



# 2019 NECAFS Annual Conference Notes

Albany, New York, 02/04/19 through 02/06/19

## Day 1, Tuesday, Feb. 5<sup>th</sup>, 2019

3:00pm: Produce Safety Workgroup – Educational Focus

### Elizabeth Newbold – UVM / NECAFS

- NECAFS clearinghouse resource overview
- Username and password is required to post and modify resources on NECAFS. Shift in resource ownership is now available.
- Searches can be done by keyword. Keyword searches with no results will soon be documented so it is aware that there is no current posting on that topic.
- There is a tally tracking the amount of resources (people, project, publications and videos) posted on Clearinghouse
- Option to opt in “automatic email” and will be notified by email whenever a resource is being added. However, you can also opt into “weekly, or monthly” email updates.
- An excel sheet can be generated including: post title, author, type of resource, topic, state and summary of each resource posted.
- Newsletters will be more frequent to let users know of new resources and resources that are lacking.
- Even if you feel your resource may not be completely relevant, there is a chance it can help your peers. Feel free to send any and all resources to Elizabeth for review if you are unsure about posting it.
- Q: can notifications be filtered by subject or topic of the postings?
- A: good question, we will look into it. We’re not sure.
- Q: Can you filter by Spanish listings?
- A: if you use “Spanish” as the key word, it will provide all resources listed that have the word “Spanish” in the description or title. **(if you are posting a resource that is in Spanish, be sure you include the word “Spanish” in the title or description. Good practice in general, include keywords and even multiple spellings of keywords. E.g. “hand washing”, “handwashing”, “hand-washing”, “washing hands”)**
- Feel free to post the same resource in multiple languages!
- We (very briefly) reviewed how a resource was added!
- Descriptions should be as specific and in-depth as possible to allow for keyword searches to be inclusive for a maximum amount of resources.
- Q: are you concerned about links going dead?
- A: there is a “bot” that checks for when links go inactive. Elizabeth receives a notification and reaches out to the poster of the resource. If you have posted a resource and are aware the link or main website domain is going to change,

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- you have the ability to go into the post and update the link. It is your responsibility as a poster to do so.
- Q: What if we find a resource that is not ours and we think they should be posted?
  - A: Please upload any and all resources that are found. To be approved as a poster, you're seen as a reliable source and we trust that the information you post is credible. If you're aware of the source, please cite them or ask them to post it if you know who the author is.

### **Andy Chamberlin – UVM Extension Ag Engineering**

#### UVM Factsheets Available:

- Practical Resources for Improving Produce Safety
- Packing Sheds & produce safety- lots of risk factors post-harvest. Final steps before consumer. Often an improvement area on the farm.
- PSR: equipment and tools. 112.123(d)- maintain and cleaning food contact surfaces. 112.123(a) Tools that are adequate design, construction and workmanship to enable them to be cleaned and properly maintained. 112.123(c) seams on food contact surfaces must be smoothly bonded or maintained to minimize buildup.
- Hygienic design workshop:
  - Accessibility- if you can't see/reach it, you can't clean it
  - smooth and cleanable surfaces- surfaced should be smooth and enable thoroughly cleaning
  - no collection points- niches, sandwich joints, lap joints, and flat or concave horizontal surfaces should be avoided to prevent collection of water or material
  - compatible materials- with the product being handled on that surface& the cleaning and sanitation process
  - Preventing contamination- systems and building should prevent the product from further contamination.
- Flow of water- plumbing, hose hangers, trolleys, multiple drains for hoses
- Insulation- foam boards, rock wool or mineral wool, spray foam, generally try to about cellulose or fiberglass in high moisture environments.
- CoolBots- low cost, easy to retrofit into existing space, efficiency beneficial, build your own box. CONS- slow to pull down temp, slow to recover from rises in temp, can't freeze.
- Fact sheet available for harvest containers- things to consider: venting, durability, clean-ability, light-blocking, UV resistant, what's going in the box? Closed or open?
- Wash sinks, tanks, tubs and basins. What's recommended? Is it cleanable?

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- Hoses- cheaper than a spray nozzle, a little less durable.
- Smooth and cleanable materials overview and pricing.
- Rodent and pest control. Removing food, limit access through construction and corner blockage.
- Precooling- for prolonging crop viability.
- Brush washers- How do we clean?? Replacing the brushes? Replacing the machine? There are ways to clean it!! But it takes time and nobody wants to do it!
- Rinse conveyor- washing bunched crops. Very high flexibility for produce washing with this machine. Washing bins! These machines are also customizable. Stainless. ~\$7,000. The machine recirculates water. PSR 112.48 requires the water to be managed as necessary. Must monitor and maintain water temp. (to avoid infiltration) Volume ~150 gallons.
- Discussion: no farmer can use it as just \$7,000. Necessary upgrades are going to be required by farmers for on-farm usage including conveyors and pre-wash soak tanks. \*noted to not be a 1 person wash team. 2-3 ppl required for proper usage\*
- User reviews of the rinse conveyor are online. As well as resource videos
- Spinners- small scale to full-scale spinners info available. Appropriate usage and management covered.
- Case studies from UVM follow (also on Clearinghouse):
  - Mighty Food Farm: special use building (VT) for wash and pack, CSA room. Only 1 operator. Stainless sinks, deep tanks for bulky greens, grindstone barrel washer. (Cleaned, maintained, allowed to dry. SOP available)
  - Footprint Farm: triple dunk, spin, pack system. Converted washing machine used. 10x14 cooler powered by CoolBot.
  - Last Resort Farm- Dairy Barn renovated to produce washing. Bright, cleanable, surface material treatment and proper drainage. Trusscore-type of PVC material used. Humidity control in barn, custom cooler, humidity and temp highly controlled.
  - Root 5 Farm- cleanable & drainable. (Fact sheet in the works) versatile outdoor space. Organized, consistent with a high volume of easy to clean bins. Bins clean Methods: up dirty, down clean. Many new renovations in the works.
- Post-Harvest case studies also available online.
- Resources on the way!: Drains, Brush Washers, Drum Washers, Greens Bubblers, Spray Tables, Doors, Materials for smooth surface easy to clean, insulation.

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- **TAKEAWAY:** UVM Extension Ag Eng blog (<http://go.uvm.edu/ageng>) has MANY resources available for post-harvest cleaning and sanitation practices. Also on the NECAFS Clearinghouse (<http://go.uvm.edu/clearinghouse>)
- **The questions below are suggestions for upcoming resources**
- **Q:** farmer aren't fond of the public being aware of the high water usage. It would be interesting to see science based alternatives to the high volume of water being used. Most wash houses are facing issues with sediment build-up in drainage systems. Are there new designs that could prevent this?
- **A:** There are definitely drain systems designed for sediment handling. 12" wide trench drains with a removable standpipe outlet allow for cleaning out sediment.
- **Q:** comparing cleaning and sanitation for areas underneath equipment vs. high contact surfaces would be interesting.
- **Q:** there is concern for people who do not understand composting toilets.
- **A:** Hans- I spent hours on this in VT. There are plenty of farms who legally have composting toilets. 1. Spend a lot of money w a septic engineer and ensure the toilet is safely away from all product. 2. A 50-gallon drum can be placed in the ground and properly disposed in a landfill when appropriate. A hand washing station is also required. Contact Hans for more info on composting toilets

### **Gretchen Wall**

- Produce Safety Alliance Educational Resources
- Highlighting NEW resources in hopes for feedback from the crowd
- PSA resources: the difficult task of finding them! Go to "resources" tab from home page of PSA website.
- "Trainer resources" or "general resources" page. They are separated due to resources more appropriate for educators (trainers) some resources are cross-listed. More in-depth resources are listed in trainer resources.
- Feedback received: online resources to practice material learned during produce safety & grower training.
- 3 most frequently used: Exemptions and Exclusions PPT, Compliance Timeline Chart (printable), Produce Safety BINGO!
- Module 2: Required Record for the FSMA PSR. Editable templates, 7 total records included. Hand washing video included (English and Spanish)
- Feel free to reach out to PSA if you have video development ideas that you would like to see as a resource
- Module 3&4: Fecal Contamination "poop pillow" activity. Not available for public use, but if you would like access to this activity, please feel free to email PSA and they are happy to share it with you. (consider your audience)

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- Module 5.1: resources on agricultural water. People are not updating growers on proposed extension for compliance and expansion of test methods!! It is absolutely critical, if you are hosting a grower training, to update your participants and students on all Ag water regulations.
- 5.1: coliform supplemental activity, webinar: How to Create a Water Lab Map for Farms in Your Area.
- 5.2: Post-Harvest water module. Post-Harvest Sanitizer Tool, fact sheet and excel tool included.
- Module 6: Name that Zone Activity- supplemental activity. Includes photos, ppt and teaching notes.
- Module 7- Farm food Plan writing Resources. Including previous related projects, (SOPs, template plans), being developed now: Farm Food Safety Plan Template incorporating USDA harmonized, GHP/GAP and PSR standards.
- Resources are available in Spanish! They have made great progress and continue to update resources.
- New policy: if your organization wishes to translate these resources to another language, be sure to keep in contact with the PSA as they require and overview and approval to ensure the resources are up to PSA standards.
- #1 email to the PSA: “where can I get updated resources for teaching PSA” PSA is on version 1.1 for curriculum. Contact PSA for link.
- To update your contact info:  
[www.producesafetyalliance.cornell.edu/training/directory/](http://www.producesafetyalliance.cornell.edu/training/directory/) then select “update my entry”
- What would you like to see the PSA develop?
  - Worker training video? --- USDA FSOP developing. Hopefully to be out summer/fall. Old worker training video works, but does not include EVERYTHING that FSMA requires. This resource will likely be split into 2 videos to improve engagement.
  - People have asked for paper materials to incorporate specific information such as: bathroom location and farm layout. It would be helpful to have a format for the growers to fill out and provide their workers for farm specific information.
- Pre and Post testing “scannable” so it is easier to interpret.
- How do you connect growers to their local experts? Is there a better way than the PSA local directory?
- Has there been progress on fish emulsion research?
  - One thing being worked on, came up a lot in Texas compost meeting. PSA has been trying to collect final opinions from FDA for publication.

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- Consolidating the information while highlighting all important material is currently being worked on.
- Hydroponic operations, aquaponic operations and some greenhouse (not soil) resources are hard to find. How does standard and water testing supply in these situations? I've found that growers think because they are growing inside, they are at a reduced risk.
  - NECAFS clearinghouse: Aquaponic resources are working to be found & updated. The Western Center is working on FSOP in final stages focusing on the development of resources dealing specifically w hydroponics and aquaponics.
  - Comparison PSA and FSMA document.
    - Kansas state and university of Utah working on this and have resources. USDA will also have a table at poster session on this
  - Are there any more advanced trainer workshops? It sounded awesome but it was so expensive!
    - Looking at advanced training collaboration with Southern center. Hopefully this can reduce costs
  - On the PSA website maybe trainers can ask for "training of the trainer" workshops

### **Betsy Bihn**

- NECAFS is here today to collectively think about what to do and where to go next. Moving objectives forward! What does this group want to do or organize collectively? Maybe a webinar? Working together in a lacking area?
  - Water Testing Labs! If each state chose 1-2 people to facilitate water testing labs outlines for an accessible resource to growers.
  - We can all agree ag. water must be safe. There is a large group of growers who have never tested ag. water.. Maybe we can implement 5 simple steps to easing into safe ag. water practices. Let's see if these practices are reasonable and useful for when it is law. (Module 5.1 talks about this including water testing lab map). We see labs giving growers wrong test results!! This is a problem! Water testing can be done 1-2x per year and it would still be great strides in safe ag water.
- How often should harvest bins be cleaned and sanitized?
  - It seems like farmers are unaware of this.
  - "As needed" is loosely defined.
  - With 600 harvest bins, growers are unable to routinely clean all of their bins.
  - A guideline for this would be great.
  - WHAT IS "as needed"
- Primer course of workshop for QE growers 3-4 years out from compliance.

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- What can these growers do now to prepare for this compliance so the transition is smooth?
  - We can maybe develop SOPs for this.
- Has anyone looked at the differences in ag water compliance issues between Small, medium and large farms? How does this affect their economy?
  - There is some data on economist's desk waiting to be processed on food safety implementation.
- Actual risk assessment for different fruits. We should be able to sort risk assessments to avoid "apple growers" taking useless precautions due to "leafy green growers" needing to control that risk.
- "As appropriate" won't ever really be answered by the FDA.
- What do we tell farmers in terms of "dropped" definition
  - State adoption of PSR is responsible for defining "dropped" This is a HUGE problem! States define this term differently. We should get a universal definition for this term.
- Sooner than later- coming together to discuss draft guidance comments as a group prior to submission of comments
- Can we as a group
  - 1. Collect things begging for research answer OR
  - 2. Have a conversation with FDA to point out gray area and ask for clarity.
- If we can define those critical points, wouldn't it be useful to gather these questions and demand answers from the FDA before new regulations are put out.