

Zurich May 2019 (EPA Ireland)



CleanAir@School
Citizen Science Interest Group
Leo McKittrick
Patrick Kenny



Environmental Protection Agency

GLOBE (2019) Air Quality Investigation

January - Information gathering

WANTED!

LOOKING FOR



NAME

**NITROGEN DIOXIDE
(NO₂)**

THE SILENT KILLER



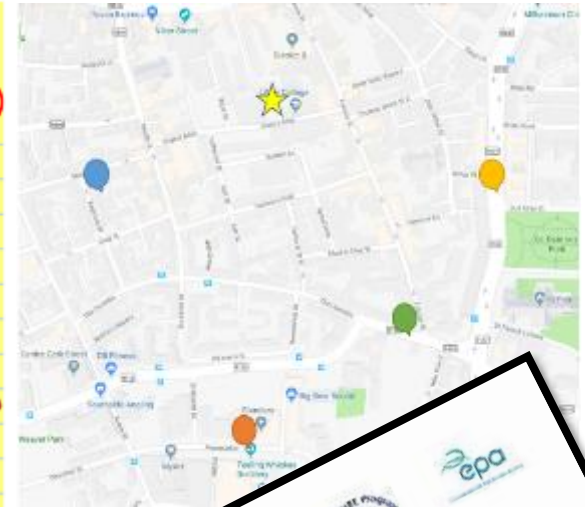
Victim File

Profile:

Risk reason:

People you know:

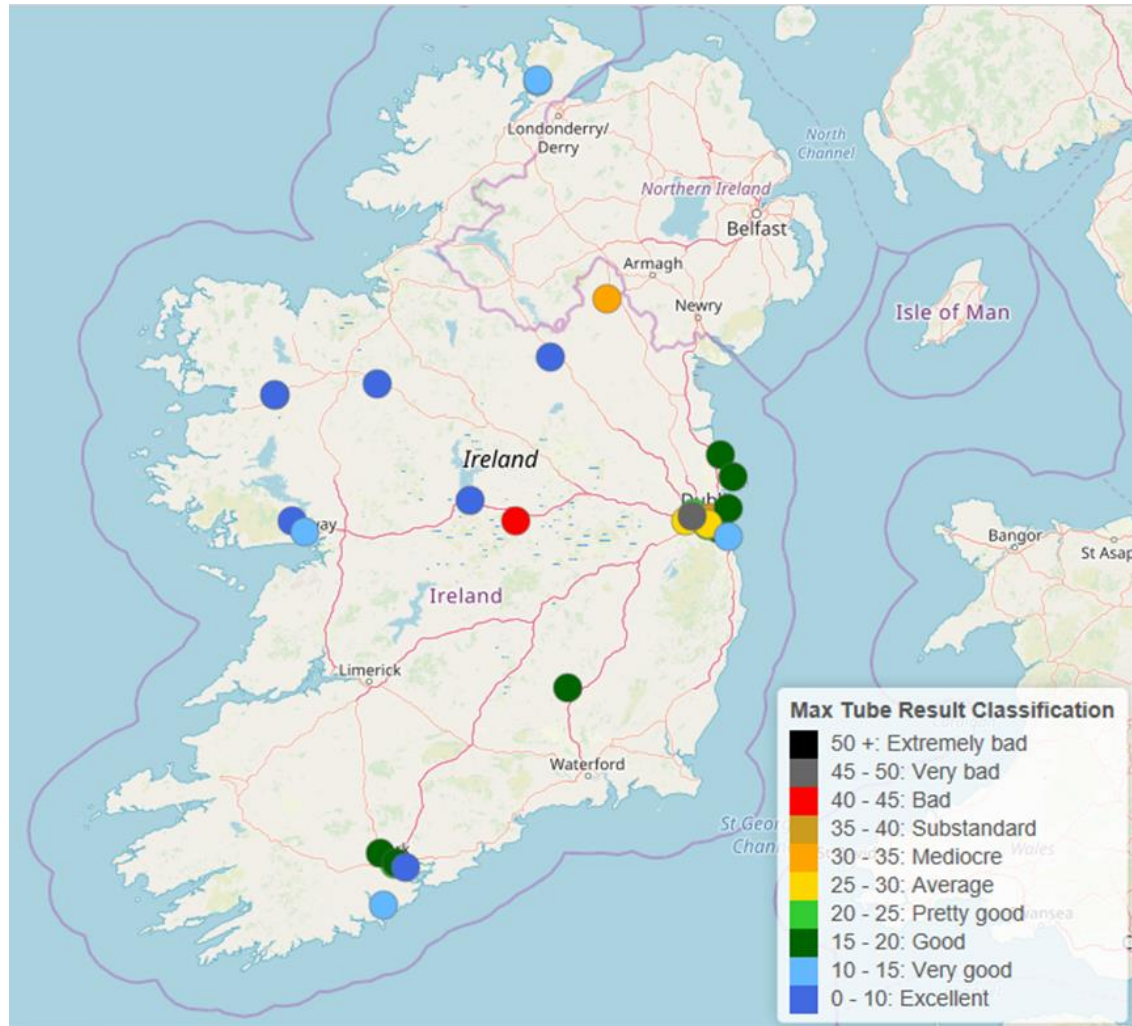
IMPORTANT



February - Measurements



March/April - Data Analysis



May - Reporting & Presentations



Traffic Zones & NO₂ Air Pollution
Kreenly Daza, Lennon Walsh, Pavel Trigub, Zinedin Labelle
Larkin Community College, Champions' Avenue, D1



Research Methods

NO₂ data was recorded over a one month period using 3 diffusion tubes that filtered NO₂ from the atmosphere. These tubes were analysed by a laboratory and the data presented in micrograms per cubic meter ($\mu\text{g}/\text{m}^3$).

Air temperature (°C) levels were recorded with a maximum/minimum thermometer daily. This data was loaded to NASA GLOBE data.

Precipitation levels (mm) were recorded with a rain gauge daily and pH recorded using universal pH paper when possible. This data was loaded to NASA GLOBE data.



EPA Air Monitoring Sites

Curriculum Needs Scale

Air Quality Campaign Aims

1. To compare non-lead residents of the 2 zones within the college campus and to relate this to the air temperature and precipitation data recorded and reported in March 2006.
2. To compare latent Clostridium Colicase data to the above 30 schools in the college campus to determine if metrics in the 2nd zone differ because of the different type of zones (open versus risk, sheltered area versus meeting traffic).
3. To promote awareness in the college about the concerns and health implications related to N₂ and other air pollutants through a campaign at "Green Day" with a school transport survey during lunch time.
4. To extend the campaign further linking with local primary schools and encourage them to participate in the campaign, and contact their own traffic survey within their own schools.
5. To link to Traffic Survey Dublin where a presentation and a site visit to the laboratories to allow students to find out about a new project funded by the Environmental Protection Agency (EPA) to examine the impact of traffic on the environment and the health of the population.



Larkin Community College Dublin 1



Diffusion Tube Locations

Results

Air Quality Campaign NO₂ Data February 2019

EEA Air Pollution Data February 2019



MET FIRST AID

NAMA ET AL.

Weather Data February 2019

Discussion

At Laramie Community College the NO₂ data was recorded on 29.12. 2014 at 18.15h by the student (father) back corner away from traffic, down off (back gate on Champion Avenue) and moving left (Catala Wright Street) across respectively. This data shows an steady increase in NO₂ levels recorded between the points and are described as average, medium & substandard in accordance with the national health data.

A second school in Tallahassee showed a similar profile in their 3 zones but exceeded Linkin College data by 7.4% (high) moving from a substandard to very bad category at their first of zone, where traffic may be heavier due to transport of students to and from school but due to its busy commercial traffic as is the case of Linkin College's major traffic zone on central Florida Ave.

Of the 38 schools surveyed, 1 school reported a significant peak in NO_x levels compared with the clustered June data. Of these 1 school, 5 are located in Dublin and 1 in Offaly town. NO_x levels increased by 9.24, 5.93, 16.50, 8.10, 10.74µg/m³ respectively indicating that the traffic at the drop-off or moving traffic 2004.

Urban and rural schools around the country largely ranged in the 2-3 range being described as excellent to pretty good indicating that the sum of class shaped traffic and other sources of NOx are not excessive enough to cause a sustained spike in levels over a period of one month.

The WHO state that air pollution is the single largest health risk and the EPA in Ireland state that "premature deaths attributed to air pollution in Ireland is estimated at 1670 per annum". Further complications such as an increase in air pollution over summer weather can lead to secondary pollution such as "O₃" that can cause respiratory ailments from chest pain to deadly cancer and that causes one third of deaths from stroke, lung cancer and heart disease are due to air pollution".

Conclusions

Overall the results indicate that increased levels of forest cover in the landscape are associated with increased levels of bird diversity. The results of the GLM analysis indicate that there was an increase in the number of bird species with increased forest cover in the landscape. The results of the GLM analysis indicate that there was a significant positive relationship between forest cover and bird diversity. The results of the GLM analysis indicate that there was a significant positive relationship between forest cover and bird diversity. The results of the GLM analysis indicate that there was a significant positive relationship between forest cover and bird diversity.

To extend this research a broad survey would also be conducted from a cross-section of the student and staff community to investigate their perceptions of safety. This information could help inform the design of the intervention to best meet the specific safety issues that were identified from a critical impact on the environment. Traffic cameras recording the volume of traffic during test times is one other data source that could help provide a baseline for the future design of the city. Students could also be surveyed about the location of their daily commutes.

Bibliography

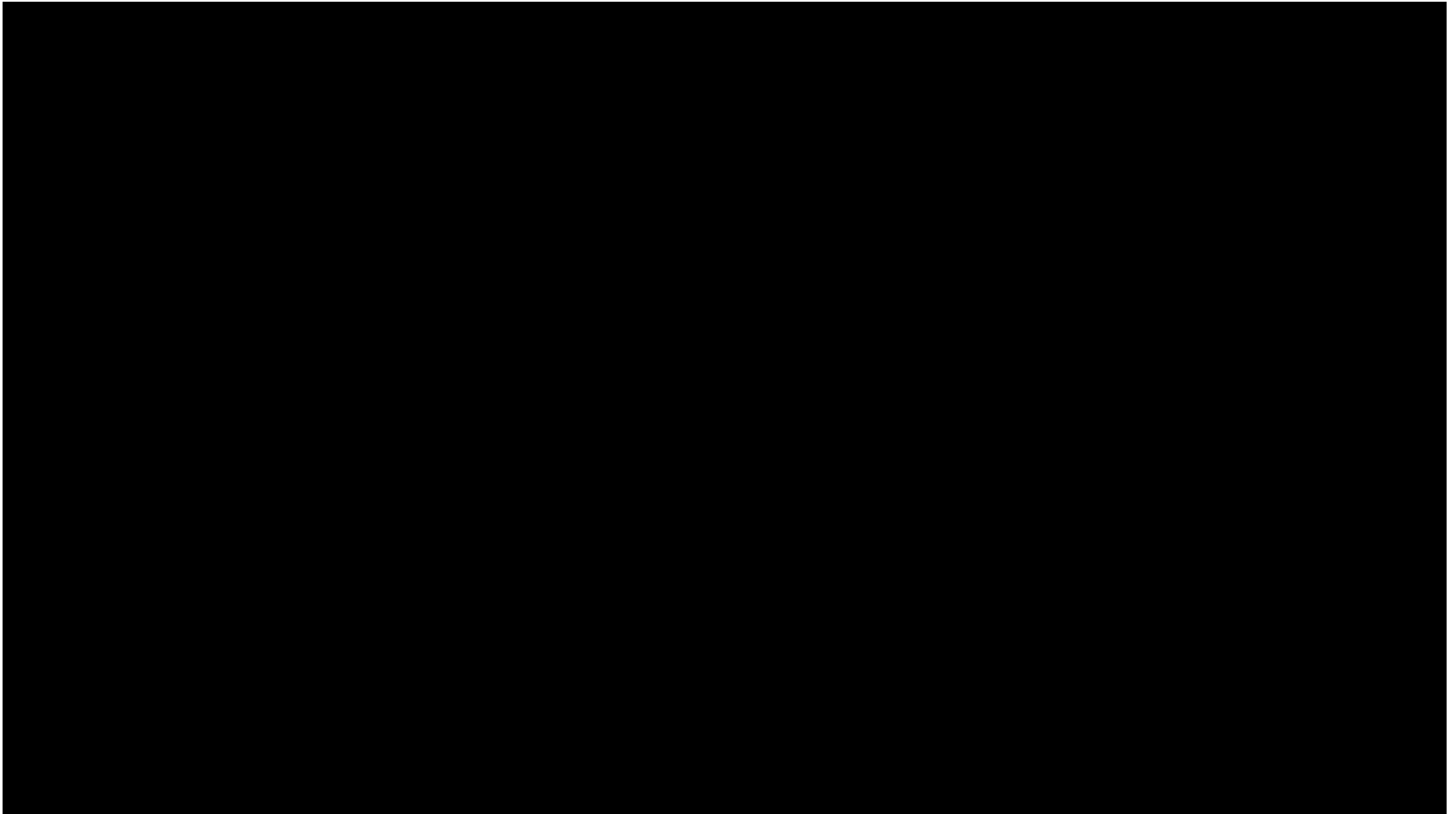
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Air quality Campaign Ireland 2019



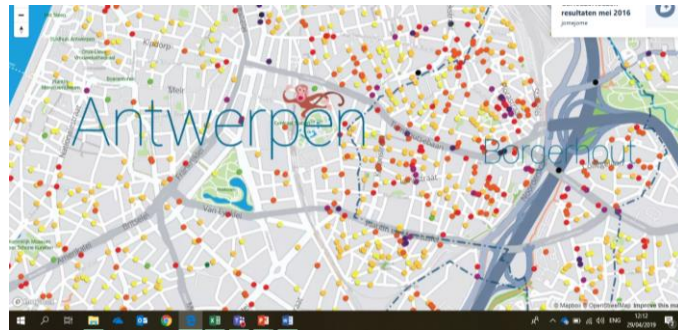
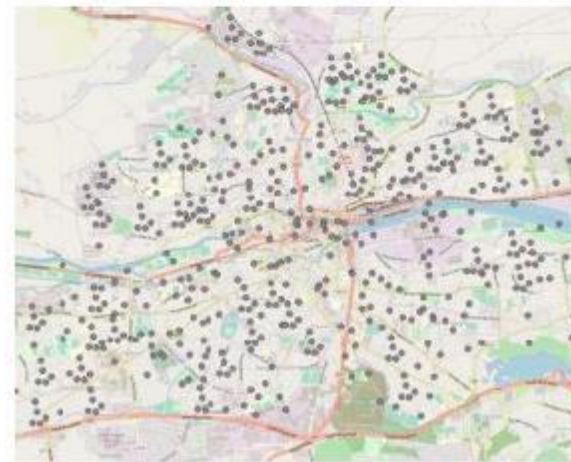
An Taisce

May - Reporting & Presentations



Imagine...Curious Noses

DUBLIN and CORK



Clean Water - Dragon Fly 2019 - 2024



The screenshot shows the National Biodiversity Data Centre website. The header includes the logo, navigation links (About us, Contact us, Mailing List, Facebook, Twitter), a search bar, and buttons for 'Submit sightings', 'Latest news', and 'Blog'. A main navigation bar contains links like Home, GBIF - GB25, Projects, What's Happening, Record biodiversity, Events, Standards, Privacy, Downloads, and Shop.

Dragonfly Ireland 2019 - 2024

- News and Events
 - Dragonfly Dash 2019
 - Launch of Dragonfly Ireland 2019 - 2024
- Dragonflies and Damselflies
- Dragonfly Ireland Survey
- How To Get Involved
- Resources
- Contact Us

Dragonfly Ireland 2019-2024
Dragonfly Dash!

What's Happening?

To celebrate National Biodiversity Week 2019, which runs for 9 days from 18th – 26th May, the National Biodiversity Data Centre will be running a Dragonfly Dash!

What's a Dragonfly Dash?

During this event we are asking everyone in Ireland to take a photo of, and submit, any sightings they make of dragonflies and damselflies anywhere around the country. The official goal is to generate lots of new records which will contribute to the Dragonfly Ireland 2019 - 2024 Atlas.

What's my motivation?

Of course the real purpose of our Dragonfly Dash is competitive! We want to see which county can generate the most dragonfly and damselfly records over 9 days from 18th – 26th May... *but please make sure to only submit records where you are sure of their identification and preferably accompanied by a clear photo.*

And there's a prize!... All recorders who submit records as part of this year's Dragonfly Dash will be

Clean Water - aquatic macroinvertebrate monitoring

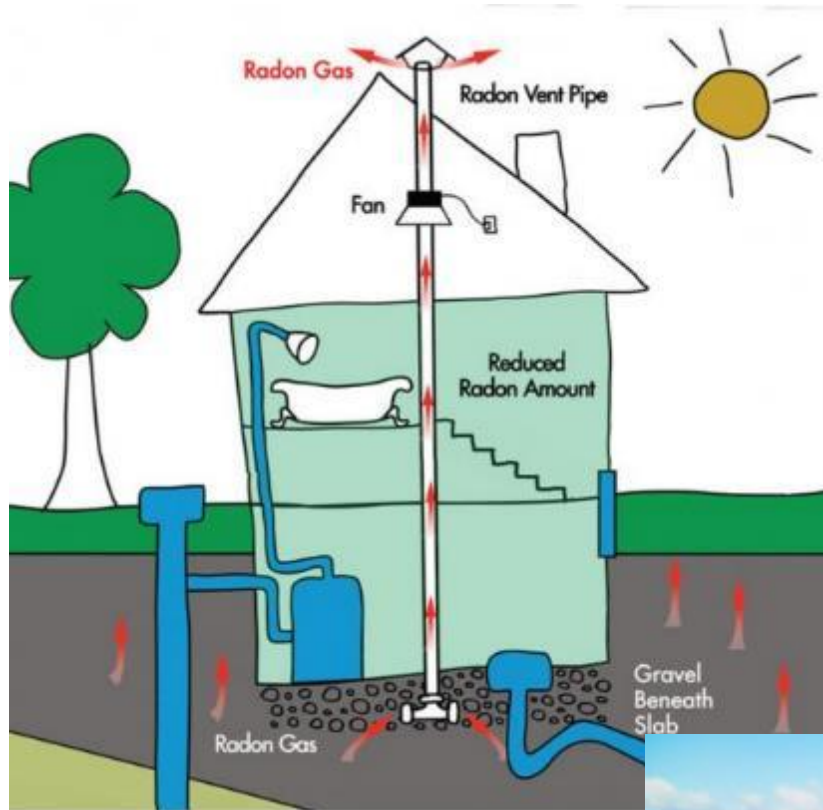


Clean Water - Border Lakes



**BORDER LAKES: CITIZEN SCIENCE
MONITORING BY LOCAL ANGLERS**

Sustainable Behaviour



Communications- New Website



2018 GLE - Killarney, Ireland

