

Science Café Summary
University of Oslo, Natural History Museum
13th December 2018

We hosted 6 science cafés in the period May – December 2018 in Oslo.

Approximately 175 participants attended our events.

Which topic was addressed?	Edible fruits 24.04.2018 and 03.05.2018
How many people attended? Who were they?	Children 11-15 years old from the neighborhood to the Botanic garden. 24.04.2018: 27 people 03.05.2018: 23 people Venue: BIBLO, a library near the Botanic garden in Oslo.
Goals and questions	
Which goals did you want to achieve? How did you find out whether you were on the right track?	To make children reflect on where their food comes from before it gets to the shop we wanted to create a concept that works as an arena to talk with children about fruits; how they are grown and from where they originate. <ul style="list-style-type: none"> • How do the activities work to create a conversation and interest about the topic? • What do children know about cultivating plants? • What do children know about the origin of tropical fruits? <p>After the cafés we took field notes from our observations and from the conversations; what the kids knew and what they asked us about. The staff in the library also provided us with information on the aftereffects of the events.</p>
Agenda and experience	
What did you do? What went well? What would you recommen	An event specially adapted for children. Three stations with practical and fun exercises created an arena for conversations about where the fruits grow and how to grow them. We concluded that tropical fruits are a good icebreaker for conversations with children that mostly were immigrants. We achieved a conversation with the children, perhaps especially because they were doing exciting practical tasks that did not remind them of school. <ul style="list-style-type: none"> • Make the stations more equal in time spent by the participants. • Conversation mustn't be the main activity. Make all station practical.

d to do differently next time?

- In order to prevent a stressful situation, elements which involve the sharpest tools can be prepared (in this situation making holes in the bottles were done in forehand for the second event).
- Find a creative solution to collect information and evaluations from the participants. It will be recommended to have one person dedicated to this task.

Pictures



Worldmap with pictures of fruits that the participants have pinned on the country of origin. The botanist explains pollination that must occur before we can get seeds and fruits. Photo: Kristina Bjureke



Participants had to work practically to remove the big seed of the mango fruit. The flesh was used to make smoothie and the seed was sown.



Mini greenhouses with soil and seeds from the smoothie station marked with labels. Photo: Kristina Bjureke

Which topic was addressed?

03.09.2018 "Bees in the city - Disappearance of bees, and competition between wild bees and honey bees in the city"

	<p>This topic was chosen because the concern for pollinating insects was addressed as a topic by the FSAG and from teenagers in a co-creation process connected to our BigPicnic exhibition.</p> <p>The theme is an ongoing discussion in media and a topic of misconception. There are many good arguments for beekeeping in the city, but is pollination one of them? In US it is tame honey bees that die, while here in Norway it is wild bees that disappear from nature.</p>
How many people attended?	<p>43 participants Date: 03.09.2018 Venue: The Mansion in the Botanic garden, evening event 18-20.30</p>
Goals and questions	
<p>Which goals did you want to achieve?</p> <p>How did you find out whether you were on the right track?</p>	<p>The goals for the evening were to:</p> <ul style="list-style-type: none"> • increase the participants' knowledge of disappearance of wild bees in Norway • raise awareness of competition between wild bees and honey bees in the city • collect information on the public's views of the topic • create a concept that serves as a relaxed arena for dissemination of science and exchanging views between experts themselves, and experts and the audience <p>We made notes, filmed the evening and the participants were invited to fill in evaluation forms at the end of the event.</p>
Agenda and experience	
<p>What did you do?</p> <p>What went well?</p> <p>What would you recommend to do differently next time?</p>	<p>Indoors discussion with 3 panelists and one moderator. Classic form of venue. Panelists were: beekeeper Ragna R. Jørgensen from Bybi, Oslo's urban bee team, L O Hansen, insect researcher at the Natural History Museum (UiO) and ecologist Erik Stange from the Norwegian Institute for Nature Research.</p> <p>Homemade honey cake and coffee/tea gave a pleasant café setting. Cozy relaxed setting with panelists in armchairs.</p> <p>Very good choice of panelists. Panelists met half an hour before to get to know each other which made them relax. Good and constructive discussion.</p> <p>It is difficult to please all. Based on this experience we will conclude that introduction is important but should not take too much of the time. Next time we will consider to start the session by giving the panel participants a given time for a presentation rather than to start a conversation right away. That will structure the introduction and prevent long digressions. The moderator shall be more alert to cut digressions the audience doesn't engage in.</p>

Before setting the time frame for the science café we will think carefully about whether we have time for everything we are planning. We will also make sure we stick to the schedule in order to get enough time for the discussion. We will be better prepared for harvesting of information; think carefully through the questionnaires, provide enough time for answering and include more check boxes.

Pictures



We have a similar design on advertisement of our BPN science cafés on webpages and Facebook.



23.09.2018 “Wild apples and cultivated apples”

Which topic was addressed?

Food resources vs biodiversity of wild species. The topic was chosen because the discussion about cultivated apples entering the list of unwanted invasive species is ongoing. We thought it could be a great discussion theme about what is most important: edible fruits or conservation of threatened wild species.

How many people

Date: 23.09.2018
34 participants

attended?	Venue: Outdoors in the Botanic garden, afternoon event at 15.00 on a Sunday
Goals and questions	
Which goals did you want to achieve?	We wanted to provide information and create a debate about the dilemma that our food plants can be a threat to our wild species. We also wanted to collect information on the public's views on this issue.
How did you find out whether you were on the right track?	We also wanted to get experience from outdoor debate and if it worked well in combination with a larger event. We made observations, had a survey, and some participants were interviewed at the end of the session.
Agenda and experience	
What did you do?	Discussion with three panelists and one moderator. Panelists were: Per A. Åsen from the Natural Museum and Botanical Garden, University of Agder, botanical investigations on wild apples in Norway; Kjersti B. Fjellstad from Norwegian Genetic Resource Centre and Kristina Bjureke from the Natural History Museum, member of the expert committee working with "Alien species in Norway – with the Norwegian Black List". The moderator was the head of the Botanic garden, Tor Carlsen. The science café was held outdoors at the "Apple Day" in the Botanical garden, a huge event with activities related to different aspects of apples. Unclassical setting. Chairs were installed under two huge party tents. We decided to have the science café at the end of the Apple day's more practical events. Homemade apple cake and coffee/tea gave a pleasant café setting.
What went well?	Very good choice of panelists. All met before the science café to get to know each other and relax. Alien species can transfer genes and therefore change the genetic constitution of native species. We were afraid that apples-lovers would find a discussion about introgression between the alien <i>Malus xdomestica</i> and the native <i>Malus sylvestris</i> provocative. But the discussion went well, and no fights occurred. It went well to conduct a science café on an "infected" theme, and we felt that it is our duty to discuss genetic contamination as a serious threat towards biodiversity. The researcher presenting DNA testing explained introgression in an easy manner. I didn't get rotten domesticated apples thrown on my head. To keep an ongoing discussion it would have been better to be indoors. It was a nice and sunny Sunday, but a bit chilly. After sitting still an hour, many participants were cold. The sound was also a challenge.

What would you recommend to do differently next time?

Having the science café in connection to a bigger event has positive and negative sides. On the positive side you can reach people who otherwise wouldn't come. On the other hand some visitors were just passing by and didn't stay there the whole time, which can be a bit disturbing.

Another time we will consider microphones and conduct the science café indoors.

Pictures



The illustration for the advertisement



The science café outdoors at the Apple day



Visitors in the Botanic garden during the Apple Day could express their thoughts about how they choose apples – Ecological? Norwegian? By price? Short transport? Photo: Kristina Bjureke



One expert showed the participants how wild apples look like, and the hybrids with cultivated apples. Many took pictures of these apples. Photo: Kristina Bjureke

	27.11.2018 Climate debate by the youth and for the youth
Which topic will be addressed?	Co-creation with young people 17-18 years old. Debate on climate and climate change, made by and for young people.
How many people attended?	12 participants in total. One of them was a visiting participant, the rest were the co-creating youth, invited young experts and us. Venue: Venue: The Mansion in the Botanic garden, evening event 17-19

Goals and questions	
Which goals did you want to achieve?	<p>Our goal was to achieve opinions and thoughts about climate and climate change from young people. In soon future we will have a Climate exhibition center here in the Botanic garden and it is of greatest importance for us at the museum to know how young people argue, think and worry. The idea to make a debate only for young people came from a young student.</p> <p>Our advertisement text was: “Are you under 26 years old? Come to us and say what you mean in the climate debate. Here you can hang around and participate in discussions, ask questions and convey your own views. The event is made by young people, young and young experts. There is free entrance and we serve some food for those who are hungry!”</p>
How did you find out whether you were on the right track?	<p>The teachers at the schools we had visited during the work with our exhibition “The future is now” was contacted and asked to spread the word about the interactive debate. It was announced on our webpage, our Facebook pages and on posters. The students spread it by Snap. We realized that few people had seen the Facebook event, due to few “going”. We tried, and our young people tried, to spread the word the last days, but unfortunately we got extremely few attendants – except for the 7 youth that organized, the young experts and us from the BigPicnic team. Only one participant in addition to “us”</p>
Agenda and experience	
What did you do?	<p>One young student contacted us at the museum regarding her CAS (creativity, activity and service) study at the high school. She knew about our upcoming Climate center and wanted to create a Climate debate – with young people and young experts. In total we had six co-creation meetings with the student (and twice together with one of the fellow students). Young experts were contacted and agreed to join. A plan was made how participants could walk around between different climate stations and discuss and express their thoughts. It was going to be interactive and people should move around.</p>
What went well?	<p>The event was, like all the other science cafés, free and the youth made wafers and we had nice food. But unfortunately only one participant joined the debate – in addition to the organizing seven students, the experts and us from the committee. This was solved by reorganizing from stations to a joined sitting and a creative discussion. This discussion was really nice and ongoing for 1,5 hours.</p>
What would you recommend to do differently next time?	<p>We have had an evaluation meeting with the young student. We all agree that is an interesting topic, a good programme and she concludes that it was a useful experience. We concluded at the evaluation meeting that the end of November was a very bad time for an event due to exam period. We also recommend for the future better advertisement in media the young people attend, to fix the day for the event earlier, and to maybe look for a location where young people are more used to hanging, like a library. Young people don’t normally go to a dark Botanic garden in</p>

wintertime, the number of participants could have been higher during months like April or September.

Pictures



The co-creating young organizers.



One of the stations before we reorganized to a joined climate debate in a cozy sofa group.

Which topic will be addressed?	<p>04.12.2018 Genes for the future - Modification and conservation</p> <p>The key to adapt food production to the changing climate conditions lies in the genes. Today's grown food plants (like rice and grains) are the result of many centuries or millennia of breeding and processing. In some species, very little of the original genetic variation is left, and a few of the existing varieties are in use. By conservation of the existing diversity of old varieties and the wild relatives of our food plants (CWR, crop wild relatives), we can safeguard genetic diversity. Today, genetic engineering also offers a huge variety of possibilities. Genetic engineering, GMO and CRISPR are controversial topics. The evening's four panelists will give an introduction to these topics before we open up for discussion at round tables.</p>
How many people attended?	<p>Date: 04.12.2018 36 participants, 12 male and 24 female</p> <p>Venue: Venue: The Mansion in the Botanic garden, NHM, evening event 18-20</p>
Goals and questions	
Which goals did you want to achieve?	<p>We wanted to provide neutral information from experts on a "hot topic" like genetic engineering, GMO and CRISPR. We know that this is a controversial topic, and we wanted a diversity of experts to convey their views on this subject to provide participants at the science café with a broad view of a "hot" theme in food safety.</p>

<p>How did you find out whether you were on the right track?</p>	<p>We wanted the participants to listen and learn, but also to discuss this topic with their neighbors around the tables to create debate and discussion.</p> <p>We made observations, listened to the discussion, had the BPN interview survey, and talked to some participants afterwards. The session was video filmed.</p>
<p>Agenda and experience</p>	
<p>What did you do?</p>	<p>The science café started with a presentation of the BigPicnic project. Then it was built upon speeches and discussion. Discussion with four panelists and one moderator. The session took 2h 10 min. First each experts got ten minutes for an introduction speech. Then we had twenty minutes break for tea/coffee, homemade caraway cakes (an important Norwegian CWR) and discussion amongst participants at the event around two questions, then open discussion between panelists and participants. The panelists and the topic for their introduction speeches were:</p> <ol style="list-style-type: none"> 1. Siri Birkeland, PhD student, Natural History Museum, UiO: "Genetic variation: importance for plants adaptations to a changing climate" 2. Hilde-Gunn Opsahl Sorteberg, Professor at the Department of Plant Science, Norway's Environmental and Biological Sciences University (NMBU): "Genetic engineering, also called genetic modification, for food and feed production: the possibilities of modern technology" 3. Hilde Mellegård, Senior Advisor at the Norwegian Biotechnology Council: "Genetic engineering for food production: regulatory, social and ethical matters" 4. Nina Sæther, Head of the Norwegian Genetic Resource Centre, Norwegian Institute of Bioeconomy Research (NIBIO): "Genetic variation: importance of conservation for future food production" <p>Panellists:</p>



Siri Birkeland, Stipendiat ved Naturhistorisk museum



Hilde-Gunn Opsahl Sorteberg, Professor ved Institutt for plantevitenskap, Norges miljø- og biovitenskapelige universitet (NMBU)



Hilde Mellegård, Seniorrådgiver i Bioteknologirådet



Nina Sæther, Fagleder ved Norges genressurscenter

What went well?

What would you recommend to do differently next time?

Our invited experts were very well prepared and had really exciting introductions to their different field of genetic work. They knew in advance that the participants were “normal people”, and they used a language that was easy to understand for everybody. As their presentations were short, no participant at the science café got tired. Everyone listened and noted intensively. The panellists began to discuss with each other in front of the participants, very good.

We tried to arrange this last science café 2018 in November, but two experts were on conferences/travels that month, so it had to be in the beginning of December. December is a really hard month to organize events connected to science in. Families are occupied with Christmas celebrations at schools and clubs and there are plenty of

Christmas parties and music events going on all month. It was hard to reach people on Facebook and web, so much is going on at this time of the year. We would recommend not to organize events like science cafés in December. It was a stressful job to share information on different relevant social media very day.

Pictures



The illustration for the advertisement at NHM website and FaceBook



All four experts sitting comfortable in front of the participants.
Photo: Kristina Bjureke



Some of the participants at the science café. Photo: Kristina Bjureke



After the science café ended well: The four experts, moderator Dr. Anneleen Kool in the middle, flanked by the two BigPicnic organizers, Kristina Bjureke and Hilde Jacobsen. Photo: Chris Ihle