Speakers:

Daniel Richardson, Esq. – Moderator
Chuck Ross, Secretary of AAFM
Diane Bothfeld, Deputy Secretary of AAFM
Andrea Stander, Executive Director of Rural VT
Lindsay Harris, Owner of Mountain Home Farm
Gerald Tarrant, Esq.
Aaron Kisicki, Esq.
Anthony Iarrapino, Esq.

Gene Bergman, Esq.
Elena Mihaly, Conservation Law Foundation
Alison Nihart, UVM
Naomi Sheffield, Esq.
Carrie Scrufari, Esq., VLS Center for Agriculture & Food Systems
Jolinda LaClair, AAFM
Kristen Haas, DVM, AAFM
Jim Leland, AAFM
Alan Graham, AAFM
Agricultural Law Continuing Legal Education Program

Sponsored by

The Vermont Bar Association

June 28, 2016

Washington Superior Court, Montpelier, Vermont

9:00 am Introduction, Overview, and Welcome: Daniel Richardson

9:00 am to 9:50 am Keynote Speaker: Chuck Ross, Secretary of AAFM

10-minute coffee break

10 am to 11:30 pm Raw Milk: Regulating with Dynamite

Panelists: Diane Bothfeld, Deputy Secretary of AAFM; Andrea Stander, Executive Director, Rural Vermont; Lindsay Harris, Owner of Mountain Home Farm (Faculty, UVM)

Lunch Break (Working Lunch)

11:45–1pm Renewable Energy on the Farm: Issues: Wind, Solar, and existing agriculture: Benefits, and Obstacles

Panelists: Gerry Tarrant; Aaron Kisicki

1:00 pm to 2:30 pm City Chicken: Issues Arising from Farming in Town

Panelists: Anthony Iarrapino; Gene Bergman; Elena Mihaly; Alison Nihart

2:30 pm to 3:20 pm Consumer Protection and Agriculture: Emerging Issues between Farms and Marketing

Panelists: Naomi Sheffield, Asst. AG; Carrie Scrufari, Esq., Center for Agriculture and Food Systems, Vermont Law School; Daniel Richardson (moderator)

3:20pm to 4:10 pm Agriculture Issue TED Talks (10 to 15 minutes)

AAFM: Development Work: Jolinda LaClair, AAFM

Animal Health: Kristen Haas, DVM, AAFM

Water Quality: Jim Leland, AAFM

Mosquitoes: Alan Graham, AAFM

Pesticides: Cary Giguere, AAFM

Five Things Every Lawyer representing a farmer or food producer should know: Daniel Richardson
Reasons People Buy our Milk

• Taste - creamy, but not heavy and has amazing flavor

• Health – use to treat cases of lactose intolerance, allergies, IBS, skin conditions, inflammation, depression, obesity and autism. (Recommended by health care professionals)

• Treat animals well – first hand view of clean, healthy, grass-fed cows

• Whole, real, unprocessed, grass-based food

• Trust – Have a connection with us and see our immaculate barn and sanitary conditions. Customers always comment on how nicely our barn smells.

• Support local – they like knowing their money is going directly to

Raw Milk has been a human staple for 10,000 years!

• Raw milk has been long been a staple in many cultures across the world.

• Evidence of early dairy farming in Northern Europe, India, Egypt, North Africa and elsewhere.

• Raw milk is mentioned more than 50 times in the bible. 'A land that floweth with milk and honey' was the fertile and all providing land of ancient Palestine.
What went wrong with raw milk?

- The industrial revolution spawned the first confinement farms
- “Swill dairies” associated with alcohol distilleries were disease-filled, manure pits and very profitable!
- Milk watered down with contaminated water, sick dairy workers and diseased cows spread illness
- Many people (especially babies) got sick or died

Quote from an observer of the day:

Raw Milk’s Regulatory Crossroads
Put cows back on the farm and go back to making safe milk?

or

Pasteurize swill milk so it wouldn’t kill people???

Widespread Pasteurization

- Kept low cost, low quality milk on the market
- Standardized Milk Ordinance Enacted in 1924, today this is called the Pasteurized Milk Ordinance (PMO)
This set of regulations, (now adopted by all states) has improved milk production from the days of swill dairies, but it still allows …
- large, crowded confinement dairy operations
- feeding of concentrates, industrial food wastes and GMO’s
- regular use of hormones
- co-mingled milk from many large farms and many thousands of cows
- allows milk from sick cows (acidosis, mastitis) to enter the food supply
Historic vs Modern Milk Risks

• Major communicable diseases associated with swill milk have largely been eradicated from the US\(^1\) (TB, Brucellosis and Typhoid)

• Scientific understanding and technological advances have made milk (raw and pasteurized) a relatively safe food\(^2,3,4\)

• Testing, vaccinations, water chlorination, and pasteurization of contaminated milk have greatly increased milk safety

References for Previous Slide


CDC’s Current Milk Safety Data

• FOIA request from FTCLDF outlines 33 years (1973-2005) of data on raw and pasteurized milk outbreaks in the U.S.\(^1\)

• 1,581 total illnesses attributed to raw milk (average of 48 illnesses per year in the US)

• 19,845 total illnesses attributed to pasteurized milk (average of 601 illnesses per year in the US)

"Raw milk’s contribution to the nation’s foodborne illness problem is miniscule."

David Gumpert (journalist, author, in response to CDC’s Report on Raw Milk Outbreaks)

**CDC Food Borne Illness Data**

- CDC data show that 27,645 foodborne illnesses were reported in 2006.
- According to CDC statistics, 48 out of 27,645 total foodborne illnesses each year in the U.S. are attributed to raw milk.
- This means 0.17% of foodborne illnesses are caused by raw milk in the U.S.
- In 2006, the food commodities associated with the largest number of illnesses were poultry (21%), leafy vegetables (17%) and fruits or nuts (16%).


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**Raw Milk Consumption Rates**

- 2002 CDC Survey of consumers in 9 states, estimates the percentage of raw milk drinkers to be between 2.5% and 4%.
- Extrapolating nationally, there are 7-12 million raw milk drinkers in the U.S.
- Largest retail raw milk farm is Organic Pastures Dairy in Fresno, Ca. which provides raw milk and raw milk products to 35,000 regular consumers.
- Survey of Vermont dairy farmers estimates that over 175,000 gallons of raw milk will be sold in Vermont in 2010.


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**Risks Adjusted for Consumption of Milk (raw and pasteurized) Compared With Other Foods**

Statistical Evidence that Raw Milk is Not More Dangerous than Other Foods

• In a 2003 USDA/FDA report: Compared to raw milk
  515 times more illnesses from Listeria due to deli meats
  29 times more illnesses from Listeria due to pasteurized milk

When adjusted for consumption rates, deli meats present a 10x greater risk of listeriosis than raw milk.

[Interpretive Summary – Listeria Monocytogenes Risk Assessment, Center for Food Safety and Applied Nutrition, FDA, HHS/USDA, Sept. 2003, page 17]


You are ten times more likely to get listeriosis from your turkey sandwich then from drinking a glass of raw milk.

Two Raw Milks, All Raw Milk is NOT Created Equally

• Scientific evidence shows that pasture based animal products are safer and of superior nutritional quality than food from confinement systems.

• The following is a conclusion reached in Dr. Cathy Donnelly’s recent paper in the Journal of Dairy Science.

"Our results indicated that most raw milk intended for small-scale artisan cheesemaking in Vermont was of high microbiological quality with no detectable target pathogens despite the repeat sampling of farms. This suggests that factors inherent to small herds and flock sizes, the lack of extended milk holding, seasonal milking, and pasture-based feeding play a role in the overall quality of milk."

This milk is produced specifically to be consumed without pasteurization.

This milk is produced specifically to be consumed after pasteurization.

Confinement Dairy Production

- 95% of US milk is from confinement operations
- Confinement animals are many times more likely to harbor human pathogens\textsuperscript{1,2,3}
- Development of antibiotic resistant pathogens linked to subtherapeutic use of antibiotics in animals in confinement\textsuperscript{4}
- Udder infections, acidic rumens, lameness, high cull rates are more prevalent then in pasture-based systems\textsuperscript{4,5}
- Quality of food produced from confined animals has been shown to have unhealthy proportions of Omega 3,6,9 ratios\textsuperscript{7}
References from Previous Slide


PMO vs Vermont Raw Milk Standards

Bacterial Limits Allowed by Law

PMO vs Vermont Raw Milk Standards

Coliform Limits Allowed by Law

*the PMO does not require testing of coliform levels in wholesale milk at the farm
The Health Enhancing Properties of Grass-Fed Raw Milk

- Probiotics – maintains healthy gut flora which enhances immune function and reduces chronic inflammation
- Intact Enzymes – enables complete protein digestion and mineral absorption
- CLA’s – shown to decrease risk of chronic illness
- Healthy fats - Omega 3,6,9 in balance
- Full compliment of vitamins and minerals

Probiotics, Necessary for a Functioning Immune System

Dr. Robert Luby, is a Colombia trained, 20 year practitioner of family medicine, with teaching appointments at UVM, the University of Massachusetts and Tufts University medical schools. Dr. Luby recommends patients replace pasteurized milk with pasture-based raw milk as a first line therapy. He has had good results, especially in patients with asthma, seasonal allergies and eczema. Below is a quote from him.

“I challenge you to consider that there are 5 macronutrients rather than three; fat, protein, carbohydrates PLUS fiber and beneficial bacteria as well. Beneficial bacteria are the most important nutrient in milk and are destroyed during pasteurization. We are the first society in history to not regularly consume large amounts of probiotic, beneficial bacteria laden foods. The results are shockingly increasing rates of chronic disease such as heart disease, diabetes and cancer.”
Allergies and Asthma

- European study involving 15,000 children shows a direct link to raw milk and decreased rates of allergies and asthma\(^1\)
- Ruled out other factors such as exposure to the farm environment
- Concludes that protective effect may be transferred to non-farm populations through raw milk consumption


Lactose Intolerance

- Caused by insufficient levels of the lactase enzyme in the gut\(^1\)
- Raw milk contains bacteria which produces the enzyme lactase\(^2,3\)
- Survey of lactose intolerant, raw milk drinkers finds that 83% can digest raw milk with no problem
- Very common reason consumers seek out raw milk

References from Previous Slide

“Raw milk is good food. Raw milk is good medicine. Access to raw milk is access to health care.”

-Dr. Robert Luby

Thank you!
Helpful links for Agriculture Law Day 2016
City Chicken: Issues Arising from Farming in Town

Below is the link to the Burlington ordinances. The relevant provisions are Articles 2 and 3 from Chapter 17.

https://www.codepublishing.com/VT/Burlington/

Following are some frequently asked questions that will hopefully answer some of the confusion:
NOTE: Throughout this article, the use of “his” can mean “his ...

http://agriculture.vermont.gov/food_safety_consumer_protection/meat_poultry_inspections/livestock_exemptions/faqs
Law & Policy Issues in Urban Agriculture

Elena Mihaly
Staff Attorney
CONSERVATION LAW FOUNDATION
June 28, 2016

Overview

• CLF’s Farm & Food Initiative
• Law & Policy Issues in Urban Agriculture
  • Political Process
  • Land Access
  • Soil Safety
  • Water Access
  • Sale of Goods
• Resources

FARM & FOOD INITIATIVE
CONSERVATION LAW FOUNDATION

• New England’s food system = entry point to our region’s most pressing environmental and health issues
• Municipal/land use/environmental law expertise
• Policy legal support to help people grow urban agriculture in their communities
Video Clip: Urban Ag in Boston

- 4-minute-long Greater Boston clip: https://youtu.be/R7KCHvRBE

Local Policies Affecting Urban Ag

1. Comprehensive Plan
2. Zoning
   - Use restrictions: allowed or forbidden
   - Design requirements
   - Permitting requirements
3. Board of Health
4. Water Access
5. Animal Control
Urban Ag Law & Policy Issues: Political Process

**Process Matters**

1. **Policy development**
   - Use public expertise to strengthen your ordinances/programs!
   - How are decisions made?
   - Was the public involved? Was the public involvement meaningful?

2. **Permitting process**
   1. Expensive? Experts required?
   2. Can a non-lawyer navigate process?

Urban Ag Law & Policy Issues: Land Access

**Issues**

1. Competing uses for vacant lots (e.g., affordable housing)
2. No lease, short-term lease, and/or 30-day notice anytime
3. Prohibitively expensive to buy/pay property tax

**Solutions**

1. Build community support for urban farm
2. Long-term leases, reimburse for valuable land improvements, guarantee full time period specified in lease
3. Conveyance of city-owned land (e.g., Boston, conveyance for $1)
4. Current use (e.g., MA bills)
5. Other tax incentive (e.g., CA Urban Ag Incentives Zone).

Land Access Spotlight:
CA's Urban Agriculture Incentive Zones Act

**CA Urban Ag Incentive Zones Act**

- Vacant privately owned land
- Property tax incentive
- City, with approval of county board, designates “urban agriculture incentive zones”
- Landowner commits property to ag use for at least 5 years, gets tax reduction
- Tax assessed at ag value instead of market-rate value
- Requirements:
  - U.S Census urban area of 250,000 people or more
  - 100% dedicated to commercial or noncommercial ag (no non-ag structures)
  - Between 3 - 3 acres.
Urban Ag Law & Policy Issues: Soil Safety

• Issue
  1. Contaminated soils from historic land uses

• Solutions
  1. Develop Soil Safety Protocol – guidelines and safe levels of lead, arsenic, selenium
  2. Phytoremediation? Sunflowers, mustard greens – research to date shows no significant impact

Urban Ag Law & Policy Issues: Water Access

• Issues
  1. Expensive water hookup
     (e.g., water connection in Boston starts at $25,000!)

• Solutions
  1. City provides grant funding to offset cost (e.g., SF awards up to $10K of water hookup cost); flat fee (e.g., Baltimore); permit seasonal use of fire hydrants for irrigation (e.g., Cleveland)

Urban Ag Law & Policy Issues: Sale of Goods

• Issues
  1. Access to food grown locally is critical!
     → Allow farm stands in residential zones?

• Solutions
  1. E.g., Boston, MA: allow one 200 square ft stand where urban farms are allowed.
  2. E.g., Burlington, VT: allows residents to sell produce directly from their home gardens so long as sales do not exceed $1,000 per year
  3. E.g., Somerville, MA: allows residents to sell fresh, uncut & unprocessed fruits and vegetables, farm fresh eggs if stored at 45 degrees F, and unprocessed maple syrup between 9-6pm, 3 days/wk, no more than 25 days per year.
Urban Ag Law & Policy Issues: Resources

• Conservation Law Foundation technical assistance
• Johns Hopkins Center for a Livable Future’s Food Policy Networks
  • Food Policy Council technical assistance, Resource Database
  • http://www.foodpolicynetworks.org/
• ChangeLab Solutions
  • Seeding the City, Land Use Solutions to Promote Urban Agriculture,
  http://www.changelabsolutions.org/sites/default/files/Urban_Ag_SeedingTheCity_FINAL_CLS_20120530_20111021_0.pdf

CONTACT:
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Jenny Rushlow
Senior Attorney, Director of Farm and Food Initiative
617-850-1763
j.rushlow@clf.org
Developing cohesive urban agriculture policy for Burlington, VT

Alison Nihart
University of Vermont/Burlington Food Council

The Problem

Burlington Chicken Owners Say Four Hens Isn’t Enough

"It doesn’t seem like anyone in the city understands why the limit is four."

Burlington Couple Busted For Gardening Structures in Front Yard

"We want to control our own food and do it ourselves," say brewer.
Urban Agriculture Task Force

- Created March 2011 by City Council resolution
- 18-month process (March 2011-September 2012)
- Output: report to City Council

Research Objectives

- Assess current policies affecting urban agriculture in Burlington
- Analyze urban agriculture policy approaches used in other cities
- Produce policy recommendations that meet the needs of stakeholders

Research Questions

How could Burlington better govern urban agriculture?
- Which current policies affect urban agriculture?
- What are the needs and concerns of stakeholders?
- How have other cities handled complex policy challenges?
- What opportunities exist?
- Where might implementation responsibility lie?
Research Design

- Engaged research (Whitmer, et al., 2010)
- Participatory action research (PAR) (Kindon, Pain, & Kesby, 2007)
- Research partner: Urban Agriculture Task Force
- Multi-stakeholder process with public participation

Multi-Stakeholder Process

- Burlington City Council
- Local policy experts
- Urban Agriculture Task Force (and me)
- Burlington municipal officials
- Burlington practitioners
- Burlington community
- External municipal officials
Urban Agriculture in Burlington – Activities

**Activities**
- Home, community, school, and rooftop gardens
- Commercial farming
- Farming program for New Americans
- Residential poultry and livestock
- Beekeeping
- Composting
- Preservation & processing
- Food sales

Urban Agriculture in Burlington – Activities

**Infrastructure**
- Small-scale infrastructure (raised beds, cold frames)
- Hoophouses
- Greenhouses
- Livestock structures
- Community kitchens
- Farm stands
- Farmers' markets

Existing Policy – State laws

<table>
<thead>
<tr>
<th>Law</th>
<th>Major provisions</th>
<th>Implications for urban agriculture</th>
</tr>
</thead>
<tbody>
<tr>
<td>Burlington Municipal Charter (24 V.S.A. § 48)</td>
<td>Limits regulatory authority over direct farm sales</td>
<td>Indicates city cannot regulate the sale of produce directly from producers</td>
</tr>
<tr>
<td>Apiary Law (6 V.S.A. § 3021)</td>
<td>Regulates professional and hobby beekeeping</td>
<td>Hobby beekeepers must register with the state</td>
</tr>
<tr>
<td>Slaughtering and Meat Inspection Laws (6 V.S.A. § 3301)</td>
<td>Regulates humane slaughter of livestock</td>
<td>Applies to urban livestock because “farm” is not defined</td>
</tr>
<tr>
<td>Animal Cruelty Law (13 V.S.A. § 90)</td>
<td>Regulates humane treatment of animals, but exempts “livestock and poultry husbandry practices”</td>
<td>Limits ability of humane officers to enforce humane treatment</td>
</tr>
</tbody>
</table>
### Existing Policy – City Laws

<table>
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<tr>
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<td>Animals and Food (Chapter 5 of Code of Ordinances)</td>
<td>Focuses on animal welfare, prohibits &quot;illegally killing&quot; an animal</td>
<td>Mostly doesn't apply to livestock or poultry, routes regulated as nuisance animals, disturbing neighborhood</td>
</tr>
<tr>
<td>Buildings and Construction (Chapter 6 of Code of Ordinances)</td>
<td>Outlines requirements for obtaining building permits for any structure to be constructed in Albuquerque</td>
<td>Agricultural structures are not required to be designed by a registered architect or engineer; chicken coops, hoofstock, and garden sheds must go through costly and lengthy permit process</td>
</tr>
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<td>Health (Chapter 12 of Code of Ordinances)</td>
<td>Regulates the sale of &quot;perishable food items&quot;</td>
<td>Residents may not keep more than 4 animals, no livestock without being considered a boarding establishment</td>
</tr>
<tr>
<td>Vegetation (Chapter 19 of Code of Ordinances)</td>
<td>Limits planting of trees in public parks or right-of-ways without prior approval from local boards</td>
<td>Residents may not keep more than 4 animals, no livestock without being considered a boarding establishment</td>
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### Policy in Other Cities

- **Focus on poultry policies**
- **Mostly regulation; some public information**
- **Regulations vary significantly**
- **Despite diverse approaches, general satisfaction with policies**

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<tr>
<td><strong>Year adopted</strong></td>
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<td>1959</td>
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<td>2008</td>
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<td><strong>Species regulated</strong></td>
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<td>Poultry</td>
<td>Domestic Food</td>
<td>Poultry</td>
<td>Fish</td>
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<td><strong>Zoning</strong></td>
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<td>Single family residential and</td>
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<td>multi-family residential and</td>
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<td><strong>Mid-Rise Units</strong></td>
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<td>Not allowed</td>
<td>Allowed</td>
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<td><strong>Community gardens, Urban Farms</strong></td>
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<tr>
<td>Allowed in agriculture zones</td>
<td>Allowed, some lot size rules</td>
<td>Allowed</td>
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<td><strong>Coop Housing construction</strong></td>
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<td>Accessory structures less than 10' x 10' exempt from</td>
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<td><strong>Protection from predation</strong></td>
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<tr>
<td>No requirements</td>
<td>Building permit required</td>
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<td><strong>Setbacks</strong></td>
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<tr>
<td>Accessory structures to be set back</td>
<td>Building permit required</td>
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<td><strong>Size</strong></td>
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8/1/2016
### Recommendations – Planning and Zoning

- Zoning changes
  - Update definitions
  - Streamline process for structures
- Expand community garden space
- Expand zoning definition to include the sale of produce
Recommendations – Livestock and Poultry

▪ Adopt an animal welfare ordinance
▪ Regulate structures through zoning
▪ Regulate number of animals based on humane care and structure size
▪ Registration system
▪ Clarify that slaughtering is legal
▪ Continue to apply nuisance ordinance to roosters

Recommendations – Other Activities

▪ Home gardens
▪ Greenbelt gardens
▪ Rooftop gardens
▪ School gardens
▪ Beekeeping
▪ Urban food forestry
▪ Composting
▪ Food processing
▪ Food sales

Translating Recommendations into Policy

▪ Nov 2012: City Council sent high priority recommendations to other groups to draft ordinances
  ▪ Livestock recommendations to Board of Health, which convened a Livestock Subcommittee to draft ordinances
  ▪ Zoning recommendations to Planning Commission, which asked Planning and Zoning staff to draft ordinances
  ▪ Legal support from the Conservation Law Foundation (Anthony)
Policy Adoption Process

Livestock policies:
- Livestock Committee
- Board of Health

Zoning changes:
- Planning and Zoning Staff
- Planning Commission

Policy Adoption – Livestock

- Board of Health Livestock Subcommittee worked with Humane Society to identify best practices for livestock
  - Focus on animal wellbeing as a proxy for other potential problems (e.g. smells)
- Board of Health approved livestock ordinance (June 2014)
- City Council sent draft ordinance to its Ordinance Committee
- City Council adopted new article on Humane Treatment of Animals in Chapter 27 (Health) of the Burlington Code of Ordinances (October 2015)
  - Major components:
    - Number of animals limited by square footage requirements for humane treatment
    - Registration and fees for 5+ chickens, 2+ goats, 2+ sheep, 9+ rabbits
    - Commercial use allowed
    - Waste handling and disposal regulated
    - Slaughtering allowed (with provisions)
    - Prohibited: roosters, cattle, swine, ostriches, emu, and camels

Policy Adoption Process – Zoning

- Zoning permit exemptions (March 2014)
  - Cold frames 6 ft high or less
  - 2 hoop houses (up to 200 sq ft each)
  - Urban ag structures on rooftops
  - Food sales up to $1,000

- Community Garden Changes
  - Community gardens allowed in expanded number of zoning districts (March 2014)
  - Waiver for New Developments (August 2015): New developments that create a community garden receive a waiver of the parks impact fee
Lessons Learned

- Involving stakeholders illuminates complexities early
- Balancing stakeholder needs difficult, but important
- Ongoing issues will require continued community policy work

Thank You!

burlingtonfoodcouncil.org/our-projects/ufact
alison.nihart@gmail.com

Any questions?
CONSUMER PROTECTION & AGRICULTURAL PRODUCTS

NAOMI SHEFFIELD, ASSISTANT ATTORNEY GENERAL

CLAIMS AND REPRESENTATIONS

- Truthful
- Substantiated
- Omissions & Disclosures
- Statutory/Regulatory Requirements

TRUTHFUL

- Are you describing the product accurately?
- What might a reasonable consumer looking at the claim or representation think?

Examples:

- Made in U.S.A.
- Made using New England Apples
- Hand Crafted
- Family Farm
- Natural
- Wholesome
- Simple
- Blueberry, Strawberry, Vanilla, Honey, etc.
SUBSTANTIATED

• Must be able to substantiate all reasonable interpretations of a claim (including unintended messages). FTC Policy Statement Regarding Advertising Substantiation, 106 F.T.C. 648
• What documentation does the advertiser hold to support the claim.
  • At least the level that is expressly or impliedly claimed.
  • “Assigned” or “main point”
  • Without an express or implied level, advertiser must have a “reasonable basis” for the claim. Type of product
    • Type of claim
    • Product or service
    • Consent of various claims
    • Benefits of a truthful claim
    • Cost of developing substantiation
    • Amount of substantiation experts believe is reasonable
  • In full: advertisements, newspapers, sales material
  • In studies, scientific research, expertly, objectively conducted, qualified individuals

SUBSTANTIATION IN CERTAIN CIRCUMSTANCES

• Animal Production Claims
  • Ex. “raised without antibiotics,” “raised without added hormones,” “free range,” “free roaming,” “grass fed,” “corn fed,” “grain fed,” “certified organic.”
  • Supporting documentation:
    • Detailed written protocol explaining controls from birth to harvest (with protocols from any suppliers)
    • Signed affidavit declaring the specifics of the claim
    • Product tracing and segregation mechanism from slaughter through retail distribution
    • Complete feed formulation
    • If third-party certified/certified, current copy
• Nutrient Content Claims & Health Claims
  • Nutrient Content: “low fat,” “high fiber,” etc.; Health: diet-disease relationship

OMISSIONS & DISCLOSURES

• The absence of additional information makes a claim or representation misleading.
• Additional disclosure cannot always cure an omission:
  • Can never simply disclaim an affirmative representation or make a subsequent truthful disclosure
    • “Vermont cheese” - made with milk from NY (CP: 120)
  • Refunding or money back guarantees do not solve the problem
• There are instances where disclosure may be appropriate or acceptable:
  • “Vermont Jam Company - made with fruit from New England (CP 125)
  • GE Labeling contemplates the possibility of disclosure regarding FDA position (CP 131.02[c][ii])
STATUTORY AND REGULATORY REQUIREMENTS

- GE Labeling – Consumer Protection Rule 121
  - Maintaining records of production.
  - Meat versus other
  - Prohibitions on “natural”

- Vermont Origin – Consumer Protection Rule 120
  - Unqualified Claim (“Vermont _______”)
  - Qualified Representation (“made in Vermont”)
  - Company Name
  - Local – V.S.A. 2465a
  - Originated within Vermont
  - Originated within 30 miles of place where sold
  - Used in connection with specific geographic location (“local to New England”)

- Maple – Title 6, Ch. 32 & CVR 20-011-002
  - Enforced by Agency of Agriculture
  - May also incur Consumer Protection Act violation

EXAMPLES

- The Dannon Company (2010)
  - Claims that Activia relieves irregularity and DanActive helps avoid catching a cold or flu.
  - Settlement requires certain disclosure: cannot make irregularity representation is non-misleading and conveys the full information about what is required to get benefit.

- PepsiCo Nature Juice – Natural Claims (2013)
  - “all natural” and “non-GMO”
  - Actually contained processed and synthetic ingredients and ingredients from GMO crops

- Kellogg – Frosted Mini-Wheats (2009)
  - Improved kids’ attention, memory and cognitive function to a degree not supported by evidence.

EXAMPLES CONT.

- Vermont
  - “Vermont’s All Natural Mints” or “Vermont’s All Natural Pastilles” “Product of USA”
  - Manufactured in Canada from ingredients originating outside of Vermont (maple syrup)

- Olive Oil
  - Claims that it was imported from Italy
  - Claims that it was extra virgin olive oil

- Natural Litigation
  - Salt & Herbs – Acetic acid, calcium pantothenate, citric acid, corn syrup, potassium carbonate, potassium hydroxide, sodium azide, sodium phosphate, sucrose, and/or xanthan gum

- Ben & Jerry’s – kiddie ice cream

- FDA Natural Rulemaking

- Arizona, Snapple, ConAgra, General Mills – High Fructose Corn Syrup

- General Mills, Frito-Lay, General Pepperidge Farm – GMOs
WHY DOES IT MATTER – PEOPLE PAY MORE

- It matters for the same reason that a producer or seller wants to include the claim or representation – people will pay more or be more likely to purchase the product.

- **Consumer Studies**
  - 46% of consumers want to be able to buy meat and poultry raised without antibiotics in local grocery stores, and 60% will pay more for it.
  - 70% of consumers will pay more for local food.
  - Over half of consumers search for “all natural” when looking at products.

- **Market Research**
  - Between 2001 and 2010 there was an increase in both the number of health and nutrition-related claims and the number of products with such claims.
Labeling Requirements for Food Products

- What is the applicable law?
  - Federal Law
    - Federal Food Drug & Cosmetic Act
    - Code of Federal Regulations
    - Federal Standards of Identity
    - Lanham Act
    - Federal Trade Commission Truth in Advertising
  - State Law
    - Vermont State Statutes
    - Vermont Administrative Code

Applicable Laws for Food Labels:
Using the label “maple” as an example:

Prominence of the Issue:
• A Google search for “Vermont maple” yields 650,000 results
• 2013: VT maple syrup industry totaled $310 million in sales & provided 2,700 full time jobs (UVM’s Center for Rural Studies)

Federal Food Drug and Cosmetic Act (FFDCA)
FFDC: the goal

- Health, safety, quality, preventing consumer deception, avoiding adulteration (bacterial contamination) and economic adulteration.

FFDC: 21 USC § 331 and other relevant provisions

<table>
<thead>
<tr>
<th>Section 331 (a)</th>
<th>Prohibits introduction into interstate commerce of any food that is adulterated or misbranded.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Section 331 (n): misbranded means</td>
<td>&quot;the extent to which the labeling or advertising fails to reveal facts material in the light of such representations.&quot;</td>
</tr>
<tr>
<td>Section 342 (b): adulterated means</td>
<td>the absence, substitution, or addition of constituents. (1) If any valuable constituent has been in whole or in part omitted; or (2) if any substance has been substituted wholly or in part; or (3) if damage or inferiority has been concealed in any manner; or (4) if any substance has been added or mixed or packed to increase its bulk, reduce its quality, or make it appear better or of greater value than it is.</td>
</tr>
<tr>
<td>Section 321 (k): a label means</td>
<td>a display of written, printed, or graphic matter upon the immediate container of any article.</td>
</tr>
<tr>
<td>Section 201 (m): labeling defined as</td>
<td>&quot;all labels and other written, printed, or graphic matter (1) upon any article or any of its containers or wrappers, or (2) accompanying such article.&quot;</td>
</tr>
</tbody>
</table>

FFDCA: Sec. 343 A food shall be deemed to be misbranded--

(a) False or misleading label
(b) Offer for sale under another name
(c) Imitation of another food
(d) Misleading container
(e) Package form
(f) Prominence of information on label
(g) Representation as to definition and standard of identity
(h) Representation as to standards of quality and fill of container ... (probably NA)
(i) Label where no representation as to definition and standard of identity (NA)
(j) Representation for special dietary use (probably NA, but see re: vitamin, mineral, and other dietary properties)
REQUIRED vs VOLUNTARY LABELING STATEMENTS UNDER FFDCA:

**Required**
- Name of food (standard of identity)
- Net quantity of contents
- Ingredients list (greatest quantity in least)
- Nutrition facts
- Name/address of manufacturer

**Voluntary**
- Health claims (benefits to disease)
- Nutrient level claims (high fiber, low fat, etc.)
- Structure/function claims
- All natural, low fat, low sodium
- Organic
- GMO free
- 3rd party verification

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**Code of Federal Regulations (CFR):**

- Federal Food, Drug, and Cosmetic Act (FFDCA)
- Federal Standards of Identity (SOI)

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**Code of Federal Regulations (CFR)**

21 C.F.R. § 168.140 - Federal standard of identity for maple syrup:

(a) Maple syrup is the liquid food derived by concentration and heat treatment of the sap of the maple tree (Acer) or by solution in water of maple sugar (maple concrete) made from such sap. It contains not less than 66 percent by weight of soluble solids derived solely from such sap. The concentration may be adjusted with or without added water. It may contain one or more of the optional ingredients provided for in paragraph (b) of this section. All ingredients from which the food is fabricated shall be safe and suitable.

(b) The optional ingredients that may be used in maple syrup are:

(1) Salt.
(2) Chemical preservatives.
(3) Defoaming agents.

(c) The name of the food is “maple syrup.” Alternatively, the word “syrup” may be spelled “sirup.”

(d) Label declaration. Each of the ingredients used in the food shall be declared on the label as required by the applicable sections of parts 101 and 130 of this chapter.
Federal Standards of Identity

- Check 21 U.S. §341 Definitions and Standards for Food
- No definition and standard of identity and no standard of quality shall be established for fresh or dried fruits, fresh or dried vegetables, or butter, except that definitions and standards of identity may be established for avocados, cantaloupes, citrus fruits, and melons.

Lanham Act
Lanham Act: 15 USC § 1125

- Prohibition against false advertising (including origin)
- Provides a means of legal recourse if you think a competitor’s advertisement is deceptive.

Federal Trade Commission (FTC): Truth in Advertising Law

- Vermont Administrative Code
- Federal Food, Drug, and Cosmetic Act (FFDCA)
- Code of Federal Regulations (CFR)
- Federal Standards of Identity (SOI)
- Federal Trade Commission (FTC) Truth in Advertising

FTC: truth in advertising

- Note, the Food and Drug Administration (FDA) doesn’t regulate advertising.
- FTC regulates advertising (including the internet)
  - A representation, omission, or practice is deceptive if likely to
    - Mislead consumers, or
    - Affect consumer behavior re: decisions about the product.
Vermont State Statutes

Federal Food Drug and Cosmetic Act (FFDCA)

Vermont State Statutes

Code of Federal Regulations (CFR)

Federal Standards of Identity (SOI)

Lanham Act

Vermont Administrative Code

Federal Trade Commission (FTC) Truth in Advertising

Vermont Administrative Code

Title 6: Agriculture, Part 2: Product Grades, Standards and Labeling, ch. 32 Maple Products, 6 VSA § 481 – Definitions:

- “Advertisement”: any method used to call attention to a product which is intended to arouse a desire to purchase that product. It shall include, but is not limited to, signs, displays, radio and television broadcasts, newspapers and periodicals, direct mail, other printed forms, and any electronic media.

- “Maple products”: only maple syrup, maple sugar, maple cream, or any other product in which the sugar content is entirely derived from pure maple sap and to which nothing has been added.

- “Maple sap”: unprocessed liquid derived from the maple tree (Acer).

- “Maple sugar”: solid, crystalline produce of maple tree sap only.

- “Produced in Vermont” shall mean only that maple syrup or other maple products which are manufactured in their entirety from pure, unprocessed maple sap within the state of Vermont pursuant to standards established by this chapter and the regulations promulgated hereunder.
Vermont Administrative Code

- **2-4 Vt. Code R. § 205.1** (definitions)
- **2-4-205.3.** State of Vermont Grades and Standards for Maple Syrup.
- **2-4-205.5.** Labeling.

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Vermont Administrative Code

- **2-4-205.5.** Labeling.
  - No person shall label any maple syrup, maple product, maple flavored product, or artificial maple flavored product in any manner which is untruthful, unfair, or deceptive. 2-4 Vt. Code R. § 205 (1)

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Vermont Administrative Code

- All labels must comply with other federal statutes, state statutes, and regulations re: labeling and consumer fraud. 2-4 Vt. Code R. § 205 (1) (a)
Vermont Administrative Code

- No maple syrup may be labeled as being a Vermont product, or labeled in any manner which would imply that the maple syrup was produced in Vermont, unless the maple syrup is 100 percent pure maple syrup which was entirely produced within the state of Vermont in compliance with the terms of the Act and these regulations. When the packer’s name or a maple syrup trade mark, contains the word “Vermont”, the name or trade mark, may be used on the principal display panel of maple syrup produced outside Vermont if the principal display panel also clearly and conspicuously includes the state of origin of the maple syrup or the country of origin if the country of origin is other than the United States of America. 2-4 Vt. Code R. § 205 (1) (b)

- No maple product. . . 2-4 Vt. Code R. § 205 (1) (b)

Vermont Administrative Code

- All maple flavored products shall be clearly labeled on their principal display panel or panels in a manner which will alert the purchaser to the fact that the product is not a 100 percent pure maple product, in accordance with the Act and other applicable statutes and regulations. 2-4 Vt. Code R. § 205 (1) (d)

- Artificial maple flavored products shall be clearly and conspicuously labeled on their principal display panel or panels with the term “artificial flavor” shall be of a size equal to, or larger than, other words used to describe the product. It is unlawful to use the terms “maple syrup” or “maple sugar,” however modified, to describe an artificially flavored product. Any restaurant menu listing such a product, or any advertising of such a product shall clearly state that the product is artificially flavored. 2-4 Vt. Code R. § 205 (1) (e).

Vermont Administrative Code

- For bulk containers: The labeling requirements of Paragraph 490 (a) of Title 6 V.S.A. Chapter 32. shall not apply to bulk maple syrup containers used solely for transportation or storage of maple syrup prior to being processed or packaged for consumer glass or prior to being manufactured into another maple product. For bulk containers used solely for transportation or storage of maple syrup prior to being processed or packaged for consumer glass or prior to being manufactured into another maple product, or in any other markets where the syrup is not further processed before purchase by the consumer shall be labeled with the same information required on packaged maple syrup. 2-4 Vt. Code R. § 205 (2)

- Seeing if your label is compliant: It is recommended that persons wishing to determine whether their maple products labels comply with the terms of the Act and these regulations submit a copy of such labels to the Agency prior to their printing and use. If the label complies with the terms of the Act and these regulations, the Agency will certify its compliance with the provisions of the Act. 2-4 Vt. Code R. § 205 (3)

- Exemptions for existing labels: Persons with existing supplies of labels, or preprinted containers, which do not comply with these regulations, may apply to the Secretary for a temporary exemption from these regulations as to those labels, or preprinted containers. The Secretary shall have the discretion to permit such persons to use up existing supplies of labels or preprinted containers, where he determines that those labels, or preprinted containers, will not be misleading to the consumer and where he determines that such an exemption is in the public’s interest, any such exemption shall be for a specified period of time only; thereafter, persons who obtained such an exemption shall use only labels, or preprinted containers which comply with these regulations. 2-4 Vt. Code R. § 205 (5)
Vermont Administrative Code

- **2-4-205:VII.** Advertising: No person shall advertise any maple syrup, maple product, maple flavored product, or artificial maple flavored product in any manner which is untruthful, unfair, or deceptive. 2-4 Vt. Code R. § 205:VII

Recourse (federal)

- FDA can sue companies/producers for not complying with the FFDCA pursuant to 21 USC § 304(1)(a) “any article of food … that is adulterated or misbranded when introduced into or while in interstate commerce or while held for sale … shall be liable … on libel of information and condemned in any district court of the U.S.”
- Private citizens can sue FDA if agency isn’t complying w/ the statues as it promulgates rules (this could be important in the “natural” context.
- FFDCA does not have a private right of action – no citizen suit provisions.
- Companies can sue other companies for unfair competition under the Lanham Act.
- Alert the FTC and request an investigation. File a complaint with the National Advertising Division (of the council of the Better Business Bureau).

Recourse (state)

- Look at state consumer protection statutes that protect businesses against unfair competition – many allow for class actions or citizen suits. See Vermont Consumer Protection Act (Title 9, ¶ 2453) athttp://legislature.vermont.gov/statutes/section/09/063/02453
- Call local BBB or file a complaint
- Contact TV, radio, newspaper running the ad.
- Contact state Attorney General or state Office of Consumer Affairs
An ounce of prevention is worth a pound of cure . . .

- For more information, see:

Thank you!!!!
A “ONE HEALTH” APPROACH TO ANIMAL HEALTH

Human Health - Animal Health - Environmental Health
Holistic Care for Our Communities

Kristin M. Haas, DVM
Vermont State Veterinarian
June 28, 2016

WHAT IS “ONE HEALTH”?  

• One Health is the collaborative effort of multiple health science professions, together with their related disciplines and institutions – working locally, state-wide, nationally, and globally – to attain optimal health for people, domestic animals, wildlife, plants, and our environment.
• The legal community may not have historically been involved in One Health initiatives, but you should be
• Concept is intuitive / not new, but it has gained considerable traction
• Recognition of the importance of One Health will better enable you to support your clients’ missions and provide holistic care for your communities

WHY SHOULD YOU CARE ABOUT ONE HEALTH?  

• Prevalence of emerging zoonotic diseases – over past 30 years, new infectious agents/diseases affecting humans have been detected at rate of more than one per year; 75% of these emerging diseases recognized in the past 10 years are zoonotic. Animal diseases are often predictors of human disease.
WHY SHOULD YOU CARE ABOUT ONE HEALTH?

• Expanding world population – 9 billion by 2040; 11 billion by 2050

WHY SHOULD YOU CARE ABOUT ONE HEALTH?

• Increasing threat of agroterrorism / food security breeches – more sophisticated and passionate domestic extremist organizations

WHY SHOULD YOU CARE ABOUT ONE HEALTH?

• Global economy – what happens in VT does not stay in VT

Animals Are Not Ours to Use
Highly pathogenic Avian Influenza (HPAI)

Collateral impact – diversification of agricultural systems

Steadily expanding

HUMAN-ANIMAL INTERFACE

STATE / NATIONAL / INTERNATIONAL ONE HEALTH INITIATIVES

- February 2015 – group of U.S. senators sent letter to President Obama urging him to pursue a multidisciplinary approach to addressing zoonotic diseases like Ebola
- Academia
  - One Health Alliance (OHA) to accelerate pertinent research
    - Developed by 9 veterinary colleges, including Tufts, Cornell and Penn in the NE
    - OHA will develop strategies to capitalize on One Health opportunities in the areas of enhanced communication and research
  - USDA-APHIS identified One Health as one of the five focus areas in its strategic planning process and now has a One Health office
- Governor Shumlin’s Executive Order 7-15
**WHAT DOES ANIMAL HEALTH DO?**

- **Mission Statement:**
  Protect the health and welfare of Vermonters and their livestock.

- **Goal Statement:**
  Advance a safe and secure food supply within a marketplace that provides fair and equal access to consumers and processors while enhancing Vermont’s working landscape, rural character and local economies.

  Animal Health section activities focus on the pre-harvest phase of production

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**MEAT AND POTATOES WORK**

- Prevent the introduction and/or spread of contagious livestock diseases, many of which are zoonotic

  - Manage feeding of prohibited food scraps to swine – no meat for pigs
  - Poultry/livestock disease testing
  - Technical assistance and outreach to all partners and stakeholders

---

**MEAT AND POTATOES WORK**

- Ensure adequate animal traceability

  - Organic production
  - Niche marketing
  - Interstate movement
MEAT AND POTATOES WORK

- Help ensure food safety
  - Antibiotic residue avoidance in meat/milk
  - Disease-free livestock herds and poultry flocks

- Licensing/registration program management
  - Limited scope of responsibility in animal well-being cases
    - Right of entry onto commercial dairy farms
    - Consult with humane officers upon their request
    - Minimal scope of authority in companion animal cases

PARTNERS

- VT. Department of Health
- VT. Department of Emergency Management and Homeland Security
- Multiple NGOs
- Multiple producer/industry groups – VFB, NOFA, Sheep and Goat Assn.
- USDA APHIS & USDA FSIS
- FDA
- Licensees/registrants
- VT. Department of Fish and Wildlife
- Many others
WE TRY TO APPROACH EVERY CHALLENGE HOLISTICALLY

“The whole is greater than the sum of its parts”

Think outside of your silos
When you hear hoof beats, don’t forget to think about the “zebras”

We utilize the experts in our communities to better understand and prepare for the challenges of the 21st century
We build multidisciplinary teams
QUESTIONS?
Vector Borne Disease Surveillance in Vermont

Vermont Bar Association Meeting
June 28, 2016

Alan C. Graham
State Entomologist
Vermont Agency of Agriculture

What do we do?

- Survey for ticks
- Survey for mosquitoes
- Identify specimens to species
- Submit samples for disease testing
Why do we do it?

- Surveillance is important for human and animal health.
- Provide good scientific data for determination of disease risk.

Mosquito Surveillance

- Focus on Eastern Equine Encephalitis virus (EEE)
- Look for West Nile virus (WNV)
- Identify risk areas with primary vector species

Look for large hardwood acidic swamps.
Concentrated on western side of the state.
West Central Interest Area

- Addison/Rutland County wetland complex
- History of EEE+ mosquito samples
- Veterinary and human deaths in 2012

Mosquito Traps

Resting Box Traps
- Passive trap for resting mosquitoes
- Primary vector species for EEE

Gravid Traps
- Catches females laying eggs
- Primary vector species for WNV
- Stinky water attractant

CDC Light Traps
- Good for all mosquitoes
- CO₂ attractant

Surveillance 2015 Trap Sites

- 91 trap locations
- 73 towns
- 14 counties (statewide coverage)
2015 Trapping Statistics

- 146,238 mosquitoes
- 28 species
- 3886 pool samples
- 89,465 mosquitoes tested
- 11 species tested
- 3517 Cs melanura collected (↓11%)

Samples tested by the VDOH for EEE and WNV using RT-PCR.

2015 Arbovirus Activity

- No reported human or veterinary cases of WNV or EEE
- 1 EEE+ mosquito pool
- 97 WNV+ mosquito pools
- Four towns had sustained WNV activity for ≥3 consecutive weeks

Towns Surveyed and Results of Testing

- 97 WNV+ mosquito batches in 20 towns (2014 = 8)
- 1 EEE+ mosquito batches (2014 = 8)
Flagging for ticks

2015 Tick Survey

- Look for ticks (focus on *Ixodes scapularis*)
- Surveyed 7 counties, 21 towns
- Sampled 23 sites
- 68 transects of 100 meters each (4.23 miles)
- Spring and fall sampling
Towns and counties surveyed in 2015

- Submitted 659 ticks for testing

Relative tick densities among towns sampled in 2015

Tick Densities in Selected Vermont Towns

A tick density of 1.0 means one tick every meter.
Collection sites positive for *Borrelia burgdorferi* (Lyme disease)

Collection sites positive for *Anaplasma phagocytophilum* (Anaplasmosis)

First detection of *Babesia microti* (Babesiosis) in Vermont
Disease prevalence

- **Borrelia burgdorferi**
  - (Lyme disease) = 58.2%
- **Anaplasma phagocytophilum**
  - (Anaplasmosis) = 10.5%
- **Babesia microti**
  - (Babesiosis) = 0.8%

Risk of tick pathogens by town

<table>
<thead>
<tr>
<th>Town</th>
<th>Density (ticks/square meter)</th>
<th># Ticks Tested</th>
<th>% Borrelia</th>
<th>% Anaplasma</th>
<th>% Babesia</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bennington</td>
<td>0.24</td>
<td>216</td>
<td>49.2</td>
<td>21.0</td>
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<tr>
<td>Brattleboro</td>
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</tbody>
</table>

Make information publically accessible.

What does this mean?

- Vermonters can make better decisions when working in areas with a known disease risk.
- Health practitioners can make better decisions in diagnosing and treating disease.
Acknowledgments

- Dr Patsy Kelso, State Epidemiologist, VT Dept of Health
- Bradley Tompkins, Health Surveillance Epidemiologist,
  VT Dept of Health
- Jenna Paige, Infectious Disease Epidemiologist, VT Dept of Health
- Special thanks to our Vermont Agency of Agriculture Seasonal Field and Lab Technicians
  - Whitney Burgess
  - Eliza Doncaster
  - Dan Fraysier
  - Mike Johnson
  - Tom MacKenzie
  - Michael Sabourin
  - Ben Williams

For More Information

- Vermont Agency of Agriculture
  - www.Agriculture.Vermont.gov
  - Search for “Entomology”
  - Alan.Graham@Vermont.gov
  - Patti.Casey@Vermont.gov

- Vermont Department of Health
  - www.HealthVermont.gov
  - Search for “Diseases and Prevention”
  - Bradley.Tompkins@Vermont.gov

Questions?
Zika virus Vector Surveillance

- BG Sentinel Trap
  - Human lure
  - Targeted habitats
    - Tire dumps
    - Truck stops
- Oviposition Traps
  - Fermented hay water
  - Egg laying habitat
Host Feeding Patterns of *Culiseta melanura* in Vermont

- 308 *Cs. melanura* analyzed
- 52 host species identified
- 49 bird species
  - Migratory and resident birds
  - 43 passerine birds
  - 3 mammal species

**Host Feeding Pattern of *Culiseta melanura***

- Green Heron
- American Robin
- Common Yellowthroat
- Black-capped Chickadee
- Savannah Sparrow
- Common Grackle
- Northern Cardinal
- River Warbled Cowheas
- Weaver
- Red-eyed Vireo

Red-eyed vireo