

**Atkins development and utilisation of great crested newt detection dogs
Nationally
Various clients**

BIG Biodiversity Challenge Award Category: *Innovation Award*

Project overview

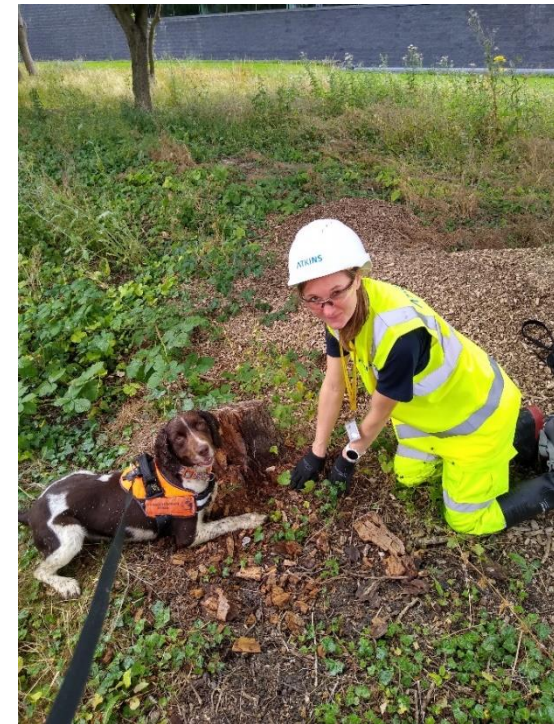
Atkins development and utilisation of great crested newt (GCN) detection dogs to facilitate safe, effective, efficient and sustainable GCN survey and mitigation.

What were the biodiversity conditions on site, prior to the enhancement?

GCN detection dogs have been utilised by Atkins for GCN survey and mitigation on various sites since 2018. The biodiversity conditions differ from site to site, however, all are sites where vegetation clearance or intrusive works are needed to facilitate development, which can harm or kill GCN.

What were the reasons behind this project ?

The reasons behind the development and use of GCN detection dogs was to develop a more efficient, effective, sustainable and cost effective method of detecting GCN at development sites. This method of GCN survey and mitigation ensures that GCN are effectively identified on sites (if present) and removed to a place of safety under an appropriate licence. Traditional methods of GCN terrestrial survey, capture and mitigation are considered to be much less effective in finding, capturing and removing all GCN safely from a development site.



A pre-construction GCN detection dog search being undertaken at a development site during 2021.

What were the biodiversity measures taken?

- Atkins, in collaboration with Tarmac, Natural England and Wagtail UK Ltd, developed, trialed and scientifically tested the **world's first ever scientifically proven GCN detection dogs**.
- The detection dogs are able to effectively and efficiently indicate the location of individual GCN on sites to provide **significant time savings** (avoidance of lengthy GCN trapping programmes), **improved health and safety** (less need for surveyors to survey ponds during the night/less time required to survey terrestrial habitats, construction sites, etc.) and a **more sustainable approach** (much less time required on site, no use of plastic exclusion fencing, etc.)
- Atkins were subsequently **granted the first ever Natural England mitigation licence and the first ever Natural Resources Wales mitigation licence** that included the use of GCN detection dogs as the primary method of GCN mitigation.
- Atkins partnered with Engineering Matters in 2021 to produce a Podcast 'Engineering with Dogs' to share knowledge of this innovative method of GCN survey and mitigation.
- The share knowledge further, Atkins **spoke at the UK's first ever Wildlife Detection Dog Conference** in January 2021.
- Atkins also presented at the UK's **first ever GCN detection dog training course** in March 2022.
- Atkins are currently working with our approved suppliers, Paws for Conservation, to **develop, trial and scientifically test the next generation of GCN detection dogs** to meet demand and maintain high standards in the industry.

Atkins are seen as leaders and influencers in the development and utilisation of GCN detection dogs in the industry. The development and use of GCN detection dogs is innovative and replicable, it benefits the industry as a whole and protects GCN more effectively.



Initial GCN detection dog trials undertaken by Atkins in 2017



Atkins use of GCN detection dogs has won two Rail Industry Environmental and Sustainability awards (in 2021 and 2022)

Further information

"It's amazing how quickly Rocky and Arnie managed to cover the worksite in Hitchin and check if there were any GCN. This method saves valuable time and reduces delays to vital improvements to the railway. As we work to protect the environment and increase biodiversity near the railway, the detection dogs will help us protect GCN, so they can be moved to suitable habitats." **Steve Hughes, Programme Director for Network Rail**

"GCN detection dogs are an efficient and sustainable method of risk mitigation against loss of programme and subsequent costs." **Monica Symes, Environment and Sustainability Project Manager, Atkins**

"By using these specially-trained dogs we are able to identify where the newts are living and ensure the impact on both the wider environment and ecology is kept to an absolute minimum. We also reduce our carbon footprint by reducing the number of times we need to visit site to set up fencing and buckets and search for newts." **Matthew Cooper – Project Manager, South East Water**

"The GCN detection dogs proved to be a real benefit compared to manpower alone: finding the GCN more efficiently and effectively and in a non-invasive way. They worked incredibly quickly, speeding up the search process and focusing on specific areas to identify where there were pockets of GCN. Keeping the works programme on schedule would not have been possible without them." **Thomas Oliver - Ecology Manager, EWRA**

Project Team

Atkins, Wagtail UK, Tarmac, Natural England

What was the motivation for carrying out the enhancement?

The motivation for developing and utilising GCN detection dogs came from a desire to significantly improve GCN survey and mitigation, not just for Atkins but for the industry as a whole. Atkins has invested a huge amount of time and effort into the development and utilisation of GCN detection dogs and this has gone beyond normal business practice.



A pre-construction GCN detection dog search undertaken earlier this year.