

People, Planet, Profit

Aquaponics Triple Bottom Line

Tawnya Sawyer

Co-Owner



About Us

- Left 20 year corporate careers in 2009
- Wanted to make the world a better place for our kids and everyone
- Work together to build a sustainable business
- Connect with community
- Wanted to teach people to grow food



Since 2009

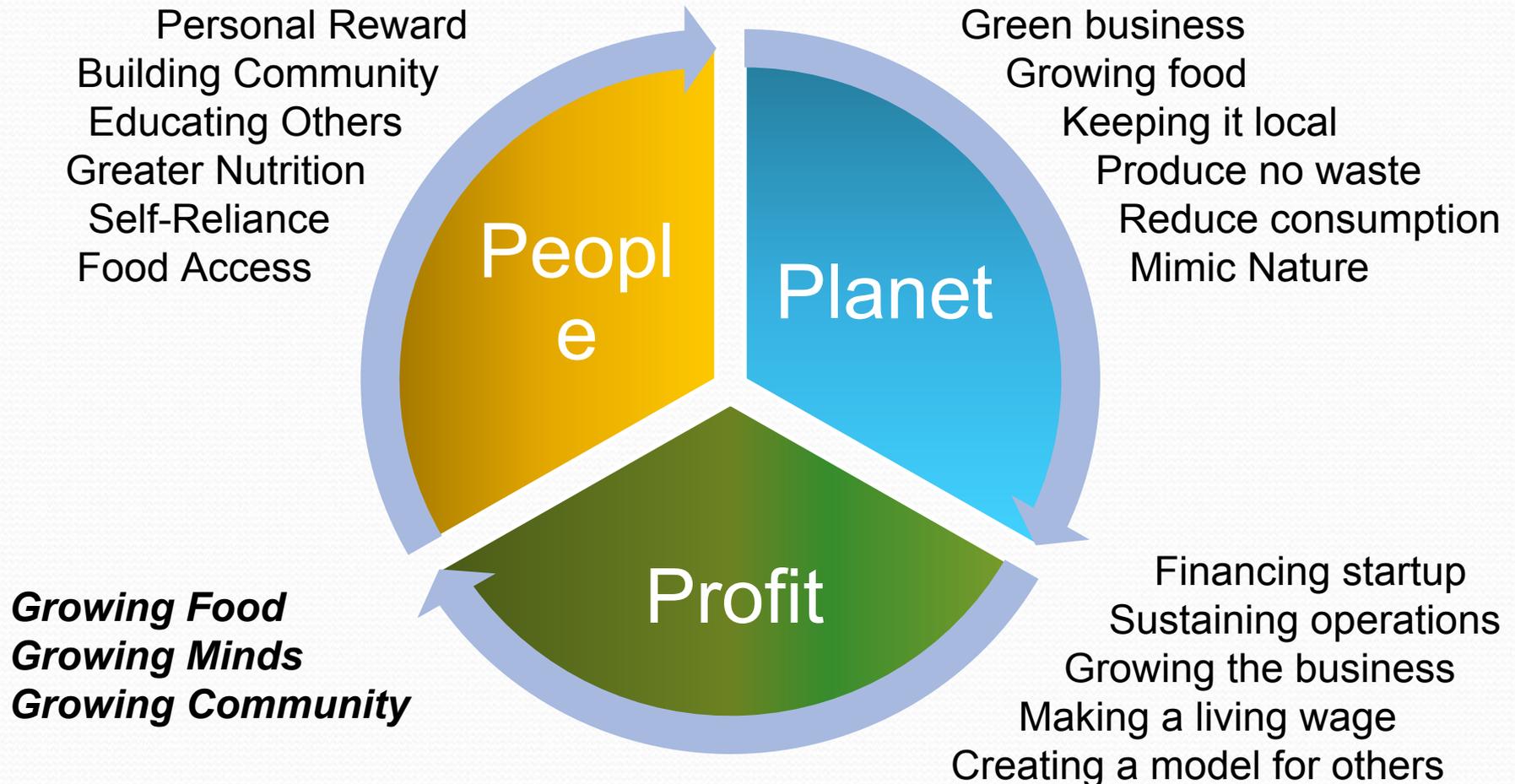
- Built and operated three aquaponic farms
- Owned The Aquaponic Source since 2015
- Part of the founding Aquaponic Association team
- Chaired the AA conference in Denver and Tuscon
- Trained over 1,800 people from hobby to farm scale
- Dozens of aquaponic installs at K-12 and Universities
- Design and install greenhouse farms for customers
- Produced thousands of pounds of fish and produce
- Partners with non-profits and industry leaders

Our Mission

To provide people and communities access to locally grown food and resilient farming solutions through education, demonstration, and innovation.



Sustainable Business Triple Bottom Line



People – Community Connections



Food Access is a Right,



Not a Privilege!

The GrowHaus

Food is a First Form of Medicine



***Mental Health
Center of
Denver, Dahlia
Campus Farms
and Garden***

Education to Empower Everyone



Skills Building and Self-Reliance



Nutritious Produce and Protein



How to connect with people

- Who do you want to connect to?
- What do you want to provide them?
- When is the best time to work with them?
- Where do they gather?
- Why do you want to connect to this group?
- How are you going to make this connection happen?

Connecting with a Chef example

- Who do you want to connect to? *Chefs in high end restaurants*
- What do you want to provide them? *Farm fresh salad and cooking greens, culinary herbs and fresh fish*
- When is the best time to work with them? *Before or between meal rushes, mid-morning, mid-afternoon usually they best*
- Where do they gather? *The restaurant, invite them to visit the farm*
- Why do you want to connect to this group? *To sell products at a premium price point to support the farm operations*
- How are you going to make this connection happen? *Look for a restaurant that sells what you grow, go into the restaurant, have a meal, ask where they get their greens, ask to see the chef, tell your “story” and provide your contact info, drop off some samples and a price list, ask them when they want to start ordering from you, take their order and deliver your product*

Connecting with Parents Example

- Who do you want to connect to? *Parents with young children who may/may not have access to health food.*
- What do you want to provide them? *Farm fresh salad and cooking greens, an excitement for healthy eating, more options*
- When is the best time to work with them? *During the school day, afterschool and weekends*
- Where do they gather? *School, church, sports events, community centers, libraries*
- Why do you want to connect to this group? *Provide more nutritious options and encourage healthy choices*
- How are you going to make this connection happen? *Talk to parents, send out a flier or email with food options, bring samples, give away some food, make a meal or snacks together, show my kids eating our food, give them an easy way to buy from you*

Connecting with Students

Example

- Who do you want to connect to? *Other people who want to learn about aquaponics*
- What do you want to provide them? *Tours or training sessions to show them how your aquaponics system works and get them inspired to grow with aquaponics*
- When is the best time to work with them? *Nights and weekends*
- Where do they gather? *Schools, gardening groups, churches, community centers*
- Why do you want to connect to this group? *To get more people involved with aquaponics as a hobby, to make some money doing what you love, potentially create other revenue streams*
- How are you going to make this connection happen? *Set up or get involved with your local aquaponics chapter, advertise a tour or class, set a price, host the event, enjoy empowering others*

Planet – The Best “Green Tech”



Benefits of Aquaponics

- Uses 10% of water necessary in agriculture
- Free of costly and harmful petro-chemicals
- Completely natural and continuous fertilizer
- No soil-borne diseases, E-coli, Salmonella
- No fish contamination or species depletion
- Less physical labor, no tilling, no weeds
- Protein and produce grown together
- Greater crop yields, faster production
- Significantly reduced food transportation
- Creates nutritious food access and greater food security
- Works in draught, places with poor soil quality or challenging climates
- Enhances the local economy and provides green job opportunities



Uses 10%
of water

Making Aquaponics Sustainable

- Align your crops and fish with the seasons in your area
- The right building for your environment is key
- Alternative power, heating and cooling system
- If using lights, choose T5s or LEDs and light movers
- Choose good quality fish feeds for a healthy system
- Locate aquaponics system close to the consumers
- Don't fight with mother nature, she usually wins!



“You can’t save the environment and feed people healthy food if you can’t stay in business.”

Brian Cook
Colorado Farm Service Agent

More Thoughts From a Farm Service Agent

- *“At the end of the day, that lettuce, that fish, that tomato....needs to pay for itself.”*
- *“Profit Preserves Passion!”*
- *“Mother nature doesn’t care about your spreadsheets.”*
- *“You don’t make money by growing a crop, only by selling a crop.”*

Brian Cook, Colorado Farm Service Agent

Profit

What keeps your farm running?

- Not everyone's goal is profit. But it would be nice to cover your costs.
- How can you keep costs low and production high?
- Partner up with others to maximize strengths.
- Have a polyculture of profit opportunities
- Plant for profit not production
- There are other “profits” to reap from aquaponics

Polyculture of Revenue

- Plant production
- Farm food boxes
- Fish production
- Tours, field trips
- Training classes
- System, supplies & component sales
- Grants, donations
- Local installations and support
- Agrotourism
- Paid internships
- Events and space rentals
- Farm to table meals
- Compost
- Fish fertilizer
- Other business opportunities

Work on profit from the start

- Pick a few specific crops that will work in your climate and focus on them (easier to grow, market, package, etc)
- Focus on crops that you have an established demand for
- Maximize growing space, crop rotation is critical
- Only keep plants and fish that can pay for themselves
- Consider where to delegate work efforts
- Check the “costs” of different products & price points etc.
- R&D is wonderful, but it is hard to make it pay
- Don't quit your “day” job, consider hiring a farm assistant
- Have a “growth” plan, don't try to do everything at once

Planting for Profit – Not Production

**30 rafts per week harvested
in 5 week turns**

24ct head lettuce per raft

\$1ea, \$720/wk, \$37,500/yr

\$1.50ea, \$1080/wk, \$56,000/yr

\$2ea, \$1440/wk,
\$75,000/yr



**50 rafts per week harvested
in 3 week turns**

- Mixed baby salad greens

- 1 lb per raft, at \$5lb =
\$250/wk or **\$13,000/yr**

- 1.5 lb per raft, at \$7lb =
\$525/wk or **\$27,300/yr**



Planting for Profit – Not Production

Pea tendrils, pea flowers and baby peas

Very temp. sensitive,
4'x8' space, constant cutting
\$150/4 months, \$300/yr



Pea shoot microgreens

16 flats in 4'x8' space
2 weeks from seed to delivery
\$20/flat, \$320/wk, \$16,640/yr
Cost about \$1.25 to grow



Profit = Revenue - Expenses

You can make more money by increasing revenue.

You can also make more money by lowering expenses.

- Have a plan to manage expenses
- Work with suppliers, buy in bulk
- Manage utility costs, don't over consume anything
- If using lights consider a light mover and correct coverage
- Consider renting space instead of building a greenhouse
- Interns can help offset labor costs
- Partner with other organization with similar goals
- Consider renting a delivery van instead of buying one

Other “Profits” besides money

*Growing Food, Growing Minds,
Growing Community*



Create, Innovate, Educate, Integrate, Connect, Evolve



www.coloradoaquaponics.com

www.theaquaponicsource.com

