

# 2024 CONSERVATION SKILLS WORKSHOP

The 2024 Conservation Skills Workshop will be held September 23<sup>rd</sup> – September 26<sup>th</sup> in Auburn, NY at Auburn Holiday Inn. Included in this packet you will find the 2024 Conservation Skills Workshop registration information, class descriptions and class schedule.

This year we have a number of classes that cover multiple days. Please read each class description carefully and be aware that classes will overlap. All classes run from Monday to Thursday. In addition, **classes will start at 10:00 am on Monday morning. Classes start at 8:30 on Tuesday – Thursday.**

This workshop is sponsored by the NYS Conservation District Employee's Association, USDA Natural Resource Conservation Service, and NYS Soil and Water Conservation Committee.

This year's registration rate is \$50 per person.

Registration forms will be accepted electronically for 2024, however, payments must still be mailed to the address below. Registrations are due no later than September 2<sup>nd</sup>, 2024.

If you plan on staying at the Auburn Holiday Inn, your registration will be due by **August 21<sup>st</sup>** in order to ensure you have a room. Your full registration isn't needed, just whether or not you will need a room. If you register later, we cannot guarantee a room at the Auburn Holiday Inn for you.

[Click here to fill out registration form](#)

MAKE CHECKS PAYABLE TO: NYSCDEA

PLEASE PUT ATTENDEE NAMES ON MEMO LINE OF CHECK

MAIL CHECKS TO: CHENANGO COUNTY SWCD

99 NORTH BROAD STREET

NORWICH, NY 13815

C/O KATY KEMMEREN

## Questions?

- Classes – Tom Eskildsen at Yates County SWCD – (315) 536-5188 or [tom@ycsoilwater.com](mailto:tom@ycsoilwater.com)
- Registration or hotel – CDEA President Caitlin Stewart (518-458-3991 / [Caitlin@hamcoswcd.org](mailto:Caitlin@hamcoswcd.org)) or CDEA Vice President Jessica Armstrong (315-736-3334 Ext 135 / [Jessica.Armstrong@oneidacountywcd.org](mailto:Jessica.Armstrong@oneidacountywcd.org)).
- Payment – CDEA Treasurer Katy Kemmeren at Chenango County SWCD – (607)371-7101 or [kkemmeren@chenangoswcd.org](mailto:kkemmeren@chenangoswcd.org)

**DIRECTIONS:** Classes will be held at the Auburn Holiday Inn, unless otherwise noted in the class description. 75 North Street, Auburn, NY 13021. Please read the class description for location information. Further information on location may be provided by class coordinator at a later date.

**DINING:** Breakfast at the hotel and snacks are provided. All other meals for the workshop are on your own. Participants should be prepared for lunch in the field if site visits are necessary.

**Lodging:** A block of rooms has been reserved at the Auburn Holiday Inn for District Employees only (NRCS employees will need to reserve their own lodging). Registration response is required by August 21<sup>st</sup> to reserve a room (class list not due until Sept 4). A single room is \$100 additional cost per night and a double room is \$50 per night per person.

## 2024 CONSERVATION SKILLS WORKSHOP

*Please remember, 1) you are visiting these field sites as part of the 2024 Conservation Skills Workshop for educational purposes, 2) these sites are open to you as a courtesy to help accommodate your training needs, and 3) by participating in this training you agree to utilize information for training purposes only and to keep all information confidential.*

### Course List

#### 1. **Basic Tree, Shrub, and Plant ID**

Sept 23<sup>rd</sup> 10:00 – 4:30

LIMIT: Min – None Max – 40

CLASS & FIELD

Instructors: Rebecca Hargrave – SUNY Morrisville; Joe McMullen – USC

This course will include basic ID of Northeast hardwoods, softwoods, common introduced/naturalized species, shrubs, and common herbaceous plants. There will be both classroom and field components so dress appropriately for the field (sturdy footwear, raingear, etc.). This course will be held OFF-SITE at Baltimore Woods Nature Center, about 20 minutes from the hotel. Bring a bagged lunch and plenty of water. Light snacks will be provided.

CCA CEUs: 1 CM

#### 2. **Nutrient Management and Fertilizers Basics**

Sept. 23<sup>rd</sup> 10:00 – 4:30

LIMIT: Min – None Max – 35

CLASS & FIELD

Instructors: Brendan Jordan, Ron Bush, CNMP Specialist – NYS Agriculture & Markets; Kirsten Workman, Nutrient Management and Environmental Sustainability Specialist – Cornell PRO-DAIRY

This day-long course will provide a basic introduction to fertilizer and its role in nutrient management planning (ala NRCS-NY 590 CPS and the 4Rs). We will begin our day in the classroom where we will explore the various sources and forms of commercial fertilizer available and how they may fit with a farm's overall management. We will go over the equations required to plan how much of a product will be required for a field and how to convert various tonnage values and percent nutrient analysis into pound per acre values that can be used for nutrient management planning. We will go over fertilizer application equipment from planters to spreaders to sprayers and the importance of accounting for that equipment in planning activities, because many plans to improve rates, timings, methods, and sources of nutrient applications are only possible with specialized equipment. The second half of the day will consist of a tour of a fertilizer blend facility in Auburn, where we will see how fertilizer blends are created, how each component of a blend is combined and how it makes it to the field and see some of the specific equipment involved in each of these NRCS-NY 590 nutrient management tasks. Lunch will be on your own with options at the hotel or throughout the city of Auburn. We will be touring the fertilizer facility rain or shine so please check weather ahead of time and plan accordingly.

CCA CEUs: 3.5 NM, 0.5 SW

### 3. Basic Soils

Sept 23<sup>rd</sup> 10:00 – 4:30

Sept 24<sup>th</sup> 8:30 – 4:30

LIMIT: Min – 10, Max– 30

CLASS & FIELD

Instructors: Dan Ufnar, State Soil Scientist – USDA NRCS

Conservation professionals routinely use soil information from both soil surveys and on-site planning. This course provides an overview and introduction to relevant soils topics. Topics will include soil surveys, updates to soil data, accessing soils data, dynamic soil properties, USDA soil classification system, and more. There will be field exercises to practice performing soil health assessments, identifying hydric soil indicators, and classifying soils in the field to improve site assessment for conservation practice design.

CCA CEUs: 3.5 SW (day 1) and 4.5 SW (day 2)

### 4. Advanced Surveying

Sept 23<sup>rd</sup> 10:00 – 4:30

Sept 24<sup>th</sup> 8:30 – 4:30

LIMIT: Min – 5, Max – 20

CLASS & FIELD

Instructors: Paula Morse, Civil Engineer / NY CAD coordinator – USDA NRCS; Cody Sargen, Civil Engineer, USDA NRCS; Paula Bagley, State Conservation Engineer – USDA NRCS

Training will be provided on survey data collection equipment operation (Total Station and Global Navigation Satellite System Receiver), TIN surveying technique and AutoCAD Civil 3D software modeling to create site specific topographic models for conservation practice design. Training will cover reading topographic maps, understanding TIN surfaces, about the equipment, survey equipment operation, data collection priorities, and survey download.

Students will be encouraged to operate and collect data with the style of equipment available to them on their workplace. They will be taught how to upload points and correct the TIN surface model created by the 3D points using AutoCAD Civil 3D. Students will then be instructed through the process of creating plan view layouts, alignments, and profiles. If time allows a basic process for creating proposed surfaces and downloading construction layout points will be presented.

Students will need their own computers with AutoCAD Civil 3D installed (any version/year). Prerequisites include a basic surveying class (CSW or school), some drafting experience and some construction inspection experience. For optimum class experience, students may arrange to bring their own survey equipment.

Students will have the opportunity to collect data in the field, download the points, upload them to CAD then correct the surface generated by the CAD system. Students will address the appearance of the CAD surface within a layout and set scales for printing. Instruction will include locating alignments and profiles on the job sites to communicate key elements in important within the construction drawings.

A portion of the course is going to include field work and equipment handling please be prepared. We will not be operating the equipment in the rain; in case of rain bring your imagination.

**5. Culture of Conservation Communication: A Media Training**

Sept 24<sup>th</sup> 8:30 – 12:00

LIMIT: Min – 5, Max – 30

CLASS

Instructors: Howard Schaffer – Media Marketing Public Relations; Troy Bishop, Grazing Specialist – Madison County SWCD; Caitlin Steward, District Manager – Hamilton County SWCD

The Culture of Conservation Communication is essential to your Soil and Water Conservation District's success. Handling hot regional media topics with reporters and editors, building relationships with legislators, and writing press releases can be daunting tasks. This fun and interactive course will teach you how to craft a news release that will get published, newsletter and annual report tips and tricks, how to take media friendly photos, and how to handle tough questions from reporters. You will practice your communication techniques, and build your soft skill set for the purpose of increasing your District's credibility with local press, tax payers, and elected officials while communicating a conservation story that resonates. Bring a camera or phone for photography practice outdoors.

**6. Soil Health Field Day in Pasture and Silvopasture Systems**

Sept 24<sup>th</sup> 8:30 – 4:30

LIMIT: Min – 5, Max – 60

FIELD

Instructors: Brett Chedzoy – Schuyler CCE; Joseph Amsili & Michael Glos – Cornell Soil Health; Paul Gier – Tompkins SWCD; Graham Savio & Jenna DeRario – Tompkins CCE; Katherine Carestio – Backbone Farm; Harry Greene – Ramble on Farm; Peter Smallidge – Cornell; Garrett Miller – Finger Lakes Cider House

This session is part of the larger Soil Health and Climate Resiliency Field Day with added bonuses for SWCD and NRCS staff!

Join us to learn how two farms in the Finger Lakes are striving to increase the resiliency and profitability of their soils and operations through a suite of regenerative practices like establishing multi-purpose trees, silvopasturing, cropland conversion to pastures, and bale grazing.

Backbone Farm (AM)

Pre-tour session (east side of farm CSW ONLY): heavy use areas for cattle, brushland reclamation for pasture, mixed hardwood plantings (mostly black locust)

Main session (west side of farm): Cropland conversion to pasture, intensive rotational grazing, bale grazing, and Soil Health Trailer & soil health benchmarks for NY.

### Ramble On Farm (PM)

A case for planting trees (why, how, how much) – the big picture (“millions of new trees” initiatives, and the nitty gritty of Harry’s farm)

Designing and implementing a successful project (species & variety selection, matching trees to site, on-going care, future expectations for silvopasturing objectives)

An open conversation on how trees soil health, system resiliency, etc. (fine if this is more speculative than locally proven, thus “groups discussion”)

### Finger Lakes Cider House (after hours CSW ONLY)

Tour of organic pasture and orchard silvopastures + food & drink!

The entire day will be spent in the field (rain or shine). Please dress accordingly for walking through tall vegetation, tree planting sites, the woods and wet areas including appropriate footwear, long pants, sun and insect protection. Also, bring your favorite note taking materials and clipboard for the field.

Please bring a lunch with you, there are limited places nearby to purchase something (but we will provide options), we will only have light snacks and beverages available.

CCA CEUs: 1 SW, 0.5 PM, 2.5 CM

## **7. RUSLE2 & Cropping Systems Basics**

Sept 24<sup>th</sup> 8:30 – 4:30

LIMIT: Min –10 Max – 35

CLASS & FIELD

Instructors: Brendan Jordan, Ron Bush, CNMP Specialist – NYS Agriculture & Markets; Josh Hornesky, State Agronomist – USDA NRCS; Tom Eskildsen – Yates County SWCD

This day-long course will focus on the basic skills necessary to assess, plan, and implement Cropland BMPs, specifically focused on row crops and the NRCS Stripcropping CPS (585). We will work on AEM / NRCS cropland planning processes associated with farm field characteristics, tillage and planting equipment and practices, resource concerns, management goals, and potential BMP opportunities and alternatives.

We’ll start the course in the classroom to familiarize (or refresh) with general/typical farming practices, crop rotations, and soil erosion, including observations and measurements necessary for the assessment and planning for sheet, rill, and gully erosion. Linkages will be made between the tools used for planning soil health systems (RUSLE2, NRCS conservation practices standards, soil tests) and observations in the field to help best characterize field conditions while planning. Several fields and cropping sequences (including soil erosion estimates) will be modeled in RUSLE2, along with instructions for using this software and information to plan Stripcropping and Conservation Crop Rotations. Related cropland BMPs such as WASCObS, grassed waterways, terraces, diversions, and underground outlets may also be discussed as associated practices (minor focus for this class).

The afternoon will be spent walking fields, practicing field measurement skills, and laying out Strips. This course will be helpful for those just starting with Cropland Conservation, as well as

experienced technicians who have already worked with farms (your knowledge and experience is welcomed!)

Please be prepared for seasonal weather (boots, raingear, sunscreen, water, etc.). A clipboard for field notes will be helpful and, if you have one in your office, please bring a clinometer to measure field slopes for RUSLE2 (no worries if not, as we'll have clinometers to share). Lunch is on your own, so plan to bring a lunch or purchase one nearby during mid-day break (light snacks and refreshments will be provided). Be prepared to provide your own transportation to field site visit or network for carpooling opportunities as necessary.

CCA CEUs: 1 NM, 3 SW, 1 CM

## **8. I Just Wanna Fly – Drone Regulations, Safety, and Fly Time**

September 24<sup>th</sup> 1:00 – 4:30

CLASS & FIELD

Instructors: Matthew Champlin – Cayuga-Onondaga BOCES Computer Systems and Network Administration instructor and New York State Master Teacher

This course promises to be just as much fun as Sugar Ray's song *Fly*. More and more Soil and Water Conservation Districts are incorporating drone technology into their programs, services, and events. This course will cover New York State rules and regulations, certification requirements, safety, and fly time with flight tips. Come prepared for both indoor and outdoor conditions, and bring your fully charged drone and equipment

CCA CEUs: 0.5 SW, 1 CM

## **9. Afforestation**

Sept 25<sup>th</sup> 8:30 – 4:30

LIMIT: Min – 5, Max – 60

CLASS & FIELD

Instructors: Joseph Chairvolotti – Oswego County SWCD; Kristen Ballou, Franklin County SWCD; Greg Albrecht, NYS AEM Coordinator – NYS Agriculture & Markets; Tyler Knapp – NYS Agriculture & Markets

At Water Quality Symposium in March 2024, the session “Fallow Areas to Forests”, gave participants the background knowledge on managing forested areas and afforestation opportunities. As we see fallow areas or reverting farmland, those areas are opportunities to help reach tree planting goals, however these areas are not at a loss for challenges to re-establishing forest cover. In this session we will assess these fallow areas to determine what is currently growing, considerations for existing vegetation, invasive species considerations and treatment options, developing a planting plan and what species and stocking would be best suited for the site. These sites will include abandoned agricultural fields and pastures. This session will also include visiting a site where trees were planted. At this site we will review the planting plan, planting density, planting diversity, maintenance and success.

The entire day will be spent in the field (rain or shine). Please dress accordingly for walking through tall vegetation, tree planting sites, the woods and wet areas including appropriate footwear, long pants, sun and insect protection. Also, bring your favorite note taking materials and clipboard for the field. Please bring a lunch with you, there are limited places nearby to purchase something, we will only have light snacks and beverages available.

CCA CEUs: 1 SW, 1 PM, 1.5 CM

## **10. AEM Tier 3a Farmstead Planning**

Sept 25<sup>th</sup> 8:30 – 4:30

LIMIT: Min – 5, Max – 30

CLASS & FIELD

Instructors: Brendan Jordan, Ron Bush, CNMP Specialist – NYS Agriculture & Markets; Josh Hornesky, State Agronomist – USDA NRCS; Paula Bagley, State Conservation Engineer – USDA NRCS

During this one-day course, participants will work through the NRCS / AEM planning process starting with an introduction to the core planning component, on-farm assessment (Tier 2 Worksheets), making maps for AEM plans, and fundamentals of Tier 3 Planning. Planning exercises will focus on the farmstead, encompassing livestock heavy use areas, feed storage, process waters, manure management, clean water management, petroleum and pesticide storage, and connections to other farm management areas. Participants will form small groups to develop mock farmstead conservation plans for a nearby farm and discuss their resource concern determinations and Agricultural BMP System recommendations with the full class. This is a critical course for those who are starting to work with farms on NRCS / AEM conservation planning and are interested in building their planning skills.

Information and planning skills will support and build-upon key concepts covered in past Agricultural Environmental Management (AEM) courses. Experienced Conservation Professionals are welcomed and encouraged to attend as well; your participation, sharing of knowledge, and hopefully future networking and collaboration on projects is valued and appreciated.

We'll be walking around a farmstead and nearby pastures/fields, so please be prepared for seasonal weather (boots, raingear, sunscreen, water, etc.). A clipboard for field notes will be helpful as well as a collapsible chair. Lunch is on your own, so plan to bring a lunch or purchase one nearby during mid-day break (light snacks and refreshments will be provided). The entire class will take place at the Farm so please be prepared to provide your own transportation or network for carpooling opportunities as necessary.

CCA CEUs: 2 NM, 3 SW

## **11. OSHA 10-hour Construction Industry Outreach Training Course**

Sept 25<sup>th</sup> 8:30 – 4:30

Sept 26<sup>th</sup> 8:30 – 4:30

LIMIT: Min – 5, Max – 40

CLASS

Instructors: Lisa Brownson, CSP; President, Safety Source Consultants, Ltd.

The OSHA 10-hour is an introductory-level hazard recognition class that covers OSHA, the Focus Four (Falls, Struck By, Electrocution, and Caught In or Between hazards), Personal Protective Equipment, Health Hazards in Construction, Excavations, Stairways & Ladders, and Scaffolds. Some knowledge of construction site activities is helpful but not a prerequisite.

## **12. Stream Smart**

Sept 25<sup>th</sup> 8:30 – 4:30

Sept 26<sup>th</sup> 8:30 – 4:30

LIMIT: Min – 10, Max – 30

CLASS & FIELD

Instructors: Jacob Kelly – Cattaraugus County SWCD; Josh LaFountain, Freshwater Specialist – The Nature Conservancy; Jared Popoli, Restoration Hydrologist – NYS Water Resources Institute; Thomas Hoffman, Aquatic Habitat Restoration Program Lead – USFWS; Emily Hill, Biological Science Technician – USFWS; Corbin Gosier, Aquatic Habitat Program Manager – NYS DEC

The Stream Smart training promotes road-stream crossings that maintain fish and wildlife habitat while protecting roads and public safety. It advocates for channel spanning structures and incorporates the stream's elevation, slope, and substrate. By utilizing ecologically designed culverts, conservation professionals can increase flood resiliency, decrease debris accumulation, and decrease periodic maintenance and replacement. This niche training program is multifaceted and covers the ecological function and value of free-flowing streams, regulatory requirements, design, funding opportunities, and an interactive model to demonstrate different road-stream crossing structures under various flow regimes. This two-day training will incorporate a classroom presentation that encompasses the principles and advantages of the Stream Smart method, as well as a field portion to evaluate the effectiveness of existing local crossings. Stream Smart is correlated with the North Atlantic Aquatic Connectivity Collaborative (NACC); as the latter identifies road stream crossings with no or reduced aquatic organism passage. When structures are replaced, collaborators have an opportunity to make them Stream Smart to increase their longevity and decrease costs over time.

CCA CEUs: 2 SW (day 1) and 2 SW (day 2)

## **13. Manure Storage Cover & Flares**

Sept 26<sup>th</sup> 8:30 – 4:30

LIMIT: Min – 10, Max – 45

CLASS & FIELD

Instructors: Greg Albrecht, NYS AEM Coordinator – NYS Agriculture & Markets; Jason Oliver, Senior Extension Associate and Dairy Environmental Systems Engineer; Lauren Ray – Agricultural Sustainability and Energy Engineer; Jessica Skinner, Professional Engineer – JESS Engineering PLLC; Tucker Kautz – Ontario County SWCD

This day-long class will provide recent, real-world experiences with planning, designing, proposing, implementing, and coordinating manure storage cover and flare projects. After initial classroom discussions in the morning, we'll travel to farms in Cayuga County to see a project in the construction phase as well as completed projects. We'll hear from Professional Engineers, District staff, and farmers with direct experience in the projects (and several others like them) to allow discussion about the approaches, challenges, benefits, lessons learned, component practices, O&M, and other topics related to cover and flare projects. Please bring your questions and cover and flare project experiences so we can learn from each other and advance the feasibility of this practice.

Lunch is on your own, so plan to bring a lunch or purchase one in Auburn as we transition from the classroom to the farm visits. The course will be held rain or shine, so bring clothing/footwear



for the forecast and walking farmsteads as well as water and sunscreen. We'll drive our vehicles to farms, so please also plan to carpool as much as possible to limit vehicle miles and parking space at the farms. Thank you.

CCA CEUs: 2 NM, 2 SW

#### **14. Construction Materials**

Sept 26<sup>th</sup> 8:30 – 4:30

LIMIT: Min – 10, Max – 40

CLASS & FIELD

Instructors: Jeremy Paris, Civil Engineering Technician – USDA NRCS; Tim Clark – NYS SWCC

Are you just starting out designing BMPs and are unsure about the common materials used, such as pipe, stone, fabric and wood? Are you a seasoned technician that wants to learn more about the wide variety of construction materials and new products available? If so, then Construction Materials is the class for you. See different types of pipes and fill materials, environmental fabrics and wood. Find out when to use them, where to use them, how to use them.

CCA CEUs: 2.5 SW

#### **15. Stormwater Site Inspections**

Sept 26<sup>th</sup> 1:00 – 4:30

LIMIT: Min – 5, Max – 30

CLASS & FIELD

Instructors: Jessica Verrigni – Schuyler County SWCD; PJ Emerick – NYS Department of Agriculture & Markets

The Stormwater Site Inspection course will offer students a chance to conduct a site inspection of an active construction site. Students will review the approved SWPPP and then walk the project to conduct a site inspection. Students will learn site inspection safety, site inspection protocol, reporting and discuss opportunities for your SWCD related to Stormwater.

## 2024 Conservation Skills Workshop

|                                                                          | <b>Monday, Sept<br/>23<sup>rd</sup><br/>Class Time<br/>10:00 – 4:30</b>                                          | <b>Tuesday, Sept 24<sup>th</sup><br/>Class Time<br/>8:30 – 4:30</b>                                                                                            | <b>Wednesday, Sept<br/>25<sup>th</sup><br/>Class Time<br/>8:30 – 4:30</b>                      | <b>Thursday, Sept<br/>26<sup>th</sup><br/>Class Time<br/>8:30 – 4:30</b>                                                           |
|--------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|
| 10:00 –<br>12:00<br>(Monday<br>only)<br><br>8:30 – 12:00<br>Tues - Thurs | (1) Basic Forest /<br>Plant ID<br>(2) Basic NMP /<br>Fertilizers<br>(3) Basic Soils<br>(4) Advanced<br>Surveying | (3) Basic Soils<br>(4) Advanced<br>Surveying<br>(5) Culture of<br>Conservation<br>(6) Soil Health<br>Pasture/Silvopasture<br>(7) RUSLE 2 &<br>Cropping Systems | (9) Afforestation<br>(10) AEM<br>Farmstead<br>(11) OSHA 10-hour<br>course<br>(12) Stream Smart | (11) OSHA 10-hour<br>course<br>(12) Stream Smart<br>(13) Manure Storage<br>Cover & Flare<br>(14) Construction<br>Materials         |
| 1:00 - 4:30<br>PM                                                        | (1) Basic Forest /<br>Plant ID<br>(2) Basic NMP /<br>Fertilizers<br>(3) Basic Soils<br>(4) Advanced<br>Surveying | (3) Basic Soils<br>(4) Advanced<br>Surveying<br>(6) Soil Health<br>Pasture/Silvopasture<br>(7) RUSLE 2 &<br>Cropping Systems<br>(8) Drones                     | (9) Afforestation<br>(10) AEM<br>Farmstead<br>(11) OSHA 10-hour<br>course<br>(12) Stream Smart | (12) Stream Smart<br>(13) Manure Storage<br>Cover & Flare<br>(14) Construction<br>Materials<br>(15) Stormwater<br>Site Inspections |

**Note:** Some of these courses have time frames that overlap. If you wish to take more than one course during the week, please check to make sure that your choices do **not** overlap.

Field trips and off-site classroom locations will require transportation – be prepared to drive or carpool.

Be prepared for unpredictable fall weather.

Off-site locations will be provided prior to the beginning of the session.