Finances of Full Spectrum Farm Fertility

DEREK CHRISTIANSON BRIX BOUNTY FARM

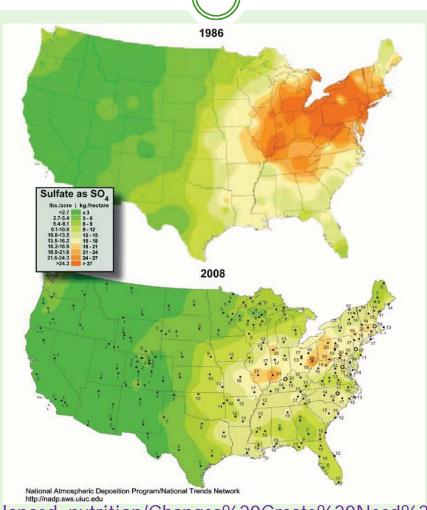
HTTP://WWW.BRIXBOUNTY.COM

DEREKCHRISTIANSON@GMAIL.COM

NOFAMASS WINTER CONFERENCE

SATURDAY JANUARY 14, 2012

Sulfur Deposition by Precipitation '86-08 (mosaic)



www.back-to-basics.net/balanced_nutrition/Changes%20Create%20Need%20for%20Sulfur.pdf

Ask the Right Questions

- What are the Farm's Limiting Factors?
 - Fertility
 - Labor
 - Markets
 - Weed Pressure
- How are We Building a Foundation or "Endowment "for Future Generations?
- Caring, Honoring, and Dignifying our Biological Systems

Considering the Fixed Costs (of Labor)

- In order to ensure financially viable farming operations, we need to "maximize" our return on labor while improving our natural resource base for the future.
- Yield Limiting Factors may include Oxygen, Water, Nutrients
- Do You Have Adequate Mineral Levels? Are These Minerals Bio-Available?

Feeding Soil Biology

- Healthy Crops "Catching and Cycling Solar Energy"
- Root Exudates
- Minerals as Building Blocks, Enzyme Co-Factors and Necessary Metabolites
- Northeast Soils... Often Lacking in ______.

Strategy for "Cooperative Investing" at Brix Bounty

- Capital Fertility Plan Development
- Deep Nutrition Share (Optional)
- "Wintertime Vegetable CSA Share Price Our prices reflect our deep commitment to growing top quality produce using sustainable practices which emphasize care for the earth. We are striving to take the necessary actions to make accelerated steps toward improved nutritional quality in our production. To this end we are inviting our CSA members to make a voluntary investment in our Capital Fertility Plan, dubbed the Deep Nutrition Share (\$100 investment for wintertime shares, \$200 investment for summertime shares). See our Wintertime CSA Share Information for complete information about the new Deep Nutrition Share Investment Option."
- "Asking for Support" (with a story)

Results of Our Inaugural Offering

- 2011-2012 Wintertime CSA:
 - 6 Distributions \$250 November January
- Small Wintertime CSA currently ~35 Members
 - 34 Members @ \$250 = \$8,500.00
 - 12 Deep Nutrition Shares @ \$100, 2 @ \$50 = \$1,300.00
 - ~41% of Wintertime Members Contributed
 - ~15% Additional Dollars from Deep Nutrition Share
 - +20 yds of EarthCare Farm Compost for Hoophouse & Garlic Beds

Outlook for 2012

- 2012 Summertime CSA ~80 Shares (Partial & Full)
 - 20 Weekly Distributions \$450-500 and \$600-650
- \$150 Investment for Deep Nutrition Share
 - 18 Members Enrolled YTD (as of 1/13/2012) = 10,400.00
 - 4 Deep Nutrition Shares @ \$150 and 1 @ 75 = \$675.00
 - ~27% of Summertime Members Contributed So Far
 - +6.5 % Additional Dollars from Deep Nutrition Share
 - Goal \$1525.00 for 45 tons of Rock Dust (Basalt & Granite)
 - "Tiered Spending" Based on Member Support

Fertility Costs

Inputs

Equipment

Supplies

Labor

• "Savings"

Goal – "Closing the Fertility Loop"

- What is Current Deficit?
- What is "Timeline" for Improvement
- What is the Farm's Capacity to Address Deficiencies?
- Addressing Mineral Deficiencies with Biology
- Off –Farm Inputs

Fertility Budget Primers

Resources

- Laurie Drinkwater (Cornell) A Closer Look at Nutrient Budgeting
 - http://www.smallfarms.cornell.edu/tag/nutrients/
- Organic Farming Research Foundation Project Report (Drinkwater)
 - http://ofrf.org/funded/reports/drinkwater_03s16.pdf
- Nutrient Cycling and Maintaining Soil Fertility... (U of Minn.)
 - ★ http://www.extension.umn.edu/distribution/horticulture/m1193.html
- Using Manure and Compost as Nutrient Sources... (U of Minn.)
 - http://www.extension.umn.edu/distribution/horticulture/M1192.html
- Nutrient Budget Basics for Organic Farming Systems (eXtension.org)
 - http://www.extension.org/pages/18794/nutrient-budget-basics-for-organicfarming-systems

Developing a Fertility Budget

- Biology, Chemistry, and Physics
 - But Don't Forget (Cultivation, Efficient Labor, Marketing, Water)
- Start With Proper Information

Soil Testing
Crop Value and Market Demand

- Assessing Existing Fertility
- Assessing Farm Generated Fertility
- Financial Budget Will Often Dictate Choices

A 5 Year Plan?

- Importance of Time
- Questions
- Decisions
- Observation
- Reflection
- Adjustment

and Repeat

Fertility Recommendations

- Climatic Impact on Soils (Albrecht)
 - Mosaic Co. Back-to-Basics http://back-to-basics.net/
- Based on Soil Analysis
- Past Amendment Application
- Field History
- Organic Matter and Cover Crop Nutrient Credits
- Current and Future Crops

What is the Proper Amount of \$ to Invest in Health?

- A Question for Our Community
- Importance of Agriculture in Raw Material "Economic Productivity"
- Multiple Benefits
 - Improved Yields
 - Improved Disease & Pest Resistance
 - Environmental Impact
 - Humification > Building Soil

Upcoming Related Events

- Financing Regenerative Agriculture Conference (Carbon Farming Course) – Saturday Feb. 4th, 2012 http://carbonfarmingcourse.com/workshops/financing-regenerative-agriculture-conference
- Soil & Nutrition: An Education & Coalition Building Conference – Feb. 9-11th, 2012 in Northhampton http://www.nofamass.org/seminars/winterseminar.php
- NOFAMass Growing Greens for the Winter Market Workshop Saturday Feb. 18th, Brix Bounty Farm - <u>www.nofamass.org</u>

Honoring our Farms with Full Spectrum Fertility

Powerpoint .pdf of This Presentation Available at www.brixbounty.com

For more information on this presentation contact:

Derek Christianson **Brix Bounty Farm**858 Tucker Road

Dartmouth, MA 02747

508-992-1868

derekchristianson@gmail.com

