



The University of Vermont

Vermont Agricultural Resilience Initiative

Thank you for taking the time to fill out this survey. The goal of our project is to work with farmers, agricultural service providers, researchers and community organizations to address the impacts that extreme weather (like strong storms or long droughts) has had, and may have, on Vermont agriculture. How do changes in weather affect you as a farmer? What farming practices are you using and how do you choose them? Your input is extremely valuable to us!

This survey should take about 25 minutes to complete. It focuses on 1) farm characteristics; 2) farming practices; 3) how and why you make farm decisions; 4) nutrient management; 5) information on how weather and climate affect you; and 6) income and education information.

If you are not sure what a term or a practice means, please check the glossary located at the of the survey.

Your responses, name and identifying information will remain confidential.

As a **thank you** for completing this survey, we will donate \$5 to a food or farming organization of your choice.

Section 1: Please tell us about your farm

1. How many years have you been farming? _____

2. Land usage for entire farm (in acres).

Owned

Leased

Pasture	_____	_____
Hay	_____	_____
Row crops/small grains/corn	_____	_____
Wetland	_____	_____
Woodland pastured	_____	_____
Woodland not pastured	_____	_____
Vegetables/herbs	_____	_____
Tree fruits	_____	_____
Small fruits	_____	_____
Fallow	_____	_____
Other (farm buildings, roads, wasteland, etc.)	_____	_____
TOTAL	_____	_____

3. What bodies of water do you have on your property? (check all that apply)

- | | |
|--------------------------------------|-------------------------------------|
| _____ No bodies of water on property | _____ Intermittent streams |
| _____ Rivers | _____ Vernal pools |
| _____ Streams | _____ Ponds |
| _____ Creeks | _____ Other (please describe) _____ |

4. What value added enterprises do you implement on your farm? (check all that apply)

☐ Not applicable
 ☐ Events venue (e.g. weddings)

☐ Community Gatherings
 ☐ Agritourism

☐ Education
 ☐ Other(s)

5. In addition to your farm work, do you work off-farm at any point during the year? (check one)

☐ No
 ☐ Yes
 ☐ Not sure

6. What agricultural goods generate income on your farm?

Product	Percentage of Total Sales	Product	Percentage of Total Sales
Vegetables		Dairy – cows	
Herbs		milkers	
Timber		heifers	
Maple Syrup		calves	
Grains for human consumption		bulls	
Grains for livestock feed		Dairy – sheep	
Hay		Dairy – goat	
Tree Fruit (raw, not processed)		Meat – beef	
Small Fruit (raw, not processed)		Meat – pork	
Value added fruit or vegetable products		Meat – chicken or other fowl	
Bedding plants		Meat – turkey	
Nursery Plants		Meat – Goat	
Christmas trees		Meat – lamb	
Sod		Wool – sheep	
Fluid Milk		Eggs – chickens or other fowl	
Dairy products (other than fluid milk)		Other (please describe)	

7. Management type (check all that apply)

☐ Certified organic

☐ Organic, not certified

☐ Conventional

☐ Other

Section 2: Please tell us about your farming practices

8. Which of the following practices do you currently implement on your farm? (check all that apply)

Practice	Practice
<input type="checkbox"/> Hoop houses/high tunnels	<input type="checkbox"/> Wetlands conservation
<input type="checkbox"/> Green manures (crop residue incorporation into soil)	<input type="checkbox"/> Nutrient management plan
<input type="checkbox"/> Cover crops	<input type="checkbox"/> Stormwater runoff management
<input type="checkbox"/> Insurance (farm policies, crop insurance, product liability)	<input type="checkbox"/> Drainage tile
<input type="checkbox"/> No till	<input type="checkbox"/> Rotational grazing
<input type="checkbox"/> Timely manure incorporation	<input type="checkbox"/> Animal diversity
<input type="checkbox"/> Pest/disease management	<input type="checkbox"/> Animal feed management
<input type="checkbox"/> Invasive species management	<input type="checkbox"/> Agroforestry (silvopasture, alley cropping, forest farming)
<input type="checkbox"/> Irrigation (automated, drip, overhead)	<input type="checkbox"/> Alternative energy (biomass, wind, solar, methane digesters)
<input type="checkbox"/> Conservation buffer strips (riparian buffers, wind breaks, stream corridors, buffer strips, shelter belts, hedgerows)	<input type="checkbox"/> Reduced tillage (zone, strip, keyline plowing, deep tillage)

9. In the past year, have you noticed any on-farm water quality problems that have negatively affected your agricultural operations? (check all that apply)

<input type="checkbox"/> Not applicable	<input type="checkbox"/> Flooding
<input type="checkbox"/> Potability	<input type="checkbox"/> Drought
<input type="checkbox"/> Soil compaction	<input type="checkbox"/> Poor drainage/soil saturation
<input type="checkbox"/> Nutrient loss	<input type="checkbox"/> Other (please describe) _____
<input type="checkbox"/> Erosion	

10. Have you applied minerals or soil-building amendments to your land within the last three years? (check all that apply)

<input type="checkbox"/> Not applicable	<input type="checkbox"/> Compost
<input type="checkbox"/> Wood ash	<input type="checkbox"/> Other (please describe) _____
<input type="checkbox"/> Lime	

11. Do you produce compost on your farm? (check one)

☐ No ☐ Yes ☐ Not sure

12. If you spread compost on your farm, where is it applied? (check all that apply)

<input type="checkbox"/> No compost is spread on my farm	<input type="checkbox"/> Crop land
<input type="checkbox"/> Pastureland	<input type="checkbox"/> Produce land
<input type="checkbox"/> Hay land	<input type="checkbox"/> Not sure
	<input type="checkbox"/> Other (please describe) _____

13. What percentage of your land has received compost at least once in the last three years? _____

Section 3: Please tell us about your use of Conservation Programs and Practices

14. There are many different conservation practices that farmers use.

Suppose an agency offered to pay you to implement conservation practices on your farm for one year. Payments would be offered on a per acre basis. Conservation practices may be offered singly or in groups. Which combination of practices would you be mostly likely to implement?

Consider each of the following combinations and rank them 1-7, with 1 being the one you are most likely to choose, and 7 being the one you are least likely to choose. Use each number only once.

Please refer to the back page for definitions of conservation practices if needed.

RANK (1-7)	CONSERVATION PRACTICES	RANK (1-7)	CONSERVATION PRACTICES
_____	You will be paid \$30/acre to implement conservation tillage.	_____	You will be paid \$170/acre to implement conservation buffers and conservation tillage.
_____	You will be paid \$90/acre to implement cover cropping.	_____	You will be paid \$175/acre to implement cover crops and conservation buffer strips.
_____	You will be paid \$105/acre to implement conservation buffers.	_____	You will be paid \$205/acre to implement cover crops, conservation buffers and conservation tillage.
_____	You will be paid \$120/acre to implement conservation tillage and cover cropping.		

15. Are you currently enrolled in any federal government conservation programs? (check all that apply)

Conservation Program	Mark if applicable	What practices did you implement as a result of participation in this program?	Would you have used these practices without this program? (Y, N, Not sure)
I am not enrolled in any federal government conservation programs.	_____	_____	_____
Wildlife Habitat Incentives Program (WHIP)	_____	_____	_____
Environmental Quality Incentive Program (EQIP)	_____	_____	_____
Conservation Reserve Enhancement Program (CREP)	_____	_____	_____
Farm and Ranch Lands Protection Program (FRPP)	_____	_____	_____
Agricultural Management Assistance (AMA)	_____	_____	_____
Conservation Technical Assistance (CTA)	_____	_____	_____
Participate in programs but can't remember which ones	_____	_____	_____
Current Use Program	_____	_____	_____
Conservation Security Program (CSP)	_____	_____	_____
Other (please describe)	_____	_____	_____

16. What is your top reason for enrolling/participating in the programs? Please rank from 1-5, with 1 being your top reason. Use each number only once.

_____ Not applicable	_____ Help with farm management issues (e.g. manure)
_____ Financial compensation	_____ Benefiting your community and landscape
_____ Conservation/environmental health	_____ Other (please identify) _____

17. Do you have a conservation easement on your property? (check one)

_____ No _____ Yes _____ Not sure

18. If you answered “yes” to question 17, through which organization? _____

Section 4: Please tell us about how weather and climate affect you

19. In your opinion, are there more extreme weather events now than 10 years ago? (check one)

_____ No _____ Yes _____ Not sure

20. Over the past 10 years, damage from heavy rain has:

_____ Decreased a great deal _____ Increased slightly
_____ Decreased slightly _____ Increased a great deal
_____ No change _____ Not sure

21. A heavy rain event will _____. (check one statement below to complete sentence)

_____ Have a strongly net positive impact on my farm _____ Have a negative net impact on my farm
_____ Have a positive net impact on my farm _____ Have a strongly negative net impact on my farm
_____ Have no net impact on my farm _____ Not sure

22. In your opinion, do extreme temperatures occur more often than they did 10 years ago? (check one)

_____ No _____ Yes _____ Not sure

23. Increasing extreme temperature events will _____. (check one statement below to complete sentence)

_____ Have a strongly net positive impact on my farm _____ Have a negative net impact on my farm
_____ Have a positive net impact on my farm _____ Have a strongly negative net impact on my farm
_____ Have no net impact on my farm _____ Not sure

24. In your opinion, is seasonal drought more frequent now than 10 years ago? (check one)

_____ No _____ Yes _____ Not sure

25. A drought event will _____. (check one statement below to complete sentence)

_____ Have a strongly net positive impact on my farm _____ Have a negative net impact on my farm
_____ Have a positive net impact on my farm _____ Have a strongly negative net impact on my farm
_____ Have no net impact on my farm _____ Not sure

26. In your opinion, is the climate changing? (check one)

_____ No (skip to question 28) _____ Yes _____ Not sure

27. If you believe the climate is changing, do you believe this will affect your farm in a negative way? (check one)

_____ No _____ Yes _____ Not sure

28. How often do you make management decisions in response to weather events? (check one)

_____ Daily _____ Monthly _____ Seasonally
_____ Weekly _____ Yearly _____ Not sure

29. How often do you make management decisions in response to a changing climate? (check one)

_____ Daily _____ Monthly _____ Seasonally
 _____ Weekly _____ Yearly _____ Not sure

Section 5: Please tell us about your current and future use of Nutrient Management Plans

At first, the connection between climate change and nutrient management plans may not appear obvious. We believe, however, that there is a strong connection. Thank you for taking the time to fill out the following section.

30. In the past three years, have you implemented a Nutrient Management Plan for reducing phosphorus and/or nitrogen outflows from or inflows to your farm?

A Nutrient Management Plan may be formal (through an agency) or informal (designed and implemented by you.) (check one)

_____ No (skip to question 33) _____ Yes (approved by an Agency) _____ Yes (not approved by an Agency) _____ Not sure

31. For each component of your Nutrient Management Plan, please circle the extent to which you adopted each practice in the past 3 years:

Use the following numbers in the extent of adoption column:

0= no adoption

1=adopted at one quarter of full capacity

2=adopted at half of full capacity

3=adopted at three quarters of full capacity

4=adopted at full capacity

PRACTICE	EXTENT OF ADOPTION (0-4)				
	0	1	2	3	4
Planned crop rotations	0	1	2	3	4
Soil test at least every 3 years	0	1	2	3	4
Strip Cropping	0	1	2	3	4
N, P, & K applications at rates recommended by soil tests	0	1	2	3	4
Buffers at field edges	0	1	2	3	4
Cover cropping	0	1	2	3	4
Reduced tillage (strip, zone, and no)	0	1	2	3	4
Applying manure at recommended rates and times	0	1	2	3	4
Applying fertilizer at recommended rates	0	1	2	3	4
Incorporating manure and fertilizer as quickly as possible after application	0	1	2	3	4
Manure spreading setbacks (from water bodies and private/public wells)	0	1	2	3	4

32. How do you feel (very bad, neutral, or very good) about the adoption of the following (new or existing) nutrient management practices for your farming operation in the next one to three years? Please circle each practice on a scale from “very good” (1) to “very bad” (7):

	Very Good			Neutral		Very Bad		
	1	2	3	4	5	6	7	
Planned crop rotations	1	2	3	4	5	6	7	N/A
Soil test at least once every 3 years	1	2	3	4	5	6	7	N/A
Strip cropping	1	2	3	4	5	6	7	N/A
N,P and K application at rates recommended by soil tests	1	2	3	4	5	6	7	N/A
Buffers at edge of field	1	2	3	4	5	6	7	N/A
Cover cropping	1	2	3	4	5	6	7	N/A
Reduced tillage	1	2	3	4	5	6	7	N/A
Fertilizer application at recommended rates	1	2	3	4	5	6	7	N/A
Incorporating manure and fertilizer as quickly as possible after application	1	2	3	4	5	6	7	N/A
Manure spreading setbacks from water bodies and wells	1	2	3	4	5	6	7	N/A

33. The next question is designed to help us understand who (friends and/or family, neighbors, or other farmers) may most strongly influence your decision to adopt conservation practices.

Under each conservation practice, please tell us how strongly you agree or disagree that friends and family, neighbors, or other farmers think you should adopt that practice, if applicable.

If no one influences your decisions, you can choose “not applicable” (N/A).

PLANNED CROP ROTATIONS

	Strongly agree			Neutral		Strongly disagree		
Your friends and/or family think you should adopt	1	2	3	4	5	6	7	N/A
Your neighbors think you should adopt	1	2	3	4	5	6	7	N/A
Other farmers think you should adopt	1	2	3	4	5	6	7	N/A

SOIL TESTS AT LEAST ONCE EVERY 3 YEARS

	Strongly agree			Neutral		Strongly disagree		
Your friends and/or family think you should adopt	1	2	3	4	5	6	7	N/A
Your neighbors think you should adopt	1	2	3	4	5	6	7	N/A
Other farmers think you should adopt	1	2	3	4	5	6	7	N/A

STRIP CROPPING

	Strongly agree			Neutral		Strongly disagree		
Your friends and/or family think you should adopt	1	2	3	4	5	6	7	N/A
Your neighbors think you should adopt	1	2	3	4	5	6	7	N/A
Other farmers think you should adopt	1	2	3	4	5	6	7	N/A

N,P AND K APPLICATION AT RATES RECOMMENDED BY SOIL TESTS

	Strongly agree			Neutral		Strongly disagree		
Your friends and/or family think you should adopt	1	2	3	4	5	6	7	N/A
Your neighbors think you should adopt	1	2	3	4	5	6	7	N/A
Other farmers think you should adopt	1	2	3	4	5	6	7	N/A

BUFFERS AT THE EDGE OF FIELDS

	Strongly agree			Neutral		Strongly disagree		
Your friends and/or family think you should adopt	1	2	3	4	5	6	7	N/A
Your neighbors think you should adopt	1	2	3	4	5	6	7	N/A
Other farmers think you should adopt	1	2	3	4	5	6	7	N/A

COVER CROPPING

	Strongly agree			Neutral		Strongly disagree		
Your friends and/or family think you should adopt	1	2	3	4	5	6	7	N/A
Your neighbors think you should adopt	1	2	3	4	5	6	7	N/A
Other farmers think you should adopt	1	2	3	4	5	6	7	N/A

REDUCED TILLAGE

	Strongly agree			Neutral		Strongly disagree		
Your friends and/or family think you should adopt	1	2	3	4	5	6	7	N/A
Your neighbors think you should adopt	1	2	3	4	5	6	7	N/A
Other farmers think you should adopt	1	2	3	4	5	6	7	N/A

FERTILIZER APPLICATION AT THE RECOMMENDED RATES

	Strongly agree			Neutral		Strongly disagree		
Your friends and/or family think you should adopt	1	2	3	4	5	6	7	N/A
Your neighbors think you should adopt	1	2	3	4	5	6	7	N/A
Other farmers think you should adopt	1	2	3	4	5	6	7	N/A

INCORPORATING MANURE AND FERTILIZER AS QUICKLY AS POSSIBLE AFTER APPLICATION

	Strongly agree			Neutral		Strongly disagree		
Your friends and/or family think you should adopt	1	2	3	4	5	6	7	N/A
Your neighbors think you should adopt	1	2	3	4	5	6	7	N/A
Other farmers think you should adopt	1	2	3	4	5	6	7	N/A

MANURE SPREADING SETBACKS FROM WATER BODIES AND WELLS

	Strongly agree			Neutral		Strongly disagree		
Your friends and/or family think you should adopt	1	2	3	4	5	6	7	N/A
Your neighbors think you should adopt	1	2	3	4	5	6	7	N/A
Other farmers think you should adopt	1	2	3	4	5	6	7	N/A

34. How confident are you in being able to adopt/continue implementing the following Nutrient Management Practices? Circle each practice on a scale from highly confident (1) to no confidence (7):

	Highly confident					No confidence		
Planned crop rotations	1	2	3	4	5	6	7	N/A
Soil test at least once every 3 years	1	2	3	4	5	6	7	N/A
Strip cropping	1	2	3	4	5	6	7	N/A
N,P and K application at rates recommended by soil tests	1	2	3	4	5	6	7	N/A
Buffers at edge of field	1	2	3	4	5	6	7	N/A
Cover cropping	1	2	3	4	5	6	7	N/A
Reduced tillage	1	2	3	4	5	6	7	N/A
Fertilizer application at recommended rates	1	2	3	4	5	6	7	N/A
Incorporating manure and fertilizer as quickly as possible after application	1	2	3	4	5	6	7	N/A
Manure spreading setbacks from water bodies and wells	1	2	3	4	5	6	7	N/A

35. If you do not already use the following practices, do you intend to adopt them in the next three years? Circle for each practice on a scale from highly likely (1) to highly unlikely (7).

PRACTICE	I already use this practice (y/n)	If No, please fill out this column							
		Highly likely					Unlikely		
Planned crop rotations	_____	1	2	3	4	5	6	7	N/A
Soil test at least every 3 years	_____	1	2	3	4	5	6	7	N/A
Strip Cropping	_____	1	2	3	4	5	6	7	N/A
N, P, & K applications at rates recommended by soil tests	_____	1	2	3	4	5	6	7	N/A
Buffers at field edges	_____	1	2	3	4	5	6	7	N/A
Cover cropping	_____	1	2	3	4	5	6	7	N/A
Reduced tillage	_____	1	2	3	4	5	6	7	N/A
Fertilizer application at recommended rates	_____	1	2	3	4	5	6	7	N/A
Applying fertilizer at recommended rates	_____	1	2	3	4	5	6	7	N/A
Incorporating manure and fertilizer as quickly as possible after application	_____	1	2	3	4	5	6	7	N/A
Manure spreading setbacks from water bodies and wells	_____	1	2	3	4	5	6	7	N/A

Section 6: Please tell us about yourself – your information will be kept confidential

36. What percent of your household income is generated from the farm? _____

37. What was the **gross** income from your farm in 2011? (check one)

_____ \$0-\$9,999	_____ \$100,000-\$124,999
_____ \$10,000 - \$24,999	_____ \$125,000-\$149,999
_____ \$25,000 - \$49,999	_____ \$150,000-\$174,999
_____ \$50,000 - \$74,999	_____ \$175,000-\$199,999
_____ \$75,000-\$99,999	_____ \$200,000+

38. What was the net income for your farm in 2011? (check one)

_____ Less than \$0 (net loss)	_____ \$100,000-\$124,999
_____ \$0-\$9,999	_____ \$125,000-\$149,999
_____ \$10,000 - \$24,999	_____ \$150,000-\$174,999
_____ \$25,000 - \$49,999	_____ \$175,000-\$199,999
_____ \$50,000 - \$74,999	_____ \$200,000+
_____ \$75,000-\$99,999	

39. In what year were you born? (check one)

_____ 1910-1919	_____ 1960-1969
_____ 1920-1929	_____ 1970-1979
_____ 1930-1939	_____ 1980-1989
_____ 1940-1949	_____ 1990-1999
_____ 1950-1959	

40. Highest level of education achieved? (check one)

_____ Some high school	_____ Associate's Degree
_____ High school degree/GED	_____ Bachelor's Degree
_____ Some college	_____ Graduate Degree

41. What is your zipcode? _____

42. In appreciation, we will donate \$5 to an agriculture or food organization of your choice. (check one)

_____ The Vermont Foodbank	_____ Rural Vermont
_____ The Vermont Vegetable and Berry Growers Association	_____ The Vermont Grass Farmers Association
_____ The Vermont Dairy Promotions Council	_____ Other(please name) _____
_____ NOFA Vermont	

43. This survey is phase one of a multiphase project. Phase 2 of this project will focus on farms that adopt certain practices and the in-depth financial and environmental impacts of these practices. Farms that participate in Phase 2 would receive modest financial compensation in addition to valuable information about the impact of farm practices.

Would you be willing to participate in later phases of this research?

_____ Yes (please provide your contact information below)

_____ No

_____ Not sure

If you want to learn more about our project, please provide your contact information. This information will be kept separate from your survey responses.

Name: _____

Address: _____

Email: _____

Thank you for finishing the survey!

If you have concerns or wish to learn more about our work,
contact Kate Westdijk at katherine.westdijk@uvm.edu, or 802-656-0409.

Glossary Definitions

Adaptation:	Planning for the changes that are expected to occur as a result of climate change. <i>(EPA)</i>
Agroforestry:	Agroforestry intentionally combines agriculture and forestry to create integrated and sustainable land-use systems. Agroforestry takes advantage of the interactive benefits from combining trees and shrubs with crops and/or livestock. <i>(USDA National Agroforestry Center)</i>
Animal Feed Management:	Feeding a balanced diet, avoiding overfeeding, and providing abundant supplies of cool, clean, and pure water will help to optimize feed and nutrient use on an animal farm. <i>(UVM Extension, eXtension)</i>
Conservation buffers:	Strips of land maintained in permanent vegetation. These buffers can be used in a systems approach to manage soil, water, nutrients, and pesticides for sustainable agricultural production, while minimizing environmental impact <i>(NRCS)</i>
Conservation tillage:	A number of strategies and techniques for establishing crops in the previous crop's residues, which are purposely left on the soil surface. The principal benefits of conservation tillage are improved water conservation and the reduction of soil erosion. Additional potential benefits include reduced fuel consumption, planting and harvesting flexibility, reduced labor requirements, and improved soil tilth. Two of the most common conservation tillage systems are zone tillage and no-till <i>(ATTRA)</i>
Cover crops:	Crops, including grasses, legumes, and forbs, used to provide vegetative cover for natural resource protection and improvement. <i>(USDA)</i>
Deep zone tillage:	Deep zone tillage uses a 5-inch-wide tilled strip to simultaneously break up plow pans, warm the soil and prepare a seedbed. A deep shank or subsoiler (zone-builder) breaks up the plow-pan while fluted coulters cut and prepare a strip in the killed residue/cover crop, and rolling baskets help break up soil clods to prepare the narrow seedbed. <i>(University of Connecticut)</i>
Drainage tile:	A type of subsurface drainage used in areas with moist soils or the experience standing water. The purpose of subsurface drainage is to lower the water table in the soil. The water table is the level at which the soil is entirely saturated with water. The excess water must be removed to a level below the ground surface where it will not interfere with plant root growth and development. <i>(Iowa State University)</i>
Green Manure:	The term "green manure" refers to cover crops that are tilled into the soil. Green manures are mainly grown to increase soil organic matter (OM). <i>(NRCS)</i>
Hoop Houses/High Tunnels:	A seasonal tunnel system is a polyethylene (plastic) covered structure that is used to cover crops to extend the growing season. They are also known as high tunnels, hoop houses, or cold tunnels. They are used to extend the growing season for crops by approximately two to three weeks on each end of the season by increasing the temperature surrounding the crop and minimizing the heat loss during the night. <i>(NRCS)</i>
Keyline plowing:	Keyline plowing can help alleviate compaction and has been reported to help improve soil quality and build organic matter. The thin, cast shanks (~3/4") and coulter wheels of the Yeomans' Keyline subsoil plow aerate subsoil while causing minimal disruption to the pasture surface. <i>(University of Vermont)</i>
Mitigation:	Mitigation refers to technological change and substitution that reduce energy resource inputs and emissions per unit of output. Specific to climate change, mitigation encompasses implementing policies and practices to reduce greenhouse gas emissions and to enhance sinks (IPCC, 2001).
No till:	No-till cropping systems are based on the concept of keeping the soil covered at all times. They include the use of crop rotations, cover cropping, and planting into a seed slot created by coulters. <i>(NRCS)</i>
Nutrient management plan:	Established plan for managing the amount (rate), source, placement (method of application), and timing of plant nutrients and soil amendments. Benefits include nutrient conservation and improved air, water, and soil quality. This practice applies to all lands where plant nutrients and soil amendments are applied. This standard does not apply to one-time nutrient applications to establish perennial crops. <i>(USDA)</i>
Rotational Grazing:	Exposing animals to limited grazing areas for set periods of time, then providing adequate periods of rest for the grass. The system requires careful management to ensure that animals do not trample or eat grass so close to the ground that its regrowth is hampered. It is sometimes called "prescribed" if grazing systems are set up in advance, paddocks are numbered, and movement of the animals progresses in a prescribed order. <i>(UVM Center for Sustainable Agriculture)</i>
Stormwater runoff management:	Stormwater runoff is generated when precipitation from rain and snowmelt events flows over land or impervious surfaces and does not percolate into the ground. As the runoff flows over the land or impervious surfaces (paved streets, parking lots, and building rooftops), it accumulates debris, chemicals, sediment or other pollutants that could adversely affect water quality if the runoff is discharged untreated. The primary method to control stormwater discharges is the use of best management practices (BMPs). <i>(EPA)</i>
Wetlands conservation:	Protecting wetlands, wildlife habitat, soil, water, and related natural resources in an environmentally beneficial and cost effective manner. <i>(USDA)</i>

