

# Citizen Science Webinar Attendees

## Contributions and Resources

Caravan Studios, August 2018

During and after our webinar our community/attendees chat box was very active. Attendees provided a variety of **great** resources and information regarding Citizen Science and Air/Water Quality sensors. We are sharing the session's chat content links and information regarding papers, resources and communities you might want to review and check-out. Thanks to all that contributed!

### Papers/Resources

#### **Heather Lukacs**

Citizen Science as early detection - I like this paper: O'Rourke, D. and Macey, G. P. (2003). Community Environmental Policing: Assessing New Strategies of Public Participation in Environmental Regulation. Journal of Policy Analysis and Management 22(3): 383–414. <http://dx.doi.org/10.1002/pam.10138>.

### Thoughts and Ideas regarding Citizen Science

#### **Jennee**

Along the same lines as Heather's suggestion, citizen science as an alert/screening tool that triggers further data collection by a government/academic entity. Given that many communities may not have the resources to purchase high-end sensors and produce robust data, citizen science data can still be useful as a screening tool.

#### **Tom Guay**

Glad you mentioned that not all science projects need be geared for peer-reviewed research articles ... but some academics in our group look with disdain on "citizen scientist" projects, that only egg heads should be doing this work. How do we deal with this arrogance?

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### Data Collection and Sensors

#### **Darlene Cavalier**

[SciStarter](#) is building a database of low-cost citizen science instruments, including sensors. Five low cost sensors are being evaluated now at ASU. The findings will be shared on this database.

[SciStarter](#) has more than 3,000 searchable projects and events registered there, if you're looking for any to share or get involved in.

#### **Darlene Cavalier**

Contact [Anne.Bowser@wilsoncenter.org](mailto:Anne.Bowser@wilsoncenter.org) for information about shared resources for all citizen science data

#### **Anthony Aufdenkampe**

It's also worth checking out <https://www.envirodiy.org/reply/2001/> for designs and forums. Sensor data can go to [Data.EnviroDIY.org](http://Data.EnviroDIY.org), an open, free data sharing portal.

The data uploaded to [Data.EnviroDIY.org](http://Data.EnviroDIY.org) are re-shared using [Water One Flow](#) web services, and can be found alongside federal and academic data at catalog portals such as <http://data.cuahsi.org>

#### **Beth Fisher**

Some air quality sensors are supported at <http://data.envirodiy.org/> Such as BME280, and I suspect others. Are there specific sensors that you have in mind?

#### **Darlene Cavalier**

[Purple air](#), [Clarity](#), [Airbeam](#) ... for starters, outdoor sensors that cost less than \$500 and monitor PM 2.5 . Is there a place to share data from those sensors?

#### **Beth Fisher**

Darlene, those might be tricky because they are proprietary. But if they are arduino-based, you could re-program them. [Purple Air](#) includes the BME280, and a laser particle counter (I think two of them), which I suspect could be added to [envirodiy](#).

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### **Scott Andrews- Aclima**

Note that sensors lose their accuracy over time and need to be replaced or re-calibrated on a regular cadence, which is usually more frequent with poorer air quality (i.e. smoke). Cheaper sensors generally have poorer data quality and degrade more rapidly.

### **Heather Lukacs**

The Things Network is a good place to share data: <https://www.thethingsnetwork.org/>

Misc

### **Public Lab**

Welcome [TechSoup](#) to a long tradition of supporting communities to ask questions and be supported in environmental inquiry. All are also welcome at [publiclab.org](http://publiclab.org), see [publiclab.org/questions](http://publiclab.org/questions). Also thank you TechSoup for all your in-kind donations!

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