

# The SCRUB Project: Up to Our Elbows in Suds and Bubbles

Produce Safety Educator's Call #60 June 6, 2022

### Instructions

- All participants are muted.
- There will be time for questions and discussion at the end of the meeting.
- Feel free to use the chat box to ask questions as well!
- This session will be recorded and the presentation will be shared via the listserv and on our website after the call.





## **Speaker Introduction**

### • Christopher Callahan, MBA, PE

- Associate Extension Professor of Agricultural Engineering, University of Vermont
- Director of the Northeast Center to Advance Food Safety (NECAFS)





### Sanitization and Cleaning Resources for Your Business

Vern Grubinger, Hans Estrin, Chris Callahan, Andrew Chamberlin (UVM Extension)

Ava DeBovis, Billy Mitchel, Tricia Wanko (National Farmers Union)

Robert Hadad, Caitlin Tucker (Cornell Cooperative Extension of Western NY)

Phillip Tocco,(Michigan State University Extension) go.uvm.edu/scrub

Grant number 2020-70020-33003 from the USDA National Institute of Food and Agriculture. It is offered without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, disability, protected veteran status, or any other category legally protected by federal or state law.

### The SCRUB Project: Up to Our Elbows in Suds and Bubbles

### PSA Educators Call June 6, 2022

THE UNIVERSITY OF VERMONT



### MICHIGAN STATE

Extension

**Cornell Cooperative Extension** Cornell Vegetable Program Think of a time when you learned something new or changed the way you do things....

as an adult.

What made it work for you?



Project Motivations OFRR's, inspections, our own experiences, & grower feedback all pointed to:

- insufficient or inadequate cleaning schedules,
- insufficient documentation of their implementation (logs), and
- lack of standard operating procedures (SOPs) used for cleaning and sanitizing equipment.



Think of a time when you learned something new or changed the way you do things....

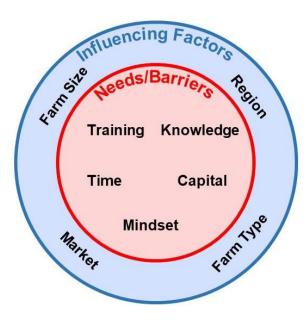
as an adult.

### What made it work for you?



Project Motivations Known barriers to improved practice include the usual suspects:

- knowledge
- training
- time
- capital
- mindset



go.uvm.edu/**necafs** 

From H. Harwood, C. Callahan, E. Newbold – submitted to FPT, in revision.

Our multi-state team is creating and sharing educational resources to improve produce safety and efficiency on your farm.









DIRECT TECHNICAL ASSISTANCE



PARTICIPANT



PARTNER



ADVISOR



Workshops are also typically in 3 formats:

Small groups One-on-one Co-learning







Twilight Highlights Peer Learning Multi-state One on One In-person and Virtual Multi-state Active Listening to Inform New Resource Development









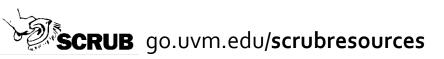
**Resources** are typically in 3 formats:





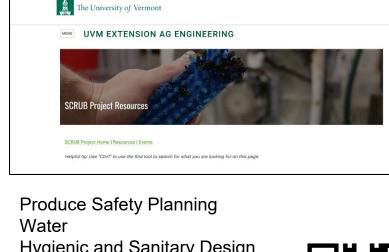


Print Web Video Print PDF Responsive Web Blog Post Video Audio Podcast



Existing Resources have been reviewed and curated.

93 reviewed 34 shared (38%)



Hygienic and Sanitary Design Standard Operating Procedures Training Culture and Case Studies

○ A ≠<sup>2</sup> https://blog.uvm.edu/cwcallah/scrub-pro

Curated & New

SCRUB Project Resources - UV/ X +

# UVM Bloos







**SCRUB** go.uvm.edu/scrubresources, ... foodsafetyclearinghouse.org

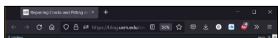
### One Example: Concrete Floor Repair

- Started with a Farm Visit.
- Grower noted a need.
- Worked together to "learn by doing."
- Documented and shared.









#### **Repair Material Decision**

 Are the sides of the credk moving initiative to each other seasonally? Use a flexible sealert which will allow some movement (not covered in this document). Do note that there is movement, there may be a more significant structural issue that needs attention. Repairing a credk with significant soluciontion end invorment over their and kinget me situation.

 Is the damaged area relatively stable and not moving? Is it in a traffic or heavy load area? Use Fast Setting Repair Mortar or Duck Setting Cerner Repair mortar and cernent will oure to provide high strength in compression which will stand up to typical loads.



hach and supplex that are availed for execute organs. (4) Quinter Decenter and August Decen Decenterate, (9) Quinter Advanced Polyces Deck Header, (1) Quinter Que Starting Owners, (3) Quinters Ray Concerns Dauk Status, (3) Site In Sales Hauly Mic Decenter Poly, (1) Site Pro Sales Context Top Site Pro Sales Context Top Sales, (9) 11 November (3) Marcer Vales (3) Colt Comptoners.

#### **Repairing Cracks**

For cracks up to 2 inches wide the repair steps are demonstrated in a series of 5 videos and outlined below





Repairing Cracks For cracks up to 2 inches wide the repair steps are demonstrated in a series of 5 videos and outlined below.



### Another Example: Cleaning Tools

- Born out of Hygienic Design work.
- How cleanable are your cleaning tools?
- What options are out there?
- How do they work?
- Let's try them out... together.



#### Color Coding

The 5 core colors commonly available for cleaning tools are: red, green, yell and blue. Select tools are available in additional colors.

C @ O A ≈ https://blog.uvm.edu/cwc= E ☆ 🖂 🗸

Save to Pocker

- □ White Product Contact (Food hoe & shovels)
- Yellow Packshed, non-product contact areas (floors)
- Blue Coolers
- Green Washline Equipment (Rinse conveyor, brush washer, tanks & tubs)
- Black Drains
- Grey Trash
- Red Bathrooms
- Orange Animal area
- Purple Kitchen/Break area
- Pink, orange, purple, lime Free choice!

Colors can be assigned to for different purposes a here are a few suggestions.

Floor aguesgee – You do get what you pay for in floor squeegees. Fancier ones are easier to keep clean, and have a softer rubber edge making better contact with the floor. That being said, a basis and cheep squeegee may be just the tool you need to help rid of water especially if you're not publing the puddles of your concrete currently.



Single piece molded rubber squeegee (Left) Double edge for better contact with replaceable cartridge (Center), Replaceable foam squeegee for tile floors (Right)





**SCRUB** go.uvm.edu/cleaningtools, go.uvm.edu/hygienicdesign



Scrub Shorts: Cleaning **Tools For** Produce Farms

### Each <60 sec

































Crowdsourcing Labeled AND Available Sanitizers Use germicidal bleach! V'ALL!

Significant product line and label changes from Clorox in 2020.

Crowdsourcing locally available sanitizer information to supplement PSA tool.



Images: NFU/LFSC Twitter

### Speaking of Sanitizers



#### Sanitizer Dose C 🏠 🗘 🗛 🕶 https://ageng.w3.uvm.edu/sanitiz 🗉 කී Calculator Sanitizer Dose Calculator This calculator determines the amount of sanitizer to be added to a volume of water to provide the correct PPM of active incredient This calculator determines the amount of sanitizer to be added to a for an intended use. More information about correct PPM of active ingredient for an intended use. More informati sanitizers including links to their labels and descriptions of different uses can be found in links to their labels and descriptions of different uses can be found in our Guide to Cleaning, Sanitizing, and Sanitizing, and Disinfecting. Disinfecting Sanitizer Sanitizer: Select Sanitize SaniDate 5.0 Select Lise Use: Wash Water Treatment Size of Bottle, Sink, or Tank (select units of measure below): gallons (gal) r Volum C Size of Bottle, Sink, or Tank (select units of measure below): 100 gallons (gal) Results Sanidate 5.0 has an active ingredient concentration of 5.3%. When using this sanitizer for Wash Water Treatment the target concentration is 27 to 96 PPM. For this calculation, a target concentration of 60 PPM was used. To achieve this concentration add 1.81 cups (about 1-3/4 cup + 1 Tbsp) to 100 gal. This 1.81 cup (about 1-3/4 cup + 1 Tbsp) dose is equivalent to 14.5 fl. oz., 0.9 pints or 428 mL. If using an injector, this dose is equivalent to a mixing ratio of 1:883 ("sanitizer to water").

**SCRUB** go.uvm.edu/sanitizerdispensers, go.uvm.edu/websanitizercalc

## Safely Dispensing SanitizersSanitizer Dose CalculatorGuide (Web, PDF)(Web App)

Coming up...

- One-on-One Technical Assistance
- Twilight Highlight Workshops (Webinars)
- Low Tech, Low Cost Produce Safety in Pictures
- More Resources
  - "Dry" Cleaning
  - Detergent Guide
  - Managing Humidity and Avoiding Condensation
  - Product Movement dollies, u-boats, pallet jacks, fork lifts



# What cleaning and sanitizing resources do you think are needed?

# Do you work with a farm that could use help from this team?



### Summary Evaluation

### at 18 months



10 partner farms GA, MI, NH, NY, & VT

6 Twilight

Highlight

Webinars



http://go.uvm.edu/scrub. These resources have enjoyed 4,412 page views by 2,158 unique visitors over the past 18 months.



135 outcomes including

- 5 new produce safety plans,
- 11 farms improving postharvest ag water practice,
- 59 farms improving hygienic design for cleaning and sanitizing,
- 22 farms creating or improving SOPs,
- 12 farms improving employee training, and
- 26 farms improving produce safety culture.



hours

SCRUB go.uvm.edu/scrub

In Their Own Words *"We know this is important and we have been wanting to do this for a while."* 

"Now that I have a template, I can work on it starting from scratch was too much."

*"We have never prioritized wash/pack, and SCRUB gave us the kick in the behind we needed."* 



# New Resources:

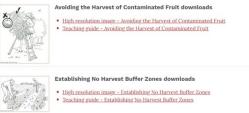
### 'More Than Words' Illustrations

Home / Resources / Trainer Resources / More than Words

#### More Than Words

Illustrations provide a powerful and effective way to communicate concepts without the use of text. The PSA Grower Training Course teaches individuals about the Food Safety Modernization Act (ISMA) Produce Safety Rule (PSR), how to assess produce astley risks, and implement practices to reduce identified risks. This training contains complex regulatory language and scientific information, which can be difficult to understand. Incorporation of illustrations will provide an opportunity for learners to engage with the information in a different way to enhance their learning experience. These illustrations allow growers to consider risks they may have on their farms, practices that could reduce these risks, and regulatory provisions that may be relevant if they are subject to the FSMA PSR.

#### Downloads

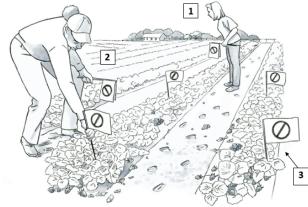


- Intended to highlight difficult produce safety topics (including cleaning and sanitizing!)
- <u>https://producesafetyalliance.cornell.edu/training/trainer-resources/more-words/</u>
  <u>Preduce Safety</u>

# 'More than Words' Teaching Notes

- Each illustration is accompanied by an illustration guide and teaching notes
  - Key teaching points
  - Relevant FSMA references
  - Suggested location for use in PSA
    GT
  - Supporting resources





#### Key Teaching Points

- 1. Workers must be able to recognize when produce must not be harvested. This requires training and understanding food safety risks in the field, such as those from wildlife or domestic animals. Review § 112.22(b)(1), § 112.83, and § 112.112. In this illustration, two workers scout for evidence of animal intrusion and fecal contamination in a strawberry field prior to harvest. Visible hoof prints and deer feces are shown in the rows as well as in the path between the rows of strawberries.
- 2. While buffer zones are not required to be established by the FSMA Produce Safety Rule, they are one way to manage risk. Buffer zones may vary from a 1-25 foot radius, depending on the type of feces, extent of the contamination, and environmental conditions such as prior rain or wind events. Growers should also consult with current industry guidance and marketing agreements for specifics of buffer zone distances required for certain commodities such as leafy greens.



#### Packinghouse Flow: Considerations for Food Safety

- <u>High resolution image Packinghouse Flow:</u> <u>Considerations for Food Safety</u>
- <u>Teaching guide Packinghouse F</u> <u>Considerations for Food Safety</u>

**Cleaning and Sanitizing Tools** 

High resolution image - Cleaning

Teaching guide - Cleaning and Sa

Tools



#### Packinghouse Sanitation: Dry Cleaning

- <u>High resolution image Packinghouse Sanitation</u>: <u>Dry Cleaning</u>
- <u>Teaching.guide Packinghouse Sanitation: Dry</u>
  <u>Cleaning</u>



#### Harvest Equipment Sanitation

- <u>High resolution image Harvest</u>
  <u>Sanitation</u>
- <u>Teaching guide Harvest Equipm</u>



#### Sanitation Challenges: Hard to Clean Equipment

- <u>High resolution image Sanitation Challenges:</u> <u>Hard to Clean Equipment</u>
- <u>Teaching guide Sanitation Challenges: Hard to</u> <u>Clean Equipment</u>



### **Upcoming Training**

- Remote Grower Training in SPANISH
  - July 7-8, 2022
  - <u>https://producesafetyalliance.cornell.edu</u>
    <u>/training/grower-training-</u>
    <u>courses/upcoming-grower-</u>
    <u>trainings/remote-grower-training-course-</u>
    <u>july-7-8-2022</u>





Curso de Capacitación para productores de la Alianza PSA impartido a distancia (remoto)



echas/Horario del curso de capacitación: Jueves 7 de julio de 2022, 11:00 a.m. - 4:15 p.m. Hora del Este Viernes 8 de julio de 2022, 11:00 a.m. - 4:15 p.m. Hora del Este

#### Enlace para registrarse:

https://producesafetyalliance.cornell.edu/training/grower-training-courses/upcoming-grower-trainings/remotegrower-training-course-july-7-8-2022/

#### Personas de contacto:

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#### Luga

Plataforma virtual en Zoom. El enlace de acceso será compartido con los participantes más adelante





# Advanced Training Registration Closes Tomorrow!





https://producesafetyalliance.cornell.edu/training/advanced-trainerworkshop/



### **The PSA Website**

http://producesafetyalliance.cornell.edu/ En español: es.producesafetyalliance.cornell.edu

