Section I: Field Operations

Logan Bradley-Trietsch

Field Ops Table

List all equipment operations

- Start **after** the harvest of the **previous** crop and continue **through** harvest of the **planted** crop
  - Harvest includes grazing activities on stubble, not harvesting stubble

- Do not put 2 different crop years in the same table
- Permanent **Hay** – start with the first operation, end with the last operation performed in the **calendar year**

Field Operations to Include

- Neighbors, friends, "swap"
- Land forming
- Tillage
- Preparing for irrigation before seeding
- Planting

- Harvesting
- Pruning, hedging, topping
- Hauling **within field**
- Residue management
- Grazing (**Start** and **Stop**)
- **Custom** operations

Field Ops Table - Excludes

- Exclude
  - Lime/gypsum applications
  - Pesticide, manure, fertilizer applications
  - Hauling of the harvested crop from the field edge to barns, grain bins, etc.
  - Work done outside the selected field, e.g., field border

FIELD OPERATIONS — SELECTED FIELD

1. Including custom operations, what operations were performed by hand or machines on this field for the 2024, 2023, and 2022 crop years?
   - Begin with the first field operation for the 2024 crop (after harvesting of 2023 crop)
   - List the operations in order by crop year, through harvest
   - Maintain the order of tandem hook-ups
   - Include field operations performed by hand

   a. Let's start with the 2024 crop year

Lines in Table	Table 100	0499

CHECK LIST

INCLUDE all field work done by hand or using machines for

☐ Land Forming ☐ Planting ☐ Hauling within field
☐ Tillage ☐ Harvesting ☐ Residue Management
☐ Preparing for Irrigation before seeding
☐ Custom Operations ☐ Pruning, hedging, topping

EXCLUDE all field work done by hand or using machines for

☐ Lime & Gypsum applications
☐ Fertilizers, Manure & Pesticides applications
☐ Hauling from field edge to storage

Some possible issues:

1. Machines used at edge of field do not need to be included such as backhoe, ditch cleaner, etc.

2. Double check consistency – 1 digit wrong on machine code can mean Flame Thrower (223) used for corn harvest (123).

   a. Correct dates and sequences are absolutely critical.

3. Include ALL operations, even when there is more tillage and replanting after a crop failure

   o we will sort it out with clues from Section C: Cropping History.

Operations After Harvest of Previous Crop

- Operations after harvest of previous crop are recorded in the **next crop year** with **next year's crop code** (<u>unless the</u> <u>operation is specifically for the previous crop)</u>
  - o Fertilizer or manure applications
  - o Chemical applications
  - o Tillage

- Exceptions that occur **after harvest** that are recorded in the **same crop year:**
  - Grazing stubble
  - Baling stubble
  - Stalk chopping

Field Operations Table

LINE	1 Crop Year	2 Sequence Number	3 What crop was associated with this operation?	4 Crop Code [Record from Respondent Booklet pgs. 4 - 7.]	5 What operation or equipment was used on this field?	6 Machine Code [Record from Respondent Booklet pgs. 39 - 41.]	7 Was this operation used to incorporate a fertilizer or manure application? Yes = 1 No = 3	8 What was the timing of the field operation?	9 What was the depth of tillage for tillage/planting operations?
	Year	Number	Crop Name	Code		Code	Code	MM DD YY	Inches
01	86 24	87				88	99	96 _ _ _ _ _ _	97 . _
02	86 24	87				88	99	96 _ _ _ _ _ _	97 . _
03	86 24	87				88	99	96 _ _ _ _ _ _	97 . _
04	86 24	87				88	99	96 _ _ _ _ _ _	97 . _
05	86 24	87				88	99	96 _ _ _ _ _ _	97 . _
06	86 24	87				88	99	96 _ _ _ _ _ _	97 . _
07	86 24	87				88	99	96 _ _ _ _ _ _	97 . _

Field Operations Table

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01	86 24	87				88	99	96 _ _ _ _ _ _	97 ._
02	86 24	87				88	99	96 _ _ _ _ _ _	97 ._
03	86 24	87				88	99	96 _ _ _ _ _ _	97 ._
04	86 24	87				88	99	96 _ _ _ _ _ _	97 ._
05	86 24	87				88	99	96 _ _ _ _ _ _	97 ._
06	86 24	87				88	99	96 _ _ _ _ _ _	97 ._
07	86 24	87				88	99	96 _ _ _ _ _ _	97 ._

Field Operations Table

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	Year	Number	Crop Name	Code		Code	Code	MM DD YY	Inches
01	86 24	87				88	99	96 _ _ _ _ _ _	97 .__
02	86 24	87				88	99	96 _ _ _ _ _ _	97 .__
03	86 24	87				88	99	96 _ _ _ _ _ _	97 .__
04	86 24	87				88	99	96 _ _ _ _ _ _	97 .__
05	86 24	87				88	99	96 _ _ _ _ _ _	97 .__
06	86 24	87				88	99	96 _ _ _ _ _ _	97 .__
07	86 24	87				88	99	96 _ _ _ _ _ _	97 .__

Special Situations – Cover Crops

- Record the cover crop in the year it is **terminated**
- Record all operations required to produce cover crop
  - Planting
  - Maintaining
  - Removing/terminating of crop

Multiple Harvests of the Same Crop

- Record all harvest operations.

- Use a supplement if more lines are needed.

- If the supplement is insufficient or the operation cannot report every harvest date, then record at least the **first** and **last** harvest operations.

  o Leave a comment stating how frequently the field was harvested and the total number of harvests.

Gleaning, Straw/Residue Harvest

Record all **harvest** operations **in the same crop year**, including:

- Harvest of the primary crop

- Harvest of "gleanings" (vegetables, fruit)

- Harvest of straw/stubble

Livestock and Grazing

If livestock are present at any time during the year:

- o Record the dates when livestock are **turned in** on the field (**Start Graze**)
- o Record the dates when livestock are **pulled off** of the field (**Stop Graze**)

If livestock are rotated on and off multiple times during the year this should be captured each time through the **Start Graze** and **Stop Graze** operations.

Partial Crop Failure

- **20** acre field is tilled and fertilizer applied for **corn**
- **Corn** crop is planted, but **5** acres are **flooded out**
- Flooded section is disked and replanted to **soybeans**
- Pesticide is applied to **soybeans** (midseason)
- **Corn**/**Soybeans** harvested

- Record all information for each crop, and include detailed notes.
  - **Section C**:   record **corn** in column 1 and **soybeans** in column 2.
  - **Section D**:   record fertilizer applied to **corn**
  - **Section F**:   record pesticides applied to **soybeans**
  - **Section I**:   record planting and harvest of both crops

Complete Crop Failure

- **20** acre field is tilled and fertilizer applied for **corn**.

- **Corn** crop is planted, but freeze occurs and the crop is deemed a loss.
  - **Section C, Column 1**   record information for **corn** crop, including 20 acres planted/abandoned
  - **Section D**   record fertilizer applied for corn
  - **Section I**   record field operations for corn

- Field is disked and replanted to **soybeans**

- Pesticide is applied to **soybeans** (midseason)

- **Soybeans** harvested.
  - **Section C, Column 2**   record information for soybeans, including acres planted and harvested
  - **Section F**   record pesticides applied to soybeans
  - **Section I**   record all field operations for soybeans

Example 1 – Basic Operation

Pull out your **GREEN** Section I example and work through it. All operations were performed to the selected soybean field (**crop code = 120**) in crop year 24.

- The **first** operation was a chisel plow (**machine code = 1**) used to incorporate manure with a 5 in. tillage depth on Feb 26, 2023.

Solution – Basic Operation

The **first** operation was a chisel plow (**machine code = 1**) used to incorporate manure with a 5 in. tillage depth on Feb 26, 2023.

LINE	1 Crop Year	2 Sequence Number	3 What crop was associated with this operation?	4 Crop Code [Record from Respondent Booklet pgs. 4 - 7.]	5 What operation or equipment was used on this field?	6 Machine Code [Record from Respondent Booklet pgs. 39 - 41.]	7 Was this operation used to incorporate a fertilizer or manure application? Yes = 1 No = 3	8 What was the timing of the field operation?	9 What was the depth of tillage for tillage/planting operations?
	Year	Number	Crop Name	Code		Code	Code	MM DD YY	Inches
01	86 24	87 1	soybeans	120	chisel plow	88 1	99 1	96 0 2 2 6 2 3	97 5 0

Example 2 – Tandem Operation

- The **second** operation was a flex-tine tooth (**machine code = 21**) connected to a field cultivator (**machine code = 33**) on March 29, 2023.

  - Flex-tine tooth: 0.5 in. tillage depth

  - Field cultivator: 1 in. tillage depth

- The **third** operation was a conventional planter (**machine code = 114**) with a 1 in. tillage depth on April 3, 2023.

Solution – Tandem Operation

LINE	1 Crop Year	2 Sequence Number	3 What crop was associated with this operation?	4 Crop Code [Record from Respondent Booklet pgs. 4 - 7.]	5 What operation or equipment was used on this field?	6 Machine Code [Record from Respondent Booklet pgs. 39 - 41.]	7 Was this operation used to incorporate a fertilizer or manure application? Yes = 1 No = 3	8 What was the timing of the field operation?	9 What was the depth of tillage for tillage/planting operations?
	Year	Number	Crop Name	Code		Code	Code	MM DD YY	Inches
01	86 24	87 1	soybeans	120	chisel plow	88 1	99 1	96 0 2 2 6 2 3	97 5 0
02	86 24	87 2	soybeans	120	flex-tine tooth	88 21	99 3	96 0 3 2 9 2 3	97 0 5
03	86 24	87 2	soybeans	120	cultivator	88 33	99 3	96 0 3 2 9 2 3	97 1 0
04	86 24	87 3	soybeans	120	planter	88 114	99 3	96 0 4 0 3 2 3	97 1 0

Example 3 – Missed Operations

- The operator forgot that a soil finisher **(machine code = 66)** operation was performed **before** planting occurred.
    - o 3 in. tillage depth
    - o April 1, 2023

Solution – Missed Operation

LINE	1 Crop Year	2 Sequence Number	3 What crop was associated with this operation?	4 Crop Code [Record from Respondent Booklet pgs. 4 - 7.]	5 What operation or equipment was used on this field?	6 Machine Code [Record from Respondent Booklet pgs. 39 - 41.]	7 Was this operation used to incorporate a fertilizer or manure application? Yes = 1 No = 3	8 What was the timing of the field operation?	9 What was the depth of tillage for tillage/planting operations?
	Year	Number	Crop Name	Code		Code	Code	MM DD YY	Inches
01	86 24	87 1	soybeans	120	chisel plow	88 1	99 1	96 0 2 2 6 2 3	97 5 0
02	86 24	87 2	soybeans	120	flex-tine tooth	88 21	99 3	96 0 3 2 9 2 3	97 0 5
03	86 24	87 2	soybeans	120	cultivator	88 33	99 3	96 0 3 2 9 2 3	97 1 0
04	86 24	87 ✗ 4	soybeans	120	planter	88 114	99 3	96 0 4 0 3 2 3	97 1 0
05	86 24	87 3	soybeans	120	finisher	88 66	99 3	96 0 4 0 1 2 3	97 3 0

Example 4 – Grazing (Fix the Error)

LINE	1 Crop Year Year	2 Sequence Number Number	3 What crop was associated with this operation? Crop Name	4 Crop Code [Record from Respondent Booklet pgs. 4 - 7.] Code	5 What operation or equipment was used on this field?	6 Machine Code [Record from Respondent Booklet pgs. 39 - 41.] Code	7 Was this operation used to incorporate a fertilizer or manure application? Yes = 1 No = 3 Code	8 What was the timing of the field operation? MM DD YY
01	86 24	87 1	winter wheat	125	no-till drill	88 105	99 3	96 101223 _ _ _ _ _ _
02	86 24	87 2	winter wheat	125	combine	88 123	99 3	96 070124 _ _ _ _ _ _
03	86 24	87 3	winter wheat	125	graze	88 409	99 3	96 070224 _ _ _ _

Solution – Grazing (Fix the Error)

LINE	1 Crop Year	2 Sequence Number	3 What crop was associated with this operation?	4 Crop Code [Record from Respondent Booklet pgs. 4 - 7.]	5 What operation or equipment was used on this field?	6 Machine Code [Record from Respondent Booklet pgs. 39 - 41.]	7 Was this operation used to incorporate a fertilizer or manure application? Yes = 1 No = 3	8 What was the timing of the field operation?
	Year	Number	Crop Name	Code		Code	Code	MM DD YY
01	86 24	87 1	winter wheat	125	no-till drill	88 105	99 3	96 101223 _ _ _ _
02	86 24	87 2	winter wheat	125	combine	88 123	99 3	96 070124 _ _
03	86 24	87 3	winter wheat	125	**Start** graze	88 409	99 3	96 070224 _ _ _ _
04	86 24	87 4	winter wheat	125	**Stop** graze	88 **410**	99 **3**	96 **072324** _ _ _ _

Questions?

Special Situations – Strip Cropping

Record all information for each crop –

- Tillage
- Planting
- Cultivation
- Harvest

Double Cropping

Double cropping explanation

Double cropping section I table picture