

THE BOTTOM RUNG

Noise: the challenges, trends, technologies, politics and opportunities

Looking forward; seeking solutions

Autumn 2021

20MPH: 'AN UNSTOPPABLE FORCE'



Paris, Brussels, Wales, Scotland, among the many places across the world where 20 mph (30kph) is becoming the norm for built-up areas. The benefits are considerable: reduces road danger, noise, pollution, emissions and the cost to the taxpayer. Easier to walk and cycle. The benefits are so clear that renowned transport expert, Professor John Whitelegg, called 20mph limits 'an unstoppable force' in conversation with Rod King, the man who has done so much to put them on the international agenda: <https://vimeo.com/609891191>

Since the introduction of a 30 kph speed limit in Brussels in January of this year noise pollution from road traffic has halved. There has also been a 25% reduction in deaths and serious injuries and an explosion in the number of new cyclists (over the last two years). <https://www.thebulletin.be/report-shows-zone-30-having-positive-effect-road-safety-brussels>

For more information on 20mph check out <https://www.20splenty.org/>

LEFT TO LIVE WITH YOUR NEIGHBOUR'S NOISE

Local authorities forced to cut enforcement staff as noise complaints soar

Environmental Health Officers (EHOs) can be life-savers for people experiencing neighbour noise. These are the people who investigate noise complaints on behalf of the local council. They also deal with matters like waste, rubbish, dirty premises and air pollution. But cuts in Government funding to councils has meant that they have had to reduce the number of EHOs they employ. **The statistics are startling (1).**

- 58% of councils have stopped providing some services;
- 77% have less staff in environmental health;
- 63% say the public have to wait longer for a response;
- 42% no longer investigate low-risk complaints;
- 37% undertake fewer inspections;
- 73% do less preventative work;
- 29% are less likely to pursue complex cases;
- 27% are sharing services with other councils;
- 40% provide less out of hours services
- 32% do less investigatory work

People in deprived areas are worst hit - low or no wage earners living in substandard accommodation; poor, older and disabled people who are more likely to be digitally excluded.

According to the survey people in more deprived areas are worst hit: low or no wage earners living in substandard accommodation; people who are very poor, older and disabled people who are more likely to be digitally excluded.

That survey was published in 2018. Since then, noise complaints have soared. This is partly the result of lockdown. Local councils received 1,000 complaints a day about noisy neighbours during the height of the pandemic. Research by Churchill Home Insurance, based on Freedom of Information requests to all councils in the UK, found that between April 2020 and March 2021, 368,924 noise complaints were made - a 28% rise from the previous year, with 86% of the councils reporting increases. But only 11% of people who said they had been affected by noisy neighbours had reported it to their local council, suggesting the true number of noise-related issues could be much higher.

Although neighbour noise complaints may fall post-lockdown, there are no signs that the number of EHOs will increase. However, there is a new factor on the horizon. 'Generation Rent' is being forced to rent properties, many of which are poorly insulated. They are unlikely to sit back quietly and accept the noise from neighbours. Could they be the trigger that will force Government and local councils to act?

(1). <https://www.unison.org.uk/content/uploads/2019/04/Damage-environmental-health.pdf>

Just imagine:



IF THE NOVEMBER INTERNATIONAL CLIMATE CONFERENCE WAS ABOUT NOISE.....

Here are the measures we'd be pressing for:

Traffic and Transport

- Lower speed limits on all roads within five years
- Traffic reduction, by means of road user charging, controls on parking, affordable and accessible public transport and investment in active travel and mobility hubs
- A particular focus on main roads where noise tends to be worse
- Move towards electric cars
- Fiscal measures to encourage a switch from air to rail where practicable
- Prioritise research into quieter planes
- Mandate best operational practice for all airports

Homes and Neighbourhoods

- Sound insulate homes as a priority
- Put a moratorium on the installation of heat pumps until their noise impacts have been independently assessed
- Pro-active teams in all local authorities to tackle neighbour noise effectively. Tougher punishments for offenders
- Ban muzac in hospitals, surgeries and schools
- Immediate restrictions on fireworks, with a clear date when they will be replaced by laser shows

Energy

- Invest in the quietest form of energy: nuclear
- Remove all land-based wind turbines which cause annoyance to people within five years

A boy can dream!

'But noise is a local problem...isn't it?'

The world's leaders won't gather to talk about noise. We would argue that they should. Here's the evidence:

According the UK Government's latest survey:

11% of people are extremely disturbed by neighbour noise, with 54% bothered to some extent;

8% of people are extremely disturbed by traffic noise, with 55% bothered to some extent;

4% of people are extremely disturbed by aircraft noise, with 31% bothered to some extent

I reckon these figures add up to a 'noise emergency'

And there's more:

17% of people say piped music is the thing they most detest about modern life;

Wind turbine noise can cause real annoyance;

Underwater noise has doubled each decade during the past 50 years;

Each year one in six people in the UK move house because of noise.

And the noise situation is much worse in the Global South.

Governments tend to argue noise is a local problem. It is that. But it is also widespread and worldwide. Noise campaigners can, though, find it hard to look beyond their own problem. Noise remains on the bottom rung.

John Stewart
Editor *The Bottom Rung*

Cacophony of human noise is hurting all marine life, scientists warn

'The damage caused by noise is as harmful as overfishing, pollution and the climate crisis but is being dangerously overlooked'

A natural ocean soundscape is fundamental to healthy marine life but is being drowned out by an increasingly loud cacophony of noise from human activities, according to the first comprehensive assessment of the issue. The damage caused by noise is as harmful as overfishing, pollution and the climate crisis, the scientists said, but is being dangerously overlooked. The good news, they said, is that noise can be stopped instantly and does not have lingering effects, as the other problems do.

Marine animals can hear over much greater distances than they can see or smell, making sound crucial to many aspects of life. From whales to shellfish, sea-life uses sound to catch prey, navigate, defend territory and attract mates, as well as find homes and warn of attack. Noise pollution increases the risk of death and in extreme cases, such as explosions, kills directly. Carbon dioxide emissions from fossil fuel burning are also making the oceans more acidic, meaning the water carries sound further, leading to an even noisier ocean, the researchers said.



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But the movement of marine mammals and sharks into previously noisy areas when the Covid-19 pandemic slashed ocean traffic showed that marine life could recover rapidly from noise pollution, they said. "Everything from the tiniest plankton up to sharks sense their acoustic environment," said Prof Steve Simpson at the University of Exeter in England, and part of the review team. "As a result, the animals have to produce sound to communicate, but also to receive sound."

He said noise pollution was like an "acoustic fog" in the ocean. "Marine animals can only see across tens of metres at most, and can smell across hundreds of metres, but they can hear across entire ocean basins," said Prof Carlos Duarte at King Abdullah University of Science and Technology in Saudi Arabia, who led the review.



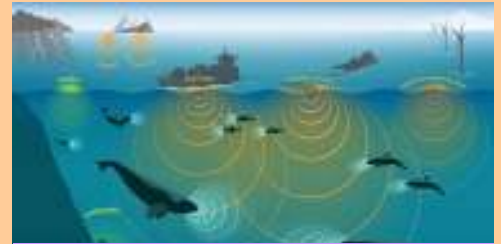
Over the past 50 years, increased shipping has raised low-frequency noise on major routes by 32 times

Duarte said major assessments of the health of the ocean were ignoring noise: "Yet the scientific literature, when read carefully, provides compelling evidence of human-caused noise being a major source of disruption to the marine ecosystem." The review, published in the journal Science, analysed more than 500 studies that assessed

the effects of noise on sea life. About 90% of the studies found significant harm to marine mammals, such as whales, seals and dolphins, and 80% found impacts on fish and invertebrates. "Sound is a fundamental component of ecosystems, [and noise] impacts are pervasive, affecting animals at all levels," the analysis concluded.

The most obvious impact is the link between military sonar and seismic survey detonations and deafness, mass strandings, and deaths of marine mammals. But many uses of sound can be harmed, such as the hums that male toadfish use to attract females and the honks that cod use to coordinate spawning. Baleen whales produce calls to help group cohesion and reproduction that can travel across ocean basins, and humpback whales sing complex mating songs that have regional dialects. Sperm whales and various dolphins and porpoises use sonar to echolocate prey. Other animals use sound to feed: some shrimps produce a “snap” sound to stun prey.

However, over the past 50 years, increased shipping has raised low-frequency noise on major routes by 32 times, the review said. Fishing vessels use sonar to find shoals of fish and bottom trawlers create rumbling noise. The construction and operation of oil rigs and offshore windfarms also cause noise pollution, as does the detonation of second world war bombs in the North Sea. “Fish, clams, crabs and corals all hear sound and use it to find healthy places to make their home,” said Simpson. “So shipping or construction noise takes away that homing sense. It also means that whales that might have lived in a family and hunted over hundreds of miles have to live within 10 miles of each other to be able to communicate. “We find that animals are directly stressed by noise as well, and so they make poor decisions that often lead to death,” he said, noting that noise from motorboats on the Great Barrier Reef in Australia leads to double the mortality from predators. “Underwater noise is a serious concern and it is growing,” said Prof Daniel Pauly at the University of British Columbia in Canada, who was not part of the review team. “The level of noise marine mammals are exposed to is devastating ... Underwater sound waves are far more violent than sound waves in air.”



“Underwater noise is a serious concern and it is growing. The level of noise marine mammals are exposed to it is devastating”.

There are solutions, the review found, with a retrofit of five large container ships by shipping giant Maersk in 2015 showing that new propeller designs reduce noise and also increase fuel efficiency. Quieter propellers are the top priority, said Duarte; half of shipping noise comes from just 15% of vessels. Electric motors are another possible solution, as are small reductions in speed. For example, cutting the speeds of noisy vessels in the Mediterranean from 15.6 to 13.8 knots cut noise by 50% between 2007 and 2013. Seismic surveys can also be carried out using seabed vibrators, rather than sending noise waves through the whole water column. “Cutting noise is possibly the lowest-hanging fruit to make a difference and we can change that today,” said Simpson. “I have real hope that we will hear a healthier ocean in our lifetimes.”

This article by Damian Carrington first appeared in *The Guardian* 4/2/21

Gregory Scott writes:

Find Your Quiet Place Challenge!

Join the mission this October to promote **Hearing Health Awareness** in your community!

Measure the noise in the places you visit during October and win prizes!

Download the Soundprint app: <https://www.soundprint.co/download>

And check out what you need to do: <https://www.youtube.com/watch?app=desktop&v=5je86ssoxCA&feature=youtu.be>

Each contribution is invaluable and enables SoundPrint to advocate for safe noise levels, help communities find quieter places, and protect the public’s hearing health.

The 2021 Find Your Quiet Place Challenge is sponsored by ReSound.

Listen Out!

Our regular slot that gives you the chance to sound off!

Giving our pets a rocket

We love our dogs. We let them sit on our laps, hog the fire, even jump on our bed. We buy them treats and plan our holidays around them. We take them for walks and pick up their poo. They are special. **Except when it comes to fireworks.**

We tell ourselves we are a nation of animal lovers. It's probably not true. We eat turkeys for Christmas and turn a blind eye to factory farming. But we wouldn't do anything to arm our pets. **Except when it comes to fireworks.**



The facts are not in doubt. Fireworks cause animals distress and even death. And of course the noise they produce disturbs many people. And there are continued safety concerns. Yet over recent decades the number of private and public firework displays has grown and grown. The good news is that there are signs of curbs being imposed in some places – Scotland, for example. Public opinion would not allow Governments to outlaw fireworks but there are signs there would be support for restrictions on where and when displays could be staged and on getting rid of the noisiest fireworks.

You can join the Firework Campaign on <https://fireworkcampaign.com/about-2/>

By Mrs 'Guy Fawkes'

Two Great Videos

Cities Are Not Loud: Cars Are Loud

from Notjustbikes

<https://youtu.be/CTV-wwszGw8>

How Noise Pollution is Ruining Your Life

from Niklas Christl

https://youtu.be/kFh_OdMb5v8

Help! I've got a noise problem!

You can contact:

The Noise Abatement Society

<https://noiseabatementociety.org/>

Helpline on 01273 823 850;

email info@noise-abatement.org

The Noise Abatement Society also carries out a range of activities including research and lobbying

Or contact **Noise Nuisance**

<https://noisenuisance.org/>



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