

THE CASE *study*

Keeping you up-to-date with the world of **environmental noise**



The silence of the lambs

The sound of new-born lambs bleating is something that most people would be happy to wake up to on a Spring morning – or perhaps not?

Noise consultant Louise Alderson, had the unusual assignment of monitoring noise levels from baby lambs and their mothers on a farm in Cumbria following a planning application to build a housing development on nearby fields – owned by the same farmer.

Environmental Health Officers (EHO) from the Local Authority had raised concerns that noise from the annual spring lambing could be deemed too loud for the new residents who wanted to enjoy a rural setting – but possibly not that rural.

“It is one of the more unusual jobs I have been awarded,” agreed Louise. “Once the lambs are born they are transferred to lambing sheds with their mothers but the EHO was worried that the combined noise they made would impact on the amenity of future home owners if planning permission was granted.”

“One part of the Invictus that is invaluable is the ability to have audio recordings once noise exceeds a predetermined level so peaks can be identified.”

Louise used the Cirrus Environmental Invictus to take 2 x 24 hours surveys in February and March at different times of the lambing cycle.

“Measured levels determined that there was no significant adverse impact,” explained Louise. “The highest hourly ambient level over the 24 hour period was 53 dB LAeq but that was actually caused by helicopters overhead, the highest we got from the lambs was in the 40s.”

“That is one part of the Invictus that is invaluable – the ability to have audio recordings once noise exceeds a predetermined level so peaks can be identified.”

Stay connected with the environmental noise experts



Helicopters and aircraft

In this particular area there were quite a few helicopters and aircraft and these were picked up by the Invictus.

“You find these days that developers are being asked for more and more studies or evidence over issues such as environmental noise, particularly in rural locations. Some would seem almost comical but it is becoming more the norm to meet planning requirements and developers have to comply.”

Due to the rural location, Louise was able to utilise the remote access and log in functions of the Invictus to check her measurements. “My job takes me all over the region so having the ability to use the remote access function of the equipment is essential. I also like the fact that the equipment measures octave band frequencies at the same time, some instruments only do this as a separate function but the Invictus can do them concurrently.”

Louise originally used the Cirrus Environmental hire service to trial the Invictus but has since gone on to buy her own kit. “It is easy to set up, the case is very compact and, combined with the other functions I like so much, I decided to buy one,” she added.

Another case solved by Invictus

Louise has also used the Invictus for another case near Penrith which centred on a noise complaint from a resident who lived more than 2km away from the site of a forestry plant. The lady had complained of a very specific frequency noise that was irritating her when out in the garden.

“The issue here was that the property was

also at a similar distance to the M6 so there was a constant background noise from road traffic, but when volume of traffic on the motorway reduced this low frequency noise became slightly more apparent. We undertook a survey over five days to determine whether the noise had an adverse impact and if anything could be done to mitigate it, but the results showed it wasn't an issue and so the client had the specific evidence to present to the resident.”

“It is easy to set up, the case is very compact and, combined with the other functions I like so much, I decided to buy one.”

The Invictus can be used on its own as a portable environmental noise monitor or combined with other instruments and sensors to form part of a larger, more comprehensive noise measurement and management system. For medium and long term noise monitoring applications, the Invictus can be combined with a secure enclosure for wall or mast mounting.

The Invictus also has a large, clear colour touch screen which allows the instrument to be deployed quickly so Louise could see the exact status of the system. It uses the very latest technology to provide a wide range of noise measurement parameters and comes supplied with the Noise-Hub² software package to make up the ideal instrument for any application where ease of use and high performance go hand in hand.

Invictus key features:

- **Reliable:** Purpose designed for environmental noise measurements
- **Intelligent:** Simultaneous measurement of all parameters
- **Informed:** Audio recording, SMS, email and twitter alerts
- **Control:** Communicate remotely via 3G, GPRS, Wi-Fi, Ethernet (LAN) or Radio Modems
- **Flexible:** Set different measurement periods and alerts for different times of the day and days of the week
- **Responsive:** Receive alerts before noise levels are exceeded with the proactive % Noise feature
- **Manage:** Noise-Hub² Software allows data to be downloaded, reports created and data analysed
- **Integrate:** Includes additional inputs and outputs for integration of weather data and video recording systems
- **Free training** to cover all aspects of setting up and using your Invictus Monitor along with reporting through its associated Noise-Hub² software

Cirrus products used in this case study

- Invictus CR:247 Portable Noise Monitor
- Noise-Hub² Noise Monitoring System Software