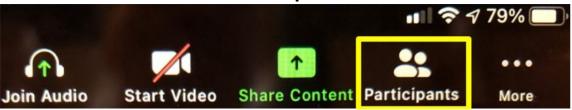


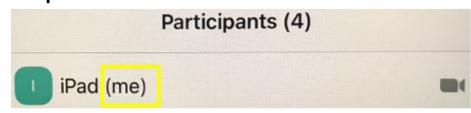




 Touch your screen to see the menus, then click on "Participants"



• Your name followed by (me), towards top.



 If your full name is not displayed then click on what is currently being displayed. Click on "Rename"



 Type state fips, first & Last name





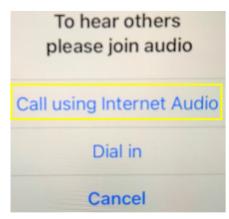




• Touch your screen to see menus. If you see "Join Audio" then click on it.



 Click on "Call using Internet Audio" this is the preferred method or if you select "Dial in", you will be presented with phone numbers to call.

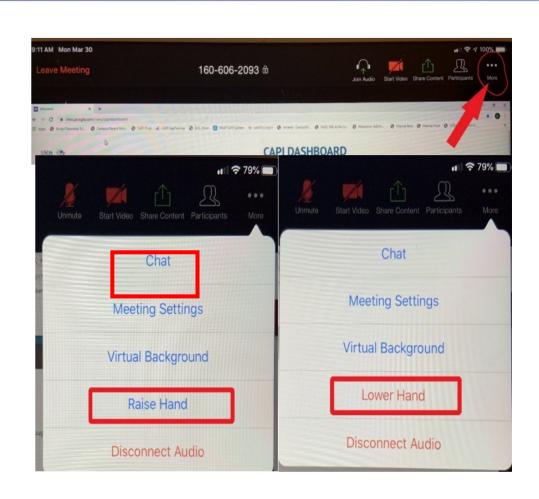




Zoom Conference



- We will be using the lower / raise hand feature in Zoom.
- If you have a question please "Raise Hand".
 - When called on by the presenter unmute so that you can ask your question.
- If you no longer have a question, you can "Lower Hand".
- You can also use "Chat" feature to ask a question.







We are recording this session and will load to the NASDA website so team members not able to join have the opportunity to review and allow those attending to review as well, if needed.

Our local video expert in the RFO will edit to enhance or remove any statements not allowed for non NASDA\NASS consumption (PII) and to remove our conversations before the formal session begins.



Zoom Conference



- Reminder to attendees:
 - Please keep microphone muted to prevent background noise.
 - Be aware of your surroundings if you have your camera turned on.
 - If you have an issue, contact your NASDA coordinator for help, or make a note in the chat box.
- Reminder to presenters:
 - Make sure to speak towards your computer microphone, so voice is picked up and heard by attendees. Don't rush! If you need to, use headphones or call in.
- Questions at end:
 - Use Raise Hand feature in zoom or put question in chat box.
 - When called on, be sure to unmute your microphone.
 - Will look at chat box and raised hands before we end the meeting.





Winter Wheat Objective Yield Zoom Training



April 17, 2023

9:00 am Central Time



Introductions



- Nick Streff Director of Northern Plains Region
- Christy Meyer Deputy of Northern Plains Region
- Doug Bounds Kansas State Statistician
- Michael Echtenkamp Kansas NASDA Coordinator
- Andrew Van Engelenhoven Nebraska NASDA Coordinator
- Curtis Arnold WOY Program Manager & Nebraska WOY Stat
- Sean Fedt Kansas WOY Statistician
- Paul Sueper WOY Group Leader























Curtis Arnold – Program Manager (402) 470-8779

curtis.arnold@usda.gov

Paul Sueper – Group Leader (402) 470-8757

Paul.Sueper@usda.gov

Office Phone: (800) 582-6443





Northern Plains Contacts for Wheat

KANSAS

Michael Echtenkamp – NASDA Coordinator (785) 260-3652 cell Michael.Echtenkamp@usda.gov

Sean Fedt – Kansas Wheat (402) 470-8754 Sean.Fedt@usda.gov

NEBRASKA

Andrew Van Engelenhoven - NASDA (402) 440-3209 cell Andrew.VanEngelenhoven@usda.gov

Curtis Arnold – Nebraska Wheat (402) 470-8779 Curtis.Arnold@usda.gov



Introductions



KANSAS

- Gary Morris
- Judy Bevan
- Dena Tabor
- Greg Koppes
- Rob Roberts
- Amanda Cook
- Renee Harman

NEBRASKA

- Yolanda Ambrosek
- Bonnie Emerson
- George Pinkerton
- Don Kneifl
- Kay Kallsen
- Lorie Paprocki



Agenda



- Purpose
- Form A
- Pesticide Safety
- Unit Location
- Form B
- Preferred Packaging
- Form E
- Due Dates & Grain Shipping
- Home Study Quiz
- Question and Answer Session



Workshop Overview



- Housekeeping Items
 - If you have an issue, please contact your NASDA Coordinator for help.
 - Please keep your microphone muted to prevent background noise.
 - Please hold questions until the specified allotted time, or put questions in the chat.
 - Please have the training packet readily available which contains the following items: WOY Booklet, Questionnaires and Interviewer's Manual.



Goals



- Refresher training
 - For experienced enumerators
- Basic tools
 - new enumerators
- Kit envelopes contain Forms A, B & E
 - Samples bundles contain materials used for units & grain
- Share knowledge and interact with other enumerators
- Meet NPR office staff







- Supervisors and enumerators are authorized for additional training.
 - Supervisor may meet with their group.
 - Supervisors may meet individually with their enumerators.
 - Time is available at your supervisor's discretion.
 - Recommend a field practice exercise with laying out the units.







- 1. Training Packet
- 2. Samples bundles, gleaning bundles and kit envelopes
- 3. Bamboo Poles

*New enumerators should have received a 4th containing WOY satchels



Training Packets



- Training Memo
- Cover Letter & Background Sheet
 Packaging Standards
- Training Booklet
- Interviewer's Manual
- Forms A & B practice forms
- Blank Forms A, B, & E
- Yellow and Pink ID tags
- Quiz

- Reference Sheet
- UPS Procedures
- Trifold Brochure
- Wheat Objective Yield Procedures booklet
- Grid Map



Kit Envelopes



- Each sample has a kit envelope
- Each kit envelope contains
 - Form A
 - Form B multiple months
 - Form E if the sample is divisible by 4
 - Yellow and Pink ID tags
 - Grid Map







- Sample Bundles
 - Packaging supplies for shipping grain
 - Unit stakes

- Gleaning Bundles
 - Packaging supplies for shipping gleaning grain
 - Unit stakes





Extra Supplies - Enumerators

- WOY Satchel
- Bamboo Poles
- Flagging Ribbon

• If you are running low on supplies, contact your Supervisor





Resources on the NPR NASDA Website

- CAPI Dashboard: NASDA
- Go to the "Northern Plains Region" area.
- Under "Objective Yield" tap on the document you want to download to Books.
- Tap on the box with the arrow pointed up. (1) Located in the upper right corner.
- Tap on "Copy to Books" to take you directly into Books.
- Once a document is downloaded to Books (icon on your home screen), it is saved on your iPad & can be accessed without a signal.





NPR NASDA Website – Objective Yield

• Website: https://www.nasda.org/organizations/northern-plains-region

Objective Yield		
Wheat OY – Unit Location (7 min)	Lab Sample Packaging	
Wheat OY – Form B (2 min)	Wheat OY Quiz	
Wheat OY – Crop Maturity (15 min)	Wheat OY Evaluation	
Wheat OY – Form E (4 min)	Wheat OY Training Slides	
Corn Home Study Quiz	Laying Out a Unit	
Soybean Home Study Quiz	Corn Soybean 2022 Training	
Course Evaluation	Wheat OY – Lab	
Wheat OY – Gleanings	OY Sample Packaging	



NASDA Administration



- Charge all time and expenses for Wheat OY to Project Code 101
- Mid Year Workshop
 - Kansas May 17 19
 - Nebraska May 15 17







Winter Wheat Objective Yield Zoom Meeting

April 17, 2023 Project Code 101











Purpose



- The purpose of the wheat objective yield survey is to accurately forecast the production of wheat at the State, Regional, and National levels. We also find harvest loss and change in acreage intentions for harvest.
- The monthly Crop Production reports provide reliable and timely information to use by farmers to make knowledgeable marketing strategies and business decisions.
- The Objective Yield survey provides factual information about wheat crop like row width, plants per acre, heads per square foot, grain weight, moisture content and harvest loss. All grain samples are processed at the National OY lab in Saint Louis, MO.





Wheat Objective Yield Program

Program

- Field counts, measurements & grain weights to forecast wheat yields
- 10 States are in the program with 75% coverage of wheat harvested & 64% coverage of wheat production

Farmer Benefit

- Update marketing strategies (forward contract, hedge into futures, cash market)
- Decide on farming practices (sell vs store)
- Change intended crop usage harvest, graze, silage, hay or feed usage.

USDA doesn't drive down prices

- Actual supply entering the market, along with demand determines prices
- 49% Wheat price increased one week after report over the last 35 years
- 49% Wheat price **decreased** one week after report over the last 35 years
- 2% Wheat price had **no change** one week after report over the last 35 years





Winter Wheat Yield Estimates

- In-Season Forecasts (for winter wheat May 1 August 1)
 Published near the 10th Crop Production Report
 - ☐Ag. Yield
 - Subjective
 - Inexpensive
 - □Objective Yield (OY)
 - Actual counts of stalks and grain-objective
 - Expensive
 - ☐ Remote Sensing
 - Satellites used to measure vegetation to model yield
- Year End
 - ☐Final OY
 - ☐ County Agricultural Production small grains (CAPS)
 - ☐ September Agricultural Production Survey (APS)





Winter Wheat Objective Yield

- Each sample field will have two units laid out. This is where the counts and measurements will be done.
- 2 parts to WOY fieldwork
 - ☐ Forms
 - Paperwork and then data entered into CAPI
 - ☐ Wheat clippings, final pre-harvest, and gleanings
 - Bagged and shipped
- National Lab in Saint Louis, Missouri
 - Number of heads, weight of heads, thresh, moisture content, test weight
 - ☐ Form E harvest loss



Sample Size



- Samples are drawn from the 2023 March Agricultural Survey
- Winter Wheat harvested for grain
- No pre-assigned fields
 - Regional States
 - Kansas
 - Nebraska





Field Selection



- All samples will have a direction and closest or furthest indicator
- Move clockwise if no field in the indicated direction
 - N, NE, E, SE, S, SW, W, NW
- Direction variable means field in that direction that has not already been selected
- (C) Closest or (F) Furthest was added to enable all fields to be eligible for selection



NASDA Guidance



- Pre-survey letter was mailed to operator on April 10th
- The first contact attempt should be by phone
 - Complete Form A and the get Field(s) selection
 - Setup a personal appointment to meet operator
 - No answer, follow up with a personal attempt
- Allowed to drive to the field to set up field plots and make crop counts when you get operator permission
- Enumerators claim mileage for approved travel time





Use of Crop Production Report

- End Users
 - Farmers, bankers, grain buyers, economist, policy makers, media, brokers, extension, and universities
- Communicated Through
 - Farm magazines, radio, Internet, TV, newspapers, commodity news services, email and State Field Offices
- Unbiased source
 - No one has an advantage that could unfairly influence prices
- Grain Markets
 - It is actual supply entering the market along with demand that determines prices for farmers
 - USDA reports have had a positive effect on prices as often as negative effect.







- May 12th at 11:00 am CT
 - Crop Production Report (forecast)
- June 9th at 11:00 am CT
 - Crop Production Report (forecast)
- July 12th at 11:00 am CT
 - Crop Production Report (forecast)
- August 11th at 11:00 am CT
 - Crop Production Report (forecast)
- September 29th at 11:00 am CT
 - Small Grains Summary (final)



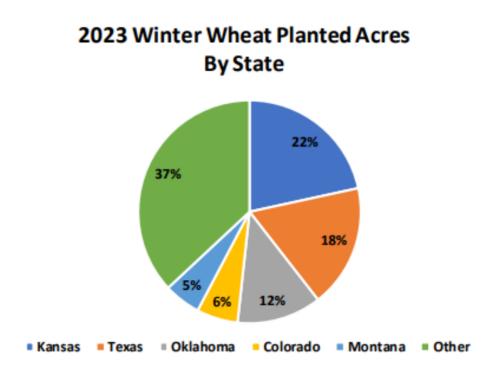




2023 Winter Wheat Planted Acreage

	Planted (1,000 Acres)		
United States	37,505		
% Change from Previous Estimate	↑ 1.5		
% Change from Previous Season	↑ 12.7		

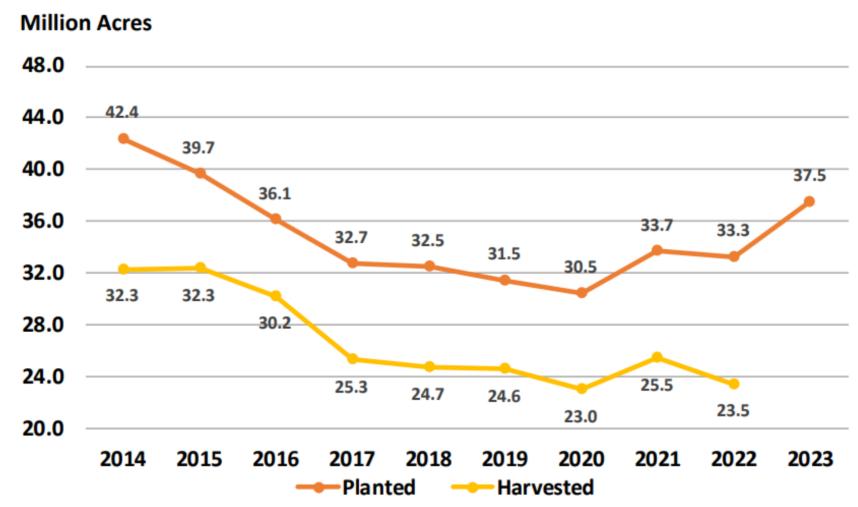
	Top 5 States			
	Planted			
	(1,000 Acres)	% Δ PY		
Kansas	8,100	\uparrow	11.0	
Texas	6,700	\uparrow	26.4	
Oklahoma	4,600	\uparrow	7.0	
Colorado	2,250	\uparrow	15.4	
Montana	2,000	\downarrow	2.4	





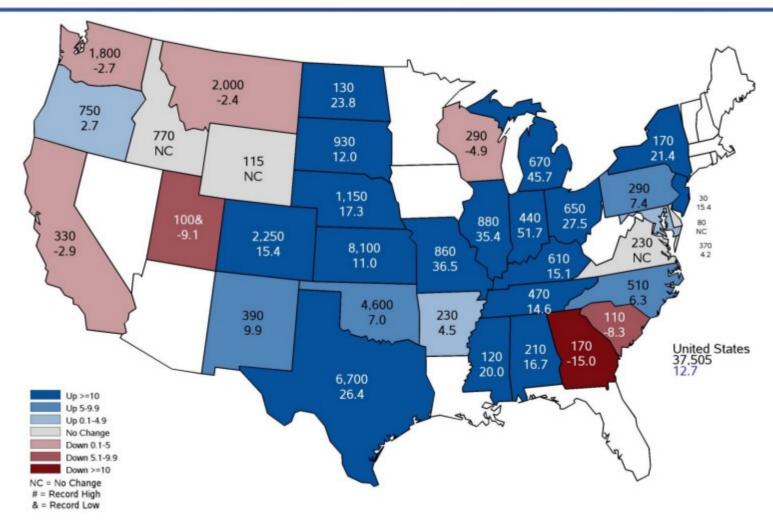


Winter Wheat Planted & Harvested Trend





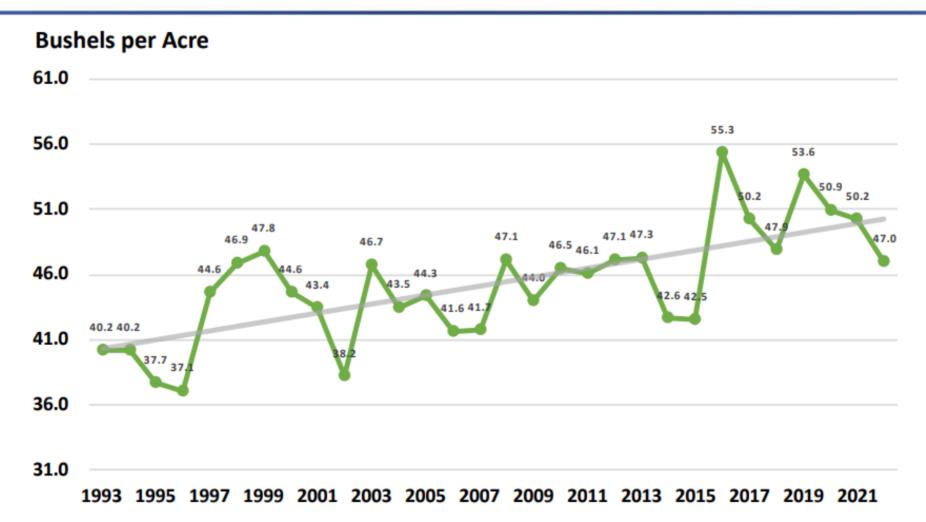
2023 Winter Wheat Acreage Map & Change







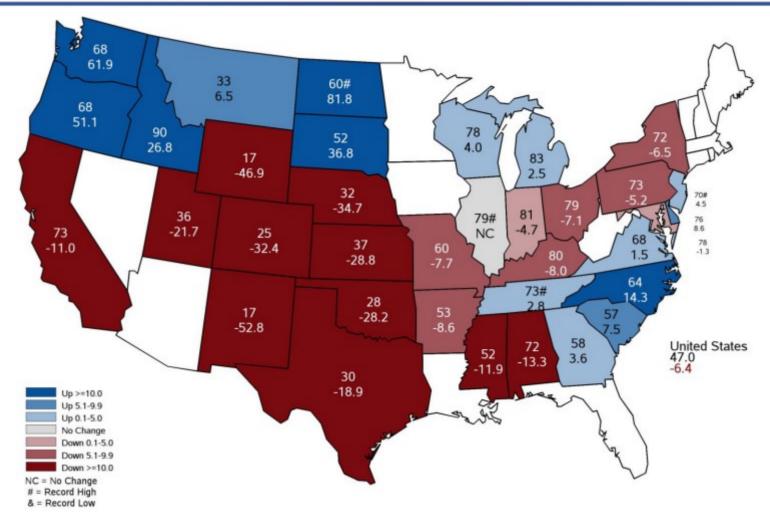
Winter Wheat US Yield Trend







Winter Wheat US Yield Map & Change





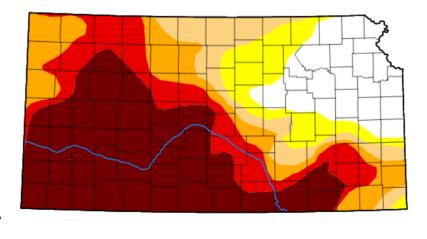
Kansas Drought Monitor Map

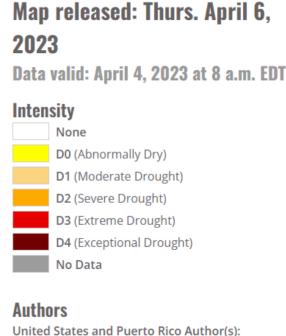


As of April 9th, Kansas winter wheat conditions rated:

- 33% percent very poor
- 28% poor
- 26% fair
- 12% good
- 1% excellent

Winter wheat jointed was 17%, behind 19% last year and behind 20% for five-year average.





75% of the state is experiencing moderate to exceptional drought

David Simeral, Western Regional Climate Center



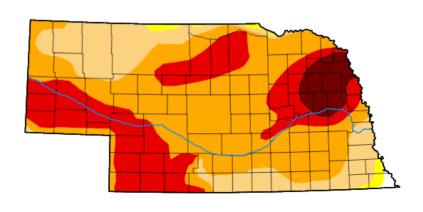
Nebraska Drought Monitor Map



As of April 9th, Nebraska winter wheat conditions rated:

- 10% percent very poor
- 31% poor
- 36% fair
- 20% good
- 3% excellent

Winter wheat has not started jointing.



Map released: Thurs. April 6, 2023

Data valid: April 4, 2023 at 8 a.m. EDT



Authors

United States and Puerto Rico Author(s):

David Simeral, Western Regional Climate Center

• 98% of the state is experiencing moderate to exceptional drought





Form A

Winter Wheat Objective Yield Survey Initial Interview 2023











- Update the acreage of wheat expected to be harvested for grain since the March APS survey
- Get permission from farmer to conduct field work
- Select field that we will collect the wheat objective yield data from



Procedures



- Form A will be entered into CAPI
- Phone first
- Enter Form A as you complete interviews
- Sample Field Selection will be the Closest or Furthest field in a Cardinal direction



Verify Name and Address



• If there are any changes correct both Form A1 and Kit Envelope

Write notes in CAPI





Initial Interview



- Box 1 pre-printed from what was intended to be harvested for grain from March Agricultural Production Survey
- DO NOT CHANGE the acreage in box 1
- Verify acreage don't copy
- Record total wheat acres harvested in Box 102
- Make notes if the pre-printed acreage is incorrect



Table A



- Column 1 Sample Field
 - Based on location to the residence
 - Denoted by sample number
 - **C**=Closest/ **F**=Furthest Variable
 - Cardinal direction N, S, E, W, NE, SE, SW, NW
- Column 2
 - Total Acres in Field
- Columns 3 & 4
 - Areas of winter wheat field not harvested
- Column 5 Field Location Description
 - Help find field for Unit location
 - Intersections, landmarks, etc.

(If total equals zero, end interview)

Earlier this season, the number of winter wheat acres you intended to harvest on all the land 620.0 320.0

Now, I need to identify one (or more) of your winter wheat field(s) and get their acreage

Notes:

Complete Table A for the winter wheat fields based off the cardinal directions indicated in column 1 below

TABLE A

SAMPLE Number and	TOTAL ACRES	Acres in USE or CROPS OTHER THAN WINTER WHEAT to be HARVESTED for GRAIN or SEED (For example: not seeded, bare spots, winter kill, waterways, roads, other crops, etc.)		LOCATION DESCRIPTION/ INTERSECTION OF FIELD (E.g., landmarks, features,
Direction	IN FIELD	USE	ACRES	street intersections)
1	2	3	4	5
*13 FSW		ditches		NE corner of 1st
	160. <u>0</u>	arcerios	2. <u>0</u>	St & Hwy A





Table A – Multiple-sample Operations

- Identify sample fields for each sample number copy data over to the other Form A's
- Sample for the Form A is in the 1st row with a '*' next to it.
- Only 1 sample per field, until no more fields available

	FORM A - 1: V	VINTER WHEAT						
Earlier this season, the number of winter wheat acres you intended to harvest on all the land you operate was						620.0		
What are the total acres of winter wheat for harvest on the land you operate? (If total equals zero, end interview)					7000			
	Now, I need to identify one (or more) of your winter wheat field(s) and get their acreage.							
	Notes:							
	Complete Table A for the winter wheat fields based off the cardinal directions indicated in column 1 below.							
	TABLE A							
	SAMPLE Number and ACRES Acres in USE or CROPS OTHER THAN WINTER WHEAT to be HARVESTED for GRAIN or SEED (For example: not seeded, bare spots, winter kill, waterways, roads, other crops, etc.)			LOCATION DESCRIPTION/ INTERSECTION OF FIELD (E.g., landmarks, features,				
	Direction	IN FIELD	USE	ACRES		intersections)		
	1	2	3	4		5		
	÷12 ECW				NE con	ner of 1st		
	*13 FSW	160. <u>0</u>	ditches	2. <u>0</u>	St & H	wy A		
A	14 CN	80 · <u>Q</u> _			N of fa	rmstead		

United States Department of A National Agricultural Statistics Service







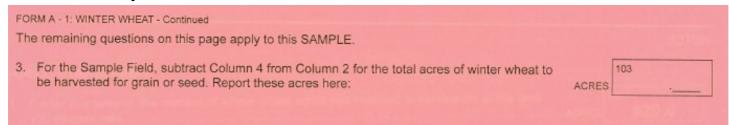
- Making sure you are in the correct field:
 - Use the grid map with great details like specific roads or intersections
 - If you both have smart phones have the respondent send you a pin on Apple or Google maps
 - Get the legal description and use a plat map to find the field



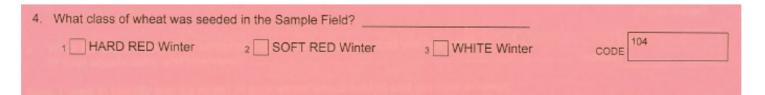




• Item 3 – Sample Field Information



• Item 4 – Wheat Class



• Item 5 – Irrigated





Plotting & Pesticides



• Item 6 - Explain plotting processes

6.	making plant and fruit counts.	Vith your permission I will go out to the field and mark off two small plots to be used in taking plant and fruit counts. I will return to the plots each month until harvest to make ounts, and clip a few heads to determine their size and weight. Would that be all right?			
	Yes - Continue.	No - Conclude interview and return all forms.			

- Item 7 Pesticides
 - Organophosphorus applied?
 - See Interviewers Manual for re-entry schedule

7. Have you or will you apply pesticides with organophosphorus content to the sample field?			
Yes	□ No	☐ Don't Know	
If YES, enter latest app	olication date	and name of pesticide	





• Item 8 – Respondent's Name

8. Respondent Name:

IMPORTANT: Review for completeness. Sign name.

Record expected harvest date, pesticide intentions, (item 7), and operator's telephone number on your kit envelope.

• Item 9 – Enumerator Information

9. Enumerator Name:

Enumerator Number	190
Supervisor Number	191
Evaluation	193



Friendly Reminders



- ✓ Phone first
- ✓ Form A's will be entered via CAPI
- ✓ All samples will have a cardinal direction and an indication if it is the closest or furthest in that direction









- A pesticide safety program has been developed for all employees who may be exposed to pesticides while working WOY.
- This program is designed to protect you from the possibility of overexposure.
- Organophosphorus insecticides are used on most crops.

Organophosphorus Chemicals Commonly Us	sed in Wheat Production
Trade Name(s)	Common Name
Bracket, Orthene	Acephate
Sniper	Azinphos-methyl
Eraser, Govern, Lorsban, Nufos, Pilot, Warhawk, Whirlwind	Chlorpyrifos
Cobalt Advanced	Chlorpyrifos plus gamma-cyhalothrin
Stallion	Chlorpyrifos plus zeta-cypermethrin
Cygon, Cymate, De-Fend, Digon, Dimate, Dimethoate	Dimethoate
Disyston	Disulfoton
Ethyl parathion	Ethyl parathion
Atrapa, Fyfanon, Malathion	Malathion
Declare, Methyl parathion, Penncap-M	Methyl parathion
Thimet	Phorate



Pesticide Safety



Field Re-Entry Intervals

All Pesticides – 1 Day

- Organophosphorous Compounds 3 Days
 - 30 Days Limited to 6 Hours per Day



Pesticide Safety



- Protective Clothing
 - Wear a Long Sleeve Shirt
 - Wear Long Pants
 - Wear Head Covering
 - Wear Only 1 Day and Launder Separately From Your Other Clothes!



Pesticide Safety



Soap and Water For Decontamination

- Carry Water and Bath/Bar Soap
- Thoroughly Wash All Exposed Skin Areas



Pesticide Poisoning



SYMPTOMS

- Headaches
- Dizzy Spells
- Nervousness
- Sudden Weakness
- Sick Stomach
- Cramps
- Pupils of the Eye reduced in Size

SYMPTOMS

- Diarrhea
- Heavy Sweating
- Breathing Difficulty
- Coma
- Seizures
- Vomiting



Medical Attention



Go to the Nearest Qualified Physician!

- Notify Immediately:
 - Your Supervisor and NASDA Coordinator
- Do Not Return to the Field Without:
 - The Doctor's Written Permission
 - Completing Form NAS-016 (Rev 11/95)





Unit Location and Layout







Wheat Objective Yield Supplies

Sample Bundle

5 small white Tyvek

1 jumbo white Tyvek

8 orange rubber bands

7-#12 paper bags

5-#8 paper bags

5- #5 paper bags

18 red stakes

24 blue stakes

Gleaning Bundle

2 small white Tyvek

1 orange rubber band

1-#12 paper bag

10 red stakes

Satchel Contents

50 ft Tape Measure

Anchor Pin

Yardstick

Clippers

Clipboard

Pencil

Black Marker

Wheat Frame

Hand Counter

Other Supplies: Bamboo Poles, Flagging Ribbon, UPS Labels (white w/<u>blue banner</u> – St. Louis), Envelopes, pencils, clipboards, etc.

If you are running low on supplies, contact your Supervisor



Wheat Supply Bundles



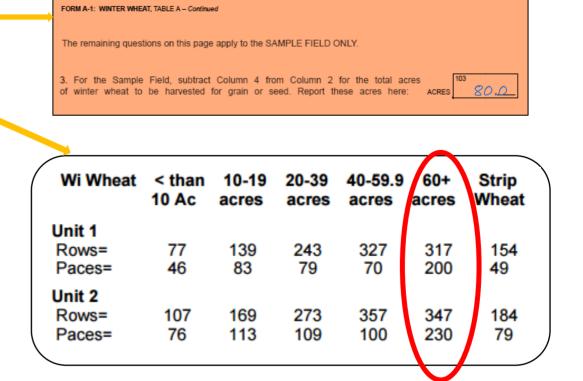
- All bundles prepared by National Lab in St. Louis, MO
- Why Supply Bundles?
 - Consistent supplies across samples
 - Easily transferrable between enumerators
 - Eliminates time required to assemble in RFO
- Do <u>NOT</u> open bundles if you don't need them, we can use them next year



Determining Paces



- Use Form A box 103 acres
- Find the appropriate field size on the kit envelope label
- Circle the rows and paces on the Kit Envelope label
- Copy to Form B





Unit Location



Keep in Mind:

- ✓ Starting corner will be the point which allows the units to fall anywhere in the field boundaries.
 - Mark the starting corner. (Make note of it on your Kit Envelope)
- ✓ Step off your paces outside the plowed edge of the field. Start one and one-half feet outside the plowed edge of the field along the longer side of the field.
- ✓ Turn at a right angle and step off paces into the field.
- ✓ Make sure to deduct any area that was deducted in Form A



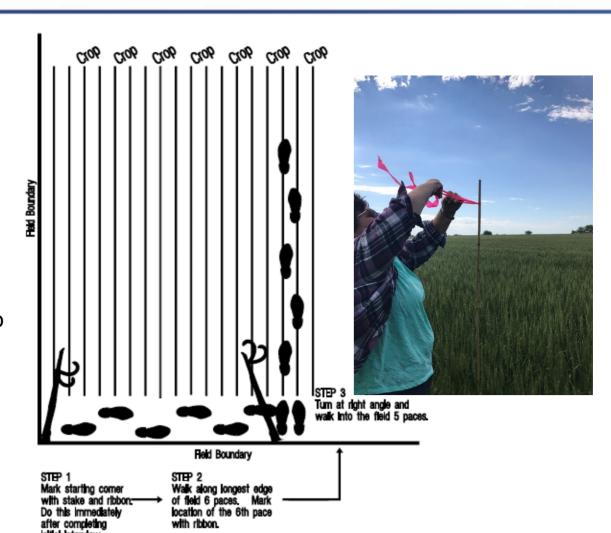


Interviewer's Manual Page 401-402

❖ Tie a piece of flagging ribbon to your poll to make it easier to find.

START

after completing

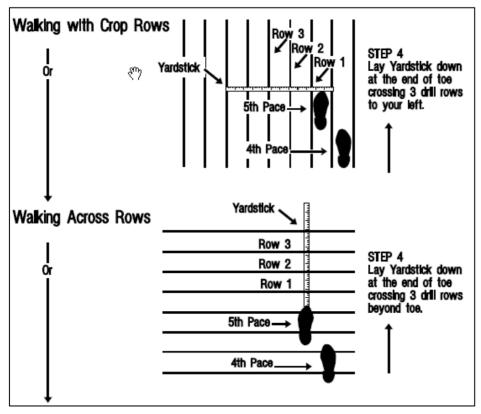


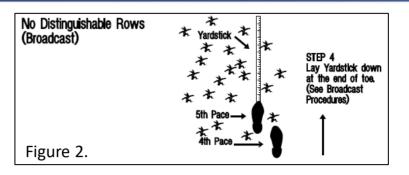
United States Department of Agriculture National Agricultural Statistics Service





Figure 1.





- After you have completed your paces, place the yardstick so that it touches the toe of your shoe.
 - Yardstick needs to cross **3** drills rows.
 - Broadcast procedures start on page 409 of the Interview's Manual
- Lay out a five foot buffer zone to the RIGHT of the yardstick. (Use 50ft tape, anchor pin, wooden stakes.)
- Red florist stake will be placed at the beginning of your buffer zone.
 - **...** Be sure to label your florist stake with the sample number.

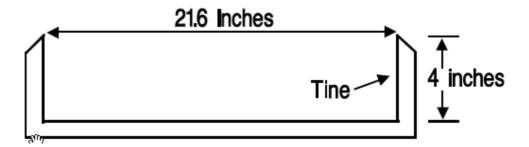


Wheat Frame



- Be sure to check your wheat frame (quality control)
 - Correct length (21.6 in)
 - Frame and tines are not bent
 - Halfway point marked (10.8 in)

 Wheat Frame





Labeling Units



- Remember to label your wooden stakes
- S-1 (Sample 1)
- U-1,R-1 (Unit 1, Row 1)
- U-1, R-2 (Unit 1, Row 2)
- U-1, R-3 (Unit 1, Row 3)
- U-2,R-1 (Unit 2, Row 1)
- U-2, R-2 (Unit 2, Row 2)
- U-2, R-3 (Unit 2, Row 3)

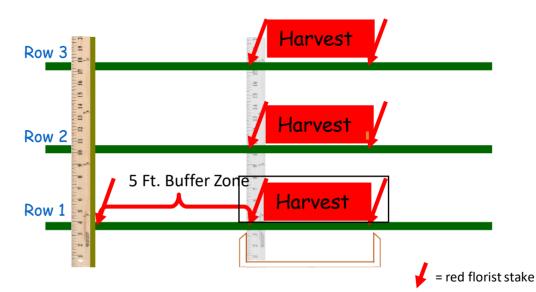






Laying Out Unit 1 — Count Area

- Reposition yardstick to touch stake and cross three drill rows.
- Insert wheat frame into Row 1 and insert red florist stakes
 - Wheat frame identifies the length of the row included in the unit.
- Use tine to put in a red florist stake in the second row
- Do the same for row three





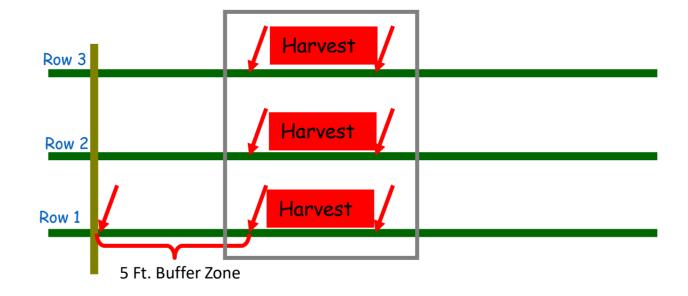
Count vs Clip Area



• Red stakes mark the 1st, 2nd, and 3rd rows for one wheat frames length from the Buffer Zone.

- Note the stakes go inside the wheat frame tines
- The Red stakes enclose the COUNT AREA.

Count Area



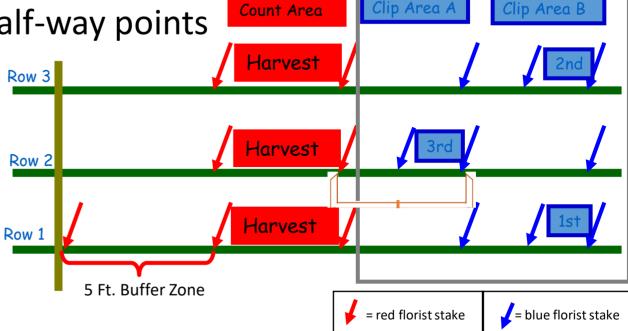




Count vs Clip Area - continued

- Blue stakes follow a tines length from each of the red stakes
- Second set of Blue stakes follow a tines length
- Clip Areas are one half of the total tines length

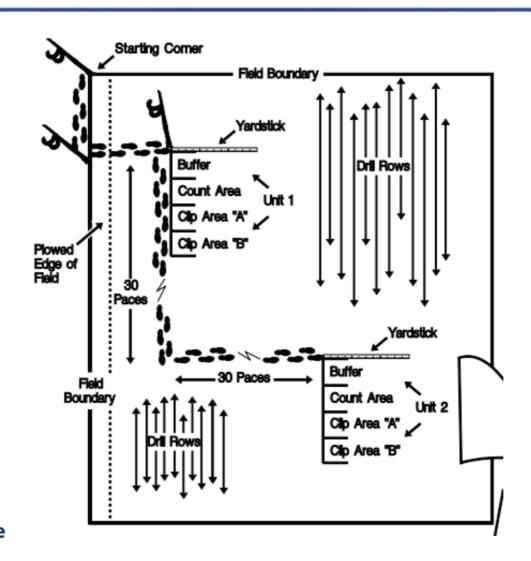
• Use **blue stakes** to denote the half-way points when laying out clip areas







Unit 1 and Unit 2 Field Locations





Special Situations



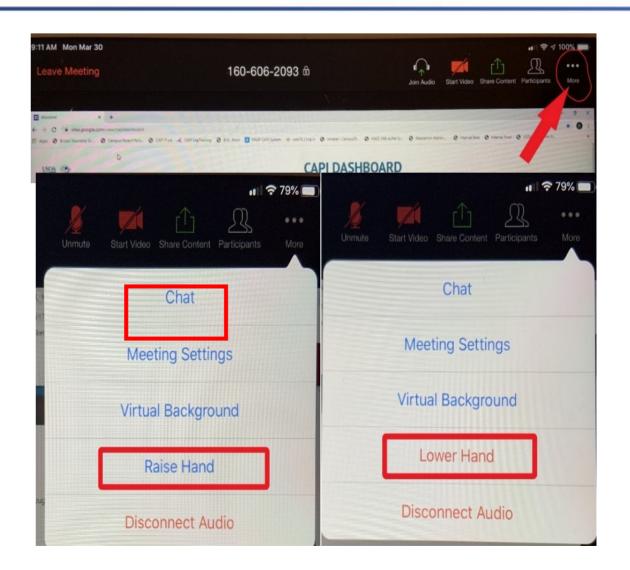
- Bounce Back
 - You reach the end of the field and have not taken the required paces, turn around and walk back.
- Spiral Seeded Field
 - Starting point first point reached when arriving to field and walk clockwise along the edge of the field.
- Part of Unit Falls Outside of Field
 - Decrease the pace count
- Odd-Shaped Fields Starting Corners
 - Sample unit needs to have an equal change of falling anywhere in the field.
- Center Pivot Fields
 - Entire field including corners
 - Circle only
 - Utilize access roads used for irrigation







- "Raise Hand" in Zoom
- Unmute
- Type questions in the chat







Form B WINTER WHEAT YIELD COUNTS 2023





Form B – CAPI Only



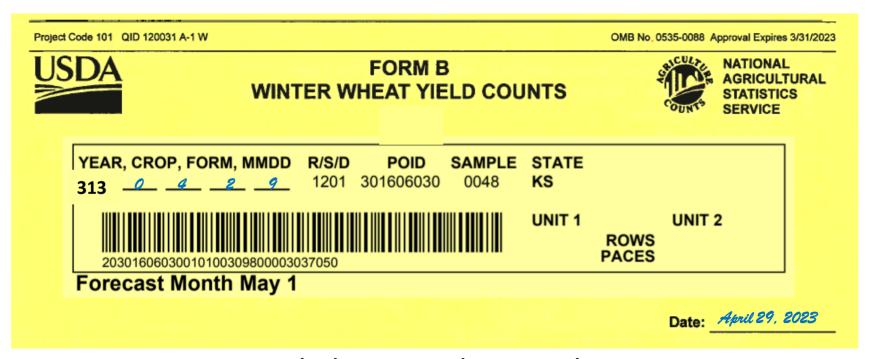
- Form Bs during monthly Wheat OY data collection timeframe:
 - Enter into CAPI
 - Do not ship paper forms to NPR

- Form Bs <u>outside</u> of monthly data collection timeframe:
 - Hold Form Bs and enter when data collection begins again
 - Ship final harvest to lab immediately



Form B – Matching Dates





Both dates need to match







1. Pesticides

- 2. Paces along edge
- 3. Paces into field
- 4. Unit Location Code

	 Has operator applied pesticides wit 	h organophosphorus content to the	sample field?			
	□ Yes	□ No				
	If YES, enter latest application					
	UNIT LOCATION			UNIT 1	-	UNIT 2
	2. Number of paces along edge of field	d			+ 30	
	Number of paces into field				+ 30	
				UNIT 1	-	UNIT 2
)	4. UNIT LOCATION CODE	First visit to lay out unit Unit relocated this month Sample unit laid out previously	Enter Code When unit is Cod	305 led 3, go to item	6; otherw	307 rise go to item 5.







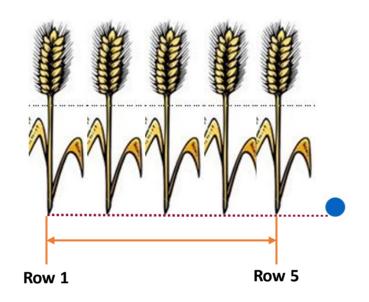
5. Row space measurements

5. ROW SPACE MEASUREMENTS UNIT 1 UNIT 2

Measure distance from stalks in Row 1 to stalks in Row 5......

Feet & Tenths 301 .____

303 .___









When in doubt, always go lower!

MATURITY STAGE	PRE-FLAG	FLAG OR EARLY	OR FLOWER	MIII K	SOFT DOUGH	HARD DOUGH	RIPE	BLANK		
UNIT 1 Count Area	300 1	300 2	300	300 4	300 5	300 6	300 7	300 8		
UNIT 2 Count Area	302 1	302 2	302 3	302 4	302 5	302 6	302 7	302 8		
If Unit One Maturity is	1 or 2, start c	ounts with	3, 4, or 5, star	t counts with	item 8	6 or 7, start co	8. Substitute Unit Two when both 8 Go to item 1			
COUNTS WITHIN UNIT	3			UNIT 1			UNIT 2			
			Row 1	Row 2	Row	3 Row	1 Row 2	Row 3		
7. Number of stalks (st	ems) in row		311	312	313	314	. 315	316		
8. Number of heads in	LATE BOOT		351	352	353	354	355	356		
9. a. Number of	of emerged heads on a	ll stalks	331 332 333			334	335	336		
b. Number of	of detached heads in ur	nit		341			344			



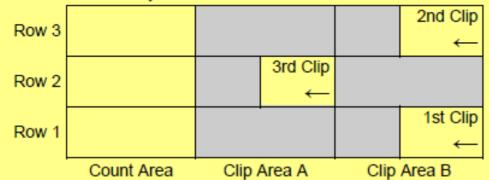


Questionnaire Breakdown

10. Steps based on maturity code

- 10. If the MATURITY CODE circled in item 6 for Unit One (or Unit Two when Unit One is blank) is:
 - a. Code 1 or 2: SKIP items 11 and 12. Enter enumerator and supervisor numbers and sign name.
 - b. Code 3, 4, or 5: Go to item 11.
 - c. Code 6 or 7: Go to item 12.
 - d. Code 8 (Both Units): Record dashes for appropriate items plus note on Form B and kit envelope that both units are in blank area. Enter enumerator and supervisor numbers and sign name.

Lay out Units 1 and 2 as shown below:



CLIPPING ORDER

Both Units (item 11)

First Clipping -- Row 1 in Clip Area B

Second Clipping -- Row 3 in Clip Area B

Third Clipping -- Row 2 in Clip Area A





Questionnaire Breakdown



CLIPPING ORDER

Both Units (item 11)

First Clipping -- Row 1 in Clip Area B

Second Clipping -- Row 3 in Clip Area B

Third Clipping -- Row 2 in Clip Area A

11. Clip Areas

(MC = 3, 4, or 5)

11. WITHIN CLIP AREA: Make clippings in the designated ROW within Clip Area OF EACH unit following steps below.

If Unit 2 Maturity Code is 2, enter enumerator and supervisor numbers below and sign name. Discard Unit 1 clipping and DO NOT send any clippings to the lab.

Step 1 -- Mark half-way point in specified row in clip area.

Step 2 -- MOW (cut stalk within 2 inches of base) all wheat stalks in specified row until 5 emerged heads (if that many) are obtained OR until one-half the row is completely mowed. Begin mowing at the end of the row farthest from count area and mow in direction of count area. Examine each stalk for emerged head as it is mowed; if present, clip stalk 1/2 inch pelow the head. Place the 5 (or less) emerged heads in a small bag. Record count on YELLOW I.D. tag. Also, when mowing, clip and count any heads in late boot at base of top foliage leaf and place in a medium size bag

Step 3 -- MOW remaining stalks up to the half-way mark. Examine each stalk and determine which ones are emerged heads and late boot heads. CLIP the stalks 1/2 inch below the emerged head or at base of top foliage leaf for late boot heads. Place the remaining emerged heads in a large bag and the late boot heads in a medium bag.

Step 4 -- Record the count of the remaining emerged heads and the late boot heads on the YELLOW I.D. tag.

Repeat steps 1 through 4 for Unit 2 using same bags for emerged heads and late boot heads as used in Unit 1.

Prepare one I.D. tag. Label all bags with sample number. Seal and place the small and medium size bags in the large bag. Seal large bag. Verify and date YELLOW I.D. tag and attach to outside of large bag using one rubber band.

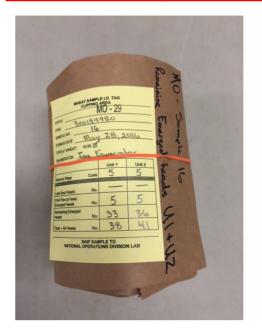






Clip area – Maturity Stage 3, 4 and 5, one set of bags for both units







Yellow ID Tag vs Form B



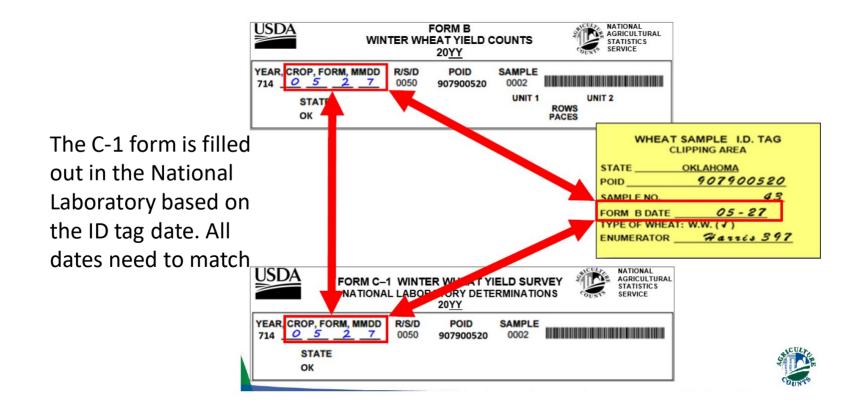
JSDA	WINTE	FC R WHEA	RM B AT YIELI	D COU	NTS	W.	NATI AGR	IONAL ICULTURAL FISTICS VICE			
									WHEAT SAMPL CLIPPING		
							26	, 2023	STATE NEBRASKA		
						•					
						Da	ate:		POID \$\$ 102559	0	
Has operator applied p	-		ntent to the	sample field	?				SAMPLE NO. 30		
☐ Yes If YES, enter late	st application date	□ No	and	name of pe	esticide				FORM B DATE 5/26		
NIT LOCATION					_	UNIT 1		UNIT 2	FORM B DATE		
Number of paces alon	g edge of field						+ 30		TYPE of WHEAT: W.W.		
Number of paces into	field					UNIT 1	+ 30	UNIT 2	ENUMERATOR JOHN	SIANIMA	
	1 First	isit to lay out u	ınit	7	30		30		ENOMERATOR JOVY	SYVIITVI	
UNIT LOCATION COL	E 2 Unit n	elocated this m	nonth	Er	nter Code					11.77.4	
			,,	When u	nit is Coded	3, go to item (3; otherwise	go to item 5.		Unit 1	Ur
ROW SPACE MEASU	REMENTS				_	UNIT 1	_	UNIT 2	Maturity Stage Code	3	2
Measure distance			v 5	Feet	& Tenths 30		30		The state of the s	1046 FEVE 116	
. STAGE OF MATURI	Y: (Circle one code fo	E1 40 00 I								1-1	1
NATURITY STAGE	PRE-FLAG		DR FLOWER	MILK		HARD DOUGH	RIPE	BLANK	Late Boot Heads No.	1 1	1
NIT 1 Count Area	300	300 3	3	300 3	00 5	6 30	7	300	First Five (or less)	5	-
INIT 2 Count Area	302		02	302 3		30		302	Emerged Heads No.		_
	1	2	3	4	5	6	7	8. Substitute	Remaining Emerged	. 6	
Unit One Maturity is	1 or 2, start or item 7	unts with 3,	4, or 5, start o	counts with ite	m 8 6 or	7, start counts	with item 8	Unit Two when both 8, Go to item 10	Heads No.	10	10
OUNTS WITHIN UNITS				UNIT 1			UNIT 2			20	2
		3	Row 1	Row 2	Row 3	Row 1	Row 2	Row 3	Total – All Heads No.	32	3
Number of stalks (ste Number of heads in L				352	353	354	355	356			
			21	332	333	334	335	336	SHIP SAMP		
Number of emerged heads on all stalks 331 Number of detached heads in unit				000	000	300		NATIONAL OPERATIO	NE DIVICION	LLAD	

Data on lower portion of Yellow ID tag comes from the Clip Area on the back of Form B





Forms & ID Tags Relationship (Clip)









12. Count Area (maturity code = 6 or 7)

12. WITHIN COUNT AREAS -- Clip and Count all heads in count area of BOTH units following steps below.

Use a separate large bag for each unit.

Step 1 -- Clip all heads in Late Boot at base of top foliage leaf in Row 1 - Compare with item 8 count

Step 2 -- Clip all Emerged heads 1/2 inch below head in Row 1 - Compare with item 9a count and place emerged heads in same bag with late boot heads.

Step 3 -- Repeat steps 1 and 2 for Rows 2 and 3. -- Check counts.

Step 4 -- Pick up all Detached Heads on ground in unit counted in item 9b. Place in bag with clipped heads.

Copy recorded heads from items 8 and 9 of Form B onto PINK I.D. Tags. Date and attach one I.D. Tag to each large bag.

Check here

after placing bags in a Tyvek envelope addressed to NATIONAL LABORATORY





Preferred Packaging Final Pre-Harvest

Count Area –
Maturity Stage 6 & 7,
(Hard Dough & Ripe)

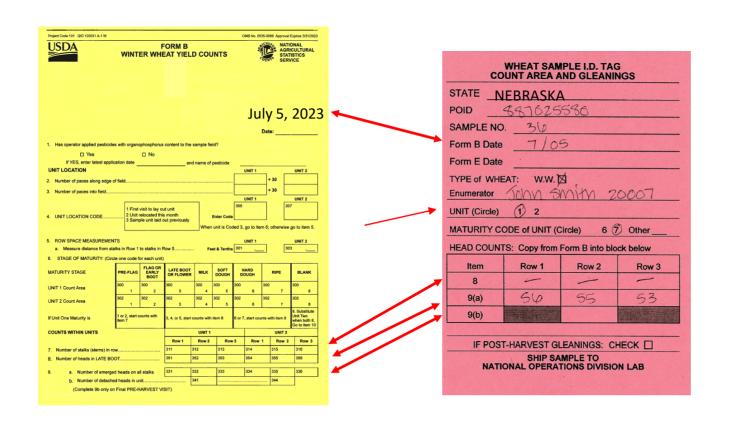
separate bag for
each unit







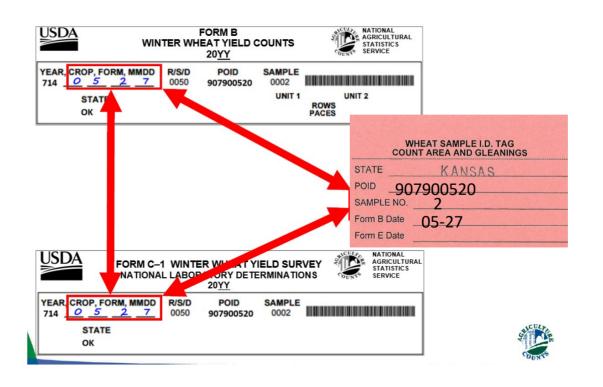








Forms & ID Tags Relationship (Preharvest)

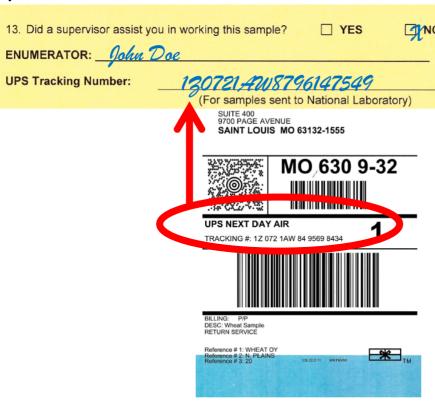








13. Supervisor assistance



 Add comments about unusual situations

Enumerator Number

Supervisor Number

Evaluation

- For example, frost damage, special drill spacing, unit located in poor wheat, unit located in excellent wheat, drill skips, etc.
- UPS Tracking Number needs to be put into CAPI Form B too



Shipping to St Louis Note



- The labels only have a blue banner printed on them
- Next day air delivery





UPS Preferred Packaging to Lab

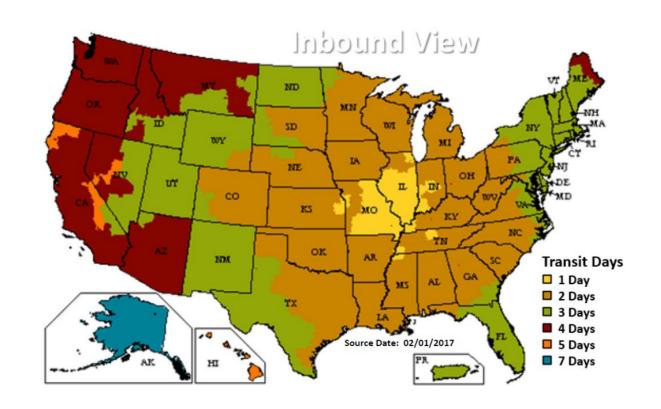


- NO Staples
- NO Duct Tape
- NO Wrapping of any sort
- One or two rubber bands is sufficient
- One strip of packing tape is sufficient over seal if needed











Friendly Reminders



- ✓ Never take iPad into the field
- ✓ Unit location code 3 is used when the sample unit was laid out **and** counted previously
- √ When in doubt about maturity stage, always go lower
- ✓ A wheat head is either late boot (#8) **or** emerged (#9), it cannot be counted as both
- ✓ Clip stalks ½ inch below the head
- ✓ Use <u>same</u> bags for both units and YELLOW tags when clipping the clip areas
- ✓ Use <u>separate</u> bags for each unit & PINK tags when clipping count area for final pre-harvest
- ✓ Sample ID tags should be placed on the <u>outside</u> of paper bags with one rubber band
- ✓ Use Blue striped UPS labels to ship to the National Lab in St. Louis, Missouri





CAPI Form B

Winter Wheat Yield Counts on the iPad







CAPI: Form B



Form B available for data entry in CAPI

Never take iPad into fields

- Complete Form B on paper in the field
- Enter data into CAPI while at field to review work and save a trip in case of data errors
 (OR)
- Enter data into CAPI when safely at home, organized and cooler
- Submit in CAPI the same day data is entered.



CAPI: Form B



- CAPI will be available from the 1st day of data collection through the second day of the month
- Enumerators should promptly enter data into CAPI Production
 - Exception would be Final Pre-Harvest sample outside of survey period
 - If outside of survey period, hold paper questionnaire and enter when next survey period starts





CAPI: WOY Assignment Listing

						_	(will change	each					
	INF	CMT	COF	MAP	ST ↓↑	С	month)		Sub ↓↑	OP DOM ↓↑	SEQ. NUM ↓↑	DCMS↓↑	Name
FOR	M B WHE	AT YIELD	COUNTS	- WINTER	WHEAT O'	JULY 201	8-07-01 (101)			į.			
	6	•		•	48	117	887036200*	1	1	0	10	420	DOE FARMS IN JOHN DOE
	0	•		Q	48	117	887036200*	1	2	0	11	420	DOE FARMS IN JOHN DOE
	8			•	48	117	887036200*	1	3	0	12	420	DOE FARMS IN JOHN DOE
	8			Q	48	117	887036200*	1	4	0	13	420	DOE FARMS IN JOHN DOE
	8	•		Ŷ	48	117	887036200*	1	5	0	14	420	DOE FARMS IN JOHN DOE
	8	•		•	48	117	887036200*	1	6	0	15	420	DOE FARMS IN JOHN DOE
0	8			· ·	48	117	887036200*	1	7	0	16	420	DOE FARMS IN JOHN DOE
	8			•	48	117	937023070*	1	1	0	30	420	DOE FARMS IN JOHN DOE
	6			9	48	117	937023070*	1	2	0	31	420	DOE FARMS IN JOHN DOE



CAPI: Form B Edit



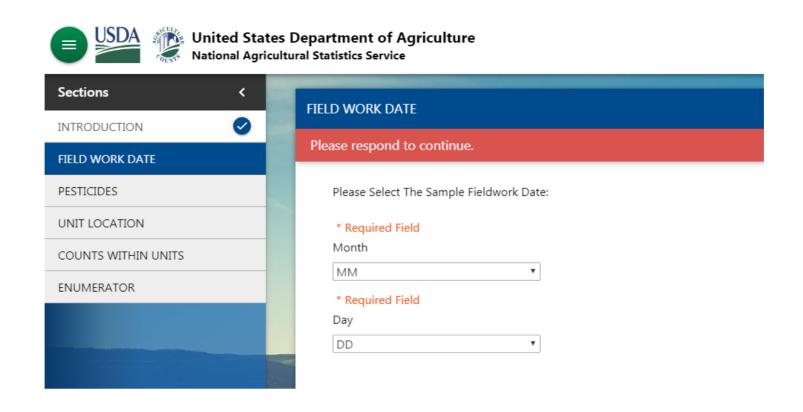
• WOY CAPI uses the new Survey Designer to apply edits to prevent submission without required items being completed.

- CAPI Edits
 - Missing field work date
 - Status code missing
 - Conditional edits built into the form to find errors
 - Unit location, row space measurement, maturity code, etc.















Status Code=1 Only for Maturity Codes 1-5

Status Code=4 Only for Maturity Codes 6 &7, or blank

Status Code=7 Refusal from Form A

Status Code Definitions:

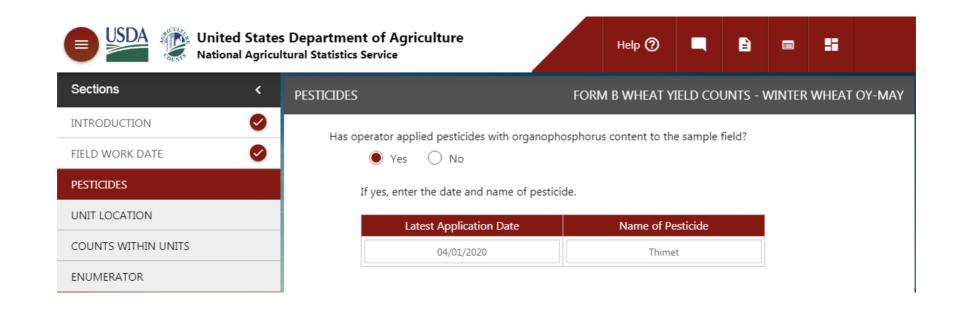
- -WOY Reference Book
- -IM Pages 704-707





CAPI: Pesticides

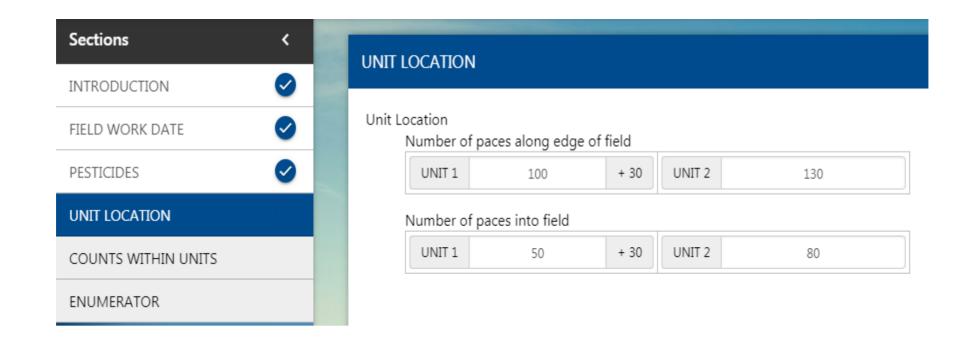








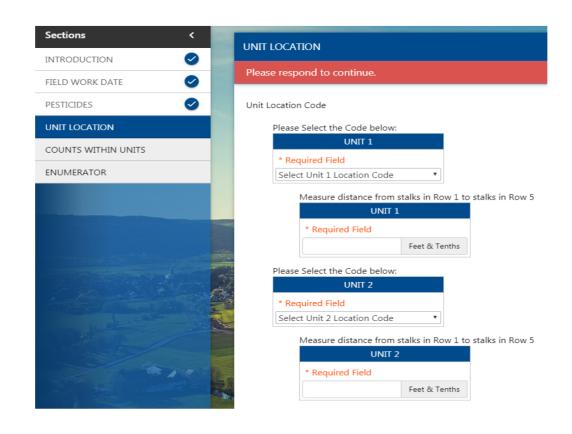








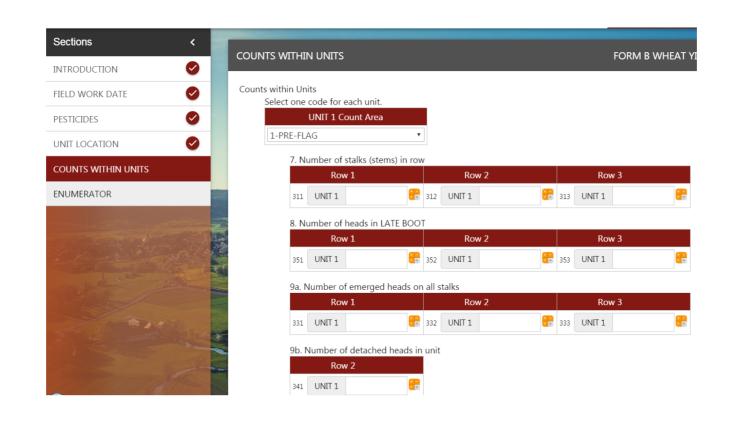
CAPI: Row Space Measurement







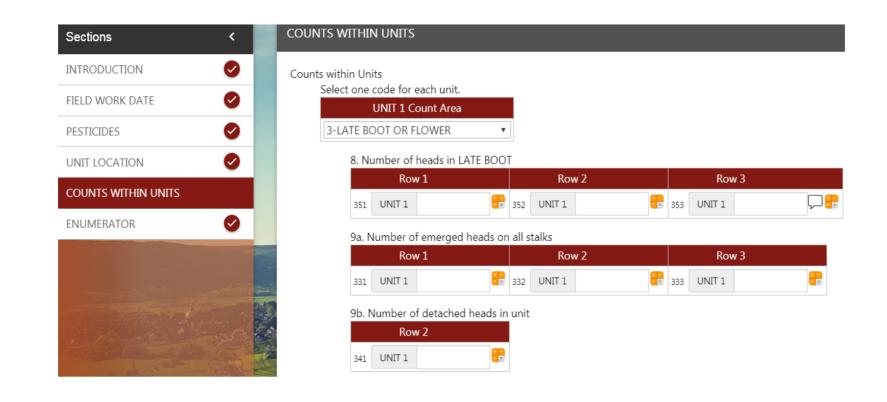
CAPI: Counts for Maturity 1-2







CAPI: Counts for Maturity 3-7

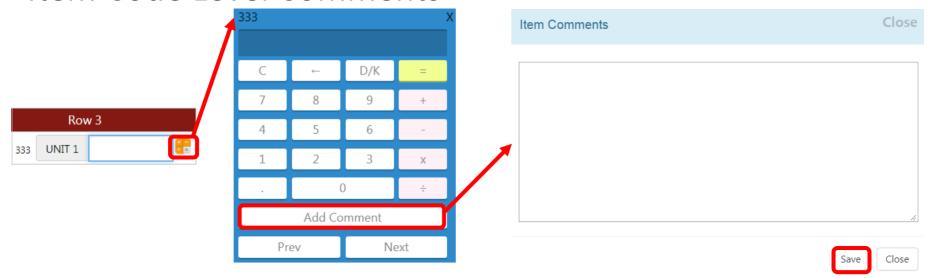






CAPI: Item Level Comments

• Item Code Level Comments







CAPI: Enumerator Information

Sections <	ENUMERATOR			
INTRODUCTION	ENOMERATION			
FIELD WORK DATE	Did a supervisor assist you in	Did a supervisor assist you in working this sample?		
PESTICIDES	○ Yes ○ No	○ Yes ○ No		
UNIT LOCATION	Enumerator Numb	ber Supervisor Number		
COUNTS WITHIN UNITS	390	391		
ENUMERATOR	UPS Tracking Num	ber:		





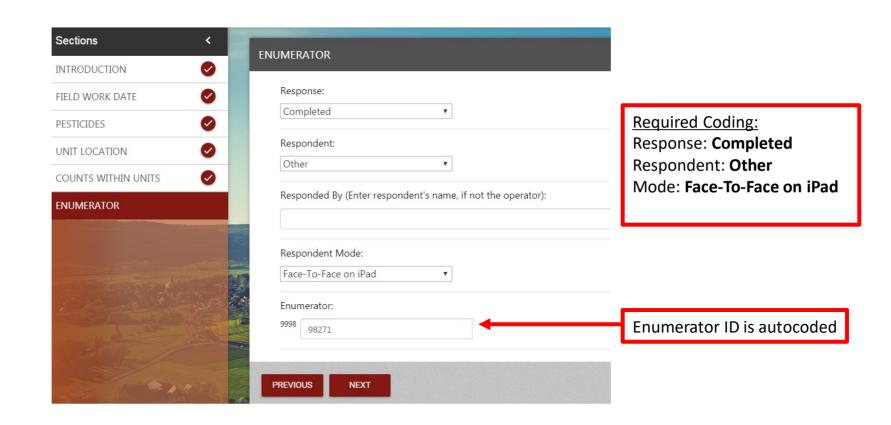
CAPI: UPS Tracking Number

ENUMERATOR:		ES NO	Enumerator Number Supervisor Number	390 391 393		
UPS Tracking Number:	130721,4W87961475 (For samples sent to National	Laboratory)	Evaluation			
	SHIP TO: TONY MARROCCO 314-595-9551 USDA-NASS-NOC OY LAB FPG 2		Did a sup	pervisor assist you in wo	orking this sample?	
	SUITE 400 9700 PAGE AVENUE SAINT LOUIS MO 63132-1555 MO 630 9-32	_	(Yes No		
				Enumerator Number		Supervisor Number
	UPS NEXT DAY AIR		390	Enumerator Number	391	Supervisor Number
		-		Enumerator Number UPS Tracking Number:		Supervisor Number













Wheat Objective Yield Sample Packaging Standards for Lab Clippings, Final Pre-Harvest & Gleanings





Sample Packaging Standards – Clippings

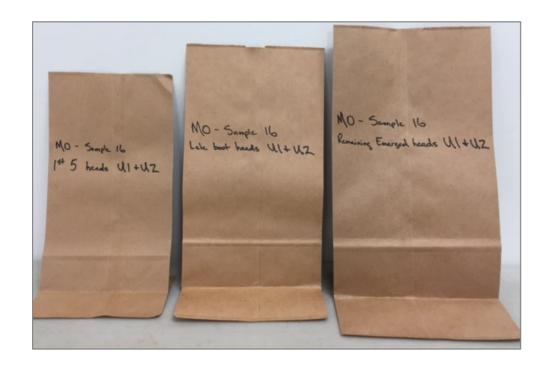
- Clip Area Samples Maturity Codes 3, 4, and 5
 - Late Boot, Milk and Soft Dough stages
 - STEMS MUST BE CUT TO ½ INCH
 - The clip samples from both units should be combined within one set of paper bags
 - Small Bag First 5 heads from both units
 - Medium Bag Late boot heads from both units
 - Large Bag Remaining emerged heads from both units
 - Crop ID Tag (YELLOW)
 - Ensure all information is CORRECTLY filled out on ID Tag
 - STATE, POID, SAMPLE NUMBER, DATE, MATURITY CODE, HEAD COUNTS
 - Attach to OUTSIDE of bag, using one rubber band (NO STAPLES)

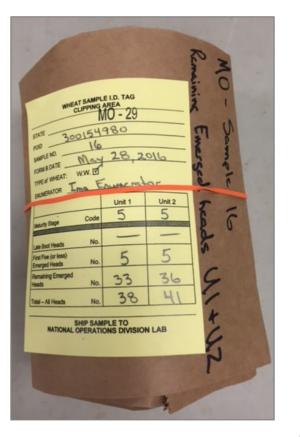




Sample Packaging Standards – Clippings

Clip Area Samples – Maturity Codes 3, 4, and 5







Sample Packaging Standards – Final Pre-Harvest

- Count Area Samples Maturity Codes 6 and 7
 - Hard Dough and Ripe stages
 - STEMS MUST BE CUT TO ½ INCH
 - Heads bagged SEPARATELY for Units 1 and 2
 - PLEASE COUNT WHEAT HEADS ACCURATELY
 - Crop ID Tags (PINK ONE ID TAG PER UNIT)
 - Ensure all information is **CORRECTLY** filled out on each ID Tag
 - STATE, POID, SAMPLE NUMBER, DATE, MATURITY CODE, UNIT, HEAD COUNTS
 - Total the Heads for each unit.
 - Attach to OUTSIDE of each bag, using one rubber band per bag (NO STAPLES)
 - When only one unit is harvested, include the second ID Tag explaining the status of the missing unit



Sample Packaging Standards – Final Pre-Harvest

Count Area Samples – Maturity Codes 6 and 7

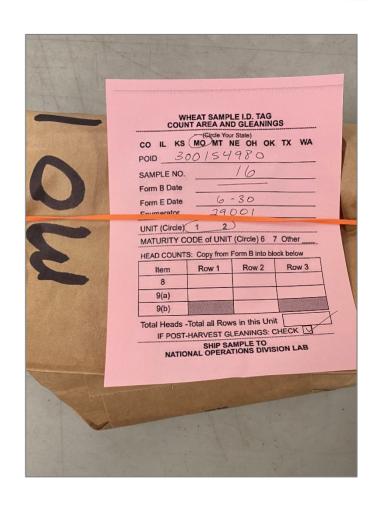






Sample Packaging Standards - Gleanings

- Gleaning Samples
 - Remove as much debris as possible
 - Do not send dirt, mud, sticks, rocks, etc.
 - Check Gleanings box on ID Tag
 - Place ID Tag on the OUTSIDE of the paper bag, using one rubber band
 - Ship E Form in Tyvek with sample
 - DO NOT SHIP THE E FORM SEPARATELY







White Tyvek Envelopes for Shipping



- NO tape
- NO staples
- NO wrapping of any sort
- One sample per Tyvek





Common Problems at the Lab

- Missing Maturity Codes
- Missing Form B Date
- Missing Sample Numbers on ID Tag
- Stems not clipped to ½ inch
- ID Tags placed inside bags



UPS Shipping



- All samples will be shipped to the NOD for processing
- Ship lab samples promptly upon completion of field work
- SHIP EARLY AND OFTEN! DO NOT HOLD SAMPLES!





FORM E: Winter Wheat Yield Survey Post-Harvesting Gleanings









Purpose is to collect <u>harvest loss</u> information

Harvest loss from weather, wind, birds, combine, etc.

• Done within three days of harvest, preferably the same day of harvest

- Collected for samples that their sample numbers are divisible by 4
 - (4, 8, 12, 16, 20, 24, 28, 32,)





Form E: Post Harvest Gleaning Form







Form E: Laying out the Gleaning Unit

 Basically it is the same as the laying out the count area, only add 5 more steps

You will have a 5 foot buffer zone to the right of your yardstick

 At the beginning of the buffer zone measure the distance from the center of row 1 to the center of row 5



Form E: Paces



UNIT LOCATION (Diagram on reverse side)	UNIT 1	UNIT 2
Number of paces along edge of field	162 +5	192 +5
2. Number of paces into field	239 +5	269 +5
Measure distance from stalks in Row 1 to stalks in Row 5 Feet and Tenths	704 3 . 4	705 3 . 3

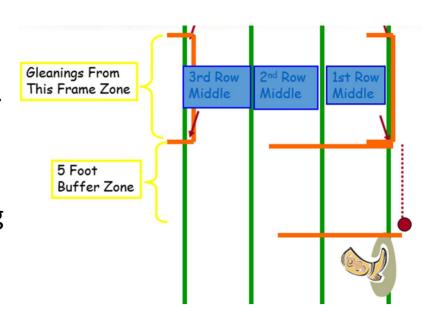
- Add 5 paces to original paces along edge and into the field for both units
- Record all distances in feet and tenths of feet







- Measure the 5 foot buffer zone and insert a red stake in the stubble of row 1
- Reposition the yardstick to cross four drill rows
- Insert the frame so the back of the frame is parallel to the row and the inside corner of the left tine touching the stake
- Insert a stake touching the corner of the right tine

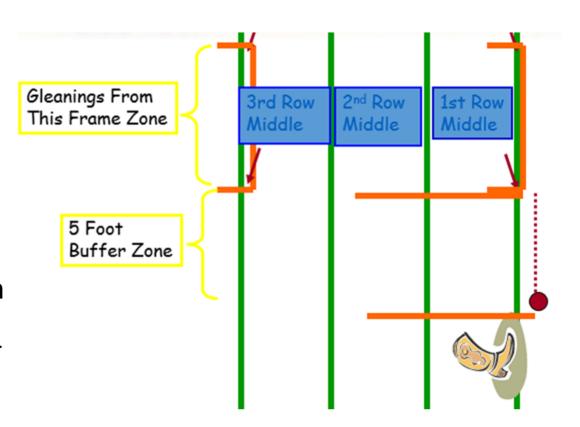








- In row 4, insert the frame so that the stubble of row 4 is excluded
- Place two red stakes touching the corners of the left and right tines
- Connect all four stakes with ribbon so three drill rows and three middles will be included and row 4 stubble will be excluded.

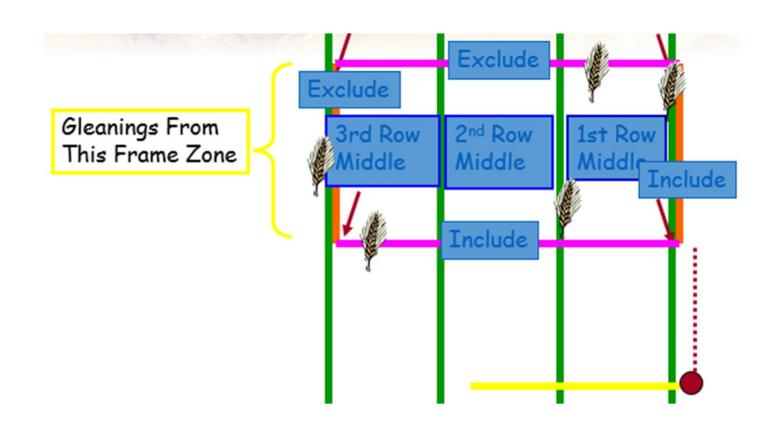








- Pick up attached stalks, detached stalks, heads, and loose grains within the boundaries
- INCLUDE the items above that are on the two starting corner boundaries
- **EXCLUDE** everything that are on the two remaining boundaries







Preferred Packaging – Gleaning Sample

- Remove as much debris as possible
- One bag for both units
- Check Gleanings box on Pink ID Card
- Include Form E in the Tyvek Envelope









	PICK UP IN BOTH UNITS a. All unthreshed whole heads	CHECK EACH BOX AS COMPLETED
5.	Was an alternate field used for making post-harvest observations? ☐ YES — (Indicate in Field Notes) ✓ NO FIELD NOTES: If post-harvest observations cannot be made, give reasons here.	
6.	Did a supervisor assist you in working this sample? TYES NO	

80 grains = 1 bu of loss





Both Units = One Paper Bag

 Put all gleaning for both units in the same paper bag (go easy on the taping)

Complete the pink ID tag and attach to paper bag with a rubber band





Need Matching Dates

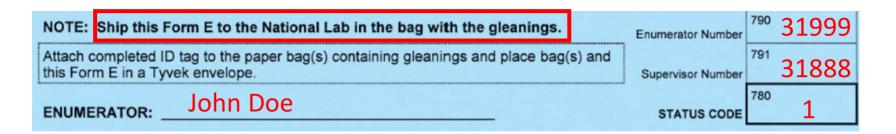


MULTATIONNEL	Project Code 101 QID 120031E-W OMB No. 0505-0088. Approval Exp FORM E WINTER WHEAT YIELD SURVEY NATIONA NATIONA
WHEAT SAMPLE I.D. TAG COUNT AREA AND GLEANINGS	POST-HARVEST GLEANINGS AGRICUL
TATE KANSAS	2023
OID 300440430	YEAR, CROP, FORM, MMDD R/S/D POID SAMPLE STATE
AMPLE NO. 104	7 _0 _7 _0 _6 1201 300660430 0064 KS
orm B Date 7/2/2023	UNIT 1 UNIT 2 ROWS PACES
F.D.	20300660430010100289700003040390 PAGES JULY 6, 202
PE of WHEA1	NOTE: The post-harvest field gleanings should be completed as soon after harvest as possible, and must be done within 3 days after harvest. If the sample field has been plowed, disked, or pastured since harvest, select an alternate field for gleaning if one is available in the tract or nearby field (in the sample operation) for list frame sample(s).
NIT (Circle) (1) (2)	UNIT LOCATION (Diagram on reverse side)
	Number of paces along edge of field
ATURITY CODE of UNIT (Circle) 6 7 Other	Number of paces into field
EAD COUNTS: Copy from Form B into block below	704 705
Item Row 1 Row 2 Row 3	Measure distance from stalks in Row 1 to stalks in Row 5 Feet and Tenths
8 ROW 2 ROW 3	GLEANINGS (Place all gleanings from both units in one paper bag.) CHECK EACH BOX AS COM
9(a)	PICK UP IN BOTH UNITS a. All unthreshed whole heads
9(b)	5. Was an alternate field used for making post-harvest observations?
	☐ YES — (Indicate in Field Notes) ☐ NO
IF POST-HARVEST GLEANINGS: CHECK	FIELD NOTES: If post-harvest observations cannot be made, give reasons here.
SHIP SAMPLE TO	
NATIONAL OPERATIONS DIVISION LAB	
	Did a supervisor assist you in working this sample? YES NO
	NOTE: Ship this Form E to the National Lab in the bag with the gleanings.
	Attach completed ID tag to the paper bag(s) containing gleanings and place bag(s) and this Form E in a Tyvek envelope. Supervisor Number
	ENUMERATOR: STATUS CODE
	ENUMERATOR: STATUS CODE









- Ships to Saint Louis, Missouri the location of National Lab
- The Form E also gets shipped to Saint Louis, not Lincoln



UPS Procedures



- Use a BLUE STRIPE UPS label to ship to the National Lab
- Place E form and paper bag in a Tyvek envelope
- Attach a BLUE STRIPE UPS label and record the tracking number on the backup recording sheet
- UPS shipping via home pickup or official drop off location
 - Home Pickup Phone Number (800) 742-5877
 - Home Pickup requires planning ahead for the next day, not same day pick up





Due Dates and Shipping Review





Due Dates



KANSAS

Survey Date	Field Work Begins	Forms to be Completed	Field Work Ends	Last Day to Enter Form B in CAPI
May 1	April 24	All A forms** Even B forms	May 1	May 2
June 1	May 25	Remaining A forms All B forms	June 1	June 2
July 1	June 24	All B forms	July 1	July 2

^{**}Even A forms are required, but all A's can be completed Form E must be submitted to the National Lab within 3 days of harvest.

NEBRASKA

Survey Date	Field Work Begins	Forms to be Completed	Field Work Ends	Last Day to Enter Form B in CAPI
June 1	May 25	All A & B forms	June 1	June 2
July 1	June 24	Remaining A forms All B forms	July 1	July 2
August 1	July 25	All remaining forms	August 1	August 2

Form E must be submitted to the National Lab within 3 days of harvest.



Due Dates



- Due dates must be followed
 - Supervisors will be contacted for missing forms
 - Inform supervisors and Lincoln office for special situations
- Always send samples as soon as possible <u>Do Not Hold</u>
 - Samples & E Forms to St. Louis, MO (UPS Blue Stripped)
 - St. Louis Blues hockey team



Due Dates - continue



- Final Pre-harvest Sample
 - Complete during the regular survey period if maturity code 6 or 7
 - Farmer going to harvest between survey periods?
 - Complete pre-harvest sample no more than 3 days before harvest date
 - Hold Form B until CAPI, for the next month, opens and enter into CAPI
 - Ship sample to St. Louis immediately
- Gleaning
 - Complete within 3 days after farmer harvest
 - E Forms are sent to the Lab with the sample (UPS blue bannered)
 - Follow the packaging instructions



Form A & B



- Form As:
 - Enter into CAPI
- Form Bs:
 - Enter into CAPI
- Form B's <u>outside</u> of monthly data collection timeframe:
 - Hold until CAPI opens next month and enter into CAPI





- All samples must be sent the day of or the morning after they are collected
- Good Shipping Procedures
 - Reduce transit time
 - Preserve sample quality
- Remember to include an ID tag for both units
 - If only one unit being shipped, send second loose ID tag with explanation for absence (lost to harvest, not planted, drowned out, blank area, etc.)



Shipping - continued



- Shipped UPS Next Day Air
 - Samples should be taken to an official UPS drop off location or UPS store
 - Also have the option for home pickup
 - See handout 2023 Objective Yield UPS Procedures
- Record the tracking number for each sample:
 - Form B paper version & in CAPI
 - Form B is your backup recording sheet







- Covers school topics
- Useful for reminders and instructions
 - Filling out forms
 - Assembling units
 - Special situations
 - Fieldwork and due dates
 - Wheat growth stages (Maturity codes)
 - Form B Status Codes
 - Shipping procedures
 - Manual pages to reference if needed
 - And more!





Workshop Evaluation



- Please complete the workshop evaluation at the following link:
- https://tinyurl.com/WOYeval

