

North Country Ag Advisor

www.ncrat.cce.cornell.edu

"Your trusted source for research-based knowledge"



Cornell Cooperative Extension North Country Regional Ag Team

VOLUME 3 ISSUE 8 August 2018

North Country Regional Ag Team

Kitty O'Neil, PhD Michael Hunter
Field Crops & Soils Field Crops & Soils
315-854-1218 315-788-8450
kao32@cornell.edu meh27@cornell.edu

Kimberley Morrill, PhD Lindsay Ferlito
Dairy Management Dairy Management
603-568-1404 607-592-0290
kmm434@cornell.edu lc636@cornell.edu

Kelsey O'SheaTatum LangworthyAg Business ManagementSr. Admin Assistant315-955-2795315-788-8450kio3@cornell.edutlm92@cornell.edu

Harvest NY

Barbara Williams
Dairy Processing Specialist
315-813-1250
bw495@cornell.edu

Alyssa Couse

Lindsey Pashow Ag Business and Marketing 518-569-3073 lep67@cornell.edu

Jessica Prosper

County Ag Educators

CCE of Jefferson Co.	CCE of Franklin Co.
315-788-8450	518-483-7403
amc557@cornell.edu	jlr15@cornell.edu
Mellissa Spence	Sara Bull
CCE of Lewis Co.	CCE of Clinton Co.
315-376-5270	<i>518-561-7450</i>
mms427@cornell.edu	slk95@cornell.edu
Betsy Hodge and Billy Bullock	Carly Summers
CCE of St. Lawrence Co.	CCE of Essex Co.
315-379-9192	518-962-4810
bmf9@cornell.edu	cfs82@cornell.edu
wrb93@cornell.edu	

North Country Ag Advisor

Cornell Cooperative Extension of Clinton, Essex, Franklin, Jefferson, Lewis, and St. Lawrence Counties

Ag Advisor is published by the North Country Regional Ag Team collaborating with Harvest NY

Layout/Design: Tatum Langworthy

Table Of Contents		
Wild Parsnip and Poison Hemlock in Pastures and Hat Fields—Risks ad Controls	3	
Guidance and Clarity on Waste Tires	6	
NY Grown and Certified Agriculture Produc- ers' Grant	8	
Ag Plastics Recycling	10	
NY Crop Insurance Fact Sheet	12	
Welcome to the New Dairy Processing and Marketing Specialist	14	
Upcoming Events and Programs	Back cover	

Contact us directly through our website: http://ncrat.cce.cornell.edu/

Follow us on Facebook: https://www.facebook.com/ ccennydairyprograms/

Follow us on Twitter: https://twitter.com/NorthCountryAg

Our Mission

"The North Country Regional Ag Team aims to improve the productivity and viability of agricultural industries, people and communities in Jefferson, Lewis, St. Lawrence, Franklin, Clinton, and Essex Counties by promoting productive, safe, economically and environmentally sustainable management practices, and by providing assistance to industry, government, and other agencies in evaluating the impact of public policies affecting the industry."

Field Crops and Soils Wild Parsnip and Poison Hemlock in Pastures and Hay Fields – Risks and Control

By Kitty O'Neil and Mike Hunter

Two plants in the carrot family, wild parsnip (*Pastinaca sativa*) and poison hemlock (Conium maculatum), have become widely distributed nuisance weeds over the past several years in NNY and NYS. Each plant poses health risks to people and to livestock and care should be taken to manage and control them. In recent years, the two plants have received increased attention as their expanding geographic distributions have resulted in more frequent human and livestock contact and consequences.

<u>Descriptions, habitat.</u> Both wild parsnip and poison hemlock typically grow as biennials, but can occasionally be perennial. They grow as a short, basal leafy rosette in the first year, overwinter and then send up a taller stems with flowers in the second year. Both plants can be noticed in early spring growing along roadsides, in ditches and in any neglected, unmowed areas of pastures, fields or natural areas. Both



A large patch of wild parsnip along a state highway in St Lawrence County, July 2018. Photo by Kitty O'Neil

species prefer sunny areas and are adaptable to a range of environments and can produce a large amount of seed, which contributes to their persistence and spread. These plants are related to Queen Anne's lace or wild carrot (Daucus carota) and their flowers are similar in appearance. Wild parsnip has leaves resembling celery leaves and hollow, grooved stems from 2 to 6 feet tall. Flowers of wild parsnip are small, typically yellow-green in color, 5-petaled and are arranged in an umbel, like Queen Anne's lace, up to 5-6" across. Poison hemlock has more fernlike leaves and hollow, grooved, hairless stems with purple blotches from 4 to 10 feet tall. Flowers of poison hemlock are white and also resemble the umbel of Queen Anne's lace except that the hemlock umbel is somewhat rounded while Queen Anne's lace has a flat-topped umbel.

Toxicity, risks. Both plants pose risks to human and livestock health. All parts of the wild parsnip are toxic to mammals and this toxicity persists in dry hay and silage, so field areas with heavy populations of wild parsnip should not be harvested. Wild parsnip sap contains furocoumarins which cause phytophotodermatitis – when the plant sap is contacted or ingested, then exposed to sunlight, a rash, burn or severe blistering occurs. Livestock usually avoid eating wild parsnip but will ingest it when forage is limited. Many people unknowingly contact wild parsnip while cleaning up field borders or lawn edges with exposed skin.

All parts of the poison hemlock plant are highly toxic to humans and animals and may result in death if ingested. These plant tissues contain piperidine alkaloids which acutely affect the nervous system. Livestock appear nervous, trembling and uncoordinated soon after consuming this poison. They then



Poison hemlock in a farm ditch in Franklin County, June 2017. Photo by Kitty O'Neil

progress to coma and death. Most of the recent cases of human poisoning have resulted from mistaking poison hemlock with edible species of the carrot family. Livestock poisoning usually occurs from the presence of poison hemlock in hay or when pastures are overgrazed and other sources of food have been depleted.

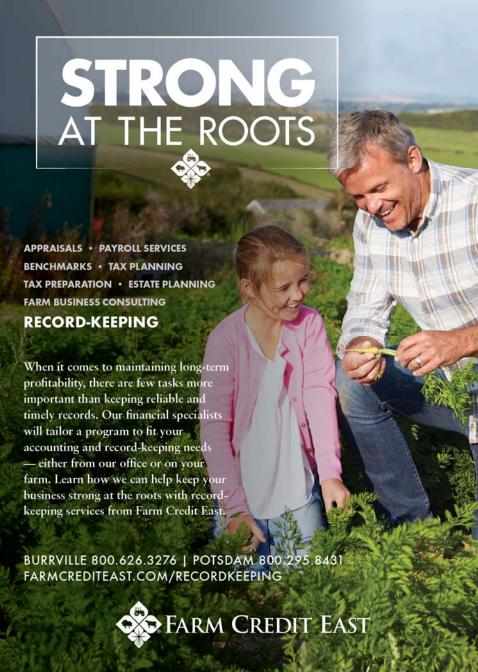
...continued from page 3.

Control measures. Both species may be controlled with regular mowing. Clipping a pasture or mowing a hayfield once or twice before plants produce viable seed will reduce populations and limit spread of both species. Mowing is required over multiple seasons for eradication as the seedbank is plentiful. Spot treatment with an herbicide is often a practical way to control patchy, poisonous plants. 2,4-D, a common, unrestricted, selective broadleaf herbicide, may be sprayed on pastures and hayfields. The herbicide application timing should be scheduled for early spring or late summer. It may take a couple of years of herbicide treatment to bring populations of these weeds under control.

References and Further Reading

- lowa State University Extension and Outreach. "Weed watch: Wild parsnip and poison hemlock" https://crops.extension.iastate.edu/weed-watch-wild-parsnip-and-poison-hemlock
- Brown, Dan. "Plants Poisonous to Livestock and Other Animals." Cornell University. http://poisonousplants.ansci.cornell.edu
- Gildersleeve et al. 2013 Toxic Plants in Midwest Pastures and Forages. Univ. Wisconsin Extension. https://walworth.uwex.edu/files/2014/03/
 A4019 ToxicPlantsWisconsinPasturesForages.pdf
- Uva, R; J. Neal and J. DiTommaso. 1997.
 "Weeds of the Northeast." Cornell
 University Press, Ithaca, NY, USA.





Academy for Dairy Executives

This educational program is designed to provide progressive young dairy executives and agri-service personnel the opportunity to increase their knowledge and understanding of the fast changing farming industry and provide the leadership & management skills necessary to run a successful farm.

Attendance at all 3 sessions is highly recommended.

Topics Covered:

- Business Management & Communication
- Building Effective Management Teams
- Financial Assessment
- Budgeting and Decision Making
- Strategic Planning & Business Risk Management
- Community Relations
- Employee Engagement & Management
- And more.....

Registration:

This program does require a complete application to be submitted.

Applications must be submitted by October 26th, 2018

Applications are available online: https://prodairy.cals.cornell.edu/ conferences/academy

For assistance with applications contact: Caroline Potter at cjh42@cornell.edu or 315-683-9268

For questions on the program contact: Kelsey O'Shea at kio3@cornell.edu or 315-955-2785 Cornell Cooperative Extension North Country Regional Ag Team



Session 1

Date: Dec 12th-13th

Location: Lake Placid, NY

Session II

Date: |an 30th-31st

Location: Canton, NY

Session III

Date: Mar 27th-28th

Location: Clayton, NY





To apply use the code and complete the application.



e-Leader

June 2018

Guidance and Clarity on Waste Tires

Farmers have raised several questions about compliance with Part 360 and several farms have made efforts to modify tires or purchase new sidewalls to replace whole tires. In an effort to clarify some of these questions and issues, NYFB, NEDPA, and PRO-DAIRY hosted a farm tour with DEC officials as an educational opportunity to learn more about the use of tires on bunk silos on farms. Based on conversations with DEC, we wanted to provide an update and clarify portions of the beneficial use determination (BUD) for tires used on farms.

Enforcement Discretion: What does it mean?

On March 1, 2018, the NYS Department of Environmental Conservation issued an Enforcement Discretion Letter regarding the enforcement of Part 360 as it relates to waste tires used on bunk silos. The letter provides for an additional year, **until May 3, 2019**, for DEC to provide enforcement discretion for farmers who are in compliance with either Part 360.12 (c)(2)(iv) or BUD 1137-0-00.

This means that farms will have flexibility for compliance under the enforcement discretion letter. It will be acceptable for farmers to be working toward compliance with either the conditions of new Part 360.12(c)(2)(iv) or BUD 1137-0-00, whichever is more feasible, in order to be covered by the Enforcement Discretion Letter dated March 1, from now until May 3, 2019 (or until regulation revisions if final earlier). A copy of BUD 1137-0-00 can be found here: https://www.dec.ny.gov/docs/materials_minerals_pdf/bud1137000.pdf.

BUD 1137-0-00 refers generally to ensuring the amount of tires received at a farm does not exceed the number needed for bunker silos. No method is prescribed to limit this number, so the farmer should be able to show, if necessary, that tires on the site are a reasonable number based on common practice for securing silo and storage tarps and the farmer's silo/storage capacity. If excess tires are kept at the farm, which are unlikely to be used on a bunk or for expansion purposes, the farmer should ensure these tires do not pose a fire hazard or collect standing water, and begin planning for removal of the tires from the site. The policy goal is to ensure that tires are not sitting in piles, unused for years and the state wants these tires properly disposed of.

BUD 1137-0-00 further states the farmer must take measures to minimize standing water and insect breeding. No specific procedures are prescribed for meeting these requirements, so the farmer is at liberty to use any method that will be compliant with other federal, state and local requirements (e.g., CAFO permit, pesticide regulations, etc.).

These procedures could include:

- -Keep vegetation down around stacks/piles of tires when not in use on the bunk. This can help tires dry out faster and retain less water
- -Put tires that are not in use under cover (tarp or building) to reduce water build-up
- -Stack tires neatly so that minimum amounts of water can accumulate
- -Rims can be kept in place in tires, which can prevent retention of water

Bias-ply vs. Radial Tires:

If farmers are ordering sidewalls for their bunks, they should research the type of sidewalls that they are purchasing. Bias-ply sidewalls do not contain any wires in the tire. Radial tires do have wires in them which can present both an employee and animal hazard. Before using radial tires that have been cut in half or sidewalls, consider the following: producers who have used radial tire sidewalls or half-tires have reported that over time, the rubber shrinks and as wires rust, metal pieces break off and may cause an increase in hardware disease.

DEC continues to engage with the agricultural community about the potential for more widely available and viable recycling options for unneeded tires. It is possible that mobile chippers could help solve the transportation problem due to needed permits and the bulkiness of tires, but this type of solution will take time to work out. We hope to provide more information on this topic as discussions with DEC continues. **Farmers are reminded that burial or burning of tires are expressly prohibited.** Before taking tires to permitted disposal locations, farmers should call ahead to find out if there are certain requirements, such as cleaning the tires, before they can be accepted at a disposal facility.

As tires are removed from bunks, this is a good time to decide what actions will be taken to meet the BUD. For example, stacking tires on edge to minimize water collection, or storing tires undercover if there is an option available near the bunk. Controlling weeds around tire storage should be something many farms can manage. While farmers should begin to think about compliance on their farms, they should look at manageable efforts in the interim under the enforcement discretion. We continue to work with DEC to find a practical solution that will be workable for farms across the state. As information changes, updates will be provided.





Calling all Farmers!!

The New York Farm Viability Institute and PRO-DAIRY are conducting a survey to better understand the research, education and training needs of your dairy business.

Your input will help us prioritize our efforts to support your business. The survey can be completed in less than 10 minutes. Visit: https://qtrial2018q2az1.az1.qualtrics.com/jfe/form/SV_9H4VoV6Fn2qOJc9

If you have any questions, please email Aileen Randolph, New York Farm Viability Institute, at arandolph@nyfvi.org.

It's important that we get as many responses as possible, so please feel free to share this survey link with other dairy farmers. Surveys are due the first week of August.







NYS Grown & Certified Agriculture Producer's Grant

The Development Authority of the North Country received \$500,000 in 2017 from the New York State Department of Agriculture and Markets to implement the NYS Grown & Certified Agriculture Program. The program was established to assist NYS agricultural producers in meeting food safety standards necessary for participation in the NYS Grown & Certified Program. The funding is available for eligible participants located in Jefferson, Lewis, St. Lawrence, Clinton, Essex, Franklin and Hamilton counties.

TECHNICAL ASSISTANCE

In order to provide the necessary technical assistance to effectively implement the grant, the Development Authority is partnering with the seven county Cornell Cooperative Extension offices and the seven county Soil and Water Conservation offices. The Cornell Cooperative Extension offices will provide technical assistance to producers to include assistance in Good Agricultural Practices (GAPs). The seven county Soil and Water Conservation offices will assist recipients with Agriculture Environmental Management (AEM). These technical assistance providers will work closely with recipients to determine the appropriateness of their projects and assist them toward becoming certified in the NYS Grown & Certified Program.

GRANT CRITERIA

<u>Eligibility</u>: Agriculture producers looking to become certified through the NYS Grown & Certified Program. If already in the NYS Grown & Certified Program, applicants must provide justification for why the project is needed to maintain their food safety certification, or how it will increase the number of producers enrolled in the program.

Maximum Grant: \$50,000.00

Cash Equity: 10% of the total project amount required as cash equity

<u>Eligible Commodities:</u> Produce, dairy, shellfish, eggs, beef, poultry, pork, maple, alcoholic beverage producers, and beverage ingredient producers

<u>Eligible Use of Funds</u>: Must be used for real estate, improvements, machinery or equipment that will allow the producer to become certified in the NYS Grown & Certified Program. Funds cannot be used for working capital or audit costs associated with the certification process.

<u>Reimbursement:</u> Grants will be paid upon the recipient receiving their certification from the NYS Grown & Certified Program. *NOTE* - All Recipients must make short-term arrangements to pay

eligible project costs prior to grant reimbursement. Recipient will be required to provide copies of invoices and cancelled checks/invoices for proof of expenditures.

<u>Financial Underwriting</u>: The Development Authority will review the applicant's proposed project, financial and business history, personal financial statement, and credit report.

Additional Condition: You are expected to maintain certification within the NYS Grown and Certified Program for 5 years from the date of the grant disbursement. NYS Department of Agriculture and Markets will review your participation in the NYS Grown and Certified Program annually.

SELECTION PROCESS:

The Authority will accept and review applications for financial capability and program compliance, which will include a review confirming the applicant's match requirement. The Cornell Cooperative Extension office will complete a site visit to confirm that the proposed project is feasible and will meet the expected results, leading to certification. If applicants pass the financial and feasibility review, the Authority will consider them for program funding and submit them for final approval to NYS Department of Agriculture and Markets. Upon the approval from Department of Agriculture and Markets, the Authority will enter into a Grant Agreement with the recipient. Funding will be available to eligible applicants that pass the financial and feasibility review on a first-come, first-served basis.

For more information contact:

Michelle Capone, Director of Regional Development, Development Authority of the North Country, (315) 661-3200, or mcapone@danc.org.

It's great how farming brings people together.

We're proud to work with the #1 farm insurer* with over 100 years of experience in agriculture. They help us offer you top of the line protection for your farm or ranch operation, with flexible coverages and exceptional claims, underwriting and risk management services.

We offer Nationwide farm and ranch insurance and would welcome the chance to discuss it with you.

Kevin M Daniels Agency Malone 518-483-3598 Canton 518- 386-4335

Potsdam 315-265-2140



*2015 SNL Financial Report. Based on statutory data.

Products underwritten by Nationwide Agribusiness Insurance Company, Farmland Mutual Insurance Company, Allied Property and Casualty Insurance Company and AMCO Insurance Company. Home Office: 1100 Locust Street Des Moines, IA 50391. Subject to underwriting guidelines, review and approval. Products and discounts not available to all persons in all states. Nationwide and the Nationwide N and Eagle are service marks of Nationwide Mutual Insurance Company. © 2018 Nationwide GPO-0292AO (06/16) 7549700

Ag Plastics Recycling

By Ron Kuck, CCE Jefferson

Many of you are looking forward to harvesting 3rd and 4th cuttings along with corn silage. Those of you with bunk silos, drive over piles and Ag baggers also have purchased your oxygen limiting barrier covers and bags for you storage facilities. The recycling and disposal of these plastics are also on your mind.

Until a good alternative for recycling the material becomes realistic, responsible disposal remains the best option. The Development Authority of the North Country (DANC) has been accepting agricultural plastic at its regional tri-county landfill as waste for a long time. (DANC serves Jefferson, Lewis and St. Lawrence counties.) The tri-county area consumes and therefore produces more waste agricultural plastic than any other region in the NE. With recycling markets being depressed, it is difficult to market any of it. The value of recycled waste plastic is largely based on the \$\$\$\$\$ of crude oil.

Recycling and disposal of this waste is handled differently in each county. DANC has been working to locate recycling opportunities for agricultural plastic for its tri-county service area. A potential market in Arkansas has been identified, but the material must be baled in order to be transported efficiently and DANC is currently working to determine the best method of baling and the equipment required.

It's still important to practice good environmental stewardship when recycling or disposing of your farm waste. Each county's practices and requirements differ, so be sure to check with your county transfer station.

Bale wrap and bunk cover – Can typically be properly disposed of by taking to a county or local transfer station.

Bulky Plastics- If they contained chemicals, they have to be triple-rinsed and can then be recycled if your local or county transfer station accepts them. In Jefferson County they can be taken to the Jefferson County transfer station for recycling.

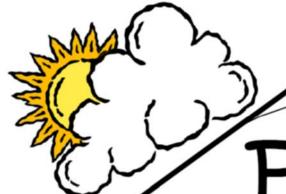
Tires- Tires are becoming a larger problem almost by the day. Jefferson County will accept them for recycling but there is a fee. Any producer who is looking to dispose of large quantities should contact their county transfer station prior to showing up with a truck load. Large tires are typically charged a higher rate for disposal/recycling because they are more difficult to process.

For more information on recycling or disposal of ag plastics in Jefferson, Lewis or St. Lawrence counties, contact:

Brian J. Wohnsiedler, Materials Management Supervisor, Development Authority of the North Country

23400 NYS Route 177, Rodman NY, 13682 bwohnsiedler@danc.org 315-661-3260 315-854-0327 cell www.danc.org





Family Farm Day

Public Open House 10am-3pm Grace-Way Farm

Refreshments available

Saturday, October 13th

at Marc and Christina Laribee 9627 State Route 26, Lowville, NY 13619 ~Rain or Shine~

Directions: From Carthage- take Rt 26

towards Lowville, 5.2 miles

on right.

From Lowville- take Rt 26 towards Carthage, 9.1

miles on left.

Educational Displays
Free Ice Cream & Yogurt

Children's Activities Machinery Display

Farm Tours

Scavenger Hunt

Wagon Rides

...and much more

Sponsored by Cornell Cooperative Extension—Lewis County Lewis County Farm Bureau and Lewis County Soil and Water For more info: 315-376-5270 (CCE)

Farm Business Management

NY Crop Insurance Fact Sheet Organic Producers 2018







Crop Insurance for Organic Farming Practices

Organic farming has become one of the fastest growing segments of U.S. agriculture. In New York state alone, organic agriculture sales increased 56% from 2008 to 2014. USDA's Risk Management Agency (RMA) recognizes that organic farming practices result in higher value crops and provides coverage for organic producers and producers transitioning to organic production under several existing crop insurance policies.

Are there special insurance products for organic crops?

No, there are no special insurance products exclusive to organic production.

RMA treats organic production for some crops as a "practice" type, which allows for a more accurate "price election" or "projected price" value to be used when calculating the insurance guarantee. This results in a more appropriate guaranteed level of coverage for the higher value crops.

What types of loss are covered?

As long as the producer maintains records proving that good organic management practices, as established by organic agricultural experts for the area, were followed and losses were unavoidable, certain types of loss will be covered, including those caused by:

- Weather
- Insects
- Disease
- Weed infestation

What types of loss are NOT covered?

Losses that are NOT covered include:

- Failure to comply with USDA National Organic Program standards.
- Crop contamination by prohibited substances. This includes contamination caused by pesticide drift.

Which New York crops have organic coverage?

The following crops in New York have crop insurance coverage for certified and transitional practices in 2018:

- Apples
- Barley
- Corn
- Dry Beans
- Fresh Market Beans
- Grain Sorghum
- Potatoes
- Processing Beans
- Soybeans
- Sweet Corn
- Tomatoes
- Wheat

How do I report organic acreage?

On the acreage reporting date you must have the following:

For Certified Organic Acreage:

- A current organic plan; and
- An organic certificate (written certificate) or documentation from a USDAaccredited certifying agent that indicates an organic plan is in effect.

For more NY crop insurance information, visit: ag-analytics.org/cropinsurance

NY Crop Insurance Fact Sheet Organic Producers 2018 (reverse)







For Transitional Acreage:

- An organic plan, or written documentation from a USDA-accredited certifying agent that indicates an organic plan is in effect. The organic plan must:
 - Identify the acreage that is in transition for organic certification;
 - List crops grown on the acreage during the 36 month transitioning period; and
 - Include all other acreage (conventional acreage) in the farming operation.

What if my crops are grown for a contract?

A Contract Price Addendum (CPA) is available to organic producers who grow crops under contract. You can choose to use the prices established in those contracts as your "price election" or "projected price" in place of the RMA-issued prices when buying crop insurance. This value can equal up to a maximum contract price amount that is set by RMA. The CPA allows organic producers who have a contract to buy a crop insurance guarantee that is more reflective of the actual value of their crop.

A copy of the contract must be submitted by the crop insurance acreage reporting date for CPA election!

In 2018, all crops with organic practice elections in New York are eligible for the CPA **EXCEPT fresh market beans and sweet corn.**

Whole Farm Revenue Protection

Whole-Farm Revenue RMA's Protection (WFRP) product insures revenue for all commodities sold by one farm under one policy. The plan guarantees up to \$8.5million of revenue, and is available for farms with specialty or organic commodities (both crops and up to \$1million of livestock.) This allows product also certified organic producers to use organic prices when calculating guaranteed revenue.

Anything else I should know?

There are many important dates to keep track of when participating in the crop insurance program. Important date information for New York can be found at the RMA Raleigh, NC Regional office website:

rma.usda.gov/aboutrma/fields/nc_rso or at: ag-analytics.org/cropinsurance

For More Information...

Crop insurance policy information, crop provisions and handbooks can be found on the RMA Organic Crops Page at rma.usda.gov/news/currentissues/organics/.

A crop insurance agent can provide you with detailed information regarding crop insurance for your farm. A list of crop insurance agents is available online at the RMA agent locator at:

rma.usda.gov/tools/agent.html.

You can also find a list of insurable crops in New York and additional crop insurance educational materials for New York farmers at: ag-analytics.org/cropinsurance.

For more NY crop insurance information, visit: ag-analytics.org/cropinsurance

Harvest NY

Dairy Foods Extension Welcomes New Harvest New York Dairy Processing and Marketing Specialist for Northern NY: Barbara Williams

Barbara Williams joins the Harvest NY team as the Northern NY Dairy Processing Specialist. Barbara earned a BS in Biological Sciences from Siena College in Loudonville, NY. She received her Certificate in Fluid Milk Processing for Quality and Safety from Cornell University in 2014. She is currently working towards her Masters of Science in Food Safety through Michigan State.

Previously, Barbara worked for HP Hood LLC for over 20 years. During her time with Hood, Barbara worked her way from a part time lab technician to an SQF Associate. Her responsibilities included being the plant SQF Practitioner, ensuring regulatory compliance, writing and maintaining both the Food Safety and Food Quality Plans, and maintaining the pre-requisite programs. She was also responsible for developing and implementing plant wide food safety training for all employees. Join us in welcoming Barbara, and reach out to her if you have any questions about dairy processing.



Contact details:

Barbara Williams 315-813-1250 bw495@cornell.edu

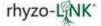


Becky Worley Marketing Coordinator

Office (740) 382-5701 ext. 233 Toll Free (800) 622-4877 Direct Dial: 740-223-3869 421 Leader Street Marion, OH 43302 worleyb@nachurs.com

visit us online:
www.nachurs.com
Facebook • Twitter • YouTube









Confidentiality Notice: This e-mail (and any attachments) is intended only for the attention of the addressee. Its unauthorized use, disclosure, storage or copying is not permitted. If you are not the intended recipient, please destroy all copies and inform the sender by return mail.



Seeing Spots

By Paul Hetzler, CCE St. Lawrence

Ever since a tiny Asian fly called the spotted-wing drosophila (SWD) "discovered" us in 2012, growers of cherries, raspberries, blueberries, and other small fruits have battled this fruit-wrecking pest. Though it's "just" a fruit fly, SWD are not your grandparents' fruit flies. Wait, that sounded awkward. Old-school, respectable fruit flies gently push their eggs into rotten fruit. SWD, which come equipped with sharp saws and bad attitudes, don't wait for fruit to go soft.

The female has a saber-like ovipositor with sharp, sclerotized (hardened) teeth. She uses this formidable tool to break the skin on unripe berries - strawberries, raspberries, and blueberries are favorites - and insert eggs. As the berry starts to turn color, tiny maggots are maturing inside. Other fruit flies need mushy fruit to lay eggs; SWD makes fruit mushy. This year, SWD is here earlier than ever before, continuing an unfortunate trend. Summer raspberries are already infested, and the mid- to late-season blueberry crop is at extreme risk of being largely destroyed.

Signs of SWD in raspberries include fruit which are darker and squishier than normal, have poor flavor, fall to the ground prematurely, or "deflate" and dry out. Once picked, infested fruit spoils much faster, even overnight. Juice droplets on the fruit, or on the plant after the berry is plucked, are other clues. At dusk or early morning you may even see adult flies checking out the fruit.

With one spot on each wing, the male SWD stands out from other species. Females have no wing spots, but can be identified, under magnification, by their spike-tooth ovipositors. Spotted-wing drosophila larvae are white, and about 1/32" to 3/16" long.

SWD breed in loads of wild fruit such as elderberry, dogwood, buckthorn, honeysuckle, and even nightshade. In warm weather they can have about one generation per week, with eggs hatching in as few as 12 hours. Cool weather, of course, slows them down. Eggs and larva become inactive at about 34F, and at 32F some may even be killed.

Initially it was believed SWD were not cold-hardy, but that is now in question. No one is sure if they simply emerge later than other fruit flies, blow in from the south, or if their major route of infestation here is via produce shipments. Early-season berries shipped from warmer locales come with a free supply of SWD eggs and larvae; it's unavoidable. Although commercial berries are now sprayed more frequently than ever, SWD cannot be entirely controlled.

We can't eradicate SWD, but we can reduce their impact. Pick berries less ripe than you'd normally select, and refrigerate right away. Stomp on berries that fall to the ground so they dry out and don't continue to breed flies. For homeowners, there are few pesticide options. Some common products like carbaryl can remain toxic for 7-10 days, and shouldn't be used on berries.

Fortunately, new SWD-exclusion netting systems, along with innovative 2017 research on attract-and-kill methods done by Peter J. Jentsch, Director of Cornell's Hudson Valley Research Laboratory, may hold the key to SWD control. You can learn more about field-proven control options at https://cpb-us-e1.wpmucdn.com/blogs.cornell.edu/dist/f/3191/files/2016/10/ ICE.AtK .Jentsch.9.30.16.Final .RdSz-2kpk9kc.pdf or contact your local Cornell Cooperative Extension office.

CCE North Country Regional Ag Team 203 North Hamilton Street Watertown, New York 13601

What's Happening in the Ag Community

Empire Farm Days, August 7-9, 2018, Seneca Falls.

Lewis County Family Farm Day, October 13, 2018, see page 11 for more information.

Calving and Neonatal Workshop, October 22 and November 6 in Watertown, and October 23 and November 7 at Miner

Academy for Dairy Executives, December 2018 - March 2019.

Please note that Cornell University Cooperative Extension, nor any representative thereof, makes any representation of any warranty, express or implied, of any particular result or application of the information provided by us or regarding any product. If a product or pesticide is involved, it is the sole responsibility of the User to read and follow all product labelling and instructions and to check with the manufacturer or supplier for the most recent information. Nothing contained in this information should be interpreted as an express or implied endorsement of any particular product, or as criticism of unnamed products. The information we provide is not a substitute for pesticide labeling.