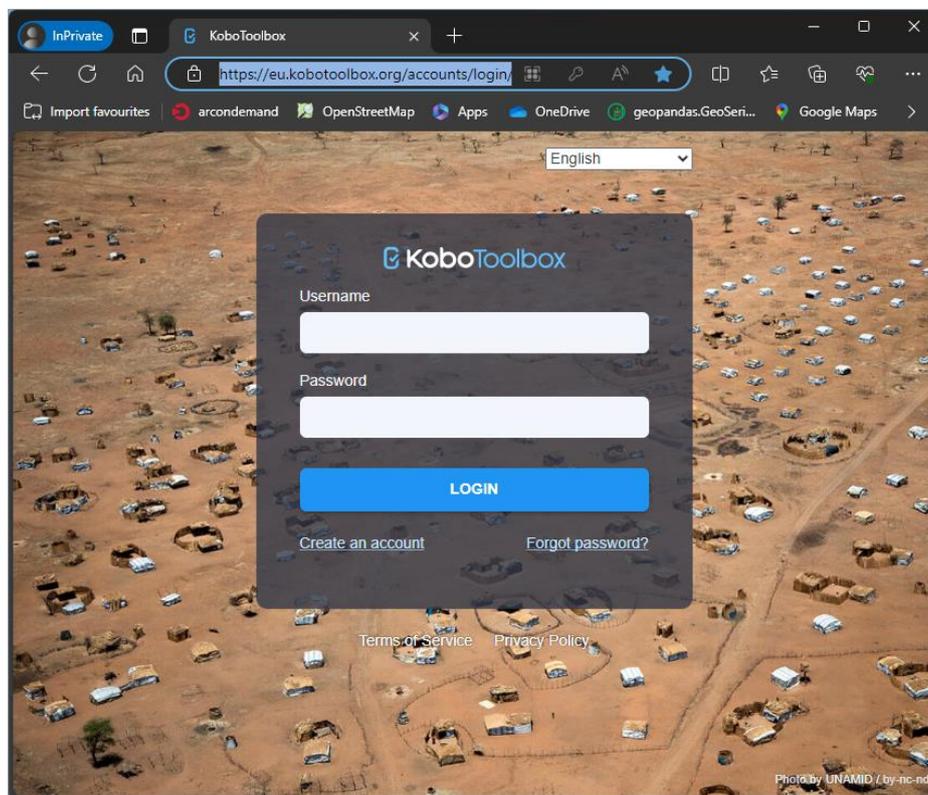


KoboToolbox

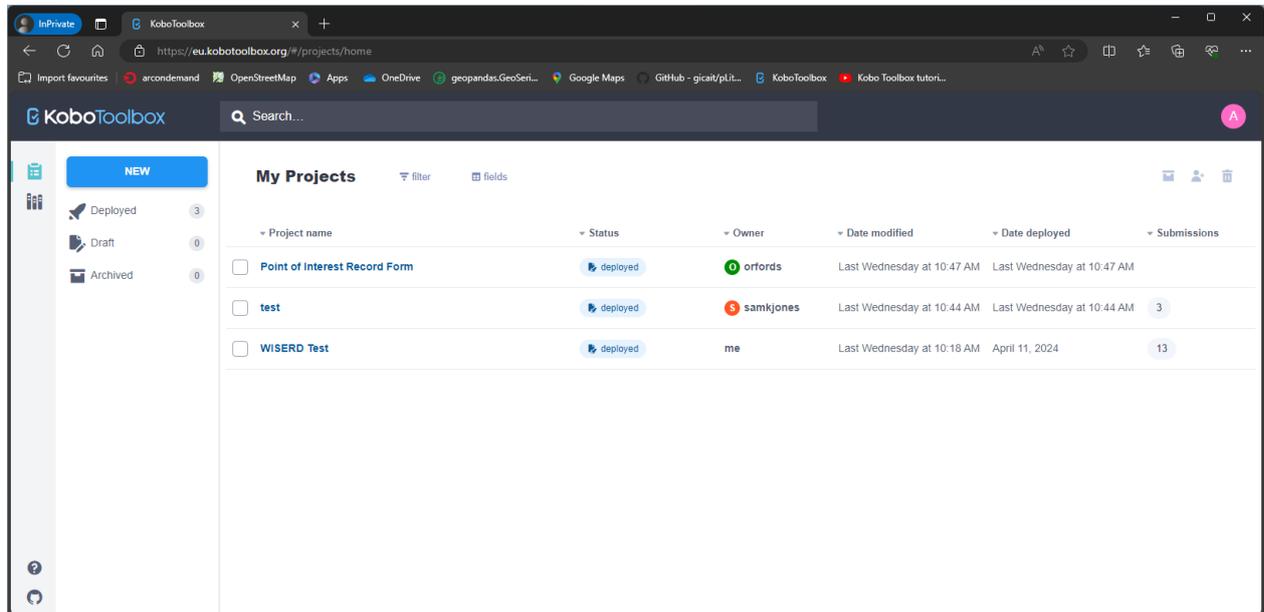
This tutorial will show you how to create your own surveys which can map data with KoboToolbox

Logging-in

Go to <https://eu.kobotoolbox.org/accounts/login/> to log in which looks like this:

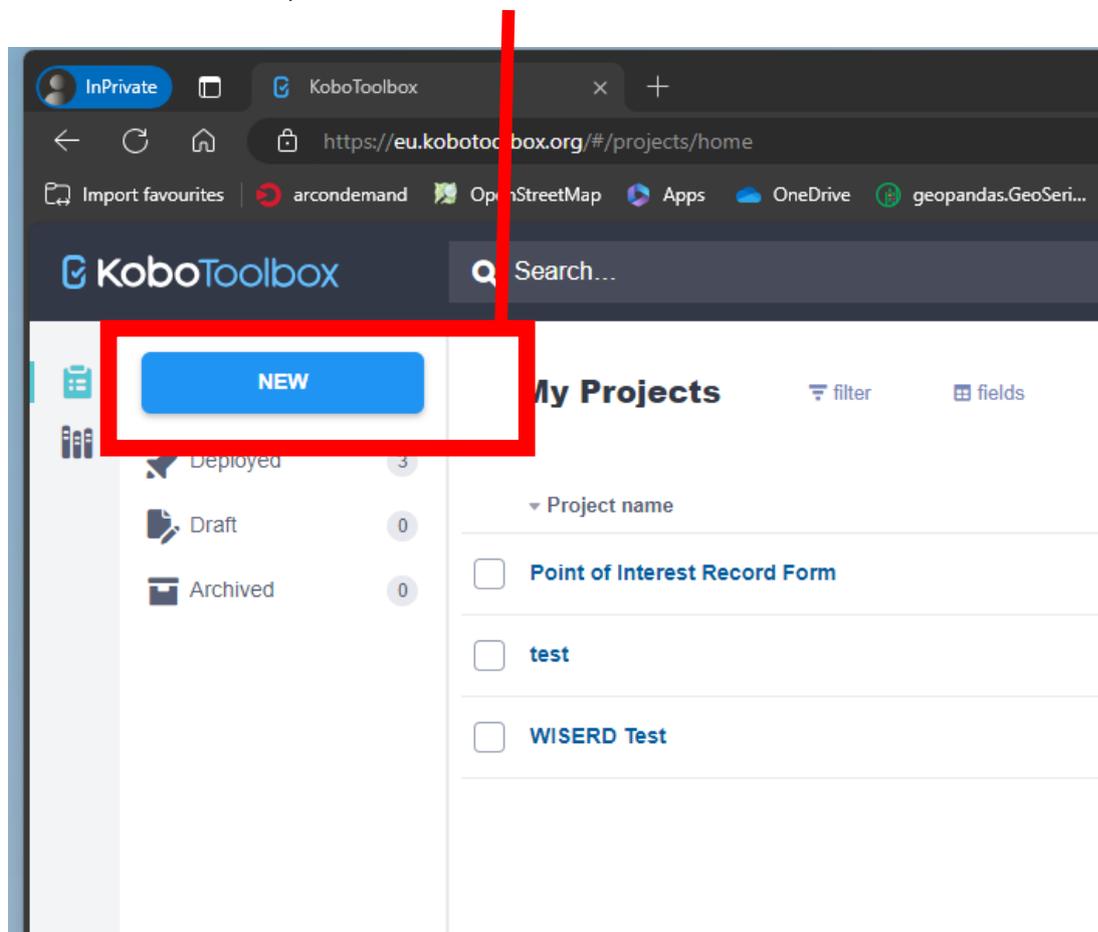


Once logged in you will be greeted with your dashboard, where you can create new surveys, view data collected from previous ones or export the data to use in other applications.

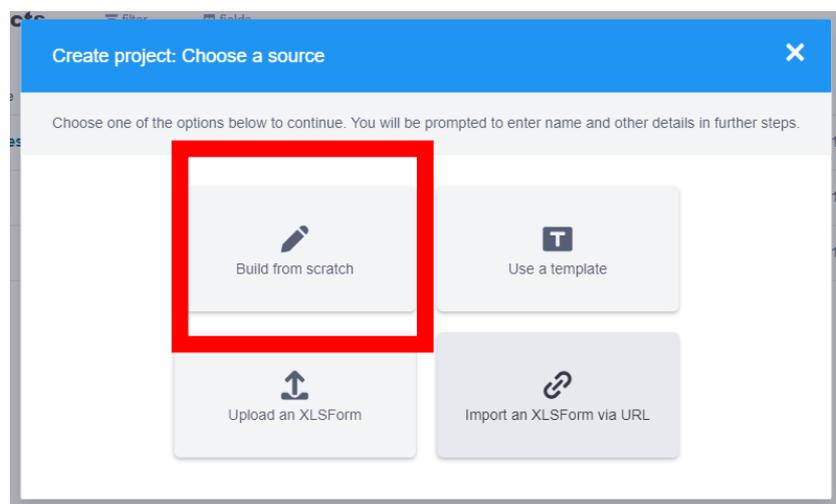


Creating a new Survey

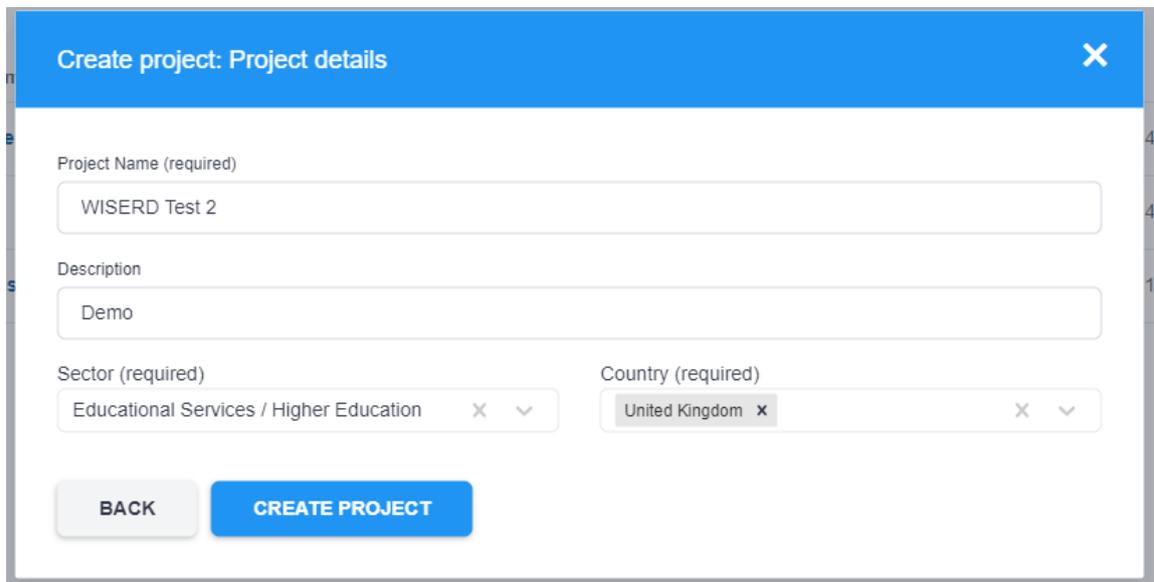
From the dashboard, click on the **NEW** button.



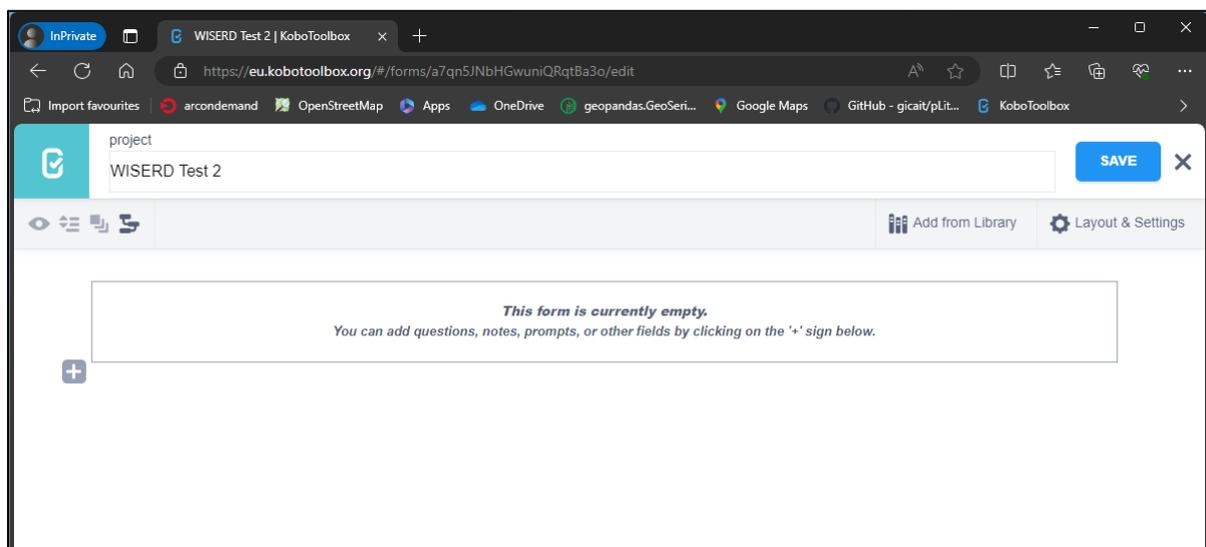
Click on **build from scratch** to create a new survey. If you make a template, you can use one you've saved, or you can download online templates.



Enter your survey project name, description for the survey, selector (educational etc) and country. Click **Create Project**.



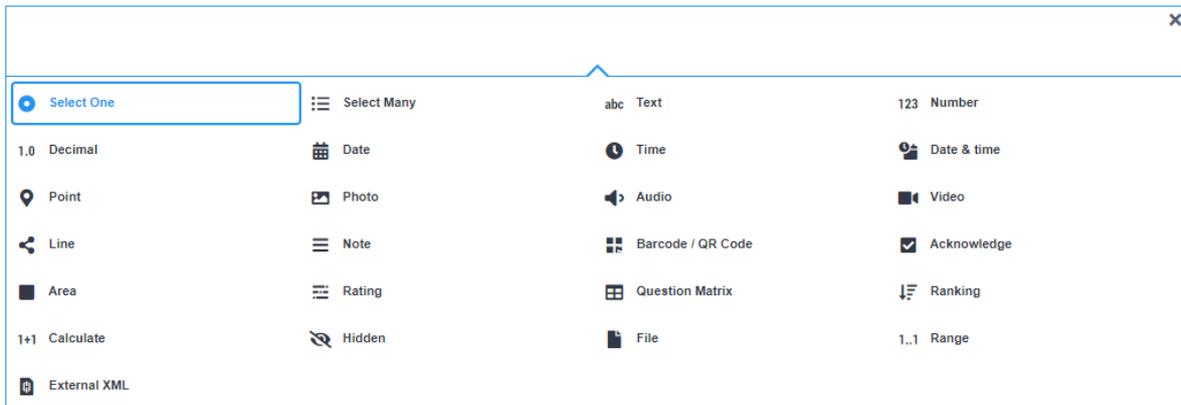
You will now be on the survey building application.



Click on the  button bring up the add question prompt.



Click **add question**. You will be able to select the type of question for the survey, and which sort of data output you want (e.g. photo, text, video, audio etc).



Most of them are self-explanatory but a table at the end of this tutorial describes what they do. ****Note: the more media type answers you require in the survey, the more memory it will use on the system so try not to use too many.**

Building your first survey tutorial (Tree survey)

Question 1.

For this tutorial, the first question will be a photo of the tree. Select **photo** input.

 A rectangular button with a camera icon and the text "Photo".

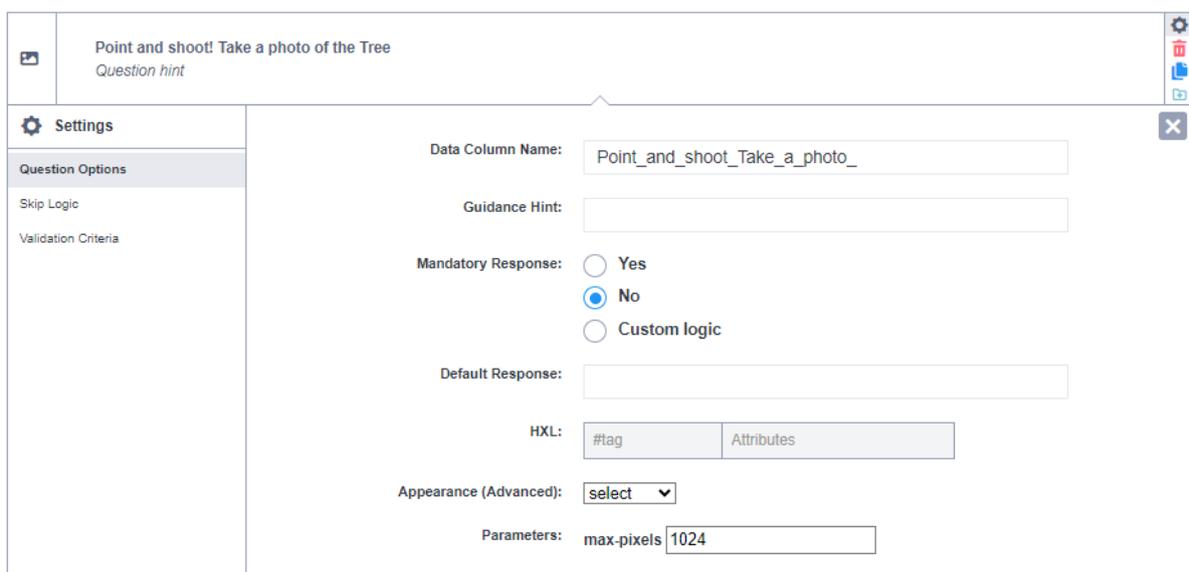
The question will now be listed on the survey.

 A horizontal list item for a survey question. It contains a camera icon, the text "Point and shoot! Use the camera to take a photo", a "Question hint" label, and a settings gear icon on the right.

If you click the top set of text, you can change the question. Change the text to “Point and shoot! Take a photo of the Tree”

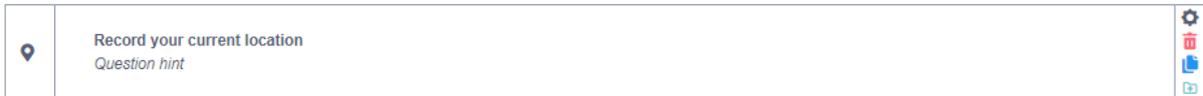
 A horizontal list item for a survey question, similar to the previous one, but with the text "Point and shoot! Take a photo of the Tree".

Click the  icon to edit the question settings. If you want, you can change the max resolution of the photo to stop users from using too much memory. This will bring up a menu:

 A settings menu for the survey question. It has a sidebar with "Settings", "Question Options", "Skip Logic", and "Validation Criteria". The main area contains fields for "Data Column Name" (Point_and_shoot_Take_a_photo_), "Guidance Hint", "Mandatory Response" (radio buttons for Yes, No, Custom logic, with No selected), "Default Response", "HXL" (with #tag and Attributes), "Appearance (Advanced)" (select dropdown), and "Parameters" (max-pixels: 1024).

Question 2.

After question one is complete, press the  button to add a new question. We would like to locate the tree on a map, to do this we need to add the coordinates of where we are during the survey. To do this choose **point**.



This question will prompt the user with a button to press that will use the mobile devices GPS to gather coordinates.

Question 3.

Press  again for a new question. The third question will be a single choice question, asking the user what type of leaves the tree has. Press **select one** to start this question. Change the question to “OSM: Type of leaf” and add the following choices:

1. broadleaved
2. needleleaved
3. mixed
4. leafless

We use “OSM:” in the title as this question relates to OpenStreetMap (OSM) values. We can use Kobo to generate some OSM data, helping to fill in OSM as we conduct the surveys. This question fills in the leaf_type value on OSM (https://wiki.openstreetmap.org/wiki/Key:leaf_type). We do not use capital letters in the answers, as OSM is case sensitive and uses lowercase letters.

Your question should now look like this:



The screenshot shows a survey question interface. At the top, the question title is "OSM: Type of leaf" with a "Question hint" below it. On the right side, there are icons for settings, a trash can, a list, and a refresh button. Below the title, there are four response options, each in a text input field with a trash icon on the left and an "AUTOMATIC" button on the right:

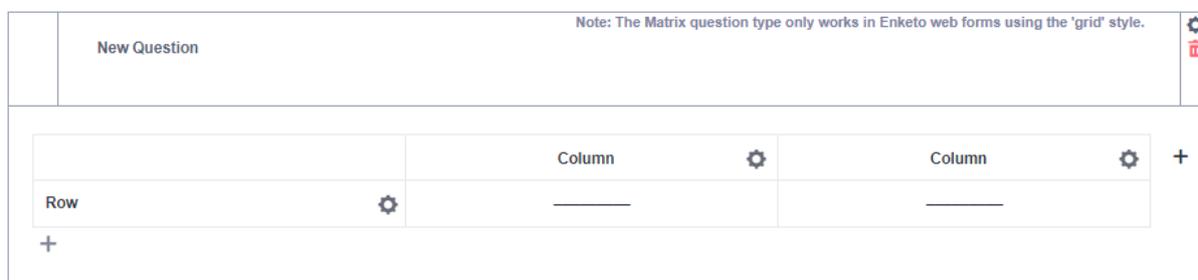
- broadleaved
- needleleaved
- mixed
- leafless

At the bottom, there is a button that says "+ Click to add another response...".

Question 4.

Question 4 will allow the user to state if the tree has damaged the area and describe what the tree has done in terms of impact on the surrounding area. Matrix based questions allow the user to do this with a **single choice** answer and a text answer. For

question 4, press the  button and select **Question Matrix**.

The "New Question" dialog box shows a note: "Note: The Matrix question type only works in Enketo web forms using the 'grid' style." Below the note is a table structure for defining the matrix. The table has two columns labeled "Column" and one row labeled "Row". Each cell in the table has a gear icon for configuration. There are plus signs (+) to add more columns and rows.

	Column	Column	
Row			

To create the question, we want for the tree survey, select the  next to the column. Change the response type to **select one** and change the label to “Has the tree effected the surrounding area?”, state it is required and change the labels to the answer to “yes” and “no”.

Response Type

Label

Data Column Suffix

Required

Label	Data Column Name	
<input type="text" value="Yes"/>	<input type="text" value="option_1"/>	
<input type="text" value="No"/>	<input type="text" value="option_2"/>	
<input type="button" value="+"/>		

Click on the second column, and change the label to “If yes, how has it effected the area?”. Leave the response type as **text** and leave the required box unchecked as its an optional response depending on whether the previous question was answered ‘yes’.

Response Type

Label

Data Column Suffix

Required

Change the question title and row label to “The trees impact on the area.”

Your question 4 should now look like this:

The tree's impact on the surrounding area Note: The Matrix question type only works in Enketo web forms using the 'grid' style. 

	Has the tree affected the surrounding area 	If yes, how has the tree affected the area? 	<input type="button" value="+"/>
Impact 	<input type="radio"/> Yes <input type="radio"/> No	<input type="text"/>	<input type="button" value="+"/>

Question 5.

Another form of media would be nice for the survey, so we will use audio for question 5.

Add a new question and select the **audio** question type.



Change the title to “leave a voice note about the tree”.



Question 6.

For the last specific question, we’ll use another OSM example. Trees in OSM require a number of fields, which can be seen here:

<https://wiki.openstreetmap.org/wiki/Tag:natural%3Dtree>.

For the last one we’ll use the leaf cycle. This will be another select one like with question 3, but with different choices. Create a new single choice question and name it “OSM: Describe the Leaf cycle”.

The choice of answers for this question will be:

1. evergreen
2. deciduous
3. semi evergreen
4. semi deciduous
5. mixed

This question will require a hint to explain what these cycles are, within the question hint under the title, type the following: “Evergreen for plants that are never entirely without green foliage (leaves), Deciduous for trees that are leafless during certain periods during the year, semi evergreen for the plants that lose most but not all foliage, semi deciduous for plants that lose their foliage for a short period of time and new leaves start growing as soon as old leaves fall off, mixed for habitat with evergreen and deciduous vegetation.”

OSM: Describe the leaf cycle
Evergreen for plants that are never entirely without green foliage (leaves). Deciduous for trees that are leafless during certain periods during the year, se

<input type="checkbox"/> evergreen	AUTOMATIC
<input type="checkbox"/> deciduous	AUTOMATIC
<input type="checkbox"/> semi evergreen	AUTOMATIC
<input type="checkbox"/> semi deciduous	AUTOMATIC
<input type="checkbox"/> mixed	AUTOMATIC
+ Click to add another response...	

Questions 7-10.

Select a few different formats and make up some questions for the last set. You can still use single choice for some questions but try and get different types to get used to the different inputs.

Ideas or questions for the tree survey:

- Does the tree provide any shade?
- Estimated height of the tree?
- Does the tree look nice? Can you describe it?
- Has the tree been damaged?
- Has the tree been maintained lately?

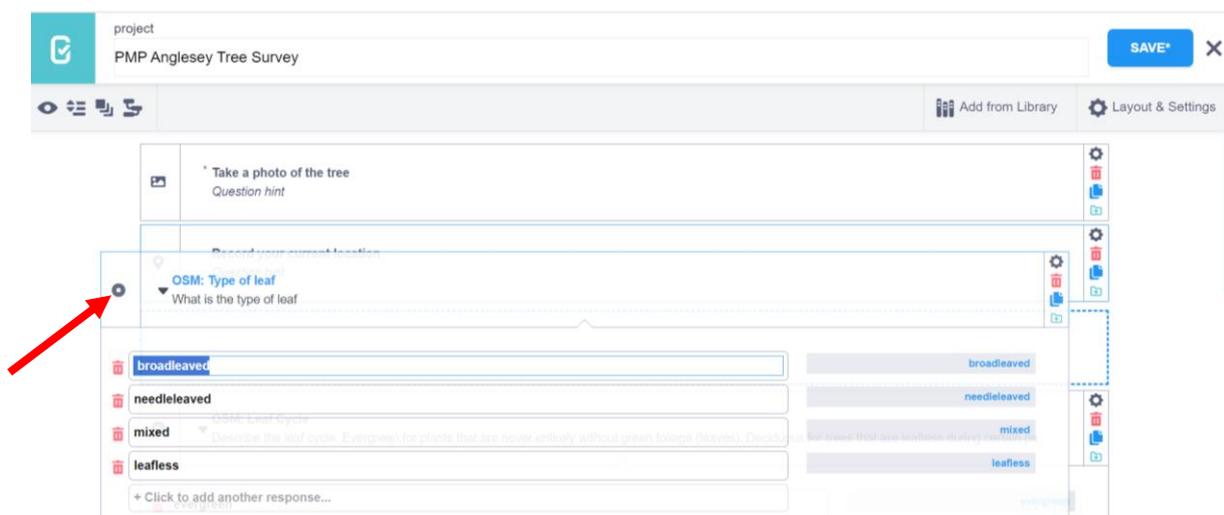
If you'd like to fill in any more OSM data, select from the list on <https://wiki.openstreetmap.org/wiki/Tag:natural%3Dtree> and use select one as the output. The select one output must be a valid OSM tag or type.

You can also include sensory questions such as smell, sight, or sound.

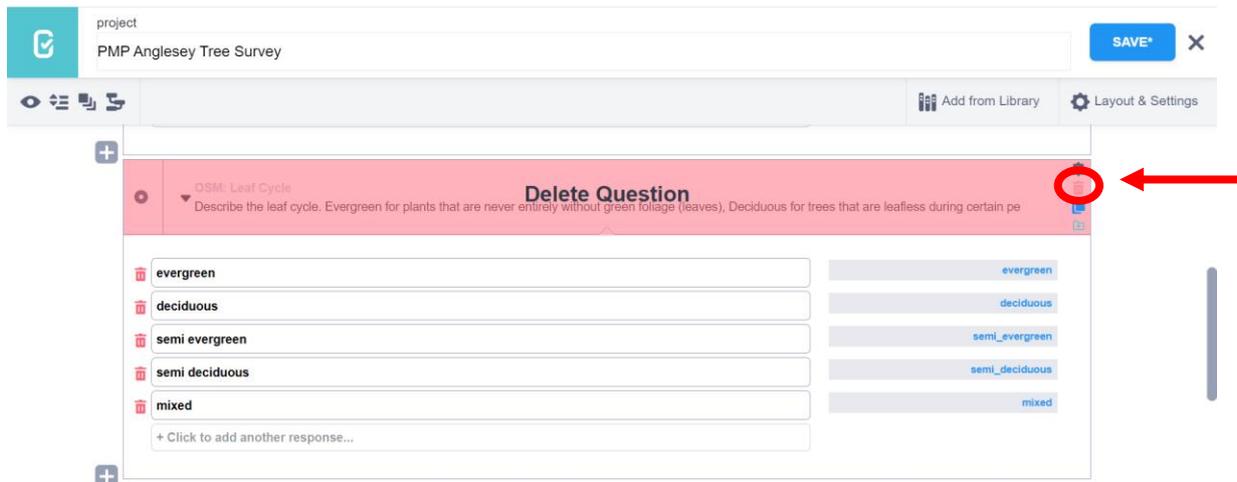
Other functions

You can do various things once you have added your questions.

You can re-order the questions if you think they work best in a different order. For instance, you could put all the OpenStreetMap related questions together. You do this by clicking on the icon on the left-hand side of the question and dragging the question upwards or downwards.



You can delete a question by clicking on the Delete icon in the top right-hand side of the question



project
PMP Anglesey Tree Survey

SAVE* X

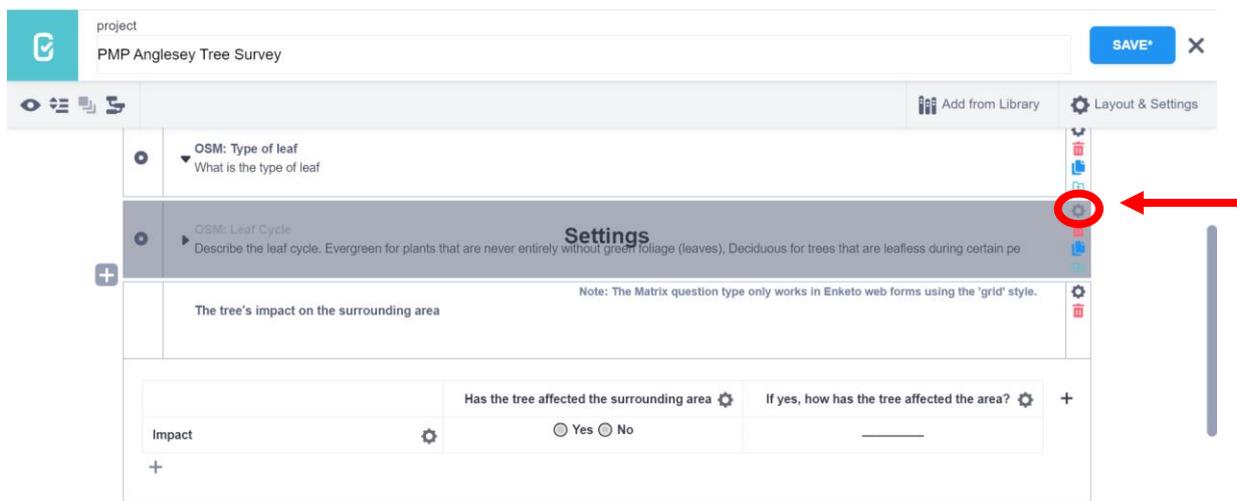
Add from Library Layout & Settings

OSM: Leaf Cycle
Describe the leaf cycle. Evergreen for plants that are never entirely without green foliage (leaves), Deciduous for trees that are leafless during certain pe

evergreen
deciduous
semi evergreen
semi deciduous
mixed

+ Click to add another response...

You can change and the parameters of a question by clicking on the Settings icon in the top right-hand side of the question.



project
PMP Anglesey Tree Survey

SAVE* X

Add from Library Layout & Settings

OSM: Type of leaf
What is the type of leaf

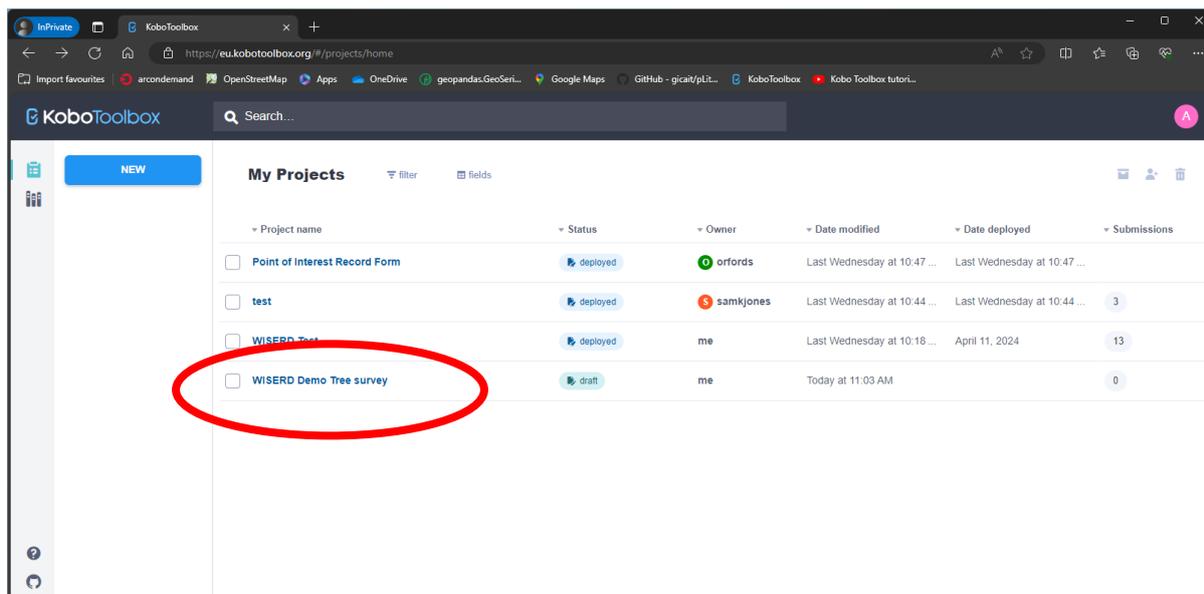
OSM: Leaf Cycle
Describe the leaf cycle. Evergreen for plants that are never entirely without green foliage (leaves), Deciduous for trees that are leafless during certain pe

The tree's impact on the surrounding area
Note: The Matrix question type only works in Enketo web forms using the 'grid' style.

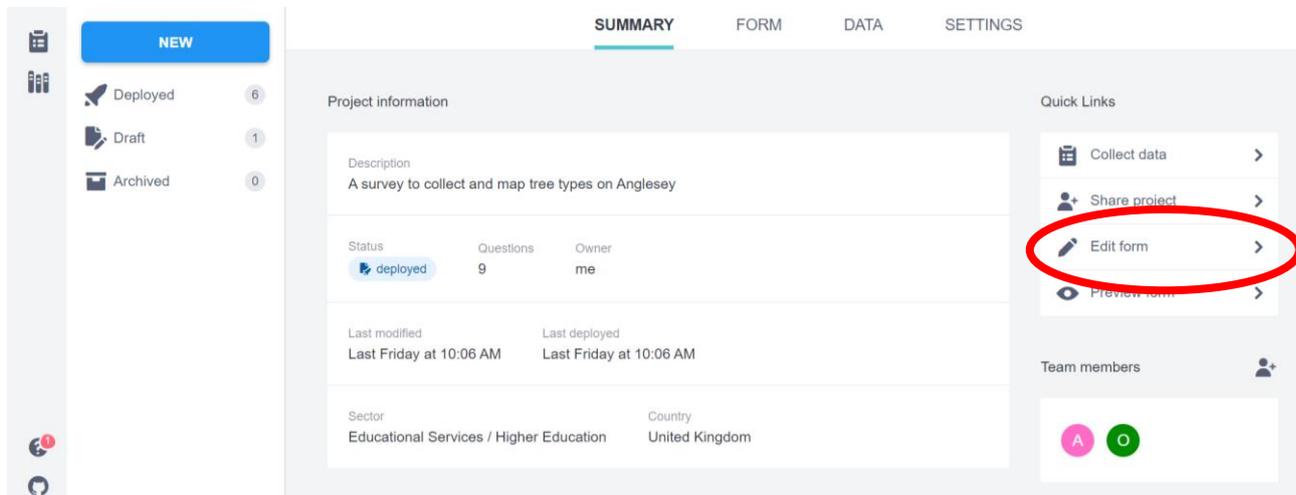
Impact	Has the tree affected the surrounding area	If yes, how has the tree affected the area?
	<input type="radio"/> Yes <input type="radio"/> No	

Once you are happy with your survey press **SAVE** in the top right of the page.

Then click the Return to List icon  in the top left-hand corner to get back to the dashboard.



If you want to go back and edit the survey, click on the survey name (WISERD Demo Tree Survey)



Click on Edit form in the right-hand panel.