



IHEA-USA 2016 Annual Conference

New Hunter Track 18 May

2016

Vergennes, Vermont

A Study of the Locavore Movement

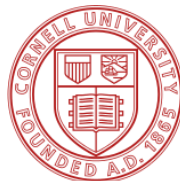
Keith Tidball, Moira Tidball, Lincoln Larson, Paul Curtis, & Rich Stedman



Cornell University
Human Dimensions Research Unit



Cornell University
Cooperative Extension
Seneca County



Cornell University



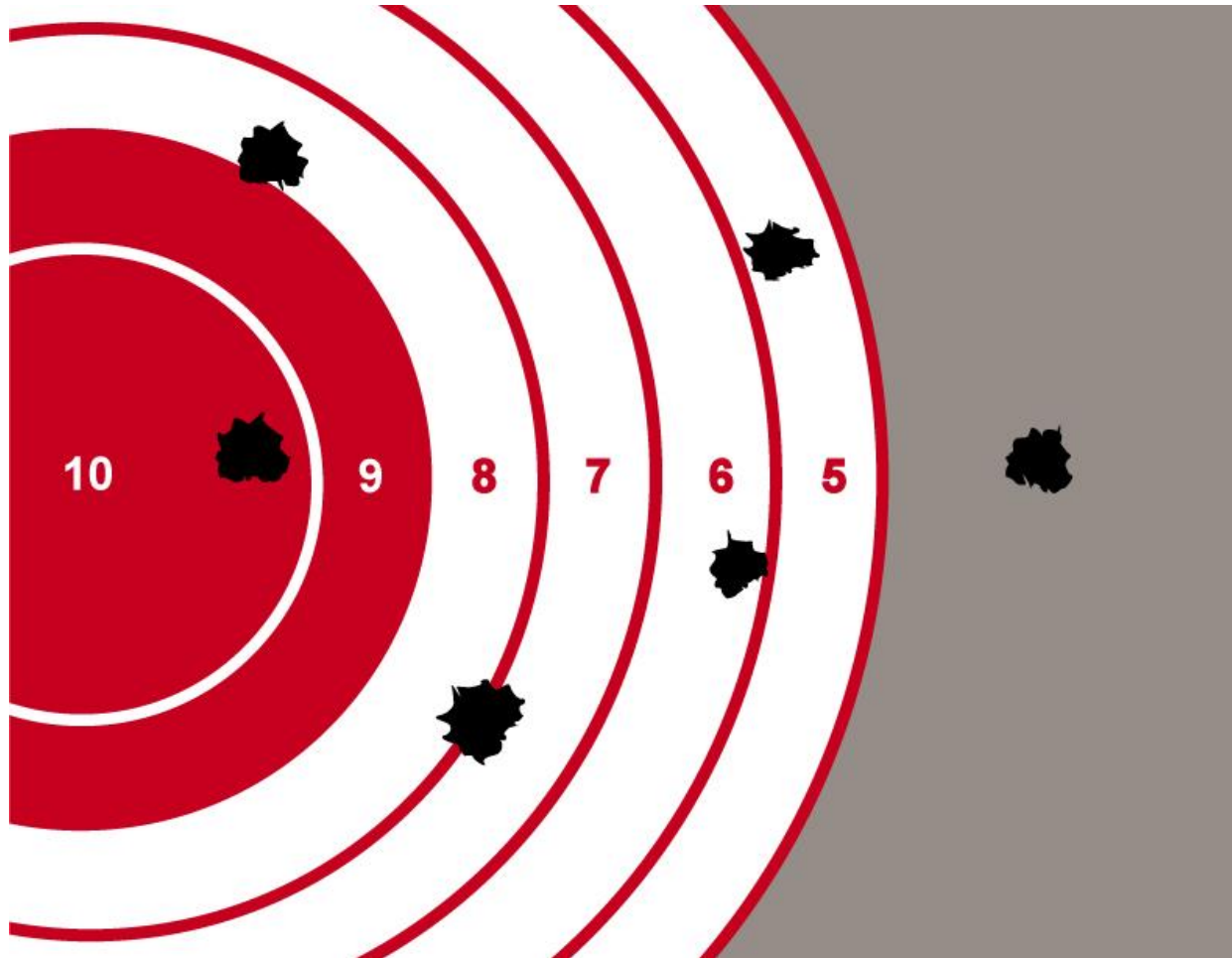


United States Department of Agriculture

National Institute of Food and Agriculture

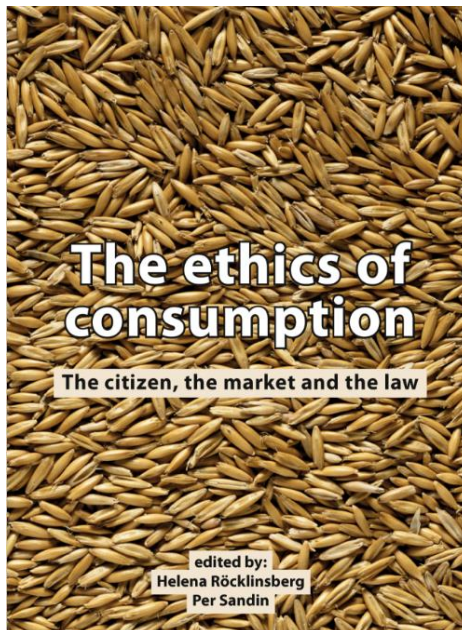
This work was supported by the USDA National Institute of Food and Agriculture, Accession #227441, for NYC-147489 'Leveraging the Locavore Movement: Exploring Family and Community Food Decision-Making'. Any opinions, findings, conclusions, or recommendations expressed in this publication are those of the author(s) and do not necessarily reflect the view of the National Institute of Food and Agriculture (NIFA) or the United States Department of Agriculture(USDA)".

Our study re ‘leveraging the locavore movement to increase hunter recruitment and retention’ – on the paper, not yet “zeroed”



Why Locavores?

Recently the issue of hunting has reemerged in ways that make it ripe for fresh environmental ethical analysis. In the popular press, for instance, numerous new essays and books have appeared, touting hunting as an ethical, even *the* ethical, model of food procurement and consumption. The *New York Times* book review featured a series of memoirs written by ‘a new breed of **hunter**’ who ‘shoots, eats, and tells’ about it (2012). These hunters are not, as the article states, your typical macho, pick-up truck driving set. Rather the new breed of huntin writers ‘have loaded their rifles and shotguns for complicated reasons, including culinary one-upmanship’.

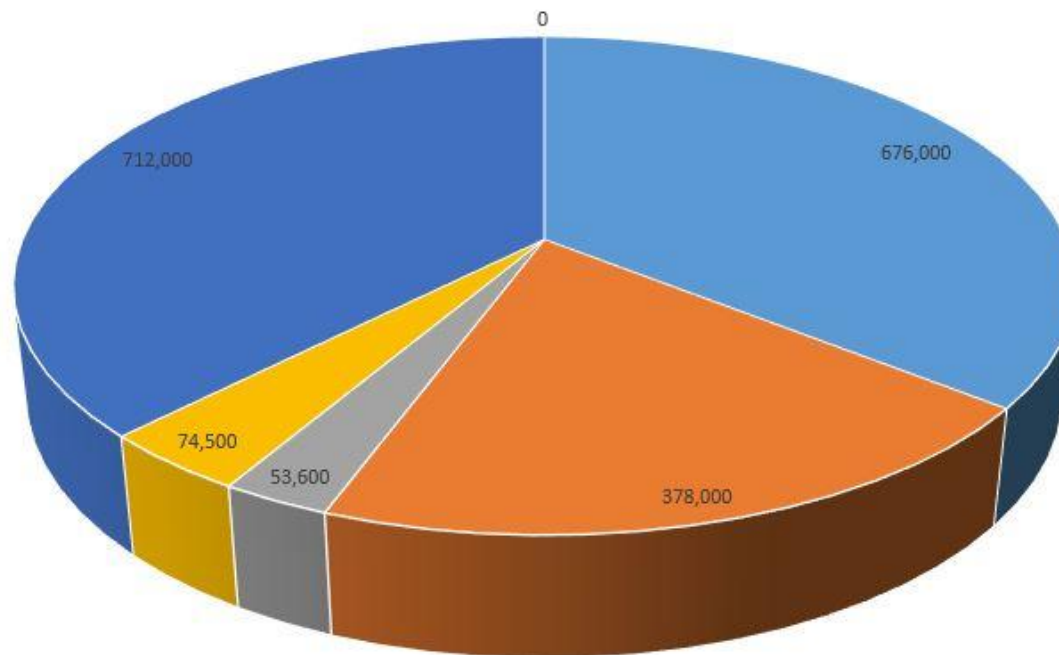


Lauren Poindexter and Cornell president Elizabeth Garret discussing the “Leveraging the Locavore” project.

Not surprisingly, we found quite a large conversation on the World Wide Web regarding the topic of the next generation of hunters and anglers and their relationships with local food movements.

Search Term	Hits
Hipsters hunting fishing	676,000
Hipsters hunting	378,000
Locavore hunting	53,600
Locavore fishing	74,500
new hunters anglers for food	712,000
women hunting for food	86,800,00

Internet Search Hits



• Hipsters hunting fishing • Hipsters hunting • Locavore hunting
• Locavore fishing • new hunters anglers for food • women hunting for food

Title	Source	Date
Wisconsin aims to put more female fingers on the triggers	Wisconsin State Journal	2013
More Women Give Hunting a Shot	National Geographic	2013
The Professional Women Who Hunt, Shoot and Gut Their Dinners	New York Times	2013
ICYMI: All The Cool Girls Go Hunting For Food	Organic Authority	2013
All the Cool Girls Hunt Their Own Food	Jezebel	2013
The Rise of the Hipster Hunters	Sporting Classics	2015
Hipsters Who Hunt: More Liberals are Shooting Their Own Supper	Slate	2012
On Hipsters and Hunting	Field & Stream	2015
Hipster's are Going Hunting	Maclean's	2014
A Profile of a Hipster Hunter, the Next Generation of Conservationists	Outdoorhub	2015
The Changing Culture of Killing for Food	The Texas Observer	2014
Locavore movement takes to deer hunting across US	Yahoo News/Assoc. Press	2014
The Meat-Eater Revolution	Petersen's Hunting	2014
Locavore, Get Your Gun	NY Times	2007
The Hunt to Table Movement	Isthmus	2015

(Pink) new levels of female participation; (Blue) the growing trend of hunting among so-called “hipsters” and “millennials” (undefined herein, intentionally); and (Green) the expanding locavore, food/environment issues driven hunting trend.

What is a “Locavore”?

Locavore = “person motivated to eat food that is grown, raised, produced or harvested locally”



Locavores and Hunting: A Natural Connection?



Extending the Locavore Movement to Wild Fish and Game:
Questions and Implications

Keith G. Tidball,* Moira M. Tidball, and Paul Curtis

Multi-stage Project: Integrating Fish & Game into Local Food Systems in NY

1. Interviews with key stakeholders to determine attitudes toward fish & game consumption and potential barriers
 - Nutrition educators (CCE)
 - Hunting & fishing community
 - Locavores (i.e., “foodies”)
 - Low-income families
2. Nutritional analysis for 3 wildlife species commonly harvested in US & create a standard nutrition label for each species
 - Ruffed grouse, Canada goose, Brook trout (Moira will discuss)

Stage 3: Human Dimensions Survey

3. Web survey examining factors affecting integration of wild fish & game into local food systems in NY

▫ Objectives:

1. Examine locavore consumption of wild fish & game meat
2. Characterize locavore participation in fishing & hunting
3. Identify strategies that might increase locavore participation in fishing & hunting

How will the locavore movement affect hunter and angler recruitment and retention, as well as wildlife conservation?

The NY Locavore Sample

- **Sample lists obtained from various sources:**
 - Edible Finger Lakes (EFL) magazine/newsletter subscribers
 - Finger Lakes Culinary Bounty membership organization
 - Central NY farmers market
 - Cooperative Extension program networks
- **Web survey focused on EFL subscribers emailed out March-April 2014**
- **Total sample size = 1,586**
- **Total survey responses = 523 (33.0% Resp. Rate)**
 - 471 EFL subscribers completed entire survey AND were NY residents



Who are the EFL Subscribers?

- **98.8% motivated to eat local food**
 - **88.9% motivated to eat local meat**

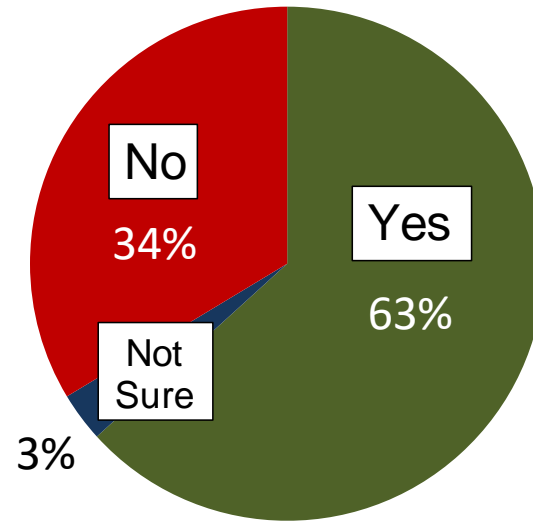
Variable	Population Freq.
Gender (Female)	69.6%
Age (Mean in years)	52.9
Education (College degree)	89.9% (47.2% have grad degree)
Household Income (Mean)	\$131,293 (45.1% ≥ \$100,000)
Race (White only)	95.5%
Grew up in urban/suburban area	63.2%
Live in urban/suburban area	50.3%

Reasons for Eating Local	Mean Rating	% Very Important
Support Local Area (Buying from local regions, Contributing to local economies)	4.60	66.0
Personal Health (Avoiding processed or enhanced food, Eating food of high quality & nutritional value)	4.53	64.1
Nature Conservation (Doing what is good for environment, living sustainably & minimizing impacts)	4.48	59.4
Self-sufficiency (Enjoying satisfaction for providing for myself & my family, Establishing direct connections with food)	3.90	35.5
Social interaction (Developing & maintaining relationships with people who share food interests)	3.33	18.0

N = 471, Scale: 1=Not at all important to 5=Very important

Wild-caught Fish Consumption

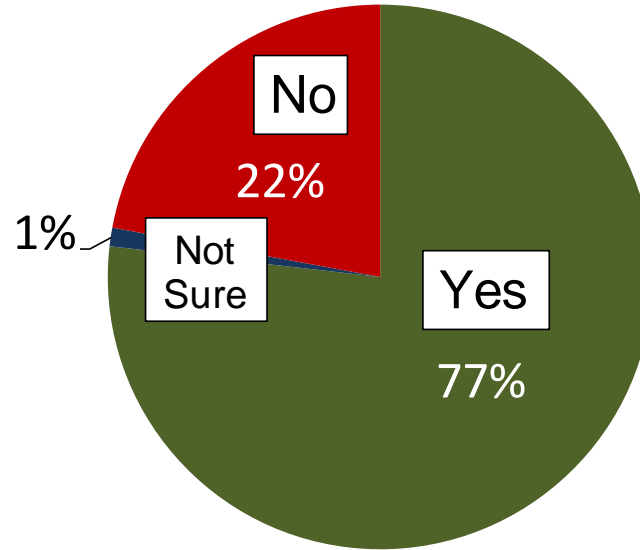
**Have you ever eaten
wild fish caught in
your local area?**



- **52.6% enjoy eating wild-caught fish caught by themselves, friends, or family in local area**
- **36.7% prefer local wild-caught fish to store-bought fish (41.3% have no preference)**
- **24.4% enjoy catching their own fish to eat**

Wild Game Consumption

**Have you ever eaten
wild game harvested
In your local area?**



- **55.2% enjoy eating wild game harvested by themselves, friends, or family in local area**
- **39.9% prefer locally harvested meat to store-bought meat (26.8% have no preference)**
- **13.6% enjoy harvesting their own game to eat**

Of 362 People who Ate Local Game...

Type of Game Eaten	Eaten \geq once per year?	Eaten \geq once per month?	How was game obtained?
Venison (Deer)	84.7%	15.6%	77% family/friends 8% caught myself 10% game dinner 1% other
Waterfowl (Ducks, geese, etc.)	37.3%	0.8%	58% family/friends 8% caught myself 15% game dinner 11% other
Upland game birds (Grouse, pheasants, etc.)	31.8%	0.3%	69% family/friends 9% caught myself 11% game dinner 5% other
Small game mammals (Rabbit, squirrel, etc.)	30.3%	0.3%	64% family/friends 11% caught myself 12% game dinner 10% other

Locavore Fishing Participation

- **72.8%** participated in fishing as a child
- **22.9%** fished in last 12 months

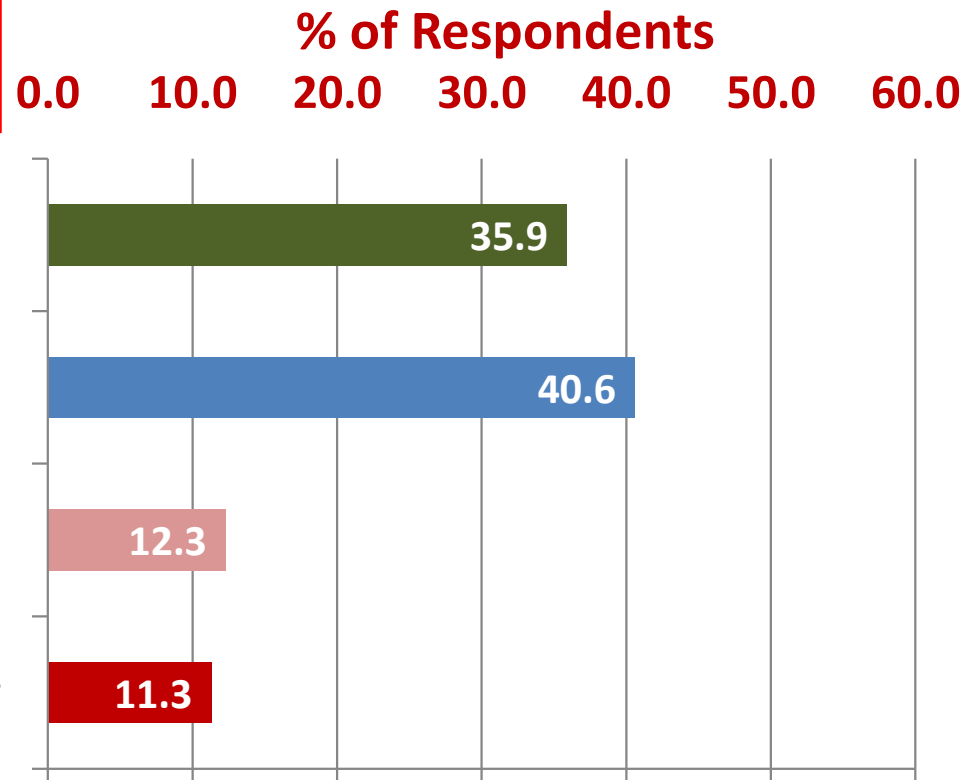
Likelihood of Future Fishing Participation

I have gone fishing in the past, and plan to continue fishing in the future

I have gone fishing in the past, but have since quit fishing

I have never gone fishing, but I would consider it

I would never go fishing



Locavore Hunting Participation

- 11.9% participated in hunting as a child
- 7.4% hunted in last 12 months

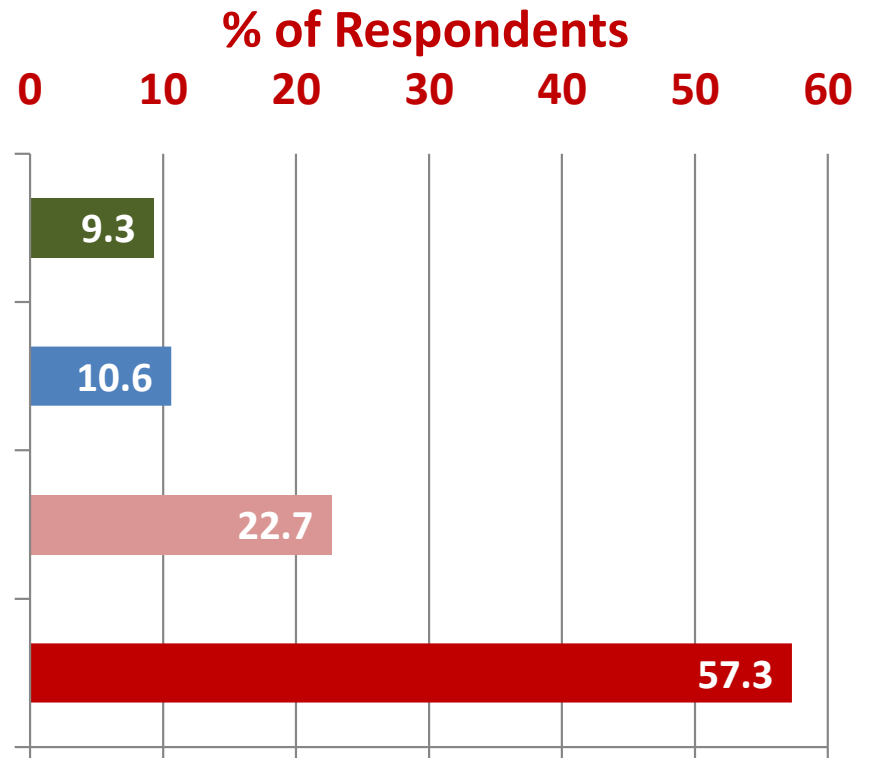
Likelihood of Future Hunting Participation

I have gone hunting in the past, and plan to continue hunting in the future

I have gone hunting in the past, but have since quit hunting

I have never gone hunting but I would consider it

I would never go hunting



Interest in Fishing-related Topics

Interested in Additional Information about... ?

	Mean Rating	% Interested
Conservation benefits of catching & eating wild-caught fish	0.95	74.0
Preparing wild-caught fish (cooking for personal/family consumption)	0.95	69.1
Processing wild-caught fish (safe handling, cleaning & storage)	0.63	49.8
Catching fish (fishing skills, approaches, opportunities)	0.59	48.3
Other topics	0.56	35.2

N = 471, Scale: 0=Not interested, 1=Somewhat interested, 2=Very interested

Interest in Hunting-related Topics

Interested in Additional Information about?...

	Mean Rating	% Interested
Conservation benefits of catching & eating wild game	0.72	58.9
Preparing wild game meat (cooking for personal/family consumption)	0.79	58.7
Processing wild game meat (safe handling, cleaning & storage)	0.46	35.4
Hunting wild game (hunting skills, approaches, opportunities)	0.34	27.2
Other topics	0.50	28.6

N = 471, Scale: 0=Not interested, 1=Somewhat interested, 2=Very interested

Likelihood of Participation Increase with Additional Information

Fishing

Information about...	% Likely or Very Likely to Increase Participation
Preparing wild-caught fish	33.6
Conservation benefits of eating wild fish	31.0
Processing wild-caught fish	27.1
Catching fish	26.3

Hunting

Information about...	% Likely or Very Likely to Increase Participation
Preparing wild game meat	20.3
Processing wild game	16.9
Conservation benefits of eating wild game	16.8
Hunting game	15.8

N = 471, Scale: -2=Very unlikely to increase participation to 2=Very likely to increase participation

Locavore Hunters/Anglers: Myth or Reality...or right trend wrong demographic?

- **Many respondents occasionally eat wild fish & game, BUT not on a regular basis**
- **Few of these individuals harvest their own fish/game for personal consumption**
 - **Most locavores rely on family, friends, and social networks for meat provision**
- **In the last 12 months, fishing (23%) and hunting (7%) participation among respondents slightly higher than national averages** (USFWS, 2012)
 - **Opportunities to increase numbers based on past/future interest in fishing (53%) and hunting (33%)**

Locavore Hunters/Anglers: Myth or Reality?

- **Locavores crave information about fish & game preparation and conservation benefits of catching and eating wild fish/game**
- **Even if locavore movement does not produce more license buying anglers/hunters, it will likely generate indirect benefits through expansions of social world that support wildlife-based recreation & management**
(Larson et al. 2014)
- **Future research should continue to explore key agencies, organizations, and information sources that might help foster links between locavores, local wildlife, and wildlife-dependent recreation and conservation**

Locavore Hunters/Anglers: Key Take-aways to date ...

- Based on our sample, the Locavore movement is not resoundingly a panacea for hunter and angler recruitment and retention (see also Pettis, 2014)
- Yet, our sample looks predominantly like this –



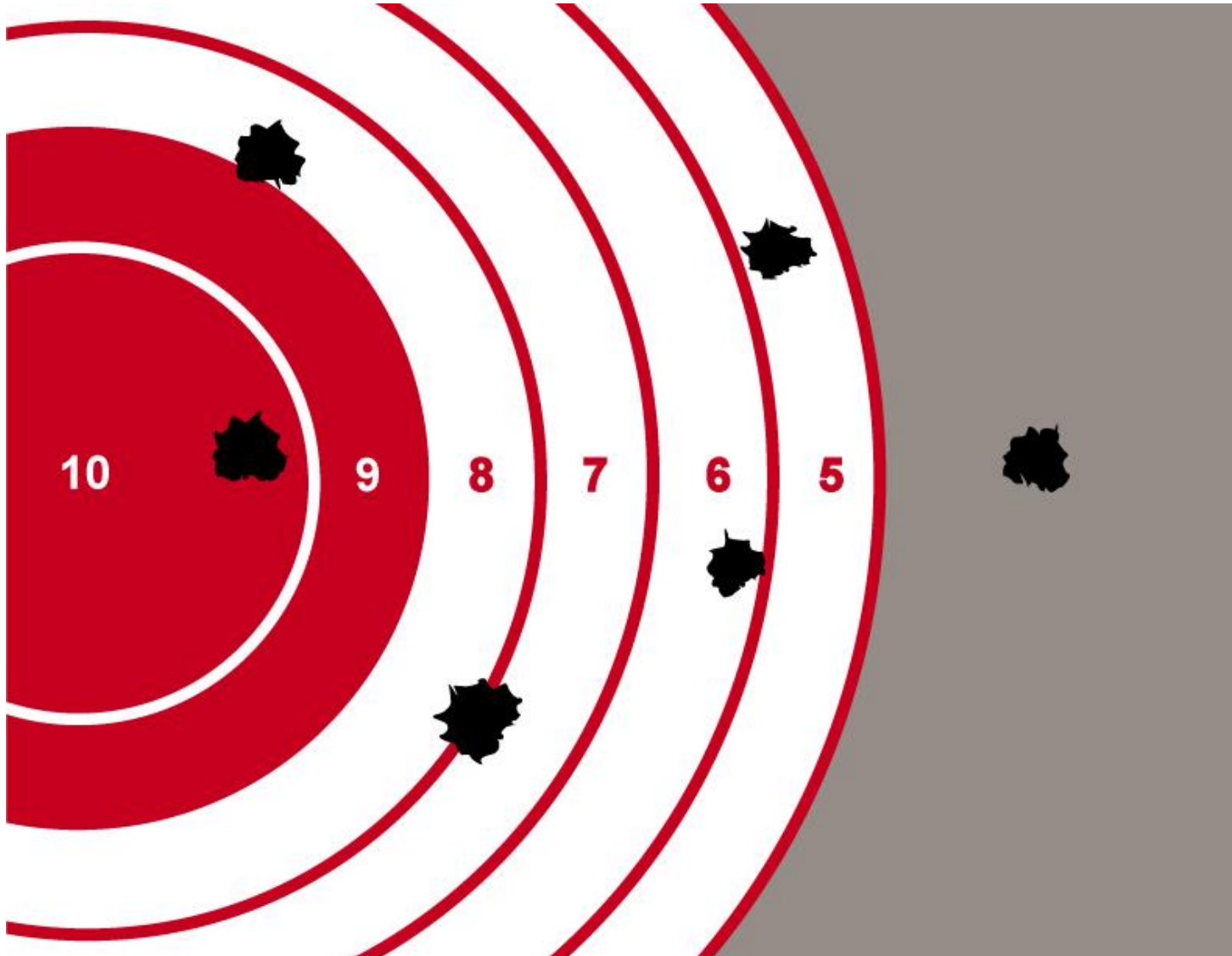
- Do these white, well educated, affluent female 50 somethings represent the locavore movement? Or a small subset of what the Locavore movement is?
- Or is locavorism a part of a larger social movement (like alt foods), encompassing the hipsters, the faux-hermits, millennials, and other demographic segments not found where we looked?

Remember this slide?

What is a “Locavore”?

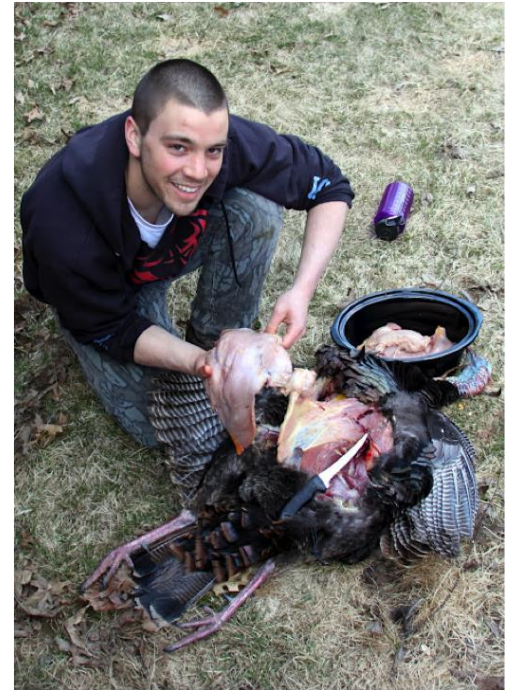
Locavore = “person motivated to eat food that is grown, raised, produced or harvested locally”



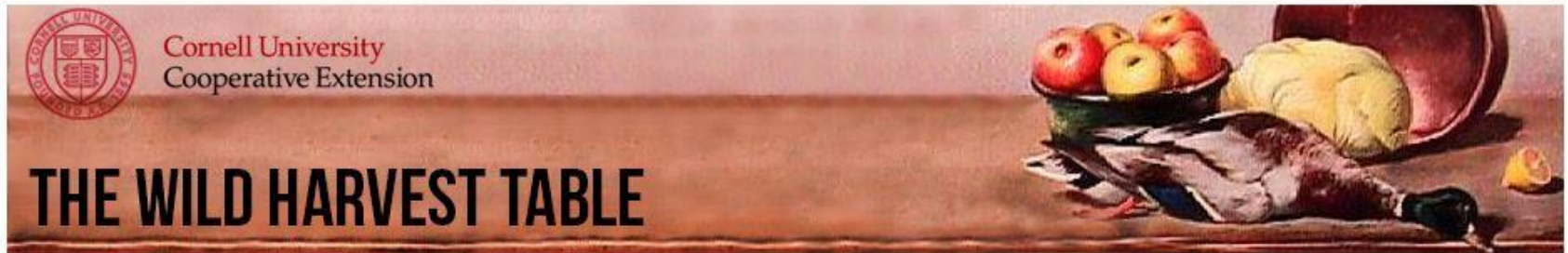


Next Steps

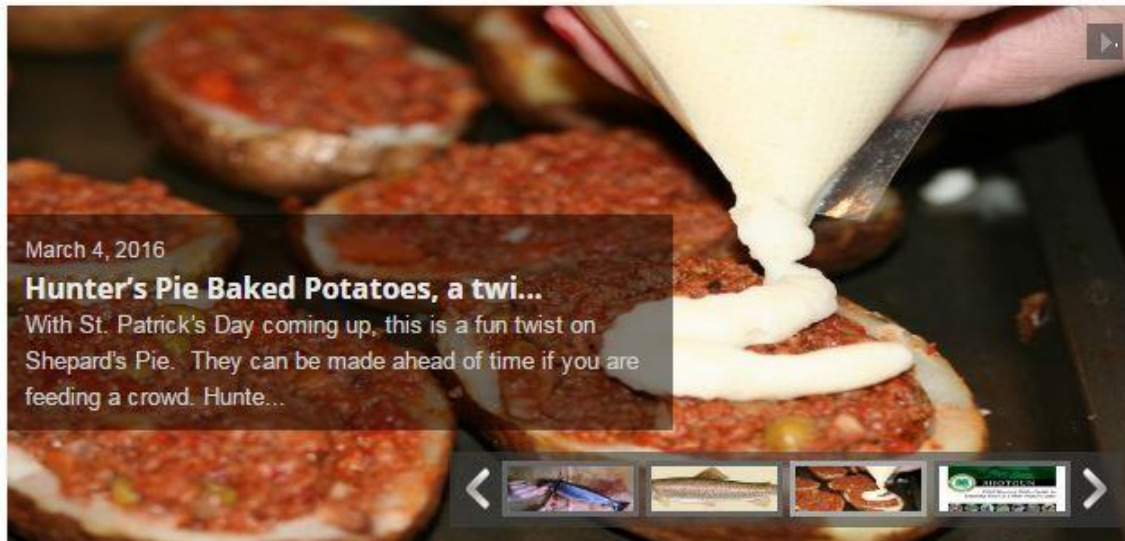
- Identify different locavore subgroups, characterize their prevalence, and assess their fish & game consumption patterns
- Examine how motivating factors and barriers differ among locavore subgroups
- Determine key information needs & best practices for recruiting locavores as angler, hunters, and/or wildlife-dependent recreation advocates



Website Resources:



[HOME](#) [BIG GAME](#) [SMALL GAME](#) [FOWL](#) [FISH](#) [IN THE NEWS](#)



About This Website

The Wild Harvest Table started as a celebration of the culinary bounty represented by wild game and fish in the Finger Lakes region of New York State. Cornell Cooperative Extension Nutrition Educator, Moira Tidball, from Seneca County started the website as a resource for game and fish recipes, nutrition information, and preparation techniques. Her partner, Dr. Keith G. Tidball, Senior Extension Associate in the Department of Natural Resources (DNR) at Cornell, helped with the inception of the website and recognized potential research questions evolving from the project. ... more

Perspectives Regarding Nutrition Info

- 49.9% believe it is important or very important to have **nutrition information available for recipes involving wild fish & game**
- 36.3% believe **easy access to nutrition information would lead to an increase (small or large) in their desire to eat wild fish & game meat**

Nutrition Facts	
Serving Size 172 g	
Amount Per Serving	
Calories 200	Calories from Fat 8
% Daily Value*	
Total Fat 1g	1%
Saturated Fat 0g	1%
Trans Fat	
Cholesterol 0mg	0%
Sodium 7mg	0%
Total Carbohydrate 36g	12%
Dietary Fiber 11g	45%
Sugars 6g	
Protein 13g	
Vitamin A 1%	Vitamin C 1%
Calcium 4%	Iron 24%
*Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs.	
NutritionData.com	

Extension Workshops...

GAME FOR A NEW MEAT?

Workshop offers tips, recipes for cooking venison



Story and photos by
SUSAN CLARK PORTER
sreporter@fittimes.com

WATERLOO — The Finger Lakes is wild-game heaven.

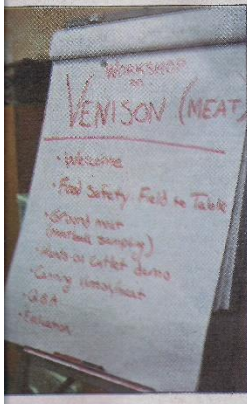
And, more and more people are bringing a taste of that heaven to their tables.

Moira Tidball, nutrition resource educator for Seneca County Cornell Cooperative Extension, focused on processing and cooking venison at last Saturday's workshop. Although the three hunters on hand were experienced in processing and cooking their kills, they were more than happy to hear tips on food safety and sample some of Tidball's venison recipes.

As Hugh Mecum of Waterloo and brothers Joe Emmons of Cicero and John Emmons of Memphis introduced themselves, they tasted venison/cheese pepperoni made by Caver Meats of Clyde. Tidball shared her background as a trained cook who also happens to be a hunter herself; in addition, she and her husband raise grass-fed beef.

Tidball wondered if Mecum and the Emmonses had encountered family resistance to eating the fruits of their hunt — many people have the perception that venison is too tough or “gamey” tasting. Others just can’t get over what Tidball called “the Bambi factor.”

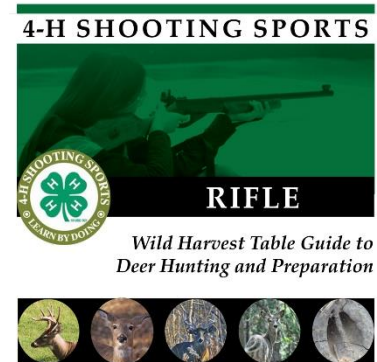
• See GAME on Page 20



At a recent venison workshop put on by the Seneca County Cornell Cooperative Extension, Moira Tidball provided a variety of preparation tips. At left is her agenda for the workshop. Above, these venison “veal” cutlets were soaked overnight in salted water. At top, Tidball fries the cutlets on a griddle as (from left) John Emmons, Hugh Mecum and Joe Emmons watch. The cutlets were breaded in panko bread crumbs and served with a slice of lemon.



Print Resources:





Keith's contact info: kgtidball@cornell.edu
Mo's contact info: mmt65@cornell.edu

The following are extra slides
for Q&A

Alternative Food Attitudes and Support for Hunting

Adam Pettis

Rural Sociology Ph.D. Candidate

Ohio State University



Could the local food movement take us where we want to go?

- Alternative food groups and wild game consumers are two different groups
- Alternative food respondents lower support for...
 - wild game as healthy
 - prefer wild over beef
 - wild as organic
- Net of other factors alternative food factor shows no significant relationship with hunting support or hunting engagement.
- Based on presented data and considering the theory of planned behavior/reasoned action alt food groups do not indicate a primed a group primed to initiate hunting.

Could the local food movement take us where we want to go?

- Urban alt food motivation: social connection to producers not necessarily engagement in activity (passive provisioning).
- Rural alt food (hunters): preaching to the choir.
- Give up on alt foodies?
 - It takes a hunter to make a hunter (RM 1995)
 - Not sure alt food is a better motivation than any other
 - Non-hunting foodies not negative toward hunting
- Target experience of provisioning
 - Over 75% of hunters cook own meat (2008 hunter survey)
 - But only 33% of hunters see game meal as event
 - 52% of British men see cooking as a hobby not a chore
 - British men spend twice as much time cooking than 1960's

Information Sources: Fish & Game

How likely are you to use the following sources to gather information and learn skills related to catching, processing, and/or preparing wild fish/game meat?

% Likely or Very Likely to Use Source for Info about...	Fish	Game	Pooled Mean*
Friends & family	64.1	59.2	0.39
General internet sources (websites, blogs, etc.)	67.6	51.3	0.31
Books & magazines	55.0	47.1	0.06
“Foodie” organizations	43.3	37.3	-0.10
County Extension Offices	34.0	27.1	-0.38
NY Dept. of Environmental Conservation	31.4	25.0	-0.45
Tackle shops & outdoor outfitters	22.0	12.2	-0.82
Local sports clubs & organizations	15.9	13.5	-0.84

N = 471, *Scale: -2=Very unlikely to use, -1=Unlikely to use, 0=Unsure, 1=Likely to use, 2=Very likely to use

Barriers to FISH Consumption

Variable	Mean Rating	% Mod. or Maj. Barrier
Concern about environmental quality where fish was caught	2.73	62.2
Concern about fish quality/safety & personal health	2.60	56.4
Time required to catch & prepare fish	2.32	45.2
Lack skills required to catch fish	2.25	41.5
Lack skills required to process/prepare fish	2.22	37.9
Lack people to fish with & learn from	2.05	33.4
Limited access to water & fishing opportunities	1.90	30.7
Lack info about where to catch/obtain fish	1.92	29.1
Cost of catching fish (travel, equipment)	1.84	25.3
Don't like the taste	1.63	20.6
Don't like the act of killing animal	1.61	18.1
Don't know the nutritional content	1.40	11.4

N = 471, Scale: 1=Not a barrier, 2=Minor barrier, 3=Moderate barrier, 4=Major barrier

Barriers to GAME Consumption		
Variable	Mean Rating	% Mod. or Maj. Barrier
Lack skills required to hunt wild game	2.52	51.8
Lack skills required to process/prepare game meat	2.51	51.0
Time required to catch and prepare game meat	2.34	45.7
Don't like the act of killing animal	2.25	40.2
Concern about game meat quality/safety and personal health	2.15	37.0
Lack people to hunt with and learn from	2.00	33.3
Cost of hunting game (travel, equipment, etc.)	1.97	32.8
Concern about environmental quality where game was harvested	2.03	31.5
Don't like the taste	1.85	27.5
Limited access to hunting land/opportunity	1.82	26.4
Lack information about where to hunt or obtain wild game	1.82	25.7
Don't know the nutritional content	1.48	12.5

N = 471, Scale: 1=Not a barrier, 2=Minor barrier, 3=Moderate barrier, 4=Major barrier

Factors Affecting Fish Consumption

Variable	Mean Importance	% Rating Imp. or Very Imp.
Quality & freshness	4.52	92.1
Taste	4.37	89.9
Connection to local food sources	4.06	81.4
Sustainable use of natural resources	4.06	79.4
Support for wildlife conservation	4.08	79.2
Nutritional or health benefits	3.92	75.9
Where fish was obtained	4.06	74.9
How fish was obtained	3.75	63.5
Demonstrating healthy eating habits for family & friends	3.50	57.6
Sharing knowledge about fish & fish consumption	2.81	32.3
Spending time with others who enjoy eating wild-caught fish	2.51	25.8

N = 356, Scale: 1=Not all important to 5=Very important

Factors Affecting Game Consumption

Variable	Mean Importance	% Rating Imp. or Very Imp.
Quality & freshness	4.38	89.5
Taste	4.19	82.1
Sustainable use of natural resources	3.97	76.4
Support for wildlife conservation	3.98	75.6
Connection to local food sources	3.91	72.4
Where game was obtained	3.78	68.6
How game was obtained	3.83	68.0
Nutritional or health benefits	3.69	63.9
Demonstrating healthy eating habits for family & friends	3.07	43.2
Sharing knowledge about fish & fish consumption	2.38	24.6
Spending time with others who enjoy eating wild-caught fish	2.36	22.5

N = 419, Scale: 1=Not all important to 5=Very important

Motivations to Engage in Fishing/Hunting

	Mean Imp.	% Rating Imp. or Very Imp.
Relaxing & enjoying time outdoors	3.28	52.8
Interacting with & learning about wildlife/nature	3.04	47.2
Spending time outdoors with friends/family	3.01	46.1
Improving my mental health	2.94	44.0
Obtaining my own food from natural sources	2.96	43.2
Improving my physical health	2.93	42.6
Becoming more connected to place where I live	2.92	40.7
Challenging/improving outdoor rec skills	2.87	40.3
Contribute to fish & wildlife management that helps local ecosystems	2.76	35.4
Participate in fish & wildlife management that helps local communities	2.61	31.3
Providing for myself & my family	2.32	23.7
Helping others develop outdoor rec skills	2.30	22.4
Meeting/building friendships with others	1.97	12.9

N = 544, Scale: 1=Not all important to 5=Very important