

Google Forms for record-keeping

Neil Hickson of Burscough Community Farm has put together a useful system for recording inputs and outputs to the farm's growing system using Google Forms. Here he explains how the system works and how to get started with your own crop recording system.

When we first looked at becoming certified organic growers I winced at the idea of keeping all those records. Noting everything down seems like such a chore. If you're anything like me, writing down lists of things that you have done during the day won't be your favourite pastime.

Record-keeping isn't one of my strong points. Let's face it, you just want to get on with the job. There's no time for faffing around writing stuff down when the wholesaler's van is on its way and you still have fifteen boxes of beans to pack.

In an earlier career, before I got into growing, I used Google Docs and Google Apps a lot. The power of these online tools is amazing, but best of all, they're **FREE**.

To keep things up to date, just getting my phone out whilst standing in the field to tick a few boxes saves a lot of hassle. Google Forms is a great solution.

Google Forms is a flexible, customisable, cloud-based recording system where you can build your own online data entry system and database. All the data recorded is conveniently stored away in a spreadsheet waiting for you to analyse it. Once you've got your head around the basics, it's really easy to use.

When you've built your form, you can save a link to it under a button on your smartphone's screen. One-touch of the button and you're filling in your form right there in the field the instant you've sown your salads or harvested your beetroot.

I can't give you every step of all the parts of our crop recording system within this article, that would take up several pages of this magazine and need more images than we have room for. So, to get you going I'll give you the basics of setting up your first form and show you the potential of the system. There will be a step by step video of the whole process showing the system I've put together for our community farm on my website at <https://neilhickson.co.uk>.

How does this work?

To set this up, you need a Google Mail account. Great news, it's free, it won't cost you a penny. So, if you haven't got one, go to www.gmail.com, and set one up. Don't worry if you already have your email sorted elsewhere, you can just use the account for recording your crop growing data; you don't need to use the email address that the account gives you.

Once you're signed up and signed in, you can start to build your form.

Build your first form

If you want to get the most benefit from this article, you should be logged on and following my instructions on your computer screen.

Because Google Forms are one of the lesser-known tools of the Google Apps suite, you may have some problems finding it at first. A quick way to find it is to go to <https://docs.google.com/forms/>. And whilst there, why don't you bookmark the location in your browser. I use Google Chrome, so I just click onto the little star symbol that lies at the end of the address bar. From then on, I just have to click onto my bookmark and I am straight into the forms page.

You'll see that you have a row of templates in a grey area at the top half of the page. Choose the first option with the + symbol at its centre, 'Start a new form - Blank.'

You'll then find yourself on a form builder page. At this point, you can name the form and start to design your first question field.

We use three forms to track all our crops, one for sowing, one for transplants and one for harvesting. Each form can be set up to record their data onto different sheets/tabs of the same spreadsheet, so all your records are stored together in the same place; easy to find whenever you need to check them.

Give the form a name. For our first form, we used 'Crop sowing records.'

Our first question is the name of the grower. We like to give people ownership of their achievements, so attributing a crop to a person helps with this.

You have a choice of different question formats:

- Short answer
- Paragraph
- Multiple choice
- Checkboxes
- Drop-down
- File upload
- Linear scale
- Multiple-choice grid
- Tick box grid
- Date
- Time

Each of these choices gives different options for how you enter your data.

One big lesson we learned this year is to use drop-down or multiple choice questions wherever possible. This ensures you get consistent results in your database as different people inevitably end up calling things different names. It does mean you have to know who the different members of the team are when you are creating the form, but you can add more people in the future.

'Multiple choice' is another option for this first question, and it would only allow you to choose one person, If you wanted to have two or more people, you could use the checkboxes option, which allows more than one selection.

To populate the question with different options, click onto Option 1 and enter in the name of the first grower. When you have done this, you go on to add the second grower name by clicking onto the 'Add option' button below. Carry on until you have all your team in place.

All questions can be marked as 'Required' which means that these questions must be filled in or the form cannot be submitted. To the right of the required button is a row of three vertical dots. These give access to a small submenu. One of the submenu items is a 'Description' field, which allows you to give instructions/guidance on how users answer this question.

When you have completed your question, you can move onto creating the next question by clicking onto the round grey button with the + symbol. This is situated at the top of the menu to the right of the current question you are filling in. You won't need to use the other options in this menu for the form we are designing here, but they give powerful features for when you want to build more complex forms.

For our sowing record, the next two questions are the 'crop' and the 'variety.' Again, dropdowns are the way to go with these so you get consistent spellings. Knowing all

the seed types that need entering in before you start designing the form is going to save time, but as before, you can add more options later.

Our next question is the date. Google forms automatically record the date and time that a record is added, so if your team is really diligent, you can leave this question out. But, even with the convenience of the forms, it's still possible to forget to record a crop, so it's good to be able to do this at a later date.

After the date, we record how the seeds were shown. On our form, I've used a multiple-choice question listing all the different options we have for sowing our seeds. Choices include open seed flats, small seed blocks, medium seed blocks, the various sizes of seed flats that we use.

On the bottom of your form field, you have the option of 'Other.' This is useful, it gives people the opportunity to fill in their own answer if you have a one-off sowing medium/container/method that's not listed. I left the Required button unchecked on this question because we do lots of direct sowing and this option is picked up on another question.

The next two questions require number entries, so I set these up as short answer questions. The first asks for the number of blocks, flats or trays used. The next the bed length of directly sown beds.

On our farm, we grow most crops in 30-inch beds with 18-inch paths. Different crops have different numbers of rows, so I have options on the next question for one to nine rows. The sower enters in how many rows they are sowing for a particular crop.

This question could also use drop-down or multiple-choice options if you prefer that format. I used the linear scale question format. This allows the person who answers the question to choose a number along a linear scale.

The final question on my form is the location where the seeds are sown. I used a short text answer format, but a drop-down or multiple-choice format could be used here as well if you don't have too many locations.

Our seed sowing form is now completed, so all we now need to do is make sure that the form can be accessed by other people, and they can start using your form.

To distribute it, you need to obtain a link to the form from Google. If you click onto the Send button at the top right of the screen you will be given a menu. Select the link symbol and Google will generate a URL to your form. Click the copy button and this URL will be copied to your clipboard.

With my Android phone, I programmed this link under a button on my screen, so I have instant access to the form. I emailed the link to other users so they can put the link on their smartphones.

To use the form, click onto the link and you can fill in the form field by field with the relevant information. At the end of the form click onto the submit button, the data is instantly logged in the cloud (assuming you have data coverage on your phone).

Looking at your data

Next is setting up the spreadsheet to receive the data. From the form building window, click onto the Responses link. It's possible to look at individual form responses within this window, but you get lots more functionality if you work on the entries within a spreadsheet. To create a spreadsheet, click onto the green square with the white cross which symbolises the Google spreadsheets app. You'll be asked if you want to create a spreadsheet or have the form send its data to a spreadsheet that already exists.

So, that's it, you've created your first form. If you record your transplants, you can create another form for that and you will need another form for harvesting.

We have found Google Forms and the small custom system we have built to be a really useful tool, and our Soil Association inspector likes it too. If you want to know more about how to build such a tool contact me via neil@neilhickson.co.uk.

← Sowing Records

SEND

QUESTIONS RESPONSES

Sowing Records

Use this form to record any seed sowing on the farm

Grower*
Short-answer text

Plant*
Short-answer text

Variety*
Short-answer text

← Untitled form

SEND

QUESTIONS RESPONSES

Sowing Records

Use this form to record any seed sowing on the farm

Untitled Question

Option 1

Add option or [ADD "OTHER"](#)

- Short answer
- Paragraph
- Multiple choice
- Checkboxes
- Drop-down
- File upload
- Linear scale
- Multiple-choice grid
- Tick box grid
- Date
- Time

BCF Records



Sowing Records



Transplant
Records



Harvest Records



Add



Rows in bed

1 2 3 4 5

1 row 5 rows

Number of transplants in row

Give an estimate of how many transplants you have made.

Your answer

Row Location

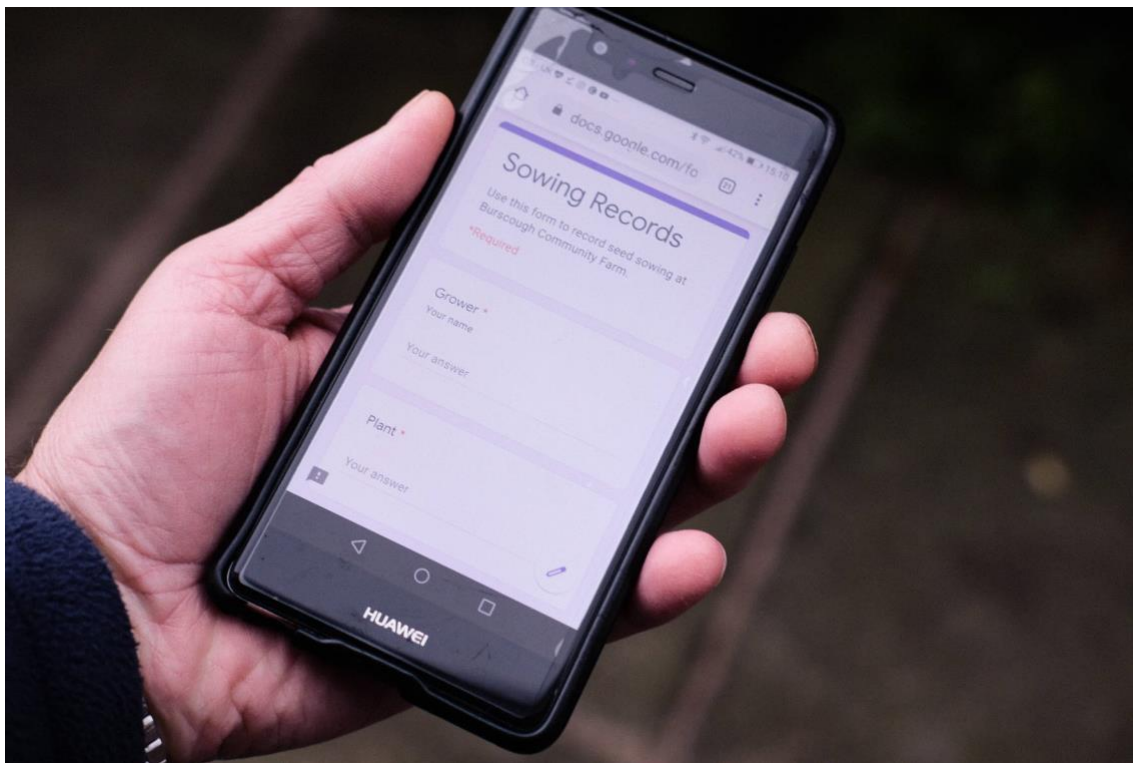
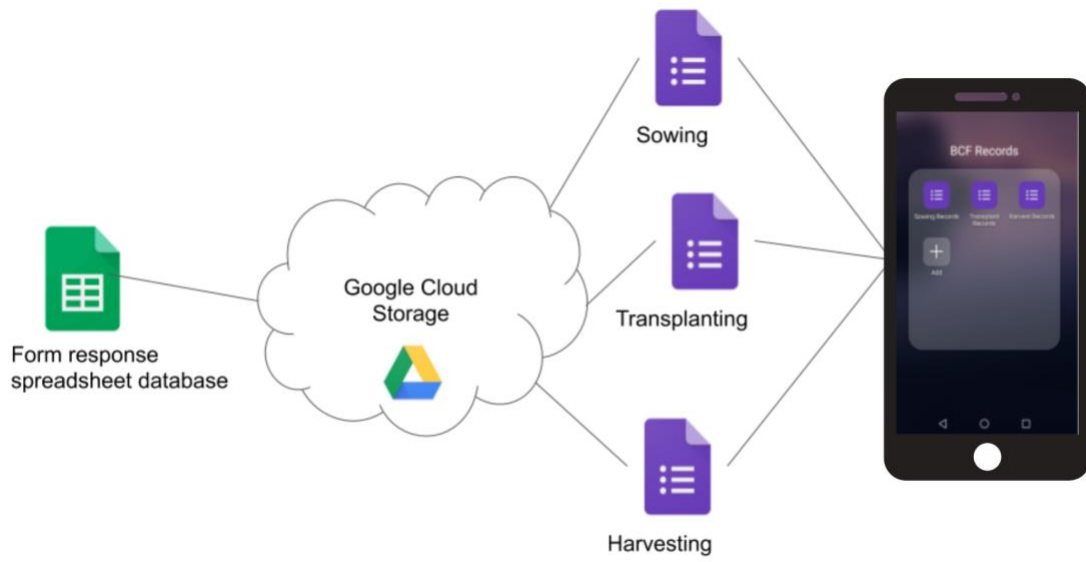
Your answer

SUBMIT



Never submit passwords through Google







Growing Records (Responses)

File Edit View Insert Format Data Tools Form Add-ons Help



Share



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	A	B	C	D	E	F
1	Timestamp	Grower	Plant	Variety	Sowing Medium	Direct Sowing - Bed Leng
2	25/10/2018 12:28:21		Garlic	BCF own	Cloves direct into soil	30m
3	23/01/2019 23:32:41		Sweet Pea	BCF saved seed	Seed Flat - 7x12 (84)	
4	26/01/2019 15:24:26		Cosmos	Cosmea (2014 seed)	Seed Flat - 7x12 (84)	
5	07/02/2019 14:49:34		Broad Bean	Farm's Own		90 m
6	10/02/2019 14:48:42		Beetroot	Golden	Medium Soil Block	
7	10/02/2019 14:50:27		Beetroot	Jannis	Medium Soil Block	
8	10/02/2019 14:51:31		Spring Onion	Ramrod	Medium Soil Block	
9	10/02/2019 14:52:48		Sweet Pea	BCF Scarified with sand	Medium Soil Block	
10	12/02/2019 11:02:49		French Bean	Faraday	Medium Soil Block	
11	17/02/2019 12:04:43		Broad Bean	Farm's own		30m
12	21/02/2019 11:32:42		Spring Cabbage	Caraflex	Medium Soil Block	
13	21/02/2019 11:47:40		Rudbeckia	Marmalarde	Medium Soil Block	



Sowings

Transplants

Harvesting

Pivot Table



Explore