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How to be a maker 2 **Week 4**

# Let garden birds tweet online

Is your garden home to birds, badgers or bears when you aren't there? Find out with **Hannah Joshua's** tweeting wildlife camera



Hannah Joshua is a science writer and maker based in London. You can follow her on Twitter @hannahmakes

## New stuff you need

**Old smartphone**  
**Phone stand**

## For next week

**Kitchen foil**  
**Soft sponges**  
**Thin plastic document folder**  
**Piezo buzzer**  
**Electrical wire**  
**Waterproof container**

## Next in the series

- 1 Moisture-sensing plant
- 2 Moisture and temperature-sensing plant
- 3 Plant auto-waterer
- 4 Tweeting wildlife cam
- 5 **Pest scarer**  
Help keep rats at bay
- 6 BBQ thermometer
- 7 Rain alarm
- 8 Mini weather station
- 9 Remote controlled pest-proof bird feeder part 1
- 10 Remote controlled pest-proof bird feeder part 2

NOW for something completely different. Maker projects aren't just about microcontrollers and small electrical components. They are also about recycling old tech, and harnessing apps and online tools to supercharge your abilities.

This week we will pair an old smartphone with internet wizardry to make a motion-activated camera that posts pictures to social media. That will let the birds in your garden tweet as many selfies as they want.

To start, get hold of an old smartphone. All it needs is an internet connection and a camera. Clear any old photos off it – you don't want to accidentally tweet embarrassing old holiday snaps.

There are three parts to the project: take the photo, get it online and post it on social media. For step one, we can use a free motion-detection app. I am using Motion Detector Pro for Android phones, but if you have an iPhone, you can use Motion Detector Cam Free. When the app is open, it will take and save a photo every time something moves in front of the phone's camera.

Now download the Dropbox app and make an account if you haven't got one already. Dropbox is a cloud service offering 2GB of free online storage, or more for a fee. The free account is plenty for us. In the app's settings menu, find "Camera uploads". Turning this on will synchronise your phone's photos with a folder in your Dropbox account. So every time a pic is taken by the motion detector, it will get uploaded to the cloud.



DAVID STOCK FOR NEW SCIENTIST

## Make online

**Projects so far and a full list of kit required are at [newscientist.com/maker](http://newscientist.com/maker) Email: [maker@newscientist.com](mailto:maker@newscientist.com)**

Now for the clever bit. There is a free app or web service called If This Then That (IFTTT) that enables you to connect different apps and accounts. It lets you make routines that have two parts, a trigger and an action. If this trigger happens, then that action gets done.

Make an account, log in to IFTTT and hit "new applet" to create your first routine. Click "+this", then search for "Dropbox" to connect that account. Follow the directions, then select the "New photo in your folder" option. Enter "Camera uploads" in the box (since this is the name of the Dropbox folder your phone photos are syncing to) and hit "create trigger".

Next, click on "+that" and search for Twitter. You will be prompted to connect your Twitter. Make a dedicated account for your garden to stop the wildlife monopolising your personal feed. Select the action called "Post a tweet with image". Enter any text you want to accompany your tweets then click "create action" and "finish". Your wildlife camera is ready.

Leave it in a window, plugged into a battery pack or charger, or stash it in a clear, weatherproof container outside.

Now your gardens are online, they can make friends. Tweet me @hannahmakes and I promise to follow every one of them. ■