Aquaculture is the cultivation of fish, aquatic animals, and plants. Aquaponics is a bio-integrated system that links recirculating aquaculture with hydroponic vegetable, flower, and/or herb production. In aquaponics, nutrient-rich effluent from fish tanks is used to fertigate hydroponic production beds. SARE has supported advances by producers, researchers, and educators that are helping to advance aquaculture and aquaponics into working models of sustainable production.

NCR-SARE Project Sampler

To view SARE's entire aquaculture and aquaponics portfolios, or just the North Central Region's, visit https://projects.sare.org and search using the terms “aquaculture” or “aquaponics.” For selected North Central Region aquaponics grants, see the reverse side.

Through a collaborative, comprehensive, urban farming initiative, Whispering Roots worked on a healthy food project involving aquaponics. Students who worked on the aquaponics system received multiple awards for their efforts. See https://projects.sare.org and search for project number FNC13-911.

A producer explored using unused manure pits as a resource for aquaculture production. He hopes to provide former dairy farmers with a good use for their unused manure pits. See https://projects.sare.org and search for project number FNC17-1105.

A producer studied the feasibility of using on-farm inputs for fish food such as red wigglers, meal worms, black soldier fly larva, and tank raised duckweed (as opposed to commercially processed fish pellets) in order to reduce operation expenditures. See https://projects.sare.org and search for project number FNC12-863.

Students and staff constructed a large vertical tower aquaponics system with twelve ZipGrow® towers, a 100-gallon stock tank, an external biofilter, plumbing to connect the various components, and woodwork for framing and structural support. See https://projects.sare.org and search project number YENC13-067.

SARE's four regional programs and outreach office work to advance – to the whole of American agriculture – innovations that improve profitability, stewardship and quality of life by investing in ground-breaking research and education.
**Farmer and Rancher Grants**

**Developing a “Cold Banking” System For Perch which Would Provide an Available Supply of Fish for Indoor Grow-Out Facilities Throughout the Winter**
Brad LaFave, Black Dog Fish Farm, Wisconsin, FNC18-1132, $22,404

**Increasing Farm Income and Diversification By Converting Abandoned Manure Pits Into Aquaculture Production Facilities**
William West, Blue Iris Fish Farm, Wisconsin, FNC17-1105, $20,406

**Remodel Operating Cold Water Trout Farm into Combination Cold Water/Cool Water Fish Farm, While Diversifying Production and Maintaining a Reduced Ecological and Energy Footprint**
Michael Foster, Wilderness Springs, Wisconsin, FNC16-1034, $15,000

**Growing Mealworms as a Fish Feed for Sustainable Aquaponics**
Barry Adler, RainFresh Harvests, Ohio, FNC16-1024, $3,467

**Developing a Self-Funded Aquaculture Program for High Schools**
William West, Blue Iris Fish Farm, Wisconsin, FNC16-1064, $20,315

**In-Pond Substrate to Increase Yield and Size of Freshwater Prawns**
Don Maloney, Don’s Prawns & More, Ohio, FNC15-1003, $7,477

**Rushing Waters Aquaponics Feasibility Study**
Jeremiah Robinson, Frosty Fish, Wisconsin, FNC15-992, $15,000

**Increase Sustainability on Fish Farms with the Development of Value Added Products from Fish and Fish Waste**
Roy Landskron, Bluegill Heaven, Wisconsin, FNC14-955, $13,746

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**Youth Educator Grants**

**The Viability of Small Scale Aquaponics in Urban and Rural Underserved Communities**
Gregory Fripp, Whispering Roots, Nebraska, FNC13-911, $2,915

**Economic Evaluation of Aquaponics**
Jeff Hafner, Iowa, FNC12-861, $7,475

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For more information on many more SARE-funded aquaculture and aquaponics projects, search the SARE project database: https://projects.sare.org.

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