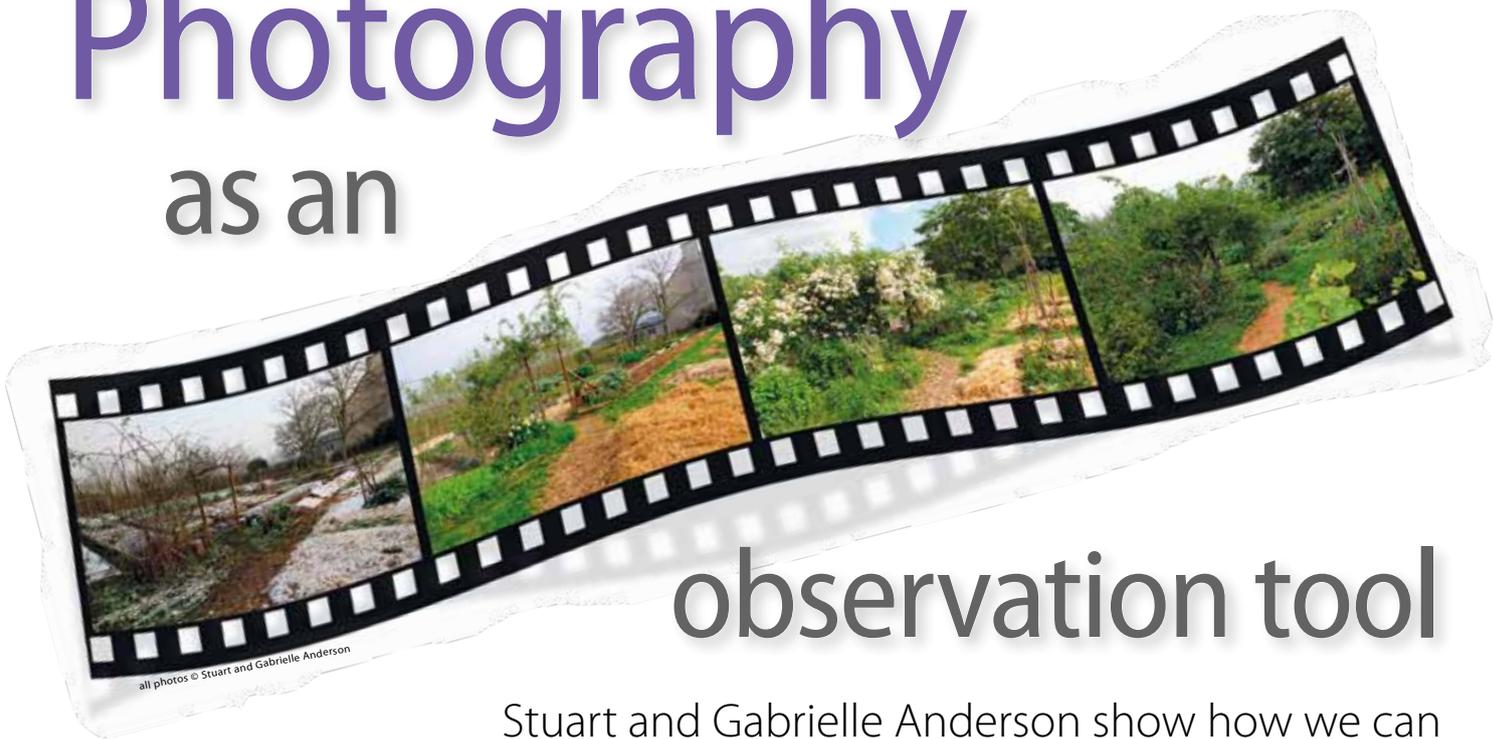


# Photography

as an



## observation tool

Stuart and Gabrielle Anderson show how we can use photography as a tool for permaculture design and discovery

“Does a camera come between you and the subject or does it make you look more closely?”

We'd like to show you that the camera can be a really useful permaculture tool that will improve your observation, help you learn and aid your record keeping. You certainly don't need expensive equipment for the ideas we're going to suggest, a compact digital camera will do and, if you have a smartphone, you're probably already carrying one with you.

### metadata

You may already be using your camera as an extension of your notebook but did you know that, along with the picture, a digital camera records hidden 'metadata'. Along with lots of other information, the date and the time you took the photo are recorded, along with the location if your camera is GPS enabled. † You take a photo of the first primrose of the year or a fallen leaf covered in the rime of frost one morning for your aesthetic pleasure, but you're also noting the date. Over the years, you'll create a record of the last frost in your garden along with similar events that will inform your planting and show

similarities and differences from one year to the next. As we put this article together, we've been searching through our photos and came across a picture of crocus flowers emerging in February. A quick trip outside to check and, a year to the day later, the crocuses are at exactly the same state. Of course, not every plant is that punctual!

### time-lapse

Perennial permaculture advice is to observe your plot over 12 months before you make design decisions. In the 1995 film *Smoke*, Harvey Keitel's character Auggie, stands in the same place each day to take a photo of the junction outside his shop in Brooklyn. Urging his friend





to slow down as he flips through the album, a somewhat exasperated Paul replies that they're all the same. "They're all the same but each one is different from every other one," says Auggie, "You got your bright mornings and your dark mornings, you got your summer light and your autumn light, you got your weekdays and your weekends... The earth revolves around the sun and every day the light from the sun hits the earth at a different angle." The discipline of taking the daily photo helped Auggie to observe his environment more thoroughly and has inspired us to undertake a similar project. For the past year, each week, I've been placing the tripod at four points on our smallholding to record the same view.

In the depths of winter, when ordering seeds and planning for the new season it's all too easy to forget how big some plants get in mid-summer. Seeing the different months together, this picture project has shown



*Title picture:* Sequence of photos taken throughout the year from the same position.

*Below left:* Crocuses blooming at same time as previous year.

*Above:* Recording fungi.

*Top right:* Bee drinking nectar from a hole bitten through the side of a comfrey flower.

*Below:* Glow worm revealed by camera and (*inset*) as seen by the human eye.

us how the mature plants occupy the space. Distracted by the work involved or perhaps by the frothy beauty of the climbing rose, we've failed to notice the areas that are non-productive, underused or badly maintained; the time-lapse viewpoint has thrown this into sharp relief and helps the re-evaluation and refining of the original design decisions.

### take only photos, leave only footprints

Whether it's insects, wild flowers or mushrooms, a photograph is a non-invasive way of taking things home to study. Fast-moving things are frozen for a closer look that can often be very revealing. Have you noticed how bees, particularly bumblebees, love comfrey flowers? Do you know how they drink the nectar? Plants and their pollinators (insects and sometimes birds) have evolved together, thus a deep flower needs a long-tongued pollinator... or a crafty one.

In *A Sting in the Tale* by Dave Goulson, we read that bumblebees that can't access





deeply stored nectar through the conventional route will often bite little holes at the base of the flower to gain direct access. Sure enough, as the photo shows, at the base of the deep bell-shaped flower of the comfrey are little frayed holes, browned at the edges in the way a cut apple discolours, along with a bumblebee demonstrating how to hang onto the side of the plant to siphon off the nectar.

Digital technology can also reveal something hidden to our eyes. During a late evening slug patrol in the polytunnel, I spotted tiny sparkles of fluorescent green down by the ground. Switching on the torch made them disappear, so I took a snap. (Your camera may have a setting especially for low-light situations, which will help.) With the photo loaded into the computer, I made some adjustments to the exposure to reveal the glow-worm (*Lampyris noctiluca*) in all its beauty: a wingless female beetle, hoping to attract a mate. By the way, it's good news for the polytunnel as glow-worms hunt snails and slugs.



Panasonic TZ7), I was amazed at the dragonfly's face and eyes, revealed on the computer screen as I zoomed in, details I couldn't see with the naked eye.

Being able to snap away and then come inside, zoom in and compare to pictures in books and on the internet has also helped us identify plant diseases and pests: one year, we identified pig lice, which were causing our newly-arrived weaners some distress, from a macro shot.

### macro – your camera as a microscope

Early one summer's morning, while doing the rounds of the animals on our smallholding, I took a moment to survey the pond and saw what I took to be a couple of insects amorously coupled. 'They' obligingly stayed in place while I ran inside to fetch my camera. In fact, what I was looking at was a dragonfly emerging from its nymph casing, waiting for its wings to dry before flying off. Even with just a compact camera (an old

## Photography Competition



### And the winner is...

Juan Anton waters the plants in his polytunnel/ greenhouse in Spain. The structure is made from bamboo covered in plastic. The stone and earth wall and the tanks of water absorb heat throughout the day and radiate it out at night, which helps to guard against frosts.

photograph by  
*Hélène et Benoit*

Hélène et Benoit of Sideways (<http://side-ways.net/en>), win a week's holiday for two at Stuart and Gabrielle's converted barn in Brittany, plus free places on one of their courses. Thank you to everyone who entered. For details of Stuart and Gabrielle's gite accommodation see:

[www.brittanycountrygite.com](http://www.brittanycountrygite.com)



Add in some social media and you can use your photos to get help from others. A plant appeared in some pasture that we couldn't identify, nor could three neighbouring farmers I asked. I posted a photo on our blog and got a very quick response, telling me that it was crosswort (*Cruciata laevipes*) and, reassuringly, not at all poisonous to our sheep.

### back up

Please don't forget to back up all your digital photos! Digital storage, on an external hard drive for example, gets cheaper and cheaper and will save you from a whole world of pain if your computer breaks down or is stolen. In discussing the utility of carrying a camera, we shouldn't forget what fun and pleasure there is to be had from taking, looking at and sharing photos 🌱

*Stuart and Gabrielle Anderson live on a 1.2 hectare (3 acre) permaculture smallholding in Brittany, France. They grow fruit, vegetables and firewood, raise sheep, pigs, chickens, ducks and bees and rent out their gîtes:*  
[www.permacultureinbrittany.com](http://www.permacultureinbrittany.com)

† There are many free software products that will help you organise, edit and read the metadata from your photos, for example: for PCs you have Picasa and for Macs, iPhoto. GIMP (for all platforms) is more sophisticated, it is open source and therefore also free.



*Left: Dragonfly emerging from its nymph casing. Computer enlargement showed incredible detail in the eyes.*

*Above: Underwater shot of the roach and oxygenating weed in our pond.*

*Right: A wildlife camera trap reveals a nocturnal visitor.*



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