



New England Sweet Corn Pest Management Survey
Pest management Resources Online for New England
(PRO New England)



This survey should be completed by the person most responsible for crop management decisions on your farm. Please complete if you grow Sweet Corn.

Do you grow Sweet Corn for sale? (Please circle your answer)

Yes ----> continue below

No ----> if no, please answer the questions on **Page 19** and return questionnaire using the self-addressed stamped envelope – Thank you

Please fill in the blanks or circle your answers where indicated in the questions below for sweet corn.

A1. How many acres of sweet corn did you manage in 2004? (Please fill in your answer)

_____ Acres

A2. Over the past five years, what is your average annual yield of harvested sweet corn per acre? (Please fill in your answer)

_____ bushel bags/Acre (bushel bag= 5 dozen ears)

A3. What percentage of your sweet corn crop is sold through each of these markets?

Fresh market, wholesale	_____ %
Fresh market, retail farm stand	_____ %
Processing	_____ %
Other (specify _____)	_____ %
Other (specify _____)	_____ %
Total	100 %

If you have any questions about this survey please contact Natalia P. Clifton at (413) 545-1044 or email at nclifton @psis.umass.edu

Horticultural Management for SWEET CORN

B1. Which of the following practices do you use? (Circle all that apply.)

Direct seeding under plastic
Direct seed into bare ground
Direct Seed with row covers
Transplants on plastic
Transplants into bare ground
Transplant with row covers

B2. Do you use a soil test to determine fertilizer needs for sweet corn in most years? (Circle your answer)

No
Annually
Every 2-3 years
Every 4-5 years
Do not use fertilizer
Other (please specify) _____

B3. Which soil and/or nutrient management practices do you use? (Circle all that apply.)

Pre-side dress (June) nitrate test
Grass cover crop (rye, oat, sudax, etc)
Legume cover crop (clover, vetch, etc.)
Manure application
Compost application
Other (please specify) _____

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General Pest Management Information for SWEET CORN

C1. Please estimate the average number of pesticide applications you use for a block of sweet corn in a typical year:

Number of times you spray specifically for insects each year _____
 Number of times you spray specifically for mites each year _____
 Number of times you spray specifically for weeds each year _____
 Number of times you spray specifically for diseases each year _____

C2. Which of these insects/mites require routine annual management, require occasional management, or are never a problem in your sweet corn fields? (Please circle your answers)

Insects & Mites

European Corn Borer	Routine, annual management	Occasional pest	Never a problem
Fall Armyworm	Routine, annual management	Occasional pest	Never a problem
Corn Earworm	Routine, annual management	Occasional pest	Never a problem
Corn Flea Beetles	Routine, annual management	Occasional pest	Never a problem
Corn Leaf Aphid	Routine, annual management	Occasional pest	Never a problem
Cutworms	Routine, annual management	Occasional pest	Never a problem
Seedcorn Maggot	Routine, annual management	Occasional pest	Never a problem
Wireworms	Routine, annual management	Occasional pest	Never a problem
Twospotted Spider Mite	Routine, annual management	Occasional pest	Never a problem
Japanese Beetle	Routine, annual management	Occasional pest	Never a problem
Stalk Borer	Routine, annual management	Occasional pest	Never a problem
Sap and Picnic Beetle	Routine, annual management	Occasional pest	Never a problem
Common Armyworm	Routine, annual management	Occasional pest	Never a problem
Other insects/mites (Specify: _____)	Routine, annual management	Occasional pest	
Other insects/mites (Specify: _____)	Routine, annual management	Occasional pest	

C3. Which of these diseases require routine annual management, require occasional management, or are never a problem on your sweet corn fields? (Please circle your answers)

Diseases

Maize Dwarf Mosaic Virus	Routine, annual management	Occasional disease	Never a problem
Rust	Routine, annual management	Occasional disease	Never a problem
Seed Decay	Routine, annual management	Occasional disease	Never a problem
Stewart's Wilt	Routine, annual management	Occasional disease	Never a problem
Common Smut	Routine, annual management	Occasional disease	Never a problem

Other diseases:(Specify: _____) Routine, annual management Occasional disease
 Other diseases:(Specify: _____) Routine, annual management Occasional disease

C4. Which of these pests require routine annual management, require occasional management, or are never a problem on your sweet corn fields? (Please circle your answers)

Weeds & Vertebrate pests

Annual Broadleaf Weeds	Routine, annual management	Occasional pest	Never a problem
Perennial Broadleaf Weeds	Routine, annual management	Occasional pest	Never a problem
Annual Grasses	Routine, annual management	Occasional pest	Never a problem
Perennial Grasses	Routine, annual management	Occasional pest	Never a problem
Deer	Routine, annual management	Occasional pest	Never a problem
Birds	Routine, annual management	Occasional pest	Never a problem
Raccoons	Routine, annual management	Occasional pest	Never a problem
Other Vertebrate pests (Specify: _____)	Routine, annual management	Occasional management	
Other Vertebrate pests (Specify: _____)	Routine, annual management	Occasional management	

In order to understand the importance of various pesticides and alternative strategies to SWEET CORN pest management, the following sections D-F ask for specific information about your pest management strategies and actual pesticide use.

General Insect Pest Management Information for SWEET CORN

D1. Which of the following monitoring practices do you use to manage insects and/or mite pests? (Circle all that apply.)

- (a) pheromone trap for European Corn Borer
- (b) pheromone trap for Corn Ear Worm
- (c) pheromone trap for Fall Armyworm
- (d) Other Traps (Please Specify _____)
- (e) Field scouting for worms or feeding damage
- (f) Field scouting for other pests (Please specify _____)
- (g) Field scouting for beneficials
- (h) Read state or regional pest alerts
- (i) None

For each of the following insects and mites, indicate the **percentage of your total sweet corn crop treated in 2004**. If you **did not treat for the pest**, put “0” in the “percent treated” slot. If question is left blank, we won’t know if you meant zero percent treated or if you skipped the question. Please circle the pesticides that you used and the effectiveness of the management strategy (**excellent, good, poor**). If you used non-pesticide strategies to manage a pest please specify them in the “**Other Strategies Employed**” area.

D2. European Corn Borer

a) Percent of sweet corn treated for European corn borers in 2004 _____ %

b) Pesticide(s) used (circle all that apply)	Effectiveness				
	<u>Excellent</u>	<u>Good</u>	<u>Poor</u>		
Ambush (permethrin)	Excellent	Good	Poor		
Asana XL (esfenvalerate)	Excellent	Good	Poor		
Avaunt (indoxacarb)	Excellent	Good	Poor		
Baythroid 2 (cyfluthrin)	Excellent	Good	Poor		
Capture 2EC (bifenthrin)	Excellent	Good	Poor		
Dipel DF or ES (Bacillus thuringiensis kurstaki)	Excellent	Good	Poor		
Entrust (spinosad)	Excellent	Good	Poor		
Intrepid 2F (methoxyfenoxide)	Excellent	Good	Poor		
Lannate SP (methomyl)	Excellent	Good	Poor		
Larvin 3.2 (thiodicarb)	Excellent	Good	Poor		
Spintor 2SC (spinosad)	Excellent	Good	Poor		
Warrior (lambda-cyhalotrin)	Excellent	Good	Poor		
Other Pesticide(s) used: (Please Specify) _____	Excellent	Good	Poor		
Biological Strategies Employed: Release Trichogramma wasps	Excellent	Good	Poor		
Other Strategies Employed: (Please Specify) _____			Excellent	Good	Poor
(Please Specify) _____			Excellent	Good	Poor

D3. Fall Armyworm

a) Percent of sweet corn treated for Fall Armyworm in 2004 _____ %

b) Pesticide(s) used (circle all that apply)	Effectiveness		
	<u>Excellent</u>	<u>Good</u>	<u>Poor</u>
Ambush (permethrin)	Excellent	Good	Poor
Asana XL (esfenvalerate)	Excellent	Good	Poor
Avaunt (indoxacarb)	Excellent	Good	Poor
Baythroid 2 (cyfluthrin)	Excellent	Good	Poor

Capture 2EC (bifenthrin)	Excellent	Good	Poor
Dipel DF or ES (Bacillus thuringiensis kurstaki)	Excellent	Good	Poor
Entrust (spinosad)	Excellent	Good	Poor
Lannate SP (methomyl)	Excellent	Good	Poor
Larvin 3.2 (thiodicarb)	Excellent	Good	Poor
Spintor 2SC (spinosad)	Excellent	Good	Poor
Warrior (lambda-cyhalotrin)	Excellent	Good	Poor
XenTari (Bacillus thuringiensis aizawai)	Excellent	Good	Poor
Other Pesticide(s) used: (Please Specify) _____	Excellent	Good	Poor
Other Strategies Employed: (Please Specify) _____	Excellent	Good	Poor
(Please Specify) _____	Excellent	Good	Poor

D4. Corn Earworm

a) Percent of sweet corn treated for Corn Earworm in 2004 _____%

b) Pesticide(s) used (circle all that apply)	Effectiveness		
	Excellent	Good	Poor
Ambush (permethrin)	Excellent	Good	Poor
Asana XL (esfenvalerate)	Excellent	Good	Poor
Baythroid 2 (cyfluthrin)	Excellent	Good	Poor
Capture 2EC (bifenthrin)	Excellent	Good	Poor
Dipel ES (Bacillus thuringiensis kurstaki)	Excellent	Good	Poor
Entrust (spinosad)	Excellent	Good	Poor
Golden Natural Spray Oil (soybean oil)	Excellent	Good	Poor
Lannate SP (methomyl)	Excellent	Good	Poor
Larvin 3.2 (thiodicarb)	Excellent	Good	Poor
Mustang (zeta-cypermethrin)	Excellent	Good	Poor
Spintor 2SC (spinosad)	Excellent	Good	Poor
Warrior (lambda-cyhalotrin)	Excellent	Good	Poor
XenTari (Bacillus thuringiensis aizawai)	Excellent	Good	Poor
Other Pesticide(s) used: (Please Specify) _____	Excellent	Good	Poor
Other Strategies Employed: (Please Specify) _____	Excellent	Good	Poor
(Please Specify) _____	Excellent	Good	Poor

D5. Corn Flea Beetle

a) Percent of sweet corn treated for corn flea beetle in 2004 _____ %

b) Pesticide(s) used (circle all that apply)	Effectiveness			
	Excellent	Good	Poor	
Ambush (permethrin)	Excellent	Good	Poor	
Asana XL (esfenvalerate)	Excellent	Good	Poor	
Baythroid 2 (cyfluthrin)	Excellent	Good	Poor	
Capture 2EC (bifenthrin)	Excellent	Good	Poor	
Counter 15G (terbufos)	Excellent	Good	Poor	
Cruiser 5FS (thiamethoxam)(seed treatment)	Excellent	Good	Poor	
Gaucha 600 (imidacloprid) (seed treatment)	Excellent	Good	Poor	
Lannate SP (methomyl)	Excellent	Good	Poor	
Mustang (zeta-cypermethrin)	Excellent	Good	Poor	
Sevin XLR Plus (carbaryl)	Excellent	Good	Poor	
Thimet 20G (phorate)	Excellent	Good	Poor	
Warrior (lambda-cyhalotrin)	Excellent	Good	Poor	
Other Pesticide(s) used: (Please Specify) _____	Excellent	Good	Poor	
Other Strategies Employed: (Please Specify) _____		Excellent	Good	Poor
(Please Specify) _____		Excellent	Good	Poor

D6. Corn Leaf Aphid

a) Percent of sweet corn treated for Corn Leaf Aphid in 2004 _____ %

b) Pesticide(s) used (circle all that apply)	Effectiveness			
	Excellent	Good	Poor	
Capture 2EC (bifenthrin)	Excellent	Good	Poor	
Lannate SP (methomyl)	Excellent	Good	Poor	
Thionex 50W (endosulfan)	Excellent	Good	Poor	
Warrior (lambda-cyhalotrin)	Excellent	Good	Poor	
Other Pesticide(s) used: (Please Specify) _____	Excellent	Good	Poor	
Other Strategies Employed: (Please Specify) _____		Excellent	Good	Poor
(Please Specify) _____		Excellent	Good	Poor

D7. Cutworms

a) Percent of sweet corn treated for cutworms in 2004 _____%

b) Pesticide(s) used (circle all that apply)	Effectiveness		
	Excellent	Good	Poor
Ambush (permethrin)	Excellent	Good	Poor
Asana XL (esfenvalerate)	Excellent	Good	Poor
Baythroid 2 (cyfluthrin)	Excellent	Good	Poor
Capture 2EC (bifenthrin)	Excellent	Good	Poor
Lorsban 4E (chlorpyrifos)	Excellent	Good	Poor
Mustang (zeta-cypermethrin)	Excellent	Good	Poor
Sevin XLR Plus (carbaryl)	Excellent	Good	Poor
Warrior (lambda-cyhalotrin)	Excellent	Good	Poor
Other Pesticide(s) used: (Please Specify) _____	Excellent	Good	Poor
Other Strategies Employed: (Please Specify) _____	Excellent	Good	Poor
(Please Specify) _____	Excellent	Good	Poor

D8. Seedcorn Maggot

a) Percent of sweet corn treated for seedcorn maggot in 2004 _____%

b) Pesticide(s) used (circle all that apply)	Effectiveness		
	Excellent	Good	Poor
Capture 2EC (bifenthrin)	Excellent	Good	Poor
Counter 15G (terbufos)	Excellent	Good	Poor
Cruiser 5FS (thiamethoxam) (seed treatment)	Excellent	Good	Poor
Force 3G (tefluthrin)	Excellent	Good	Poor
Fortress 5G (chlorethoxyfos)	Excellent	Good	Poor
Gaicho 600 (imidacloprid)(seed treatment)	Excellent	Good	Poor
Lorsban 4E (chlorpyrifos)	Excellent	Good	Poor
Thimet 20G (phorate)	Excellent	Good	Poor
Other Pesticide(s) used: (Please Specify) _____	Excellent	Good	Poor
Other Strategies Employed: (Please Specify) _____	Excellent	Good	Poor
(Please Specify) _____	Excellent	Good	Poor

D9. Wireworms

a) Percent of sweet corn treated for wireworms in 2004 _____%

		Effectiveness			
b) Pesticide(s) used (circle all that apply)		Excellent	Good	Poor	
Capture 2EC (bifenthrin)		Excellent	Good	Poor	
Counter 15G (terbufos)		Excellent	Good	Poor	
Cruiser 5FS (thiamethoxam) (seed treatment)		Excellent	Good	Poor	
Force 3G (tefluthrin)		Excellent	Good	Poor	
Mocap 10% G (ethoprop)		Excellent	Good	Poor	
Thimet 20G (phorate)		Excellent	Good	Poor	
Other Pesticide(s) used:					
(Please Specify) _____		Excellent	Good	Poor	
Other Strategies Employed: (Please Specify) _____			Excellent	Good	Poor
(Please Specify) _____			Excellent	Good	Poor

D10. Twospotted Spider Mite

a) Percent of sweet corn treated for twospotted spider mite in 2004 _____%

		Effectiveness			
b) Pesticide(s) used (circle all that apply)		Excellent	Good	Poor	
Capture 2EC (bifenthrin)		Excellent	Good	Poor	
Metasystox-R (oxydemeton-methyl)		Excellent	Good	Poor	
Other Pesticide(s) used:					
(Please Specify) _____		Excellent	Good	Poor	
Other Strategies Employed: (Please Specify) _____			Excellent	Good	Poor
(Please Specify) _____			Excellent	Good	Poor

D11. Japanese Beetle

a) Percent of sweet corn treated for Japanese beetle in 2004 _____%

		Effectiveness		
b) Pesticide(s) used (circle all that apply)		Excellent	Good	Poor
Capture 2EC (permethrin)		Excellent	Good	Poor
Mustang (zeta-cypermethrin)		Excellent	Good	Poor
Sevin XLR Plus (carbaryl)		Excellent	Good	Poor
Warrior (lambda-cyhalotrin)		Excellent	Good	Poor

Other Pesticide(s) used:
(Please Specify) _____ Excellent Good Poor

Other Strategies Employed: (Please Specify) _____ Excellent Good Poor
(Please Specify) _____ Excellent Good Poor

D12. Stalk Borer

a) Percent of sweet corn treated for stalk borer in 2004 _____%

b) Pesticide(s) used (circle all that apply)

	Effectiveness		
	Excellent	Good	Poor
Ambush (permethrin)	Excellent	Good	Poor
Asana XL (esfenvalerate)	Excellent	Good	Poor
Baythroid 2 (cyfluthrin)	Excellent	Good	Poor
Capture 2EC (bifenthrin)	Excellent	Good	Poor
Warrior (lambda-cyhalotrin)	Excellent	Good	Poor

Other Pesticide(s) used:
(Please Specify) _____ Excellent Good Poor

Other Strategies Employed: (Please Specify) _____ Excellent Good Poor
(Please Specify) _____ Excellent Good Poor

D13. Sap and Picnic Beetles

a) Percent of sweet corn treated for sap and picnic beetles in 2004 _____%

b) Pesticide(s) used (circle all that apply)

	Effectiveness		
	Excellent	Good	Poor
Asana XL (esfenvalerate)	Excellent	Good	Poor
Capture 2EC (bifenthrin)	Excellent	Good	Poor
Lannate SP (methomyl)	Excellent	Good	Poor
Malathion 57EC (malathion)	Excellent	Good	Poor
Mustang (zeta-cypermethrin)	Excellent	Good	Poor
Sevin XLR Plus (carbaryl)	Excellent	Good	Poor
Warrior (lambda-cyhalotrin)	Excellent	Good	Poor

Other Pesticide(s) used:
(Please Specify) _____ Excellent Good Poor

Other Strategies Employed: (Please Specify) _____ Excellent Good Poor
(Please Specify) _____ Excellent Good Poor

D14. Other Insect/Mite Pest(s) Please Specify _____

a) Percent of sweet corn crop treated for Other Insect/Mite(s) in 2004 _____ %

b) Pesticide/Strategy(ies) used (please list)	Effectiveness		
	Excellent	Good	Poor
_____	Excellent	Good	Poor
_____	Excellent	Good	Poor

Disease Management for SWEET CORN

E1. Which of the following practices do you use to manage diseases in sweet corn? (Circle all that apply.)

- (a) Fungicide-treated seed
- (b) Disease tolerant varieties
- (c) Crop rotation
- (d) Application of fungicides
- (e) Other (Please specify) _____

For each of the following diseases, indicate the **percentage of your total sweet corn crop treated in 2004**. If you **did not treat for the disease**, put “0” in the “percent treated” slot. If question is left blank, we won’t know if you meant zero percent treated or if you skipped the question. Please circle the pesticides that you used and the effectiveness of the management strategy (**excellent, good, poor**). If you used non-pesticide strategies to manage a disease please specify them in the “**Other Strategies Employed**” area.

E2. Rust

a) Percent of sweet corn crop treated for rust in 2004 _____ %

b) Pesticide(s) used (circle all that apply)	Effectiveness		
	Excellent	Good	Poor
Bravo Ultrex 82 WDG (chlorothalonil)	Excellent	Good	Poor
Dithane (mancozeb)	Excellent	Good	Poor
Maneb (maneb)	Excellent	Good	Poor
Manzate (mancozeb)	Excellent	Good	Poor
Penncozeb (mancozeb)	Excellent	Good	Poor
Tilt (propiconzole)	Excellent	Good	Poor
Other Pesticide(s) used: (Please Specify) _____	Excellent	Good	Poor
Other Strategies Employed: (Please Specify) _____	Excellent	Good	Poor
(Please Specify) _____	Excellent	Good	Poor

E3. Other Disease Pests (Please Specify) _____

a) Percent of sweet corn crop treated for other Diseases in 2004 _____ %

		Effectiveness					
		Excellent	Good	Poor			
b) Pesticide/Strategy(ies) used (please list)	_____	Excellent	Good	Poor			
	_____	Excellent	Good	Poor			
	_____	Excellent	Good	Poor			
Other Strategies Employed:	(Please Specify) _____				Excellent	Good	Poor
	(Please Specify) _____				Excellent	Good	Poor

Weed Management for SWEET CORN

F1. Which of the following weed management practices did you use for sweet corn? (Please circle the practices used and their effectiveness: excellent, good, poor.)

<u>Practice (circle all that apply)</u>	<u>Effectiveness</u>		
Mechanical cultivation	Excellent	Good	Poor
Hoing	Excellent	Good	Poor
Hand pulling	Excellent	Good	Poor
Banded herbicide application (over the row only)	Excellent	Good	Poor
Shielded application (between rows)	Excellent	Good	Poor
Spot treatment	Excellent	Good	Poor
No-till or zone-till	Excellent	Good	Poor
Other (please specify) _____	Excellent	Good	Poor
Other (please specify) _____	Excellent	Good	Poor

Continue to next page

For each of the following weed management practices, indicate the **percentage of your total sweet corn crop managed in 2004**. If you **did not use the practice**, put “0” in the “percent treated” slot. If question is left blank, we won’t know if you meant zero percent treated or if you skipped the question. Please circle the pesticides that you used and the effectiveness of the management strategy (**excellent, good, poor**). If you used non-pesticide strategies to manage weeds please specify them in the “**Other Strategies Employed**” area.

F2. Stale Bed Application

a) Percent of sweet corn acreage treated with stale bed application in 2004 _____ %

b) Pesticide(s) used (circle all that apply)	Effectiveness		
	Excellent	Good	Poor
Gramoxone Max 3S (paraquat)	Excellent	Good	Poor
Roundup 4S (glyphosate)	Excellent	Good	Poor
Scythe 4.2 (pelargonic acid)	Excellent	Good	Poor
Other Herbicide(s) used:			
Please Specify _____	Excellent	Good	Poor
Please Specify _____	Excellent	Good	Poor

F3. Preemergence Soil Applied Annual Grass and Broadleaf Herbicides

a) Percent of sweet corn acreage treated with preemergent soil-applied herbicides in 2004 _____ %

b) Pesticide(s) used (circle all that apply)	Effectiveness		
	Excellent	Good	Poor
Aatrex 4L (atrazine)	Excellent	Good	Poor
Bicep Magnum (metolachlor and atrazine)	Excellent	Good	Poor
Bicep Lite Magnum (metolachlor and atrazine)	Excellent	Good	Poor
Dual Magnum (metolachlor)	Excellent	Good	Poor
Eradicane 6E (EPTC and safener)	Excellent	Good	Poor
Frontier 6.0 (dimethenamid)	Excellent	Good	Poor
Laddox (bentazon & atrazine)	Excellent	Good	Poor
Lasso 4EC (alachlor)	Excellent	Good	Poor
Princep 80WP (simazine)	Excellent	Good	Poor
Prowl H20 (pendimethalin)	Excellent	Good	Poor
Sutan+ 6.7E (butylate)	Excellent	Good	Poor
Sutazine 6 ME (alachlor and atrazine)	Excellent	Good	Poor
Other Herbicide(s) used:			
Please Specify _____	Excellent	Good	Poor
Please Specify _____	Excellent	Good	Poor

F4. Postemergence Applied Annual Grass and Broadleaf Herbicides

a) Percent of sweet corn crop treated postemergent applied herbicides in 2004 _____ %

b) Pesticide(s) used (circle all that apply)	Effectiveness		
	Excellent	Good	Poor
Aatrex 4L (atrazine)	Excellent	Good	Poor
Amine 4 (2,4-D amine)	Excellent	Good	Poor
Basagran 4E (bentazon)	Excellent	Good	Poor
Evik 80W (ametryn)	Excellent	Good	Poor
Lorox 50DF (linuron)	Excellent	Good	Poor
Permit 57 WDG (halosulfuron)	Excellent	Good	Poor
Scythe 4.2 (pelargonic acid)	Excellent	Good	Poor
Other Herbicide(s) used:			
Please Specify _____	Excellent	Good	Poor
Please Specify _____	Excellent	Good	Poor

F5. Perennial Weed (quackgrass, bindweed, milkweed) Management

a) Percent of sweet corn crop treated for perennial weed control in 2004 _____ %

b) Pesticide(s) used (circle all that apply)	Effectiveness		
	Excellent	Good	Poor
Roundup 4S (glyphosate)	Excellent	Good	Poor
Roundup 4s (glyphosate)	Excellent	Good	Poor
Other Herbicide(s) used:			
Please Specify _____	Excellent	Good	Poor
Please Specify _____	Excellent	Good	Poor

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Vertebrate Pest Management for SWEET CORN

G1. Which strategies do you use to manage birds? (Please circle the strategies that you use and their effectiveness: excellent, good, poor.)

Type of protection used (circle all that apply)	<u>Effectiveness of Management</u>		
Avitrol bait	Excellent	Good	Poor
Cannons	Excellent	Good	Poor
Recorded distress call devices	Excellent	Good	Poor
Scare-eye balloons	Excellent	Good	Poor
Shell crackers	Excellent	Good	Poor
Other visual or sound devices			
Please specify _____	Excellent	Good	Poor
Chop and leave debris after harvest	Excellent	Good	Poor
Other strategies:			
Please Specify _____	Excellent	Good	Poor
Please Specify _____	Excellent	Good	Poor

G2. Which strategies do you use to manage deer? (Please circle the strategies that you use and their effectiveness: excellent, good, poor.)

Type of protection used (circle all that apply)	<u>Effectiveness of Management</u>		
Fence (non electric)	Excellent	Good	Poor
Electric fence	Excellent	Good	Poor
Hinder (Spray repellent)	Excellent	Good	Poor
Deer Away (Spray repellent)	Excellent	Good	Poor
Other repellents Please specify _____	Excellent	Good	Poor
Dogs	Excellent	Good	Poor
Hunting	Excellent	Good	Poor
Other strategies:			
Please Specify _____	Excellent	Good	Poor
Please Specify _____	Excellent	Good	Poor

G3. Which strategies do you use to manage raccoons? (Please circle the strategies that you use and their effectiveness: excellent, good, poor.)

Type of protection used (circle all that apply)	<u>Effectiveness of Management</u>		
Electric fence	Excellent	Good	Poor
Plant trap crop at edge	Excellent	Good	Poor
Trapping	Excellent	Good	Poor
Dogs	Excellent	Good	Poor
Other strategies:			
Please Specify _____	Excellent	Good	Poor
Please Specify _____	Excellent	Good	Poor

G4. Other Vertebrate Pests and Strategies (Please list vertebrate, list strategies used and circle their effectiveness)

Please Specify Pest(s)	Strategy(ies) used	<u>Effectiveness of Management</u>		
_____	_____	Excellent	Good	Poor
_____	_____	Excellent	Good	Poor
_____	_____	Excellent	Good	Poor
_____	_____	Excellent	Good	Poor
_____	_____	Excellent	Good	Poor
_____	_____	Excellent	Good	Poor

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Information for Management Decisions:

H1. Who does insect trapping or field scouting on your farm? (Please circle all that apply)

- a) You
- b) Private IPM scout/consultant
- c) Farm employee or family member
- d) Extension and/or University employee
- e) No one
- f) Other (specify: _____)

H2. How important are these factors to you when choosing pesticides for use on your farm? (Please circle your answers)

		<u>How Important?</u>		
		Very Important	Somewhat Important	Not Important
a)	Applicator hazard (toxicity to humans)	Very Important	Somewhat Important	Not Important
b)	Cost per Treatment	Very Important	Somewhat Important	Not Important
c)	Customer relations (food safety concerns)	Very Important	Somewhat Important	Not Important
d)	Effectiveness against pest compared to alternative products	Very Important	Somewhat Important	Not Important
e)	Formulation (liquid vs. dry, water soluble bags)	Very Important	Somewhat Important	Not Important
f)	Impact on beneficial species (parasites, predators, pollinators)	Very Important	Somewhat Important	Not Important
g)	Label restrictions (reentry & preharvest interval, protective equip.)	Very Important	Somewhat Important	Not Important
h)	Size or type of packaging	Very Important	Somewhat Important	Not Important
i)	Other potential nontarget and environmental impacts	Very Important	Somewhat Important	Not Important
j)	Storage requirements	Very Important	Somewhat Important	Not Important

H3. How often (frequently, occasionally, never) do you use the following weather information in making your pest management decisions? (please circle your answers)

a)	Forecasts for next rain	Frequently	Occasionally	Never
b)	Rainfall totals (for effect on spray residue)	Frequently	Occasionally	Never
c)	Temperatures (for degree day models)	Frequently	Occasionally	Never
d)	Wind speed forecast	Frequently	Occasionally	Never

H4. If weather information was readily available, would you use it for? (please circle your answers)

Forecasts for next rain	Yes	No
Rainfall totals (for effect on spray residue)	Yes	No
Temperatures (for degree day models)	Yes	No
Wind speed forecast	Yes	No

H5. How often do you use the following personal protective equipment and protective clothing when mixing and/or applying pesticides (Please circle your answer)

<u>Personal Protective Equipment</u>	<u>How Often do you wear</u>			
Long Pants	Always	Occasionally	Never	Not Applicable
Long-sleeved shirt	Always	Occasionally	Never	Not Applicable
Gloves	Always	Occasionally	Never	Not Applicable
Goggles	Always	Occasionally	Never	Not Applicable
Face Shield	Always	Occasionally	Never	Not Applicable
Nitrile Gloves	Always	Occasionally	Never	Not Applicable
Latex Gloves	Always	Occasionally	Never	Not Applicable
Cotton Gloves	Always	Occasionally	Never	Not Applicable
Chemical Resistant Suit	Always	Occasionally	Never	Not Applicable
Respirator	Always	Occasionally	Never	Not Applicable
Boots (chemical resistant)	Always	Occasionally	Never	Not Applicable

H6. Which of the following pesticide application equipment do you use for sweet corn? (Please circle all that apply)

- a) Air blast sprayer
- b) Boom sprayer without drop nozzles
- c) Boom sprayer with drop nozzles
- d) Shielded sprayer
- e) Back pack sprayer
- f) Zea-later (or other oil applicator)
- g) Air assisted sprayer
- h) Other (specify: _____)

**H7. How important are these sources of information in making your pest management decisions?
(please circle your answers)**

a)	Twilight meetings	Very Important	Somewhat Important	Not Important
b)	Off season educational meetings	Very Important	Somewhat Important	Not Important
c)	New England Vegetable Mgmt Guide	Very Important	Somewhat Important	Not Important
d)	Extension newsletters and/or pest alerts	Very Important	Somewhat Important	Not Important
e)	Web sites	Very Important	Somewhat Important	Not Important
f)	Trade publications	Very Important	Somewhat Important	Not Important
g)	Other growers	Very Important	Somewhat Important	Not Important
h)	Suppliers/dealers	Very Important	Somewhat Important	Not Important
i)	University/Extension staff	Very Important	Somewhat Important	Not Important
j)	Other _____	Very Important	Somewhat Important	Not Important

H8. In order to avoid sending an incorrect survey to you in the future please circle the crops that you normally grow for Sale.

Vegetables			Tree Fruit	Small Fruit	Field Crops
Asparagus	Garlic	Pumpkin	Apple	Blueberry	Field Corn
Bean	Gourds	Radish	Cherry	Blackberry	Tobacco
Beet	Herbs	Rutabaga	Peach	Cranberry	Hay
Broccoli	Leeks	Spinach	Pear	Gooseberry	Alfalfa
Cabbage	Lettuce	Summer Squash	Plum	Grapes	Other Feed Crops
Carrot	Muskmelon	Swiss Chard		Raspberry	
Cauliflower	Onion	Tomato		Wine Grape	
Celery	Parsley	Turnip		Strawberry	
Cucumber	Pea	Watermelon			Other Crops
Eggplant	Pepper	Winter squash		Christmas Trees	Honey
Endive	Popcorn			Greenhouse Crops	Maple Syrup
Escarole	Potato			Nursery	

H9. How would you describe your crop production practices? (please circle your answer)

Conventional

IPM

Organic

Other (please specify: _____)

Please use this space for any comments that you have

Thank you for your help.

Please return your questionnaire in the enclosed envelope to:

**UMass Extension Pesticide Education
212 Agricultural Engineering Bldg.
University of Massachusetts
Amherst, MA 01003-0210**