

Setting the standard in ecological fieldwork with thermal imaging cameras

Chevron Green Services' Consultancy division had a theory that using thermal imaging cameras as part of their on-site Ecological Clerk of Works would have a superior ecological benefit compared to visual checks alone. We trialled this theory on the A303 whilst providing ECoW supervision to Chevron Green Services.

Our Theory

We had seen thermal imaging cameras used with great success in other industries but hadn't seen them being used in ecology. Our theory was that using thermal imaging cameras would be a beneficial enhancement to our Ecological Clerk of Works provision. It would make the work more comprehensive, safer for our teams, more efficient for our clients, and less disruptive to the habitats we were protecting, therefore further enhancing the biodiversity of the site.

The Challenge

Traditional survey work is done by eye, and added to a data system which means there is a lot of paperwork. Some work is done at night which makes it harder. The surveyors can find themselves scrabbling up a verge or down a bank to get the best view, or trying to make their way through dense vegetation. The view can be restricted based on the objects you're surveying or the species you're protecting.



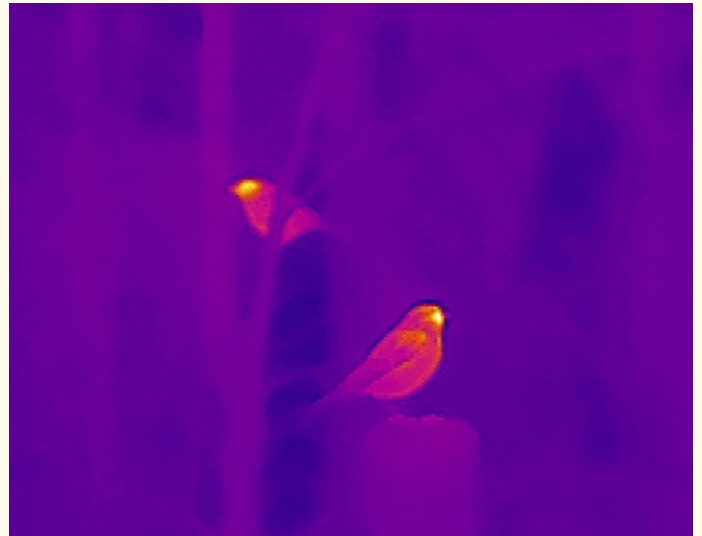
The Outcome

Through our trial we confirmed that using thermal imaging cameras as part of our ECoW provision is ecologically valuable because it means that we are being less disruptive to the sites we're protecting. It means that our teams don't have to venture into (and therefore disturb) dense vegetation, meaning any species found by the cameras and shown on screen in the area are less disturbed than they would be if the checks had been manual. This supports the maintenance of the natural biodiversity on any site.

Being able to use the cameras is also more effective than a visual check, providing more reassurance to our clients that we are sure of our findings. As well as enabling us to check further beyond our standard reach, including higher, deeper, further, than we would have been able to with the restrictions of the naked eye.

We have found that it is also a quicker way to undertake the works, which means our teams are onsite for less time in safety-critical environments (e.g. on the side of a motorway). It also means that the subsequent teams following behind to clear site lines or remove hazardous trees can get to their work quicker. So not only is it also safer for all site teams, it's more efficient because they are off site and out of the habitats quicker too. Meaning that any temporary disturbance caused to wildlife is shorter.

As well as all the above benefits, it is also a more cost effective option for our clients.



The trial was a **success**.
Using thermal imaging cameras is now the **standard operating procedure** for all of our **ecological fieldwork** and **ecological clerk of works** provision.

