



SCOTTISH QUALITY CROPS FARM RECORD BOOK

Index

Page

2	General information
3	Farm emergency action plan
4	Guidelines for secure storage for fertiliser on farm
5-6	Pesticide store & stocklist
7-9	Rodent records & bait point location plan
10	Grain store – Pre-harvest hygiene checks
11	Glass protection system
12-13	Grain stores – weekly/monthly checks
14-15	Sprayer self assessment & basic calibration form
16-17	Sprayer self assessment & calibration for electronic rate controllers
18	Mycotoxins risk assessment for wheat
19	Annual checks - Machinery
20-37	Field records
38-39	Grain Movement Record
40	Complaints register

FARM EMERGENCY ACTION PLAN

GENERAL INFORMATION

SEERAD FARM CODE (CPH):

Contractors/Rodent Contractor/Chemical Suppliers

Name/Company	Telephone Number	Address

Consultants FACTS/BASIS Details

	Name and Company	Registration Number
Basis Adviser		
Facts Adviser		

Spray Operator Details

Name/Company	Certificate of Competence No	MASL Course	Date Attended	NRoSO No	Expiry Date

Waste Exemption Number

Local Beekeepers/Beekeeper Liaison Officer

Name	Telephone

In case of emergency dial 999 from your mobile phone or the nearest landline which is situated

Give the following information including the nature of incident including any remaining hazards:

Farm Name and Address:

OS Ref:

Farm contact:

Farm telephone No:

Move any staff, livestock and machinery away from the danger area if safe to do so:

LOCATION OF IMPORTANT FACILITIES

Location of fire extinguishers:	Location of gas and electricity isolation points:
Location of washing facilities:	Location of nearest water source (tap, bowser or other water source etc):
Location of surface water and foul water drains:	Location(s) of first aid box: Trained First Aider:

Other Useful Contacts	Telephone Numbers
Local Casualty Department	
Local SEPA /Environmental Agency Tel No	
Doctors Tel No and Name	
Local Police Station	
Local Fire Dept	
Electricity Company	
Gas Company	
Water Company	
Emergency Waste Disposal Company	

[illegible][illegible]

Weekly/Monthly Checks

Date Checked	Name of Bait *	Station 1 location:	Station 2 location:	Station 3 location:	Station 4 location:	Station 5 location:	Station 6 location:	Observations	Initials

* Bait stations do not need to carry rodenticides

* Bait stations do not need to carry rodenticides

RODENT CONTROL

Weekly/Monthly Checks

Date Checked	Name of Bait *	Station 1 location:	Station 2 location:	Station 3 location:	Station 4 location:	Station 5 location:	Station 6 location:	Observations	Initials

* Bait stations do not need to carry rodenticides

Bait Point Location Plan

Grain Store (pre-harvest hygiene checks)

[illegible]

Glass Protection System

Glass Protection System
It is recommended that plastics are included in your store check to avoid grain contamination

[illegible]

GRAIN STORES

Weekly/Monthly Checks

[illegible]

GRAIN STORES

Weekly/Monthly Checks

[illegible]

SQC Sprayer Maintenance and Self Assessment form (complete annually if sprayer not NSTS tested)

Owner:	Operator:	Make:
Model:	PA Cert no:	Reg No:
Date:	NRoSO no:	

Key:	Checked/Completed	<input checked="" type="checkbox"/>	Needs Attention	<input checked="" type="checkbox"/>
	Adjusted	<input type="checkbox"/>	Not Applicable	<input type="checkbox"/>

Regularly

Mechanical

☐ Is the attachment to tractor secure?

☐ Is the chassis and structure free of cracks and rust?

☐ Are the wheels and tyres in good condition?

☐ Are guards, inc. PTO shaft guard, secure and undamaged?

Hydraulic system, inc. tracking system if fitted.

☐ Are they free from leaks under pressure?

☐ Are the hoses and connections worn or cracked?

Electrical system

☐ Is the wiring undamaged & are all connections properly insulated?

☐ Do all the lights work properly?

Pneumatic system

☐ Is the system free from leaks when under working under operating pressures?

Sprayer tank

☐ Are the tank/chassis fasteners secure?

☐ Free from leaks?

☐ Does the lid fit securely and free from leaks?

☐ Is the contents gauge clearly legible?

Boom

☐ Is it properly latched when folded for transport?

☐ When unfolded, is it straight and level?

☐ Does the height adjustment and suspension work properly?

☐ Does the boom return to level when displaced to left and right?

☐ Are the break-backs functioning freely?

☐ Are the mountings and linkages secure and not worn?

'Spray lines'

☐ Are they free from leaks under pressure?

☐ No hoses and connectors worn or cracked?

☐ Are all valves and filters in good condition?

Nozzles

☐ Are all fittings and turrets in good condition?

☐ Are all nozzles correctly orientated?

☐ Are all check valves working properly?

☐ Is the spray/distribution pattern visually correct?

Regularly (cont)

Controls and valves

☐ Are the master on/off switches working correctly?

☐ Are all boom section switches functioning?

☐ Can you read the pressure gauges easily?

☐ Are all labels appropriate and legible?

☐ Is the pressure adjustment/stable?

☐ Pressure gauge reading zero?

Chemical induction system

☐ Are the system and controls working properly?

☐ Is it free from leaks under pressure?

☐ Are all labels appropriate and readable?

☐ Is the rinse system and container wash system working properly?

Tank rinse system

☐ Is the system functioning properly?

External washdown

☐ Is the system functioning properly?

Personal

☐ Water supply tank filled?

☐ Is the clothing locker clean and contents complete?

Periodical

☐ Jug test all nozzle outputs

Date Completed

☐ Formally complete and file check sheet

Independent test due (if applicable).....

Maintenance Required/Completed/Specific items requiring attention

Calibration Record

Calibration
Must be carried out regularly at the beginning of each spray season (spring and autumn) and regularly during the season and always after changing tractor, tractor wheels, nozzles or replacing any part of the spray delivery system.

When calibrating the sprayer, wear a minimum of a coverall, gloves and boots:

		Enter Values
Read the LABEL	Spray VOLUME Spray DOSE Spray QUALITY	
Measure TIME per 100m	Measure time in seconds over land similar to that to be sprayed	
Calculate SPEED	Speed = 360 ÷ Time (seconds)	
Measure nozzle SPACING on boom	(normally 0.5m)	
Calculate nozzle OUTPUT	Output = Volume x speed x space ÷ 600 (Litres/min) (litres/ha) (km/h) (metre)	
Select NOZZLE	Refer to nozzle manufacturers chart and select size and type of nozzle that will produce the calculated OUTPUT and required spray QUALITY	

Now check the calibration of the sprayer:

Check Nozzle OUTPUT	Using water, check output of 4 or more nozzles using a calibration jug or flow meter.	
Calibrate SPRAYER	Volume = output x 600 ÷ space ÷ speed (Litres/ha) (litres/min) (metre) (km/h)	

Record Details

Date Completed: _____

Nozzles fitted		Tractor used	
Spray volume		Tractor gear	
Spray pressure		Tractor wheels	
Spray quality		Tractor revs	
Forward speed			

Further forms can be downloaded from the SQC Website www.sqcrops.co.uk or obtained by telephoning the SFQC office: 0131 335 6604

This form is reproduced with kind permission of the BCPC

14

15

SQC Sprayer Maintenance and Self Assessment form (complete annually if sprayer not NSTS tested)

Owner: Model: Date:	Operator: PA Cert no: NRoSO no:	Make: Reg No:
---------------------------	---------------------------------------	------------------

Key:	Checked/Completed <input checked="" type="checkbox"/>	Needs Attention <input checked="" type="checkbox"/>
	Adjusted <input checked="" type="checkbox"/>	Not Applicable <input checked="" type="checkbox"/>

<div>Regularly</div> <div>Mechanical</div> <div><input type="checkbox"/> Is the attachment to tractor secure?</div> <div><input type="checkbox"/> Is the chassis and structure free of cracks and rust?</div> <div><input type="checkbox"/> Are the wheels and tyres in good condition?</div> <div><input type="checkbox"/> Are guards, inc. PTO shaft guard, secure and undamaged?</div> <div>Hydraulic system, inc. tracking system if fitted.</div> <div><input type="checkbox"/> Are they free from leaks under pressure?</div> <div><input type="checkbox"/> Are the hoses and connections worn or cracked?</div> <div>Electrical system</div> <div><input type="checkbox"/> Is the wiring undamaged & are all connections properly insulated?</div> <div><input type="checkbox"/> Do all the lights work properly?</div> <div>Pneumatic system</div> <div><input type="checkbox"/> Is the system free from leaks when under working under operating pressures?</div> <div>Sprayer tank</div> <div><input type="checkbox"/> Are the tank/chassis fasteners secure?</div> <div><input type="checkbox"/> Free from leaks?</div> <div><input type="checkbox"/> Does the lid fit securely and free from leaks?</div> <div><input type="checkbox"/> Is the contents gauge clearly legible?</div> <div>Boom</div> <div><input type="checkbox"/> Is it properly latched when folded for transport?</div> <div><input type="checkbox"/> When unfolded, is it straight and level?</div> <div><input type="checkbox"/> Does the height adjustment and suspension work properly?</div> <div><input type="checkbox"/> Does the boom return to level when displaced to left and right?</div> <div><input type="checkbox"/> Are the break-backs functioning freely?</div> <div><input type="checkbox"/> Are the mountings and linkages secure and not worn?</div> <div>'Spray lines'</div> <div><input type="checkbox"/> Are they free from leaks under pressure?</div> <div><input type="checkbox"/> No hoses and connectors worn or cracked?</div> <div><input type="checkbox"/> Are all valves and filters in good condition?</div> <div>Nozzles</div> <div><input type="checkbox"/> Are all fittings and turrets in good condition?</div> <div><input type="checkbox"/> Are all nozzles correctly orientated?</div> <div><input type="checkbox"/> Are all check valves working properly?</div>	<div>Regularly (cont)</div> <div>Controls and valves</div> <div><input type="checkbox"/> Are the master on/off switches working correctly?</div> <div><input type="checkbox"/> Are all boom section switches functioning?</div> <div><input type="checkbox"/> Can you read the pressure gauges easily?</div> <div><input type="checkbox"/> Are all labels appropriate and legible?</div> <div><input type="checkbox"/> Is the pressure adjustment/stable?</div> <div><input type="checkbox"/> Pressure gauge reading zero?</div> <div>Chemical induction system</div> <div><input type="checkbox"/> Are the system and controls working properly?</div> <div><input type="checkbox"/> Is it free from leaks under pressure?</div> <div><input type="checkbox"/> Are all labels appropriate and readable?</div> <div><input type="checkbox"/> Is the rinse system and container wash system working properly?</div> <div>Tank rinse system</div> <div><input type="checkbox"/> Is the system functioning properly?</div> <div>External washdown</div> <div><input type="checkbox"/> Is the system functioning properly?</div> <div>Personal</div> <div><input type="checkbox"/> Water supply tank filled?</div> <div><input type="checkbox"/> Is the clothing locker clean and contents complete?</div> <div>Periodical</div> <div><input type="checkbox"/> Jug test all nozzle outputs</div> <div>Date Completed</div> <div><input type="checkbox"/> Formally complete and file check sheet</div> <div>Independent test due (if applicable).....</div> <div>Maintenance Required/Completed/Specific items requiring attention</div>
---	---

Calibration Record – sprayers fitted with electronic controllers – for pressure and flow based control systems

Must be carried out regularly at the beginning of each spray season (spring and autumn) and regularly during the season and always after changing tractor, tractor wheels, nozzles or replacing any part of the spray delivery system

When calibrating the sprayer, wear a minimum of a coverall gloves and boots: Make sure the sprayer is clean and flushed outside and inside to reduce the chance of contamination. Clean all filters.

Action	Completion record/values
Half fill sprayer tank with water and take to a suitable flat field Run sprayer to measure travelling speed from the sprayer based system using appropriate formula to check that the results are accurate. (The tractor speed system cannot be relied on for accuracy)	
Check the rate controlled system is functioning in the manual setting to give maximum and minimum pressures thresholds more than the sprayer will need to achieve whilst spraying.	
Set pressure, in manual, to manufacture recommended pressures, for the nozzle used. Check calibration and patteration of nozzles to confirm nozzles are working within the manufactures guidelines on nozzle chart. If out with these settings or pattern is wrong, change nozzles, and restart calibration.	
Set sprayer box in automatic and put in a simulated speed settings. Set the controller to an appropriate rate for the size of the nozzles. Run and flow test nozzles for 1 minute to confirm rate controller output.	
With the recorded nozzle output apply the flow/application rate formulae to confirm Rate Controller is performing correctly.	
For pressure based systems:	
Calibrate all nozzle sets that are to be used as in box 3 above*.	

*Flow based systems if the nozzle is worn, liquid application will be correct but the drop pattern/size will vary. On a pressure based system if the nozzle is worn droplet size should be acceptable but application rate will be higher.

N.B. The tank capacity should be confirmed as new. Any tank contents indicators are a guide only and have too many error factors to use this as a calibration method and could give inaccurate information. Tank capacity should be done after the calibration process using the rate controllers which should now be correct.

Further forms can be downloaded from the SQC Website www.sqcereals.co.uk or obtained by telephoning the SFQC office: 0131 335 6604.

Mycotoxins – Risk Assessment for wheat

Factor	Details	Risk	Score
Region (see map – HGCA Topic Sheet 104/Summer 09)	High	4	
	Moderate	2	
	Low	-2	
	Very low	-4	
Previous Crop	Maize	6	
	Other	0	
Cultivation	Direct-drilled	4	
	Standard non-inversion tillage	3	
	Intensive non-inversion tillage	2	
	Plough (soil inversion)	0	
Wheat variety	RL resistance rating 1 - 5	1	
	RL resistance rating 6 - 9	0	
Your pre-flowering score			
T3 fungicide	Under 50% rate of recommended product	0	
	50 - 74% rate or recommended product	-2	
	75% rate or above of recommended product	-3	
Rainfall at flowering (GS59-69)	More than 80mm	9	
	40 – 80mm	6	
	10 - 40mm	3	
	Less than 10mm	0	
Rainfall pre-harvest (GS87 to harvest)	More than 120mm	12	
	80 – 120mm	9	
	40 – 80mm	6	
	20 – 40mm	3	
	Less than 20mm	0	
Your final score			

Risk Assessment		
Field number or identification	Risk identified (score)	Action taken (if score >15)

Explaining risk factors
Cultivation: Crop debris is an important source of fusarium. Complete burial by ploughing reduces risk to the greatest extent while risk is highest with direct drilling. Intensive non-inversion tillage (3 or more cultivations with discs, tines or chisel plough) is more effective at reducing risk than standard non-inversion tillage (1 or 2 cultivations). Note, appropriate machinery can achieve several cultivations in a single pass.
Variety: based on HGCA Recommended List rating for fusarium ear blight. Score 1 if unknown.
T3 fungicide: The benefit of using an appropriate rate of a T3 fungicide recommended against fusarium and/or mycotoxin production results in a negative score. Current recommended fungicides include products containing dimoxystrobin, metconazole, prothioconazole, tebuconazole or bromuconazole.
Rainfall at flowering: Wet weather promotes fusarium development. The score is based on total rainfall during flowering (GS59-69 – full ear emergence to end of flowering).
Rainfall pre-harvest: Based on total rainfall from crop starting to ripen (GS87 – hard dough) to harvest.

ANNUAL CHECKS (year)

FYM/Fertiliser spreader (spring check of calibration and spreading pattern)

Machine	Date of check	Checked by	Maintenance and Uniformity of distribution	Calibration check	Action / Result

Sprayer (carry out at the beginning of spring and autumn seasons, and regularly throughout the seasons or after changing nozzles or other parts of the delivery system).

Machine	Date of check Or NSTS test date	Checked by	Maintenance check or NSTS Test Number	Calibration check	Action / Result

Grain drier/Combine/Loading Equipment Maintenance Checks

Machine	Date Checked	Checked by	Maintenance Required	Action/Result

Moisture meter (calibrated against standards)

Date of check	Checked by	Action / Result

Trailer pre-harvest hygiene

Date	Cleaning Process (swept/power washed)	Disinfectant Used

Harvest Year

FIELD RECORD

Field Name/No:	Area:	Ergot: * Present / Not Present *Delete as appropriate		Harvest Date:	Fertiliser (including FYM/slurry):			
Home Saved Seed Yes / No	Crop: Purchased Seed Lot Number:	Varyety:		Seed Treatment:	Date:	Rate:	N:P:K	
Soil Type:							Accumulative Nitrogen Applied	
Previous Crop:	Sowing Date:		Seed Rate:					
Cultivations:		Soil Analysis:	pH	P	K	Mg		
		Date:						

Other Applications

[illegible]

24

[illegible]

Continued:

[illegible]

Harvest Year

FIELD RECORD

Field Name/No:	Area:	Ergot: * Present / Not Present *Delete as appropriate		Harvest Date:	Fertiliser (including FYM/slurry):			
Home Saved Seed Yes / No	Crop: Purchased Seed Lot Number:	Varyety:		Seed Treatment:	Date:	Rate:	N:P:K	
Soil Type:							Accumulative Nitrogen Applied	
Previous Crop:	Sowing Date:		Seed Rate:					
Cultivations:		Soil Analysis:	pH	P	K	Mg		
		Date:						

Other Applications

[illegible]

26

[illegible]

Continued:

[illegible]

Harvest Year

FIELD RECORD

Field Name/No:	Area:	Ergot: * Present / Not Present *Delete as appropriate	Harvest Date:	Fertiliser (including FYM/slurry):			
Home Saved Seed Yes / No	Crop: Purchased Seed Lot Number:	Variety:	Seed Treatment:	Date:	Rate:	N:P:K	
Soil Type:						Accumulative Nitrogen Applied	
Previous Crop:		Sowing Date:	Seed Rate:				
Cultivations:		Soil Analysis:	pH	P	K	Mg	
		Date:					

Other Applications

[illegible]

30

[illegible]

Continued:

[illegible]

Harvest Year

FIELD RECORD

Field Name/No:	Area:	Ergot: * Present / Not Present *Delete as appropriate	Harvest Date:	Fertiliser (including FYM/slurry):		
Home Saved Seed Yes / No	Crop: Purchased Seed Lot Number:	Variety:	Seed Treatment:	Date:	Rate:	N:P:K
Soil Type:						Accumulative Nitrogen Applied
Previous Crop:		Sowing Date:	Seed Rate:			
Cultivations:		Soil Analysis:	pH	P	K	Mg
		Date:				

Other Applications

[illegible][illegible]

Continued:

[illegible]

SQC Grain Movement Record

Date	Commodity	Bio-fuel ✓	Approx. Tonnage	Merchant	Haulier	Registration No.	Loader Signature	Driver Signature	Notes

SQC Grain Movement Record

Date	Commodity	Bio-fuel ✓	Approx. Tonnage	Merchant	Haulier	Registration No.	Loader Signature	Driver Signature	Notes

SQC – Member’s Complaints Register

- If no complaints received, complete Section 2

Section 1

Name and address of Complainant	Date received	Nature of complaint	Proposed correction action	Date action finished
Eg. Grain Company, Dock 1 The Keys	09/09/10	Saw tooth grain beetle	Treat grain with Reldan 22	12/09/10

Section 2

Harvest Year:	No Complaints Received	Signature:	Date:
Harvest Year:	No Complaints Received	Signature:	Date: