University of Vermont Combined Research

Report of Accomplishments and Resul[ts]

Status Submitted	
Date Submitted	

I. Report Overview

Executive Summary

UVM Extension (EXT) and the Vermont Agricultural Experiment St[ation] of Agriculture and Life Sciences (CALS) integrate higher educa[tion] changing needs of Vermont citizens, communities and organizat[ions] enhance a quality of life characterized by a healthy natural community, resilient youth and a deeply ingrained connection[...]

Our efforts focus on the following crucial areas: agriculture, health, and human and community development. Through multi[...] research and outreach, these areas continue to fall within [...] this and due to the overall size of our planned programs, it [...] of our efforts within the NIFA Global Food Security and Hunger [...] have programs of sufficient size to divide neatly into other [...] majority of our efforts within Global Food even if we could al[l...] priority areas. The Global Food program area encompasses a wi[de...] ranging from water quality improvement, to food safety, to co[...] U.S. agricultural production, to the viability of dairy throu[gh...]

The annual economic impact of Vermont agriculture is over [...] and the state economy, and CALS is committed to supporting i[ts...] education and technical assistance tailored to the specifi[c...] efforts support many industries that produce signature Verm[ont...] artisan cheese, hard cider, wine, artisan beer, and ice cream[...] workshops, site visits, consultations, electronic communica[tions...] community with best management practices[.]

Dairy makes up [__]% of Vermont's agricultural economy. Yet in th[e...]

8QLYHUVLW\ RI 9HUPRQW &RPELQHG 5HVHDUFK DQG ([WHQVLRQ $QQXDO 5HSRUW RI $I

VXSSRUWV ORQJ WHUP WUHH JURZWK KHDOWK DQG D VXVWDLQDEOH IX

)RRG VDIHW\ LQFLGHQWV FRVW WKH 8 6 HFRQRP\ DQ HVWLPDWHG   EL
ORFDOO\ JURZQ SURGXFHG DQG SURFHVVHG IRRGV LV FULWLFDO WR S
:H LQYHV VLJQLILFDQW HIIRUW WR KHOS JURZ DQG PDLQWDLQ D YLDE
DQG SURFHVVRUV RI YHJHWDEOHV PHDW DQG PDQXIDFWXUHG IRRG VX
GHWHFWLRQ RI IRRG ERUQH SDWKRJHQV WR H[SORULQJ GLVHDVH UHVLV
VDIH SURGXFWLRQ WR VDIH VWRUDJH WR VDIH SURFHVVLQJ DQG GLVW
3URJUDP IRU)DFLOLWLHV GHOLYHUHG   WUDLQLQJV PDQ\ ZLWK FHUWL
SURYLGHG GLUHFW FRQVXOWDWLRQV WR EXVLQHVVHV LQ 9HUPRQW F
ERUGHUV E\ OHDGLQJ WKH 1RUWKHDVW &HQWHU WR $GYDQFH)RRG 6DI
VWDWHV DQG WKH 'LVWULFW RI &ROXPELD DLPV WR MRLQWO\ DGYDQFH
VDIHW\ DPRQJ WKH UHJLRQ V VPDOO DQG PHGLXP VL]HG SURGXFH JURZ
IRRG V\VWHP IURP IDUP WR WDEOH WR VXSSRUW D VDIH DQG QXWULW

9HUPRQW V DJULFXOWXUDO ZRUNLQJ ODQGVFDSH V\PEROL]HV D ZD\ RI
FLWL]HQ VWDNHKROGHUV UHFRJQL]H WKH YDOXH RI 9HUPRQW V DJULFX
VRLO DQG KXPDQ KHDOWK UHVRXUFHV :H DGGUHVV WKHVH FULWLFDO
DQG GLVVHPLQDWLQJ HVVHQWLDO FXUUHQW VFLHQFH EDVHG LQIRUPDW
LQFUHDVHV WKHLU NQRZOHGJH DQG VNLOOV DQG HQFRXUDJHV LPSOHPH
VRXQG VXVWDLQDEOH DJULFXOWXUDO SUDFWLFHV

&OHDQ ZDWHU LV HVVHQWLDO IRU WKH KHDOWK RI 9HUPRQW V HFRQRP
WR VRLO DQG FURS PDQDJHPHQW RXU HIIRUWV KDYH D GLUHFW LPSDF
YHJHWDEOH QXWULHQW PDQDJHPHQW FODVVHV UHDFKHG RYHU   RI WK
DQG SRVLWLYHO\ LPSDFWHG RYHU   RI 9HUPRQW ODQG LQ YHJHWDEOH
DSSOLFDWLRQV 2XU QXWULHQW PDQDJHPHQW SODQ FRXUVHV KDYH DOO
LQFUHDVH \LHOGV DQG TXDOLW\ DQG PLQLPL]H QHJDWLYH LPSDFWV RQ
KDYH XVHG WKH &$/6 GHYHORSHG JR&URSŒ ZHE DQG PRELOH DSSOLFDW
SODQV %HFDXVH RI WKLV HGXFDWLRQ DQG JXLGDQFH IDUPHUV DGRSW
SRVLWLYHO\ DIIHFWHG 9HUPRQW V FURSODQG LWV DVVRFLDWHG OLYHV

9HUPRQWHUV QHHG WR EH FRPSHWHQW LQ ERWK OLIH DQG MRE VNLOOV
VWDEOH &$/6 SOD\V D FULWLFDO UROH KHOSLQJ IDPLOLHV DGXOWV D
FRQQHFWLRQV WR HDFK RWKHU DQG WR FRPPXQLWLHV RI SODFH DQG S
PDVWHU\ RI D WUDQVIHUDEOH VNLOO OLNH G\R3 LRQ GS6HG\ GHXQJIL89.9H

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AES provides the opportunity for seed project funding throug[...]

7KH 'LUHFWRU RI $(6 KDV DQ DGYLVRU\ ERDUG ZKLFK PHHWV WZLFH
DGYLFH RQ IXWXUH WUHQGV RI DJULFXOWXUH DQG OLIH VFLHQFHV
'LUHFWRU RI $(6 PHHW UHJXODUO\ DQG VKDUH VWDNHKROGHU LQS

$ $ EULHI VWDWHPHQW RI WKH SURFHVV WKDW ZDV XVHG E\ WKH UH
LQGLYLGXDOV DQG JURXSV VWDNHKROGHUV DQG WR FROOHFW LQSXW I
0HWKRG WR LGHQWLI\ LQGLYLGXDOV DQG JURXSV

” 8VH $GYLVRU\ &RPPLWWHHV
” 8VH ,QWHUQDO)RFXV *URXSV
” 8VH ([WHUQDO)RFXV *URXSV
” 8VH 6XUYH\V

%ULHI H[SODQDWLRQ

890 ([WHQVLRQ FUHDWHV QHZ DQG FRQWLQXHV WR GHYHORS H[LVW
DJHQFLHV LQ DQ HIIRUW WR HQFRXUDJH PHDQLQJIXO FRQYHUVDWLR
FULWLFDO LQ DFFHVVLQJ NH\ LQGLYLGXDOV ZLWK NQRZOHGJH RI FX
RI WKDW HIIRUW DUH PRQWKO\ JURXS PHHWLQJV DPRQJ SDUWQHUV
86'$ 1DWXUDO 5HVRXUFHV &RQVHUYDWLRQ 6HUYLFH 9HUPRQW $JHG
9HUPRQW $VVRFLDWLRQ RI &RQVHUYDWLRQ 'LVWULFWV 86'$ 5XUDO
$JHQF\ UHSUHVHQWDWLYHV IURP DOO WKUHH &RQJUHVVLRQDO RIIL
LQWHUHVWHG 7KLV \HDU 890 ([WHQVLRQ FRQGXFWHG ILYH SUHVHQ
UHOHYDQW WR WKH SURJUDP DUHDV ZH UH ZRUNLQJ LQ

890 ([WHQVLRQ V VWUDWHJLF SODQQLQJ SURFHVV FDOOHG IRU D KL
SDUW RI DQ LQIRUPDWLRQ FROOHFWLQJ SURFHVV 7KHVH SHRSOH L
([WHQVLRQ LQGLYLGXDOV ZKR ZRUN DW 890 EXW ZKR DUH QRW SDU
DUH H[WHUQDO WR 890 7KH 6WUDWHJLF 3ODQQLQJ SURFHVV ZDV OH
RWKHU &$/6 IDFXOW\ DQG VWDII 7KLV &RUH *URXS FRQVLGHUHG PD
LQFOXGLQJ WKRVH UHFRPPHQGHG E\ IDFXOW\ DQG VWDII IURP ([WHO

9HUPRQW V VPDOO WRZQV DQG KLJK OHYHO RI FLWL]HQ LQYROYHPH
9HUPRQWHUV WR XQGHUVWDQG ZKR LV LQ WKHLU FRPPXQLWLHV 3
GHYHORSLQJ IXWXUH SURJUDPV WKURXJK RQ VLWH GDWD FROOHFW

7KH &$/6 $(6 'HDQ 'LUHFWRU ORRNV DW D ZLGH UDQJH RI H[SHUWLV
DGYLVRU\ FRPPLWWHH ZKR KDYH H[SHULHQFH LQ WKH DUHD RI GDLU
ILQDQFH PDUNHWLQJ WR QDPH D IHZ 1HZ UHVHDUFK LQLWLDWLYH
ERDUG UHYLHZV WKH &ROOHJH 6WUDWHJLF 3ODQ DQG SURYLGHV LQ
DQG OLIH VFLHQFHV ,QIRUPDWLRQ UHJDUGLQJ WKH ERDUG FDQ EH
KWWSV ZZZ XYP HGX FDOV ERDUGBDGYLVRUVB

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B. A brief statement of the process that was used by the re
individuals and groups who are stakeholders and to collect
Methods for collecting Stakeholder Input

" Meeting with traditional Stakeholder groups
Survey of traditional Stakeholder groups

planning process were used to create a final Strategic Pl...
mission and identifies potential paths forward that will...
value to UVM Vermonters and various stakeholders in Ver...
four Result Areas around which we will organize our work...

The AES advisory board provides a source of council to the...
help formulate a research direction and aid in the devel...

Brief Explanation of what you learned from your Stakeholders...

UVM Extension's strategic planning process resulted in or...
clarification of our purpose and mission and developments...
will organize our work

Our purpose is to Cultivate healthy communities

Our mission is to Provide and facilitate research educat...
people of Vermont

Our Result Areas

- Result Area Improve the financial environmental a...
agriculture food and forest sectors
- Result Area Increase the resilience of families and...
personal and family well being
- Result Area Engage with communities to support lea...
and diverse voices in decision making
- Result Area Integrate business and conservation w...
environment where Vermonters live work and play

IV Expenditure Summary

Total Actual Formula dollars Allocated prepopulated from C...			
Extension		**Research**	
Smith Lever b c	Extension	Hatch	Evans Allen
No Data Entered	Data Entered	Data Entered	Data Entered

Totaled Actual dollars from Planned Programs Inputs				
	Extension		Research	
	Smith Lever	b c Extension	Hatch	Evans Allen
Actual Formula				
Actual Matching				
Actual All Other				
Total Actual Expended				

Amount of Above Actual Formula Dollars Expended which comes from			
Carryover			

V. Planned Program Table of Cont

S No	PROGRAM NAME
	Global Food Security and Hunger
	Community Development and the Personal and Intellec
	Climate Change
	Sustainable Energy
	Childhood Obesity
	Food Safety

V(A) Planned Program (Summary)

Program

Name of the Planned Program

Global Food Security and Hunger

☑ Reporting on this Program

V(B) Program Knowledge Area(s)

Program Knowledge Areas and Percentage

KA Code	Knowledge Area	Extension		Research	
	Watershed Protection and Management				
	Management and Sustainability of Forest Resources				
	Pollution Prevention and Mitigation				
	Conservation of Biological Diversity				
	Plant Management Systems				
	Basic Plant Biology				
	Integrated Pest Management Systems				

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$FWXDO DPRXQW RI)7(6<V H[SHQGHG WKLV 3URJUDP

<HDU	([WHQVLRQ		5HVHDUFK	
3ODQ				
$FWXDO 3DLG				
$FWXDO 9ROXQWHHU				

$FWXDO GROODUV H[SHQGHG LQ WKLV 3URJUDP LQFOXGHV &DUU\RYH

([WHQVLRQ			5HVHDUFK	
6PLWK /HYHU	E F ([WHQVLRQ	+DWFK		(YDQV $OOHQ
0DWFKLQJ	0DWFKLQJ	0DWFKLQJ		0DWFKLQJ
$OO 2WKHU	$OO 2WKHU	$OO 2WKHU		$OO 2WKHU

9 ' 3ODQQHG 3URJUDP $FWLYLW\

%ULHI GHVFULSWLRQ RI WKH $FWLYLW\

890 ([WHQVLRQ SURMHFWV DQG SURJUDPV OLVWHG LQ EROG IROORZHG

‡ $J %XVLQHVV 0DQDJHPHQW &RQIHUHQFHV FRXUVHV FRQVXOWDW
‡ %HJLQQLQJ)DUPHU ,QLWLDWLYH)RFXV JURXSV OHDUQLQJ FLUFO
SXEOLFDWLRQV
‡ &RPPXQLW\ $FFUHGLWDWLRQ IRU 3URGXFH 6DIHW\ &$36 7HFKQL
SODWIRUP
‡ (QJLQHHULQJ IRU)RRG 3URGXFWLRQ +DUYHV DQG 6WRUDJH &R
‡ ([WHQVLRQ 0DVWHU *DUGHQHU &RXUVH WUDLQ WKH WUDLQHU
‡)DUP 9LDELOLW\ )DUP YLVLWV FRQVXOWDWLRQV
‡)DUPLQJ $OWHUQDWLYHV :RUNVKRS FRQVXOWDWLRQV IDUP YLV
‡)RRG 6DIHW\ 7UDLQLQJV ZHELQDUV FRQVXOWDWLRQV
‡)RUDJH DQG 3DVWXUH 0DQDJHPHQW (GXFDWLRQ &RQIHUHQFH IDU
‡ *UD]LQJ DQG /LYHVWRFN 3URJUDPPLQJ 3DVWXUH ZDONV GHPRQV
FRQVXOWDWLRQV YDULRXV PHGLD
‡ *URXQG :RUN %XLOGLQJ &DSDFLW\ WR 3URYLGH 7UDFWRU (GXFDW
GHYHORSPHQW
‡ /LYHVWRFN 3URGXFWLRQ DQG 3URGXFWV &RQVXOWDWLRQV GLVF
‡ 0DSOH 3URJUDP &RQIHUHQFH ZRUNVKRSV QHZVOHWWHU
‡ 1(&$)6 7KH 1RUWKHDVW &HQWHU WR $GYDQFH)RRG 6DIHW\ &RQ
ZHELQDUV
‡ 1XWULHQW 0DQDJHPHQW 3URJUDP)DUP YLVLWV FRQVXOWDWLRQ
‡ 2UJDQLF *UDLQ 3URMHFW 'HPRQVWUDWLRQV GDWD JDWKHULQJ
‡ 3HV 0DQDJHPHQW (GXFDWLRQ ,QWHJUDWHG 3HV 0DQDJHPHQW

SAFETY PROGRAM PESP TRAINING

- ‡ PRIVATE COMMERCIAL LANDOWNER AND INDUSTRY PROFESSIONAL
- ‡ SOIL HEALTH WORKSHOPS
- ‡ SUSTAINABLE FORESTS CLASSES WORKSHOP SERIES VARIOUS ...
- ‡ VEGETABLE AND BERRY GROWERS CONSULTATIONS FARM VISITS ... WEBSITE
- ‡ VERMONT NEW FARMER NETWORK CONFERENCE NETWORKING CONS...
- ‡ VERMONT TOURISM AND RECREATION RESEARCH CONFERENCE
- ‡ WOMEN'S AGRICULTURAL NETWORK

$JULFXOWXUH)DUP)DPLOLHV
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$JULFXOWXUH *RDW 6KHHS 3URGXFHUV
$JULFXOWXUH *UHHQKRXVH 2UQDPHQWDO *URZHUV
$JULFXOWXUH +RPH *DUGHQHUV
$JULFXOWXUH ,QGXVWU\ 3URIHVVLRQDOV
$JULFXOWXUH /LYHVWRFN SURGXFHUV
$JULFXOWXUH 0DSOH ,QGXVWU\
$JULFXOWXUH 0DSOH 6XJDU 3URGXFHUV
$JULFXOWXUH 1XUVHU\ 2SHUDWRUV
$JULFXOWXUH 2UQDPHQWDOV ,QGXVWU\ 3URIHVVLRQDOV
$JULFXOWXUH 3URGXFH *URZHUV
$JULFXOWXUH 6HUYLFH 3URYLGHUV
&RPPXQLWLHV &LWLHV DQG 7RZQV
&RPPXQLWLHV (GXFDWRUV
&RPPXQLWLHV /RFDO 2IILFLDOV /HDGHUV
&RPPXQLWLHV 1RQ *RYHUQPHQWDO 2UJDQL]DWLRQV
&RPPXQLWLHV 7RZQ +HDOWK 2IILFHUV
&RPPXQLW\ *RYHUQPHQW
&RPPXQLW\ +HDOWK (QWLWLHV
(QYLURQPHQWDO 3URIHVVLRQDOV (QYLURQPHQWDO 0DQDJHUV
(FRORJLVWV
(YROXWLRQDU\ ELRORJLVWV
)RRG ,QGXVWU\ )RRG 6HUYLFH :RUNHUV
)RRG ,QGXVWU\ +DQGOHUV
)RRG ,QGXVWU\ 3URFHVVRUV
)RRG ,QGXVWU\ 3URGXFHUV
)RUHVWU\ *RYHUQPHQW $JHQF\ 3HUVRQQHO
)RUHVWU\ /DQGVFDSH ,QGXVWU\
)RUHVWU\ /RJJHUV
)RUHVWU\ :RRG 3URGXFWV %XVLQHVVHV
)RUHVWU\ :RRGODQG 0DQDJHUV)RUHVWHUV
)RUHVWU\ :RRGODQG 2ZQHUV
3ROLF\PDNHUV
3XEOLF $GXOWV
3XEOLF +RPHRZQHUV
3XEOLF 0DVWHU *DUGHQHUV
3XEOLF 0DVWHU 7UDLQHUV
3XEOLF 0HGLD 2XWOHWV
3XEOLF 3HRSOH ZLWK /LPLWHG 5HVRXUFHV
3XEOLF 6PDOO %XVLQHVV 2ZQHUV (QWUHSUHQHXUV
3XEOLF 9HUPRQW *RYHUQPHQW (OHFWHG 2IILFLDO
3XEOLF <RXWK
7UDLQ WKH 7UDLQHU UHFLSLHQWV DGXOWV
86'$ SHUVRQQHO
67(0 VWXGHQWV

    +RZ ZDV H[WHQVLRQ XVHG"

H[WHQVLRQ H2UJDQLF :HEVLWH 890 ([WHQVLRQ FRQWLQXHG GHYHORSP
SDUW RI WKH H[WHQVLRQ H2UJDQLF SURMHFW H[WHQVLRQ 2UJDQLF 'DL

PHDQLQJIXO KLWV GXULQJ WKLV UHSRUWLQJ SHULRG DFFRUGLQJ WR *R...

H;WHQVLRQ)DUP (QHUJ\ :HEVLWH $ UHVRXUFH EDVH RI SHHU UHYL...
YLGHRV DVN DQ H[SHUW VSHFLDOLVWV HQWHUSULVH EXGJHWV GHFLV...
ELRHQHUJ\ VWDNHKROGHUV DQG WKH SXEOLF WR PDNH FKRLFHV DQG R...
VXSSO\ FKDLQ 7KH 86'$ %LRHQHUJ\ 3URMHFW &HQ86$ XVHV WKH H;WHQ...
WKH FROOHFWLYH NQRZOHGJH RI LWV FROODERUDWRUV DQG DGYLVR...
HLJKW)HGHUDO DQG ,QGXVWU\ 3DUWQHUV H;WHQVLRQ RUJ SURYLGHV...
([WHQVLRQ VSHFLDOLVWV DFURVV WKH 86 DV ZHOO DV SURYLGLQJ DQ...
LQIRUPDWLRQ RQ ELRHQHUJ\ IHHGVWRFN GHYHORSPHQW WKH SURGXF...
DQG HQYLURQPHQWDO SHUIRUPDQFH DQG FRQYHUVLRQ LQWR ELRIXHO...

9 (3ODQQHG 3URJUDP 2XWSXWV

6WDQGDUG RXWSXW PHDVXUHV

	'LUHFW &RQWDFW $GXOWV	,QGLUHFW &RQWDFW $GXOWV	,QGLUHFW &RQWDFW <RXWK	,QGLUHFW &RQWDFW <RXWK
$FWXDO				

1XPEHU RI 3DWHQW $SSOLFDWLRQV 6XEPLWWHG 6WDQGDUG 5HVHDU...
3DWHQW $SSOLFDWLRQV 6XEPLWWHG

<HDU
$FWXDO

3DWHQWV OLVWHG

3XEOLFDWLRQV 6WDQGDUG *HQHUDO 2XWSXW 0HDVXUH

1XPEHU RI 3HHU 5HYLHZHG 3XEOLFDWLRQV

	([WHQVLRQ	5HVHDUFK	7RWDO
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9) 6WDWH 'HILQHG 2XWSXWV

2XWSXW 7DUJHW

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Output

Output Measure

" Conference

Year   Actual

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        < H D U $ F W X D O

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<HDU $FWXDO

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" 3XEOLFDWLRQ PDJD]LQH DUWLFOH

<HDU $FWXDO

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" 3XEOLFDWLRQ PDQXDO
1RW UHSRUWLQJ RQ WKLV 2XWSXW IRU WKLV $QQXDO 5HSRUW

2XWSXW

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" 3XEOLFDWLRQ QHZVOHWWHU

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  ”79 VHJPHQW $FURVV WKH)HQFH $7)

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   1RW UHSRUWLQJ RQ WKLV 2XWSXW IRU WKLV $QQXDO 5HSRUW

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Output

    Output Measure

  "Display or exhibit

        Year   Actual

Output

    Output Measure

  "Trainee volunteer delivered programming

        Year   Actual

Output

    Output Measure

  "Mass Media Event

        Year   Actual

Output

    Output Measure

  "Guest Lectures

        Year   Actual

Output

    Output Measure

  "Invited Paper

        Year   Actual

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  "Fact Sheet

        Year   Actual

9 * 6WDWH 'HILQHG 2XWFRPHV

9 6WDWH 'HILQHG 2XWFRPHV 7DEOH RI

2 1R	287&20(1$0(
	1XPEHU RI IDUPHUV WKDW GHYHORS D QXWULHQW PDQDJHPHQW
	1XPEHU RI 0DVWHU *DUGHQHU SDUWLFLSDQWV ZKR HDUQ FHUWL GLDJQRVWLF VNLOOV ZLWK KRPH JDUGHQHUV \RXWK DQG FRPP

1XPEHU RI IDUPHUV ZKR LPSOHPHQW EHVW DJULFXOWXUDO SUD

	7KH QXPEHU RI 9HUPRQW SROOLQJ SDUWLFLSDQWV XVHG WR KH 9HUPRQW PLJUDQW SRSXODWLRQ
	7KH QXPEHU RI LQGLYLGXDOV DFFHVVLQJ UHOLDEOH FUHGLEOH LQIRUPDWLRQ DFURVV WKH QDWLRQ
	7KH QXPEHU RI OHJLVODWRUV DQG NH\ GHFLVLRQ PDNHUV ZKR ORFDO DJULFXOWXUDO LVVXHV
	7KH QXPEHU RI IDFWRUV WKUHDWHQLQJ IRRG VXSSO\ WKDW DII
	1XPEHU RI VWXGLHV RQ D GDLU\ FRZ V GLHWHU UHJLPH WR GH KHDOWK SURPRWLQJ ELRDFWLYH IDWW\ DFLGV LQ PLON

2XWFRPH

2XWFRPH 0HDVXUHV

1XPEHU RI IDUPHUV WKDW GHYHORS D QXWULHQW PDQDJHPHQW SO

$VVRFLDWHG ,QVWLWXWLRQ 7\SHV

" ([WHQVLRQ
" 5HVHDUFK

D 2XWFRPH 7\SH

&KDQJH LQ $FWLRQ 2XWFRPH 0HDVXUH

E 4XDQWLWDWLYH 2XWFRPH

<HDU $FWXDO

F 4XDOLWDWLYH 2XWFRPH RU ,PSDFW 6WDWHPHQW

,VVXH :KR FDUHV DQG :K\
:KHQ LPSOHPHQWHG FRUUHFWO\ QXWULHQW PDQDJHPHQW DOORZV
\LHOGV DQG TXDOLW\ DQG PLQLPL]H QHJDWLYH LPSDFWV RQ ZDW
([WHQVLRQ V 1XWULHQW 0DQDJHPHQW 3ODQ 103 FRXUVHV WDXJK
SODQV RQ SDSHU 7KH V\VWHP ZRUNHG EXW IDUPHUV UHSRUWHG
PDQDJH DQG XOWLPDWHO\ DQ REVWDFOH WR SODQ LPSOHPHQWDV

:KDW KDV EHHQ GRQH
$Q DOWHUQDWLYH V\VWHP ZDV QHHGHG DQG 890 ([WHQVLRQ $JURQ
FKDOOHQJH %HJLQQLQJ LQ 'DUE\ ZRUNHG FORVHO\ ZLWK GDL
ZHE DQG PRELOH DSSOLFDWLRQ GHVLJQHG IRU LQ ILHOG UHFRUGN
QXWULHQWV)URP IHUWLOL]HU XVHG WR FURSV KDUYHVWHG WKH
QXWULHQW PDQDJHPHQW IRU 9HUPRQW GDLU\ IDUPHUV 2YHU D WL

JR&URS WR ZULWH WKHLU 1XWULHQW 0DQDJHPHQW 3ODQV

5HVXOWV
7KLV \HDU IDUPHUV GHYHORSHG 1XWULHQW 0DQDJHPHQW 3ODQ
FRXUVH 6LQFH   IDUPHUV KDYH DWWHQGHG FRXUVHV DQG X
DFFRUGDQFH ZLWK WKH 5HTXLUHG $JULFXOWXUDO 3UDFWLFHV 5$
    RI JR&URS WUDLQHG IDUPHUV IROORZ WKHLU QXWULHQW PD
HYROYH ZLWK QHZ IHDWXUHV LQFOXGLQJ D PRGXOH IRU YHJHWDE
ZKROH IDUP QXWULHQW EDODQFH WRRO H[SHFWHG WR UHOHDVH W
IDUPHUV DUH OHDUQLQJ KRZ WR HIIHFWLYHO\ PDQDJH QXWULHQW
FRVWV LQFUHDVLQJ \LHOGV DQG PLQLPL]LQJ QHJDWLYH LPSDFW

$VVRFLDWHG .QRZOHGJH $UHDV

.$ &RGHQRZOHGJH $UHD
        3ROOXWLRQ 3UHYHQWLRQ DQG 0LWLJDWLRQ

2XWFRPH 0HDVXUHV

1XPEHU RI 0DVWHU *DUGHQHU SDUWLFLSDQWV ZKR HDUQ FHUWLILF
VNLOOV ZLWK KRPH JDUGHQHUV \RXWK DQG FRPPXQLW\ PHPEHUV

What has been done

UVM Extension held five vegetable nutrient management w... better understand and comply with the new RAPs. The wor... tests, plan nutrients, and reduce erosion potential on... also offered. Ninety participants attended the worksho... providers. Seven of the farmers who attended own or man... CSFO, and must complete a nutrient management plan fo...

Results

Of the workshop participants who completed an evaluat... plans for this coming season that include using inform... management. The vegetable nutrient management classes... commercial vegetable producers, and impacted over of... Vermont. Since many of these fields are already high in ph... will result in immediate reductions in phosphat appli... plans drafted in these workshops has already led to red... farmers money before the season has even begun. The quant... represents this and other agriculture best practices i... efforts

Associated Knowledge Areas

KA Code Knowledge Area

Watershed Protection and Management

Pollution Prevention and Mitigation

Engineering Systems and Equipment

Economics of Agricultural Production and Farm Ma...

Business Management, Finance, and Taxation

Outcome

Outcome Measures

Number of individuals who implement IPM practice s increa... soil

Associated Institution Types

” Extension

a Outcome Type

Change in Knowledge Outcome Measure

b Quantitative Outcome

Year Actual

UVM Extension's Agricultural Business Program and partn...

Analysis assistance. They worked with farms assessing fin...

F   4XDOLWDWLYH 2XWFRPH RU ,PSDFW 6WDWHPHQW

,VVXH :KR FDUHV DQG :K\
)RRG VDIHW\ LQFLGHQW FRVW WKH 8 6 HFRQRP\ DQ HVWLPDWHG
LQWHUQDWLRQDO UHSXWDWLRQ IRU KLJK TXDOLW\ VSHFLDOO\ IRR
OLQHV LQWR ODUJH PDUNHWV WKH\ PXVW SURYLGH VWULQJHQW
IRRG VDIHW\ SUDFWLFHV DUH IROORZHG /HDUQLQJ DQG DGRSWLQ
DQ\ VPDOO EXVLQHVV

:KDW KDV EHHQ GRQH
890 ([WHQVLRQ V)RRG 6DIHW\ 3URJUDP IRU)DFLOLWLHV KHOSV IR
UHTXLUHPHQWV 7KURXJK SDUWQHUVKLSV ZLWK WKH 9HUPRQW 'HS
,QWHUQDWLRQDO +$$&3 +D]DUG $QDO\VLV DQG &ULWLFDO &RQWU
([WHQVLRQ RIIHUV QHFHVVDU\ WUDLQLQJ DQG FHUWLILFDWLRQ IRU
([WHQVLRQ GHOLYHUHG   WUDLQLQJV PDQ\ ZLWK FHUWLILFDWLR
FRQVXOWDWLRQV WR EXVLQHVVHV LQ WHQ 9HUPRQW FRXQWLHV

5HVXOWV
6R IDU   EXVLQHVVHV KDYH PDGH LPSURYHPHQWV WR WKHLU RSH
LPSOHPHQWLQJ IRRG VDIHW\ SODQV 2QH RI WKRVH EXVLQHVVHV L
7RDG)DUP ZDV D VPDOO VFDOH GLYHUVLILHG IDUP PDNLQJ FKHHV
%URRNILHOG 9HUPRQW 7KH EXVLQHVV QRZ VHOOV LWV DZDUG ZL
QDWLRQZLGH)RRG VDIHW\ KDV DOZD\V EHHQ D SULRULW\ EXW W
WKHP WR WKH QH[W OHYHO 7KH\ WRRN DGYDQWDJH RI 890 ([WHQV
)RRG 6DIHW\ 0RGHUQL]DWLRQ $FW)60$ DQG WR JXLGH WKHP DV
,PSURYHPHQWV OLNH WKHVH EHWWHU SRVLWLRQ)DW 7RDG)DUP V
XOWLPDWHO\ VXSSRUWLQJ ORFDO EXVLQHVV DQG 9HUPRQW DJULF

$VVRFLDWHG .QRZOHGJH $UHDV

.$ &RGHQRZOHGJH $UHD
0DUNHWLQJ DQG 'LVWULEXWLRQ 3UDFWLFHV
(QVXUH)RRG 3URGXFWV)UHH RI +DUPIXO &KHPLFDOV ,Q
$JULFXOWXUDO DQG 2WKHU 6RXUFHV
3URWHFW)RRG IURP &RQWDPLQDWLRQ E\ 3DWKRJHQLF 0
1DWXUDOO\ 2FFXUULQJ 7R[LQV
+D]DUGV WR +XPDQ +HDOWK DQG 6DIHW\

2XWFRPH

2XWFRPH 0HDVXUHV

1XPEHU RI JURZHUV ZKR DGRSW QHZ FURS SODQW YDULHW\ LHV UH
VDOHV

1RW 5HSRUWLQJ RQ WKLV 2XWFRPH 0HDVXUH

Outcome

Outcome Measures

Number of individuals who complete a business plan start
planning based on personal values goals and business vi[...]

Associated Institution Types

"   Extension

a   Outcome Type

Change in Action Outcome Measure

b   Quantitative Outcome

Year   Actual

c   Qualitative Outcome or Impact Statement

Issue Who cares and Why

What has been done

Results
Associated Knowledge Areas

KA Codenowledge Area
      Management and Sustainability of Forest Resourc[...]
      Economics of Agricultural Production and Farm Ma[...]

Outcome

Outcome Measures

Number of participants who make an intentional informed[...]
based on feasibility personal goals and values

Associated Institution Types

"   Extension

D   2XWFRPH 7\SH

&KDQJH LQ $FWLRQ 2XWFRPH 0HDVXUH

E   4XDQWLWDWLYH 2XWFRPH

<HDU $FWXDO

F   4XDOLWDWLYH 2XWFRPH RU ,PSDFW 6WDWHPHQW

,VVXH :KR FDUHV DQG :K\
%HJLQQLQJ IDUPHUV OHVV WKDQ   \HDUV LQ RSHUDWLRQ DUH D
HFRQRP\ 1HZ IDUPHUV SURYLGH GLUHFW DFFHVV WR ORFDO IRRG
IDUPVWDQGV DQG DUH LQFUHDVLQJO\ VHUYLFLQJ ZKROHVDOH DQG
IDUPV QRZ FRPSULVH DERXW   RI WKH WRWDO QXPEHU DQG KDY
DERXW   PLOOLRQ RU DERXW   RI 9HUPRQW V DJULFXOWXUDO
WKHVH DJULFXOWXUDO HQWUHSUHQHXUV EXLOG YLDEOH VXVWDL

:KDW KDV EHHQ GRQH
6LQFH   890 ([WHQVLRQ KDV RIIHUHG WKH *URZLQJ 3ODFHV FRX
IDUPHUV OHDUQ WKH QXWV DQG EROWV RI VXFFHVVIXO IDUP EXVL
JRDO VHWWLQJ DQG GHFLVLRQ PDNLQJ ILQDQFLDO DQG EXVLQHVV
FUHGLW DQG PDUNHWLQJ 3DUWLFLSDQWV DFTXLUH EDVLF IDUP
86'$ SURJUDP DQG VHUYLFHV WKDW VXSSRUW QHZ IDUP IRRG DQG
,Q   SHRSOH HQUROOHG LQ WKH RQOLQH *URZLQJ 3ODFHV FR

5HVXOWV
$W WKH FHQWHU RI *URZLQJ 3ODFHV LV GHYHORSPHQW RI D ZKRO
3DUWLFLSDQWV LGHQWLI\ WKHLU FRUH YDOXHV WKH DFWLYLWLHV
KRSH WR DFKLHYH LQ OLIH 7KH SURFHVV HQFRXUDJHV GLVFXVVLR
PDNHUV VR WKDW HYHU\RQH LV RQ WKH VDPH SDJH HDUO\ LQ WKH
EXLOGLQJ D EXVLQHVV DW D VFDOH WKDW VXLWV WKHLU OLIHVW\
SDUWLFLSDQWV LQ   GHYHORSHG D JRDO VWDWHPHQW   R
UHSRUWHG WKDW WKH FRXUVH LQFUHDVHG WKHLU NQRZOHGJH VN
DJULFXOWXUDO EXVLQHVV DQG VHYHUDO LQGLFDWHG WKH\ ZHUH
SODQQLQJ DQG GHFLVLRQ PDNLQJ DFWLYLWLHV

$VVRFLDWHG .QRZOHGJH $UHDV

.$ &RGHQRZOHGJH $UHD
(FRQRPLFV RI $JULFXOWXUDO 3URGXFWLRQ DQG)DUP 0D

Outcome

Outcome Measures

Number passing the USDA GAPs audit to gain or maintain a ma[...

Not Reporting on this Outcome Measure

Outcome

Outcome Measures

Number of growers growing organic crops increase revenues

Associated Institution Types

" Extension
" Research

a Outcome Type

Change in Action Outcome Measure

b Quantitative Outcome

Year   Actual

c Qualitative Outcome or Impact Statement

Issue Who cares and Why

What has been done

Results

Associated Knowledge Areas

KA Codenowledge Area
        Economics of Agricultural Production and Farm Ma[...

 2XWFRPH

    2XWFRPH 0HDVXUHV

    1XPEHU RI IDUPHUV ZKR UHSRUW WKDW DFFHVVLELOLW\ FRVW DQ
    IDFWRUV LQ WKHLU VXFFHVV DQG ZHOOEHLQJ

    1RW 5HSRUWLQJ RQ WKLV 2XWFRPH 0HDVXUH

 2XWFRPH

    2XWFRPH 0HDVXUHV

    1XPEHU RI VPDOO SDUFHO XQGHU DFUHV IRUHVW ODQGRZQHUV
    DFWLYLWLHV WR PLQLPL]H WKH WKUHDW RI IRUHVW IUDJPHQWDWLR

    1RW 5HSRUWLQJ RQ WKLV 2XWFRPH 0HDVXUH

 2XWFRPH

    2XWFRPH 0HDVXUHV

    1XPEHU RI LGHQWLILHG QHZ DQG VXVWDLQDEOH GLVHDVH DQG DUW
    RUJDQLF DJULFXOWXUDO JURZHUV

    1RW 5HSRUWLQJ RQ WKLV 2XWFRPH 0HDVXUH

 2XWFRPH

    2XWFRPH 0HDVXUHV

    1XPEHU RI VWXGLHV WKDW H[DPLQH WKH KHDOWK DQG JURZWK RI V
    RQ VXJDU PDSOH WUHH JURZWK DQG KHDOWK

    $VVRFLDWHG ,QVWLWXWLRQ 7\SHV

    ”   5HVHDUFK

  D   2XWFRPH 7\SH

    &KDQJH LQ .QRZOHGJH 2XWFRPH 0HDVXUH

  E   4XDQWLWDWLYH 2XWFRPH

    <HDU $FWXDO

  F   4XDOLWDWLYH 2XWFRPH RU ,PSDFW 6WDWHPHQW

Issue Who cares and Why

Maple syrup production is based on the premise that tap[...] substantive detrimental effects on the overall health[...] sustainable agricultural activity

What has been done

Research compared the growth rates of trees tapped for[...] those of untapped trees under the same growth conditio[...] growth of tapped and untapped maple trees as part of an[...] sustainable tapping guidelines The objectives is to d[...] production significantly impacts long term tree growth[...] modern high yield sap collection practices impacts tre[...] than tapping with traditional collection practices

Results

For five years the research studied the health and grow[...] with conventional gravity methods and trees tapped wi[...] was measured at the start of the study and at the end o[...] significant differences in tree growth or any health par[...] slight tendency for trees subjected to high yield metho[...] will continue to measure growth over the next five year[...] towards slower growth continues

Associated Knowledge Areas

KA Code Knowledge Area

Plant Management Systems

Outcome

Outcome Measures

The number of Vermont polling participants used to help[...] migrant population

Associated Institution Types

” Research

a Outcome Type

Change in Knowledge Outcome Measure

b Quantitative Outcome

Year Actual

8QLYHUVLW\ RI 9HUPRQW &RPELQHG 5HVHDUFK DQG ([WHQVLRQ $QQXDO 5HSRUW RI $

2XWFRPH 0HDVXUHV

7KH QXPEHU RI OHJLVODWRUV DQG NH\ GHFLVLRQ PDNHUV ZKR LQF

a   Outcome Type

   Change in Knowledge Outcome Measure

b   Quantitative Outcome

   Year   Actual

c   Qualitative Outcome or Impact Statement

Issue Who cares and Why
Efficient allocation of essential resources food energy
single most important task for an economy Demand for es
regardless of price for those who can afford them but no
security for growing populations could have catastrophi

What has been done
The study researches resource allocation mechanisms an
biophysically possible with what is socially psychologic
recent World Bank database research estimate impacts
demands for food across countries and income groups

Results
Factors threatening food supplies include climate chan
environmental policies The goal is to inform policies
efficient allocation of food and other essential resour

Associated Knowledge Areas

   KA Codenowledge Area
       Natural Resource and Environmental Economics
       Nutrition and Hunger in the Population

Outcome

   Outcome Measures

Number of studies on a dairy cow s dietary regime to deter
health promoting bioactive fatty acids in milk

   Associated Institution Types

  ”   Research

D   2XWFRPH 7\SH

&KDQJH LQ .QRZOHGJH 2XWFRPH 0HDVXUH

E   4XDQWLWDWLYH 2XWFRPH

<HDU $FWXDO

F   4XDOLWDWLYH 2XWFRPH RU ,PSDFW 6WDWHPHQW

,VVXH :KR FDUHV DQG :K\
7KH JRDO LV WR LPSURYH WKH KHDOWK RI PLON DQG LWV UHODWH
GLVHDVH GHYHORSPHQW E\ LPSURYLQJ WKH QXWULWLRQDO DQG IX

:KDW KDV EHHQ GRQH
7ZR REMHFWLYHV WKH ILUVW ZDV WR LGHQWLI\ WKH FRPPXQLW\ V
VHFRQG ZDV WR ORRN DW WKH LPSRUWDQFH RI VSHFLILF UXPHQ P
IDWW\ DFLGV

5HVXOWV
7KH VWXG\ VKRZHG WKDW WKHUH LV SRWHQWLDO WR LQFUHDVH WK
SURGXFWV WKURXJK PDQDJHPHQW RI WKH FRZ V GLHW VKLIWLQJ
DOWHUHG IDWW\ DFLGV DYDLODEOH WR WKH PDPPDU\ JODQG IRU L

$VVRFLDWHG .QRZOHGJH $UHDV

.$ &RGHQRZOHGJH $UHD
/F2 10 Tf 0 0 0 rg (.QRZOHGJH $UHD)Tj 0 g ET 1 0 0 1 0 0 1e3 $U2DOHGJH $UHDSU

effective IPM tactics are still being tested, and need to be assessed under field conditions before they are broadly adopted; the costs of some IPM practices are considerably higher than chemical pesticides which reduce adoption by growers; customers in general have limited knowledge of IPM, though they are willing to pay more for IPM produced products when informed of the benefits of this production approach.

Food Safety: Cost of program implementation. Cost of personnel training to understand food safety regulations. A person's perception of risk associated with foods sometimes does not match the science of food safety.

Vegetable and Berry Program: Weather; costs of production inputs such as energy; consumer demand and prices received for products sold; federal, state, and local regulations; availability of farmland and labor; ability to find relevant and timely technical information to support good production and management decisions.

Increased Population: Food and Agriculture Organization (FAO) www.fao.org (2011) estimates that population growth and greater affluence will increase the demand for food by 70% by 2050.

VI. Planned Program (Evaluation Studies)

Evaluation Results

New England Vegetable and Fruit Conference: on post-conference evaluation forms, 165 growers said they had implemented a new practice on their farms that they learned about at a prior New England Vegetable and Fruit Conference.

The Northeast Center to Advance Food Safety (NECAFS): When asked "Has NECAFS helped you improve your food safety training, education and/or outreach?" 36 (92%) respondents answered "Yes." Answers to the follow-up evaluation question "If so, how?" resulted in themes focused on the value of networking and communication, as well as sharing of resources and information. Networking that led to training delivery and direct funding were also cited by respondents, though less frequently.

Nutrient Management Program:

• In FY18, the Champlain Valley Crop, Soil & Pasture Team consulted and provided technical assistance and education to 135 farms who planned and implemented conservation practices that improved water quality including 9,584 acres of Nutrient Management Plans on 97 farms, 2,482 acres of reduced tillage and no-till on 64 farms, 422 acres of new cover crop acres on 32 farms, and implemented 772 acres of improved pasture grazing systems on 71 farms.

• Farmers that attended a Nutrient Management Planning update class reported the following: 98% implemented a practice to improve water quality (buffer, cover crops, no-till, etc) and 78% implemented practices that improved forage yield or quality.

Vermont Tourism and Recreation: University of Vermont Extension and partners organized the third annual Vermont Open Farm Week, with 43 farms open to visitors August 14-20, 2017. UVM Extension took the lead on providing technical assistance to participating farms to ensure best practices with regards to liability, safety, and other

V. A. Planned Program Summary

Program

Name of the Planned Program

Community Development and the Personal and Intellectual De...

☑ Reporting on this Program

V. B. Program Knowledge Areas

Program Knowledge Areas and Percentage

KA Code	Knowledge Area	Extension	Extension	Research	Research
	Urban Forestry				
	Community Resource Planning and Development				
	Human Development and Family Well Being				
	Community Institutions Health and Social Services				
	Youth Development				
	Total				

V. C. Planned Program Inputs

Actual amount of FTE SYs expended this Program

Year	Extension		Research	
Plan				
Actual Paid				
Actual Volunteer				

Actual dollars expended in this Program includes Carryove...

Extension		Research	
Smith Lever	b c Extension	Hatch	Evans Allen
Matching	Matching	Matching	Matching
All Other	All Other	All Other	All Other

9 '   3ODQQHG 3URJUDP $FWLYLW\

%ULHI GHVFULSWLRQ RI WKH $FWLYLW\

+ 3RVLWLYH <RXWK 'HYHORSPHQW SURJUDPPLQJ KHOSV \RXWK DFTXL
'HFLVLRQ 0DNLQJ &ULWLFDO 7KLQNLQJ 3UREOHP 6ROYLQJ &RPPXQLFD
(YHU\GD\ /LYLQJ WR VXFFHHG DV DGXOWV 'HOLYHU\ 0HWKRGV LQFOXGH
H[SHULHQWLDO OHDUQLQJ WHFKQLTXHV IRU LQ VFKRRO DIWHUVFKRRO

6FLHQFH 7HFKQRORJ\ (QJLQHHULQJ $UWV DQG 0DWK 67($0 SURJUDP
HQJLQHHULQJ LVVXHV DIIHFW \RXWKV OLYHV DQG SUHSDUHV D IXWXUH
+ 67($0 SURJUDP SUHVHQWV + ZLWK D QHZ RSSRUWXQLW\ WR FRQQHF
FRPPXQLW\ DQG LQWHJUDWH ZLWK FXUUHQW \RXWK ZRUNIRUFH GHYHORS

&RPPXQLW\ /HDGHUVKLS DVVHVVLQJ DGGUHVVLQJ DQG H[SDQGLQJ FRP
DQG SXEOLF SROLF\ HGXFDWLRQ HIIRUWV LQFOXGLQJ EXLOGLQJ DQG H
DQG FROODERUDWLYHV

&RSLQJ ZLWK 6HSDUDWLRQ DQG 'LYRUFH &23(SDUHQW HGXFDWLRQ IR
GLYRUFH HVWDEOLVKPHQW RI SDUHQWDJH VHSDUDWLRQ GLVVROXWLF
DQG UHVSRQVLELOLWLHV 7KLV LV D FRXUW PDQGDWHG SURJUDP

+LJK 6FKRRO (TXLYDOHQF\ 3URJUDP +(3 KHOSV HOLJLEOH PLJUDQW D
PHPEHUV RI WKHLU LPPHGLDWH IDPLO\ REWDLQ WKH HTXLYDOHQW RI D
HPSOR\PHQW RU SXUVXH SRVWVHFRQGDU\ HGXFDWLRQ +(3 RIIHUV SUR
WR RQOLQH FXUULFXOXP DYDLODEOH LQ ERWK (QJOLVK DQG 6SDQLVK
DQ LQGLYLGXDOL]HG DQG VHOI SDFHG FRXUVH RI VWXG\ LQ SUHSDUDWL
RIIHUHG LQ SDUWQHUVKLS ZLWK RWKHU 1HZ (QJODQG VWDWHV RI 0DLQ

0LJUDQW (GXFDWLRQ 3URJUDP 0(3 SURYLGHV HGXFDWLRQDO VXSSRUW
ZKR UHORFDWH LQGHSHQGHQWO\ RU ZLWK WKHLU IDPLOLHV LQ RUGHU
DJULFXOWXUH 'HOLYHU\ 0HWKRGV 2XWUHDFK WR VFKRROV DJULFXOW
WKURXJKRXW WKH VWDWH

35263(5 >352PRWLQJ 6FKRRO FRPPXQLW\ XQLYHUVLW\ 3DUWQHUVKLSV W
GHOLYHU\ V\VWHP RI HYLGHQFH EDVHG SURJUDPV IRU WKH SXUSRVH RI
VXFK DV ORQJ WHUP UHGXFWLRQV LQ VXEVWDQFH XVH UHGXFHG \RXWK
RQ VFKRRO HQJDJHPHQW DQG DFDGHPLF VXFFHVV ZLWK VLPLODU EHQH
JURXSV

7D[6FKRRO 890 (WHQVLRQ 7D[6FKRRO SURYLGHV WKH ODWHVW LQ GH
DQG 9HUPRQW 7D[ODZ DQG UHJXODWLRQV 7KH WUDLQLQJ FDQ SURYLG
($V $)6636 DQG XS WR   KRXUV IRU &3$V

9HUPRQW 8UEDQ DQG &RPPXQLW\ )RUHVWU\ SURJUDP D MRLQW LQLWLD
([WHQVLRQ DQG WKH 'HSDUWPHQW RI)RUHVWV 3DUNV DQG 5HFUHDWLR
WKH VWHZDUGVKLS RI WKH XUEDQ DQG UXUDO ODQGVFDSHV WR HQKDQ
7KH SURJUDP SURYLGHV HGXFDWLRQDO WHFKQLFDO DQG ILQDQFLDO D
IRUHVWV LQ DQG DURXQG WKH EXLOW ODQGVFDSH DV ZHOO DV)LUVW
PHWKRGV LQFOXGH FODVVHV PHHWLQJV YDULRXV PHGLD DQG FRPPXQ

%ULHI GHVFULSWLRQ RI WKH WDUJHW DXGLHQFH

+ &RPPXQLW\ RU 3URMHFW &OXEV 3DUWLFLSDQWV <RXWK
+ /HDGHUV $GXOW
+ 6SHFLDO ,QWHUHVW RU 6KRUW 7HUP 3URJUDP 3DUWLFLSDQWV <RXW
+ $GXOW 9ROXQWHHUV
+ &DPS %RDUG 'LUHFWRUV
+ <RXWK
+ <RXWK 9ROXQWHHUV
$GXOWV
$JH   <RXQJ $GXOW
$JH $GXOW
$JH   <RXWK
$JULFXOWXUH)DUP)DPLOLHV
$JULFXOWXUH)DUPHUV
$JULFXOWXUH)DUPHUV ZLWK GLVDELOLWLHV
$JULFXOWXUH *RYHUQPHQW $JHQF\ 3HUVRQQHO
$JULFXOWXUH ,QGXVWU\ 3URIHVVLRQDOV
$JULFXOWXUH /LYHVWRFN SURGXFHUV
&RPPXQLWLHV &LWLHV DQG 7RZQV
&RPPXQLWLHV (GXFDWRUV
&RPPXQLWLHV /RFDO 2IILFLDOV /HDGHUV
&RPPXQLWLHV 1RQ *RYHUQPHQWDO 2UJDQL]DWLRQV
&RPPXQLWLHV 6FKRROV
&RPPXQLW\ OHDGHUV DQG FLWL]HQV
&RPPXQLW\ )DPLO\ &RXUW 3HUVRQQHO
([WHQVLRQ)DFXOW\ 6WDII
)RUHVWU\ /DQGVFDSH ,QGXVWU\
)RUHVWU\ :RRGODQG 0DQDJHUV)RUHVWHUV
)XQGHUV
3ROLF\ 0DNHUV /HJLVODWRUV
3XEOLF)DPLOLHV
3XEOLF *HQHUDO
3XEOLF 0LJUDQW ,Q 6FKRRO <RXWK
3XEOLF 0LJUDQW 2XW RI 6FKRRO <RXWK
3XEOLF 1RQSURILW 2UJDQL]DWLRQV
3XEOLF 3DUHQWV
3XEOLF 6PDOO %XVLQHVV 2ZQHUV (QWUHSUHQHXUV
3XEOLF 9ROXQWHHUV
6FKRRO (QULFKPHQW 3URJUDP 3DUWLFLSDQWV <RXWK
7D[3UHSDUHUV
7UDLQ WKH 7UDLQHU UHFLSLHQWV DGXOWV
86'$ SHUVRQQHO

+RZ ZDV H[WHQVLRQ XVHG?

H[WHQVLRQ ZDV QRW XVHG LQ WKLV SURJUDP

9(3ODQQHG 3URJUDP 2XWSXWV

6WDQGDUG RXWSXW PHDVXUHV

 2XWSXW

    2XWSXW 0HDVXUH

  "   + 2YHUQLJKW &DPS

              <HDU $FWXDO

 2XWSXW

    2XWSXW 0HDVXUH

  "   + 6FKRRO (QULFKPHQW

              <HDU $FWXDO

 2XWSXW

    2XWSXW 0HDVXUH

  "   + 6KRUW WHUP VSHFLDO LQWHUHVW

              <HDU $FWXDO

 2XWSXW

    2XWSXW 0HDVXUH

  "&ODVV FRXUVH

              <HDU $FWXDO

 2XWSXW

    2XWSXW 0HDVXUH

  "&RQIHUHQFH

              <HDU $FWXDO

 2XWSXW

    2XWSXW 0HDVXUH

  "&RQVXOWDWLRQV

              <HDU $FWXDO

2XWSXW

2XWSXW 0HDVXUH

"3XEOLFDWLRQ QHZVSDSHU DUWLFOH
1RW UHSRUWLQJ RQ WKLV 2XWSXW IRU WKLV $QQXDO 5HSRUW

2XWSXW

2XWSXW 0HDVXUH

"79 VHJPHQW $FURVV WKH)HQFH $7)

<HDU $FWXDO

2XWSXW

2XWSXW 0HDVXUH

"7UDLQ WKH 7UDLQHU VHVVLRQV
1RW UHSRUWLQJ RQ WKLV 2XWSXW IRU WKLV $QQXDO 5HSRUW

2XWSXW

2XWSXW 0HDVXUH

":RUNVKRS VHULHV

<HDU $FWXDO

2XWSXW

2XWSXW 0HDVXUH

":RUNVKRS VLQJOH VHVVLRQ

<HDU $FWXDO

2XWSXW

2XWSXW 0HDVXUH

"7UDLQHH 'HOLYHUHG 3URJUDPPLQJ

<HDU $FWXDO

2XWSXW

2XWSXW 0HDVXUH

"0DVV 0HGLD EORJ SRVW VRFLDO PHGLD ZHE SDJH LQWHUQHW VL...

9 * 6WDWH 'HILQHG 2XWFRPHV

9 6WDWH 'HILQHG 2XWFRPHV 7DEOH RI	
2 1R	287&20(1$0(
	1XPEHU RI HOLJLEOH PLJUDQW \RXWK HQUROOHG LQ WKH 9HUPR
	1XPEHU RI LQGLYLGXDOV \RXWK DQG YROXQWHHUV LQ VKRUW LQFUHDVH 67($0 UHODWHG NQRZOHGJH DQG RU VNLOOV LQ FRQ
	1XPEHU RI SDUHQWV XQGHUJRLQJ IDPLO\ WUDQVLWLRQ WKURXJ XQGHUVWDQG WKH LPSDFW RI WKHVH FKDQJHV DQG WKHLU EHK
	,QFUHDVH LQ QXPEHU RI \RXWK UHDFKHG ZLWK SRVLWLYH \RXW GHPRQVWUDWH PDVWHU\ IRU WDUJHWHG OLIH VNLOOV LQFOXG UHVRXUFHV FRPPXQLFDWLRQ DFFHSWLQJ GLIIHUHQFHV OHDGL KHDOWK\ OLIHVW\OH FKRLFHV DQG RU VHOI UHVSRQVLELOLW\
	1XPEHU RI YROXQWHHUV DQG VWDII GHPRQVWUDWLQJ QHZ WHFK SURJUDPV WR EHWWHU SUHSDUH \RXWK WR GHYHORS OLIH DQG DQG GHYHORSPHQW
	1XPEHU RI LQGLYLGXDOV ZKR XVH VNLOOV DQG HIIHFWLYHO\ SD LVVXH V H J JUHHQ LQIUDVWUXFWXUH ORFDO OHDGHUVKLS L
	1XPEHU RI SDUWLFLSDQWV ZKR DUH (QJOLVK ODQJXDJH OHDUQH SURILFLHQF\
	1XPEHU RI FRPPXQLWLHV RU FRPPXQLW\ JURXS RUJDQL]DWLRQ SURMHFWV WR LPSURYH RU PLWLJDWH D FRPPXQLW\ LVVXH
	1XPEHU RI PLJUDQW RXW RI VFKRRO \RXWK ZKR JDLQ SURILFLH
	1XPEHU RI PLJUDQW FKLOGUHQ DQG \RXWK ZKR GHPRQVWUDWH FRPSOHWLRQ
	7KH QXPEHU RI LQGLYLGXDO FOLQLFV RU RWKHU KHDOWK HQWL SROLFLHV RU SUDFWLFHV WKDW LQFUHDVH DFFHVV IRU /LPLWH

2XWFRPH

2XWFRPH 0HDVXUHV

1XPEHU RI HOLJLEOH PLJUDQW \RXWK HQUROOHG LQ WKH 9HUPRQW

$VVRFLDWHG ,QVWLWXWLRQ 7\SHV

”   ([WHQVLRQ

D   2XWFRPH 7\SH

&KDQJH LQ $FWLRQ 2XWFRPH 0HDVXUH

E   4XDQWLWDWLYH 2XWFRPH

<HDU $FWXDO

F   4XDOLWDWLYH 2XWFRPH RU ,PSDFW 6WDWHPHQW

,VVXH :KR FDUHV DQG :K\

:KDW KDV EHHQ GRQH

5HVXOWV

$VVRFLDWHG .QRZOHGJH $UHDV

.$ &RGH.QRZOHGJH $UHD
&RPPXQLW\ ,QVWLWXWLRQV +HDOWK DQG 6RFLDO 6HUY
<RXWK 'HYHORSPHQW

2XWFRPH

2XWFRPH 0HDVXUHV

1XPEHU RI LQGLYLGXDOV \RXWK DQG YROXQWHHUV LQ VKRUW WHU
67($0 UHODWHG NQRZOHGJH DQG RU VNLOOV LQ FRQWHQW DQG FDU

$VVRFLDWHG ,QVWLWXWLRQ 7\SHV

”   ([WHQVLRQ

a. Outcome Type

   Change in Knowledge Outcome Measure

b. Quantitative Outcome

   Year   Actual

c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)
American Youth are losing ground in science, technolog[y...]
compared to peers in other nations. Although the Unite[d...]
and military leader, too many young Americans do not hav[e...]
succeed and meet our country's needs in the future. Amer[ican...]
in the global marketplace, are at risk as student inter[est...]
declines at the same time that STEAM literacy and maste[r...]
Roundtable

What has been done
UVM Extension's VTeen H-Science Pathways Cafés are a free[...]
STEAM with local experts in the field. Each two hour café b[...]
through discussion and hands on activities to learn ab[out...]
far reaching a total of [] Vermont teens in grades seve[n...]
follow up labs are planned for the coming year.

Results
According to post program evaluations, [] of café partici[pants...]
From astrobiology to the science of stress, the cafés offe[r...]
possible careers in Vermont. Fifteen year old participa[nts...]
café we can see that there are professions within the st[ress...]
and engaging? The VTeen H-Science Pathways Cafes are onl[y...]
to engage children and youth with STEAM related programm[ing...]
country's current and future needs

Associated Knowledge Areas

   KA Code Knowledge Area
          Youth Development

Outcome

Outcome Measures

Number of parents undergoing family transition through p
understand the impact of these changes and their behavi

Associated Institution Types

" Extension

a Outcome Type

Change in Knowledge Outcome Measure

b Quantitative Outcome

Year   Actual

c Qualitative Outcome or Impact Statement

Issue Who cares and Why

What has been done

Results

Associated Knowledge Areas

KA Code Knowledge Area
Human Development and Family Well Being

Outcome

Outcome Measures

Increase in number of youth reached with positive youth d
mastery for targeted life skills including decision mak
accepting differences leadership useful marketable ski
responsibility

Associated Institution Types

”   ([WHQVLRQ

D 2XWFRPH 7\SH

&KDQJH LQ $FWLRQ 2XWFRPH 0HDVXUH

E 4XDQWLWDWLYH 2XWFRPH

<HDU $FWXDO

F 4XDOLWDWLYH 2XWFRPH RU ,PSDFW 6WDWHPHQW

,VVXH :KR FDUHV DQG :K\

:KDW KDV EHHQ GRQH

5HVXOWV

$VVRFLDWHG .QRZOHGJH $UHDV

.$ &RGHQRZOHGJH $UHD
<RXWK 'HYHORSPHQW

2XWFRPH

2XWFRPH 0HDVXUHV

1XPEHU RI YROXQWHHUV DQG VWDII GHPRQVWUDWLQJ QHZ WHFKQLT|
EHWWHU SUHSDUH \RXWK WR GHYHORS OLIH DQG MRE VNLOOV OHD|

$VVRFLDWHG ,QVWLWXWLRQ 7\SHV

”   ([WHQVLRQ

D 2XWFRPH 7\SH

&KDQJH LQ $FWLRQ 2XWFRPH 0HDVXUH

E 4XDQWLWDWLYH 2XWFRPH

<HDU $FWXDO

F 4XDOLWDWLYH 2XWFRPH RU ,PSDFW 6WDWHPHQW

,VVXH :KR FDUHV DQG :K\

:KDW KDV EHHQ GRQH

5HVXOWV

$VVRFLDWHG .QRZOHGJH $UHDV

.$ &RGHQRZOHGJH $UHD
<RXWK 'HYHORSPHQW

2XWFRPH 0HDVXUHV

Community Institutions Health and Social Serv...
Youth Development

Outcome

Outcome Measures

Number of communities or community group organization s h...
improve or mitigate a community issue

Associated Institution Types

" Extension

a Outcome Type

Change in Action Outcome Measure

b Quantitative Outcome

Year   Actual

c Qualitative Outcome or Impact Statement

Issue Who cares and Why
Vermonters are at greater risk for serious heat relate...
statewide average temperature reaches $°F$ or hotter a...
Vermont Department of Health Since Vermont has had...
when the temperature reached $°F$ or hotter and by mid c...
increase of to hot days per year Vermont residents o...
because many homes and businesses are not well designed...

What has been done
The Vermont Urban Community Forestry Program UCF a par...
Extension and Vermont Department of Forests Parks and R...
Vermont that are most vulnerable to heat related ill...
Energy Saving Trees When planted properly a single matu...
on energy costs The program uses a research based eas...
takes the guesswork out of tree planting to maximize th...

Results
In the program s pilot year   UCF worked in the Vermon...
to give away   free trees to   residents In   UCF sele...
away   trees to   residents By planting trees in stra...
energy saving benefits these trees are expected to save...
energy savings during the first   years The shade and co...

Short concrete immediately relevant lessons improve t...
plant a seed of learning that may sprout into their see...
Education like this creates a stronger more capable wor...

Associated Knowledge Areas

KA CodeKnowledge Area
Human Development and Family Well Being

Outcome

Outcome Measures

Number of migrant children and youth who demonstrate sch...
completion

Associated Institution Types

”   Extension

a   Outcome Type

Change In Action Outcome Measure

b   Quantitative Outcome

Year   Actual

c   Qualitative Outcome or Impact Statement

Issue Who cares and Why

What has been done

Results

Associated Knowledge Areas

KA CodeKnowledge Area
Human Development And Family Well Being
Youth Development

 2XWFRPH

2XWFRPH 0HDVXUHV

7KH QXPEHU RI LQGLYLGXDO FOLQLFV RU RWKHU KHDOWK HQWLWLH
SUDFWLFHV WKDW LQFUHDVH DFFHVV IRU /LPLWHG (QJOLVK 3URILF

$VVRFLDWHG ,QVWLWXWLRQ 7\SHV

"   ([WHQVLRQ

D   2XWFRPH 7\SH

&KDQJH LQ $FWLRQ 2XWFRPH 0HDVXUH

E   4XDQWLWDWLYH 2XWFRPH

<HDU $FWXDO

F   4XDOLWDWLYH 2XWFRPH RU ,PSDFW 6WDWHPHQW

,VVXH   :KR FDUHV DQG :K\

:KDW KDV EHHQ GRQH

5HVXOWV

$VVRFLDWHG .QRZOHGJH $UHDV

.$ &RGHQRZOHGJH $UHD
&RPPXQLW\ ,QVWLWXWLRQV +HDOWK DQG 6RFLDO 6HUY

9 +   3ODQQHG 3URJUDP ([WHUQDO)DFWRUV

([WHUQDO IDFWRUV ZKLFK DIIHFWHG RXWFRPHV
"Natural Disasters (drought, weather extremes, etc.)

"Economy

"Appropriations changes

"Public Policy changes

"Government Regulations

"

Transportation is often an issue for rural youth to participate in out of school hours programming.

9 $ 3ODQQHG 3URJUDP 6XPPDU\

3URJUDP

1DPH RI WKH 3ODQQHG 3URJUDP

&OLPDWH &KDQJH

☑ 5HSRUWLQJ RQ WKLV 3URJUDP

9 %   3URJUDP .QRZOHGJH $UHD V

3URJUDP .QRZOHGJH $UHDV DQG 3HUFHQWDJH

.$
&RGH.$

([WHQVLRQ			5HVHDUFK	
6PLWK /HYHU	E	F ([WHQVLRQ	+DWFK	(YDQV $OOHQ
0DWFKLQJ	0DWFKLQJ	0DWFKLQJ	0DWFKLQJ	
$OO 2WKHU	$OO 2WKHU	$OO 2WKHU	$OO 2WKHU	

9 ' 3ODQQHG 3URJUDP $FWLYLW\

%ULHI GHVFULSWLRQ RI WKH $FWLYLW\

,QYDVLYH 3HVWV PRQLWRULQJ RI WKH $VLDQ /RQJ +RUQHG %HHWOH D...
DQG SUHYHQWLRQ LI SRVVLEOH PLWLJDWLRQ WKURXJK ZRUN ZLWK ELR...
ZLWK WKH 86 IRUHVW VHUYLFH 86 $JULFXOWXUDO 5HVHDUFK 6HUYLFH ...

0DSOH 3URGXFWLRQ UHVHDUFK DQG H[WHQVLRQ HIIRUWV DW WKH 3UR...
WKH VXJDULQJ VHDVRQ PD[L 5R0W 5 4WX& Hm 0 0 0 rg ()Tj 0 g 1 0 0 1 70 452.46 420.5 VLDQ /...

 2XWSXW

    2XWSXW 0HDVXUH

   ” 6FLHQWLILF 0HHWLQJ V

              <HDU $FWXDO

 2XWSXW

    2XWSXW 0HDVXUH

   ” 3UHVHQWDWLRQV

              <HDU $FWXDO

 2XWSXW

    2XWSXW 0HDVXUH

   ” &RQIHUHQFHV

              <HDU $FWXDO

 2XWSXW

    2XWSXW 0HDVXUH

   ” &RXUVH

              <HDU $FWXDO

 2XWSXW

    2XWSXW 0HDVXUH

   ” :RUNVKRS   VLQJOH VHVVLRQ

              <HDU $FWXDO

9 * 6WDWH 'HILQHG 2XWFRPHV

9 6WDWH 'HILQHG 2XWFRPHV 7DEOH RI	

2 1R	287&20(1$0(
	1XPEHU RI FOLPDWH FKDQJH PDQDJHPHQW SUDFWLFHV LGHQWLI| FOLPDWH FKDQJH DGDSWDWLRQ
	1XPEHU RI HFRORJLFDO DQG HYROXWLRQDU\ IDFWRUV LGHQWLI| 9HUPRQW
	1XPEHU RI ODQGRZQHUV ZKR DFWLYHO\ HQJDJH ZLWK WKHLU OD| ZRRGODQGV
	1XPEHU HQWHUSULVHV ZKR LPSOHPHQW UHFRPPHQGHG HQYLUR| H[FHHG WHUPV WR KDYH YHKLFOHV FHUWLILHG WKURXJK WKH H|
	1XPEHU RI QHZ DQG FRQWLQXLQJ HQWHUSULVH RUJDQL]DWLRQV| IUHH WKHPHG FHUWLILFDWLRQ FRXUVHV WR HPSOR\HHV DQG U| VDYLQJ IXHO PRQH\ DQG UHGXFLQJ HQYLURQPHQWDO LPSDFWV|
	1XPEHU RI LQGLYLGXDOV ZKR LPSOHPHQW RQH RU PRUH EHVW S| FOLPDWH FKDQJH IRU IDUP IRUHVW RU JDUGHQ
	1XPEHU RI GULYHUV FRPSOHWLQJ D SHUVRQDO SOHGJH WR HPE|
	1XPEHU RI H5DWLQJ FHUWLILHG YHKLFOHV
	1XPEHU RI VRFLDO PHGLXP SODWIRUP HQJDJHPHQWV WKDW KDY| ZHDWKHU HYHQWV
	1XPEHU RI 7UHDWPHQW 2SWLRQV IRU 7DUJHWLQJ :DWHU 3ROOXW|

 2XWFRPH

   2XWFRPH 0HDVXUHV

   1XPEHU RI FOLPDWH FKDQJH PDQDJHPHQW SUDFWLFHV LGHQWLILHG
   FKDQJH DGDSWDWLRQ

   1RW 5HSRUWLQJ RQ WKLV 2XWFRPH 0HDVXUH

 2XWFRPH

   2XWFRPH 0HDVXUHV

   1XPEHU RI HFRORJLFDO DQG HYROXWLRQDU\ IDFWRUV LGHQWLILHG

   1RW 5HSRUWLQJ RQ WKLV 2XWFRPH 0HDVXUH

 2XWFRPH

   2XWFRPH 0HDVXUHV

   1XPEHU RI ODQGRZQHUV ZKR DFWLYHO\ HQJDJH ZLWK WKHLU ODQG

   1RW 5HSRUWLQJ RQ WKLV 2XWFRPH 0HDVXUH

 2XWFRPH

   2XWFRPH 0HDVXUHV

   1XPEHU HQWHUSULVHV ZKR LPSOHPHQW UHFRPPHQGHG HQYLURQPH
   WHUPV WR KDYH YHKLFOHV FHUWLILHG WKURXJK WKH H5DWLQJ SUR
   $VVRFLDWHG ,QVWLWXWLRQ 7\SHV

   ”   ([WHQVLRQ

  D 2XWFRPH 7\SH
    &KDQJH LQ $FWLRQ 2XWFRPH 0HDVXUH

  E 4XDQWLWDWLYH 2XWFRPH
    <HDU $FWXDO

  F 4XDOLWDWLYH 2XWFRPH RU ,PSDFW 6WDWHPHQW
    ,VVXH :KR FDUHV DQG :K\

:KDW KDV EHHQ GRQH

5HVXOWV

$VVRFLDWHG .QRZOHGJH $UHDV

.$ &RGHQRZOHGJH $UHD
:HDWKHU DQG &OLPDWH
3ROOXWLRQ 3UHYHQWLRQ DQG 0LWLJDWLRQ

2XWFRPH 0HDVXUHV

1XPEHU RI QHZ DQG FRQWLQXLQJ HQWHUSULVH RUJDQL]DWLRQV RI
WKHPHG FHUWLILFD5N45R6QmFR3X1VhHV0WgR"HQ7$CGR0H1H0 cPnQ,GdUH0D1W1H5R6.9

 2XWFRPH

    2XWFRPH 0HDVXUHV

    1XPEHU RI LQGLYLGXDOV ZKR LPSOHPHQW RQH RU PRUH EHVW SUDF
    FKDQJH IRU IDUP IRUHV RU JDUGHQ

    1RW 5HSRUWLQJ RQ WKLV 2XWFRPH 0HDVXUH

 2XWFRPH

    2XWFRPH 0HDVXUHV

    1XPEHU RI GULYHUV FRPSOHWLQJ D SHUVRQDO SOHGJH WR HPEUDF

    $VVRFLDWHG ,QVWLWXWLRQ 7\SHV

    ”   ([WHQVLRQ

    D   2XWFRPH 7\SH

       &KDQJH LQ $FWLRQ 2XWFRPH 0HDVXUH

    E   4XDQWLWDWLYH 2XWFRPH

       <HDU $FWXDO

    F   4XDOLWDWLYH 2XWFRPH RU ,PSDFW 6WDWHPHQW

       ,VVXH :KR FDUHV DQG :K\

       :KDW KDV EHHQ GRQH

       5HVXOWV

      $VVRFLDWHG .QRZOHGJH $UHDV

        .$ &RGHQRZOHGJH $UHD
              3ROOXWLRQ 3UHYHQWLRQ DQG 0LWLJDWLRQ
              %XVLQHVV 0DQDJHPHQW)LQDQFH DQG 7D[DWLRQ

2XWFRPH

2XWFRPH 0HDVXUHV

1XPEHU RI H5DWLQJ FHUWLILHG YHKLFOHV

$VVRFLDWHG ,QVWLWXWLRQ 7\SHV

" ([WHQVLRQ

D 2XWFRPH 7\SH

&KDQJH LQ $FWLRQ 2XWFRPH 0HDVXUH

E 4XDQWLWDWLYH 2XWFRPH

<HDU $FWXDO

F 4XDOLWDWLYH 2XWFRPH RU ,PSDFW 6WDWHPHQW

,VVXH :KR FDUHV DQG :K\

:KDW KDV EHHQ GRQH

5HVXOWV

$VVRFLDWHG .QRZOHGJH $UHDV

a. Outcome Type

Change In Knowledge Outcome Measure

b. Quantitative Outcome

Year   Actual

c. Qualitative Outcome or Impact Statement

Issue Who cares and Why
Natural disasters are becoming increasingly expensive a...
exposing communities to greater risks Disaster prepara...
change resilience and social media is being used more a...
and after disasters While there is a growing body of res...
people use social media surrounding disaster events mo...
disaster case study

What has been done
In this study five of the costliest disasters were analy...
 Hurricanes Irene and Sandy two sets of tornado outbrea...
Vermont s Tropical Storm Irene was part of the storms an...
frequency of both generic and specific food security and q...
network size and Twitter activity during disasters

Results
 Research found differences in tweet volume for keywords...
people using Twitter more frequently in preparation for...
information for tornado and flooding events Further i...
general disaster and specific preparation and recovery...
with average sized networks are most likely to share inf...
most cases do so more frequently than normal This sugg...
form of social contagion is being engaged in which average...
influentials are key to communication

Associated Knowledge Areas

    KA Code Knowledge Area
            Management and Sustainability of Forest Resourc...
            Nutrition and Hunger in the Population

Outcome

Outcome Measures

Number of Treatment Options for Targeting Water Pollutio...

Associated Institution Types

" Research

a Outcome Type

Change in Knowledge Outcome Measure

b Quantitative Outcome

Year Actual

c Qualitative Outcome or Impact Statement

Issue Who cares and Why
Stormwater runoff from paved and dirt roads rooftops p...
operations occur adversely impacts the water quality of...

What has been done
Research was performed on soil media and plant combinat...
treatment using bioretention cells layers of stone...
of stone and with switchgrass and layers of stone and...
phosphorus compost amendment placed at the roots of ee...
sampled during storm events to compare the quality of w...
the performance of three different bioretention cells

Results
Preliminary results indicate that the planted bioretent...
runoff than the unplanted cell For cell although pl...
compost in the first growing season plant survival was...
growing season biomass was nearly identical in the two...
without low phosphorus compost

Associated Knowledge Areas

KA Code Knowledge Area
Pollution Prevention and Mitigation

9 + 3ODQQHG 3URJUDP ([WHUQDO)DFWRUV

([WHUQDO IDFWRUV ZKLFK DIIHFWHG RXWFRPHV
" Natural Disasters (drought, weather extremes, etc.)

" Economy

" Appropriations changes

" Public Policy changes

" Government Regulations

%ULHI ([SODQDWLRQ

The political climate: changing policy and budget priorities may have an impact on public attitudes toward a program focused on increasing energy efficiency, reducing fossil fuel consumption, and re4uci5g the2E8pe26aCae2mp4sSACCdoH0 1 0 0 cm BT 1 0 0 5on of the Vermont Climate Action C454.41on of th

July 20, 2017 the governor announced the creation of the Vermont Climate Action Commission (VSAC) to provide recommec1ducing fossil fuel consumption, and

V A   Planned Program   Summary

Program

Name of the Planned Program

Sustainable Energy

☑ Reporting on this Program

V B   Program Knowledge Area s

Program Knowledge Areas and Percentage

KA Code	Knowledge Area	Extension	Extension	Research	Research
	Basic Plant Biology				
	Economics of Agricultural Production and				

Actual		

V F   State Defined Outputs

Output Target

Output

    Output Measure

    ● Workshop single session

        Year   Actual

Output

    Output Measure

    ● Research Projects

        Year   Actual

Output

    Output Measure

    ● Conference papers

        Year   Actual

a Outcome Type

Change in Knowledge Outcome Measure

b Quantitative Outcome

Year   Actual

c Qualitative Outcome or Impact Statement

Issue Who cares and Why

What has been done

Results

Associated Knowledge Areas

KA Code Knowledge Area
        Basic Plant Biology

Outcome

Outcome Measures

Number of Vermont Farms financially reviewed with operati...

Associated Institution Types

”   Research

a Outcome Type

Change in Knowledge Outcome Measure

b Quantitative Outcome

Year   Actual

c Qualitative Outcome or Impact Statement

Issue Who cares and Why
The research focuses on community based biodigester syst...
significant because individual biodigester systems are f...
huge investment and the development of renewable energ...

SURJUDP KRZHYHU LW LV KLJKO\ UHVWULFWHG E\ WKH ODFN RI F
SURGXFWV

:KDW KDV EHHQ GRQH
7KH JRDO RI WKLV UHVHDUFK LV WR H[SDQG WKH PDUNHWV IRU UH
PDQXUH DQG RWKHU ZDVWH WKURXJK LQWHJUDWHG UHVHDUFK DQ
GDWD FROOHFWLRQ DQG DQDO\VLV RI ELRGLJHVWHUV RQ 9HUPRQW

5HVXOWV
$ VXUYH\ ZLOO EH GHYHORSHG DQG FRQGXFWHG LQ   ZLWK DQ R
ELRGLJHVWHU V\VWHP DQG WZR FRPPXQLWLHV ZLWK SURSRVHG EL

$VVRFLDWHG .QRZOHGJH $UHDV

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(FRQRPLFV RI $JULFXOWXUDO 3URGXFWLRQ DQG)DUP 0D

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([WHUQDO IDFWRUV ZKLFK DIIHFWHG RXWFRPHV
▪ Natural Disasters (drought, weather extremes, etc.)
▪ Economy
▪ Government Regulations

%ULHI ([SODQDWLRQ

9 ,   3ODQQHG 3URJUDP   (YDOXDWLRQ 6WXGLHV

(YDOXDWLRQ 5HVXOWV

{No Data Entered}

.H\ ,WHPV RI (YDOXDWLRQ

{No Data Entered}

V.A.   Planned Program   Summary

Program

Name of the Planned Program

Childhood Obesity

☑ Reporting on this Program

V.B.   Program Knowledge Area s

Program Knowledge Areas and Percentage

KA Code	Knowledge Area	Extension	%Extension	Research	%Research
	New and Improved Non Food Products and Processes				

8QLYHUVLW\ RI 9HUPRQW &RPELQHG 5HVHDUFK DQG ([WHQVLRQ $QQXDO 5HSRUW RI $I

5HVHDUFK

8QLYHUVLW\ RI 9HUPRQW &RPELQHG 5HVHDUFK DQG ([WHQVLRQ $QQXDO 5HSRUW RI $I

EHLQJ RXWGRRUV WRJHWKHU ZKLOH OHDUQLQJ DERXW HQYLURQPHQWD

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2XWSXW 0HDVXUH

" 'HPRQVWUDWLRQ
1RW UHSRUWLQJ RQ WKLV 2XWSXW IRU WKLV $QQXDO 5HSRUW

 2XWSXW

2XWSXW 0HDVXUH

" 5HVHDUFK 3URMHFW

<HDU $FWXDO

 2XWSXW

2XWSXW 0HDVXUH

")LHOG 6LWH 9LVLWV

<HDU $FWXDO

 2XWSXW

2XWSXW 0HDVXUH

" &RQIHUHQFH
1RW UHSRUWLQJ RQ WKLV 2XWSXW IRU WKLV $QQXDO 5HSRUW

 2XWSXW

2XWSXW 0HDVXUH

" 'LVFXVVLRQ *URXS

<HDU $FWXDO

 2XWSXW

2XWSXW 0HDVXUH

")DFW 6KHHW

<HDU $FWXDO

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2XWSXW 0HDVXUH

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<HDU $FWXDO

9 * 6WDWH 'HILQHG 2XWFRPHV

9 6WDWH 'HILQHG 2XWFRPHV 7DEOH RI	
2 1R	287&20(1$0(
	1XPEHU RI LQGLYLGXDOV ZKR LQFRUSRUDWH RQH RU PRUH KHD DFWLYLW\ WR SUHYHQW PDQDJH GLVHDVH DQG RU REHVLW\
	1XPEHU RI LQGLYLGXDOV ZKR VHOHFW DQG SUHSDUH D YDULHW GLVHDVH DQG RU REHVLW\
	1XPEHU RI ZHLJKW ORVV SURJUDPV WKDW KHOS UHGXFH DGXOW
	1XPEHU RI LQGLYLGXDOV ZKR WDNH VWHSV WR PHHW GDLO\ QHH SHUVRQDO ZHOOEHLQJ
	1XPEHU RI VWXGLHV WKDW H[DPLQHV FRRNLQJ DV DQ LQWHUYHG RYHUZHLJKW DGXOWV
	1XPEHU RI PRELOH JDPLQJ DSSV GHYHORSHG WR LPSURYH SK\V VWXGHQWV

8QLYHUVLW\ RI 9HUPRQW &RPELQHG 5HVHDUFK DQG ([WHQVLRQ $QQXDO 5HSRUW RI $I

2XWFRPH 0HDVXUHV

1XPEHU RI LQGLYLGXDOV ZKR LQFRUSRUDWH RQH RU PRUH KHDOWK

”   ([WHQVLRQ
”   5HVHDUFK

D   2XWFRPH 7\SH

&KDQJH LQ $FWLRQ 2XWFRPH 0HDVXUH

E   4XDQWLWDWLYH 2XWFRPH

<HDU $FWXDO

F   4XDOLWDWLYH 2XWFRPH RU ,PSDFW 6WDWHPHQW

,VVXH :KR FDUHV DQG :K\

:KDW KDV EHHQ GRQH

5HVXOWV

$VVRFLDWHG .QRZOHGJH $UHDV

.$ &RGHQRZOHGJH $UHD
1XWULWLRQ (GXFDWLRQ DQG %HKDYLRU
1XWULWLRQ DQG +XQJHU LQ WKH 3RSXODWLRQ

2XWFRPH

2XWFRPH 0HDVXUHV

1XPEHU RI ZHLJKW ORVV SURJUDPV WKDW KHOS UHGXFH DGXOW RE

$VVRFLDWHG ,QVWLWXWLRQ 7\SHV

”   5HVHDUFK

D   2XWFRPH 7\SH

&KDQJH LQ .QRZOHGJH 2XWFRPH 0HDVXUH

E   4XDQWLWDWLYH 2XWFRPH

<HDU $FWXDO

F   4XDOLWDWLYH 2XWFRPH RU ,PSDFW 6WDWHPHQW

,VVXH :KR FDUHV DQG :K\

:KDW KDV EHHQ GRQH

5HVXOWV

$VVRFLDWHG .QRZOHGJH $UHDV

.$ &RGHQRZOHGJH $UHD
        +HDOWK\ /LIHVW\OH

2XWFRPH

2XWFRPH 0HDVXUHV

1XPEHU RI LQGLYLGXDOV ZKR WDNH VWHSV WR PHHW GDLO\ QHHGV
ZHOOEHLQJ

$VVRFLDWHG ,QVWLWXWLRQ 7\SHV

”   ([WHQVLRQ
”   5HVHDUFK

D   2XWFRPH 7\SH

&KDQJH LQ $FWLRQ 2XWFRPH 0HDVXUH

E   4XDQWLWDWLYH 2XWFRPH

<HDU $FWXDO

F   4XDOLWDWLYH 2XWFRPH RU ,PSDFW 6WDWHPHQW

,VVXH :KR FDUHV DQG :K\
7KH VWDELOLW\ RI WKH 9HUPRQW GDLU\ LQGXVWU\ GHSHQGV RQ L
KRXUV SHU ZHHN LQ D SK\VLFDOO\ GHPDQGLQJ MRE 7KHVH ORQJ
SRRU KHDOWK DQG IDWLJXH 6LJQLILFDQW EDUULHUV OLNH ODFN
SUHYHQW ZRUNHUV IURP DGGUHVVLQJ KHDOWK FDUH QHHGV DQG V
'HOD\V LQ DFFHVVLQJ KHDOWK FDUH VHUYLFHV HLWKHU IRU LOOQ
KHDOWK SUREOHPV GHFUHDVH SURGXFWLYLW\ DQG LQFUHDVH

:KDW KDV EHHQ GRQH
890 ([WHQVLRQ V %ULGJHV WR +HDOWK %7+ SURJUDP KHOSV LPP
FDUH QHHGV WR WKHLU HPSOR\HUV DQG DFFHVV WLPHO\ DIIRUGD
ORFDO FRPPXQLWLHV (DFK \HDU   LPPLJUDQW IDUPZRUNHUV D

6WXGLHV ZHUH FRQGXFWHG WR H[SORUH KRZ \RXQJ $PHULFDQ DG[
5HVHDUFK JURXS GHYHORSHG D SHGDJRJ\ IRRG DJHQF\ WR DVFHU
HFRQRPLF DQG VRFLDO FRQGLWLRQV WR LQGLYLGXDOV DELOLW\ W
FKRRVH PDNLQJ D PHDO DW KRPH YHUVXV DOWHUQDWLYHV

5HVXOWV
7KUHH VWXGLHV ZHUH SHUIRUPHG WZR XVLQJ WKH IRRG DJHQF\
VWXGHQWV LQ D FRRNLQJ ODE 2EVHUYDWLRQV LQFOXGHG QRWDE
WKH VWXGHQW EHFRPLQJ PRUH FRQILGHQW 6WXGHQWV IHOW LQ D
KRPH FRRN WKXV ZKDW WKH\ OHDUQ ZLOO KHOS WKHP LQ IXWXUH
GLG KHOS ZLWK FDOPLQJ LQFUHDVHG FRQILGHQFH DQG RUJDQL]D

$VVRFLDWHG .QRZOHGJH $UHDV

.$ &RGHQRZOHGJH $UHD
1XWULWLRQ (GXFDWLRQ DQG %HKDYLRU

2XWFRPH

2XWFRPH 0HDVXUHV

1XPEHU RI PRELOH JDPLQJ DSSV GHYHORSHG WR LPSURYH SK\VLFD

$VVRFLDWHG ,QVWLWXWLRQ 7\SHV

”   5HVHDUFK

D   2XWFRPH 7\SH

&KDQJH LQ .QRZOHGJH 2XWFRPH 0HDVXUH

E   4XDQWLWDWLYH 2XWFRPH

<HDU $FWXDO

F   4XDOLWDWLYH 2XWFRPH RU ,PSDFW 6WDWHPHQW

,VVXH :KR FDUHV DQG :K\
RI KLJK VFKRRO VWXGHQWV LQ 9HUPRQW DUH QRW SK\VLFDOO\
IURP WKH &HQWHU IRU 'LVHDVH &RQWURO DQG 3UHYHQWLRQ 3K\V
FRQWURO DQG RSWLPDO KHDOWK (VWDEOLVKLQJ D SK\VLFDO DFW
GHVLUDEOH DV DGROHVFHQW LV LQ D FULWLFDO SHULRG IRU ER

:KDW KDV EHHQ GRQH
7KH VWXG\ LQWHQGV WR KHOS KLJK VFKRRO VWXGHQWV WR PHHW
JDPLQJ DSS WR LQFHQWLYL]H PLQXWHV RI SK\VLFDO DFWLYLW\

5HVXOWV

The mobile gaming app was developed and was published in

Associated Knowledge Areas

KA CodeKnowledge Area
Healthy Lifestyle

V H   Planned Program External Factors

External factors which affected outcomes
" Economy
" Public Policy changes
" Government Regulations
" Competing Programmatic Challenges
" Populations changes (immigration, new cultural groupings, etc.)

Brief Explanation

2015 Dietary Guidelines for Americans.

USDA National School Lunch Program implemented regulation requiring children to sel 1 [i24m 0Geul 1 [i24torg10 Tf

9 $ 3ODQQHG 3URJUDP 6XPPDU\

3URJUDP

1DPH RI WKH 3ODQQHG 3URJUDP

	Direct Contacts Adults	Indirect Contacts Adults	Indirect Contacts Youth	Direct Contacts Youth
Actual				

Number of Patent Applications Submitted Standard Research
Patent Applications Submitted

Year
Actual

Patents listed

Publications Standard General Output Measure

Number of Peer Reviewed Publications

	Extension	Research	Total
Actual			

V. F. State Defined Outputs

Output Target

Output

Output Measure

● Research Projects

Year	Actual

Output

Output Measure

Output Publications
Not reporting on this Output for this Annual Report

9 *   6WDWH 'HILQHG 2XWFRPHV

9 6WDWH 'HILQHG 2XWFRPHV 7DEOH RI
2 1R	287&20(1$0(

• Research

a. Outcome Type

Change in Knowledge Outcome Measure

b. Quantitative Outcome

Year   Actual

c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)
There is the growing population of artisan cheesemakers...
education and technical assistance in order to address...
cheeses. An outbreak of food borne illnesses linked to V...
damage this important value added sector of the Vermon...

What has been done
Preventing Listeria contamination of artisan cheese re...
monitoring of product contact surfaces within the produ...

Results
Measures to improve food safety with artisan cheese prod...
surveillance of cheesemaking environments to control p...
test methods and control of pathogens on wooden shelv...

Associated Knowledge Areas

KA CodeKnowledge Area
Protect Food from Contamination by Pathogenic M...
Naturally Occurring Toxins

V H. Planned Program External Factors

External factors which affected outcomes
• Natural Disasters (drought, weather extremes, etc.)
• Economy
• Appropriations changes
• Public Policy changes
• Government Regulations
• Competing Public priorities
• Other (Food safety requirements of food)