

## The UK Acoustics Network Newsletter March 2020

### Dear Members

These are very unsettling times for all of us. The situation with COVID-19 has resulted in a total shutdown of all the UK universities. Many businesses have had to scale down their operations and send their staff to work from home. As a result, any experimental work has been suspended. A number of UKAN events are cancelled or postponed as a result of this dynamic situation. We are trying to keep our website up-to-date to reflect these cancellations. Check our [Events page](#) or write directly to the organisers of a UKAN event if you are unsure whether or not this event is still going ahead. Good news is that the International Year of Sound has extended into 2021, making now a good time to plan to maximise its success.

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#### Arranging on-line events

In this situation UKAN life should not stop and we encourage you to come up with alternative ideas to organise and hold UKAN events over the internet. The UKAN has resources and is happy to provide you with a software platform to facilitate events. Sheffield University can host Webinars for UKAN SIGs using [Blackboard Collaborate](#) with breakout rooms, screen sharing, polling, recording and more. [Google Handouts](#), [Go to Meeting](#) and [Microsoft Teams](#) are good examples of other on-line UKAN meeting/communication software platforms. These are used extensively by university staff to connect with multiple participants over a PC, tablet or phone. More and more events are now being organised via these software platforms, e.g. the next UK-RAS conference in April which [has](#)

[completely moved on-line](#). If you are booked on a cancelled event, please ring-fence the time you would have spent with UKAN to consider how you or your organisation can: (i) contribute to IYS2020/21 through [sharing resources](#) and getting information out into the public domain; (ii) put together positive news and stories through your media teams, contacts and UKAN highlighting the impact of acoustics on society and its scientific, social and environmental contribution; (iii) use this opportunity to develop new grant proposals or published papers related to acoustics.

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#### Potential Impact of COVID-19 on Acoustics Related Research

The main funding body for the acoustics related research in the UK, UK Research and Innovation, fully realise that the ongoing COVID-19 situation is significantly impacting on the research and innovation community. UKRI funding programmes will continue and UKRI are monitoring the situation, identifying impacts on specific calls or research disciplines. Their main funding systems, e.g. [Je-S](#), are operating as normal. They will review their call deadlines and, if required, extend or reopen calls in light of COVID-19. They will continue to receive and decide quickly on grants relevant to the management and follow-up of the COVID-19 pandemic and will allow 'No-cost' extension requests to grants impacted by coronavirus. More information from UKRI can be found [here](#).

## Submission of EPSRC UK Acoustics Network+ Application

A positive highlight for the future of the UKAN was the submission of the UKAN+ application. Support from our non-academic partners is amazing. The UKAN+ application has received over £1.1M of direct financial and in-kind support from the industry, government and charity organisations. We are very grateful to all those supporting us.

We submitted the proposal to the EPSRC on the 12<sup>th</sup> of March. We requested a £1.2M Network Flexible Fund to be used competitively to support research related activities of UKAN+. £200k of this fund will be used for the usual network activities fund such as workshops, further industry engagement, mobility, communication and outreach. £100k is the Early Career Research support fund to support our 200+ member [Early Career Group](#). The rest of the Flexible Fund (£900k) is the pilot research investment fund to support 3-6 month exploratory projects to test research and KT ideas. This money will primarily be used to cover the PDRA time and distributed on a competitive basis across UK institutions over the duration of the grant. It will not be restricted to members of the UKAN+ only. These investments will be topped up with additional £200K-300K direct financial support offered by our non-academic partners.

We expect that the decision on the UKAN+ application will be made by the end of the 2020.

## Matlab and Simulink for Acoustics

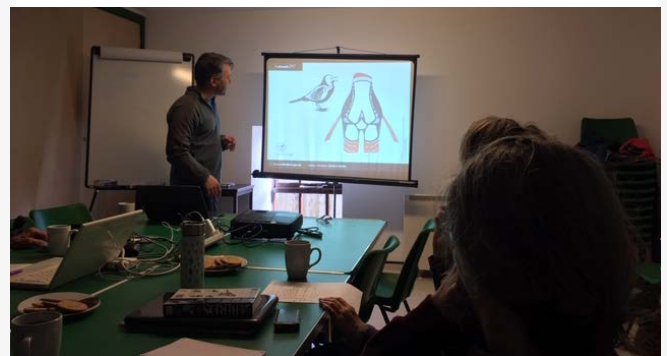
Because of the COVID-19 situation lots of research in the next few months will be done on a computer. Matlab by Mathworks is a popular computing platform and their File Exchange has a lot of [examples on Acoustics created by the MATLAB](#)

[community](#), that can be used for teaching and research. There is a free [Acoustic toolbox in MATLAB](#) developed by UCL and University of Brno. Mathworks also stores several relevant books which are a part of their Book Programme. These are: (i) [Control of Noise and Structural Vibration: A MATLAB-Based Approach](#); (ii) [Finite Element and Boundary Methods in Structural Acoustics and Vibration](#). Our contact at Mathworks is Martina Sciola ([msciola@mathworks.com](mailto:msciola@mathworks.com)). She is happy to support the UKAN members and respond to any queries regarding the use of Matlab and Simulink for acoustics related research and training.

## Ingleborough Soundscape Project Update

Not surprisingly, the Ingleborough Soundscape Project has been put on hold until the current health crisis has passed, when it will be extended to cover the seasons that have been missed. However, the team have collected plenty of data to be getting on with during the 'shutdown' period. The SM4 (Song Meters) provided by UKAN have been a game-changer to demonstrate how the bird population change with the seasons, and for identifying unseen birds by their acoustic signature.

Carlos Abrahams from Baker Consultants Ltd at the Birdsong Identification Training event.



The study site, Colt Park Wood, is over 400 years old and it has never undergone a systematic ecological survey. In this site the team have been able to add 13 new species of birds to the 65 noted in [Warden's diaries](#) between 1958-1996. The provision of a UKAN funded Birdsong Identification workshop, delivered by Carlos Abrahams of Baker Consultants Ltd on 13 March 2020, has further extended the project's potential for identifying unseen birds by their song and their calls.

Immediately prior to the suspension of the project the team also collected commercial aircraft overflights from Colt Barn using a B&K 2250L and a flight tracker app. The data measured from 30 overflights ranging in height from 23,000-38,000 feet to plot a 32dB(A) Tranquillity / Wildness Contour around the study site. The aircraft overflight data was gathered on behalf of Dr Antonio Filippone at the University of Manchester who is considering a research proposal based around the propagation of high altitude aircraft noise. Should you require more information or wish to consider a joint research proposal please email him at [A.Filippone@manchester.ac.uk](mailto:A.Filippone@manchester.ac.uk). For more information on the Ingleborough Soundscape Project contact Dr Rob Pheasant at [R.J.Pheasant@oulook.com](mailto:R.J.Pheasant@oulook.com).

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### **Staying in Touch, Sharing Stories and Planning Community Response**

Finally, we would like our members to share with us any stories about impact of acoustics on the current situation, lives of people and wildlife. There has definitely been a noticeable reduction in the level of environmental noise due to the reduced traffic and travel. We would also like to listen to your stories on how this situation affects your research and business to help to plan collaborative

mitigation measures during this crisis and immediately aftermath.

Do also be the sharer of positive news during the COVID-19 situation. One example on Twitter is [@SIBirdClub](#) (started by Chris Packham who is self-isolating); a great place to share bird songs and encourage folks to make and post their own recordings and use [Audacity free open source acoustic software](#). A constructive activity and introduction to acoustics during social isolation. Another example is Bruce Drinkwater's news (NDE SIG Leader [@sonic\\_bruce](#)) about his most read paper in Journal of the Royal Society, <https://royalsocietypublishing.org/doi/10.1098/rsif.2019.0692>.

Our community responds actively to this situation. For example, the Institute of Acoustics produced new guidelines [Practicality and Reliability of Baseline Sound Level Surveying and related matters during the current COVID-19 pandemic](#).

Do not hesitate to send more of these news stories to [info@acoustics.ac.uk](mailto:info@acoustics.ac.uk) or Tweet them including [@acoustics\\_ac\\_uk](#). TWITTER is really coming into its own as a connection and communication channel. With all the potential STEM students with time on their hands, this is a lifetime opportunity to steer their interest and curiosity towards Acoustics. Keep an eye on acoustic Twitter feeds and check if the 'poster' or 're-tweeter' is listed in our [Directory](#) if they are not it would be great if you could send a link to the UKAN website to them.

### **Stay safe.**

Yours sincerely,

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