Science communication

in Kaunas Botanical Garden of Vytautas Magnus University, Lithuania

Vida Mildziene

BGCI’s 9th International Congress on Education in Botanic Gardens, April 26–May 1, St. Louis, Missouri
Session: Engaging the Public: Science Communication Initiatives in Botanic Gardens
62.5 ha green territory maintaining historical spirit of the former estate and picturesque park in the very center of Kaunas city

4 botanical sectors: Dendrology, Floriculture (including Green house), Medicinal plants, Pomology (horticulture).

Total No. of collection examples (taxa, culta, populations and unidentified examples): 9641
Number of visitors

<table>
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<th>Year</th>
<th>Number of Visitors</th>
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The most open for the society department of the university is the best place for science communication;

- Rich plant collections: for biodiversity conservation, research, studies and education;

- Diverse programme of cultural events in the peaceful green area;

- Traditional excursions are no longer popular.

There is a clear need to develop different approach for attracting visitors;

- The problem: lack of science communication skills.
OUTLINE OF SCIENCE COMMUNICATION PROJECTS IN KBG:

- KBG is a partner of the Lithuanian Academy of Science in the project VP1-3.2-ŠMM-02-V-02-003 “Development of a National Science Communication System in Lithuania”. 2011-2014; extended for the period 2015-2020.

- KBG regularly participates in the national science festival „Erdvėlaivis Zeme“ (Spacecraft Earth) organized by the other partner of this project.

- VP3-1.4-AM-09-K-02-001 School of Green Ideas (Žaliasis Aleksotas): closely involves local community (2011-2014).

- Since 2012 KBG is the national coordinator of Fascination of Plants Day. The event takes place in 8 cities, involves ~ 30 partners and receives over 8,000 visitors.


- KBG participates in the national Young explorers projects.
ACTIVITIES:

- “NSO laboratorija”: program of science laboratory classes for children at KBG;
- Summer field expedition camps for schoolchildren;
- A mobile program of science demonstrations performed in other Botanic Gardens (6 per year).
NSO LABORATORY

**Kviečia i NSO Laboratoriją!**

Naturaes Scientiae Omnibus – Gamtos mokslių visiems

NSO LABORATORIJOJE rasime atrakcioną, kodel kaktusai spyglaudžia, ikškësimė chameleonų spalvų kitos paslapčių, susipadinsime su augalų eklimine kampanija, tyrinėsime vandenų laiko gyventojus, neršime į mūsų turinčius pasaulių, klaudžiosime stebuklingų medžių giraitės, šilnuosime medžių ievas ir balinsime akmenis, atvaršime duris į kvapų karalystę, tikrinsime augalų kantrybę, gaminsime kartą leidą, virsime alchemikas ir dar daug daugiau unikės prie mūsų ir pasaulio tapą spalvingesni, keistesnias ir dominesnias.

Atsakyk čia, užsakymus ir atlikti bandymus padės įvairių gamtos mokslų rūšių specialistai, mokslininkai, studentai ir patys MOKSLEVIAI!

Visus norimus kviečiame registruotis NSO LABORATORIJOS programai, liudiant laikų adresu: j.dabrilete@bs.vdu.lt.

ADDITIONAL VALUE:

- Programme is adopted for interactive classes for primary and secondary schools;
- Birthday of the young scientist;
- Presentations on experiments for kids on:
  https://www.youtube.com/watch?v=9-wCROG-fl0
Summer field expedition camps for schoolchildren:
1. Story on control methods of *Cameraria ohridella* with microscopic demonstrations of pupae.
2. Story on seed SEM analysis „Seed portraits“.

- **Eupatorium cannabinum**
- **Primula veris**
- **Centaurium erythraea**
- **Agrostemma githago**
3. Story on control methods of *Heracleum sosnowskyi*.

This story was presented by the young explorer Deivydas Jasinauskas.

In 2015 Deividas took the 3rd place in the National contest of the Young explorers of Lithuania. He presented the study: „Elimination of the invasive plant *Heracleum sosnowskyi* by covering with a black polyethylene film“.

Lectures and demonstrations on this topic are also main activities of the project „The campaign against *Heracleum Sosnowskyi*“ (2014-2015).

Movie: https://www.youtube.com/watch?v=yQD8ssWpUZ4
Public awareness and environmental education mean VP3-1.4-AM-09-K Project „Green Aleksotas“ http://zaliasisaleksotas.lt

Public events
Cleaning environment

Extermination of Heracleum Sosnowskyi Manden.

Planting Oak grove with prof. Birute Galdikas
TYPES OF EDUCATIONAL ACTIVITIES:

Traditional:
- Guided excursions presenting botanical collections
- Traditional or occasional small projects for preschool child and school children education
- Green classes

Not concentrated only on botany

Big educative projects:
- Innovative,
- Interactive,
- Include multiple activities

Mini Zoo + rising exotic butterflies in the Green House
SCIENCE COMMUNICATION ACTIVITIES BRING NUMEROUS BENEFITS FOR KBG:

Can increase an efficiency of BG functions since:
- Helps to diversify forms for education in BG;
- Is perfectly suited for topics on increasing public awareness;
- Increases visibility of the garden,
- Attracts visitors,
- Helps in finding more partners for projects,
- Decreases seasonal dependence,
- Provides additional financial resources.

Science communication - it gives fun or everyone!
**HOW ARE WE PLANNING TO TAKE THIS WORK FORWARD IN THE FUTURE?**

- To extend human resources for science communication;
- To develop NSO laboratory to small science museum center - oriented not only towards botany;
- To develop more activities for young explorers (individual or group projects, summer camps, etc.);
- To participate in larger scale Science communication projects with foreign partners;
- To develop collaboration with regional parks and nature reservations.
WHAT ARE OUR TOP TIPS FOR OTHER GARDEN'S WANTING TO DEVELOP THEIR SCIENCE COMMUNICATION WORK?

- Research is not an elitary occupation – everyone may be scientists;
- Curiosity and eager for knowledge is natural for all ages, thus we need to create a proper place for making fun of gaining knowledge and exploratory skills;
- Finding relevant stories and simple tools for making things by own hands (interactive);
- Help of scientists, students and gifted schoolchildren is very much appreciated;
- Science communication activities are mostly fuelled by voluntary initiatives.
ACKNOWLEDGEMENTS: TO ALL STAFF OF KBG

THANK YOU FOR ATTENTION!