feed sources for fish production. We noticed red wigglers were much easier to establish and harvest and saw the biggest benefits with them**

Catfish Growth



- **Both Mealworm and Red Wiggler treatments showed a similar fish growth compared to hatchery feed.**