



**NVZ Recording System**

**Reference Manual**

**Version 10.0**

Documentation and Software by **farm**data Limited

© 1998-2018 **farm**data Limited

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# **PREFACE**

This document describes how NVZdata for Windows the NVZ Recording System produced by Farmdata Limited, operates. The program runs on Windows 2000 or above and is written in Visual Basic.net. It will not run on Windows 95 or Windows 98

'Windows 2000', 'Windows XP', 'Windows Vista' 'Windows 7' 'Windows 8' and 'Visual Basic.net' are registered trademarks of Microsoft Corporation Inc.

## **Related Documents.**

NVZdata ; Getting started.

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## Introduction

---

### I. 1. What the System does

---

Welcome to NVZdata for Windows. The program described in this manual is one of the Farndata family of computerised management information systems for agricultural businesses.

NVZdata uses the power of a computer to record and organise the complex information which accumulates during a growing season and present it in an easy to read format.

Once the information is entered it can be edited at any time. The full information is retained for all time or until **you** decide to delete it.

### I. 2. The information it needs

---

From the recording point of view, the NVZdata system requires no more daily input than you would enter into manual field recording sheets.

Initially there is a bit of work involved in setting up the system with stock, crop, variety and field information unique to your farm.

Day to day entry of stock purchased and the recording of usage on the fields will produce all of the basic information you will require thereafter.

Operating at this level the system is simply a stock record and field costing system. You can extend this further if you wish. Entry of observations will give you a field diary. Any number of soil sample results, limings, and eelworm test results can be stored for each field.

### I. 3. The information it can provide

---

Run at its simplest the system will provide the information needed to for the NVZ regime.

The reporting flexibility is particularly useful. Any information held on a field record can be produced in report formats you can create yourself.

Full Historical information is held in complete detail. There is no summarising in a History section. All soil test, liming and eelworm test results are retained for reference.

#### I. 4. Finding your way around

---

The program is written in 'Microsoft Visual Basic.net' to run in the 'Microsoft Windows' operating system. This gives it all the flexibility and function now available with this type of programming. It is designed to be used with the mouse and to have the minimum of keyboard input.

Clicking into one option on the screen will often take you to another screen with further options. You may need to take time at first to find out where everything is. If you go into the wrong option, simply exit out again and you will be back to the previous stage.

Within a screen you should use the Tab Key to move between data fields, not the return key. Shift + Tab goes back through the fields.

If a field has a box with a down arrow at the end, it has a predefined list from which to pick. Once in the field you can scroll down the list and select the required item. Alternatively type the first letter of the item you wish, this will give you the first item with this initial letter. Press the same letter again to move to the next item on the list with that initial letter.

New items can be added to lists by clicking on the **Add button** beside the list field.

#### I. 5. If you get Stuck

---

Something somewhere is sure to catch you out. It is often just a matter of taking a step back to the previous section and starting again.

Switching the machine off is never a good option but it is unlikely that you would cause real damage if you did. You are likely to lose any unsaved entries which will have to be re-entered.

Should you get totally stuck you can call up Farmdata's help line which is manned during office hours for assistance. Outwith office hours Farmdata can be contacted by fax (01467671448), e-mail ([support@farmdata.co.uk](mailto:support@farmdata.co.uk)) or through our website ([www.farmdata.co.uk](http://www.farmdata.co.uk)).

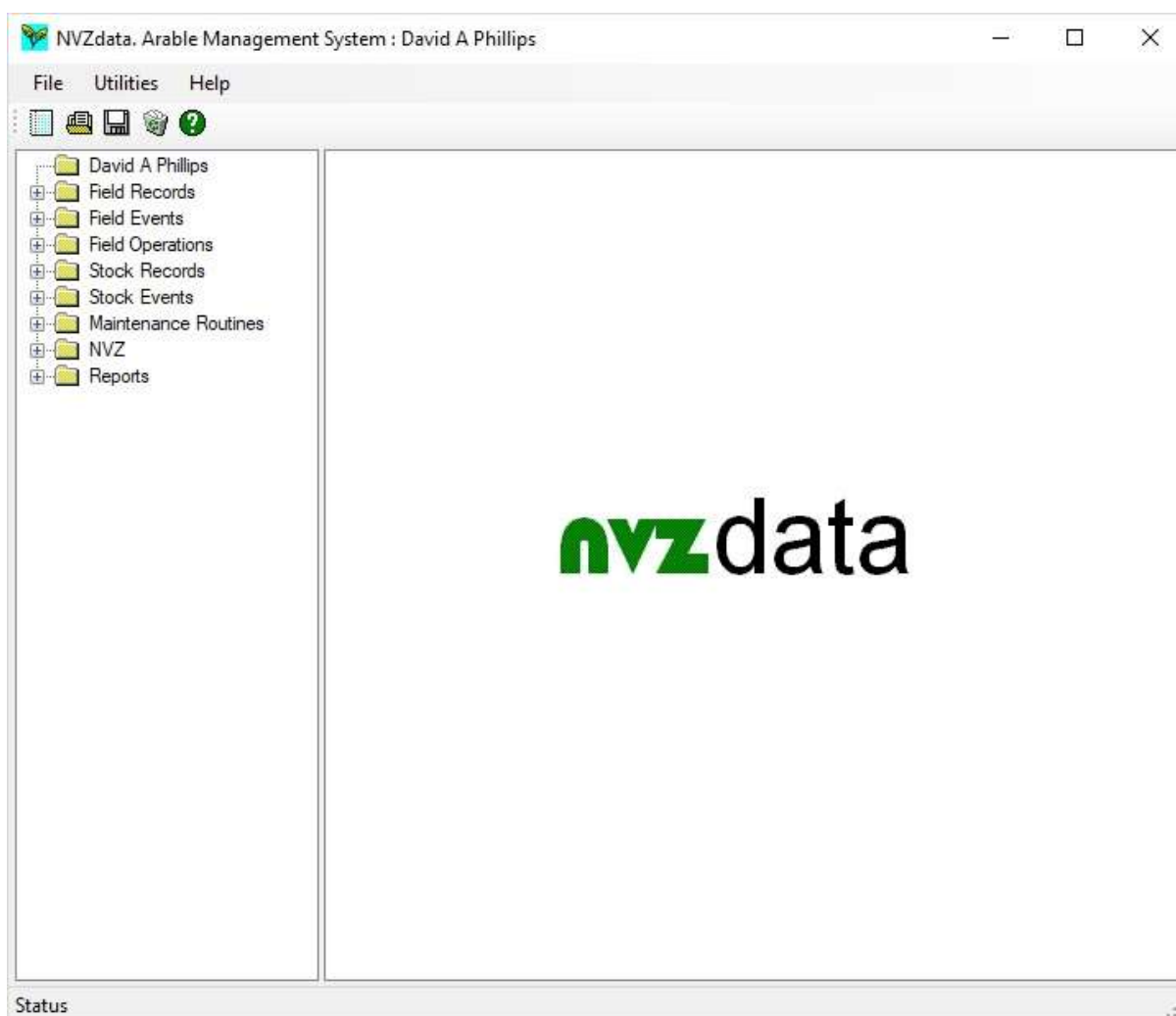
It is absolutely necessary that you take regular backups of your work. You should keep at least three sets of backups and use them in rotation. Set A should be used on Day 1, Set B on Day 2, Set C on Day 3 and on day 4 you should return to Set A. Should all else fail Farmdata can resurrect your system from your backup if it is correctly done.

## I. 6. Using this Manual.

---

Each of the sections shown in the Screen below is explained in an individual chapter. They are headed:

- 1. Maintenance**
- 2. NVZ**
- 3. Field Records**
- 4. Field Events**
- 5. Field Operations**
- 6. Stock Records**
- 7. Reports**



Each of these sections can contain a number of further options, each of these is described in a numbered section within the chapter. Each option available within a section is described in the order in which it appears. Each option is listed then its operation described.

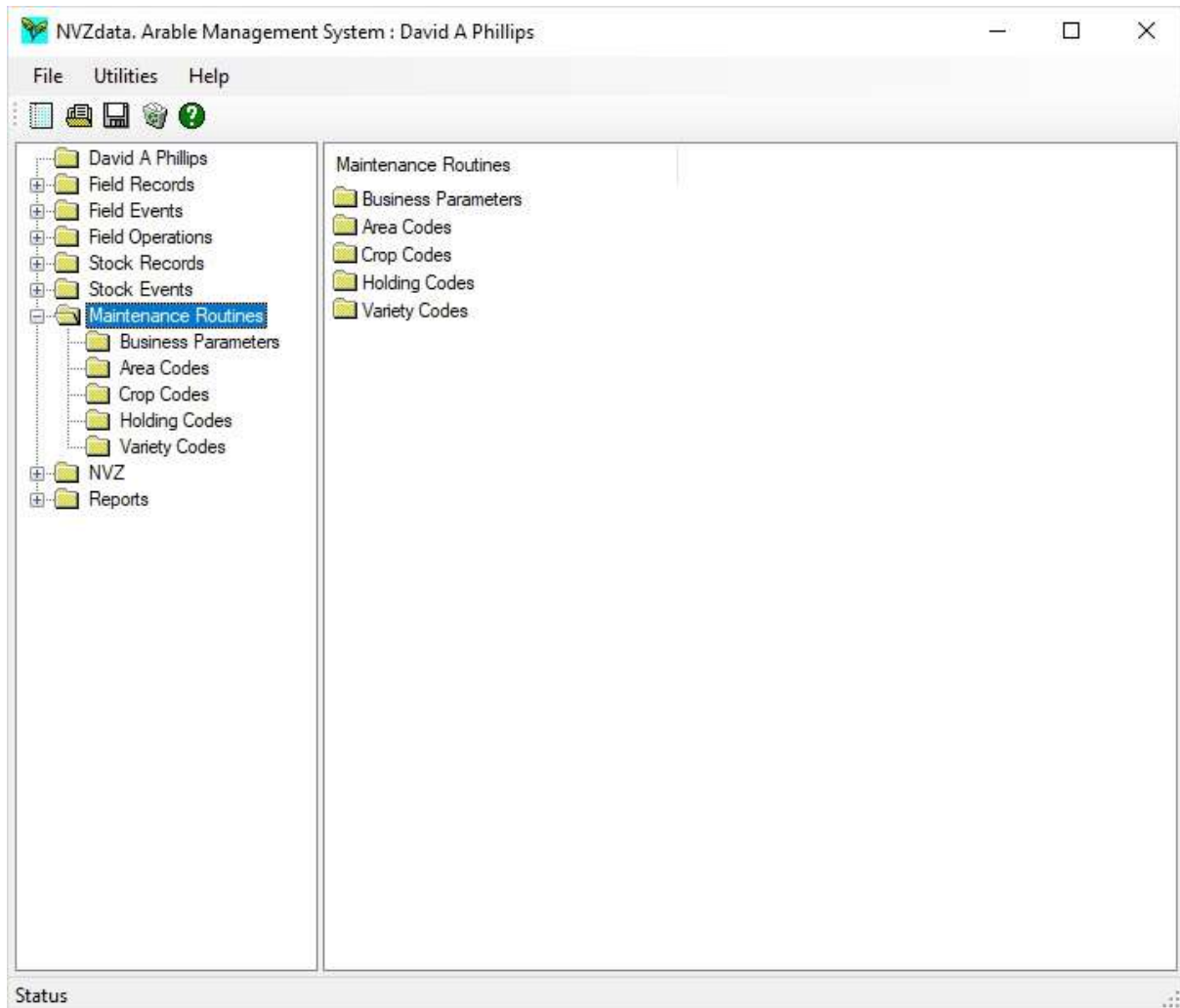
## Chapter 1 Maintenance

---

This section contains the basic information needed to set up and run the system. Some adjustment will be required here when the system is started to tailor it to your requirement.

Most of these sections can be updated whilst entries are being made.

The **Add Button** can be used in most data entry routines to create new items as required.



**All of the lists can be edited to meet your requirements. It is not advisable to delete an item once you have used it in an entry. This will leave blanks in your historical records. It is easier, where possible, to make the item “non-Current”.**

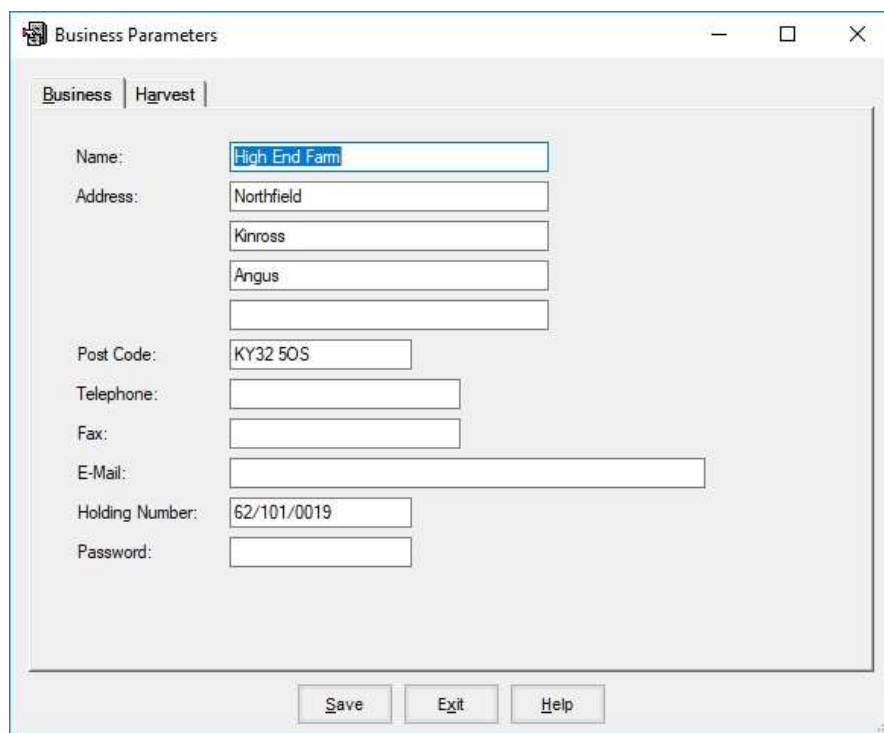


## 1. Business Parameters

---

### 1. 1. Business

---



The screenshot shows a window titled "Business Parameters" with two tabs: "Business" and "Harvest". The "Business" tab is active. The form contains the following fields:

- Name: High End Fam (highlighted with a blue selection box)
- Address: Northfield
- Kinross
- Angus
- Post Code: KY32 50S
- Telephone:
- Fax:
- E-Mail:
- Holding Number: 62/101/0019
- Password:

At the bottom of the window are three buttons: Save, Exit, and Help.

#### A. Business Name, Address and Telephone Number:

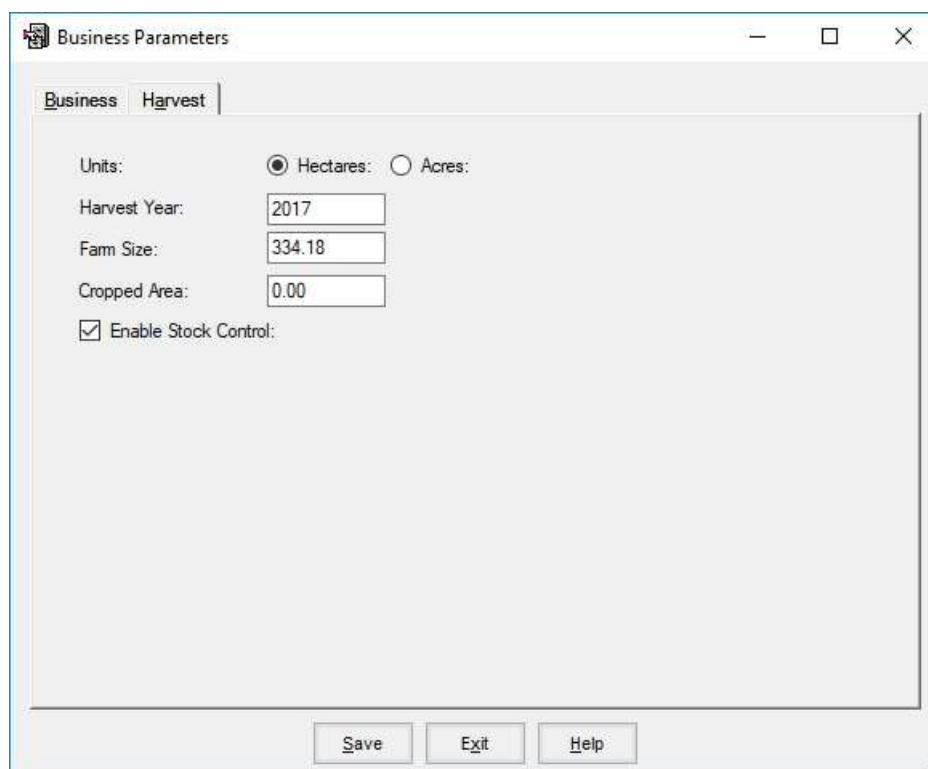
The trading name, address and contact telephone number of the business.

#### B. Holding No.

The official Ministry of Agriculture code for the principle holding of this business.

#### C. Password

Used to access the business when entered here.



The screenshot shows a window titled "Business Parameters" with two tabs: "Business" and "Harvest". The "Harvest" tab is selected. Inside the tab, there are several input fields and a checkbox. The "Units:" section has two radio buttons: "Hectares" (selected) and "Acres". Below this, there are three text input fields: "Harvest Year:" with the value "2017", "Farm Size:" with the value "334.18", and "Cropped Area:" with the value "0.00". At the bottom of the input section is a checked checkbox labeled "Enable Stock Control:". At the very bottom of the window are three buttons: "Save", "Exit", and "Help".

### A. Units

This sets the system to work either in Imperial or Metric measures. Acres for Imperial or Hectares for Metric.

### B. Harvest Year

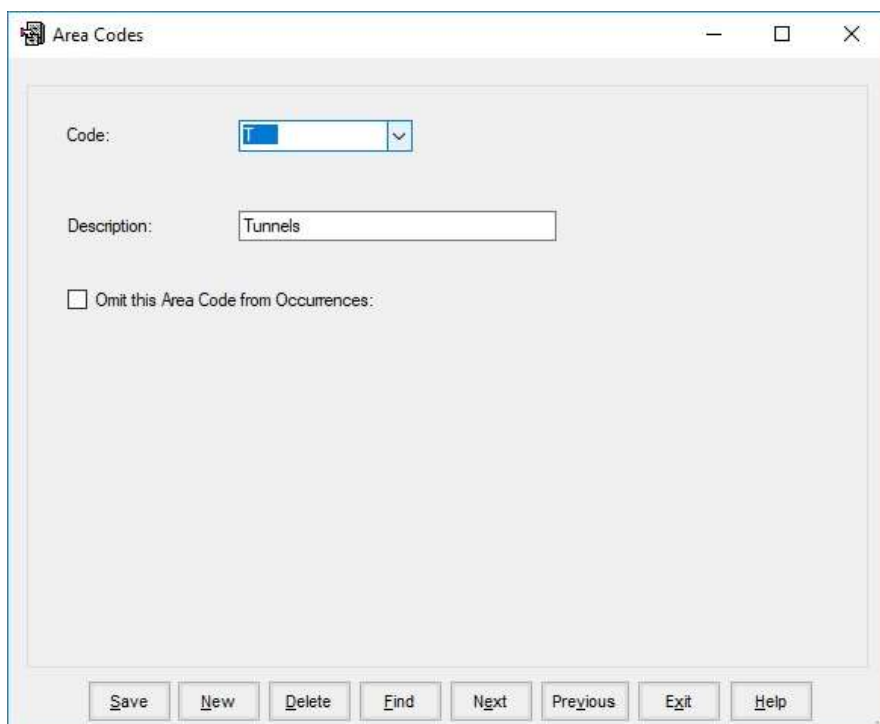
This sets the default year for entering and extracting information. It is generally set to the crop year you are currently entering information for (i.e. 2017 for crops to be harvested in 2017). It should be reset each year when you move forward to the next crop. It can be over-ridden for individual entries or reports as required.

### C. Farm Size / Cropped Area

Total farm area and total cropped area of the business.

### D. Enable Stock Control.

When this is set to **Yes** the system gives full Stock traceability. It will record when and from whom stock was purchased and show where and when it was used. If set to **No** only current available quantities of stock can be listed.



Area Codes

Code: T

Description: Tunnels

☐ Omit this Area Code from Occurrences:

Save New Delete Find Next Previous Exit Help

These are the units which can be used as 'Secondary areas' within a field. They are not generally used in field scale agriculture but rather in horticulture where detailed costing on a particular scale is required.

To create a new area, click **New**, fill in the code you wish, Tab to Description Field, fill in Description and click **Save**. You may not delete a code which is already in use.

This is the list of crops you grow on your farm. The program has a pre-set list. This is based on the list in the IACS explanatory booklet. This can be changed to your own specification if you wish.

To add a new crop, click **New** and enter the code, description and crop class (crop class relates to IACS classification). Then click **Save**.

Type	Indicates the IACS Classification of the crop.
Residue Group	This used for NVZ reporting and calculation. Set the residue group of this crop to applied to the following crop.
Standard Yield	Use in NVZ calculations. This is the standard yield figure for the crop as set in the NVZ guidelines. Applies to cereals and WOSR.
Expected Yield	Your predicted yield for the crop based on historic information. This can be varied in individual field records. Applies to cereals and WOSR.
Additional Nitrogen	Where the Expected Yield differs from the Standard Yield this is the variation to be applied to the Standard Nitrogen figure. Entered as Kg of N per Ha.

The following do not apply to forage crops. Forage crop values are set in the NVZ section under grassland management.

Autumn N

The value of N which may be applied in the Autumn to a particular crop as set in the NVZ guidelines. Based on Soil Type and Residue Group of previous crop.

Crop Codes

CropsAutumn NSpring NAdjustmentsWinter Rain

Code:WOSR

Description:Winter Oilseed Rape

Note: Figures below are for 2009 onwards:

	Soil Type	Group 1	Group 2	Group 3	Group 4	Group 5
▶	Humose Soils	30	20	10	0	
	Other Mineral Soils	30	20	10	0	
	Peaty Soils	30	20	10	0	
	Sands	30	20	10	0	
	Sandy Loams	30	20	10	0	
	Shallow Soils	30	20	10	0	
*						

< >

SaveNewDeleteFindNextPreviousExitHelp

Spring N

The Value of N which may be applied in the spring to a particular crop as set in the NVZ guidelines. Based on Soil Type and Residue Group of previous crop.

Crop Codes

CropsAutumn NSpring NAdjustmentsWinter Rain

Code:WOSR

Description:Winter Oilseed Rape

Note: Figures below are for 2009 onwards:

	Soil Type	Group 1	Group 2	Group 3	Group 4	Group 5
▶	Humose Soils	120	110	100	80	
	Other Mineral Soils	200	190	180	140	
	Peaty Soils	80	70	60	40	
	Sands	200	190	180	140	
	Sandy Loams	200	190	180	140	
	Shallow Soils	200	190	180	140	
*						

< >

SaveNewDeleteFindNextPreviousExitHelp

## Adjustments

These are variations which can be applied to the standard N figures for a particular crop as set in the NVZ guidelines. Based on Soil Type and Residue Group of previous crop. This is usually associated with the intended market.

Code: WW

Description: Winter Wheat

Note: Figures below are for 2009 onwards:

	Adjustment	Group 1	Group 2	Group 3	Group 4	Group 5
▶	Milling	40	40	40	40	
*						

Buttons: Save, New, Delete, Find, Next, Previous, Exit, Help

## Winter Rain

Adjustment which may be applied to standard nitrogen for high winter rainfall for a particular crop as set in the NVZ guidelines. Based on Soil Type and Residue Group of previous crop.

Code: WW

Description: Winter Wheat

Note: Figures below are for 2009 onwards:

	Soil Type	Group 1	Group 2	Group 3	Group 4	Group 5
▶	Humose Soils	0	10	10	10	
	Other Mineral Soils	0	10	10	10	
	Peaty Soils	0	10	10	10	
	Sands	0	10	20	20	
	Sandy Loams	0	10	20	20	
	Shallow Soils	0	10	20	20	
*						

Buttons: Save, New, Delete, Find, Next, Previous, Exit, Help

1. 4. Holdings

---

**Holding Codes**

Holding | Rainfall

Code: EN

Description: North End

Holding Number: 67/001/0004

Region: Scotland

Height: 100

☐ Omit this Holding Code from Occurrences:

Save New Delete Find Next Previous Exit Help

Holdings within a business can be identified. They are necessary for NVZ purposes. Each field on the farm can be allocated to a holding thus allowing operations to be done on a specific holding and reports to be formulated for each holding if required.

Height is required for NVZ purposes.

**Holding Codes**

Holding | Rainfall

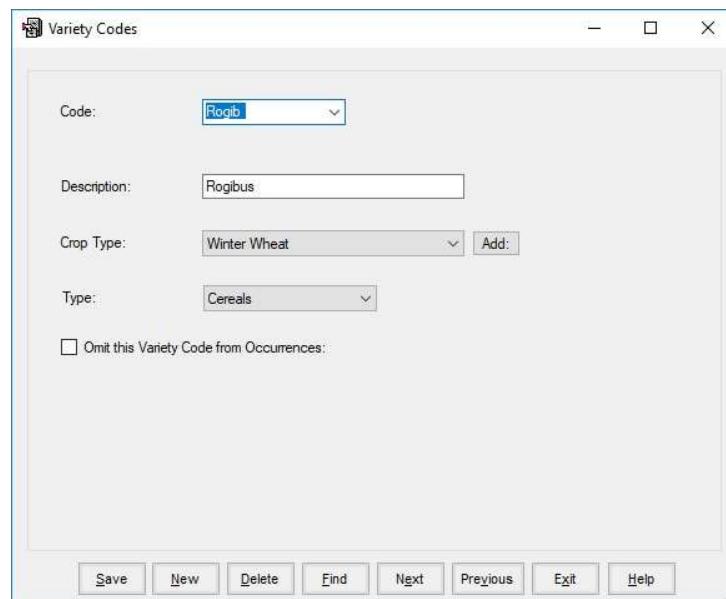
Code: EN

Description: North End

	Year	Winter	Spring	Summer	Comment
▶	2015	380	180	440	
	2016	380	180	440	
	2017	460	180	440	
*					

Save New Delete Find Next Previous Exit Help

Rainfall figures are required for NVZ purposes. These can be taken from the standard tables issued in the NZV guidelines.



Variety Codes

Code: Rogib

Description: Rogibus

Crop Type: Winter Wheat Add:

Type: Cereals

☐ Omit this Variety Code from Occurrences:

Save New Delete Find Next Previous Exit Help

The list of varieties you grow on the farm. The system comes preloaded with recommended variety lists for cereals and oilseeds. Again, the pre-set list can be edited as with **Crops** above. Each variety is related to a crop and IACS class.



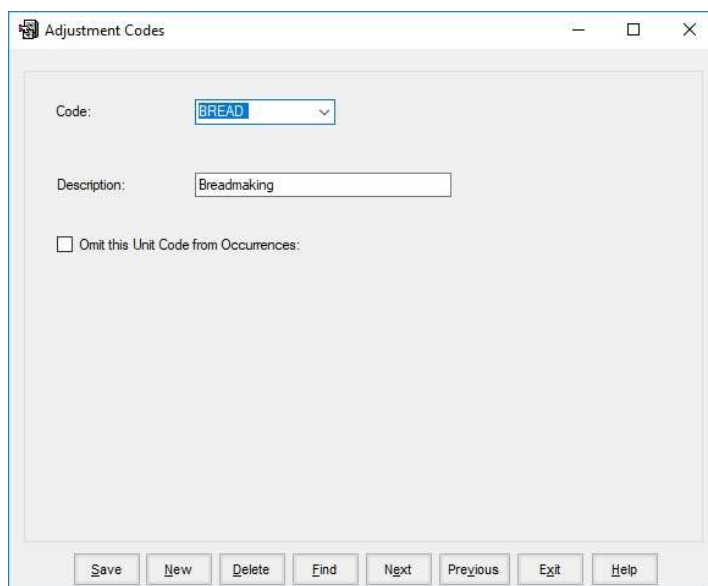
## Chapter 2. NVZ

---

These lists are required as background for NVZ reporting. They can be amended as required.

### 2. 1. Adjustments

---



Adjustment Codes

Code: BREAD

Description: Breadmaking

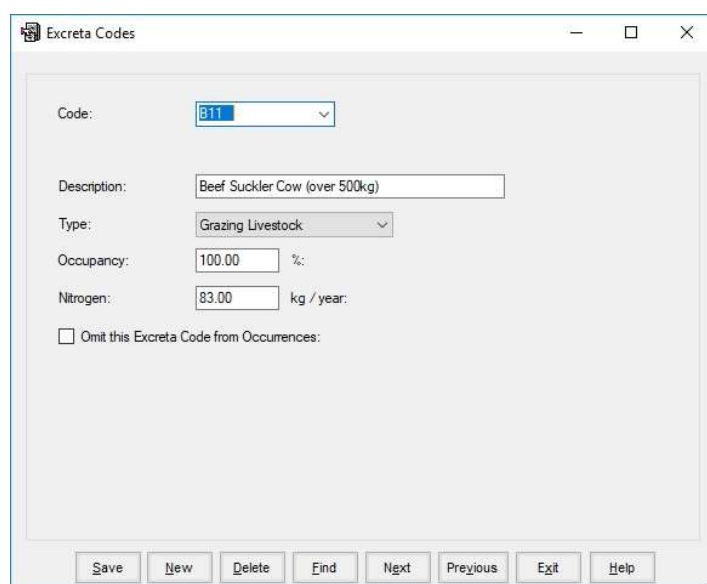
☐ Omit this Unit Code from Occurrences:

Save New Delete Find Next Previous Exit Help

This is a list of circumstances that may cause the amount of nitrogen to be amended when determining the Required Nitrogen in the Fertiliser and Manure Plans. These include specific end markets such as Breadmaking for Wheat or Malting for Barley. Specific disease situations or crop types may also require adjustment.

### 2. 2. Excreta Code

---



Excreta Codes

Code: B11

Description: Beef Suckler Cow (over 500kg)

Type: Grazing Livestock

Occupancy: 100.00 %

Nitrogen: 83.00 kg / year:

☐ Omit this Excreta Code from Occurrences:

Save New Delete Find Next Previous Exit Help

This contains the typical excreta production for different classes of livestock in a year in units of nitrogen.

## 2. 3. Excreted Nitrogen

This section contains the detail of the livestock on the holding. From these numbers, and the tables in the NVZ code lists, the Nitrogen production on the farm is calculated.

The screenshot shows a software window titled "Excreted Nitrogen". At the top, there is a "Year:" dropdown menu set to "2016". Below this is a table with the following columns: Stock Unit, Jan, Feb, Mar, Apr, May, Jun, Jul, Aug, Sep, Oct, Nov, Dec, Total Animals, Average Animals, Nitrogen per Animal, and Total Nitrogen. The table contains data for five livestock types: Beef Suckler Cow (over 500kg), Steer/Heifer for Slaughter, Steer/Heifer (3 to 13 months), Bull for Breeding (over 25 months), and Calf (up to 3 months). A row with an asterisk (\*) is also present. At the bottom of the window, there are buttons for Save, New, Delete, End, Next, Previous, Exit, and Help.

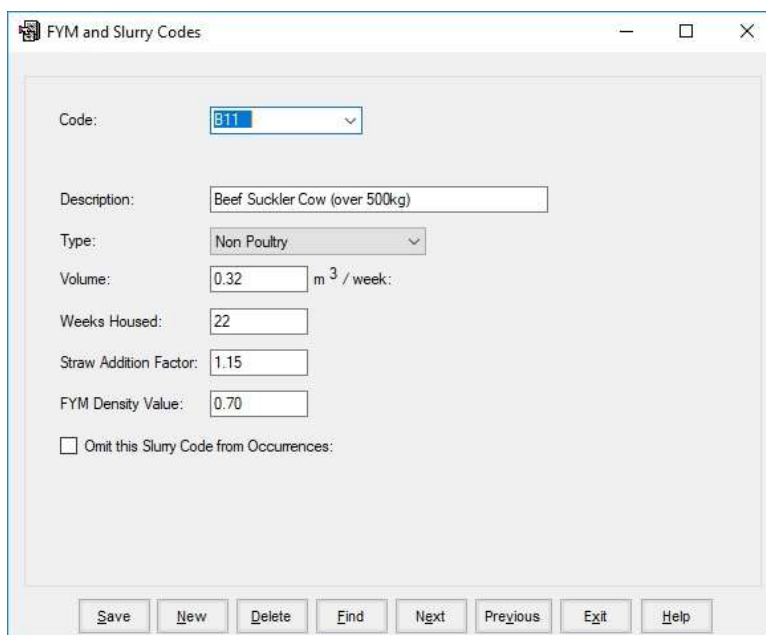
Stock Unit	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total Animals	Average Animals	Nitrogen per Animal	Total Nitrogen
▶ Beef Suckler Cow (over 500kg)	40	40	40	40	40	40	40	40	40	38	38	38	474	39.50	83.00	3278.50
Steer/Heifer for Slaughter	40	40	20	20	0	0	0	0	0	0	0	0	120	10.00	50.00	500.00
Steer/Heifer (3 to 13 months)	40	40	40	40	20	20	20	40	40	40	40	40	420	35.00	34.00	1190.00
Bull for Breeding (over 25 months)	1	1	1	1	1	1	1	1	1	1	1	1	12	1.00	48.00	48.00
Calf (up to 3 months)	0	0	0	20	39	39	20	0	0	0	0	0	118	9.83	8.00	78.67
*																

Enter your own livestock types in the screen by selecting from the available types of livestock. These types are held in the NVZ code lists. To get a list of types, type the first few letters under Stock Unit and select from the list. Then enter the quantity under the No. of Units. The Total N is then calculated. This is the total N excreted for all the livestock in Kg/year.

## 2. 4. FYM & Slurry Codes

---

This section contains the FYM and Slurry Production per week for different classes of livestock as cubic metres.



FYM and Slurry Codes

Code: B11

Description: Beef Suckler Cow (over 500kg)

Type: Non Poultry

Volume: 0.32 m<sup>3</sup> / week

Weeks Housed: 22

Straw Addition Factor: 1.15

FYM Density Value: 0.70

☐ Omit this Slurry Code from Occurrences:

Save New Delete Find Next Previous Exit Help

Code and Description of the type of animal are set.

Type is Poultry or Non-Poultry

Volume is the production of one animal in M<sup>3</sup> per week.

Weeks housed is the assumed no. of weeks this type of animal will be housed. Used to calculate annual production

Straw Addition factor applied to the annual production figure to allow for the increase in volume of added bedding.

FYM Density Value.

## 2. 5. FYM & Slurry Production

This is used to calculate the likely FYM and Slurry production of the farm for the year.

Year: 2016

Type: ☒ FYM: ☐ Slurry: ☐ Poultry:

Note: Figures below are per Week for 2009 onwards:

Stock Unit	No of Animals	Amount	Weeks Housed	Straw Addition Factor	FYM Density Value	Total Amount
▶ Beef Suckler Cow (under 500kg)	40	.22	28	1.15	.70	404.80
Steer/Heifer (for Slaughter)	40	.22	20	1.15	.70	289.14
Steer/Heifer (3 to 13 months)	40	.14	28	1.15	.70	257.60
Bull for Breeding (over 25 months)	1	.18	28	1.15	.70	8.28
*						

Buttons: Save, New, Delete, Find, Next, Previous, Exit, Help

Select the Year required of Click New to start a new year's calculation.

Select the type of production.

Enter your own livestock types in the screen by selecting from the available types of livestock. These types are held in the FYM and Slurry code lists. To get a list of types, type the first few letters under Stock Unit and select from the list. Then enter the quantity under the No. of Units. The standard figures are entered for the remainder of the entries on the line and the total production amount calculated.

Slurry production is calculated in the same way.

Year: 2016

Type: ☐ FYM: ☒ Slurry: ☐ Poultry:

Note: Figures below are per Week for 2009 onwards:

Stock Unit	No of Animals	Amount	Weeks Housed	Total Amount
Dairy Cow (over 9000 litre milk yield)	230	.45	27	2794.50
▶ Dairy Heifer Replacement (13 months to first ...	50	.28	27	378.00
*				

Buttons: Save, New, Delete, Find, Next, Previous, Exit, Help

This gives the volume of slurry produced per week.

## 2. 6. Grassland Management

---

This section holds the detail for different management options applied to grassland.

The screenshot shows a window titled "Grassland Management" with the following fields and controls:

- Code:** A dropdown menu with the value "1" selected.
- Description:** A text box containing "2 or 3 Cut Silage + Grazing".
- Site Class:** A label with a blue underline.
- Nitrogen:** A label with a blue underline.
- Site Class:** A label with a blue underline.
- Nitrogen:** A label with a blue underline.
- 1:** A text box containing "310".
- 2:** A text box containing "300".
- 3:** A text box containing "290".
- 4:** A text box containing "280".
- 5:** A text box containing "270".
- ☐ Omit this Management Option from Occurrences:
- Buttons:** Save, New, Delete, Find, Next, Previous, Exit, Help.

Code and Description. The different Management option available for Grassland

Site Class and Nitrogen. The standard maximum values of Nitrogen which may be applied to grass under this management regime adjusted for site class values.

2. 7. Livestock Manure Types

---

This section holds the different types of manure.

Livestock Manure Types

Manure

Efficiency Values

Code:

Description:

Pig Slurry

Adjustment for Autumn Applications on Grassland and Winter Oilseed Rape:

Humose, Peaty and Other Mineral Soils:

5

Save

New

Delete

Find

Next

Previous

Exit

Help

Adjustments can be set for autumn nitrogen application for some soil types.

Livestock Manure Types

Manure

Efficiency Values

Code:

1

Description:

Pig Slurry

Note: Figures below are the 'default' values for Autumn or Winter Applications:

	Date	Value
▶	01/01/2010	25.00
	01/01/2013	45.00
	01/01/2015	50.00
*		

Save

New

Delete

Find

Next

Previous

Exit

Help

Default efficiency values for autumn and winter applications are set. These over-ride other efficiency values.

## 2. 8. Livestock Manure Codes

This section contains detail of all the different type of Slurry and FYM available for application.

Livestock Manure Codes

Manure Details

Code: 101

Description: Cattle FYM

Type: Solid Manure

Incorporation Time: Not Incorporated

Total Nitrogen: 6.0

Dry Matter: 25.0

☐ Omit this Livestock Manure Code from Occurrences:

Save New Delete Find Next Previous Exit Help

Total Nitrogen is the Kgs of N per tonne or M<sup>3</sup>

Details contains the Percentage of the nitrogen available to the crop based on the season of application on the crop.

Livestock Manure Codes

Manure Details

Code: 101

Description: Cattle FYM

Note: Figures below are for 2009 onwards:

Soil Type	Spring	Summer	Autumn	Winter
▶ Humose Soils	10	10	10	10
Other Mineral Soils	10	10	10	10
Peaty Soils	10	10	10	10
Sands	10	10	10	10
Sandy Loams	10	10	10	10
Shallow Soils	10	10	10	10
*				

Save New Delete Find Next Previous Exit Help

## 2. 9. Organic Manure Movements

This section records the movements on or off the holding of organic manures.

Date	Manure	Quantity	Supplier
12/03/2015	Broiler/Turkey Litter, Stored Uncovered - [Over 2...	600	
28/04/2016	Broiler/Turkey Litter, Stored Uncovered - [Over 2...	500	Oaklands Egg Producers
09/07/2016	Broiler/Turkey Litter, Stored Uncovered - [Over 2...	150	Oaklands Egg Producers
19/09/2016	Broiler/Turkey Litter, Stored Uncovered - [Over 2...	70	Oaklands Egg Producers
26/11/2016	Broiler/Turkey Litter, Stored Uncovered - [Over 2...	65	Oaklands Egg Producers
09/01/2017	Broiler/Turkey Litter, Stored Uncovered - [Over 2...	65	Oaklands Egg Producers
02/03/2017	Broiler/Turkey Litter, Stored Uncovered - [Over 2...	64	Oaklands Egg Producers
*			

Enter the Date of the movement.

To get a list of types of manure, type the first few letter and select from the list. Then enter the quantity in Tonnes or M<sup>3</sup>.

The source or destination should also be entered.



## Chapter 3      Field Records

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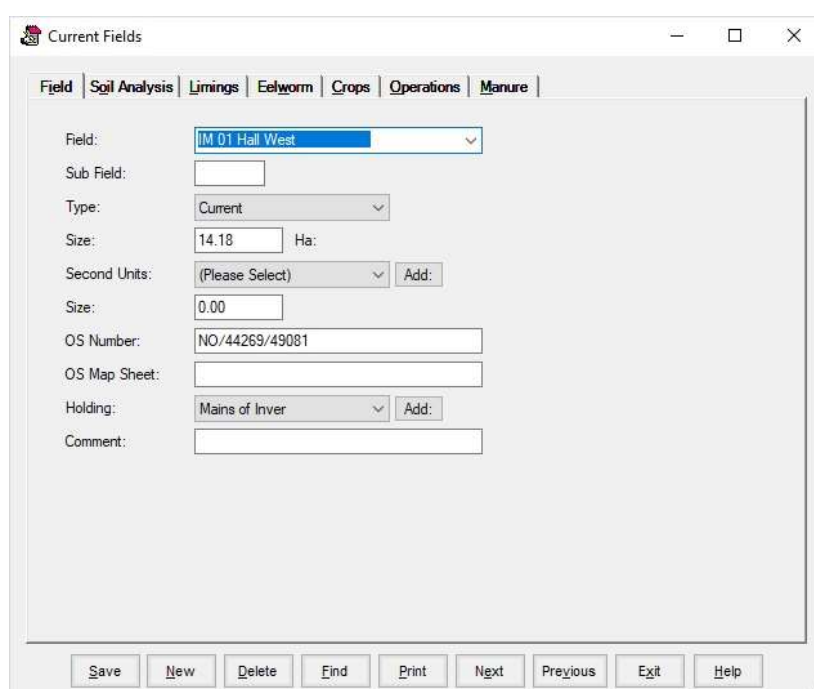
This section accesses the complete record of all fields whether current or non-current. It is generally for information only but any of this information can be edited if required.

**New fields and sub-fields must be created here before any information can be entered.**

### 3. 1.      Create a New Field

---

At the Initial Screen click on Field Records and click Field Records again on the second or sub-screen. You will be presented with the screen shown below. If you have existing fields you will see the detail of the first field alphabetically on your list.

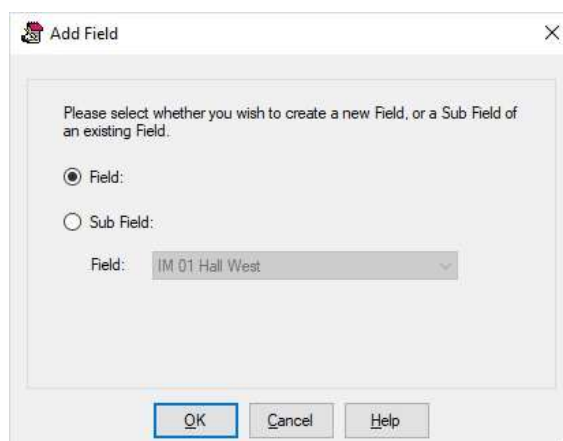


The 'Current Fields' window displays a tabbed interface with tabs for Field, Soil Analysis, Limings, Eelworm, Crops, Operations, and Manure. The 'Field' tab is active, showing the following details for the selected field 'IM 01 Hall West':

- Field: IM 01 Hall West (dropdown menu)
- Sub Field: (empty text box)
- Type: Current (dropdown menu)
- Size: 14.18 (text box)    Ha: (text box)
- Second Units: (Please Select) (dropdown menu)    Add: (button)
- Size: 0.00 (text box)
- OS Number: NO/44269/49081 (text box)
- OS Map Sheet: (empty text box)
- Holding: Mains of Inver (dropdown menu)    Add: (button)
- Comment: (empty text box)

At the bottom of the window is a button bar with the following buttons: Save, New, Delete, Find, Print, Next, Previous, Exit, and Help.

Click on **New** on the Bottom Button Bar and you will be presented with the small sub-screen shown below. (If it is the first field of the system this sub-screen will not appear.)



The 'Add Field' dialog box prompts the user to select whether to create a new Field or a Sub Field of an existing Field. It contains the following elements:

- Text: Please select whether you wish to create a new Field, or a Sub Field of an existing Field.
- Radio button: ☒ Field:
- Radio button: ☐ Sub Field:
- Field: IM 01 Hall West (dropdown menu, visible only when 'Field' is selected)
- Buttons: OK, Cancel, and Help.

If it is an entirely new field leave the button in 'Field' and click Ok. The 'Field Record' screen as above will appear with blank detail for you to fill in as follows:

<b>Field:</b>	The identifier of this field. This can be a name, number or combination of both. This identifier must be unique to each field. The list of fields is held in alphabetic order, numbers come before letters in computers.
<b>Sub Field:</b>	Not available when entering a new main field. Used to identify part fields when splitting main fields.
<b>Type:</b>	Can be either <b>Current</b> or <b>Non-Current</b> . Non-Current fields are those which are no longer used. They may be fields that have been amalgamated, sold or no longer cropped for some reason. Their histories are all retained but are not shown in current reports.
<b>Size:</b>	The nominal O.S. area of the field.
<b>Second Units:</b>	An alternative unit of measure as set up in Chapter 1, Section 2.1.
<b>Second Size:</b>	The number of the second units in the Field.
<b>O.S. Number:</b>	The Ordnance Survey Number of the field.
<b>O.S. Map Sheet:</b>	The sheet number of the map for this field.
<b>Holdings:</b>	The holdings this field is on.
<b>Comment:</b>	Free space for your own comment on this field.

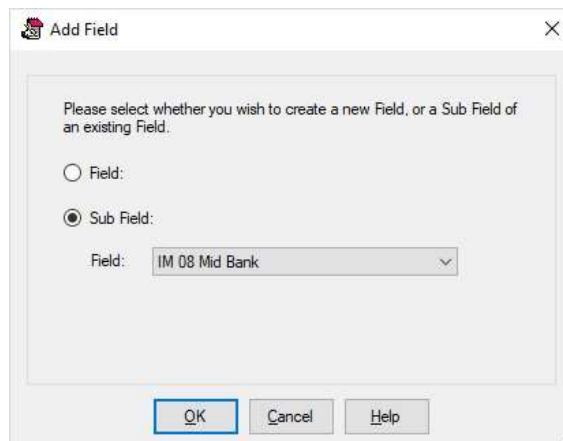
Click on **Save** on the Bottom Button Bar to store this detail.

Other details of the field's record can now be accessed by clicking on the tabs along the top. These details are not required at start-up. It is however necessary to enter the current crop details before any operations can be recorded and this is best done at this stage. This routine is explained later in this chapter.

### 3. 2. *Create a New Sub-Field*

---

If there are fields which are split in a particular year (two or more crops or part in set-aside) then **Sub-Fields** have to be created.



This is done by a similar routine to creating a new field. Click on **New** on the Bottom Button Bar. When the **New Field Sub-Screen** appears click in **Sub-Field** and select the field which is to be split from the drop-down list.

The record for that field will appear with the cursor in the **Sub-Field** section. Enter the identifier you wish for the sub-field. This should be two digits, letters or numbers. It is suggested that one of these should be the Year number for easy reference, i.e. **A7** Would be the first section of the field for the 2007 crop, **B7** the reference for the second section.

The **Size** should be set to the area of the sub-field as should the **Second Size** if applicable. The only other item likely to be edited may be the **Comment**.

You should now click **Save**.

The crop for this Sub-field can now be entered in the **Crops** section of the **Options Bar**. Continue by the same routine till you have created all the sub-fields you need.

Care should be taken that the total area of the sub-fields should not be greater than the nominal O.S. area of the main field.

### 3. 2. 1 Soil Analysis

---

Any number of soil sample results can be recorded against a field. These records can be examined and edited by clicking on the **Soil Analysis** tab.

Current Fields

Field: IM 01 Hall West

Land Class: Non LFA

Soil Type: Other Mineral Soils

Sub Soil Type:

	Date	PH	Phosphate	Potash	Magnesium	Sulphur	Manganese	Copper	Zinc
	09/04/2017	5.9							

Save New Delete Find Print Next Previous Exit Help

Land Class sets the class for IACS purposes, Non LFA, LFA or SDA.

The record holds both Soil Type and Sub Soil Type description. Soil type is selected from a dropdown list. The list is that used to define soil types for NVZ purposes.

Each test result can record -

Date, pH, Phosphate, Potash, Magnesium, Sulphur, Copper, Zinc, Calcium, Boron, Organic Matter and Comment. Comment is free space for any remarks you wish.

New entries should normally be made through **Field Events** as described in Chapter 4 Section 5.

New entries can also be recorded by clicking on **New** on the button bar and filling in the detail as required. Click save when finished.

Existing entries can be edited by clicking on the incorrect section and re-entering.

Entries can be deleted completely by clicking on **Delete** on the button bar.

### 3. 2. 2. Limings

---

Any number of limings can be recorded against a field. These records can be examined and edited by clicking on the **Liming** tab.

	Date	PH	Applied	Comment
▶▶	09/04/2018		.00	

Each Liming can record -

The Date of the application, the pH Result and amount applied. Comment is free space for any remarks you wish.

New entries should normally be made through **Field Events**.

New entries can also be recorded by clicking on **New** on the button bar and filling in the detail as required. Click save when finished.

Existing entries can be edited by clicking on the incorrect section and re-entering.

Entries can be deleted completely by clicking on **Delete** on the button bar.

### 3. 2. 3. Eelworm

---

Any number of Eelworm Tests can be recorded against a field. These records can be examined and edited by clicking on the **Eelworm** button on the options bar.

The screenshot shows a software window titled 'Current Fields'. It has a menu bar with the following options: Field, Soil Analysis, Limings, Eelworm, Crops, Operations, and Manure. The 'Eelworm' tab is currently selected. Below the menu bar, there is a text field labeled 'Field:' containing the text 'IM 01 Hall West'. Below this is a table with four columns: Date, Result, and Comment. The first row of the table has the date '09/04/2018' in the Date column. The table is currently empty of data. At the bottom of the window is a button bar with the following buttons: Save, New, Delete, Find, Print, Next, Previous, Exit, and Help.

	Date	Result	Comment
▶▶	09/04/2018		

Each test result can record -

The Date of the test and the Result. Comment is free space for any remarks you wish.

New entries should normally be made through **Field Events** as described in Chapter 5, Section 3.

New entries can also be recorded by clicking on **New** on the button bar and filling in the detail as required. Click save when finished.

Existing entries can be edited by clicking on the incorrect section and re-entering.

Entries can be deleted completely by clicking on **Delete** on the button bar.

### 3. 2. 4. Crops

This Section gives access to the full cropping record for this field. All the crops are shown as in the screen below.

Current Fields

Field: IM 01 Hall West

Watercourses: Dry: 0 < 3 m: 0  
3 - 6 m: 0 > 6 m: 0

☒ Eligible for Area Payments:

	Date	Harvest Year	Following Crop	Crop	Variety	Size	2nd Size	IACS Class
▶	01/10/2016	2017	<input type="checkbox"/>	Winter Wheat	Beluga	14.18	.00	Cereals
	15/08/2015	2016	<input type="checkbox"/>	Winter Oilseed Rape		14.18	.00	Oilseed
*			<input type="checkbox"/>					

Save New Delete Find Print Next Previous Exit Help

#### New

This allows you to create a new crop in this field. The creation of new crops is normally done within the Allocation of Crops in Field Events.

**Date:** The sowing date for this crop. For continuing crops such as grass enter the 1<sup>st</sup> January of the Harvest Year.

**Year:** This is generally the Year in which the crop will be harvested. It also is the year it is taken into account for IACS purposes. It is possible to have 2 or more crops in the same Year. In this case it may be necessary to adjust IACS Class for one or more of these crops to show correct figures.

**Crop:** The name of the crop you are entering. Either type the crop name or the first letter to select from the drop-down list.

**Variety:** The variety of the Crop. Either type the variety name or the first letter to select from the drop-down list. May be blank

**Size:** This is the area of the crop. It is generally the nominal area of the field but may be altered to a smaller area to take into account any uncropped area. This is the Area used in the costings and IACS calculation.

**Second Size:** The area of any Secondary Units if they are required.

**IACS Class:** This is generally the class associated with the chosen crop.

**Seed Type:** Is applied to oilseed rape crops where seed type is a requirement in the record.

**Management Option:** Applied to Grassland crops to define the grazing and cutting regime. Also applies to Set-Aside to define the management regime.

**Delay:** Used for NVZ calculation adjustment, specifies the number of days sowing was delayed,

**Adjustment:** Used for NVZ calculation adjustment (pre-2009), where the growing regime is tailored to a specific end market.

**Cycle:** Specifies the year of a set-aside cycle.

**Harvest Date:** This is the date the crop was harvested. Filled in after harvest.

**Comment:** This can be used for any comment you wish to associate with this crop.

Click Save when you are happy with your entry.

## Editing

Any of the detail as entered above can be edited. Clicking on the incorrect part of the entry allows you to change it. Again, click save when you are happy with your entry.

## Delete

Should you wish to remove one of the crops you may do so by highlighting it and clicking on **Delete**. You cannot delete a crop which has operations (planned or completed) or observations entered in the record. These would have to be deleted individually beforehand.

Once all these have been deleted you can now delete the crop, you will be asked to confirm the deletion before it goes.

## Watercourses

---

The Number of **watercourses** bounding this field is also maintained in this section. For LERAP purposes you are required to enter this. There are four class of watercourses depending on their width.

## Eligible For AAPS

Sets whether the field is eligible for AAPS or not.



### 3. 2. 5. Operations

This gives access to all the operations recorded on this field. These can be either planned or completed.

Field: IM 01 Hall West  
Crop: 2017 Winter Wheat  
Size: 14.18 Ha: Margin: -3287.04  
Type: ☐ Planned: ☒ Completed: /Ha: -231.81

	Date	Item Name	Rate	Quantity	Cost	Time
▶	12/10/2016	0-24-24	253.188	3590.206	1148.87	
	01/03/2017	34.5% N	150.038	2127.539	570.18	
	29/03/2017	34.5% N	290.698	4122.098	1104.72	
	20/04/2017	34.5% N	121.905	1728.613	463.27	
*						

Save New Delete Find Print Next Previous Exit Help

The crop required can be selected from the drop-down list. The operations for that crop are then displayed.

All operations are shown in chronological order. Scrolling up and down and side to side shows all the detail of each application. The Summary at the top shows the Current margin for this field in total and by Ha. Negative figures indicate that costs have been incurred which are greater than any outputs entered.

New Operations can be entered here by clicking **New** and entering the detail. Stock will be updated accordingly. This is not the normal entry routine for completed jobs.

This is however the section where **amendments** are done to entries already made. Highlight the section of the operation which is wrong and re-enter it. Stock records will be updated accordingly.

Any operation can be deleted by highlighting it and clicking on the **Delete** button. Stock records are again updated accordingly.

Planned operations are automatically removed by entering completed operations to the same field, same crop and with the same stock item. This usually means that anything left in the planned section at the end of the season didn't happen or a different stock item was used.

### 3. 2. 6. Manure

---

This section records the applications of slurries and FYM on a particular crop.

The screenshot shows the 'Current Fields' software window with the 'Manure' tab selected. The window contains the following fields and controls:

- Field:** IM 08 Mid Bank
- Crop:** 2017 Spring Barley (dropdown menu)
- Size:** 5.30
- Ha:** (empty field)
- Buffers:** 0.00
- Slopes:** 0.00
- Other:** 0.00
- ☒ NVZ Rules Apply:

Below these fields is a table with the following data:

	Date	Manure	Rate	Quantity	Season		
▶	01/03/2017	Cattle FYM - [Not Incorporated]	...	27.770	147.181	Spring	...
*							

At the bottom of the window are several buttons: Save, New, Delete, Find, Print, Next, Previous, Exit, and Help.

New Operations can be entered here by clicking **New** and entering the detail. This is not the normal entry routine for completed jobs, they are generally entered in field operations.

This is however the section where **amendments** are done to entries already made. Highlight the section of the operation which is wrong and re-enter it. Stock records will be updated accordingly.

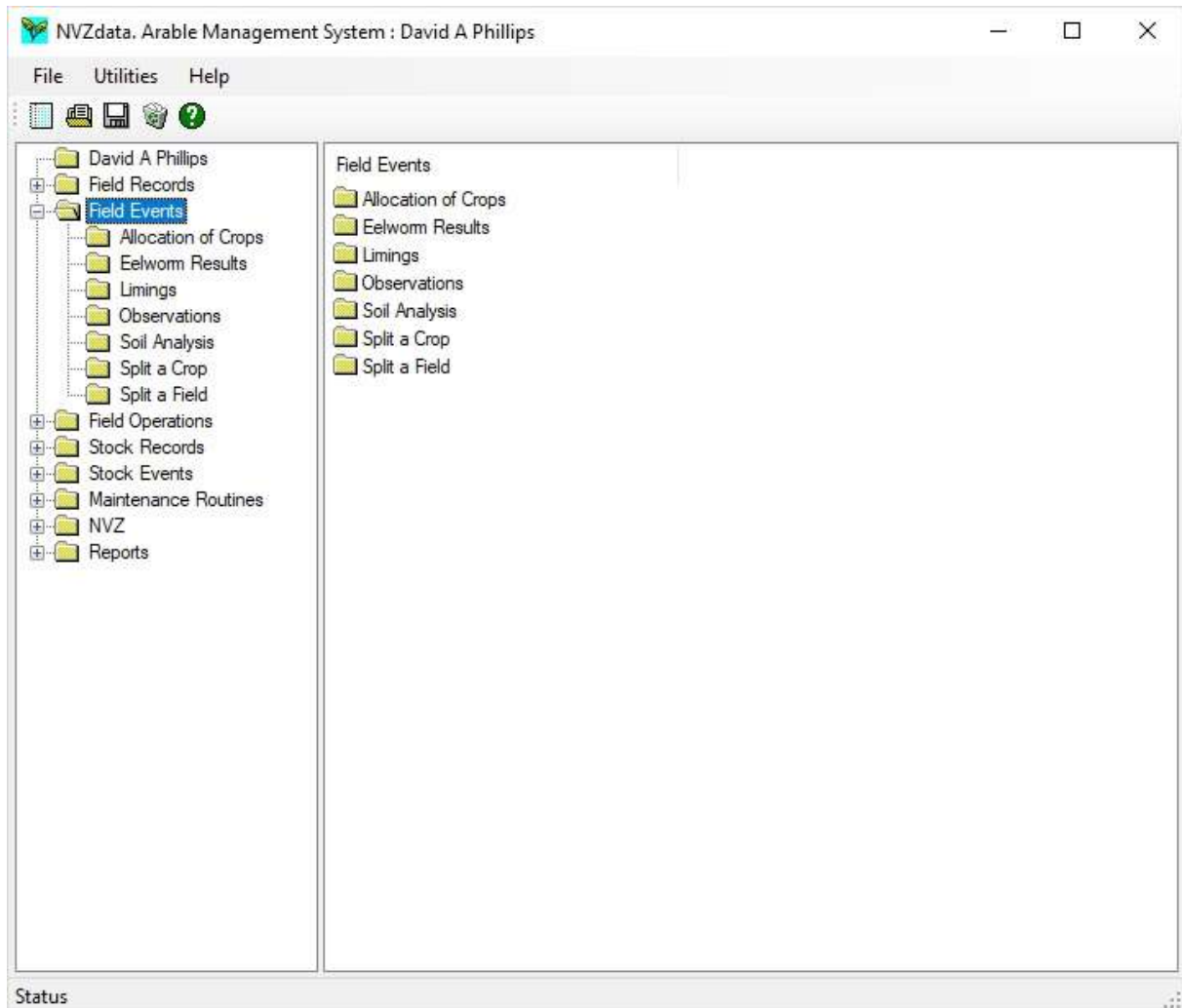
Any operation can be deleted by highlighting it and clicking on the **Delete** button.

**Buffers, Slopes and Other** are areas which are not spreadable and are deducted from the field area in some of the NVZ reporting.

## Chapter 4      Field Events

---

This Chapter describes the option available for recording field events.



## 4. 1. Allocation of Crops

This allows for the rapid entry of crops into fields. It is generally a once a year task although if a field is double cropped a second entry will have to be made.

It is best to have created all the new sub-fields you will require for the new year before commencing this process.

Allocation of Crops

Details

Date: 01/09/2017 Type: Cereals

Crop: Winter Wheat Add:

Variety: Rogibus Add:

Comment:

Fields

By Holding: Little Manor Harvest Year: 2018 Following Crop: Selected: 4 Available: 37 Total: 41

Field Name	SF	Include	Area to be Allocated	Crop Area	Previous Crop
IM 01 Hall West		<input type="checkbox"/>	14.18	14.18	Winter Wheat
IM 02 Hall East E	E	<input checked="" type="checkbox"/>	6.22	6.22	Peas
IM 02 Hall East W	W	<input type="checkbox"/>	6.22	6.22	Winter Wheat
IM 03 Whirlies		<input checked="" type="checkbox"/>	8.10	8.10	Seed Potatoes
IM 04 Well		<input type="checkbox"/>	9.35	9.35	Winter Wheat
IM 05 Cotter		<input checked="" type="checkbox"/>	10.17	10.17	Winter Oilseed Rape
IM 06 North Eat Bank		<input checked="" type="checkbox"/>	5.10	5.10	Winter Oilseed Rape
IM 07 Roadside		<input type="checkbox"/>	9.96	9.96	Winter Barley
IM 08 Mid Bank		<input type="checkbox"/>	5.30	5.30	Spring Barley
IM 09 Ram Park		<input type="checkbox"/>	6.60	6.60	Spring Barley

Save Select Print Refresh Exit Help

Enter the **Date** that work is expected to commence on this crop, usually the sowing date.

Select the **Crop** and **Variety**. **Type** is the pre-set IACS definition but can be changed if required. Comment can be entered if you wish.

Enter the **Year** for which you are entering the crops. Generally, the year the crop will be harvested. This is also the IACS year that the crop will be calculated in.

Now Highlight all the fields growing this crop and variety.

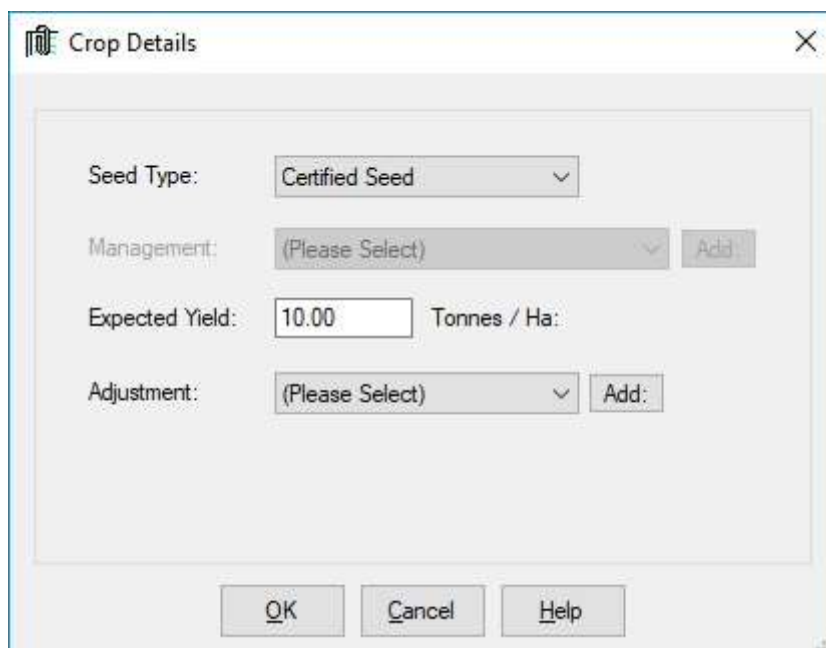
Crop Area can be amended to the planted area. This may be less than the nominal area of the field. Any remaining area may then be allocated to a second crop.

Area to be Allocated is the area of the field not already in crop for the selected year.

Clicking following crop will allow you to allocate a second, following crop for the same year. If the field has previously been allocated to more than one crop the crop with the largest area will be selected as the previous crop.

Click save and this will be recorded in the field record.

You will be presented with the details screen. Depending on the crop type being saved various options are available.

A screenshot of a 'Crop Details' dialog box. The dialog has a title bar with a close button (X). Inside, there are four rows of input fields. The first row is 'Seed Type:' with a dropdown menu showing 'Certified Seed'. The second row is 'Management:' with a dropdown menu showing '(Please Select)' and an 'Add:' button. The third row is 'Expected Yield:' with a text box containing '10.00' and the label 'Tonnes / Ha:'. The fourth row is 'Adjustment:' with a dropdown menu showing '(Please Select)' and an 'Add:' button. At the bottom of the dialog are three buttons: 'OK', 'Cancel', and 'Help'.

Click OK when details are correct.

The saved fields will disappear off the list to prevent them having two crops accidentally entered. If all the fields are done at once, the only fields left on the list at the end are those which are no longer current, e.g. old sub-fields.

Should some of the fields have an area of crop which is less than the O.S. area of the field this can be adjusted in the field record.

## 4. 2. Eelworm Test

---

Results of eelworm tests are recorded here.

**Eelworm Results**

**Details**

Date: 03/04/2018

Result: Pass

Comment:

**Fields**

☐ By Holding: High End Farm ☐ Non Current: Selected: 1 Available: 34 Total: 35

Field Name	SF	Area
01		11.44
02		10.86
03		7.89
04		13.88
05		10.71
06		14.96
07		1.49
08		11.20
09		.89
10		2.99
11		10.77
12		7.80
13		12.79
14		11.08
15		4.81
16		14.20
17		14.15

Save Select Find Print Refresh Exit Help

Enter the date of the test.

Pick the field by clicking on it to highlight.

Enter the result. (Pass, Fail, Retest Required, Resistant Variety, Order Imposed.)

Comment can be anything you wish.

Click Save to record the entry.

### 4. 3. Liming

---

Lime applications are entered here.

The screenshot shows a software window titled 'Limings'. It has a 'Details' section at the top with fields for 'Date' (03/04/2017), 'PH' (5.8), 'Applied' (4.5), and 'Tonnes / Ha'. Below this is a 'Fields' section with a table of fields. The table has columns for 'Field Name', 'SF', and 'Area'. Field 06 is highlighted in blue. To the right of the table are summary boxes for 'Selected' (1), 'Available' (34), and 'Total' (35). At the bottom are buttons for 'Save', 'Select', 'Find', 'Print', 'Refresh', 'Exit', and 'Help'.

Field Name	SF	Area
01		11.44
02		10.86
03		7.89
04		13.88
05		10.71
06		14.96
07		1.49
08		11.20
09		.89
10		2.99
11		10.77
12		7.80
13		12.79
14		11.08
15		4.81
16		14.20
17		14.15

Enter the date of the application.

Pick the field or fields by clicking on it to highlight.

Enter the PH if known and the Rate per Ha and any Comment if required.

Click save to record.

## 4. 4. Soil Analysis

Used to enter soil analysis results.

Soil Analysis

Details

Date: 03/04/2017

Items: All

Comment:

Fields

☐ By Holding: High End Farm

☒ Show Fields: Selected: 0 Available: 35 Total: 35

☐ Non Current:

Field Name	SF	PH	Phosphate	Potash	Magnesium	Sulphur	Manganese	Copper	Zinc	Boron
01		0.00								
02		0.00								
03		0.00								
04		0.00								
05		0.00								
06		0.00								
07		0.00								
08		0.00								
09		0.00								
10		0.00								
11		0.00								

Save New Delete Print Next Previous Exit Help

Enter the **Date** of the soil analysis.

Use **Items** if only one element is to be recorded.

Select **Show Fields** if you wish a list of fields to be shown.

Select **Holding** to get a list of fields on that particular holding. Do not select holding to get all the fields.

Select the first field by clicking on it to highlight it. Enter the analysis in the appropriate boxes and click Save. The Field will disappear from the list and you can highlight the next field.

Click Exit when all the entries have been made and saved.



## 4. 5. Split a Field

Used to split a field after work has started on it.

**Details**

☒ 1: A7 4.70 ☐ 4: 0.00

☒ 2: B7 3.10 Ha: ☐ 5: 0.00 Ha:

☐ 3: 0.00 ☐ 6: 0.00

**Fields**

☐ By Holding: High End Farm Harvest Year: 2017 Selected: 1 Available: 34 Total: 35

Field Name	SF	Area	Crop
01		11.44	Carrots
02		10.86	Spring Barley
03		7.89	Carrots
04		13.88	Spring Barley
05		10.71	Spring Barley
06		14.96	Spring Barley
07		1.49	Grass over 5 years
08		11.20	Spring Barley
09		.89	Grass over 5 years
10		2.99	Grass under 5 years
11		10.77	Spring Barley
12		7.80	Ware Potatoes
13		12.79	Spring Barley
14		11.08	Ware Potatoes
15		4.81	Grass under 5 years
16		14.20	Grass under 5 years
17		14.15	Grass over 5 years

Save Select Find Print Refresh Exit Help

Select **Holding** to get a list of fields on that particular holding. Do not select holding to get all the fields.

Select the **Harvest Year**.

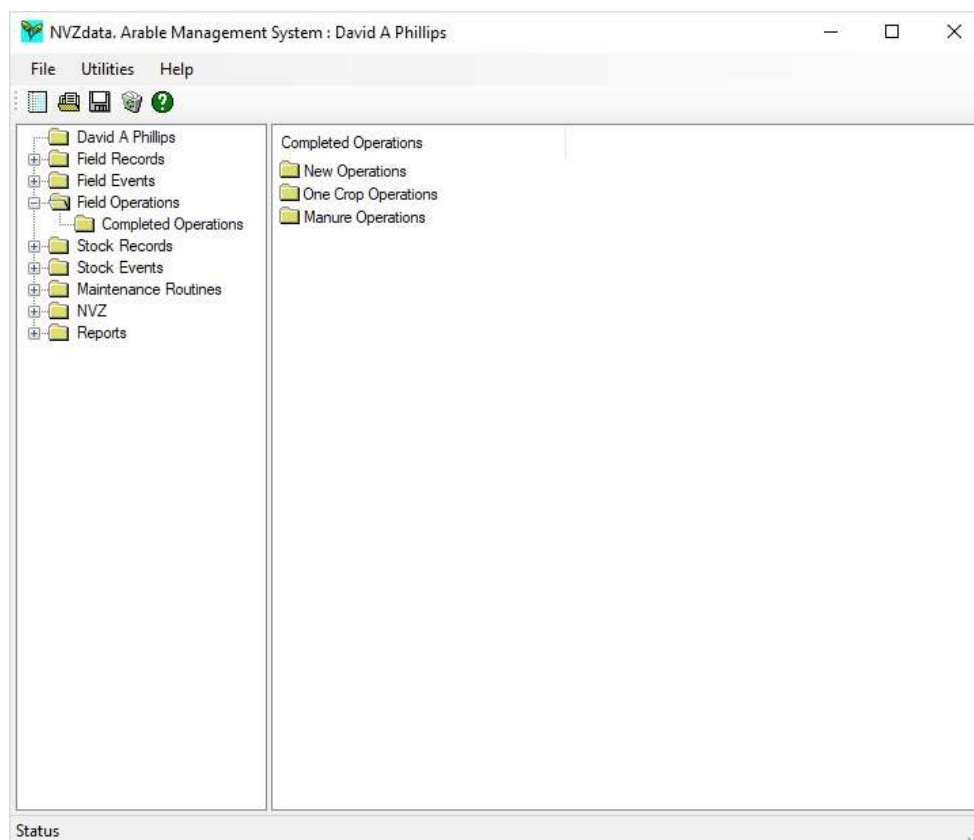
Select the field to split. Tick the number of splits to make by ticking the appropriate number of boxes.

Enter the identifier for each sub-field and the area for each.

Click Save.

## Chapter 5      Field Operations

---



There are three ways of entering detail onto fields:

1. New Operations.      This allows for individual operations to be entered onto individual fields also for the entry of sales from fields.
2. One Crop Operations.      This allows for rapid entry of the same operation to many fields growing the same crop or variety.
3. Manure Operations      Used to enter applications of FYM & Slurry.

## 5. 1. New Operations

This is where you can enter single operations onto fields. All Sprays, Fertiliser, Seeds, Tasks and Yields are available through this routine.

Completed New Operations

Details

Date: 09/04/2017

Category: All

Item: 34.5% N

Comment:

Rate: 231.965 Kgs/Ha

Quantity: 10000.000 Kgs

Price: 198.00 Tonnes

Stock: -2.599 Tonnes

Fields

By Holding: Little Manor

Harvest Year: 2017

Planned: ☐

Field Name	SF	Area	Crop
IM 01 Hall West		14.18	Winter Wheat
IM 02 Hall East	E	6.22	Peas
IM 02 Hall East	W	6.22	Winter Wheat
IM 03 Whirlies		8.10	Seed Potatoes
IM 04 Well		9.35	Winter Wheat
IM 05 Cotter		10.17	Winter Oilseed Rape
IM 06 North Eat Bank		5.10	Winter Oilseed Rape
IM 07 Roadside		9.96	Winter Barley
IM 08 Mid Bank		5.30	Spring Barley
IM 09 Ram Park		6.60	Spring Barley
IM 10 Garden		4.37	Seed Potatoes
IM 11 Road End	E	3.40	Winter Wheat
IM 11 Road End	W	4.11	Seed Potatoes
IM 12 Randle		3.53	Winter Wheat
IM13		8.25	Grass over 5 years

Selected: 5 Available: 36 Total: 41

Save Select Find Print Restore Refresh Exit Help

Enter the **Date** the operation was done.

Pick the **Category** you wish from the list. The list is obtained by clicking on the small box with the arrow at the end of the Category field. The individual **Item** from within that category is selected in the same way. Selecting **None** as the Category give a list of all Items regardless of category. (Stock can be used before it is entered in Stock Receipts, the stock level will run at a negative level.)

Select **Rate** or **Total**. Only one of these options can be selected. **Rate** would be entered as the Rate per Hectare at which the item was applied. **Total** is the total amount of the item used for the applications. Using **Total** gives a more accurate control of Stock.

**Comment** can be anything you wish to record against the application.

Select **Holding** to get a list of fields on that particular holding. Do not select holding to get all the fields.

Select the **Harvest Year**. The default **Harvest Year**, as set in the Business Parameters, is displayed.

Each field will have several crops after a number of years. This **Year** determines which crop the application will be applied to. Only fields with crops allocated in the Year will appear on the list. If a field has two crops in the same year, the field will be displayed twice. The crop with the earliest commencement will be displayed first.

**Select the fields** for the application by clicking on them to highlight them. The full list of fields can scroll up and down using the up and down arrows at the right side of the field list. If you have selected a Rate for the application, the total will build up as the fields are selected. If you have selected a Total, the rate will adjust as fields are selected.

If you wish to select all the Fields on the list click **Select All** on the Bottom Button Bar. Individual fields can then be deselected by clicking on them to remove the highlight.

On the Bottom Button Bar Click **Save** to record the entry.

## 5. 2. One Crop Operation

This section allows for the same function as in **1.** above. This options however gives the facility to pick only the fields growing the same crop in a particular year. A particular variety of the selected crop can then be chosen. It gives a rapid entry facility where an application is applied over all fields growing a particular crop or variety.

Field Name	SF	Area	Crop
IM 01 Hall West		14.18	Winter Wheat
IM 02 Hall East	W	6.22	Winter Wheat
IM 04 Well		9.35	Winter Wheat
IM 11 Road End	E	3.40	Winter Wheat
IM 12 Randle		3.53	Winter Wheat
NG 09		8.00	Winter Wheat
NG 11		8.64	Winter Wheat

Enter the **Date** the operation was done.

Pick the **Category** of input you wish from the list. The list is obtained by clicking on the small box with the arrow at the end of the Category field. The individual **Item** from within that category is selected in the same way. Selecting **None** as the Category gives a list of all Items regardless of category. (Stock can be used before it is entered in Stock Receipts, the stock level will run at a negative level.)

Select **Rate** or **Total**. Only one of these options can be selected. **Rate** would be entered as the Rate per Hectare at which the item was applied. **Total** is the total amount of the item used for the applications. Using **Total** gives a more accurate control of Stock.

**Comment** can be anything you wish to record against the application.

Select the **Crop** you wish to make the application on. All the fields growing that crop in the selected year will be listed. All is initially displayed in the **Variety** box. If you wish just one variety of the crop select it in the **Variety** box and only fields growing that variety of the crop will be displayed.

Select the **Harvest Year**. The default **Harvest Year**, as set in the Business Parameters, is displayed.

**Select the fields** for the application by clicking on them to highlight them. The full list of fields can scroll up and down using the up and down arrows at the right side of the field list. If you have selected a Rate for the application, the total will build up as the fields are selected. If you have selected a Total, the rate will adjust as fields are selected.

If you wish to select all the Fields on the list click **Select All** on the Bottom Button Bar. Individual fields can then be de-selected by clicking on them to remove the highlight.

On the Bottom Button Bar Click **Save** to record the entry.

### 5. 3. Manure Operations

This section is used to record the application of FYM and slurry onto fields.

**Manure Operations**

**Details**

Date: 09/03/2017      ☐ Rate: 6.732 T/Ha  
Season: Spring      ☒ Quantity: 300.000 Tonnes  
Manure: Cattle Slurry - Surface Applied (6%) - [Not Incorporated] 113  
Comment:

**Fields**

☐ By Holding: Little Manor      Harvest Year: 2017      Selected: 10      Available: 31      Total: 41

Field Name	SF	Area	Crop
IM 06 North Eat Bank		5.10	Winter Oilseed Rape
IM 07 Roadside		9.96	Winter Barley
IM 08 Mid Bank		5.30	Spring Barley
IM 09 Ram Park		6.60	Spring Barley
IM 10 Garden		4.37	Seed Potatoes
IM 11 Road End	E	3.15	Winter Wheat
IM 11 Road End	W	3.86	Seed Potatoes
IM 12 Randle		3.23	Winter Wheat
IM13		8.25	Grass over 5 years
IM14		6.24	Grass under 5 years
LM 01		.44	Winter Barley
LM 02		5.13	Winter Oilseed Rape
LM 03		1.62	Winter Barley
LM 04		5.55	Winter Barley
LM 05		4.96	Winter Oilseed Rape

Save    Select    Find    Print    Restore    Refresh    Exit    Help

Enter the date of the application.

Enter either a rate per Ha of the application or the total amount applied over the fields you are selecting. If a rate is selected the total is calculated, if the total is entered the rate is calculated.

Select the season for the application.

Select the type of manure being applied.

Comment can be entered as required.

If holding is selected then only fields at that holding will be selected for display. If holding is not selected then all fields within the business will be displayed regardless of holding.

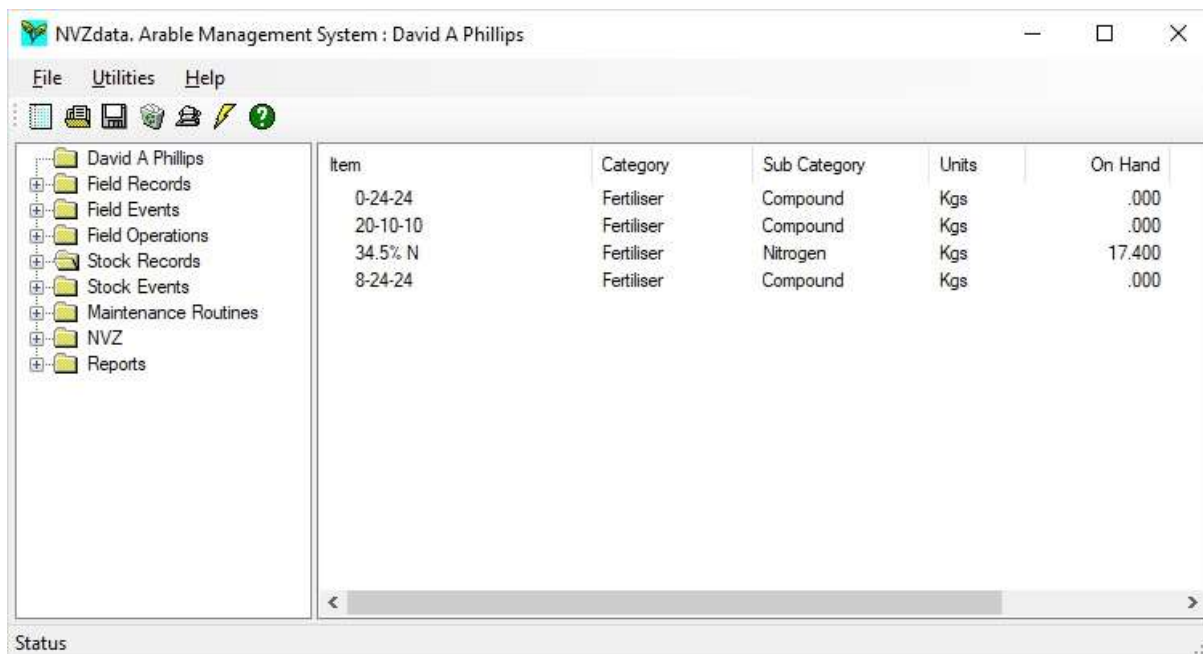
The Year determines which crops are displayed in the fields. Entering 2009 will display the crops grown in the fields in that IACS year, entering 2008 will display the crops grown in that year.

Select all the fields you wish to record this application against.

Click Save to save the application to the records.

## Chapter 6 Stock Records

This Section access all the detail of Stock items. Stock items in NVZdata have the details of inorganic manures.



Each Item which is to be costed onto a field has to be entered here. The screen below is the entry screen, the Bottom Button Bar gives the available options for all stock items. The tabs give access to further information on each Stock item.

**New Stock Items** should be entered here. Click on the **New** Button on the Bottom Button Bar and fill in the record as described below. With new records care should be taken to ensure that any existing stock holding is entered both in the **Receipts** Tab and the **Stock on Hand** and **Adjusted Cost** sections of the main record.

Existing items can be edited at any time. Select the item from the drop-down list by clicking on the down arrow at the end of the item line. Alternatively click the **Find** button on the Bottom Button Bar and type in the first few characters of the description. Click **OK** and the nearest item alphabetically will be presented. **Previous** and **Next** Buttons will work back and forwards through the list if you do not get exactly the item you want.

Care should be taken not to upset the Stock Audit by adjusting Stock Holding and Opening Stock Figures.

When you have made all the changes you want click **Save** to record them.

**Do not delete an item once it has been used. It is easiest to make it Non-Current. Non-Current items should have a 0 Stock Holding.**



## 6. 1. Stock

---

Current Items

Stock | Analysis | Receipts

Name: 34.5% N

Type: Current

Category: Fertiliser Add:

Sub Category: Nitrogen Add:

Units: Kilogrammes Add:

Standard Size: 1000.00 Kilogrammes:

Description: Tonnes Add:

Adjusted Cost: 198.00 Tonnes:

Stock on Hand: 17.400 Tonnes:

Committed Stock: 0.000 Tonnes:

Comment:

Save New Delete Find Print Next Previous Exit Help

**Name:** This is the name of the stock item. It must be unique. It can made up of any mixture of characters you like.

**Type:** This is either Current or Non-Current depending on whether it is a Stock item which you wish to be available for use or not. If it is Non-Current it is not available on the lists presented when entering operations.

**Category:** Set to Fertiliser.

**Sub Category:** This may for example define Compound ang Nitrogen, etc. within fertilisers.

**Units:** This is the unit in which the item is applied to the Field, i.e. Kilograms for Fertiliser.

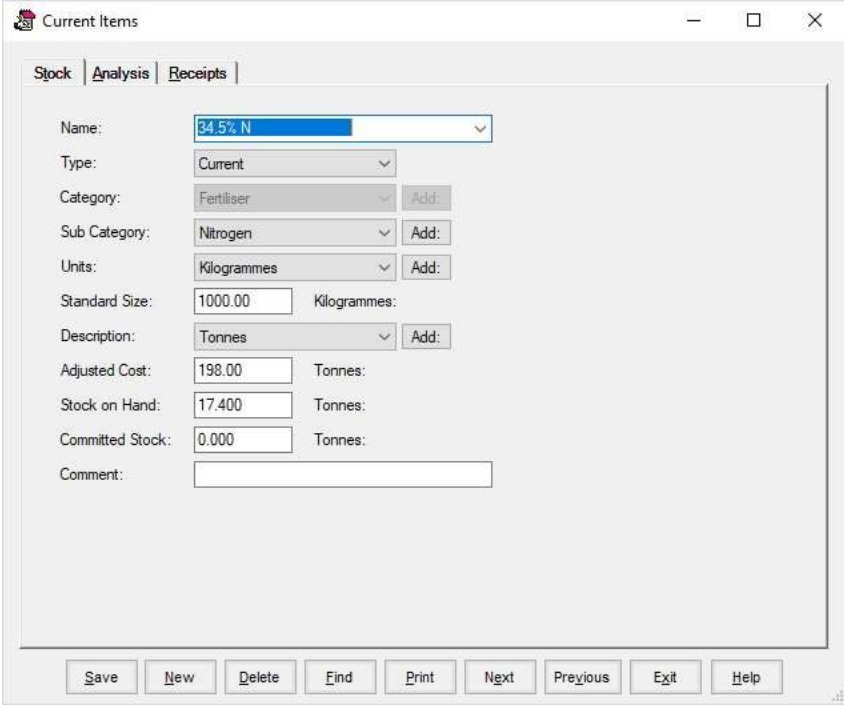
**Standard Size:** This is the number of the **above Units** that the item is purchased in. Fertilisers are normally purchased in **1000 Kg** lots called Tonnes. This is of importance when entering Stock Receipts, you enter the number of packs and the price per pack, the program will then work out the Unit price.

- Description:** The description of the type of pack the item is purchased in. Tonnes for Fertiliser. When entering Stock Receipts, you are asked for this number as the quantity purchased.
- Adjusted Cost:** This is the cost of the Stock on Hand. It is worked out as Stock is Purchased and a weighted average taken with the price of the quantity already in stock. For example, if you have 10 tonnes in stock at £100 /tonne when you buy another 20 tonnes at £110 / tonne, then the adjusted cost of the new total stock on hand is £106.67. This is the price that this new stock on hand will be applied to the fields at.
- Stock on Hand:** This is the Quantity of the stock on hand at the current time. Worked out from Quantities entered through Stock Receipts less the Quantity used as completed operations. Can run as negative values if stock is applied before being entered as a stock receipt.
- Committed Stock:** The amount of stock which is needed to cover any Planned Operations which have been entered.
- Comment:** Free space for any use you wish.

## 6. 2. Analysis

---

### Applies to Fertilisers



The screenshot shows a software window titled 'Current Items' with three tabs: 'Stock', 'Analysis', and 'Receipts'. The 'Analysis' tab is active. It contains the following fields and controls:

- Name:** A dropdown menu showing '34.5% N'.
- Type:** A dropdown menu showing 'Current'.
- Category:** A dropdown menu showing 'Fertiliser' with an 'Add:' button.
- Sub Category:** A dropdown menu showing 'Nitrogen' with an 'Add:' button.
- Units:** A dropdown menu showing 'Kilogrammes' with an 'Add:' button.
- Standard Size:** A text box containing '1000.00' and a label 'Kilogrammes:'.
- Description:** A dropdown menu showing 'Tonnes' with an 'Add:' button.
- Adjusted Cost:** A text box containing '198.00' and a label 'Tonnes:'.
- Stock on Hand:** A text box containing '17.400' and a label 'Tonnes:'.
- Committed Stock:** A text box containing '0.000' and a label 'Tonnes:'.
- Comment:** A large empty text box.

At the bottom of the window, there is a row of buttons: 'Save', 'New', 'Delete', 'Find', 'Print', 'Next', 'Previous', 'Exit', and 'Help'.

This allows for the Nitrogen, Phosphate, Potash and Sulphur analysis to be entered. The system can then give total units of N, P, K & S applied to a particular field.

## 6. 2. Receipts

This gives access to the details of stock receipts and opening stock as at the last stock update. This is only available if the Stock Audit function is switched on in the Business Parameters

Current Items

Stock | Analysis | Receipts

Name: 34.5% N

Opening Date: 01/09/2016

Opening Stock: 0.000 Tonnes

Opening Cost: 0.00 Tonnes

Date	Quantity	Cost	Supplier
12/09/2016	10.000	268.00	Fert Co.
12/02/2017	100.000	198.00	Fert Co.
*			

Save New Delete Find Print Next Previous Exit Help

The opening Stock on a particular date is recorded here. This is only valid if the Stock Audit is switched on in the Business Parameters. The Opening Stock Date, Adjusted Stock Cost and Stock Quantity on that date are recorded.

The stock audit works from the Opening Date calculating from Opening Stock, usage and receipts to give a current stock holding. This is compared to the Stock on Hand figure. If there is a difference you are warned of the error. Errors usually occur when manual adjustments are made rather than using normal entry routines.

Running the Stock update routine brings the Opening Stock Date forward and updates to the calculated Stock Cost and Stock Holding since the last date. Any errors have to be rectified at this point to the actual Stock Holding and Stock Cost.

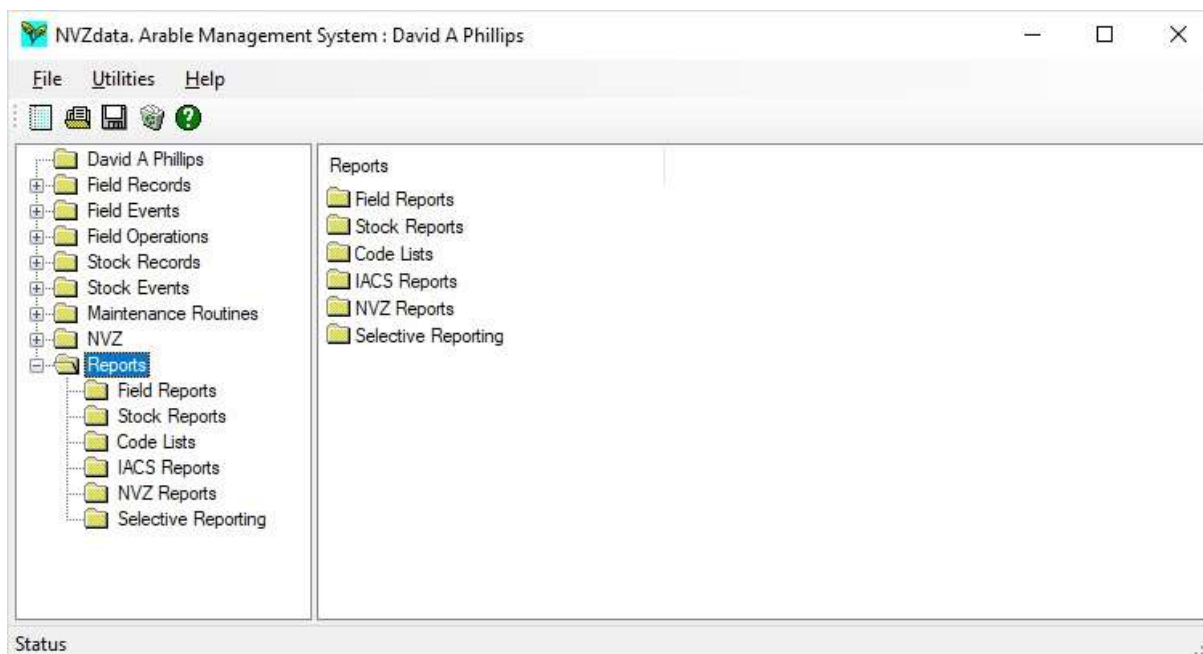
This screen only shows the receipts since the last Stock Update.

New receipts can be entered here by clicking on the **New** button on the button bar. New entries are however best entered through the Stock Receipts section.

Any existing entries can be edited by highlighting the incorrect data and re-entering it.

## Chapter 7 Reports

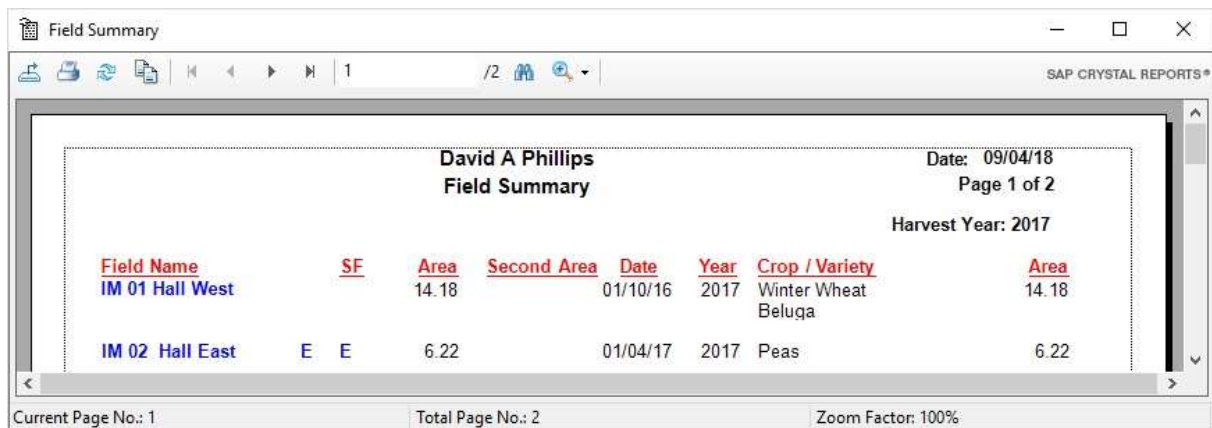
This chapter describes how to get your information out of the system in a form you will find useful.



The options are,

1. Field Reports: Reports on the field details, the crops allocated to them and the field events entered.
2. Stock Reports: Reports on Stock Items, availability and usage.
3. Code Lists: The Codes as set up in the Business Parameters.
4. NVZ Reporting Reports and calculations for the NVZ regulations
5. Selective Reporting: Reports set up and defined by you to get the what you want out of the system.

**Common to all Screen reports are some Button Controls on the Screen Display.**



The button at the top left exports the displayed report to file. This may then be imported into other applications.

Next from the left is the Print button which sends the displayed report to the printer.

The Refresh button (rotating arrows) refreshes the report if the data has been changed.

Next is the copy button.

Next is shown which page of the report is on the screen. At each side are start and end page buttons, inside these are page forward and back buttons.

The Binoculars icon next to it is for searching. For example, it can be used for searching for a particular field or stock item. Click on the Binoculars button, enter the required characters and the first item containing the characters chosen will be outlined, click again and the next item containing those characters will be shown.

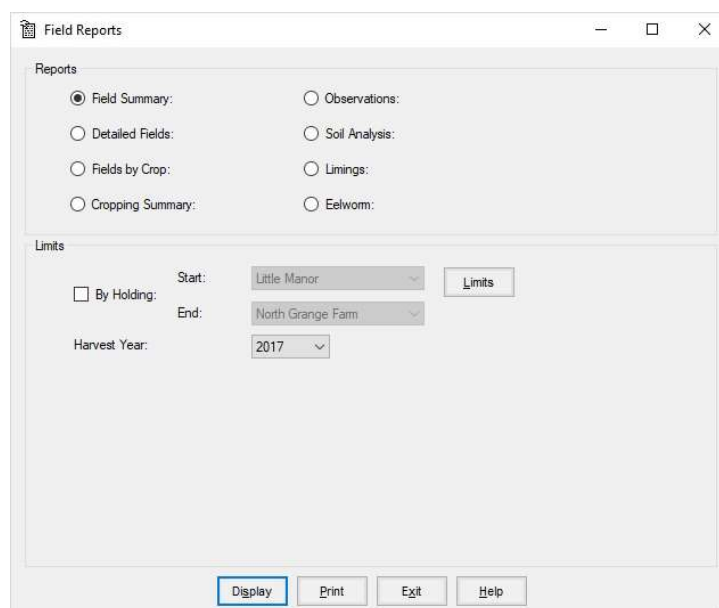
The magnification button can be used to change the size of the report shown on the screen or it can be made to fit the page width or the whole page.

The side scroll bar allows you to scroll up and down the report and the bottom scroll bar from side to side.

Reports on the various headings shown in the Options Box can be printed or shown on the screen. The screen displays are exactly the same as the printed reports. Printed reports can be created directly from the screen display. If you have a colour printer the reports will print in the same colours as the screen display.

## 7. 1. Field Reports

---

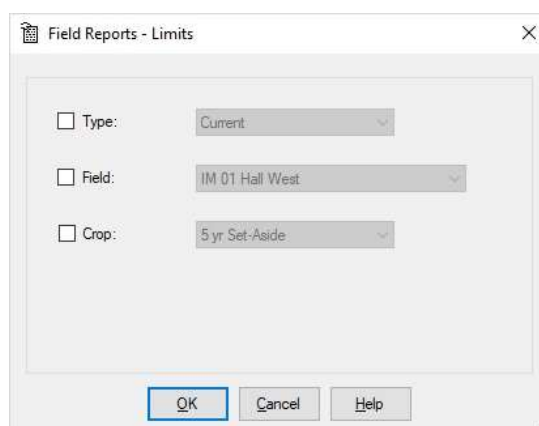


The screenshot shows the 'Field Reports' dialog box. It has two main sections: 'Reports' and 'Limits'. In the 'Reports' section, there are eight radio buttons arranged in two columns. The first column has 'Field Summary:' (selected), 'Detailed Fields:', 'Fields by Crop:', and 'Cropping Summary:'. The second column has 'Observations:', 'Soil Analysis:', 'Limings:', and 'Eelworm:'. In the 'Limits' section, there is a checkbox labeled 'By Holding:' which is currently unchecked. To its right are two dropdown menus: 'Start:' with 'Little Manor' selected and 'End:' with 'North Grange Farm' selected. Below these is a 'Harvest Year:' dropdown menu with '2017' selected. To the right of the 'Start' and 'End' dropdowns is a button labeled 'Limits'. At the bottom of the dialog are four buttons: 'Display' (highlighted with a blue border), 'Print', 'Exit', and 'Help'.

**Holdings** can be set in the holdings section by putting a tick in the box and selecting start and end holdings. Not selecting holdings means all fields in the business will be shown.

**Year** Where available it should be set to the desired year. It initially sets to the current year as set in the Business Parameters.

**Limits** are available in all the Field reports by clicking on the **Limits Button** in the Holding Section. The Limits are operated by clicking in the square beside the description. If there is no **X** in the box the limit is not set. If the limit is set with a tick then you can select from the list in the adjacent drop-down list.



The screenshot shows the 'Field Reports - Limits' dialog box. It contains three rows, each with a checkbox and a dropdown menu. The first row is 'Type:' with a checkbox and a dropdown menu showing 'Current'. The second row is 'Field:' with a checkbox and a dropdown menu showing 'IM 01 Hall West'. The third row is 'Crop:' with a checkbox and a dropdown menu showing '5 yr. Set-Aside'. At the bottom are three buttons: 'OK' (highlighted with a blue border), 'Cancel', and 'Help'.

**Type** can be limited to Current or Non-Current fields. This limit is set to Current Fields only by default. This means only current fields are included in reports as standard if you do not change Limits.

**Field** can be limit to one particular field.

**Crop** can be limited to one particular Crop.

## Field Summary.

Gives a summary listing of all fields. Be careful only to include current fields to get accurate areas at any point in time. You should set **old Sub-Fields** not in current use to **Non-Current**.

David A Phillips Field Summary							
Date: 09/04/18 Page 1 of 2 Harvest Year: 2017							
Field Name	SF	Area	Second Area	Date	Year	Crop / Variety	Area
IM 01 Hall West		14.18		01/10/16	2017	Winter Wheat Beluga	14.18
IM 02 Hall East	E E	6.22		01/04/17	2017	Peas	6.22
IM 02 Halkerton East		12.44					
IM 02 Hall East	W W	6.22		01/10/16	2017	Winter Wheat	6.22
IM 03 Whirlies		8.10		15/04/17	2017	Seed Potatoes	8.10
IM 04 Well		9.35		01/10/16	2017	Winter Wheat	9.35
IM 05 Cotter		10.17		15/08/17	2017	Winter Oilseed Rape	10.17
IM 06 North Eat Bank		5.10		15/08/16	2017	Winter Oilseed Rape	5.10
IM 07 Roadside		9.96		01/09/16	2017	Winter Barley	9.96
IM 08 Mid Bank		5.30		01/04/17	2017	Spring Barley	5.30
IM 09 Ram Park		6.60		01/04/17	2017	Spring Barley	6.60
IM 10 Garden		4.37		15/04/17	2017	Seed Potatoes	4.37
IM 11 Road End		7.51					

## Detailed Fields.

Similar to the summary report but showing more detail.

David A Phillips									
Detailed Fields									
Crop: Winter Wheat					Date: 09/04/18				
					Page 1 of 4				
					Harvest Year: 2017				
Field Name	OS Number	SF	Area	Second Area	Date	Year	Crop / Variety	Area	
Map Ref	Land Class								
IM 01 Hall West	NO/44269/49081		14.18	Non LFA	01/10/16	2017	Winter Wheat	14.18	
							Beluga		
IM 02 Hall East	NO/44492/49185	E E	6.22	Non LFA	01/04/17	2017	Peas	6.22	
IM 02 Halkerton East	NO/44492/49185		12.44	Non LFA					
IM 02 Hall East	NO/44492/49185	W W	6.22	Non LFA	01/10/16	2017	Winter Wheat	6.22	
IM 03 Whirlies	NO/43827/46548		8.10	Non LFA	15/04/17	2017	Seed Potatoes	8.10	
IM 04 Well	NO/44037/46559		9.35	Non LFA	01/10/16	2017	Winter Wheat	9.35	
IM 05 Cotter	NO/44233/46503		10.17	Non LFA	15/08/17	2017	Winter Oilseed Rape	10.17	
IM 06 North Eat Bank	NO/44483/46554		5.10	Non LFA	15/08/16	2017	Winter Oilseed Rape	5.10	
IM 07 Roadside	NO/43826/46256		9.96	Non LFA	01/09/16	2017	Winter Rape	9.96	



## Fields by Crop.

A listing of all fields with crops in the selected year totalled by crop and within crop by variety.

David A Phillips					
Fields by Crop					
Date: 09/04/18					
Page 1 of 2					
Harvest Year: 2017					
Field Name	SF	OS Number	Date	Area	Comment
Grass over 5 years					
IM13		NR/12345/56575	01/01/17	8.25	
NG 03		NO/43969/44164	01/01/17	0.94	
		2		9.19	
Total for Grass over 5 years		2		9.19	
Grass under 5 years					
IM14		NG/12342/96732	01/01/17	6.24	
Peas					
IM 02 Hall East	E	NO/44492/49185	01/04/17	6.22	
LM 08	E	NO/44066/48960	01/04/17	3.17	
LM 10		NO/44116/48814	01/04/17	3.05	
NG 08		NO/44343/44100	01/04/17	7.94	
		4		20.38	
Total for Peas		4		20.38	
Seed Potatoes					
IM 03 Whirlies		NO/43827/46548	15/04/17	8.10	
IM 10 Garden		NO/44005/45974	15/04/17	4.37	
IM 11 Road End	W	NO/44210/45895	15/04/17	4.11	
NG 07		NO/44332/43325	01/05/17	6.32	
NG 13		NO/44673/44319	01/05/17	7.09	
		5		29.99	
Total for Seed Potatoes		5		29.99	
Spring Barley					

## 7. 2. Stock Reports

---

This option gives reporting facility on Stock Items and their usage. Limits can be set for a single Stock Category or a range of stock categories.

The screenshot shows a window titled "Stock Reports" with standard Windows window controls (minimize, maximize, close). The window is divided into two main sections: "Reports" and "Limits".

**Reports Section:** This section contains five radio buttons for selecting the type of report to generate:

- ☒ Stock Items:
- ☐ Stock Holdings:
- ☐ Non Stock Items:
- ☐ Stock Transactions:
- ☐ Non Stock Transactions:

**Limits Section:** This section allows for setting specific limits for the report. It includes a checkbox labeled "By Category:" which is currently unchecked. To the right of this checkbox are two dropdown menus:

- Start:** The dropdown menu is set to "Fertiliser".
- End:** The dropdown menu is set to "Yield".

To the right of these dropdowns is a button labeled "Limits".

**Bottom Buttons:** At the bottom of the window, there are four buttons: "Display", "Print", "Exit", and "Help".

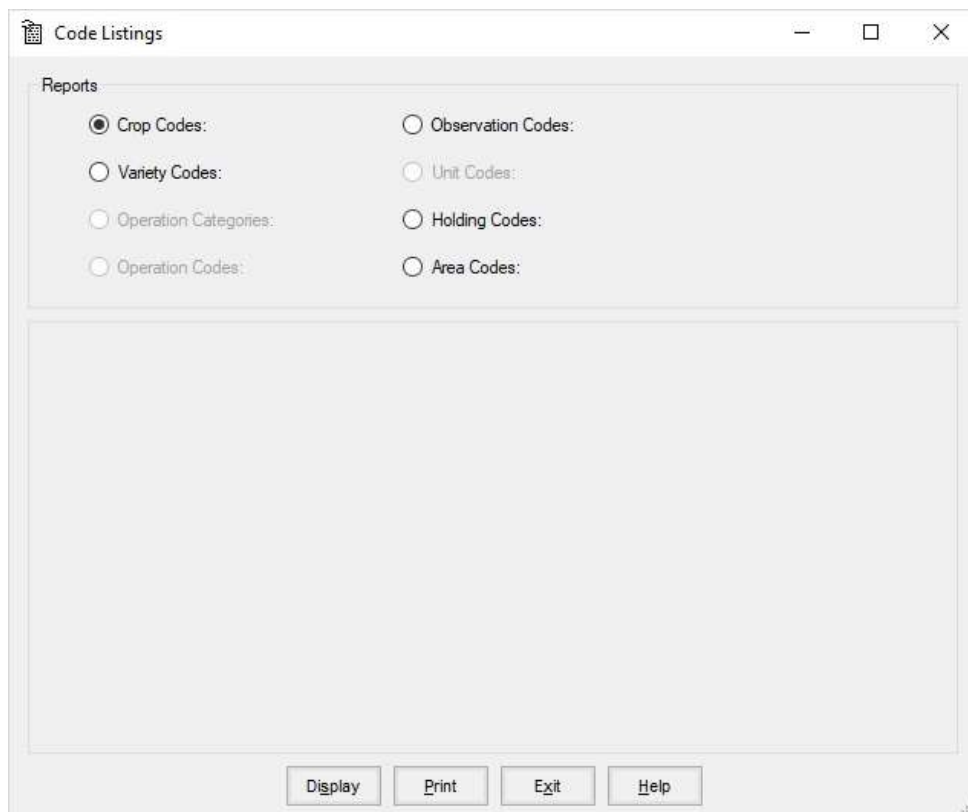
### Stock Items

A listing of all Stock Items on Record.

### 7. 3. Code Lists

---

This section gives the ability to print or view the codes as set up in the Maintenance Routines.



Select the list you wish and click Printer or Screen.

7. 4. NVZ Reports

The reports in this section are based on those published in the Scottish Government’s ‘Guidelines for Farmers in Nitrate Vulnerable Zones’.

NVZ Reports

Reports

☒ Spreading Land, Loading (Table 1):

☐ Annual Fertiliser Inventory (Table 12):

☐ Average Stocking Records (Table 3):

☐ Organic Manures - Imports/Exports (Table 13):

☐ Nmax for Arable Crops (Table 8):

☐ Nmax for WOSR (Table 16):

☐ Livestock Manure Applications (Table 9):

☐ Slurry Production (Table A):

☐ Nmax for Grassland (Table 10):

☐ Poultry Manure (Table N):

☐ Field Record Sheet (Table 11):

☐ FYM Production (Table Q):

Limits

☐ By Holding:

Start: Little Manor

End: North Grange Farm

Harvest Year: 2017

Limits

Display

Print

Exit

Help

Before creating a report for a specific year, you should be sure that the livestock figures are correct for that year in the Excreted Nitrogen and Slurry section of the Maintenance section.

Selecting a year pre-2009 will change the report to those which were described under the rules in force at that time.

The Table referred to in brackets corresponds to the same as published in the Scottish Executive ‘Guidelines for Farmers in Nitrate Vulnerable Zones’ booklet of tables.

#### 7. 4. 1. Spreading Land, Field Loading. (Table 1)

Calculates the spreadable area of each field and applies the Maximum Nitrogen figure to get the Field Limit.

Spreading Land, Field Loading (Table 1)

David A Phillips

Date: 09/04/18

Spreading Land & Field Loading (Table 1)

Page 1 of 1

Holdings : Mains of Inver to Mains of Inver

Field Name	Sub	Field Area	Ditches and Watercourses Length	Ditches and Watercourses Area	Other Red Areas	Unavail Areas	Spread Area	Field Limit
<b>Mains of Inver</b>								
IM 01 Hall West		14.18	380.00	0.38	0.00	0.00	13.80	3450.00
IM 02 Hall East	E	6.22	170.00	0.17	0.00	0.00	6.05	1512.50
IM 02 Hall East	W	6.22	170.00	0.17	0.00	0.00	6.05	1512.50
IM 03 Whirlies		8.10	0.00	0.00	0.00	0.00	8.10	2025.00
IM 04 Well		9.35	0.00	0.00	0.00	0.00	9.35	2337.50
IM 05 Cotter		10.17	0.00	0.00	0.00	0.00	10.17	2542.50
IM 06 North Eat Bank		5.10	0.00	0.00	0.00	0.00	5.10	1275.00
IM 07 Roadside		9.96	0.00	0.00	0.00	0.00	9.96	2490.00
IM 08 Mid Bank		5.30	0.00	0.00	0.00	0.00	5.30	1325.00
IM 09 Ram Park		6.60	0.00	0.00	0.00	0.00	6.60	1650.00
IM 10 Garden		4.37	0.00	0.00	0.00	0.00	4.37	1092.50
IM 11 Road End	E	3.40	250.00	0.25	0.00	0.00	3.15	787.50
IM 11 Road End	W	4.11	250.00	0.25	0.00	0.00	3.86	965.00
IM 12 Randle		3.53	300.00	0.30	0.00	0.00	3.23	807.50
IM13		8.25	0.00	0.00	0.00	0.00	8.25	2062.50
IM14		6.24	0.00	0.00	0.00	0.00	6.24	1560.00
<b>Totals for Mains of Inver</b>		<b>111.10</b>	<b>1520.00</b>	<b>1.52</b>			<b>109.58</b>	<b>27395.00</b>
<b>Totals</b>		<b>111.10</b>	<b>1520.00</b>	<b>1.52</b>	<b>0.00</b>	<b>0.00</b>	<b>109.58</b>	<b>27395.00</b>
<b>Loading Limit for Livestock Manure</b>			<b>18887.00 kg</b>					

Current Page No.: 1 Total Page No.: 1 Zoom Factor: 100%

Areas of ditches and watercourses, red area and other unavailable areas are set in the individual field records under the manure section.

## 7. 4. 2. Average Annual Stocking Record (Table 3)

Records the number of animals on the holding and calculates the total livestock nitrogen production.

Average Stocking Records (Table 3)

High End Farm

Average Stocking Records (Table 3)

Date: 03/04/18  
Page 1 of 1  
Harvest Year: 2016

Code	Description	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	Average Animals	Nitrogen per Head	Total Nitrogen
B12	Beef Suckler Cow (up to 500kg)	85	85	85	85	85	85	85	85	85	85	85	85	1020	85.00	61.00	5185.00
B16	Steer/Heifer (3 to 13 months)	0	0	0	0	0	40	80	80	80	80	0	0	360	30.00	34.00	1020.00
B18	Bull for Breeding (over 25 months)	2	2	2	2	2	2	2	2	2	2	2	2	24	2.00	48.00	96.00
B20	Calf (up to 3 months)	0	0	40	80	80	40	0	0	0	0	0	0	240	20.00	8.00	160.00
S13	Lamb (from 6 to 9 months)	100	0	0	0	0	0	0	0	150	500	400	200	1350	112.50	2.00	225.00
Totals																	6686.00

Current Page No.: 1      Total Page No.: 1      Zoom Factor: 100%

The numbers are entered in the NVZ section under the Excreted Nitrogen Section.

## 7. 4. 3. Nmax for Arable Crops (Table 8)

Calculates the Nmax figure for each crop based on the individual field records.

Nmax for Arable Crops (Table 8)

David A Phillips

Nmax for Arable Crops (Table 8)

Date: 09/04/18  
Page 1 of 2

Holdings : Mains of Inver to Mains of Inver

Mains of Inver

Peas

Standard Yield: 0.0 t/ha      Average Yield for this crop on this farm: 0.0 t/ha

Field Name	SE	Crop Prev Area Crop ha	Soil Type	Standard N Rate kg N/ha	Adjustments Yield kg N/ha	Market kg N/ha	Adjusted N Rate kg N/ha	Nmax Total N kg	N from Organic kg	N from Manufact kg	Winter Rainfall kg/ha	N to be Applied kg	N to be Applied kg/ha
IM 02 Hall East	E	6.22 SB	OMS	0	0	0	0	0	0	0	0	0	0
Totals								0	0	0	Nmax	0	0

Seed Potatoes

Standard Yield: 0.0 t/ha      Average Yield for this crop on this farm: 0.0 t/ha

Field Name	SE	Crop Prev Area Crop ha	Soil Type	Standard N Rate kg N/ha	Adjustments Yield kg N/ha	Market kg N/ha	Adjusted N Rate kg N/ha	Nmax Total N kg	N from Organic kg	N from Manufact kg	Winter Rainfall kg/ha	N to be Applied kg	N to be Applied kg/ha
IM 03 Whirlies		8.10 SB	OMS	225	0	0	225	1823	0	1823	0	1823	225
IM 10 Garden		4.37 SB	OMS	225	0	0	225	983	0	983	0	983	225
IM 11 Road End	W	4.11 SB	OMS	225	0	0	225	925	0	925	0	925	225
Totals								3731	0	3731	Nmax	3731	

Spring Barley

Standard Yield: 5.5 t/ha      Average Yield for this crop on this farm: 6.0 t/ha

Field Name	SE	Crop Prev Area Crop ha	Soil Type	Standard N Rate kg N/ha	Adjustments Yield kg N/ha	Market kg N/ha	Adjusted N Rate kg N/ha	Nmax Total N kg	N from Organic kg	N from Manufact kg	Winter Rainfall kg/ha	N to be Applied kg	N to be Applied kg/ha
IM 08 Mid Bank		5.30 WW	OMS	130	8	0	138	731	88	643	0	643	121
IM 09 Ram Park		6.60 WW	OMS	130	8	0	138	911	110	801	0	801	121
Totals								1642	198	1444	Nmax	1444	

Winter Barley

Standard Yield: 6.5 t/ha      Average Yield for this crop on this farm: 8.0 t/ha

Field Name	SE	Crop Prev Area Crop ha	Soil Type	Standard N Rate kg N/ha	Adjustments Yield kg N/ha	Market kg N/ha	Adjusted N Rate kg N/ha	Nmax Total N kg	N from Organic kg	N from Manufact kg	Winter Rainfall kg/ha	N to be Applied kg	N to be Applied kg/ha
IM 07 Roadside		9.96 WW	OMS	180	22	0	202	2012	0	2012	0	2012	202
Totals								2012	0	2012	Nmax	2012	

Current Page No.: 1      Total Page No.: 2      Zoom Factor: 100%



7. 4. 4. Livestock Manure Applications (Table 9)

Lists the applications of FYM and slurry made in the calendar year.

Livestock Manure Applications (Table 9)

High End Farm

Date: 03/04/18

Livestock Manure Applications (Table 9)

Page 1 of 1

Field Name	SF	Soil Type	Man Ref	Total N kg /t	Season	% N Spring	Size ha	Amount Applied t	Rate Applied t /ha	Available N Next Crop kg /ha
03		SL	16	25.00	Spring	30.00	7.89	47.34	6.00	45.00
04		SL	16	25.00	Spring	30.00	13.64	54.56	4.00	30.00
04		SL	4	5.00	Spring	20.00	13.64	136.40	10.00	10.00
08		SL	16	25.00	Spring	30.00	10.13	40.52	4.00	30.00
11		SL	16	25.00	Spring	30.00	10.48	41.92	4.00	30.00
12		SL	4	5.00	Spring	20.00	7.56	181.44	24.00	24.00
EN02		SL	4	5.00	Spring	20.00	10.43	260.75	25.00	25.00
EN03		SL	4	5.00	Spring	20.00	8.07	121.05	15.00	15.00
EN05		SL	4	5.00	Spring	20.00	14.89	372.25	25.00	25.00

Current Page No.: 1 Total Page No.: 1 Zoom Factor: 100%

Entries are made in Field Operations, Completed Operation, Manure Operations.

7. 4. 5. Nmax for Grassland (Table 10)

Calculates the Nmax for total grassland based on the individual field records.

Nmax for Grassland (Table 10)

David A Phillips

Date: 09/04/18

Nmax for Grassland (Table 10)

Page 1 of 1

Field Name	SF	Grass Area ha	Site Class	Intended Use	Standard N Rate kg N /ha	Total Nitrogen kg	N from Organic kg	N from Manufact Manufact kg	N from Manufact kg /ha
IM13		8.25	3	Grazing with Low Clover	250	2063	0	2063	250
IM14		6.24	3	2 or 3 Cut Silage + Grazing	290	1810	0	1810	290
NG 03		0.94	3	Grazing with Low Clover	250	235	0	235	250
Totals						4107	0	4107	

Current Page No.: 1 Total Page No.: 1 Zoom Factor: 100%

## 7. 4. 6. Field Record Sheet (Table 11)

Calculates the Actual usage of Nitrogen on a Crop. Each field is shown with its applications, the Nitrogen calculated and compared with the field limit. All Nitrogen for the fields growing the same crop is totaled and compared with the Nmax for that crop. Warnings are shown if the Nmax is exceeded.

Field Record Sheet (Table 11)

David A Phillips  
Field Record Sheet (Table 11)

Date: 09/04/18  
Page 4 of 9  
Harvest Year: 2017

Limit: 121.00 Actual N: 117.14 Total N: 215.54 306.58 460.00

NG 02 OMS 6.36 Ha NO/43846/44068 6.36 Ha

Date Applied	Crop	Date Sown	Description	Rate kg /ha	Total N Applied	Man Ref	Nitrogen Analysis	Rate / Ha	Total N Applied	Field Limit (250)	Comment
01/03/17	Spring Barley	01/04/17	20-10-10	277.72	353.26	1	6.00	27.77	1059.70		
20/03/17	Spring Barley	01/04/17	20-10-10	277.72	353.26						
30/04/17	Spring Barley	01/04/17	34.5% N	178.54	391.74						
OVER BY 6.14 /Ha--> Limit:				111.00	Actual N: 117.14	Total N: 745.01			1059.70	1590.00	

NG 05 OMS 7.80 Ha NO/44145/43574 7.80 Ha

Date Applied	Crop	Date Sown	Description	Rate kg /ha	Total N Applied	Man Ref	Nitrogen Analysis	Rate / Ha	Total N Applied	Field Limit (250)	Comment
01/03/17	Spring Barley	01/04/17	20-10-10	277.72	433.25						
20/03/17	Spring Barley	01/04/17	20-10-10	277.72	433.25						
30/04/17	Spring Barley	01/04/17	34.5% N	178.54	480.44						
Limit:				138.00	Actual N: 117.14	Total N: 913.69					

NG 12 OMS 3.49 Ha NO/44670/44528 3.49 Ha

Date Applied	Crop	Date Sown	Description	Rate kg /ha	Total N Applied	Man Ref	Nitrogen Analysis	Rate / Ha	Total N Applied	Field Limit (250)	Comment
01/03/17	Spring Barley	01/04/17	20-10-10	277.72	193.85						
20/03/17	Spring Barley	01/04/17	20-10-10	277.72	193.85						
30/04/17	Spring Barley	01/04/17	34.5% N	178.54	214.97						
Limit:				138.00	Actual N: 117.14	Total N: 408.82					

NG 14 OMS 3.18 Ha NO/44873/44512 3.18 Ha

Date Applied	Crop	Date Sown	Description	Rate kg /ha	Total N Applied	Man Ref	Nitrogen Analysis	Rate / Ha	Total N Applied	Field Limit (250)	Comment
01/03/17	Spring Barley	01/04/17	20-10-10	277.72	176.63						
20/03/17	Spring Barley	01/04/17	20-10-10	277.72	176.63						
30/04/17	Spring Barley	01/04/17	34.5% N	178.54	195.87						
Limit:				121.00	Actual N: 117.14	Total N: 372.50			529.85	795.00	

NG 15 OMS 5.51 Ha NO/44949/44360 5.51 Ha

Date Applied	Crop	Date Sown	Description	Rate kg /ha	Total N Applied	Man Ref	Nitrogen Analysis	Rate / Ha	Total N Applied	Field Limit (250)	Comment
01/03/17	Spring Barley	01/04/17				1	6.00	27.77	918.08		

Current Page No.: 4 Total Page No.: 9 Zoom Factor: 100%

Each field is shown with its applications, the Inorganic Nitrogen application is calculated and compared with the field limit. All Nitrogen for the fields growing the same crop is totalled and compared with the Nmax for that crop. Warnings are shown if the Nmax is exceeded.

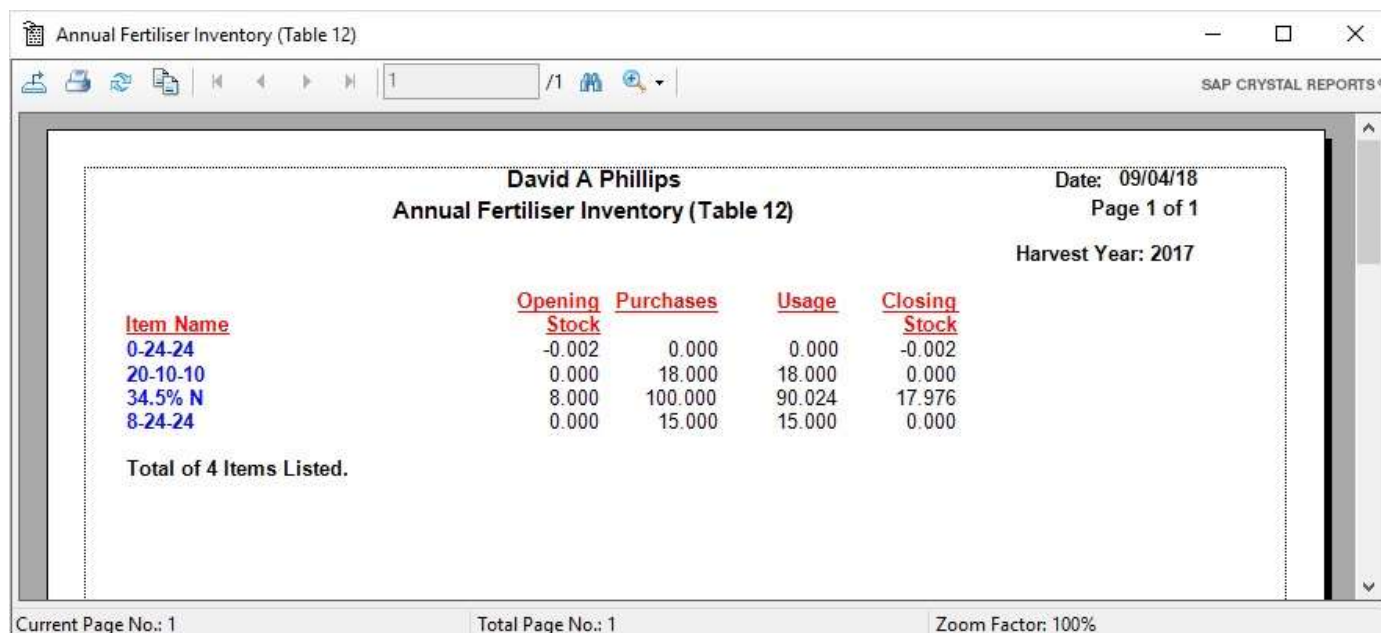
Organic Manure application are shown and the Nitrogen calculated. Warnings are shown where the field limit is exceeded.

Total Nitrogen applied in each class is calculated at the end of the report.



#### 7. 4. 7. Annual Fertiliser Inventory (Table 12)

List all the Fertilisers used or in stock in the current year.



**David A Phillips**  
**Annual Fertiliser Inventory (Table 12)**  
 Date: 09/04/18  
 Page 1 of 1  
 Harvest Year: 2017

Item Name	Opening Stock	Purchases	Usage	Closing Stock
0-24-24	-0.002	0.000	0.000	-0.002
20-10-10	0.000	18.000	18.000	0.000
34.5% N	8.000	100.000	90.024	17.976
8-24-24	0.000	15.000	15.000	0.000

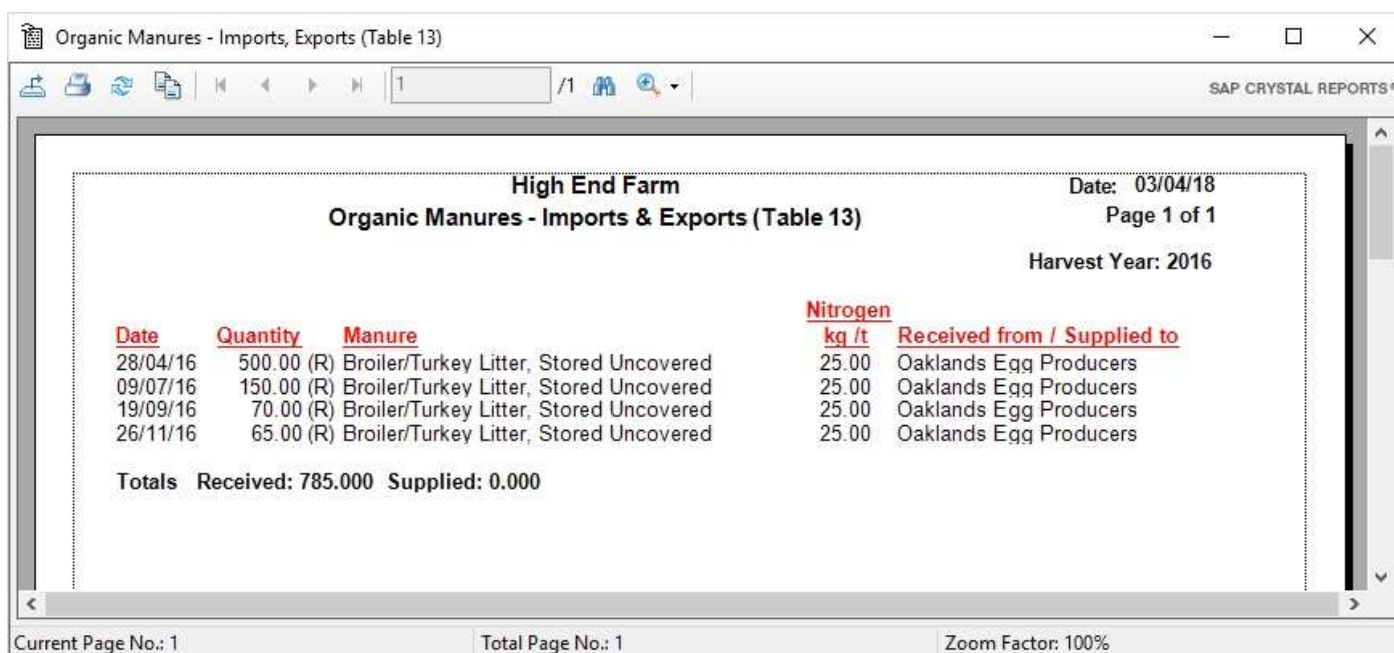
Total of 4 Items Listed.

Current Page No.: 1      Total Page No.: 1      Zoom Factor: 100%

Takes all the Fertilisers with opening stock at the beginning of the Year. Purchases are taken from the Fertiliser records. They are entered in Stock Events, Stock Receipts. Usage is taken from Individual field records. Closing stock is calculated from the above three.

#### 7. 4. 8. Organic Manures - Imports / Exports (Table 13)

Displays a list of the imports or exports of organic manure from the farm.



**High End Farm**  
**Organic Manures - Imports & Exports (Table 13)**  
 Date: 03/04/18  
 Page 1 of 1  
 Harvest Year: 2016

Date	Quantity	Manure	Nitrogen kg/t	Received from / Supplied to
28/04/16	500.00 (R)	Broiler/Turkey Litter, Stored Uncovered	25.00	Oaklands Egg Producers
09/07/16	150.00 (R)	Broiler/Turkey Litter, Stored Uncovered	25.00	Oaklands Egg Producers
19/09/16	70.00 (R)	Broiler/Turkey Litter, Stored Uncovered	25.00	Oaklands Egg Producers
26/11/16	65.00 (R)	Broiler/Turkey Litter, Stored Uncovered	25.00	Oaklands Egg Producers

**Totals Received: 785.000 Supplied: 0.000**

Current Page No.: 1      Total Page No.: 1      Zoom Factor: 100%

Entered in the NVZ section and Organic Manure Movements.<sup>7</sup>

### 7. 7. 9. Nmax for WOSR (Table 16)

Calculates the Nmax for Autumn applications of N on winter oilseed rape.

Autumn N on WOSR (Table 16)

David A Phillips  
Autumn N on WOSR (Table 16)  
Date: 09/04/18  
Page 1 of 1

Field Name	SF	Crop Prev Area Crop ha	Standard N Rate kg N /ha	N to be Applied kg
IM 05 Cotter		10.17 WB	30.00	305.10
IM 06 North Eat Bank		5.10 WB	30.00	153.00
LM 02		5.13 SB	30.00	153.90
LM 05		5.06 SB	30.00	151.80
NG 10		9.51 WB	30.00	285.30
Totals		34.97	150.00	1049.10

Current Page No.: 1      Total Page No.: 1      Zoom Factor: 100%

### 7. 7. 10 Slurry Production (Table A)

Calculates the weekly production of Nitrogen in slurry.

Slurry Production (Table A)

High End Farm  
Slurry Production (Table A)  
Date: 03/04/18  
Page 1 of 1  
Harvest Year: 2017

Code	Description	No of Animals	Nitrogen per Head	Weeks Housed	Total Nitrogen
B17	Bull Beef (3 months and over)	75	0.18	27	364.50
D12	Dairy Cow (6000 to 9000 litre milk yield)	140	0.37	27	1398.60
D14	Dairy Heifer Replacement (13 months to first calf)	30	0.28	27	226.80
Totals					1989.90

Current Page No.: 1      Total Page No.: 1      Zoom Factor: 100%

Figures are entered in the NVZ Section, FYM and Slurry Production.

#### 7. 4. 11 Poultry Manure (Table N)

Calculates the annual production of Poultry Manure.

Figures are entered in the NVZ Section, FYM and Slurry Production.

#### 7. 4. 12 FYM Production (Table Q)

Calculates the FYM Production based on the Livestock on the Farm.

**FYM Production (Table Q)**

Date: 03/04/18  
Page 1 of 1  
Harvest Year: 2016

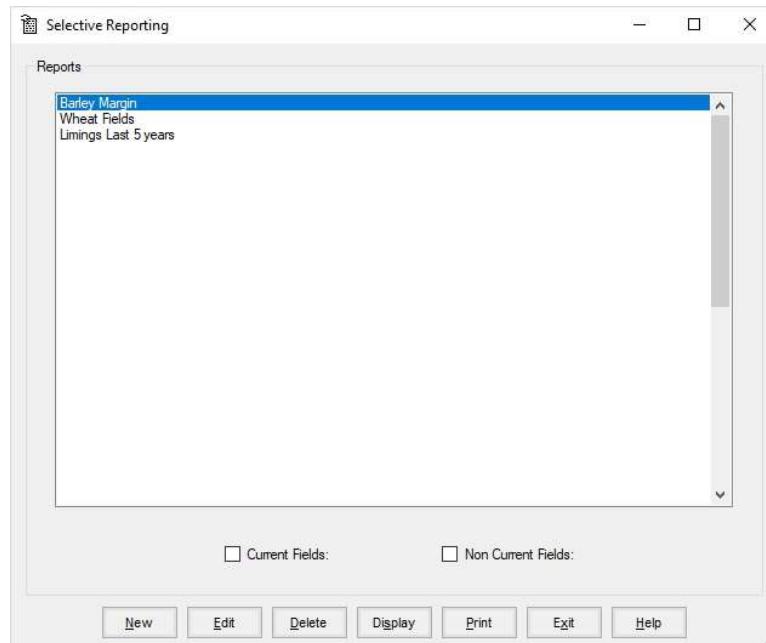
<u>Code</u>	<u>Description</u>	<u>No of Animals</u>	<u>Excreta per Head per Week</u>	<u>Weeks Housed</u>	<u>Straw Addition Factor</u>	<u>FYM Density Value</u>	<u>Total Manure</u>
B11	Beef Suckler Cow (over 500kg)	85	0.32	24	1.15	0.70	1072.46
B18	Bull for Breeding (over 25 months)	2	0.18	24	1.15	0.70	14.19
B20	Calf (up to 3 months)	60	0.05	8	1.15	0.70	39.43
<b>Totals</b>							<b>1126.08</b>

Current Page No.: 1      Total Page No.: 1      Zoom Factor: 100%

Figures are entered in the NVZ Section, FYM and Slurry Production.

## 7. 6. Selective Reporting

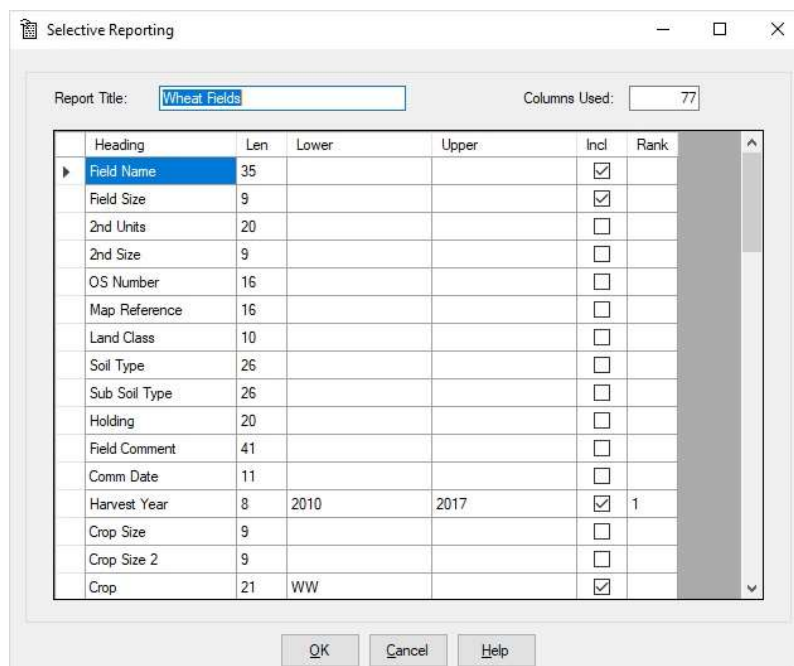
This section allows you to create reports to your own specification. Any information held within a field record can be incorporated into a report in this section. These report formats can be saved and reproduced at any time.



### To create a new report:

Click New on the Bottom Button Bar. Enter the Name of the new report. This is the name the report will be stored as.

You may now pick the parameters of the report form the scrolling screen as shown below.



There are three stages to creating the report layout.

Firstly, set the limits on what you want to include in the report. Click in the **Lower** box of the item you wish to limit, you will be asked to select the bottom limit and the upper limit of your selection. You may also be given a list to select from where there are a limited number of pre-set options. As an example, you may wish to limit one crop or variety or crop year or below a pH level.

Secondly, to include headings in the report click the box under **Incl** to show **Yes**. The order in which you click this selection is the order in which the headings are laid out across the paper. The number of columns each heading takes in a report is shown in the **Len** Column. The total characters of all selected headings is shown at the top of the report.

Thirdly, the Sort order of the report is set by the end column under **Rank**. If you want the report sorted by a particular heading click in the rank box of that heading. This will be the first sort criteria. Should you wish to sort further within the first choice then click in you second chosen option rank box. An example of this may be to sort firstly by Crop and then within crop by Variety.

Click OK to save your report format.

#### **To display or print a report:**

Highlight the report you wish from the list. Select whether you wish to include Current and / or Non-Current fields.

Click **Display** or **Print** on the Bottom Button Bar.

#### **To change the format of an old report:**

Highlight the report you wish from the list. Click **Old** on the Bottom Button Bar and the report format will be display for editing.

#### **To delete an old report:**

Highlight the report you wish to delete and click **Delete** on the Bottom Button Bar.

Highlight the report you wish from the list. Select whether you wish to include Current and / or Non-Current fields.

Click **Display** or **Print** on the Bottom Button Bar.

#### **To change the format of an old report:**

Highlight the report you wish from the list. Click **Old** on the Bottom Button Bar and the report format will be display for editing.

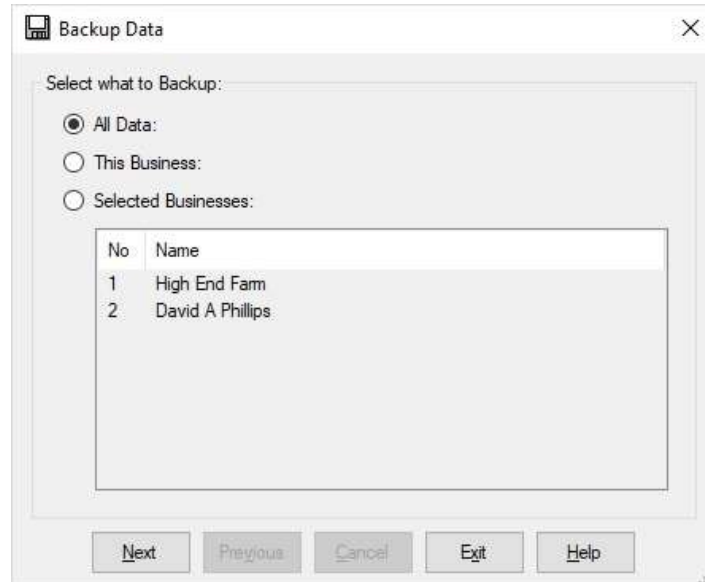
#### **To delete an old report:**

Highlight the report you wish to delete and click **Delete** on the Bottom Button Bar.

## Appendix A Backup & Restore Routines

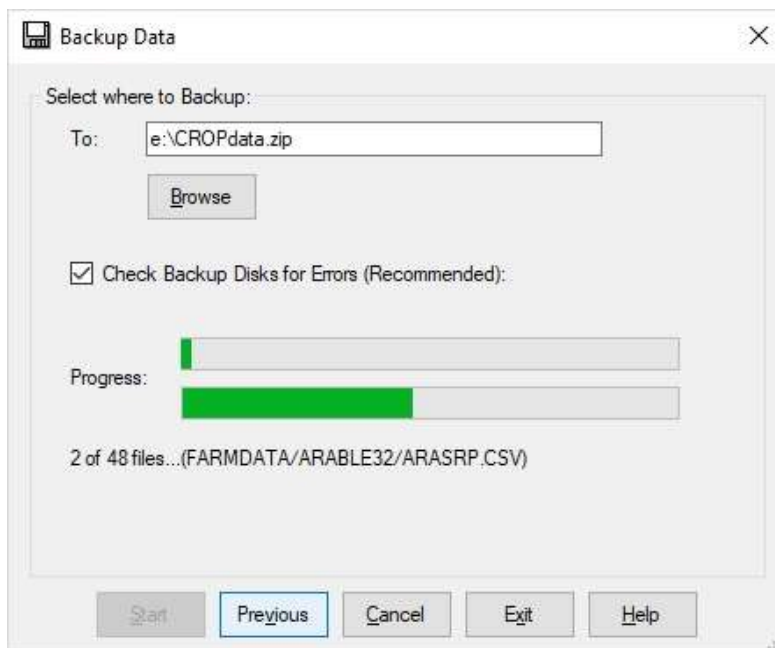
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You are strongly advised to make backup copies of your data. To do a backup you can use the utility supplied with the program which is located under the File menu.



You may select to backup all data, in which case all businesses within the system will be saved, this business which saves only the business in which you are currently working or selected business. If you choose selected businesses you must highlight those you wish to save by clicking on the list.

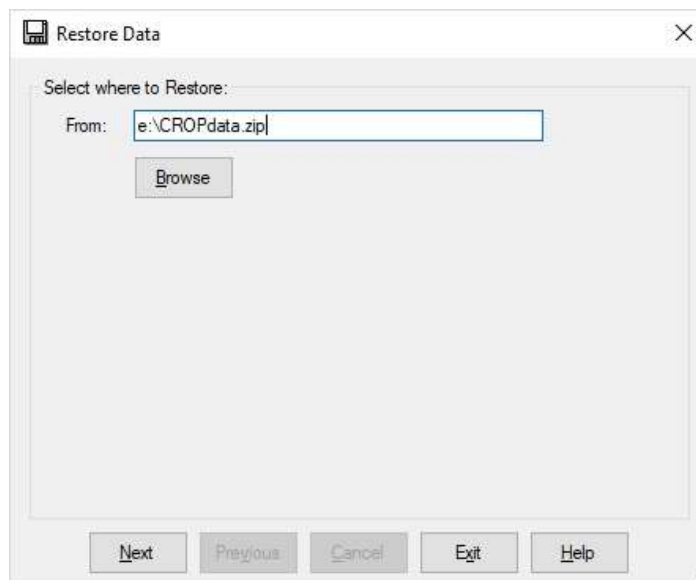
Click Next and you will be asked where you wish to put the backup. The default is A:\CROPdata.zip. To change the location, you click the browse button and select your location.



Click start and the backup will begin.

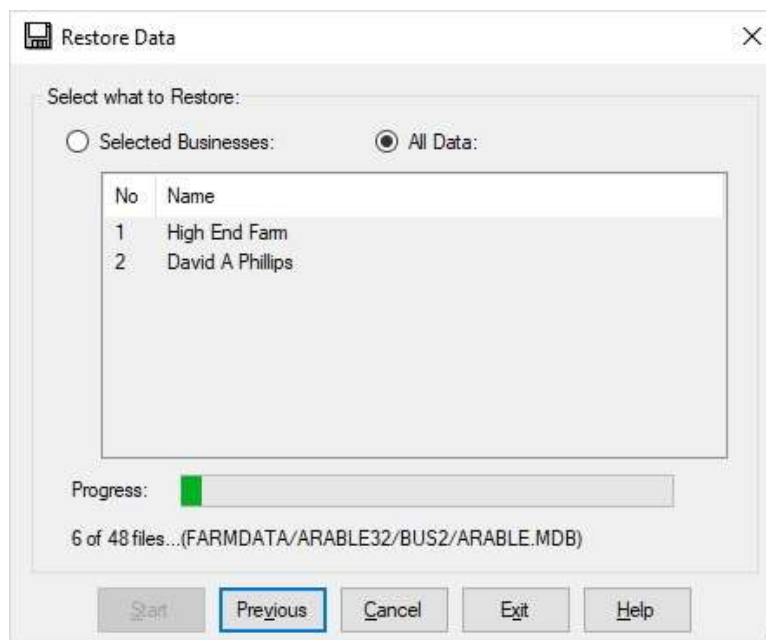
To restore data from a backup created by the above routine use the utility supplied with the program which is located under the File menu. If you are restoring data it is advisable to do take a backup of the current data first.

Click on Restore Data



The default path will be where you last did a backup. If your backup file is located elsewhere you can use the browse button to locate it.

Click Next to start the restore.



Select the businesses you wish to restore by clicking on them. Click Start to begin the restore.