2019 Industrial Hemp Conference
“A Grower’s Tutorial”

Registration is Closed and No Walk-ins Allowed. You can still register for the Live Broadcast option only by no later than 4:00pm on February 7.

The University of Vermont Extension Northwest Crops & Soils Program and Vermont Agency of Agriculture, Food and Markets are offering a one-day conference to expand industrial hemp knowledge of farmers from seed to sales. Beginning at cultivation through processing and sales. Our goal is for an audience of farmers, service providers, and related industries that will engage with the farming community. Conference to include educational and information sharing opportunities on the types of hemp grown for food, fiber, and flower including breeding and selection of hemp for CBD production, and growing, harvesting, and drying/storage methods.

Friday, February 8, 2019
9:00 a.m. to 6:00 p.m.
8:00 a.m. Registration and Exhibits open

Hilton Burlington (802) 658-6500
60 Battery Street Burlington, Vermont 05401

REGISTRATION IS FULL. NO WALKINS ACCEPTED. You can still register for the online Live Broadcast for $75 per person.

To register for the online Live Broadcast, go to:
www.regonline.com/2019industrialhempconference

To request a disability related accommodation to participate in this program, please contact Susan Brouillette at 802-524-6501 or 1-800-639-2130 by January 18, 2019 so we may assist you.

Conference Highlights
We are excited to welcome Monique McHenry, Assistant Professor from the department of Pharmacology at UVM’s Larner College of Medicine. Dr. McHenry currently teaches Medical Marijuana and Cannabis Professional Certificate and a Pharmacology course on Medical Cannabis at UVM’s College of Medicine. She will present a plenary session on the taxonomy and chemistry of hemp.

Dr. Jay Noller is a Professor and Head of the Dept. of Crop and Soil Science at Oregon State University. Since 2014, Jay is the original leader for research and development for Oregon’s hemp industry. He will share his expertise with us.
# AGENDA

## 2019 Industrial Hemp: A Grower’s Tutorial

<table>
<thead>
<tr>
<th>Time</th>
<th>Adirondak Ballroom</th>
<th>Green Mountain Ballroom</th>
<th>Lake Champlain Ballroom</th>
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<tbody>
<tr>
<td>8:00 am—9:00 am</td>
<td>Registration and visiting exhibitor tables</td>
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<tr>
<td>9:00 am – 10:00 am—Adirondack</td>
<td>Welcome and Plenary Session— <em>Cannabis as a Plant: Taxonomy and Chemistry</em>. Monique McHenry, PhD, UVM, Director of Cannabis Science and Medicine Program, will talk about cannabis as a plant, focusing on the taxonomic challenges and the chemicals that make this species so unique.</td>
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<td>10:00 am - 10:30 am</td>
<td>Hemp State and Federal Programs Information—VAAFM, VOF, Senator Sanders office</td>
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<tr>
<td><strong>Session 1</strong></td>
<td>10:45 am - 11:30 am</td>
<td>Propagation Techniques for starting CBD Hemp Plants—Christine Motyka. What are positives/negatives to seed, feminized seed, and clonal propagation? Where to access seed?</td>
<td>Breeding and Selection of CBD Hemp—Joe Veldon. A more advanced session for hemp growers that are well versed in propagation and want to learn the latest techniques and trends.</td>
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<td><strong>Session 2</strong></td>
<td>11:45 am - 12:30 pm</td>
<td>Hemp and Plasticulture - Trevor Hardy, Brookdale Farm. Review the basics of growing on plastic and hear about the different types of plastics that are available.</td>
<td>UVM Research Session - Heather Darby, UVM Agronomist, Steve Kostell, UVM Assistant Professor, and Jane Kolodinsky, UVM Professor. Receive updated research information.</td>
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<tr>
<td>12:30 pm - 2:00 pm Adirondack</td>
<td>LUNCH with presentation by Jay Noller, Developing Sustainable Markets for Hemp (1-1:45 pm)</td>
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<td><strong>Session 3</strong></td>
<td>2:00 pm - 2:45 pm</td>
<td>Basics of Growing Hemp for CBD—farmer panel. Come and learn from VT hemp growers! Learn about farmers growing practices and have time to ask your specific questions.</td>
<td>Pest Management—Chris Motyka, VTC and Scott Lewins, UVM will highlight strategies for integrated pest management for hemp.</td>
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<td>2:45 pm - 3:15 pm</td>
<td>Break and visiting Exhibitors</td>
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<td><strong>Session 4</strong></td>
<td>3:15 pm - 4:00 pm</td>
<td>From Field to Market—farmer panel. Will discuss post harvest handling practices for hemp flower harvest, including drying.</td>
<td>Irrigation 101 – Zoe Strapp, Brookdale Farm. This session will cover the nuts to bolts of irrigation.</td>
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<td><strong>Session 5</strong></td>
<td>4:15 pm - 5:00 pm</td>
<td>Hemp Lab Analytics and Processing—Scot Waring, eLucidation. Will introduce hemp analysis best practices and processing techniques for oil extraction.</td>
<td>CBD Production Systems in Oregon—Jay Noller from Oregon State University will highlight innovative and successful hemp production systems in Oregon.</td>
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<td>5:00 pm – 6:00 pm Adirondack</td>
<td>Social Hour and Networking</td>
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9:00 am – 10:00 am—Welcome and Plenary Session—Cannabis as a Plant: Taxonomy and Chemistry.  Monique McHenry, PhD, UVM, Director of Cannabis Science and Medicine Program, will talk about cannabis as a plant, focusing on the taxonomic challenges and the chemicals that make this species so unique.

10:00 am - 10:30 am Hemp State and Federal Programs including: Stephanie Smith, VAAFM; Nicole Dehne, Vermont Organic Farmers; and Erica Campbell, Senator Sanders Office.

Session 1—10:45 am - 11:30 am

Propagation Techniques for starting CBD Hemp Plants—Christine Motyka, horticulturist and educator focusing on integrated pest management and Cannabis. Adjunct faculty member at VT Technical College and a trainer with the Institute of Applied Agriculture & Food Systems, and cultivator for Champlain Valley Dispensary. She will discuss what are positives/negatives to seed, feminized seed, and clonal propagation, where to access seed, and varieties that are proven and available.

Breeding and Selection of CBD Hemp—Joe Veldon, M.S. Seven Leaf Organics in Morrisville, VT is a small breeder-direct Cannabis seed company focusing on high CBD cultivars of Industrial Hemp. Currently working on stabilizing several more cultivars for the Vermont hemp market. Joe will discuss breeding fundamentals, breeding techniques, strategic hemp breeding, and the current trends in hemp breeding.

Hemp Grain/Fiber Production – Reuben/Keenan Stone, Basic information to growing grain including soil prep, fertility mgmt, and planting techniques. The Stone’s are from Valley Bio Ltd., a registered seed establishment providing small grains and industrial hemp seed in Ontario.

Session 2—11:45 am - 12:30 pm

Hemp and Plasticulture—Trevor Hardy, Brookdale Fruit Farm, Hollis, New Hampshire. For this session, the basics of growing on plastic will be reviewed. The different types of plastic that are available and which work for what application including regular and biodegradable types.

UVM Research Session—Heather Darby, Agronomist, Steve Kostell, Assistant Professor, CDAE, and Jane Kolodinsky, Professor, CDAE. Dr. Darby will provide an update on field research for growing hemp for fiber, grain, and CBD in Vermont. Dr. Kostell will share information on identifying related opportunities for micro-manufacturing of agri-products from industrial hemp. Dr. Kolodinsky will focus on market demand and opportunities.

Hemp Grain Harvest & Storage—Reuben Stone—Now your plant is harvested, what next? Learn about post-harvest handling, drying and storing, and the economics of grain hemp as dual purpose crops.

12:30 pm — 2:00 pm

LUNCH with presentation (1:1-1:45pm) Developing Sustainable Markets for Hemp—Jay Noller from Oregon State University is involved in diverse activities in education, research, extension, and public service relevant to seed production, soils and ecosystem services, small farms and community food systems, pest management, and various approaches to natural resource management. He has been working on developing Oregon’s pilot research program in industrial hemp.

Session 3—2:00 pm - 2:45 pm

Pest Management—Christine Motyka, Vermont Technical College, and Scott Lewins, Entomologist with UVM and St. Michael’s College, will highlight strategies for integrated pest management for hemp.

Basics of Growing Hemp for CBD—farmer panel (listed below). Come and learn from VT hemp growers! Learn about farmers growing practices and have time to ask your specific questions.

Rye Matthews works with Northeast Hemp Commodities and has been promoting hemp farming in VT and the industry in general. He has successfully grown many hemp varieties using a wide range of scales and methods.

Keith Morris operates an organic family farm in Johnson, VT specializing in tree crops and a large variety of medicinal herbs while creating wildlife habitat and pollinator sanctuaries.


12:45 pm—3:15 pm—Break and visiting Exhibits

Session 4—3:15 pm –4:00 pm

From Field to Market—farmer panel (listed below)— Local farmers will discuss post harvest handling practices for hemp flower harvest, including drying and storage techniques.

Brenden Beer is a cannabis farmer from Greensboro, Vermont. He is co-owner of Kitchen Cabinet Medicinals, a Hemp company collaboratively working with nearby agricultural businesses to revitalize working land and sustainably produce plant medicine.

John DiGiuseppe owns and operates Lily Hill Farm, a Clean Green certified 4,000 plant hilltop hemp farm with his wife Rebecca. His engineering background and three full seasons of hemp farming in VT have culminated in creating a very productive and efficient farming operation which produces high quality, in-demand hemp flower.

Marc Tardiff with Acadia Farms, a family owned industrial hemp business located at the historic Additon Farm in Leeds, Maine. Approximately 70,000 pounds dry weight was harvested this past season from 30 acres of cultivated land. The crop was air dried in 2 barns on site.

Irrigation 101 – Zoe Strapp is the Inventory Manager and Irrigation specialist at Brookdale Fruit Farm in Hollis, New Hampshire. Set yourself up for success! This session will cover the nuts to bolts of irrigation.

Industrial Hemp: Using an Ancient Material to Solve Contemporary Problems—Bob Escher AIA and Alex Escher, Green Building Materials Entrepreneur with Escher Design Inc, Dorset, VT and NYC. Father and son duo will discuss the benefits and how hemp fibers are used in construction, examples of types of suitable structures, current bottlenecks and how hemp farmers can benefit from emerging trends in the green building sector.

Session 5—4:15 pm - 5:00 pm

Hemp Lab Analytics and Processing—Scott Waring, PhD from eLucidation specializing in applied science and solutions for hemp agriculture, industry, and enterprise will introduce hemp analysis best practices and processing techniques for oil extraction.

CBD Production Systems in Oregon—Jay Noller from Oregon State University will highlight innovative and successful hemp production systems in Oregon. Learn some tips from significantly more mature Oregon hemp production systems.

Fertility Management—Heather Darby, UVM Agronomist, will highlight strategies for fertilizing and meeting the crop needs.

5:00 pm – 6:00 pm Social Hour and Networking
CONFERENCE REGISTRATION

Registration fees include conference materials, lunch, and parking at the hotel. **Conference is FULL**, no more registrations accepted. **No walk-ins accepted**. You can still register for the Live Broadcast via our online registration page for $75.


Questions? Phone (802) 524-6501 or E-mail: heather.darby@uvm.edu or susan.brouillette@uvm.edu

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