NATIONAL AGRICULTURAL STATISTICS SERVICE

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ERS ECONOMIC RESEARCH SERVICE

AGRICULTURAL RESOURCE MANAGEMENT SURVEY

CORN PRODUCTION PRACTICES AND COSTS REPORT

for 2005

Form Approved
OMB Number 0535-0218
Approval Expires 8/31/2007
Project code 906
Phase II

VERSION	ID	TRACT	SUBTRACT	T-TYPE	TABLE	LINE
2	_ _ _ _ _ _ _ _ _	01	_ _	0	000	00

CONTACT RECORD

DATE	TIME	NOTES

INTRODUCTION:
[*Introduce yourself, and ask for the operator. Rephrase in your own words.*]

We are collecting information on practices and costs to produce corn and need your help to make the information as accurate as possible. Authority for collection of information on the Corn Production Practices and Costs Report is Title 7, Section 2204 of the U.S. Code. This information will be used for economic analysis and to compile and publish estimates for your region and the United States. Response to this survey is confidential and voluntary.

We encourage you to refer to your farm records during the interview.

H H M M

BEGINNING TIME [*MILITARY*] 0004 _ _ _ _

SCREENING BOX

0006

[*ENUMERATOR NOTE: If screening box is code 1, complete the screening Supplement. If Screening box is not coded, begin with Section A.]*

0014 **CEAP Match**	0016 **CEAP ID**
	_ _ _ _ _ _ _ _ _ _

☐ [*Name, address and partners verified and updated if necessary*]

POID__ __ __ __ __ __ __ __ __ __	**POID**__ __ __ __ __ __ __ __ __ __
PARTNER NAME	PARTNER NAME
ADDRESS	ADDRESS
CITY STATE ZIP PHONE NUMBER	CITY STATE ZIP PHONE NUMBER
POID__ __ __ __ __ __ __ __ __ __	**POID**__ __ __ __ __ __ __ __ __ __
PARTNER NAME	PARTNER NAME
ADDRESS	ADDRESS
CITY STATE ZIP PHONE NUMBER	CITY STATE ZIP PHONE NUMBER

1. **How many acres of corn did this operation plant for the 2005 crop year?**

TOTAL PLANTED ACRES

0050 .___

► [*If no acres planted, review Screening Survey Information Form. Make notes, then go to item 4 on back page.*. . . . . .

2. **I will follow a simple procedure to make a random selection from the corn fields planted for the 2005 crop.**

TOTAL NUMBER OF FIELDS PLANTED

What is the TOTAL number of corn fields that were planted on this operation?. 0020

[If only 1 field, enter 1 and go to item 4.]

3. **Please list these fields according to identifying name/number or describe each field. Then I will tell you which field has been selected**.

► [*If there are more than 18 fields make sure item **2** is **TOTAL** fields planted, and list only the 18 fields closest to the operator's permanent residence.*
► *If respondent is unable to identify or describe the fields, use the Field Selection Grid Supplement.]*

FIELD NAME, NUMBER OR DESCRIPTION	FIELD NAME, NUMBER OR DESCRIPTION
1	10
2	11
3	12
4	13
5	14
6	15
7	16
8	17
9	18

APPLY "RANDOM NUMBER' LABEL HERE

4. **[ENUMERATOR ACTION:**

Circle the pair of numbers on the above label associated with the last numbered field in item 3.
Select the field according to the number you circled on the label, and record the selected number.
If only 1 field, enter 1]. . . . . .

SELECTED FIELD NUMBER

0021

5. **The field selected is (field name/number/description).**
During this interview, the corn questions will be about this selected corn field.
[Be sure the operator can identify the selected field.]

OFFICE USE
OY Field Substituted

0022

1. **How many acres of corn did this operation plant in this field for the 2005 crop?** ACRES 1301 .___

a. Are the acres in this field **CERTIFIED ORGANIC**? **YES = 1** CODE 1311

2. **Were the acres in this field --** CODE 1302

1	owned by this operation?
2	rented for CASH with the payment being a fixed cash amount?
3	rented for CASH with the payment being a flexible cash amount?
4	rented for a SHARE of the crop?
5	rented for some combination of CASH and SHARE of the crop?
6	used RENT FREE?

3. [*If field is CASH RENTED (item 2 = 2, 3 or 5), ask*--]
What was the cash rent paid per acre for this 2005 corn field? DOLLARS & CENTS PER ACRE 1303 .___ ___

4. [*If field is SHARE RENTED (item 2 = 4 or 5), ask*--]
What was the landlord's share of the crop from this field? PERCENT 1304

5. [*If field is RENTED* (*item 2 = 2, 3, 4,or 5*), ask--]
What was the total cost for all inputs provided by any landlord and contractor for the 2005 crop?
(Include the costs for all inputs, such as seed, fertilizer, chemicals, technical services, custom operations, and irrigation. Exclude real estate tax expenses, drying, and lime costs paid by the landowner.)
DOLLARS & CENTS PER ACRE 1305 .___ ___ OR TOTAL DOLLARS 1306

6. **What year did you** (*the operator listed on the label*) **start operating this field?** YEAR 1307 ____ ____ ____ ____

7. **On what date was this field planted?** MM DD YY 1308 __ __ __ __ __ __

8. **What was the average corn row width?** INCHES 1312

9. **What was the seeding rate per acre the first time this field was planted?**
UNIT CODES for Seeding Rate
1=Pounds/Acre
2=CWT/Acre
4=Bushels/Acre
25=Kernels-Seeds/Acre
38=Kernels-Seeds/Foot
UNITS 1313 .___ 1314

10. **How many acres in this field had to be replanted to corn?**
(*Number of acres times the number of times replanted.*). ACRES 1315 .___

	DOLLARS & CENTS PER UNIT	UNIT CODE 1=Pounds 2=Cwt 4=Bushel 22=Acre 23=Approx. 80,000 Kernel Bag
13. **What was the total cost per unit** (***Including*** *both your and the landlord's and contractor's share*) **of purchased seed for this field?** (***Include*** *cost of seed treatment and any seed technology fee*.)	1319 . ___ ___	1320

SEED TYPE - CORN

1	Genetically-modified **herbicide resistant** seed variety (*e.g. LibertyLink; Roundup Ready*)	6	**Stacked** gene variety with both genetically-modified Bt-ECB and herbicide resistant (*e.g. YieldGard + Roundup Ready*)
2	Non-genetically-modified **herbicide resistant** seed variety (*e.g. IMI-corn*)	7	**Stacked** gene variety with both genetically-modified Bt-CRW and herbicide resistant (*e.g. YieldGard Rootworm + Roundup Ready*)
3	Genetically-modified **Bt** variety for insect resistance to control European Corn Borer (Bt-ECB) (*e.g. YieldGard, NatureGard, Knockout*)	8	Triple **stacked** gene variety with genetically-modified Bt-ECB and Bt-CRW plus herbicide resistant (*e.g. YieldGard Plus + Roundup Ready)*
4	Genetically-modified **Bt** variety for insect resistance to control the corn rootworm (Bt-CRW) (*e.g. YieldGard Rootworm*)	9	None of the above
5	**Stacked** gene variety with both genetically-modified Bt-ECB and Bt-CRW (*e.g. YieldGard Plus*)		

14. **Which type of corn seed was used on the majority of this field--**
[*Show Seed Type Code List from Respondent Booklet and choose one code*.]

	CODE
a. in 2005.	1321
b. in 2004 [*Leave blank if corn was not on this field in 2004*.].	1322

15. **Did you purchase seed treated with an insecticide?**
(e.g.,Poncho, Gaucho or Cruiser seed treatment)
[***Exclude*** *seed treated with fungicides*.]. . . . . **YES = 1**

CODE 1323

16. [*If 14a = 1,2 or 9, ask---*
Which of the following reasons influenced you the most in deciding not to plant Bt corn in 2005 on this field---. . . . . CODE 1324

1	Did not expect to have enough corn borers and/or corn rootworms to justify the cost of Bt corn.
2	Concerned about finding a market for Bt corn.
3	This field was used as refuge in 2005.
4	Concerned about the environmental impact of Bt corn.
5	Not aware of Bt Seed.
6	Other, Specify._____

17. [*If item 14a does NOT equal 9, ask---*]
Resistant seed varieties offer several benefits.

Did you choose the resistant seed variety used on this field primarily to---

1	Increase yields through improved pest (weed or insect) control?
2	Decrease pesticide input costs?
3	Decrease machinery costs?
4	Improve ability to use or ease of using reduced tillage or no-till system?
5	Improve ability to use or ease of rotating crops?
6	Save management time or labor or improve ease of management?
7	Adopt more environmentally friendly practices?
8	For some other reason(s)? [*Specify* _____]

. . . . . CODE 1325

PERCENT

18. **What percentage of the field was used as refuge for the corn borer and/or corn rootworm in order to comply with Bt corn insect resistance management guidelines?** 1326

CODE

19. **Was the corn on this field planted with the intention of being harvested as---** . . . . . 1 GRAIN, 2 SILAGE, 4 SEED, 25 OTHER 1327

CODE

20. **Has harvest of this field been completed?** . . . . . **YES = 1** 1328

21. **Now I need information about the acres harvested** (*or to be harvested*) **and the yields from this field.**

How many acres in the corn field were (*will be*)--	**ACRES**	**1** **What yield per acre did you get** (*do you expect to get*) **for—** **UNITS PER ACRE**	**2** **UNIT CODES** 1= POUNDS, 2= CWT, 3= TONS, 4= BUSHELS **UNIT CODES**
a. harvested for grain?	1329 .___	1330 .___	1331
b. harvested for hay, silage, or green chop?	1332 .___	1333 .___	**TONS**
c. harvested for commercial seed contract?	1335 .___	1336 .___	1337
d. abandoned?	1338 .___		
e. used for some other purpose?	1339 .___		

CROP CODE LIST for item 25 PREVIOUSLY **PLANTED CROP was---**			
1 Alfalfa hay	196 Tobacco, flue cured	16 Peanuts	26 Soybeans
11 Hay, all other	193 Tobacco, burley	17 Dry Peas	28 Sugarbeets
190 Barley	281 Cotton, Upland	20 Potatoes	30 Sunflowers
3 Dry Beans	282 Cotton, Pima	21 Rice	142 Vegetables
85 Canola	302 CRP	22 Rye	163 Wheat, durum
310 Clover	311 Grasses other than clover	98 Safflower	164 Wheat, other spring
6 Corn for grain	94 Mustard Seed	25 Sorghum for grain	165 Wheat, winter
5 Corn for silage	15 Oats	24 Sorghum for silage	318 **No crop planted** during this period
	31 Sweet Potatoes		

25. **Next, I need to know what crops were previously PLANTED on the majority of this field, including cover crops**

What crop was PLANTED on this field in---

	CROP NAME	CROP CODE
a. **FALL of 2004**?		1352
b. **SPRING/SUMMER of 2004**?		1353
c. **FALL of 2003**		1354
d. **SPRING/SUMMER of 2003**?		1355
e. **FALL of 2002**?		1356
f. **SPRING/SUMMER of 2002**?		1357

26. **In 2005, did your land-use practices for this field include---**		CODE
a. terraces?	**YES = 1**	1358
b. temporary or permanent levees?	**YES = 1**	1359
c. grassed waterways?	**YES = 1**	1360
d. filter strips or riparian buffers on or adjoining the field?	**YES = 1**	1361
e. contour farming?	**YES = 1**	1362
f. strip cropping?	**YES = 1**	1363
g. underground outlets such as tile drainage?	**YES = 1**	1364
h. other drainage channels or diversions?	**YES = 1**	1365

		CODE
27. **Has the Natural Resource Conservation Service** (NRCS) **classified any part of this field as "Highly Erodible"?**	**YES = 1**	1366
28. **Have you been notified by NRCS that this field contains a wetland?**	**YES = 1**	1367
29. **In 2005, did you receive technical assistance for planning, installing, maintaining, or using conservation practices or systems on this field?** (***Include*** *grassed waterways and filter strips or riparian buffers on or adjoining this field.* ***Include*** *assistance from any source whether paid for or free.*)	**YES = 1**	1368
30. **During all or part of 2005, was this field enrolled in any public programs for which you or the landlord received** (*or will receive*) **cost-sharing payments, stewardship payments, or incentive payments for conservation practices on this field.** [*Be sure to consider grassed waterways and filter strips or riparian buffers on or adjoining this field*]?	**YES = 1**	1369
[*If item 30 is YES, ask*---]		
a. Was this field enrolled in the Conservation Security Program(CSP) in 2005?	**YES = 1**	1370
b. Was this field enrolled in the Environmental Quality Incentives Program (EQIP) in 2005?	**YES = 1**	1371

31. **During 2005, did any written plan of the following types cover this field and if so, in what year was the plan implemented?** *(A "written plan" is a plan prepared in accordance with Federal, State, or district standards.)*	CODE	YEAR IMPLEMENTED
a. Conservation plan specifying practices to reduce soil erosion? . . . . . **YES = 1**	1372	1373 ___ ___ ___ ___
b. Comprehensive nutrient management plan specifying practices for applying both fertilizer and manure? . . . . . **YES = 1**	1374	1375 ___ ___ ___ ___
c. Nutrient management plan specifying practices for land application of manure only? . . . . . **YES = 1**	1376	1377 ___ ___ ___ ___
d. Pest management plan specifying pesticide use and/or other practices controlling weeds, insects, or plant disease? . . . . . **YES = 1**	1378	1379 ___ ___ ___ ___
e. Irrigation water management plan specifying practices for applying or conserving irrigation water? . . . . . **YES = 1**	1380	1381 ___ ___ ___ ___

[*If items 31a, b, c, d, or e = YES, ask*---]

32. **During 2005, did you pay any technical service provider or consultant to develop or write any of these plans which included this field?** . . . . . **YES = 1** — CODE 1382

a. [*If YES, ask*---]

What was the cost for developing these plans for this field?
(***Include*** *landlord's/contractor's share.*
*(**Exclude** cost of construction or materials.*) . . . . . — DOLLARS & CENTS PER ACRE 1383 .___ ___ — OR — TOTAL DOLLARS 1384

33. **Was the corn on this field covered by Federal Crop Insurance in 2005?**

☐ **YES** – [*Enter code 1 and continue.*] ☐ **NO** – [*Go to item 34.*] . . . . . **YES = 1** — CODE 1385

a. Which coverage did you obtain? . . . . . .

1	Basic catastrophic insurance (*Federal CAT)*
2	Buy-up above basic federal CAT level
3	Revenue insurance
4	Other Federal Crop insurance

. . . . . — CODE 1386

34. **Was the corn on this field covered by private crop insurance?**
(*Hail, wind, freeze, etc.*) . . . . . **YES = 1** — 1387

	CODE	EDIT TABLE
1. **Were commercial FERTILIZERS applied to this field for the 2005 corn crop?** . . . . . YES = 1	0202	0201

2. [*If COMMERCIAL fertilizer applied, continue, else go to item 5.*]

	NUMBER
3. **How many commercial fertilizer applications were made to this field for the 2005 crop?** (***Include*** *applications made by airplanes and custom applicators*).	0203

4. **Now I need to record information for each application**

CHECKLIST

INCLUDE	EXCLUDE
☐ Custom applied fertilizers	☐ Micronutrients
☐ Fertilizers applied in the fall of 2004 and those applied earlier if this field was fallow in 2004.	☐ Unprocessed manure ☐ Fertilizer applied to previous crops in this field
☐ Commercially prepared manure	☐ Lime and Gypsum/landplaster

T-TYPE	TABLE
2	001
Line 99 — **Office Use Lines in Table**	0213

APPLICATION CODES for COLUMN 6

1 Broadcast, ground without incorporation
2 Broadcast, ground with incorporation
3 Broadcast, by aircraft
4 In seed furrow
5 In irrigation water
6 Chisel, injected or knifed in
7 Banded/Sidedressed in or over row
8 Foliar or directed spray

LINE	2 MATERIALS USED [*Enter percentage analysis or actual pounds of plant nutrients applied per acre*.] [*Show Common Fertilizers in Respondent Booklet*.]				3 **What quantity was applied per acre?** [*Leave this column blank if actual nutrients were reported*]	4 [Enter material code.] 1 Pounds 12 Gallons 19 Pounds of actual nutrients	5 **When was this applied?** 1 In the fall before seeding 2 In the spring before seeding 3 At seeding 4 After seeding	6 **How was this applied?** [*Refer to code list above*]	7 **How many acres were treated In this application?**
	N Nitrogen	**P_2O_5** Phosphate	**K_2O** Potash	**S** Sulfur					**ACRES**
01	0205	0206	0207	0214	0208	0209	0210	0211	0212 .___
02	0205	0206	0207	0214	0208	0209	0210	0211	0212 .___
03	0205	0206	0207	0214	0208	0209	0210	0211	0212 .___
04	0205	0206	0207	0214	0208	0209	0210	0211	0212 .___
05	0205	0206	0207	0214	0208	0209	0210	0211	0212 .___
06	0205	0206	0207	0214	0208	0209	0210	0211	0212 .___
07	0205	0206	0207	0214	0208	0209	0210	0211	0212 .___
08	0205	0206	0207	0214	0208	0209	0210	0211	0212 .___

T – TYPE	TABLE	LINE
0	000	00

CODE

5. **Was gypsum applied to this field for the 2005 corn crop?** . . . . . **YES = 1** 0218

6. **Were any fertilizers applied by custom applicators?**

☐ **YES** - [*Continue*.] ☐ **NO** - [*Go to item 7*.]

a. Are you able to report the cost of fertilizer materials and custom application separately?

OFFICE USE

0215

☐ **YES** - [*Continue*.] ☐ **NO** - [*Go to item 7*.]

b. Excluding the cost of the fertilizer materials, how much was spent for custom application of fertilizers on this field?
(***Include*** *landlord and contractor costs.*
Exclude *custom application of lime, gypsum, & purchased manure*.)
[*If material and application costs can't be separated,* ***exclude*** *them here and record the total in item 7*.] . . . . . .

DOLLARS & CENTS PER ACRE	OR	TOTAL DOLLARS
0219 .___ ___		0220

7. **What was the TOTAL COST of all fertilizer products applied to this field?** . . . . . .
(***Include*** *landlord and contractor costs. Include costs for sulfur and micronutients.*
Exclude *lime, gypsum, & purchased manure*.)
[*If* ***custom applied****, include the cost of materials ONLY, unless materials and application costs cannot be separated. Include materials applied to this field if it was fallow in 2004.]*

DOLLARS & CENTS PER ACRE	OR	TOTAL DOLLARS
0221 .___ ___		0222

[*If planted with the intention of harvesting for grain (item B19 = 1), ask*---.]

8. **What was your yield goal at planting for this field?** . . . . . BUSHELS PER ACRE 0223

9. **Was a soil or plant tissue test performed on this corn field in 2004 or 2005 for the 2005 crop?**

☐ **YES** [*Continue*.] ☐ **NO** [*Go to item 14*.]

CODE

10. **Was a soil test for phosphorus performed on this corn field in 2004 or 2005 for the 2005 crop?** . . . . . **YES = 1** 0225

a. [*If phosphorus test done, ask*---]

How many pounds of phosphorus (*per acre*) were recommended (*by the phosphorus test*)? . . . . . POUNDS PER ACRE 0226

CODE

11. **Was a soil test for nitrogen performed on this corn field in 2004 or 2005 for the 2005 crop?** . . . . . **YES = 1** 0227

a. [*If nitrogen test done, ask*---]

How many pounds of nitrogen (*per acre*) were recommended (*by the nitrogen test*)? . . . . . POUNDS PER ACRE 0228

CODE

12. **Was a plant tissue test for nutrient deficiency performed on this field in 2004 or 2005 for the 2005 corn crop?** . . . . . YES = 1 | 0229 |

	DOLLARS & CENTS PER ACRE	OR	TOTAL DOLLARS
13. **How much was spent for these soil and plant tissue tests on this field?** *[**Include** landlord and contractor costs.]*	0230 .___ ___		0231

a. If tests were done at no cost explain---

1	Soil/plant tissue test provided free of charge by dealer, crop consultant, or extension service.
2	Soil/plant tissue test costs were included in the total fertilizer costs reported in item 7.
3	Some other reason.

. . . . . CODE 0232

14. [***Enumerator Action: Refer to the Fertilizer Table, column 2.***
If nitrogen (N) was applied, complete items 15 and 16.
If NO nitrogen applied, go to item 17.]

15. **Was the amount of nitrogen you decided to apply to this field based on---**
[*Enter code "1" for all that apply.*]

		CODE
a.	Results of a soil or plant tissue test? . . . . . YES = 1	0233
b.	Crop consultant recommendation? . . . . . YES = 1	0234
c.	Fertilizer dealer recommendation? . . . . . YES = 1	0235
d.	Extension Service recommendation? . . . . . YES = 1	0236
e.	Cost of nitrogen and/or expected commodity price? . . . . . YES = 1	0237
f.	Contractor recommendation? . . . . . YES = 1	0238
g.	Routine practice (operator's own determination based on past experience, yield goal, etc.)? . . . . . YES = 1	0239

CODE

16. **Did you use any product to slow the breakdown of nitrogen on this field?** (*For example a nitrification inhibitor such as N-Serve or a urease inhibitor such as Agrotain*) . . . . . YES = 1 | 0241 |

CODE

17. **Is lime ever applied to this field?** . . . . . YES = 1 | 0242 |

a. [*If no lime applied, go to item 18---else continue*.]

YEARS

On average, how many years are there between applications of **lime** to this field? . . . . . | 0243 |

TONS PER ACRE

b. How many tons of **lime** were applied per acre the last time it was applied to this field? . . . . . | 0244 .___ |

c. [*If rented,* (*item B2 =2, 3, 4, or 5*) *ask*---]

PERCENT

Considering the last time it was applied, what percent of the total cost of lime and its application was paid by the landlord(s)? . . . . . | 0245 |

18. **Was manure or other organic material** (*e.g. biosolids*) **applied to this field for the 2005 corn crop?** (***Exclude*** *commercially prepared manure*.)

CODE

☐ **YES** - [*Enter code 1 and continue*.] ☐ **NO** - [*Go to* ***Section D***.] 0246

ACRES

a. How many acres was manure applied to? ..... 0247 .___

b. What was the amount of manure applied to this field? .....

1	TONS
2	GALLONS
3	BUSHELS

..... CODE 0248 **AND** UNITS PER ACRE 0249 .___ ___ **OR** TOTAL UNITS 0250 .____

MILES

c. What is the distance between the manure storage/production location and the manured field? ..... 0251 .___

d. What was the capacity of the manure spreader used to apply manure to this field? .....

1	TONS
2	GALLONS
3	BUSHELS

..... CODE 0252 **AND** TOTAL UNITS 0253 .___ ___

e. What was the percent of manure applied---

PERCENT

(i) in the fall before planting? ..... + 0254

(ii) in the spring before planting? ..... + 0255

(iii) after planting? ..... + 0256

100%

f. Was the manure---

1	Lagoon liquid?
2	Slurry liquid?
3	Semi – dry or dry?

..... CODE 0257

g. Was the manure----

1	Broadcast or sprayed *without* incorporation?
2	Broadcast or sprayed *with* incorporation?
3	Injected/knifed in?
4	Sprayed using irrigation systems?

..... CODE 0258

h. Was the major source of the manure from---

1	Beef cattle?
2	Dairy cattle?
3	Hogs?
4	Sheep?
5	Poultry?
6	Equine?
7	Biosolids (municipal sludge, food waste, etc.)?
8	Other (Specify)_____?

..... CODE 0259

i. Was the manure---

1	Produced on this operation?
2	Purchased (including any payment for transportation or application)?
3	Obtained at no cost off this operation?
4	Obtained with compensation?

..... CODE 0260

		CODE
j. Was any manure applied to this field tested for nutrient content prior to application?	YES = 1	0261
k. Was the application rate of commercial nitrogen fertilizer on this field reduced due to manure application?	YES = 1	0262

[*If YES, ask*---]

	PERCENT
(i) By what percent did you reduce the commercial nitrogen fertilizer application rate on this field?	0263

		CODE
19. **Were the manure APPLICATION RATES to this field influenced by Federal, State, or local restrictions?**	YES = 1	0264

a. [*If item 19 is YES, ask*---]
What basis was used to determine these manure application rate restrictions--

(i) Nitrogen requirement of the crop?	YES = 1	0265
(ii) Phosphorus requirement of the crop?	YES = 1	0266

NOTES

Now I have some questions about all the pesticides used on this field for the 2005 corn crop including both custom applications and applications made by this operation.

	CODE	EDIT TABLE
1. **Were any herbicides, insecticides, fungicides or other chemicals used on the corn field for the 2005 crop?** . . . . . **YES = 1**	0302	0301

[*Probe for applications made in the fall of 2004 (and those made earlier if this field was fallow*).]
[If *no pesticides applied, go to* ***Section E***.]

Include defoliants, fungicides, herbicides, insecticides, and pesticides

Include biological and botanical pesticides.

Exclude fertilizers reported earlier and seed treatments.

	T - TYPE	TABLE
	3	001
LINE 99	OFFICE USE LINE IN TABLE	0319

CHEMICAL PRODUCT NAME	LINE	2 What products were applied to this field? [*Show product codes from Respondent Booklet*.]	3 Was this product bought in liquid or dry form? [*Enter L or D*]	4 Was this part of a tank mix? [*If tank mix, enter line number of first product in mix*.]	5 When was this applied? 1 BEFORE planting 3 AT planting 4 AFTER planting	6 How much was applied per acre per application?	OR 7 What was the total amount applied per application in this field?	8 [*Enter unit code*.] 1 Pounds 12 Gallons 13 Quarts 14 Pints 15 Liquid Ounces 28 Dry Ounces 30 Grams
	01	0305		0306	0307	0308 .__ __	0309 .__ __	0310
	02	0305		0306	0307	0308 .__ __	0309 .__ __	0310
	03	0305		0306	0307	0308 .__ __	0309 .__ __	0310
	04	0305		0306	0307	0308 .__ __	0309 .__ __	0310
	05	0305		0306	0307	0308 .__ __	0309 .__ __	0310
	06	0305		0306	0307	0308 .__ __	0309 .__ __	0310
	07	0305		0306	0307	0308 .__ __	0309 .__ __	0310
	08	0305		0306	0307	0308 .__ __	0309 .__ __	0310
	09	0305		0306	0307	0308 .__ __	0309 .__ __	0310
	10	0305		0306	0307	0308 .__ __	0309 .__ __	0310
	11	0305		0306	0307	0308 .__ __	0309 .__ __	0310
	12	0305		0306	0307	0308 .__ __	0309 .__ __	0310
	13	0305		0306	0307	0308 .__ __	0309 .__ __	0310
	14	0305		0306	0307	0308 .__ __	0309 .__ __	0310

2. [*For pesticides not listed in Respondent Booklet, specify*---]

LINE	Pesticide Type (Herbicide, Insecticide Fungicide, etc.)	EPA No. or Trade name And Formulation	Form Purchased (Liquid or Dry)	Where Purchased [ASK only if EPA No. cannot be reported.]

APPLICATIONS CODES for column 9	
1 Broadcast, ground without incorporation	6 Chisel/Injected or Knifed in
2 Broadcast, ground with incorporation	7 Banded in or over row
3 Broadcast, by aircraft	8 Foliar or directed spray
4 In Seed furrow	9 Spot treatments
5 In Irrigation water	

↓

[*If column 9 = 9, then column 6 and column 10 must be blank*]

[**ENUMERATOR NOTE**:
Use these columns only if
TOTAL COST
(item 4 on next page)
cannot be provided.]

LINE	9 How was this product applied? [*Enter code from above.*]	10 How many acres in this field were treated with this product? ACRES	11 How many times was it applied? NUMBER	12 Were these applications made by— 1 Operator, Partner or family member? 2 Custom applicator? 3 Employee/Other?	OPTIONAL ITEM 4 What was the cost per unit of the product? DOLLARS and CENTS PER UNIT	UNIT CODE 1 Pounds, 12 Gallons, 13 Quarts, 14 Pints, 15 Liquid Ounces, 28 Dry Ounces, 30 Grams
01	0311	0312 .___	0313	0316	0317 .___ ___	0318
02	0311	0312 .___	0313	0316	0317 .___ ___	0318
03	0311	0312 .___	0313	0316	0317 .___ ___	0318
04	0311	0312 .___	0313	0316	0317 .___ ___	0318
05	0311	0312 .___	0313	0316	0317 .___ ___	0318
06	0311	0312 .___	0313	0316	0317 .___ ___	0318
07	0311	0312 .___	0313	0316	0317 .___ ___	0318
08	0311	0312 .___	0313	0316	0317 .___ ___	0318
09	0311	0312 .___	0313	0316	0317 .___ ___	0318
10	0311	0312 .___	0313	0316	0317 .___ ___	0318
11	0311	0312 .___	0313	0316	0317 .___ ___	0318
12	0311	0312 .___	0313	0316	0317 .___ ___	0318
13	0311	0312 .___	0313	0316	0317 .___ ___	0318
14	0311	0312 .___	0313	0316	0317 .___ ___	0318

T-TYPE	TABLE	LINE
0	000	00

3. **Were any chemicals or pesticides applied by custom applicators?**

☐ **YES** – [*Continue*.] ☐ **NO** - [*Go to item 4*.]

OFFICE USE

a. Are you able to report the cost of chemical product and custom application separately? 0324

☐ **YES** – [*Continue*.] ☐ NO - [*Go to item 4*.]

b. Excluding the cost of the chemical product, how much was spent for custom application of chemicals and pesticides on this field?
(***Include*** *operator and landlord cost.)*. . . . . .

DOLLAR & CENTS PER ACRE	OR	TOTAL DOLLARS
0331 .___ ___		0332

4. **What was the TOTAL COST of all chemical products applied to this field?**. . . . . .
Include *operator and landlord cost, defoliants, herbicides, insecticides, fungicides, surfactants, wetting agents, growth regulators, and materials applied before planting and during 2004 fallow period.* **Exclude** *seed treatments*

DOLLAR & CENTS PER ACRE	OR	TOTAL DOLLARS
0334 .___ ___		0335

NOTE 1: *If respondent cannot report TOTAL COST, itemize cost for each product in optional columns in Pesticide Table, item D1.*

NOTE 2: *For custom applications. If respondent cannot report cost of chemical product separately from application costs, report both in item 4.*

Now I have some questions about your pest management decisions and practices used on this field for the 2005 corn crop.
By pests, we mean WEEDS, INSECTS, and DISEASES.

T-TYPE	TABLE	LINE
0	000	00

1. **[Enumerator Action: Were PESTICIDE APPLICATIONS reported in Section D?]**
   ☐ **YES** - [*Continue.*] ☐ **NO** - [*Go to item 10.*]

		CODE
2. **Was weather data used to assist in determining either the need or timing of pesticide applications?**	**YES = 1**	0800
3. **Were any biological pesticides such as Bt** (*Bacillus thuringiensis*)**, insect growth regulators, neem or other natural/biological based products sprayed or applied to manage pests in this field?**	**YES = 1**	0801
4. **Were pesticides with different mechanisms of action rotated or tank mixed for the primary purpose of keeping pests from becoming resistant to pesticides?**	**YES = 1**	0802

5. [***Enumeration Action: Were HERBICIDES used (pesticide product codes 4000-4999), Section D, item 1, column 2?***]
   ☐ **YES** - [*Continue.*] ☐ **NO** - [*Go to item 8.*]

6. **Were herbicides applied to this corn field BEFORE weeds emerged?**
   [*If item 6 = YES, ask---*] **YES = 1** — CODE 0803

   a. Were the herbicides applied BEFORE weeds emerged on this corn field based primarily on---
   1 routine treatments of what **weeds** are usually present?
   OR
   2 weed scouting from the previous year?
   — CODE 0804

7. **Were herbicides applied to this corn field AFTER weeds emerged?**
   [*If item 7 = YES, ask---*] **YES = 1** — CODE 0805

   a. Were the herbicides applied AFTER weeds emerged on this corn field based primarily on---
   1 routine treatments of what **weeds** are usually present?
   OR
   2 weed scouting from the current year?
   — CODE 0806

8. **[*Enumeration Action: Were INSECTICIDES used (pesticide product codes 1000 – 1999), in Section D, item 1, column 2?*]**
   ☐ **YES** - [*Continue.*] ☐ **NO** - [*Go to item 10.*]

9. **Were the insecticides applied to this corn field based primarily on---**
   1 routine treatments of what **insects** are usually present?
   OR
   2 scouting for insect infestation?
   — CODE 0807

10. **In 2005, how was this field primarily scouted for insects, weeds, diseases, and/or beneficial organisms---**

	CODE
1 By conducting general observations while performing routine tasks? [*Enter code 1 and go to item 13.*] 2 By deliberately going to the field specifically for scouting activities? [*Enter code 2 and go to item 11.*] 3 This field was not scouted. [*Enter code 3 and go to item 19.*]	0808

11. **Was an established scouting process used** (*systematic sampling, recording counts, etc.*) **or were insect traps used in this field?** . . . . . **YES = 1** — CODE 0809

12. **Was scouting for pests done in this field due to---**

		CODE
a. a pest advisory warning?	**YES = 1**	0810
b. a pest development model?	**YES = 1**	0811

13. **Was this corn field scouted for--**	1 **YES = 1**	2 [*If **YES**, ask---*] **Was the infestation level for** [*column 1*]— 1 Worse than normal 2 Normal 3 Less than normal **CODE**	3 [*If column 1 = **YES**, ask---*] **Who did the majority of the scouting for** [*column 1*]--- 1 Operator, partner or family member 2 An employee 3 Farm supply or chemical dealer 4 Independent crop consultant or commercial scout **CODE**
a. weeds?	0812	0813	0814
b. insects or mites?			
(i) Corn Borer?	0818	0819	0820
(ii) Corn Rootworm?	0821	0822	0823
(iii) Other Insects?	0824	0825	0826
c. diseases?	0827	0828	0829

14. [*If item 13, column 3 = 3 or 4), ask--- else go to item 15.*]
How much did you pay for the scouting services for this field?
[***Include** landlord and contractor cost.*] . . . . . **DOLLARS & CENTS PER ACRE** 0830 .___ ___ **OR** **TOTAL DOLLARS** 0831

OFFICE USE

a. [***Note:** If scouting performed at no cost, explain*:_____] 0333

15. **Were written or electronic records kept for this field to track the activity or numbers of weeds, insects or diseases?** . . . . . **YES = 1** — CODE 0832

16. **Was scouting data compared to published information on infestation thresholds to determine when to take measures to manage pests in field?** . . . . . **YES = 1** — 0833

17. **Did you use field mapping of previous weed problems to assist you in making weed management decisions?** . . . . . **YES = 1** — 0834

19. **Did you do any of the following other type(s) of pest management for the specific purpose of managing or reducing the spread of pests in this field?**
[*Enter code "1" for all that apply*.]

			CODE
a.	Use the services of a diagnostic laboratory for pest identification or soil plant tissue pest analysis for this field?	YES = 1	0836
b.	Plow down crop residues (*using conventional tillage*)?	YES = 1	0837
c.	Remove crop residue?	YES = 1	0838
d.	Rotate crops in this field during the past 3 years?	YES = 1	0839
e.	Maintain ground covers, mulches, or other physical barriers?	YES = 1	0840
f.	Choose crop variety because of specific resistance to certain pest?	YES = 1	0841
g.	Use no-till or minimum till?	YES = 1	0842
h.	Plan planting locations to avoid cross infestation of pests?	YES = 1	0843
i.	Adjust planting or harvesting dates?	YES = 1	0844
j.	Chop, spray, mow, plow, or burn field edges, lanes, ditches, roadways, or fences lines?	YES = 1	0845
k.	Clean equipment and field implements after completing field work to reduce the spread of pests?	YES = 1	0846
l.	Adjust row spacing, plant density or row directions?	YES = 1	0847

20. **Were water management practices such as irrigation scheduling, controlled drainage, or treatment of retention water used on this field to manage for pests or toxic producing fungi and bacteria** (*i.e.aflatoxin*)**?** YES = 1 — 0851

21. **Was protection of beneficial organisms a factor in your pest control decisions for this field?** YES = 1 — 0852

22. **Did you cultivate this field for weed control?** YES = 1 — 0853

[*If yes, ask---*]

		NUMBER
a.	How many times?	0854

UNIT CODES
1= POUNDS
2= CWT
3= TONS
4= BUSHELS

	UNITS PER ACRE	
23. **If untreated** (*either with insecticides or Bt seed*), **how much yield loss** (*e.g. bushels per acre*) **do you think the CORN BORERS would most likely cause on this field?**	0855 .____	0856
24. **If untreated** (*either with insecticides or Bt seed*), **how much yield loss** (*e.g. bushels per acre*) **do you think the CORN ROOTWORMS would most likely cause on this field?**	0857 .____	0858

PEST MANAGEMENT INFORMATION

25. [*Show Pest Management Information Sources Code List from Respondent Booklet*.]

Which outside sources of information on pest management practices and products were used for the 2005 corn crop?

(*Starting with the most influential in determining the pest management practices used on this operation, enter code(s) for up to 3 sources.*)

PEST MANAGEMENT INFORMATION SOURCES CODE LIST

1	County, Cooperative, or University Extension Advisor, Publications or demonstrations
2	Farm Supply or Chemical Dealer
3	Commercial Scouting Service
4	Independent Crop Consultant or Pest Control Advisor/Custom Applicator
5	Other Growers or Producers
6	Producer Associations, Newsletters or Trade Magazines
7	Electronic Information Services (*DTN, Internet, World Wide Web, etc.*)
8	Employee Pest Advisor
9	Other – (Specify:_____)
10	None – Operator used no **outside** information source

[Enter up to 3 source codes.]

FIRST	0859
SECOND	0860
THIRD	0861

26. **Other than pesticide applicator training, have you** (*the operator*) **attended any training session on pest identification and management since October 1, 2004?** . . . . . **YES = 1**

CODE
0862

Completion Code for Pest Management Data	
1- Incomplete/Refusal	0340

NOTES

1. Including custom operations, I need to list field work performed by machines on this field for the 2005 corn crop. Please…

- ► Begin with the first field operation after harvest of previous crop. (*If fallow during 2004, list operations starting with fall 2003.*)
- ► List the operations in order through harvest and hauling of this crop to storage or first point of sale, and
- ► Maintain the order of tandem hook-ups.

CODES FOR COLUMN 5

1 You (The Operator)?
2 Partner?
3 Unpaid Worker?
4 Paid Part-time or Seasonal Worker?
5 Paid Full-time Worker
6 Custom Applicator?---[*Skip columns 6-11.*]

CHECK LIST
Include all field work using machines for---

- ☐ Land Forming/Levee Building
- ☐ Tillage
- ☐ Preparing for Irrigation
- ☐ Planting
- ☐ Fertilizer & Pesticide applications
- ☐ Harvesting & Hauling to storage or first point of sale

Exclude

- ☐ Lime & Gypsum\landplaster applications

2 SEQUENCE No.	3 What operation or equipment was used?	4 [*Record machine code from Respondent Booklet.*] CODE	5 Who was the machine operator- [*Enter code from above.*] CODE	[IF CUSTOM(*column 5 = code 6*), *skip columns 6-11*] 6 What was the size or swath of the [*machine*] used?	7 [*Record size code.*] 1 Feet 2 Row 3 Moldboard (*bottoms*) Hauling 4 Pounds 5 Bushels 6 Tons CODE	8 How many acres were covered? 1/ ACRES	9 Which Power Source was used? 1=Tractor (<50 HP) 2=Tractor (50-99 HP) 3=Tractor (100-149 HP) 4=Tractor (150-199 HP) 5=Tractor (>=200 HP) 66=Animal Drawn 77=Pick up 99=Self Propelled 2/ CODE	10 What was the fuel type of the tractor? [*Record fuel type only if Power code equals 1-5*] 1=diesel 2=gasoline 3=LP gas 4=other CODE	11 What is the model year of the tractor. [*Record model year for Power codes 1 -5*] YEAR
0351		0352	0353	0354	0355	0356 .___	0357	0358	0359 ____
0361		0362	0363	0364	0365	0366 .___	0367	0368	0369 ____
0371		0372	0373	0374	0375	0376 .___	0377	0378	0379 ____
0381		0382	0383	0384	0385	0386 .___	0387	0388	0389 ____
0391		0392	0393	0394	0395	0396 .___	0397	0398	0399 ____
0401		0402	0403	0404	0405	0406 .___	0407	0408	0409 ____
0411		0412	0413	0414	0415	0416 .___	0417	0418	0419 ____
0421		0422	0423	0424	0425	0426 .___	0427	0428	0429 ____
0431		0432	0433	0434	0435	0436 .___	0437	0438	0439 ____
0441		0442	0443	0444	0445	0446 .___	0447	0448	0449 ____
0451		0452	0453	0454	0455	0456 .___	0457	0458	0459 ____
0461		0462	0463	0464	0465	0466 .___	0467	0468	0469 ____
0471		0472	0473	0474	0475	0476 .___	0477	0478	0479 ____
0481		0482	0483	0484	0485	0486 .___	0487	0488	0489 ____
0491		0492	0493	0494	0495	0496 .___	0497	0498	0499 ____
0501		0502	0503	0504	0505	0506 .___	0507	0508	0509 ____
0511		0512	0513	0514	0515	0516 .___	0517	0518	0519 ____
0521		0522	0523	0524	0525	0526 .___	0527	0528	0529 ____

1/ *For backhoes, disk border maker, ditch closer,ditcher, levee-plow disk, quarter drain machine, rear mounted blade, and hauling operations, enter **TOTAL HOURS**.*

2/ *If trucks other than pick-ups are used as the power source, use truck codes in Respondent Booklet. If power source equals 66, 77, or 99, skip columns 10 and 11.*

OFFICE USE

0032

2. **Was a self-propelled harvester used to harvest the corn field?**

☐ **YES** - [*Continue.*] ☐ **NO** - [*If NO, go to item 3.*]

[*If item 2 = YES, ask---*]

YEAR

a. What is the model year of the self-propelled harvester(s) used to harvest corn from this field? (*Report the average year if more than one was used.*). . . . . 1100 ___ ___ ___ ___

3. **I need some information about the additional labor, other than the labor just reported operating machines, that worked on this field.**

Please report the paid and unpaid labor that worked on this field to produce the 2005 corn crop.

TYPE OF WORKERS	1 How many hours did (*type of worker*) spend on this field--- a. scouting for weeds and insects? HOURS	b. irrigating? HOURS
You (The Operator)	1102	1103
Partner(s)	1104	1105
Unpaid workers	1106	1107
Paid part-time or seasonal workers (***Exclude*** *custom and contract labor*)	1108	1109
Paid full-time workers (***Exclude*** *custom and contract labor*)	1110	1111

DOLLARS & CENTS PER HOUR

4. **What was the average hourly wage rate paid to full-time hired workers?** (***Exclude*** *custom and contract workers, payroll taxes and benefits.*). . . . . 1114 .___ ___

DOLLARS & CENTS PER HOUR

5. **What was the average hourly wage rate paid to part-time or seasonal hired workers?** (***Exclude*** *custom and contract workers, payroll taxes and benefits.*). . . . . 1115 .___ ___

CODE

6. **Was any contract labor used on this field?**. . . . . **YES = 1** 1116

DOLLARS & CENTS PER ACRE

a. *If YES, ask* – What was the average cost per acre for this contract labor? (***Include*** *landlord and contractor costs.*). . . . . 1117 .___ ___

PERCENT

7. **What percent of the total hours worked on this field by UNPAID workers was worked by children under 16 years old?**. 1118

8. **Now I need some information on how much was spent for custom services used on this field for the 2005 corn crop.**

√	1 **CUSTOM SERVICE** **Which of these services were done for the 2005 corn crop on this field?** [*Check √ box for each service performed; refer to item F1 if necessary*.]	2 **Including landlord's/contractor's cost, how much was spent for** *[column 1]* **on this field for the 2005 corn crop?** **DOLLARS & CENTS PER ACRE**
☐	a. custom land preparation, shaping and/or leveling?	1119 .___ ___
☐	b. custom cultivating?	1120 .___ ___
☐	c. custom planting and/or reseeding?	1121 .___ ___
☐	d. custom harvesting?	1122 .___ ___
☐	e. custom hauling to storage or point of first sale? (___.___ ___ X_____÷_____= ___ ___.___ ___ Dollars & Cents per unit x Total units hauled from field ÷ Acres harvested in field = Dollars & Cents per acre.)	1126 .___ ___
☐	f. custom harvesting and hauling from field to storage or point of first sale? (___.___ ___ X_____÷_____= ___ ___.___ ___ Dollars & Cents per unit x Total units hauled from field ÷ Acres harvested in field = Dollars & Cents per acre.)	1127 .___ ___

9. **Did you hire any technical or consultant services to make recommendations for this field?** (*such as for nutrient, pest control, irrigation, or precision farming recommendations*)

☐ **YES** - [*Continue*.] ☐ **NO** - [Go to item *11*.]

		CODE
a. Nutrient recommendations/management service?	**YES = 1**	1129
b. Collect soil or tissue samples?	**YES = 1**	1130
c. Pest control recommendations/management service?	**YES = 1**	1131
d. Pest scouting?	**YES = 1**	1132
e. Irrigation management service (*i.e. irrigation scheduling*)?	**YES = 1**	1133
f. Yield map or remote sensing map development/interpretation?	**YES = 1**	1134
g. Other custom or technical service (Specify:_____)	**YES = 1**	1135

10. **If YES to any of these services, what was the cost for all of these services?**

(***Include*** *landlord/contractor cost.*
Exclude *cost of soil/tissue tests or scouting cost reported earlier.*
Do not report costs for any of these services if they were previously reported as part of the costs of materials and/or application.)

DOLLARS & CENTS PER ACRE	OR	TOTAL DOLLARS
1136 ___ ___ .___ ___		1137 ___ ___

CODE

11. **Was there** (*will there be*) **a yield monitor on the equipment used to harvest this corn field?** . . . . . **YES = 1** | 1138 |

[*If YES, continue; else go to item 12.*]

a. Was there (*will there be*) a yield map produced from this harvest using information from the yield monitor? . . . . . **YES = 1** | 1139 |

b. Did you use the yield monitor information to---
[*Enter code for all that apply*.]

(i) monitor crop moisture content to determine need for crop drying? . . . . . **YES = 1** | 1140 |

(ii) add/improve tile drainage? . . . . . **YES = 1** | 1141 |

(iii) add/improve irrigation equipment/irrigation water application? . . . . . **YES = 1** | 1142 |

(iv) conduct in-field experiments (*e.g., compare fertilizer applications, seed varieties, herbicides, pesticides, etc*)? . . . . . **YES = 1** | 1143 |

(v) negotiate new crop leases? . . . . . **YES = 1** | 1144 |

(vi) document yields for crop insurance, real estate tax, or farm program purposes? . . . . . **YES = 1** | 1145 |

(vii) accurately divide crop production among partners and/or for landlord crop shares? . . . . . **YES = 1** | 1146 |

(viii) other uses [specify_____] . . . . . **YES = 1** | 1147 |

CODE

12. **During 2004 or 2005, was a GPS** (*Global Positioning System*) **device used to produce a map of the soil properties of this field?** (*such as nitrate levels, PH,soil type, etc.*) . . . . . **YES = 1** | 1148 |

[*If item 12 is YES, Ask—*]

a. Was the information collected above based on---

1 soil tests from this field?
2 a machine that measured electrical conductivity of the soil in this field (*e.g.Veris machine*)?
3 other? *Specify*_____

. . . . . | CODE 1149 |

CODE

13. **Did you have an airplane or satellite provide an image or photograph of this field either at the start or during the 2005 growing season?** . . . . . **YES = 1** | 1151 |

14. **Was a variable rate applicator** (*i.e., variable rate technology or VRT; include on-the-go systems such as GreenSeeker*) **used on this field for---**

a. fertilization or liming? . . . . . **YES = 1** | 1152 |

(i) *If YES, ask*---Did you use a variable rate applicator for---
[*Enter code "1" for all that apply*.]

(1) nitrogen applications? . . . . . **YES = 1** | 1153 |

(2) phosphorus applications? . . . . . **YES = 1** | 1154 |

(3) potash applications? . . . . . **YES = 1** | 1155 |

(4) lime applications? . . . . . **YES = 1** | 1156 |

(5) manure applications? . . . . . **YES = 1** | 1157 |

b. seeding? . . . . . **YES = 1** | 1158 |

c. pesticide applications? . . . . . **YES = 1** | 1159 |

15. **Was a guidance or auto-steering system** (*connected to G.P.S.*) **used with any machine operation on this field** (*e.g. light bar, assisted steering, automatic steering, etc. – exclude custom operations)?* . . . . . **YES = 1** | 1212 |

1. **How many acres in this field were irrigated for the 2005 corn crop?**
[*If none, go to* ***Section H***.] . . . . . ACRES 1160 .___

2. **Now, I have some questions about irrigation systems and water used on this field for the 2005 corn crop.**

↓	UNIT	SYSTEM 1	SYSTEM 2
a. What type(s) of irrigation system(s) was used to irrigate this field? [*Show* ***System Type Codes*** *in the Respondent Booklet. Enter* ***System Type Code*** *for up to two systems covering the most field acres.*]	**SYSTEM TYPE CODE**	1161	1175
b. What was the total quantity of water applied to this field during the entire growing season? [***Include*** *ALL water used from both on-farm and off-farm sources.*]	**INCHES PER ACRE**	1162	1176
	OR		
	TOTAL ACRE -FEET	1163	1177
[*If operator cannot provide item 2b, ask* (i) & (ii)---]; *else go to 2c*			
(i) What is the **total** number of **hours** this system was used to apply water to this field during the corn growing season?	**TOTAL HOURS**	1164	1178
(ii) How many gallons per minute were applied?	**GALLONS PER MINUTE**	1165	1179
c. What percent of the water used to irrigate this field through this system came from surface water sources?	**PERCENT**	1166	1180
d. What was the number of times this field was irrigated during the corn growing season using this system? [***Include*** *any pre-plant irrigation*.]	**NUMBER OF IRRIGATIONS**	1167	1181
e. Was the pump type--- [*Enter code for most common pump type.*] [*If more than one pump in the system, enter type for pump closest to water source.*] **1 TURBINE? 2 SUBMERSIBLE? 3 CENTRIFUGAL? 4 BOOSTER? 5 SIPHON? 99 NO PUMP?** [*If code 99, go to item* j.]	**CODE**	1168	1182
f. What was the average pumping rate?	**GALLONS PER MINUTE**	1169	1183
g. *[If item 2a = code 1-9 (PRESSURE SYSTEM), ask---]* What was the system operating pressure?	**POUNDS PER SQUARE INCH**	1170	1184
h. What was the primary motor type used to pump the water? 1 **DIESEL** 2 **GASOLINE** 3 **LP GAS** 4 **NATURAL GAS** 5 **ELECTRICITY** 6 **SOLAR POWER**	**CODE**	1171	1185
i. What was the average motor size?	**HORSEPOWER**	1172	1186
j. [*If NO PUMP was used (item e = 99), ask*---] What was the average flow rate?	**GALLONS PER MINUTE**	1173	1187
k. How many other acres on this operation were irrigated using this field's irrigation system during the 2005 growing season? [***Exclude*** *this field.*]	**ACRES**	1174 .___	1188 .___

3. **What was the cost of the fuel or electricity used to irrigate this field?** . . . . . DOLLARS & CENTS PER ACRE 1208 .___ ___ **OR** TOTAL DOLLARS 1209

4. **Was any water purchased to irrigate this field?**
(***Include*** *landlord's share and purchases from all sources.*)

CODE

☐ **YES** - [*Enter code 1 and continue*.] ☐ **NO** - [*Go to item 5*.] 1189

PERCENT

a. What percent of the water used on this field was purchased? 1190

DOLLARS & CENTS PER ACRE OR TOTAL DOLLARS

b. What was the total cost for the water purchased for this field during the 2005 growing season?
(***Include*** *landlord and contractor costs and ditch maintenance costs.*) . . . . . 1191 .___ ___ OR 1192

5. [*If SIPHON TUBES were used (item 2a = 10 or 11), ask*---]

TOTAL DOLLARS

What would be the total cost to replace all the siphon tubes used on this field? 1193

6. [*If POLY PIPE system were used (item 2a = 14*) *ask*---]

TOTAL DOLLARS

What was the total amount spent for poly pipe used on this field during the 2005 growing season? 1194

7. [*If GATED PIPE system were used (item 2a = 15 or 16*), *ask*---]

INCHES

a. What was the average diameter of gated pipe used to irrigate this field? 1195

FEET

b. What was the total length of gated pipe used? 1196

8. **Were wells used to supply irrigation water for this field?**

CODE

☐ **YES** - [*Enter code 1 and continue*.] ☐ **NO** - [*Go to item 9*.] 1197

NUMBER

a. How many wells were used to irrigate this field? 1198

INCHES

b. What was the average diameter of the outer well casing? 1199

FEET

c. What was the average pumping depth of these wells during the irrigation season?
[*Pumping depth is the depth to water at the start of the irrigation season, plus an average decline in the water level caused by pumping during the irrigation season.*] 1200

CODE

d. Did this well(s) have a water meter or other flow measurement device? . . . . . **YES = 1** 1201

e. Were other fields irrigated using water pumped from well(s) that supplied water to the selected field?

CODE

☐ **YES** - [*Enter code 1 and continue*.] ☐ **NO** - [*Go to item 9*.] 1202

ACRES

(i) Excluding this field, how many other acres on this operation were irrigated using the same well(s) during the 2005 growing season? . . . . . 1203 .___

9. **Other than pipe that is part of the system, was any additional mainline or lateral pipe used to carry water from the source to this field?**
(***Include*** *underground pipe*.)

☐ **YES** - [*Continue*.] ☐ **NO** - [*Go to item 10*.]

a. What was the average diameter (*in inches*) of the most common type of this additional pipe used? . . . . . **INCHES** 1205

b. How many feet of this additional pipe were used to bring water to this field? . . . . . **FEET** 1206

10. **Is the run-off from this field---** . . . . . **CODE** 1207

RUN-OFF CODES	
1	retained at the end of the field?
2	re-used to irrigate on the farm?
3	collected in evaporation ponds on the farm?
4	drained from the farm?
5	there is no run off.

1. **In response to high fuel prices during the 2005 crop year for corn, did you:**

			CODE
a.	reduce the number of field operations such as tillage, cultivation, or nutrient and pesticide applications? (*i.e., compared to what you would have otherwise done on this field*)?	**YES = 1**	1210
b.	leave the crop in the field to dry longer than you would have otherwise done on this field?	**YES = 1**	1211
c.	reduce the amount of irrigation water (*i.e., compared to what you would have otherwise applied on this field*)?	**YES = 1**	1220
d.	change other production practices on this field in response to high fuel prices? [*If yes, specify*_____]	**YES = 1**	1213

2. **In response to high fertilizer prices during the 2005 crop year for corn, did you:**

a.	reduce the application rate of commercial nitrogen fertilizer? (*i.e., compared to what you would have otherwise applied on this field*)?	**YES = 1**	1214
	[*If YES, ask*---]		**PERCENT**
(i)	by what percent did you reduce the amount of commercial nitrogen fertilizer for 2005?		1215
			CODE
b.	change the type of commercial nitrogen fertilizer products applied (*i.e., compared to what you would have otherwise applied on this field*)? [*e.g. less anhydrous ammonia and more UAN*]	**YES = 1**	1216
c.	increase the application rate of manure or other organic fertilizers (*i.e., compared to what you would have otherwise applied on this field*)?	**YES = 1**	1217
d.	manage fertilizer more closely, with such practices as soil testing, split applications, variable rate applications, or soil incorporation (*i.e., compared to what you would have otherwise done on this field*)?	**YES = 1**	1218

CONCLUSION

LOCATION OF SELECTED FIELD

1. **I need to locate the selected field of corn on this map.**

	COUNTY NAME	OFFICE USE COUNTY FIPS CODE
What county is the corn field in?		0010
Field description		

FOR STATES WITH GPS UNITS ONLY

		LATITUDE		LONGITUDE
Field location	**N**	0054 __ __ . __ __ . __ __ (d d m m s s)	**W**	0055 __ __ __ . __ __ . __ __ (d d d m m s s)

2. [**ENUMERATOR ACTION:**
Mark map to indicate where the selected corn field is located.
Be sure the "X" marked on map is in county identified above.]

3. **We will need additional information to complete this study. We will contact you in February or March, 2006, to collect it. I'll call you then to set up a time that is good for you.**

		CODE
4. **Would you like to receive a copy of the results of this survey in the mail?** (Results will also be available on the Internet at http://www.usda.gov/nass/ **&** http://www.ers.usda.gov/.)	**YES = 1**	0099

		HH MM
5. **ENDING TIME** [*MILITARY*]		0005 __ __ __ __

RECORDS USE

6. [*Did respondent use farm/ranch records to report---*]

		CODE
a. [***fertilizer** data*?]	**YES = 1**	0011
b. [***pesticide** data?*]	**YES = 1**	0012
c. [*majority of this **expense** data*?]	**YES = 1**	0013

SUPPLEMENTS USED

7. [*Record the total number of each type of supplement used to complete this interview.*]

	NUMBER
FERTILIZER APPLICATIONS	0041
PESTICIDE APPLICATIONS	0042
FIELD OPERATIONS	0043

Reported by:_____ Telephone: (_____)_____

Response		Respondent		Mode		Enum	Eval.	Date MM DD YY	Optional	Optional
1-Comp 2-R 3-Inac	9901	1- Op/Mgr 2-Sp 3-Acct/Bkpr 4-Partner 9-Other	9902	2-Tel 3-Face-to-Face	9903	0098	0100	0007 __ __ __ __ **05**	0002	0003
S/E Name										