Scout training 2024

Last updated April 16th, 2024

Resources/Quick links

- If you have any questions, comments, or concerns about the scouting method or Open Crop Manager please email Miranda DePriest at <u>mnd20@psu.edu</u>.
- Open Crop Manager can be found at <u>open-crop.vmhost.psu.edu</u>
- The <u>Collaborator Resource folder</u>

The Collaborator Resources folder

Contains

- this presentation
- a more thorough guide to OCM
- data privacy policy documents
- and more

Found here:

https://drive.google.com/drive/fold ers/1rGqZmdxQYYPd2TxSaeSL1 Gr3NoQGUxdO?usp=sharing

Drive (G:) > My Drive > Profess	sional > DataDriven	> Collaborator Res	sources >
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🛃 fullOCMguide.pptx	4/16/2024 10:50 PM	Microsoft PowerPo	10,581 KB
ScoutingInstructionsFlier.pptx	5/10/2024 2:56 PM	Microsoft PowerPo	144 KB
ScoutTraining.pptx	5/10/2024 2:56 PM	Microsoft PowerPo	8,444 KB
ScoutTraining2024.mp4	4/17/2024 10:55 AM	MP4 File	127,123 KB

About Open Crop Manager (OCM)

Central repository of field data

- This is where we put:
- Field locations
- Scouting reports
- Production surveys & yield files*



open-crop.vmhost.psu.edu



Current status

- OCM browser (open-crop.vmhost.psu.edu) is available
- OCM mobile is coming out in early July
- If you have trouble making reports in remote areas, please use Epicollect5. See the <u>guide</u>.

Data timeline

Beginning of the growing season:

- 1. Create an account
- 2. Determine your user type
- 3. Add your field(s)
- 4. Add collaborators to your fields

Throughout the growing season

1. Add scouting reports

At the end of the growing season

1. Fill out the production survey and submit a yield file, if possible

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A	Il my scouting reports
	Date and Time
	05/22/2024 🗖 08:54 AM O
	Field
	v
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	Accuracy 17.48 meters

Create an account

- Go to
- open-crop.vmhost.psu .edu and choose 'Sign Up'
- Provide information
- Verify email account
- Sign in

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Open Crop Manager Home	About Sign Up Sign In					
	Sign Up Already have an account? Then please sig E-mail* E-mail address Username* Username Password* Password Password (again)* Password (again) Sign Up »					

Determine user type

You are automatically a Scout.

If you are someone responsible for managing field data (like pesticides used, planting dates, etc.) please email Miranda DePriest (<u>mnd20@psu.edu</u>) with the following information:

- Your name
- Your job title
- The owner of the field
- The email address of the owner of the field, if applicable

I will change your user type to allow you the ability to add/access certain types of data

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Miranda DePriest



Consent form	Signed or not	
Scouting report consent	True	
Production survey consent	False	
Adding user to field consent	False	

Determine user type

To protect data privacy, there are 3 user types: Grower, Researcher, and Scout.

All user types can create Scouting Reports, but only Growers and Researchers can add fields, add collaborators to field, and access the Access their Add collaborators Production Survey. Add a field field's production to their field

Add scouting reports to their fields



Grower The field owner or a company employee with permission to

manage and contribute to a field's data

Researcher

An employee of a **research**

institution with permission to manage and contribute to a field's data

Scout



An employee of either a field owner or a research institution with permission to contribute to a field's data



surveys

Add a field

- Only available to Growers and Researchers
- Found at OCM \rightarrow My Fields \rightarrow New Field
- Please add your fields ASAP. This will allow you to assign Scouting Reports to them.

Add a collaborator to a field

- Available **only** to the manager(s) of a field (Grower or Researcher)
- Others can't assign Scouting Reports to your field until you add them to it.
- Found at OCM \rightarrow My Fields \rightarrow Add User to My Field
- You can add another manager, or you can add a Scout.
 - The new co-manager can change the field's information, view all of the field's Scouting Reports, add new Scouts, and handle the Production Survey
 - New Scouts can assign Scouting Reports to your field.
- To see everyone added to your field, go to OCM \rightarrow My Fields \rightarrow [Name of field] \rightarrow Users

30A		New Field	Edit
Field across from smaller sections.	Boogersburg School. Multiple rows of trees withir	ι, sub-dividing it into	
Farm	Centre Co. PSU Ag Ops		
State	Pennsylvania		

Country United States of America



Scouting Reports

- The goal is to represent the different regions/conditions throughout the field and throughout the growing season
- Multiple Scouting Reports are completed each time you visit the field
- Ideally, one Scouting Report/5 acres every 2 weeks. Realistically, this depends on the time you have available. Any reports are better than none.



Scouting Reports

Instructions:

- 1. Determine the number of reports (n) you have time to complete
 - Each report takes ~5-10 minutes, depending on the height of the plants and the number of stressors
- 2. Mentally divide the field into n sections
 - Doesn't need to be precise
- 3. Walk a zig-zag pattern through each section, taking note of that area's conditions
- 4. Stop and make a report representing that section's conditions. Remember to look BELOW the canopy!
- 5. You DON'T need to visit the same spot each time.





Scouting Reports in OCM

The importance of accurate coordinates



Accurate coordinates can help us understand relationships between field conditions and the stressors that occur



Inaccurate coordinates make it hard to understand these more precise relationships

Adding stressors to scouting reports

Unknown stressors

 If the stressor can't be identified, choose 'Other/unknown' and take a picture. Record any observations about the unknown stressor in the scouting report notes.



About severity ratings

The severity of a stressor is rated on a scale of 1-10

- 1 the stressor is present, but impacts less than 10% of relevant plant tissues
 - If the stressor is present, it's *at least* a 1
- 2 the stressor impacts 20% of relevant plant tissues
- . . .
- 10 the stressor has/will eliminate 100% of relevant plant tissues

About severity ratings

Two general rules for severity ratings:

1. If the stressor results in plant tissue not being present (like poor planting, poor emergence, stunted growth), rate based on the amount of plant mass that should be there.

Example: If the primary symptom of a stressor is stunted growth, rate based on the amount of tissue that should be there

If the stressor impacts existing 2. plants, rate based on the %of relevant impacted tissues. Example: Rate a foliar disease based on the average % of leaf tissue impacted



About severity ratings

Two general rules for severity ratings:

1. If the stressor results in plant tissue not being present (like poor planting, poor emergence, stunted growth), rate based on the amount of plant mass that *should* be there.

Example: If the primary symptom of a stressor is stunted growth, rate based on the amount of tissue that should be there

If the stressor impacts existing plants, rate based on the % of relevant impacted tissues.
Example: Rate a foliar disease based on the average % of leaf tissue impacted



Severity: 1 Disease is present, but impacts less than 10% of the average leaf's tissue

Severity: 7 Disease impacts roughly 70% of the average leaf's tissue

Examples



Rating: 1

Reason: Japanese beetle damage is present, but the average leaf has less than 10% of its tissue impacted

Examples



Rating: 9

Reason: The weed is so prevalent that very few soybean plants are present. Based on the soybean density in healthier parts of this field, ~90% of soybean plants that could have existed here do not.



Poor emergence rating: 1 Disease rating: 4

Reason: In this quadrant of the field, roughly 10% of planned soybeans failed to emergence. Of the soybeans that did emerge, the disease impacted ~40% of the average leaf area. 22

Were these examples helpful to you?

Summary

- Create an account
- If you manage field data, email Miranda at <u>mnd20@psu.edu</u> with the information found on slide 7
- Set up your field information now
- Represent the different areas in your field
- Always update coordinates
- Leave notes/pictures on unknowns



Grower

The **field owner or a company** employee with permission to manage and contribute to a field's data

Researcher

An employee of a **research institution** with permission to **manage** and **contribute** to a field's data

Scout

An employee of **either a field owner or a research institution** with permission to **contribute** to a field's data



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