Aquaculture Boot Camp (ABC-2): Enhancing the sustainability of new and limited resource aquaculture/aquaponic farmers with innovative training

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The Ohio State University

Beginning Farmer and Rancher USDA-NIFA No. 2016-70017-25377

Project Overview

The Aquaculture Boot Camp program (ABC) offered new and beginning farmers integrated training in aquaculture production and business management strategies with "3-I" levels:

- Intensive, an in-depth level involving immersion in a year-long hands-on training and mentoring program;
- Intermediate, a mid-level involving participation in a variety of learning activities; and
- **Introductory**, a general level where sharing of information is the goal

Target Audience:

- Beginning and new aquaculture farmers with less than 10 years of any farming experience
- Other new farmers attempting to diversify their existing farming enterprise
- Potential future aquaculture farmers: students and those without a family farming history
- Educators and others who influence the farming decisions made by potential fish farmers





Intensive Evaluation Plan

Potential obstacles	Funding
What barriers do you anticipate that might prevent you from applying what you learned? *	
What might help to overcome those barriers? *	As the stat becomes more committed, the college will follow
What outcomes are you hoping to achieve as a result of your efforts? *	For now, the info I have gained will prove to be a great educational resource for my students
Future Expectations What additional information do you need to help you in your work or business?	I would love to stay connected to the staff and others in the workshop
What topics should have been covered that were not?	Only wish we could have spent more time on business plans, but I am not starting a business, so it does not affect me directly now.

Recent Entries BULK ACTIONS		Q- Search
# -	Enter your 4-digit code number	Overall The first half of the ABC Program (Jan
21	5576	3 Agree
20	6468	4 Strongly Agree
19	5576	3 Agree
18	8825	4 Strongly Agree
17	1313	4 Strongly Agree
16	743	3 Agree

We use a program called **WuFoo**

Online form builder

Monthly modules

- Module evaluation
- Assess change in knowledge
- Identify curriculum improvements

6 and 12 month assessments

- Overall experience
- Confidence
- Commitment

12 month final project presentation

 Qualitative measure of success

ABC-1 Accomplishments

2013



- 26 Farmers selected in November 2012
- Attend 12 monthly modules:
 - Hands-on training
 - Class projects
 - Mentors
 - Homework
 - Evaluation
- Three Conferences in 2013
- One Aquaculture Bus Tour
- 5 training videos
- Several brochures, worksheets and fact sheets
- ABC intermediate
- ABC introductory
- 20 graduates

2014



- 25 Farmers selected in November 2013
- Attend 12 monthly modules:
 - Hands-on training
 - Class projects
 - Mentors
 - Homework
 - Evaluation
- Four Conferences in 2014
 - North Central Region Aquaculture Conference
 - Aquaponic Workshop in KY
 - Marketing and Processing Workshop in Urbana, OH
 - RAS workshop in Newark, OH
- One Aquaculture Bus Tour
- 19 graduates

ABC-1 Accomplishments













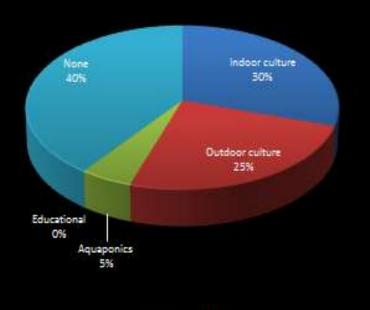
Three technical workshops were offered 2015:

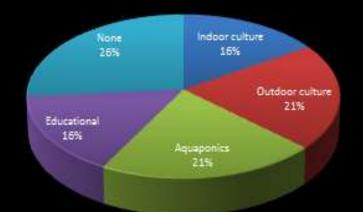
- The Ohio Aquaculture
 Association-ABC Annual
 Conference in Columbus, Ohio
 in January
- Marketing Workshop in Piketon, Ohio in May
- Aquaponics Workshop in Piketon, Ohio July 10-11
- OAA-ABC aquaculture internship: 14 interns worked at several fish farms

National Institute

of Food and Agriculture

What are the ABC graduates doing now?





ABC 2013

ABC 2014











ABC-2 Prospects (2016-2019)



"3-I levels"

Intensive, Intermediate, Introductory

"3 areas"

- General/traditional aquaculture
- Aquaponics
- Related business and marketing

"3 types"

 Hands-on, classroom/mentoring, internet/webinar

"3 key partners"

- Ohio Aquaculture Association
- Piketon Vocational School
- University of Wisconsin-Stevens Point





ABC-2 Recruiting

Informative flyer and application

- Need to know information
- Briefing of the program
- Application guidelines
- Selection process and deadline

Ex. Application Questions:

- Name, email, address, phone
- Years of experience
- Number of workshops attended
- Currently have a system
- Do you own land
- Do you have capital
- Why would you like to join ABC-2

OHIO AGRICULTURAL RESEARCH AND DEVELOPMENT CENTER OHIO STATE UNIVERSITY EXTENSION

Aquaculture Boot Camp-2 Wants You!

Aquaculture Boot Camp-2 (ABC-2) prepares participants for fish farming in the Midwest. Students apply for a one-year course that includes classroom and field training paired with mentoring from some of the industry's top-ranked leaders. Upon graduation, students will have the knowledge and hands-on experience to successfully operate an aquaculture or aquaponics farm.

Briefin

The regiment requires applicants to:

- Participate in 12 one-day training exercises held the second Saturday of each month
- Participate in three additional aquaculture workshops throughout the year at various locations
- · Attend the Aquaculture Bus Tour of Farms
- Complete homework and study assignments on-line between monthly trainings

Need to knows

- Minimum 16 days of the year will be required for this traning plus travel time to and from workshops
- Most training is on Saturday or Sunday, with some on Friday
- The main facility is located at the OSU South Centers Aquaculture Research Center in Piketon, Ohio, and other cooperating aquaculture-related facilities across the state and region
- Instructors represent a wide range:
 College and University Educators
 Government Specialists
 Business Professionals
 Experienced Aquaculture Producers
- Training addresses: Aquaculture and Aquaponics Production, Business Planning, Marketing
- No two members of the same immediate family will be selected into the program at the same time
- The cost: the intensive trainings, including lunch, are being offered at no charge



CFAES provides research and related educational programs to clientele on a nondiscriminatory basis. For more information: go.osu.edu/cfaesdiversity.

Application Guidelines

We will accept up to 35 highly motivated new (less than 10 years of farming experience) and beginning fish farmers and aquaponic producers from across Ohio and the Midwest. Students will be actively involved in aquaculture/aquaponics or seriously dedicated to developing skills for entry into the industry. To be eligible, you must:

- Submit a completed application by November 4th, 2017
- If accepted, sign documentation outlining your commitment to attend seminars and workshops
- Be responsible for all expenses (i.e. travel) related to getting to and from the training sessions

Selection Process

The following will be considered in selecting students:

- Internet access, land, a pilot aquaculture/aquaponics operation, years in production, years obtaining an Ohio Aquaculture Permit, previous workshops attended, and capital available
- Interest and willingness of the student to commit the necessary time, energy, and finances to the program
- Ability to participate meaningfully in academic seminars, outside reading, written assignments, and through self-expression
- 4.The applicant will support and abide by all policies, rules and regulations of the ABC-2 program

OSU South Centers ABC-2 Program

Jordan Maxwell 1864 Shyville Road Piketon, OH 45661 740-289-2071 ext. 124 go.osu.edu/abc2

Logistics

November 4, 2017; Application deadline
November 15, 2017; Students notified of acceptance
January 14, 2018; Selection day OSU South Centers
January 27-28, 2018; Ohio Aquaculture Association
Annual Conference in Columbus, OH
Download Application; go.osu.edu/apply_abc2

Acknowledgement

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ABC-2 Intensive Program (2016 -2019)

- ~35 new/beginning farmers selected each year
- Attend 12 monthly modules (OH: Yr 1-2; WI: Yr 3):
 - Classroom training
 - Hands-on projects
 - Mentors/Mentoring
 - Annual aqua-conference
 - One Aquaculture Bus Tour
 - Three OAA/ABC joint workshops
 - Evaluation
 - Graduation



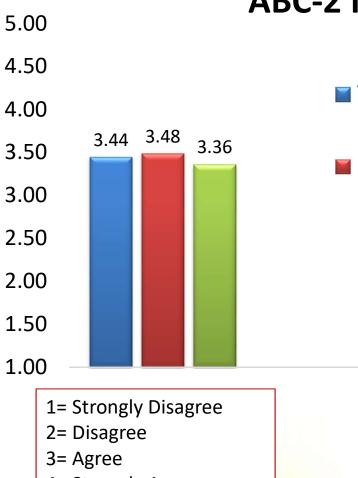
ABC-2 Accomplishments - products

- 24 monthly informative educational modules and materials were developed for ABC-2.
- 36 resource videos were produced and posted on ABC-2 website based on thirty-six Intensive classes
- 17 issues of aquaculture/aquaponics Newsletters were published in OH and WI.
- ABC-2 websites with all the ABC resources were developed in Ohio and Wisconsin.
- A new ABC-2 brochure were created for both OH and WI
- A 12-month evaluation model was developed in Wisconsin using Wufoo (www.wufoo.com) in both OH and WI.
- An ABC-WI social media group was developed using the UWSP-NADF Facebook site for photo sharing, updates, resources and non-workshop communication.
- 38 new aquaculture/aquaponics farms or operations have been created by ABC-2 students.

ABC-2 Accomplishments - Intensive

- 81 new farmer students from ABC-2 Intensive class graduated;
- ~50% of those students have started their new aquaculture/aquaponics farms or operations;
- 38 new aquaculture/aquaponics farms or operations have been created by ABC-2 Intensive students;
- Mentors were provided by ABC partners
 - Ohio Aquaculture Association (OAA)
 - Wisconsin Aquaculture Association (WAA),

ABC-2 Intensive Evaluation



■ The ABC Program met my expectations

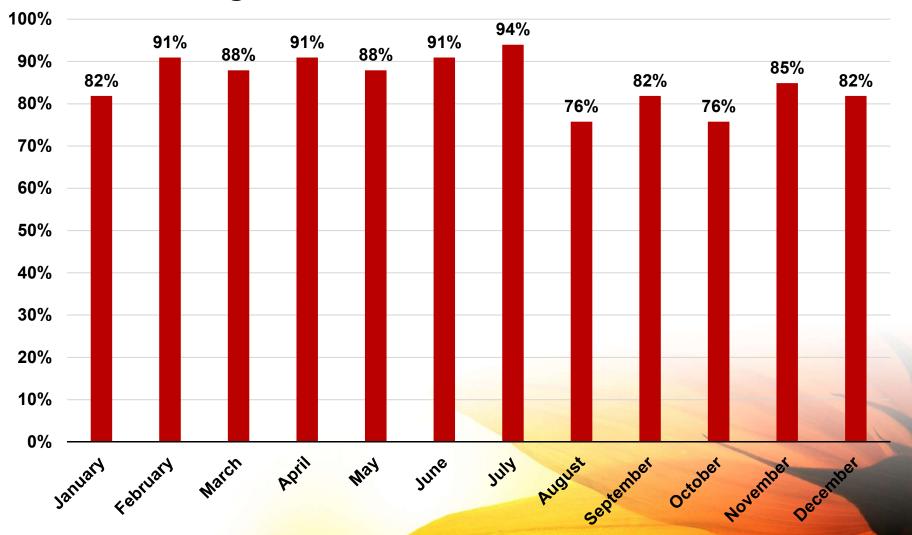
■ I would recommend this program to my business partner or relatives

4= Strongly Agree





Average Intensive Attendance Evaluation





ABC-2 Accomplishments - Intermediate

- 13 Aquaculture workshops were offered in both Ohio and Wisconsin for ABC-2 students in OH and WI;
- 3 Aquaculture Bus Tours were offered for introductory, intermediate and intensive ABC-2 students;
- 4 ABC-OAA's and WAA's annual Conferences were organized and held.
- 921 additional new/beginning farmers were trained and mentored through ABC Intermediate and these activities in Midwest.



ABC-2 Accomplishments - Introductory

- 540 people were trained through Field days/Farm & facility visits/Trips
- 2396 people gained knowledge through visiting the ABC-2 website
- 1212 people gained knowledge through our emails
- 411 people received support and information through phone system
- 86 people received support and information through one-on-one training
- Overall, ABC-2 Introductory provided training and mentoring for 4645 additional new and beginning farmers.





Thoughts from ABC-2 students...



"The hands on classes definitely aid in my learning and class discussions helped as well."

"This program has given me what I need to practically asses my dreams of doing community development work using aquaponics.





"I was pretty much overwhelmed the first day, but that's why I'm in the course, to learn!"



National Institute of Food and Agriculture



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