EUROPEAN CITIZEN SCIENCE ASSOCIATION

Annual Report 2017

ECSA Headquarters

c/o Museum für Naturkunde Berlin
Leibniz-Institut für Evolutions- und Biodiversitätsforschung
Bereichsleitung Wissenschaftskommunikation und Wissensforschung
Invalidenstraße 43
D-10115 Berlin

katrin.vohland@mfn-berlin.de
veronica.french@mfn-berlin.de
claudia.goebel@mfn-berlin.de
gaia.agnello@mfn-berlin.de
andre.mascarenhas@mfn-berlin.de
d.riemenschneider@mfn-berlin.de

+49 30 2093 8776

Our Mission is to connect citizens and science through fostering active participation.

Our Vision is that, in 2020, citizens in Europe are valued and empowered as key actors in advancing knowledge and innovation and thus supporting sustainable development in our world. Citizen Science is a recognized, promoted and funded approach to foster scientific literacy and the democratization of scientific expertise, to increase the social relevance and sustainable impact of research and to improve the evidence base for environment, biodiversity and climate change policy in Europe and globally.
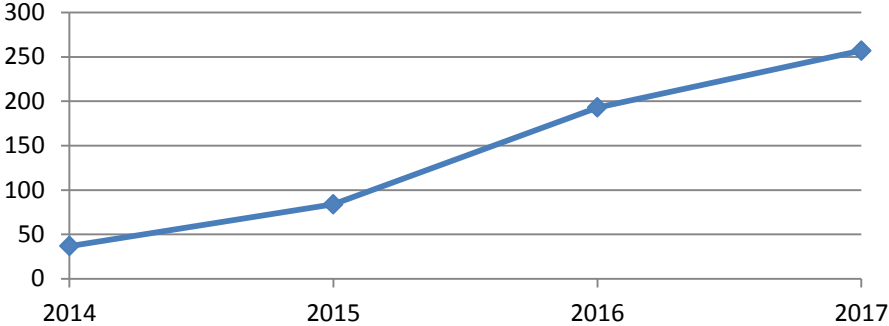
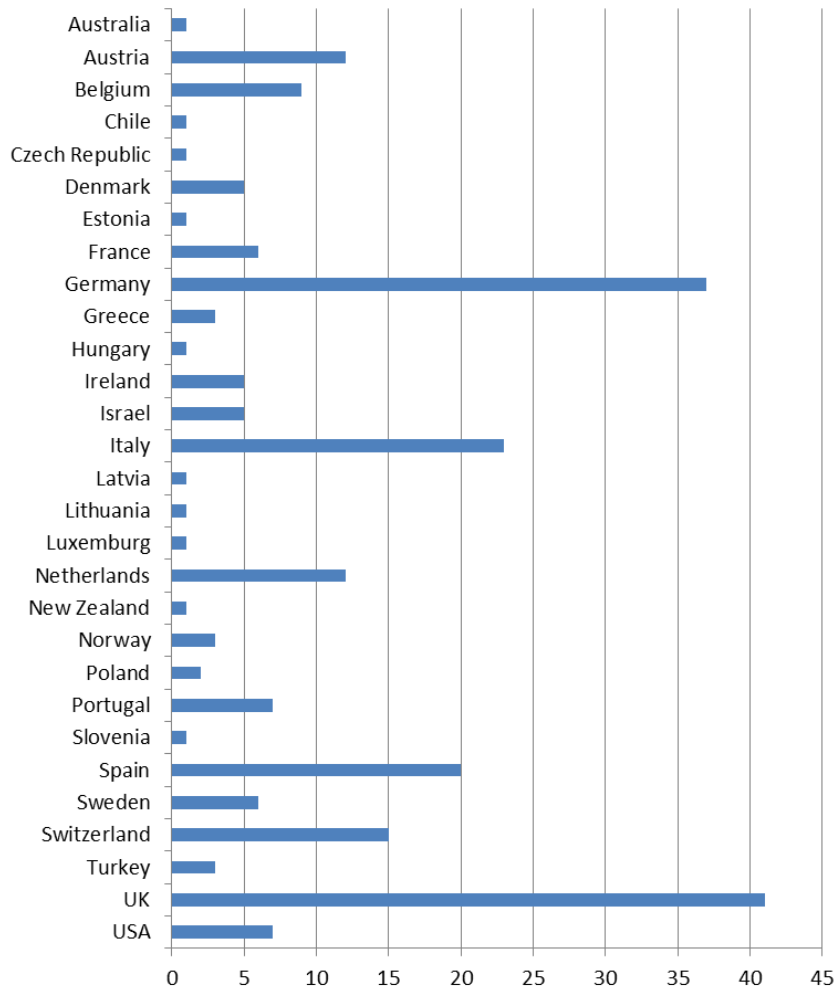## Contents

ECSA Annual Report 2017

Growing Membership

As of the end of 2017, ECSA has 232 individual and organizational members from 29 countries across Europe and beyond. In addition, ECSA has 24 organizational and individual supporters.
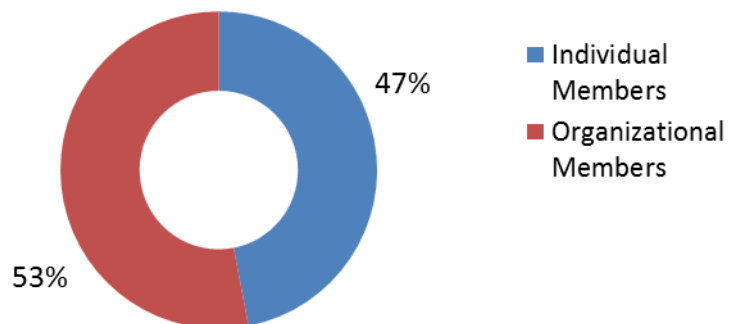
Number of ECSA Members & Supporters

ECSA Annual Report 2017

ECSA Member Geography, 2017

Country	Value
Australia	1
Austria	12
Belgium	9
Chile	1
Czech Republic	1
Denmark	5
Estonia	1
France	6
Germany	37
Greece	3
Hungary	1
Ireland	5
Israel	5
Italy	23
Latvia	1
Lithuania	1
Luxemburg	1
Netherlands	12
New Zealand	1
Norway	3
Poland	2
Portugal	7
Slovenia	1
Spain	20
Sweden	6
Switzerland	15
Turkey	3
UK	41
USA	7

Membership Types 2017
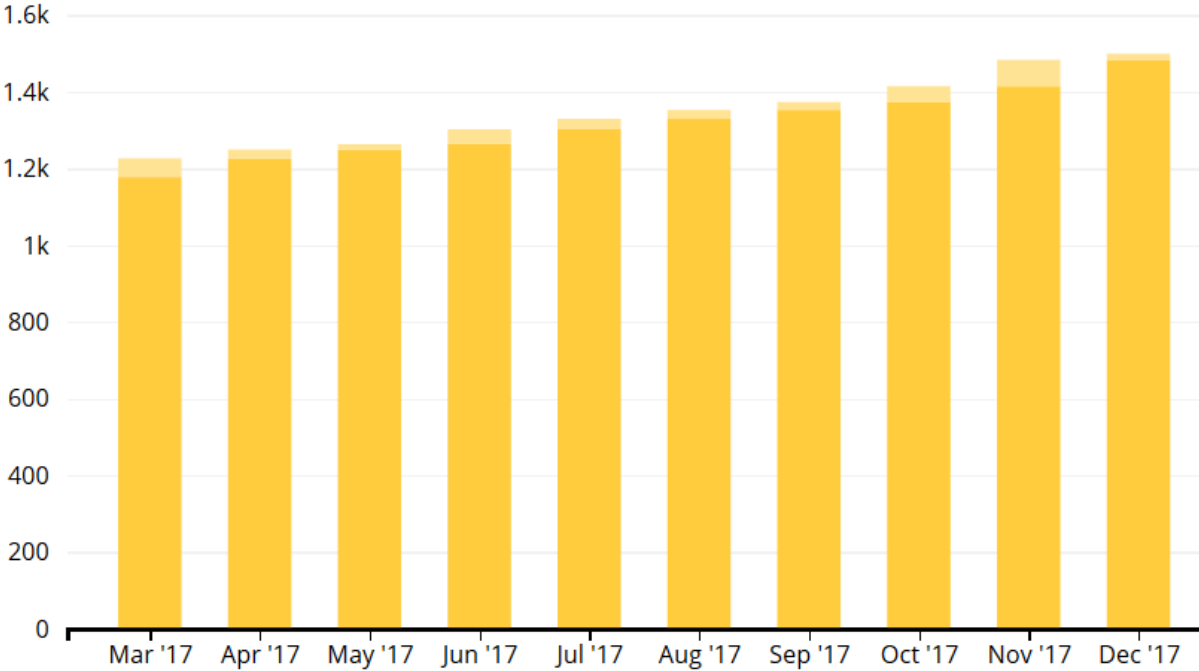
- Individual Members: 47%
- Organizational Members: 53%

Communication

We produced 5 Newsletters in 2017 which reached 1500 subscribers all over the world.

Milestones

01/24-25 – ECSA General Assembly

The BOKU University in Vienna and the International Institute for Applied Systems Analysis (IIASA) in Laxenburg welcomed the ECSA community to celebrate our fourth General Assembly in January 2017. Members from across Europe gathered for two days in working groups and plenaries to evaluate and report their achievements in 2016 and to plan and coordinate activities for 2017.

03/20 – 3rd Meeting of the Open Science Policy Platform (OSPP)

The stakeholder-driven European Open Science Policy Platform (OSPP), with ECSA representing Citizen Science, advises the European Commission on this issue. Citizen science and participatory approaches are seen as a core element of Open Science, helping to bring science effectively into society. In the third meeting of the OSPP, the Working Group Citizen Science presented a report of their work.

05/08 – Global Mosquito Alert launched

This is a new alliance of citizen science organizations and UN Environment to escalate the global fight against mosquito-borne diseases. ECSA is honoured to be able to contribute to this effort together with the Wilson Center, Mosquito Alert, Spain; MosquitoWEB Portugal; Zanzamapp in Italy; Muggenradar in the Netherlands; the Globe Observer Mosquito Habitat Mapper, USA/International, the Invasive Mosquito Project USA and CitizenScience Asia.

05 – Launch of BioBlitz Policy Brief as part of DITOs

"BioBlitz: Promoting cross border Research and collaborative Practices for Biodiversity Conservation" is the first policy brief launched by ECSA as part of the DITOs project, particularly within the framework of work package 4 on Policy Engagement for RRI. The policy brief has been developed with contributions from members of the BioBlitz Working Group and aims at informing policy and decision-makers including public administration, local authorities and donors, on the BioBlitz approach and its potential to make a valuable contribution to science, environmental management, policy and public engagement. The brief advocates for the establishment of an EU wide network of practitioners and BioBlitz organisers to foster cross border research and collaboration in biodiversity conservation.

10/02-04 – LandSense project 1 year meeting

LandSense held its first annual workshop organized by IIASA in Laxenburg, Austria. The three-day workshop brought together all 17 LandSense partners, as well as members of the LandSense advisory board, including representatives from the European Association of Remote Sensing Companies, the Ecological and Forestry Applications Research Centre and the Federal Statistical Office of Germany.

10/05 – DITOs Policy Round Table on Citizen Science and Open Science

ECSA and eutema, in cooperation with the European Commission's Directorate-General for Research and Innovation organized a European Policy Round Table in the framework of the DITOs project to discuss inputs for a European roadmap on CS. The event was held in the context of ECSA's ongoing work on the Open Science and Citizen Science Policy Brief and other round tables we conduct as part of DITOs.

10/13 – 4th Meeting of the Open Science Policy Platform (OSPP)

11/22 BioBlitz Capacity Building workshop

12/02-06 Global Citizen Science Delegation to the UN Policy Business Environment Forum and the 3rd UN Environment Assembly
ECSA formed part of an international Citizen Science delegation to the 3rd UN Environment Assembly in Nairobi promoting the establishment of a global infrastructure for Citizen Science.

12/12-13 – WeObserve project kick-off meeting
WeObserve, "*An Ecosystem of Citizen Observatories for environmental monitoring*", is a project funded under the Horizon 2020 Programme to improve collaboration between existing Citizen Obervatories (COs) and related regional, European and international activities. WeObserve tackles the following key challenges that COs are currently facing: awareness, acceptability, and sustainability, aiming to create a sustainable and vibrant ecosystem of COs to advance citizen science to the mainstream of environmental monitoring. The WeObserve consortium comprises 7 partners.

ECSA projects

Doing It Together Science

Doing it Together Science (DITOs) is a 3-year project Action funded by the European Commission's Horizon 2020 programme to **increase awareness of and participation in citizen science across Europe and beyond**. **It is focused on communication, coordination, and support of citizen science activities.** Therefore, the project promotes the sharing of best practices among existing networks for a greater public and policy engagement with citizen science through a wide range of events and activities.

Some of these activities include doing citizen science, **as 'engaging by doing' is central to the effort of the project**. Other activities, both online and offline, are focused on communicating different facets of citizen science, from in-depth engagement with small and organised groups to large-scale engagement via social media.

DITOs supports existing and new projects across the landscape of citizen science: **top-down** projects, in which people join an activity that is designed and coordinated by scientists; **bottom-up science** activities, in which people, scientifically trained or not, organise a research project around a problem of direct concern (this is sometimes known as DIY (Do It Yourself) science); as well as **collaborative projects** that are created jointly by scientists and participants.

The consortium includes UCL (coordinator), Tekiu, Eutema, Universite Paris Descartes, University of Geneva, Kapelica Gallery / Kersnikova, Medialab-Prado, RBINS, Meritum Association, Waag Society, and ECSA.

[ECSA activities in the project](#) include leading the work package on Policy Engagement for Responsible Research and Innovation, and cooperating closely with consortium members on Environmental Sustainability, Biodesign, and Communication. In addition, ECSA will act as legacy institution for the overall sustainability of the capacity building conducted by the project.

Milestones 2017

2017 marked the second phase of activities in DITOs after the initial scoping phase. Consortium partners focused on carrying out engagement activities, networking and capacity building of public, researchers and policy-makers. During summer and autumn the **DITOs science bus** was touring Europe and visited many ECSA members. In November, **the project has successfully passed the intermediary project evaluation**!

Policy Engagement Work: We published two policy briefs in order to synthesize information on CS and DIY science and make them available to decision makers throughout Europe. A third one is under way. Throughout the development of the policy briefs we expanded the network of practitioners and researchers, reached out new ECSA members and enabled them to connect among each other while contributing to advance research on CS by identifying good practices and challenges.

Policy Brief 1 on BioBlitz ([download here](#)) examines an increasingly common CS methodology, adopted for conducting a rapid assessment of biodiversity. This policy brief includes evidence of the use of this methodology across Europe and highlights the contribution it makes to public engagement, science, environmental management and policy, exploring how the potential of this methodology can be enhanced by increasing cross-boundary exchange of experience and collaboration. The development of this policy brief was the first task assigned to the ECSA working group on BioBlitz (more below).

ECSA Annual Report 2017

Policy Brief 2 on Biodesign ([download here](#)) focuses on a particular area known as Do-It-Yourself Biotechnology (DIYBio), which is the application of design methodologies on biotechnology conducted by enthusiasts in informal settings. The purpose of this brief is to describe implications and potential of this movement and how application of this approach in an informal setting can lead to a more open, inclusive and responsible sector. Contributions to this document were collected during DITOs events such as the stakeholder round tables in Berlin and Paris, via videos submitted by DIY practitioners, during interviews with DIY Biologists and gathering feedback on the vlogs created and published by WS via the DITOs YouTube channel, which covered several dimensions of the DIYBio movement.

Policy Brief 3 on Open Science in relation to Citizen Science is already in the making. An ECSA working group has been established in January 2017 and is producing the policy brief as their first major task. In order to facilitate this cooperation, ECSA has been working together closely with Eutema. Several rounds of discussion, input and feedback have been conducted via online meetings as well as a writing workshop in Copenhagen. A draft was presented at a stakeholder round table organized together with the European Commission in autumn 2017 in Brussels. We expect to publish the policy brief in February 2018 (since we're writing this report in early 2018, you can already [download the brief here](#) ;D).

In addition, we have been organizing and contributing to several **events** attracting quite some resonance allowing exploring future cooperation with a range of stakeholders.

In March 2017, UCL lead on the organization of a capacity building **workshop on stakeholder mapping and engagement for co-creation CS and DIY science projects**. The 2-day workshop in London created synergies and was co-organized with the COST Action CA15212: "Citizen Science to promote creativity, scientific literacy, and innovation throughout Europe". It brought together researchers with experience in stakeholder mapping and engagement and used this expertise to explore DITOs activities as case studies, i.e. stakeholders for the science bus (Waag) and co-lab workshops (UPD) have been mapped. The workshop offered a valuable opportunity for discussing engagement practices employed in DITOs, critically reflecting underlying assumptions and brainstorming ideas for improvement.

In the same month, ECSA and Tekiu organized a **joint workshop with UNESCO**. It focused on existing and potential CS initiatives among the varied field of activities addressed by the international organization, including education for sustainable development, science policy, small island and developing countries, bio- and geo-parks etc. The workshop provided a first opportunity for leading officials within the organization to come together, exchange experiences, learn about activities in DITOs and discuss how CS can be further supported in the UNESCO framework, i.e. through the organization itself as well as through its member states.

Following on from the success of this collaboration, in May 2017, Tekiu and ECSA ran a capacity **building workshop for policy engagement** at the BioFabbing conference that was organized by UNIGE. This event was proposed and developed following discussions raised around the first European Stakeholder Round Table organized by ECSA in November 2016. At that occasion, members of DIYbio collectives put the topic of relations between grassroots groups in CS and DIY science and institutions doing and promoting CS on the table. In the follow-up, various related topics have been addressed, e.g. the inclusiveness of ECSA as CS practitioner organization, equity and ethics of working

ECSA Annual Report 2017

with volunteers, the role of community laboratories and other institutions for providing infrastructure. For the BioFabbing conference, we were glad to answer a request by members of that community for sharing knowledge on how to do policy engagement for CS and DIY science in Europe.

In summer 2017, ECSA has organized two events to gather inputs and discuss argumentation for the Policy Brief on Citizen Science and Open Science: an **Open Science Policy Brief writing workshop** with members of the ECSA working group that has been founded for this purpose; and a **Citizen Science & Open Science workshop at a Dagstuhl seminar**, which gathered experts on CS and crowdsourcing. In the case of the Dagstuhl workshop, the idea of the policy brief was presented during a presentation and follow-up discussions with the aim of collecting inputs for the policy brief conducted with members of the seminar in a working group. Since the workshop was attracting people with expertise in crowdsourcing, CS data, Open Science, interoperability and similar topics, central expertise was mobilized for the policy brief. In addition, workshop participants were informed about DITOs and ECSA and further collaborations envisaged.

In November 2018, a series of **teacher training workshops** were conducted in the city of Barcelona by CREAF, ECSA member with long standing experience in teacher training. The objectives of the workshops were to train teachers of secondary schools to identify lichen species and monitor their presence and abundance using the citizen science platform Natusfera, as well as to explain the relationship between the presence of each species and the air pollution level.

On 22nd November 2017, the **capacity building workshop** "*Advancing BioBlitzes to bring people and biodiversity together*" was held on 22nd November 2017 in Rome at University La Sapienza and in occasion of the First Italian Citizen Science conference. There were 38 participants from 13 EU countries, both experienced and non-experienced BioBlitz organisers. The workshop included two sessions: "*Approaches to BioBlitzes*"; and "*How to mobilise data for science and policy*".

Next Steps

Our **online student competitions** will be launched in early 2018.

More policy briefs are on the way, including topics as exciting as: CS and science education, a closer look at BioBlitz activities, evaluation of the DITOs science bus, how RRI evaluation criteria need to be adapted for CS and DIY science practices, business models of CS, and more!

Upcoming events include: collaborations with the European BioBlitz Network (BioBlitz WG) e.g. City Nature Challenge 2018, workshop at ECSA conference 2018 linked on the development of an event evaluation framework; session "*Making cities green with citizen science*" at the conference of the EU Green Week 2018 in Brussels; the local round table in Italy "*Towards a shared strategy for citizen science in Italy*"; a workshop together with the COST Action and the Open Science Policy Platform to launch the Open Science policy brief in Brussels; another teacher training workshop. In 2019 we'll organize another European stakeholder Round Table and the DITOs final conference in Brussels.

Regarding DITOs policy engagement work in general: The growing attention CS receives from decision makers at the European and other levels of government, as for instance shown in a number of policy briefings from within the EC on the topic (e.g. EKC briefing, 3Os strategy, etc.), illustrate both - that DITOs activities bear fruits, but also that demand for policy engagement work is growing.

ECSA Annual Report 2017

With CS and DIY science becoming more and more known at least at EC levels, national and sub-national policy makers are getting interested as well, while at the European level in-depth discussions are requested in order to further strengthen and expand CS. Addressing these demands and launching activities on levels that have not been covered much (e.g. city level) will be subject of the coming 1,5 years of DITOs policy engagement work. A second aim for the future is doing more capacity building for policy engagement for the CS and DIY science communities to meet this growing demand independently of DITOs. Experiences and materials from WP4 can be the baseline here. A third aims is to broaden the focus of decision makers addressed from government to other stakeholder groups, notably civil society, in order to anchor CS deeper in relevant discourses and practices. In sum, deepening our existing efforts as well as broadening focus at particular instances will facilitate working towards further achieving the outlined objectives of WP4 and DITOs as a whole.

If you are interested in participating in any of these activities, please get in touch!

Contact

Gaia Agnello – Linking ECSA members to DITOs Environmental Sustainability activities, BioBlitz network Europe, Teacher Training, Student competitions

Claudia Göbel – Linking ECSA and members to DITOs Policy Engagement activities on RRI and Open Science, exploring links with Biodesign communities, storytelling

Gina Maskell – Coordinating DITOs student competitions and supporting the ECSA team as student assistant.

http://togetherscience.eu/

#togetherscience

LandSense

LandSense is a project funded under the Horizon 2020 Programme within the topic of "Demonstrating the concept of 'Citizen Observatories'". Running between September 2016 and August 2020 with a budget of about 5.7 million Euros, it is coordinated by IIASA (International Institute for Applied Systems Analysis in Austria) and supported by 18 partner institutions from nine different European countries. The project aims at uncovering the potential of citizen science and earth observation to improve the way we see, map, and understand the world. It also intends to kickstart an earth observation enabled crowdsourcing economy.

Milestones 2017

In the current reporting period following the 2017 ECSA General Assembly, the main activities conducted by ECSA in the scope of LandSense included leading of a project deliverable, participation in project and scientific events, writing of scientific publications, capacity-building and dissemination, as well as organization of the LandSense challenge. These are further detailed below.

Within Work Package 2, titled "Involve: Stakeholder Inclusion and Citizen Engagement", ECSA lead Task 2.1 to "outline user requirements, identification of barriers, and co-design of engagement

strategies", with a respective Deliverable. A summary of Deliverable 2.1 along with a link to the document are available in ECSA's website (click here).

LandSense was presented in a workshop of the COST Action CA15212 (Citizen Science to promote creativity, scientific literacy, and innovation throughout Europe), taking place in London in March 2017. Another presentation titled "Assessing and engaging stakeholders in a citizen observatory for Land-Use/Land Cover monitoring" was held in a session about "collaborative processes in the field of biodiversity research", organized by Corina Basnou and Györgyi Bela, within the ALTER-Net Conference taking place on 2nd to 4th of May 2017 in Ghent (Belgium). The conference program can be accessed here. More recently the project was presented in a mini-symposium on citizen science, organized in the Museum für Naturkunde Berlin on the 15th of March 2018.

ECSA participated in the project's year 1 workshop, which took place from the 2nd to the 4th of October 2017 at IIASA (Laxenburg, Austria). In this workshop, the first year of the project was assessed and the second year was planned. Furthermore, progress was made on the pilot cases and on the LandSense federated system. A panel discussion with the expert advisory board also took place.

A paper on "Networks for citizen science in Europe and Germany" was published in the journal "Future of Food: Journal on Food, Agriculture and Society" and included LandSense as a showcase project. The article is accessible here.

Regarding capacity-building and dissemination, in September 2017 an article presenting the project was published in Spanish in a section dedicated to citizen science (in collaboration with Fundación Ibercivis) from the online newspaper Heraldo. It can be read following this link. Two LandSense-related capacity-building and dissemination webinars were organized and hosted by ECSA. The first one took place on the 7th of December 2017 and addressed the topic of "Citizen science to monitor landscape changes". It included two talks, one about "Mobilizing citizens for in-situ observations" (by Inian Moorthy, IIASA) and one about "Home-based citizen participation" (by Linda See, IIASA), followed by a Q&A session. A recording of the webinar is available here. The second webinar took place on the 1st of February 2018 addressing the topic of "Citizen Science for monitoring urban landscape dynamics". The webinar included one talk about "Assessing urban green space in Vienna" (by Gebhard Banko and Barbara Birli from the Austrian Environmental Agency) and another talk about "Using OpenStreetMap for Citizen Science" (by Michael Schultz from the GIScience research group at the Heidelberg University), followed by a Q&A session.

ECSA was co-organizer of the LandSense challenge, which targeted individuals, web-entrepreneurs, start-ups and SMEs coming from all participating Horizon 2020 countries, to present innovative IT solutions addressing one of the three LandSense domains (Urban Landscape Dynamics, Agricultural Land Use, Forest & Habitat Monitoring). The challenge focused on using data streams coming from the LandSense Citizen Observatory, the Sentinel Hub Service or other relevant earth observation data sources to design novel Land Use/Land Cover solutions for a range of applications within the selected domains. The LandSense challenge finals take place on the 3rd of June 2018 at the public festival preceding the 2nd ECSA international conference. More information on the LandSense challenge can be found here.

Besides the main activities previously detailed, communication and dissemination activities were continuously conducted through ECSA's online channels (website and social media).

Contact and more information

Margaret Gold (mg@margaretgold.co.uk)

http://landsense.eu

Twitter: @LandSense

WeObserve

WeObserve consortium partners at the kick-off meeting at IIASA, Austria.

Rising trends in Citizen Science have led to the development of Citizen Observatories (COs) focused on engaging citizens in environmental monitoring across Europe. These initiatives are widely supported by the European Commission under two main research and innovation funding programmes, FP7 and H2020.

WeObserve, "*An Ecosystem of Citizen Observatories for environmental monitoring*", is a project funded under the Horizon 2020 Programme to improve collaboration between existing COs and related regional, European and international activities. WeObserve tackles the following key challenges that COs are currently facing: awareness, acceptability, and sustainability, aiming to create a sustainable and vibrant ecosystem of COs to advance citizen science to the mainstream of environmental monitoring.

WeObserve specifically aims to develop five communities of practice to assess the current CO knowledge base and strengthen it to address future environmental challenges using CO-driven science. The WeObserve consortium will also extend the geographical coverage of the CO knowledge base to new communities and support the implementation of best practices and standards across multiple sectors. Moreover, WeObserve will reinforce links of ongoing COs with regional and global initiatives, including GEOSS, Copernicus and the UN Sustainable Development Goals (SDGs) and promote the uptake of information from CO-powered activities across various sectors and foster new opportunities and innovation in the sector of *in-situ* earth observation.

To achieve these objectives, the WeObserve project brings together a strong consortium of 7 partners, built upon the four H2020 CO projects, namely Ground Truth 2.0, GROW, LandSense and Scent, with strong links to a wide range of networks, users and stakeholders.

ECSA plays a leading role in the task of mapping the EU landscape of existing citizen observatories initiatives, relevant communities and their interactions. ECSA also supports a number of other tasks including the development of Communities of Practice for knowledge exchange on Citizen Observatories, as well as project dissemination and outreach to ECSA members and the citizen science community.

Milestones 2017

On December 12th – 13th 2017, the project coordinator IIASA (International Institute for Applied Systems Analysis), hosted the project kickoff meeting with EC presence in Laxenburg, Austria. The key objectives of the meeting included securing partner consensus on the vision, mission and operational plan for WeObserve, as well as defining roles, expectations and the project timeline.

Next steps

The main task of ECSA for 2018 within work package 2 of WeObserve is to carry out a mapping and stakeholder analysis of Citizen Observatory initiatives and relevant communities with a view to gathering information on their reasoning, functioning and main interactions. The task will include in-depth interviews and stakeholder focus groups to gain insights on interactions and relations within Citizen Observatories.

Contact and more information

Steffen Fritz, Project Coordinator, IIASA (fritz@iiasa.ac.at)

Margaret Gold, ECSA (mg@margaretgold.co.uk)

https://www.weobserve.eu/

Twitter and Facebook: @WeObserveEU

ECSA Working Groups

Sharing Best Practice and Building Capacity

ECSA members, and non-members who participate in ECSA General Assemblies, conferences and other activities, together hold a wealth of knowledge and experience in developing, running and evaluating citizen science projects; recruiting, engaging and motivating citizens; and studying citizen science as a field to better understand its potential and how this may be realised. This working group aims to facilitate the exchange and collation of these experiences and expertise. From this, we aim to distil and share best practice across the citizen science community and build capacity within the sector. We achieve this through the ongoing activities of the core working group and also the establishment of fixed-term Task and Finish Groups dedicated to particular topics where needs and opportunities are identified.

Chair: **Lucy Robinson** (Natural History Museum London, UK)

Vice-Chair: **Janice Ansine** (Open University, UK)

Core working group members:
- Gaia Agnello (Museum fur Naturkunde, Germany)
- Jack Sewell (Marine Biological Association, UK)
- Sarah West (Stockholm Environment Institute, University of York, UK)
- Aletta Bonn (Helmholtz-Centre for Environmental Research - UFZ / German Centre for Integrative Biodiversity Research (iDiv), Germany)
- Muki Haklay (University College London, UK)
- Jade Lauren Cawthray (University of Dundee, UK)

In 2017-18, the working group has focused activity in two areas:

1. Publishing the Ten Principles of Citizen Science

The Ten Principles of Citizen Science, previously only available online as a downloadable pdf, will be published in an academic peer-reviewed format later in 2018. The working group has written a chapter within the forthcoming peer-reviewed book *Citizen Science – Innovation in Open Science, Society and Policy* detailing the process of developing the principles, including examples of how they are being used internationally and discussing the extent to which the field of citizen science is achieving best practice in the principles and where challenges remain. The working group is awaiting final proofs of the book before publication. The citation of the chapter is: Robinson, L.D., Cawthray, J.L., West, S.E., Bonn, A. and Ansine, J. (In press) Ten principles of citizen science. In Bonn, A., Haklay, M., Hecker, S., Bowser, A., Makuch, Z. & Vogel, J. (Eds). *Citizen Science – Innovation in Open Science, Society and Policy.* UCL Press.

The Ten Principles of Citizen Science are now available online in 26 languages at https://ecsa.citizen-science.net/documents We continue to monitor the use of the Ten Principles in a range of contexts, and collate case study examples of how they are being used by the citizen science community.

2. BioBlitz Task and Finish Group

Co-Chairs: **Gaia Agnello** – DITOs, ECSA & **Savita Willmott** – Bristol Natural History Consortium

A BioBlitz is an event in which members of the public and scientists meet in a delimited area and defined time period to record as many species as possible. By working together in an informal environment, while sharing expertise and collecting valuable scientific data, it is possible to bridge the gap between scientists and citizens. As such, BioBlitzes can be effective strategies to promote citizen science to the public and beyond. Many ECSA members and non-members alike already have experience in implementing this methodology, and many more have expressed an interest in doing so for the first time, wishing to learn from more experienced BioBlitzers. Hence, this Task and Finish Group aims to connect people, communities, and organizations involved and interested in the organization of BioBlitz events, to facilitate the sharing of good practice and to build capacity for this type of event across Europe.

The main aim is to build a sustainable European BioBlitz Network or community of practice, through the following objectives:

(1) Mapping current BioBlitz activity in Europe.

(2) Exploring coordination and collaborative approaches for running BioBlitz activities in Europe.

(3) Leveraging community of practitioners by linking DITOs activities to ECSA members and non-members.

(4) Learning from pioneering initiatives for example the UK National BioBlitz Network, the Australian BioBlitz Hub, City Nature Challenge and adapting and implementing strategies of knowledge exchange and capacity building.

(5) Assessment of current guidelines and supporting resources for practitioners wishing to run BioBlitz events, to identify applicability across Europe, scope to adapt and/or translate them and develop supplementary material at country level.

(6) Capacity building activities to support new BioBlitz organisers e.g. training workshop, webpage with resources.

(7) Promoting citizen science to the public and policy/decision makers through the BioBlitz approach.

ECSA Annual Report 2017

(8) Drawing experiences into policy recommendations to include in policy briefs.

Members:

Lucy Robinson (UK), Matt Postles (UK), Savita Willmott (UK), Patricia Tiago (Portugal), Jack Sewell (UK), Andrea Sforzi (Italy), Janice Ansine (UK) John Harlin (Switzerland), Dacha Atienza Ariznavarreta (Spain), Jaume Piera (Spain), Bernat Claramunt (Spain), Sven Schade (Italy), Ana Cristina Cardoso (Italy), Eugenio Gervasini (Italy), Libby Hepburn (Australia), Lila Higgins (US), Alison Young (US), Liam Lysaght (Ireland), Carole Paleco (Belgium), Jerome Constant (Belgium), Francesco Cerere (Italy), Simone Cutajar (Malta), Bruna Gumiero (Italy), Vito Cambria (Italy), Silvia Vaghi (Italy), Daniela Campobello (Italy), Kelly Martinou (Cyprus), Dimitris Poursanidis (Greece), Elisa Radosta (Switzerland), Ulrike Sturm (Germany), Carlos Ribeiro (Portugal), Veljo Runnel (Estonia), Karen Pai (Estonia), Ivo Macek (Czech Republic), Petra Caltova (Czech Republic), Stefano Martellos (Italy), Paraskevi Karachle (Greece), Kyle Copas (Denmark).

Activities in 2017:

The working group has a [dedicated page](#) on the official ECSA website. Documents are maintained in [Google Drive](#). Online WG meetings were held: 1st March 2017; 19th April; 4th July; 18th July; 6th November 2017; 22nd November 2017. [Meetings minutes are here](#).

Two questionnaires are published on ECSA website and disseminated via other channels to gather information of BioBlitz held in Europe. BioBlitz events are published on the DITOs (Doing it Together Science) website on the online event calendar and on the map. The questionnaires have been created on the basis of DITOs requirements for reporting and the template used by Bristol Natural History Consortium for registering BioBlitz events in the UK National Network.

Link to the questionnaires:
- [Register your BioBlitz to the European Network](#)
- [Recap your BioBlitz](#)

The policy brief *"BioBlitz: promoting cross border research and collaborative practices for biodiversity conservation"* was developed with contributions from members of the working group and BioBlitz organisers internationally. This policy brief, published in May 2017, is developed within the framework of the Horizon 2020 project Doing It Together Science as part of Deliverable 4.1. One of the outcomes has been establishing a collaborative and open network between DITOs partners, external organizations and policy makers throughout Europe. The full text is published in UCL repository http://discovery.ucl.ac.uk/1573359/

The [Capacity Building workshop](#) "*Advancing BioBlitzes to bring people and biodiversity together*" was held on 22nd November 2017 in Rome at University La Sapienza and in occasion of the First Italian Citizen Science conference. There were 38 participants from 13 EU countries, both experienced and non-experienced BioBlitz organisers. The workshop included two sessions: "*Approaches to BioBlitzes*"; and "*How to mobilise data for science and policy*". A workshop summary report will be published on ECSA website.

Activities planned for 2018:

- Secure extra effort through COST Action "Citizen Science to promote creativity, scientific literacy, and innovation throughout Europe" to host a Short Term Scientific Mission and conduct research on the BioBlitz methodology, in particular through the development of an evaluation tool for participants and organisers to be piloted during the intiative City Nature Challenge 2018and further developed throughout 2018-19.
- Support coordination of City Nature Challenge in Europe and help identifying best practices for expanding the initiative in 2019.
- Produce a Research Insight as part of DITOs deliverable 4.2, following up on the policy brief on BioBlitzes. The Research Insight focuses on the development of a common evaluation framework for BioBlitz and similar events, using the City Nature Challenge as a case study.
- Represent the European BioBlitz community and present major outcomes of City Nature Challenge 2018 at the high level conference of the EU Green Week "Green cities for a greener future" during the session organised by ECSA on 23rd May 2018 in Brussels.
- Hold the workshop "Evaluating BioBlitzes: an overview of participants' and organisers' perspectives" at the ECSA conference on 5th June 2018 in Geveva.

Open call for participation in the working group

The working group would like to invite more members to become active in the *Sharing best practice and building capacity for citizen science* working group, especially people based in countries other than the UK to ensure our working group has good representation across Europe. We would like to continue the BioBlitz Task and Finish Group, build upon the Ten Principles of Citizen Science, develop more routes for knowledge exchange, and develop additional Task and Finish Groups focused on particular themes where a need or opportunity is identified in the community. However more active members are needed in order to achieve our aspirations. If you have time to commit to the working group tasks, please get in touch with Lucy Robinson (l.robinson@nhm.ac.uk) or Janice Ansine (Janice.ansine@open.ac.uk).

Projects, Data, Tools & Technology

Chair: Jaume Piera – ICM-CSIC, Spain.

During 2017, the main activities of the working group have been focused on interoperability and coordination with existing networks (particularly with the Citizen Science Association, CSA and the Australian Citizen Science Association ACSA).

Two main activities have been developed, mostly in line to the funding opportunities to support networking meetings:

1. Participation in the working group "Improve data standardization and interoperability" (WG5) within the COST Action: Citizen Science to promote creativity, scientific literacy, and innovation throughoutEurope (CA 15212).

The goals of the This goal is also linked to the larger objectives of the Data and Metadata Working Group of the Citizen Science Association (CSA) and the European Citizen Science Association (ECSA).

- Task 1: Development of a metadata ontology for citizen science: The main goal in this task is to contribute to develop an ontology of citizen science projects (including a vocabulary of concepts and metadata) to support data sharing among citizen science projects.

-
  Task 2: Coordination of efforts with existing networks and groups working on standardization in citizen science. The second tasks is focused on coordinating with activities on data and service interoperability carried out in Europe, the USA and Australia, and will take into account existing standards, namely Open Geospatial Consortium (OGC) standards, ISO/TC 211, W3C standards (semantic sensor network/Linked Data), and existing GEO/GEOSS semantic interoperability.

Meeting in Novi Sad: March 27-28 2017. Towards a new ontology of Citizen Science

The Workshop was held in the University of Novi Sad. The main acclivities developed in the meeting were:

- Refine core requirements of the ontology based on existing use cases.

- Continue to identify core ontology fields and associated metadata by drawing on previous research and existing vocabularies.

- Develop a plan for further refining core requirements, ontology fields, and associated metadata with input from the larger citizen science community.

2. Contribution in the second workshop "Defining principles for mobile apps and platforms development in citizen science: Interaction, Interoperability, Innovation

 https://ecsa.citizen-science.net/sites/default/files/draft_agenda_second_workshop_0803.pdf

The event was co-organized by Naturblick, a project of the Museum für Naturkunde Berlin, the European Citizen Science Association (ECSA), and the University of Gothenburg, with the financial support of the Marianne and Marcus Wallenberg Foundation.

The second workshop continued with the discussion on principles and guidelines for app and web platform development in citizen science, following the previous results from the first workshop held on December 13th and 14th 2016, in Berlin. We identified and developed principles for best practice in three areas: (1) Interoperability and data standardization; (2) User Interface & Experience Design: Interaction, Mechanisms to support Motivation; (3) Outreach, Learning, Education, and other Rewards of Participation.

A summary of the first and second workshops for Defining principles for App and Platform development for citizen science have been published in the RIO ((Research Ideas and Outcomes) Journal as a Workshop Report: https://riojournal.com/article/21283/list/8/

Citizen Science and Open Science

Co-Chairs: **Kyle Copas** – GBIF & **Claudia Göbel** – DITOs, ECSA & Museum für Naturkunde Berlin

The adoption of open science approaches and policies can benefit citizen science, increasing its visibility and opportunities for collaboration, ensuring data persistence, and securing its legacies and impacts in scientific research and policy. At the same time, citizen science as an approach helps make many facets of research more participatory. Hence, this working group seeks to:

- Explore interrelations between Citizen Science and Open Science
- Foster exchange of experience and gathering of good practice at the intersections between Citizen Science and Open Science
- Channel opportunities for the CS community toward engaging in regional policy processes on how Citizen Science is addressed as part of Open Science, in cooperation with policy engagement work such as DITOs
- Help reduce technical, legal and other barriers that keep ECSA members and their partners from adopting open science policies and approaches that maximize the long-term impact of their programmes

Members:

Soledad Luna, Erich Prem, Barron Orr (observer), Heiner Benking, Christine Marizzi, Daniel Mietchen, Dilek Sahin, Donat Agosti, Fermin Serrano, Ilias Trochidis, Dieter Weiss, Institut für Zelltechnologie e.V. IZT, Julie Sheard, Marc Thorley (observer), Peter Desmet, Qijun Jiang, Katrin Vohland, Luis Velasquez, Muki Haklay, Anne Bowser, Eveline Wandl-Vogt, Seán Lynch, Wiebke Herding, Alexandre Pólvora, Rosy Mondardini, Bálint Balázs, Oscar Corcho, Daniel Dörler, Eileen Scanlon, Libby Hepburn, Annick Labeeuw, Dominik Scholl, Celya Gruson-Daniel, Aleksandra Berditchevskaia, Sven Schade, Thomas Hervé Mboa, Paul Groth, Tomi Kauppinen, Franz Hölker, Dave Murray-Rust, Maike Weißpflug

Aims:

(1) Increase understanding and adoption of clear and creditable **open data policies** that support of scientific values of transparency, reproducibility and reuse, helping citizen science volunteers and project managers to secure the benefits of collecting, creating and sharing data essential to 21st-century science.
Aspired output(s): **Recommendations and best practice collection on Open Data Licenses; Communication activity to articulate the value of Open Science to Citizen Science practitioners.**

(2) **Exchange experiences** and contribute to understanding of the impacts of citizen science on research and policy as well as further defining of open science principles for Citizen Science App and Platform development.
Aspired output(s): **Contribute to defining the principles for app and platform development for citizen science via the workshop in Gothenburg University, in April 25-27, 2017.**

(3) **Explore links between Citizen Science and Open Science**. Compliment the work on open data by focusing at other areas of open science, including open hardware, methodologies & knowledge, educational resources etc., as well as inclusiveness and links to RRI in Citizen Science projects.
Aspired output(s): **Briefing on Citizen Science and Open Science**.

Activities in 2017:
The working group utilized ECSA's [Basecamp installation for discussion and collaboration](#); documents are maintained in [Google Drive](#). Online WG meetings were held: 25th April; 9th June; 9th July, 8th September, 4th December - [Meetings minutes are here](#).

The work on the principles for CS App development has terminated with the [workshop report](#) and [paper](#) published (and with Soledad's departure from ECSA).

The primary output of the working group is the collaboration with the DITOs project on a [Policy Brief examining relations between Citizen Science and Open Science](#). Following a [Call for Contributions](#) (and inputs from discussions at a [Dagstuhl Seminar](#) in July), the working group held a [policy brief writing workshop](#) on 9th-10th July in Copenhagen. After the Copenhagen workshop, our process was:

- Create a draft version of the policy brief by mid-July
- Gather inputs from WG members and collect case studies until mid-August
- Consolidate and review iterative drafts of the policy brief by mid-September
- Present on the draft brief to a [European Stakeholder Round Table in Brussels](#) in early October
- Complete final revisions
- Secure formal approval by WG members and DITOs
- Layout and publish brief through DITOs PIs

Activities planned for 2018:

- [Publishing the Policy Brief](#) and presenting it at relevant events, including at a [workshop organized together with the COST Action](#) on Citizen Science on 1st March in Brussels.
- Produce guidance and best practices on data licensing in 1st half of 2018 (work to be presented at ECSA international conference).
- Hold a working group session at the ECSA international conference in Geneva.

BioBlitz

Co-Chairs: **Gaia Agnello** – DITOs, ECSA & **Savita Willmott** – Bristol Natural History Consortium

A BioBlitz is an event in which members of the public and scientists meet in a delimited area and defined time period to record as many species as possible. By working together in an informal environment, while sharing expertise and collecting valuable scientific data, it is possible to bridge

the gap between scientists and citizens. As such, BioBlitzes can be effective strategies to promote citizen science to the public and beyond. Many ECSA members and non-members alike already have experience in implementing this methodology, and many more have expressed an interest in doing so for the first time, wishing to learn from more experienced BioBlitzers. Hence, this working group aims to connect people, communities, and organizations involved and interested in the organization of BioBlitz events, to facilitate the sharing of good practice and to build capacity for this type of event across Europe.

The main aim is to build a European BioBlitz network or community of practice, throughout the following objectives:

(9) Mapping current BioBlitz activity in Europe.

(10) Exploring coordination and collaborative approaches for running BioBlitz activities in Europe.

(11) Leveraging community of practitioners by linking DITOs activities to ECSA members and non-members.

(12) Learning from pioneering initiatives for example the UK National BioBlitz Network, the Australian BioBlitz Hub, City Nature Challenge and adapting and implementing strategies of knowledge exchange and capacity building.

(13) Assessment of current guidelines and supporting resources for practitioners wishing to run BioBlitz events, to identify applicability across Europe, scope to adapt and/or translate them and develop supplementary material at country level.

(14) Capacity building activities to support new BioBlitz organisers e.g. training workshop, webpage with resources.

(15) Promoting Citizen Science o the public and policy/decision makers through the BioBlitz approach.

(16) Drawing experiences into policy recommendations to include in policy briefs.

Members:
Lucy Robinson (UK), Matt Postles (UK), Savita Willmott (UK), Patricia Tiago (Portugal), Jack Sewell (UK), Andrea Sforzi (Italy), Janice Ansine (UK) John Harlin (Switzerland), Dacha Atienza Ariznavarreta (Spain), Jaume Piera (Spain), Bernat Claramunt (Spain), Sven Schade (Italy), Ana Cristina Cardoso (Italy), Eugenio Gervasini (Italy), Libby Hepburn (Australia), Lila Higgins (US), Alison Young (US), Liam Lysaght (Ireland), Carole Paleco (Belgium), Jerome Constant (Begium), Francesco Cerere (Italy), Simone Cutajar (Malta), Bruna Gumiero (Italy), Vito Cambria (Italy), Silvia Vaghi (Italy), Daniela Campobello (Italy), Kelly Martinou (Cyprus), Dimitris Poursanidis (Greece), Elisa Radosta(Switzerland), Ulrike Sturm(Germany), Carlos Ribeiro (Portugal), Veljo Runnel (Estonia), Karen Pai (Estonia), Ivo Macek (Czech Republic), Petra Caltova (Czech Republic), Stefano Martellos (Italy), Paraskevi Karachle (Greece), Kyle Copas (Denmark).

Activities in 2017:

The working group has a dedicated page on the official ECSA website. Documents are maintained in Google Drive. Online WG meetings were held: 1st March 2017; 19th April; 4th July; 18th July; 6th November 2017; 22nd November 2017. Meetings minutes are here.

Two questionnaires are published on ECSA website and disseminated via other channels to gather information of BioBlitz held in Europe. BioBlitz events are published on DITOs website on the online event calendar and on the map. The questionnaires have been created on the basis of DITOs requirements for reporting and the template used by Bristol Natural History Consortium for registering BioBlitz events in the UK National Network.

Link to the questionnaires:
- Register your BioBlitz to the European Network
- Recap your BioBlitz

The policy brief *"BioBlitz: promoting cross border research and collaborative practices for biodiversity conservation"* was developed with contributions from members of the working group and BioBlitz organisers internationally. This policy brief, published in May 2017, is developed within the framework of the Horizon 2020 project Doing It Together Science as part of Deliverable 4.1. One of the outcomes has been establishing a collaborative and open network between DITOs partners, external organizations and policy makers throughout Europe. The full text is published in UCL repository http://discovery.ucl.ac.uk/1573359/

The Capacity Building workshop "*Advancing BioBlitzes to bring people and biodiversity together*" was held on 22nd November 2017 in Rome at University La Sapienza and in occasion of the First Italian Citizen Science conference. There were 38 participants from 13 EU countries, both experienced and non-experienced BioBlitz organisers. The workshop included two sessions: "*Approaches to BioBlitzes*"; and "*How to mobilise data for science and policy*". A workshop summary report will be published on ECSA website.

ECSA Annual Report 2017

Discussion group: Mapping tools and repositories

Activities planned for 2018:

- Secure extra effort through COST ACTION 151212 "Citizen Science to promote creativity, scientific literacy, and innovation throughout Europe" to host a Short Term Scientific Mission and conduct research on the BioBlitz methodology, in particular thourgh the development of an evaluation tool for participants and organisers to be conducted during the intiative City Nature Challenge 2018.
- Support coordination of City Nature Challenge in Europe and help identifying best practices for expanding the initiative in 2019.

ECSA Annual Report 2017

- Produce a Research Insight as part of DITOs deliverable 4.2, following up on the policy brief on BioBlitzes. The Research Insight focuses on the development of a common evaluation framework for BioBlitz and similar events, using the City Nature Challenge as a case study.
- Represent the European BioBlitz community and present major outcomes of City Nature Challenge 2018 at the high level conference of the EU Green Week "Green cities for a greener future" during the session organised by ECSA on 23rd May 2018 in Brussels.
- Hold the workshop "Evaluating BioBlitzes: an overview of participants' and organisers' perspectives" at the ECSA conference on 5th June 2018 in Geveva.

Learning and Education in Citizen Science

Summary of actions to May 2018

27 May 2018

1. Background

The WG was created during ECSA conference in Berlin (2016). Official launch, September 2016, after the summer holidays.

Chair and co-chair

Laure Kloetzer, Assistant Professor, University of Neuchâtel, Switzerland

Contact: laure.kloetzer@unine.ch

John Harlin, Alpine Institute, Leysin American School, Switzerland

Contact: jharlin@las.ch

2. Structure

Our platform for working communication is Basecamp.

- Original core group of 9 members:

Richard Edwards	Sarah Kirn	Yuri Matteman
John Harlin	Gregory Mannion	Lucy Robinson
Thomas Hillman	Katherine Mathieson	Laure Kloetzer

Attendees at the March 2018 COST Action Workshop on CS in Education have all expressed their intent to continue as an active core group. Thus, additional people who are entering as an expanded core group:

ECSA Annual Report 2017

Ansine, Janice	Baïz, Imane	Eufemi, Virginia
Aristeidou, Maria	Ford, Mary	Gold, Margaret
Hall, Rick	Grist, Hannah	Heij (de), Maaike
Jenkins, Tania	Jõgeva, Aiki	Kabbes, Jelle
Kalvāne, Gunta	Kettunen, Juhani	Kloetzer, Laure
Kwiatek-Grabarska, Katarzyna	Maskell, Gina	Massetti, Luciano
Mazurek, Jan	Mikkelsen, Bent	Ogilvie, Alec
Pope, Nicolas	Rafner, Janet	Ruck, Andy
Radosta, Elisa	Silveira, Patricia	Vogel, Juliette
Winter, Silvia		

3. Purpose of the Working Group

The WG aims to gather school and higher education teachers; educators from museums, community spaces and after-school activities; educational researchers; scientists; and other communities interested in developing the informal learning and educational aspects of their citizen science projects.

The main purposes of the WG are triple :

a)   "Building a strong international research base on learning in citizen science, connecting it more clearly to wider educational research;

b)   Engendering stronger relationships between research and practice" (Edwards et al., draft);

c)   Connecting practitioners (e.g. school teachers, museum educators, scientists) interested in the learning and educational aspects of citizen science.

The WG focuses on supporting, researching and evaluating Learning and Education in Citizen Science. This includes:

-       Encouraging Citizen Science as a culture of lifelong learning;

-       Providing guidance to citizen science teams on the development and evaluation of educational opportunities in their Citizen Science projects;

-       Developing participatory evaluation methods;

- Supporting capacity development in the research and practice of learning through citizen science;

- Building a network of citizen science researchers and practitioners interested in learning and education;

- Promoting educational opportunities in citizen science projects, for example, by offering training for scientists or connecting with the outreach goals of their research.

4. First reflections on Education & Citizen Science

We distinguish four main spaces where learning and education may happen through citizen science:

- **Educational institutions** (Schools, K-12 and higher)

- **Museums and similar out-of-school learning environments** (zoos, nature parks, etc);

- **Home/community** (makerspaces, public labs, local communities, families, etc)

- **Scientific research centres.**

These projects can happen both in real life (IRL) and purely online - or in mixed ways. The most interesting projects might happen at the borders between these spaces…

5. Current actions

The general idea is to work around specific, focused, limited in time actions, with different members engaged each time according to their interest.

Action 1: Collaborative Mapping of Educational Citizen Science in Europe.

Status : launched... and trapped.

We discussed a short survey in Sept-November in the core group. Outcome should be an enriched map on the ECSA web site (searchable map with some additional info and links to the educational CS projects).

Difficulties =

a) no specific WG resources to fund the technical efforts of creating this survey + map; resources from DITO not available so far.

b) a lot of different initiatives, esp. surveys. Not always open. How to coordinate efforts in order to avoid duplicating and exhausting the participants? As an ECSA community, we cannot (and don't want to) control what is issued on the public mailing-lists.

Question = Which resources can we build on as a WG, beyond our own dedicated effort ?

Action 2: Coordination with the CSA WG Education

The CSA (Citizen Science Association - USA) chairs are involved in the ECSA WG core group on Basecamp and will coordinate efforts where appropriate.

John visited Sarah Kirn (CSA WG co-chair) in at the Gulf of Maine Research Institute in Maine in December 2016 and again in May 2018.

John & Laure visited with Mary Ford (CSA WG co-chair) in Switzerland in March 2018.

They agreed that CSA and ECSA WG's will work together closely. In autumn 2017 monthly skype conference were held, but these have temporarily stopped.

Action 3: Coordination with the COST Action WG2

The COST Action WG on Synergizing Learning & Education with CS are coordinating with ECSA's WG on Learning & Education. Laure Kloetzer chairs both groups. Silvia Winter is the co-chair for COST, John Harlin is the co-chair for ECSA.

The COST Action Leysin Workshop, 15-17 March 2018 was the first coordinated activity (see below).

Action 4: Encouraging members to present their work on Education & Citizen Science at different conferences (including whenever possible the work of ECSA)

John presented of the WG's work to ECIS (the Educational Collaborative of International Schools) at their conference in Copenhagen in October 2016.

Actions 5 and 6: Constructing and doing two (or three) workshops around Education in CS during the next ECSA Conference (June 2018, Geneva).

Sessions during the next ECSA Conference.

● Share knowledge about designing for learning and evaluation of learning in Citizen Science projects (Laure in charge).

● "Dialogue Session" for CS in learning & education on 5 June 2018 to inform teachers and educators about Citizen Science (John in charge).

● Invited our CSA colleagues to join this effort, sharing their experience and our outputs, but they could not attend.

Action 8:Workshop in Leysin

The major action in the last year was a "Workshop on Synergies Between Education & Citizen Science", held at the Leysin American School from 15-17 March 2018.

ECSA Annual Report 2017

COST Action funded travel for approximately 25 teachers and researchers from around Europe, including participants from Latvia, Estonia, Czech Republic, and Poland, in addition to the more typically represented countries of Finland, The Netherlands, U.K., Germany, Italy, Switzerland, France, & USA. Approximately 6 participants attended on their own funding.

All presentations (typically 20 minutes each) were professionally recorded and edited so as to make them available to interested parties worldwide.

These are currently available at:

http://alpineinstitute-las.org/science/cost-workshop-2018/

and

YouTube channel for COST Action Workshop on Citizen Science in Education

These have all been made available to ECSA to add to their website as well.

6. Open questions

- Resources for supporting WG core members travels and some actions ? (like programming for the survey/enriched map)

- Actions related to policy making at the European and national levels ? Any advance from more experienced Working Groups ?

- We need tight collaboration with the WG on data, tools and platforms, to identify the best platforms and tools for education in Citizen Science.

Second International ECSA Conference Geneva 2018

Empowering Citizens, Social Innovation, Scientific Literacy

Chair: Pia Viviani (until 30.6.2017), Tiina Stämpfli (since 1.9.2017), Foundation Science et Cité, Switzerland
3-5 June 2018 | Geneva

The focus in 2017 of the ECSA working group "international conference" was dedicated to the support of the organization of the Second European Citizen Science Association (ECSA) International Conference.

Members:

- Bálint Balázs, Environmental Social Science Research Group (HU)
- Heiner Benking, Independent Journalist and Advisor/Scholar (GER)
- Martin Bocklehurst, KempleyGREEN Consultants (UK)

- Daniel Dörler, University of Natural Resources and Life Sciences (AT)
- Margaret Gold, Natural History Museum of London (UK)
- Muki Haklay, UCL (UK)
- John Harlin, Leysin American School Alpine Institute (CH)
- Susanne Hecker, German Centre for Integrative Biodiversity Research (iDiv) (GER)
- Florian Heigl, University of Natural Resources and Life Sciences (AT)
- Poppy Lakeman Frase, Centre for Environmental Policy Imperial College London (UK)
- Soledad Luna(until 30.8.2017), Veronica French (since 1.9.2017), ECSA headquarters (GER)
- Dana Mahr, University of Geneva (CH)
- Christine Marizzi, DNA Learning Center (USA)
- SerranoFermin Fundación Ibercivis (ES)
- Oliviero Spinelli, Comunità Ambiente (I)
- Bruno Strasser, University of Geneva (CH)
- Katrin Vohland, ECSA Headquarters (GER)

This working group has the following tasks:

- gives inputs for project plan provided by the Host
- defines conference topic
- gives inputs on fundraising as well as it does fundraising in own countries/Europe with ready-made documentation
- defines program framework and different session formats
- provides ideas for keynote speakers
- is responsible for special programs
- plans call for proposals and selection of proposals
- approves final program
- comments on final conference planning
- possibly moderates certain conference sessions
- coordinates and writes conference proceedings

The lead work is carried out by the Host of the conference, the Foundation Science et Cité, Switzerland on behalf of the European Citizen Science Association ECSA.

The Second ECSA Conference is going to take place in Geneva, Switzerland, from 3rd to 5th June 2018 just before the annual ECSITE Conference which will be held also in Geneva.

Following questions are going to be discussed at the conference: What role can citizen science play: For grass root organizations? For empowering individual citizens? For increasing scientific literacy? What are the reasons for the public to do citizen science? What is the role of schools? What are the impacts on social innovation?

A new conference website which can be used for all following conferences has been established: https://www.ecsa-conference.eu/

For further information please contact:
Tiina Stämpfli – tiina.staempfli@science-et-cite.ch / The ECSA Conference Team – contact@ecsa-conference.eu

Policy, Strategy, Partnerships

Chair: **Martin Brocklehurst** - KempleyGREEN Consultants, UK.

#1BillionCitSci2020

Summary
2017 has been the break through year for Citizen Science. We will look back on 2017 as the year that the role of Citizen Science was finally recognized as a potential core component in the delivery of European Policy and the United Nations Sustainability Development Goals. Members of the ECSA Policy Working Group (PWG), the related Task and Finish Groups and our colleagues from the United States (CSA) and Australia (ACSA) who worked with us through this year, can be proud of the achievements we have all made. With institutional frameworks already in place for Citizen Science in the United States of America we can confidently expect similar arrangements to emerge in Europe in 2018/2019. With a Global Vision for Citizen Science thrashed out at the UNEP Science-Policy-Business Forum for the Environment in Nairobi Kenya in December 2017 a Global Structure for Citizen Science is already building. We expect to see a strong Global Secretariat consolidate the case for Citizen Science as a core component in the delivery of global Sustainable Development Goals. The vision of global citizen science programmes and of 1 billion Citizen Scientists by 2020 is very real.

Martin Brocklehurst
Chair ECSA Policy Working Group

Policy Working Group Annual Report - 2017

2017 was a break through year during which both the EU and UNEP recognized the value of Citizen Science in policy development and its delivery.

In the first quarter the EU made progress on putting in place the institutional framework ECSA has called for, to explore how to build Citizen Science into its policy processes. Following an internal workshop on Citizen Science, organised by the **Environmental Knowledge Community (EKC)** in December 2016 (a partnership between DG ENV, DG RTD, DG JRC, DG Eurostat, DG CLIMA and the EEA) a Policy Brief was prepared on Citizen Science. **This was endorsed on 15th March 2017 by the EU Environmental Knowledge Community, DG's and the Executive Director.**

The brief recognized that CS was already impacting EC activities. Examples given included:
* Environmental Citizen Science (including indicators such as the Common Bird Index),
* Digital Social Innovation and Collaborative Awareness Platforms;
* Open Science and Responsible Research and Innovation; and
* Citizen Observatories.

The brief confirmed that:
* CS can bring economic, social, scientific and political added value to EU policies.

ECSA Annual Report 2017

- The engagement of citizens in CS activities can take different forms, from crowdsourcing (citizens as sensors) to collaborative science and policy (full engagement) – all forms can bring added value to EU policies.
- The greatest value of CS initiatives lies in their bottom-up approach and in the voluntary engagement of citizens.
- Strengthening interactions between citizens, scientists and policy-makers is fundamental for building trust in science and in evidence-based policies; and that
- Feedback mechanisms are important to clarify environmental policy objectives, increase transparency, and retain motivation.

The brief recognized three challenges in taking CS forward:

- **Policy issues**, such as the recognition of the added value of CS by public administration, the alignment of such bottom-up activities with top-down policy agendas, the sustainability of these programmes (CS does not come for free), the management of citizens' expectations and the need for a shared legal framework at EU level.
- **Organisational and governance issues**, such as the clarification of roles of the different actors and their interactions, awareness raising about existing projects and best practices, mechanisms to actively engage citizens, and new models for sharing responsibility from EU to the local and individual level – and back.
- **Technical issues**, such as the quality and validation of received inputs, their coverage and representativeness, and their integration and interoperability with traditional sources of information, data collected by the private sector, and with other CS initiatives.

The EKC DGs and Executive Director agreed to continue to cooperate on CS with the view to possibly develop a Commission position to endorse the following:

- CS data and information should be used to **complement other sources of data** (statistical surveys, Earth observation, etc.) and to help modernise environmental policy design and implementation.
- **Quality assurance** is essential in order to integrate CS data into environmental policies. It should be targeted to the intended use, build on best practices, and follow a well-defined and recognised methodology for data analysis.
- It is important to promote a flexible EU framework for CS initiatives and to create a forum to **foster a regular dialogue** between policy makers, mediators and practitioners – also beyond the environmental sector.
- CS **data sharing, management, interoperability and integration** should be promoted - not only between CS projects, but also with other data sources from the public and private sectors.
- CS should be better **integrated into the EU policy cycle**, together with the provision of criteria, guidelines and tools that make this integration useful for all stakeholders.

Critical follow up actions agreed included work to:

- explore how to best integrate CS in current and future EU initiatives on the environment,

- provided an added value is clear (e.g. in the context of monitoring & reporting, compliance assurance, the monitoring of Sustainable Development Goals, Solidarity Corps).
- develop demonstrators that pay particular attention to quality assurance schemes and are fit for the purpose of using citizens' data for policy; those will focus initially on the biodiversity area (Invasive Alien Species, Natura 2000) but other fields will be explored (e.g. waste, marine litter, air pollution and noise).
- Provide a robust methodology for the analysis of data collected by citizens, based on which criteria, guidelines and tools for a useful integration of CS in the EU policy cycle can be developed.
- Streamline CS in EU Research & Innovation programmes, notably in the context of the Open Science Agenda.
- Broaden and intensify dialogue with interested actors, including from the private sector, to better understand and define roles and responsibilities for providing access to citizens' data and for feeding CS into EU policy.

The PWG will continue its long-standing working relationship with the EU to bring these recommendations to a successful conclusion.

Running in parallel with these development UNEP worked with the PWG throughout the year to build the Mosquito Task & Finish Group into a **Global Citizen Science Programme** capable of impacting millions of lives in developing countries and tracking and supporting health programmes to mitigate the impact of mosquito born disease.

The UNEP funded a major workshop in Geneva in May 2017 at which agreement was reached to set up the **Global Mosquito Alert Consortium (GMAC)** designed to develop a global citizen science programme, to be launched in 2018/19 using common methodologies, data capture, data validation and reporting tools that could be used in any country across the globe. The outputs from the workshop are set to be published by the Wilson Centre in March/April 2018.

GMAC have also developed a common business model that can be used to develop any global citizen science programme and work is already underway on a second CS consortium to tackle the measurement of plastic litter on land and in freshwater as an aid to breaking the chain of events that has resulted in the disgusting pollution of our seas with marine plastics.

The success of the GMAC workshop convinced UNEP to push the emerging Global Citizen Science community to go further and faster and to offer the opportunity to put together a **Global Citizen Science Delegation** to attend the **UNEP Science-Policy-Business-Forum on the Environment in Nairobi, Kenya in December 2017.** They also invited the leaders of the delegation to stay over for **the United Nations Environment Assembly (UNEA3)** the highest environmental decision making body on the planet.

Both these events have had far reaching consequences, setting in place a **Global Vision for Citizen Science** that is reported elsewhere in this year's ECSA Annual Report. The UN further endorsed the value of Citizen Science to the delivery of the UN Sustainable Development Goals (SDG's) in a recorded keynote address to the **Australian Citizen Science Conference in Adelaide** in February 2018. This has given energy and drive to support efforts to build Citizen Science into Australian Policy development and implementation.

The year ended with a clear vision from both the United States and the Global Citizen Science Community that 1 billion Citizen Scientists by 2020 is a realistic proposition. Building the Big Data Systems to support this emerging network is the next critical step in creating a citizen science movement of unparalled influence in the delivery of global sustainability objectives. With nation states and the UN increasingly supporting this vision a global regional structure of citizen science communities is emerging, capable of delivering unconventional data sets that will make a significant contribution to the UN SDG's. In 2017 the PWG is proud to have played a role in these events and to have supported the instigation of an Africa Citizen Science Association along with continued support for the Asian Citizen Science Community. These are exciting times to be working on Citizen Science.

#1BillionCitSci2020

Key Events in 2017

Listed below are the key events undertaken by the PWG this year. It has been an inspiring emotional year in which we could not have achieved these outcomes without the dedicated support of a large number of volunteers from across the globe. We also owe a huge debt of gratitude to the UN staff who had the vision to engage the Citizen Science movement during 2017. We now have strong working relationships with the UNEP team and plans to put in place delivery mechanisms that will support both the growth of the Global Citizen Science Community as we strive to make an impact on the delivery of the UN Sustainability Development Goals.

Particular thanks must go to:
- my Vice Chair David Slawson of Imperial College London UK;
- Professor Jacqueline Myriam McGlade, UCL, London UK & Maasai Mara University, Kenya;
- Elizabeth Tyson and Anne Wilson of the Wilson Centre, Washington USA;
- Libby Hepburn from both ACSA and the Atlas of Life in the Coastal Wilderness (Australia); and
- Head Office staff at ECSA and the support of the Berlin Natural History Museum without whose support none of our work would have been possible.

All the active Members of the Policy Group and the Task & Finish Groups have contributed to our success this year and all have made their time freely available to ECSA. In the true spirit of Citizen Science however it is the combined efforts of all these people that have made the difference.

Key events for PWG Members were:
- **JANUARY 2017** – PWG ran an open face to face session to agree the years work programme at the ECSA Vienna Congress in January;
- **MARCH 2017** – David Slawson attended the Heads of the Environment Agencies Citizen Science Working Group in Dublin, Ireland to discuss EU wide CS programmes;
- **MARCH 2017** – EU adopts clear position on Citizen Science
- **APRIL 2017 –** Chair prepared a briefing for the EU Environment Committee on the Mosquito Task & Finish Group (MTFG), attended the meeting and secured the first EU Parliamentary Question on Citizen Science, which was tabled on our behalf by sponsoring MEP's to encourage the European Centre for Disease Prevention and Control (ECDC) to engage with the MTFG;
- **May 2017** –PWG secured funding from UNEP to coordinate with the Wilson Institute Washington a global workshop at the UNEP offices Geneva to agree common systems for the Mosquito Task & Finish Group (MTFG);

- **JUNE 2017** – Chair attended the European GEO Workshop, Shaping the European Contribution to the Global Earth Observation System of Systems (GEOSS) in Helsinki in June 2017 to present on the opportunities of linking with the Citizen Science Movement
- **SEPTEMBER 2017** – PWG supported the establishment of the **Global Mosquito Alert Consortium** chaired by Anne Bowser Wilson Institute;
- **SEPTEMBER 2017 – PWG, GMAC AND WILSON CENTER** put in place a joint NASA Development programme to link remote sensing data with CS data from Europe on mosquito distributions;
- **OCTOBER 2017 –** Chair joined the October Brussels, *EU Round Table – Needs of CS in the next 10 years – Towards a Road Map* organized by the EU Funded **Doing it Together Science (DITOs)** project where we shared the ECSA Policy papers on CS;
- **NOVEMBER 2017** – PWG Supported the Science Centre and Science Museum Day in November to set up a Global Experiment to support Global Mosquito CS tools;
- **DECEMBER 2017** – Chair and Anne Bowser Coordinated the worlds first Global Citizen Science Delegation to attend the **UNEP Science-Policy-Business Forum on the Environment and the United Nations Environment Assembly in Nairobi Kenya in December 2017 at** which a Global Vision for CS was developed**;**
- **DECEMBER 2017** – Chair and Anne Bowser Supported the formation of the African Citizen Science Association at USIU (University) Nairobi, Kenya in December 2017;
- **JANUARY 2018** – PWG agreed in January 2018 the MTFG Final Workshop report (to be published in March 2018 as a Wilson Centre occasional paper);
- **JANUARY 2018** – Chair coordinated with Libby Hepburn, Atlas of Life in the Coastal Wilderness Australia; Lea Shanley; South Big Data Innovation Hub, University of North Carolina and Amy Kaminski NASA an international workshop as part of the Australian Citizen Science Association in January 2018 on CS and its potential impact on both regulatory and science policy in Australia. UNEP outlines the critical role of SC in the delivery of the UN SDG's; and
- **JANAURY 2018** – PWG Supported the submission of a Citizen Science proposal for the UN Big Data Assembly in Abu Dhabi October 2018.

Annex 1 ECSA Policy Working Group – Membership

Chair: **Martin Brocklehurst** - KempleyGREEN Consultants, UK.
Vice Chair: **David Slawson**, OPAL, Imperial College London, UK.

Current Active Members December 2017:
Sara Aiella, University of Padova, Italy
Anne Bowser, Woodrow Wilson Centre, US
Alessandro Campanaro, Council for Agricultural Research Rome Italy.
Beniamino Caputo, University of Rome, Italy
Paolo Carletti, University of Padova, Italy
Aitana Oltra Codina, CEAB-CSIC, CREAF, Spain
Veronica French, ECSA & Museum für Naturkunde Berlin Germany.
Steffen Fritz International Institute for Applied Systems Analysis (IIASA), Austria
Hilary Geoghegan, University of Reading UK.
Claudia Göbel, DITOS Project**,** Museum für Naturkunde Berlin Germany.
Nidhi Gupta, Imperial College Researcher, London, UK
Björn Huwe, University of Potsdam, Germany.
Marc Lipinski, National Centre for Scientific Research, France.
Marie Céline Loibl, Federal Ministry of Science, Research and Economy, Austria**.**
Ed Maklouf CEO & Founder of Siine Ltd Barcelona Spain.

Dr Stefano Martellos, University of Trieste, Italy
Katherine McGavin , EarthWatch, Oxford, UK
Professor Jacqueline Myriam McGlade, UCL, London UK & Maasai Mara University, Kenya
Carole Paleco Royal Belgian Institute of Natural Science.
Eleonore Pauwels, Woodrow Wilson Centre, US
Jaume Piera, Institute of Marine Science, Barcelona, Spain.
Roeland Samson, University of Antwerp, Belgium.
Patricia Tiago, University of Lisbon – Biodiversity4All, Portugal.
Rebecca Boger Globe Project New York, USA
Elizabeth Tyson, CSA, USA

Members who stood down during the year
Soledad Luna ECSA & Museum für Naturkunde Berlin Germany.
Heiner Benking, Advisory Board Member ECSA, Berlin Germany.
Fermin Serrano Sanz Executive Director of Fundación Ibercivis Spain.
Helena Ruiz Fabra – EU Public Affairs Freelance Brussels.
Conor Smith, IMGeospatial, CODATA UK.
Simone Branchini, University of Bologna, Italy.
Malene Bruun European Environment Agency, Copenhagen, Denmark.
Micheál Lehane, Environment Protection Agency, Ireland.
Elizabeth Tyson, Woodrow Wilson Centre, US
Ian Thornhill, EarthWatch, Oxford, UK

Observers – Receiving Minutes
Poppy Lakeman Fraser, OPAL, Imperial College London, UK.
Katrin Vohland, Museum für Naturkunde Berlin Germany.
Professor Johannes Vogel, Museum für Naturkunde Berlin Germany
Shereen Zorba, UNEP, Nairobi, Kenya.

Annex 2 – Policy Working Group Objectives & Methods of Working for 2017

Original Objectives
The original objectives for the Policy Working Group (PWG) were to:

- To assess the citizen science landscape and develop strategies across countries;
- To approach policy makers and assess how to influence decisions and leverage funding;
- To analyse who the key stakeholders are and who ECSA needs to engage with to bring about changes in sectors.

PWG Objectives for 2017

The PSG identified its key challenges for 2017 at the Vienna Congress in January 2017 as follows:

- Role and input into EU Monitoring Reporting fitness check
- Delivering EU-wide CS programmes – prove it works through an example project
- Building policy and political support – grow MEP partnership
- Build on EU Environmental Knowledge Community – key group
- Build relationship with UNEP
- Find sponsors to support work: need core funding topped up by projects.

ECSA Annual Report 2017

PWG Methods of Working

The PWG operates for most of the year as a virtual group and our method of working is as follows:

- We target a video/telephone conference on a two-monthly basis;
- Members and other volunteers take the lead on specific issues to spread the workload equitably;
- We receives information from the group members, observers and anyone else who we considers relevant, and report to the ECSA Executive Board, Advisory Board, Steering Committee and wider membership largely through concise minutes (decisions and actions) of its meeting and through presentations at ECSA general assembly and conferences;
- We sponsor Task & Finish Groups currently:
  - Mosquito Task & Finish Group Chaired this year by Elizabeth Tyler & Anne Bowser;
  - EU Wide Exemplar Citizen Science Project Task & Finish Group led by David Slawson;

Citizen Science and RRI

This working group has been terminated in 2017. It was chaired by Fermin Serrano (Fundacion Ibercivis) and Claudia Göbel (ECSA) and aimed to support RRI practices in Citizen Science and strengthen the linkages between RRI Tools project and ECSA.

The working group contributed to the initial phases of conceptualizing ECSA's contribution to the EU Project "Doing-it-Together science" (DITOs). One example of this work is the contribution to the European Stakeholder Round Table on Citizen Science, DIY Science, RRI and Open Science. The report on this event has been finished in 2017 and is available here. A summary of the WG discussions has also been incorporated into the formulation of the Policy Brief on Citizen Science and Open Science.

Members included: Daniel Garcia Jimenez, Melanie Smallman, Ricarda Ziegler, Maite Pelacho, Gitte Kragh, Marika Cieslinski, Ana Casino, Soledad Luna, Marzia Mazzonetto, Hadrien Macq, Silvia Matrai, Melanie Smallman, Guillermo Santamaría Pampliega.

International Cooperation

Short Report - Global Citizen Science Delegation to the UN Policy Business Environment Forum and the 3rd UN Environment Assembly, Dec 2-6, 2017

ACSA, CSA & ECSA worked together effectively to advance the cause of global citizen science. The leaders of each Association took part in the event along with representatives engaged in Citizen Science from Africa, America, Australia, Europe, China and the Middle East. Most delegates came for the UN Policy Business Environment Forum but four stayed for the 3rd UN Environment Assembly to gain a better understanding on how we can influence events in 2019.

Global Citizen Science Delegation at the United States International University Nairobi.

The delegation held a well-attended session at the UN Policy Business Environment Forum**.** A joint statement on a global vision for Citizen Science was agreed by the delegation and presented by Johannes Vogel at the final Plenary of the UN Policy Business Environment Forum on Dec 3rd, making an substantive impact:

Commitment adopted by the Global Citizen Science Delegation
- Professional science alone cannot provide information at the scales and resolutions necessary to understand environmental change. The dominant culture of scientific expertise does not account for different ways of knowing, and often fails to engage the public.
- Citizen science emphasizes collaborative intelligence and co-creation to facilitate scientific and community-based solutions. It should become the bread and butter for environmental research and policy. To transform science there is a realistic target to engage 1 billion global citizens by 2020.
- Citizen science provides active and meaningful ways to fulfill the intention of treaties that call for the integration of local and indigenous knowledge.
- USIU-Africa will establish an African Citizen Science Association to mobilize local capacity to solve African problems by focusing on big data and analytics; water, air, and soil; and, pollution.
- The citizen science delegation will establish a Global Secretariat that will convene a standing committee to work with the UN and other public partners; promote regional leadership for citizen science; form a business advisory group; and, capture the global contribution of citizen science data to meeting the UN Sustainability Development Goals.

The substance of this statement was taken up by the Science and Technology Major Group and presented at the 3rd UN Environment Assembly plenary in open session:

Statement by Major Group "Science and Technology" on 5th of December 2017 to UNEA 3
Thank you Mr. Chair.

Despite that science presented strong evidence on various negative impacts as a result of pollution, and the need to act with urgency to manage and avoid threats to our sustainability. Most governments often failed to explicitly recognize that

ECSA Annual Report 2017

new knowledge from science that is a vital part of the solution to the pollution challenges we face. We hope that UNEA 3 will provide a number of opportunities to strengthen the science-policy interface at local, national, regional and international levels.

While technological innovations are an important part of the solution, they alone will not suffice. Knowledge from across the natural and social sciences is needed to identify, assess and monitor new technologies for their environmental and social impacts, to ensure that proposed solutions are environmentally and socially appropriate. Moreover, the technology transfer process is now stalling, so this whole issue of beating pollution is in danger.

The scientific and technological community has been working on the GEO that is an important science-policy interface that enables monitoring of the state of the environment globally and can play an instrumental role in monitoring progress in beating pollution.

The Earth System Governance project, Future Earth and The Sustainable Development Solutions Network are just a few examples of ongoing scientific research that can also be instrumental in monitoring and setting indicators as well as a good avenues for getting scientific research to solve pollution problems.

In short we recommend to UNEA 3 the following:
● Principles to be upheld by UNEA 3, e.g. The polluter-pays principle, The Extended Producer Responsibility principle, The Precautionary principle
● Establish strong Environmental governance for all pollution issues (water, land, waste…etc) with updated regularly legislation, including financial incentives and disincentives and cost recovery approach with common goals, community participation and data collection and monitoring.
● More governmental incentive and financial support to research on safer alternatives to hazardous chemicals, with priority to non-chemical alternatives, e.g. agroecological farming.
● Scientists, academics and researchers should be further motivated and engaged into various pollution policy discussion and decision-making. Their role should be further acknowledged.
● Avoiding false solutions to address pollution issues, such as incineration for e-waste & plastics. Solutions must be based on Precautionary Principle, contextualised to regional realities and scientific evidence, with public engagement respecting the Rights to Know Principle.
● Professional science alone cannot provide information at the scales and resolutions necessary to understand environmental change. The dominant culture of scientific expertise does not account for different ways of knowing, and often fails to engage the public. Thus, Citizen science emphasizes collaborative intelligence and co-creation to facilitate scientific and community-based solutions. Citizen science provides active and meaningful ways to fulfill the intention of treaties that call for the integration of local and indigenous knowledge.

Finally, UNEA 3 must ensure the full engagement of the scientific community at the global level - no scientists is left behind.
Thank you

Professor Johannes Vogel, Maike Weißpflug and Martin Brocklehurst at UNEA3

We could never have expected to achieve such an outcome prior to agreeing to attend. As a result we have started to build a whole range of new partnerships across business, the NGO community and Governments and supporting bodies we hope will mature in 2018. Throughout the proceedings Professor Jacqueline McGlade continued to support the Global Citizen Science Delegation and the UNEP staff gave invaluable help and guidance. Citizen Science was referenced on at least five occasions during the press conference to support the 3rd UN Environment Assembly resolutions and commitments of business, government and civil society.

- **Establishing Citizen Science Associations and networks worldwide**: Based on the vision, the Wilson Centre agreed to set up a Global Secretariat for the Citizen Science movement with the provisional name **"Citizen Science Global Partnership (CSGP)."** CSGP will act as a point of focus for a dialogue with the UN, coordinate the expansion of Citizen Science Associations across the global regions, collate information on the value of Citizen Science towards the delivery of the UN Sustainability Goals and coordinate global citizen science programmes designed to engage 1 billion people in Citizen Science by 2020. The United States International University of Africa (USIU) in Nairobi agreed to set up a working party to explore the establishment of a Citizen Science Association for Africa. It has the support of the Vice Chancellor of the University who is prepared to locate the new Association within the University. Martin Brocklehurst gave a media interview on the USIU meeting and closed the event with a thank you speech to the University Chancellor and Management staff. Representatives from the Middle East agreed to start the process of exploring whether or not support for a Citizen Science Association existed in the Middle East.

40

Representatives from China and Asia began the process of dialogue on how the embryonic Citizen Science groups in Hong Kong and Beijing might develop and established contact with Citizen Science groups in South Korea and the Philippines.

- **Building partnerships**: Discussions with the UN took place on the value of **UNEP Environment Live** to the global citizen science community. We were invited to submit a proposal for a joint working group to explore how we ensure open citizen science data can be a global resource and provide useful information and reports to citizens. The Eye on Earth Consortium have offered their platform for use by the global citizen science community and as a start a global webinar will be planned for February 2018 to highlight the achievements of the Global Citizen Science Delegation.
- **Working towards UNEA4**: The Global Citizen Science delegation agreed to stay in being to support the momentum created by this years events and seek greater influence at the 4th UN Environment Assembly [11-15 March 2019] and at the UN Global Data Forum Dubai in 2018. The UN agreed to attend the ACSA (by video link) and the ECSA (in person with a delegation) conferences in 2018. Anne Bowser, CSA Treasurer, agreed to sit on the UN Steering Committee for the UN Policy Business Environment Forum to shape the next UN Policy Business Environment Forum in 2019, giving Citizen Science a voice in the planning process.

The Global Citizen Science delegation were grateful to Alex Caldas and Shereen Zorba at UNEP for making it possible to attend both UN events and to Professor Johannes Vogel for leading the delegation and to Anne Bowser and Martin Brocklehurst for organising and supporting delegates to attend the UNEP event.

European Open Science Policy Platform (OSPP)

The mandate of the Open Science Policy Platform is to advise the European Commission on how to further develop and practically implement open science policy, in line with the priority of Commissioner Moedas to radically improve the quality and impact of European science.

The OSPP is a stakeholder-driven mechanism for bringing up and addressing issues of concern for the European science and research community and its representative organisations, following five broad lines for actions which are presented in the **draft European Open Science Agenda.**The OSPP supports policy formulation by helping to identify the issues to be addressed and providing recommendations on the policy actions required, supporting policy implementation, contributing to reviewing best practices, drawing policy guidelines and encouraging their active uptake by stakeholders.

Citizen Science is one of the eight pillars of Open Science in Europe, and ECSA represents the Citizen Science stakeholder group. ECSA chair Johannes Vogel has been nominated as chair oft he OSPP.

In 2017, the Working Group Citizen Science drafted policy recommendations for Citizen Science in Europe. In April 2018, these recommendations

41

(https://ec.europa.eu/research/openscience/pdf/citizen_science_recomendations.pdf#view=fit&pagemode=none) were adopted by the OSPP.

Maike Weisspflug

ECSA Finances

Budget 2017			
	ECSA Basic	**DITOs**	**Landsense**
		383.750,00 €	105.000,00 €
		100039	100038
	(Jan-Dec)	(Jan-Dec)	(Jan-Dec)
Income	**47.125,34 €**	**178.475,73 €**	**89.252,98 €**
Balance carried forward	1.310,20 €	178.475,73 €	89.252,98 €
EC project funding	0,00 €		
Membership fees	4.429,00 €		
Donations	0,00 €		
Overhead			
DITOs	29.522,14 €		
LandSense	11.864,00 €		
Expenses	**39.212,30 €**	**111.966,08 €**	**48.703,42 €**
Overhead		**29.522,14 €**	**11.864,00 €**
Personnel	**34.393,89 €**	**65.865,05 €**	**30.056,54 €**
Material Expenses			
Travel	**2.490,25 €**	**5.657,53 €**	**4.506,88 €**
Payroll office	1.158,72 €		
Fees for registration etc.	534,44 €		
Flyer, printed material		417,39 €	
Consultancy for Bid writing	635,00 €		
Activities			
DITOs European		5.965,37 €	
DITOs Bioblitz Activities		1.131,88 €	
DITOs Local Stakeholder		1.207,72 €	
DITOs Teacher Training		1.500,00 €	
DITOs Publications		699,00 €	
Landsense Stakeholder			2.276,00 €
Capital Reserve	**7.913,04 €**		
Balance	**0,00 €**	**66.509,65 €**	**40.549,56 €**

List of in-kind contributions

Museum für Naturkunde Berlin

ECSA Executive Board – ECSA Chair Prof. Johannes Vogel, ECSA Executive director Dr. Katrin Vohland. Office space, administrative support, design support, travels, print materials, website hosting, administration and development, writing and administering research proposals.

Time from all the organizations For Board of Directors, working group chairs and Advisory Board Members

IIASA hosting and supporting the organization of the ECSA GA 2017

BOKU University Vienna hosting and supporting the organization of the ECSA GA 2017

Thank you to all ECSA members, Board of Directors, Working Groups Chairs and Advisory Board!