Briefing: Secretary FOR INFORMATION

Post travel report: Ruby Paroissien, to Wakehurst Place, Ardingly, UK



Transport for NSW

Purpose: To report to the Secretary on the recent overseas travel to Wakehurst Place, Ardingly, UK on 16 July 2022 to 26 July 2022 for a technical training attachment with Royal Botanic Gardens, Kew as part of the Millennium Seed Bank Partnership Training program.

Analysis: Ruby Paroissien, an early career researcher at the Royal Botanic Gardens and Domain Trust (the Trust), was invited to undertake technical training with Royal Botanic Gardens Kew, as part of the Millennium Seed Bank Partnership Training program to increase knowledge and skills sharable with the Australian Seedbank.

Summary:

- 1. Key outcomes included developing skills in seed training and developing networks to share knowledge between partners. Follow up actions include a presentation, team discussion and increased communication between MSB and the Australian PlantBank.
- 2. Benefits to the Transport cluster include Increasing the conservation deliveries of the Australian PlantBank, through upskilling and improving efficiency in the Australian Seedbank team.

Key learnings and outcomes

This training allowed Ruby to further enhance her technical skills in seed processing and seed conservation and compare differences in objectives and technical processes between the Millennium Seed Bank and the Australian Seedbank. Ruby observed how differences in conservation priorities may alter the decisions and processes of the teams.

Key outcomes from the technical training included increasing knowledge and practical skills of seed processing. This was shared this with the Australian Seedbank team and other staff at the Australian PlantBank, further increasing the skills and efficiency of the team. Collaboration and communication with specific staff at the Millennium Seed Bank were also created and will be used to further develop the knowledge of both teams and strengthen the partnership.

Communication Strategy

Since returning Ruby has briefed several members of the Australian PlantBank on the processes used by the Millennium Seed Bank and will present to the Australian Seedbank and Research teams on the key differences and skills acquired over the course of the training attachment. Resources obtained on specific techniques will be circulated and further work will be undertaken to identify the differences between processes and the opportunities to improve efficiency and conservation deliveries.

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Objective Reference: BN22/00463

Contact: Ruby Paroissien, Seedbank Officer, Australian Institute of Botanical Science, Royal Botanic Gardens and Domain Trust

Alignment with Future Transport 2056

The Cities and Active Transport division delivers towards the following principles outlined in Future Transport 2056:

- Successful places Public spaces are key components of a successful place, and the parks and gardens managed by the Trust are key examples of preserving and maintaining an important space for our city.
- Sustainability Underpinning the maintenance of the Botanic Gardens is the world class research undertaken by the Australian Institute of Botanical Science, to ensure that we can continue to care for this resource into the future.

Disclosure Summary

Date	Organisation/Individual	Purpose of Meeting
16/7/22	Millennium Seed Bank	Technical training attachment with Royal Botanic
to	including individuals	Gardens, Kew as part of the Millennium Seed Bank
22/7/22	attached in Attachment A.	Partnership Training program.

Next steps

The next step will involve a presentation of the skills acquired followed by a team meeting to discuss if these learnings can help to develop current processes and how best to implement this. Dates for the presentation and team meeting have been set to help ensure these actions are closed out. Further action will be a sharing of resources between the Millennium Seed Bank and the Australian Seedbank, such as germination data. This will be an ongoing action but has already been initiated.

Expense Summary

Breakdown of all costs incurred	Actual Cost		
Airfares – GL 534030	\$3541 AUD*		
Accommodation – GL 534040	NA		
Official hospitality – GL 534050	NA		
Attendance fees for delegates – GL 534050	NA		
Ground transport – GL 534050	\$0 AUD		
Meals and refreshments – GL 534050	\$209.57 AUD*		
Other miscellaneous costs – GL 534050	\$80.97 AUD		
Total	\$3831.54 AUD		

*Costs covered by the Millennium Seed Bank

Traveller endorsement

Secretary



*Please send your Post Travel Report, within 28 days from travel, to the Office of the Secretary.

Background

Ruby Paroissien is an early career researcher, an integral member of the Seedbank team at the Australian PlantBank and a PhD candidate undertaking seed research. The aim of the Millennium Seed Bank Partnership Training program is to allow for the exchange of knowledge and expertise to upskill partners in seed training and research and develop networks between these partnerships.

The Millennium Seed Bank is a long-standing international partner with RBGDT and is at the forefront of global seed conservation efforts, providing detailed methodologies and protocols in seed collection, processing, and assessment. This is primarily a laboratory training program, including learning hands-on skills for seed collection, assessing viability and conducting germination trials and, as such, is not available in an online format.

Attachments

Attachment	Title
А	Trainers, contact details and topics covered
В	Timetable showing specific breakup of courses covered from 18/7/22 to 22/7/22

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Attachment A - Trainers, contact details and topics covered

Trainers and the topics covered: Sharon Balding Plant Health Officer and Shipping Nicola Mills Collections team Luces Tealer Collections team

Lucy Taylor	 Collections team
Anna Pajdo	 Collections team – Microseeds
Vicky Philpott	 Collections team – Microseeds
Pablo Gomez Barreiro	Lab manager, seed drying practical
Naomi Carvey	 Seed data management
Rachael Davies	Germination expert
Keith Manger	 Seed bank design and management
Elinor Breman	 Head of Seed conservation department
Sarah Gattiker	Collections team
Jo Wenham	Nursery team manager

Attachment B – Timetable showing specific breakup of courses covered from 18/7/22 to 22/7/22



Timetable

	9:30 - 11:00	Coffee	11:30 - 13:00	Lunch	13:30 - 15:00	Теа	15:30 - 17:00
Date Day							
			Arrival at MSB				Orientation and meal with HO
17/07/2022 Sunday							
	Welcome, introductions and Houskeeping. H&S with KM		Seed processing and quality assessment intro lecture and video (30min) then to lab NM & SG (LT)		Seed processing and quality assessment [COL] SG, NM, LT, DH(Xray)		Microseed handelling, set up for TZ & FDA. AP (SM)
18/07/2022 Monday							
19/07/2022 Tuesday	Seed development and viability (HO)		Setting up germination tests incl chipping [COL] PW & SG		Setting up germination tests incl chipping [COL] PW & SG		Germination and dormancy [RD, partly pre-recorded, calculations exercise live]
20/07/2022 Wednesday	Germination scoring (COL) PW +2 min additional scorers (VP & FS)		Germination cut- testing (COL) PW +2 if nec		FDA/TZ results from Monday AP (SM)		Dormancy lecture (pre- rec) and discussion , Q&A with RD
			Drying seeds for long- term conservation [JA] intro, then banking		Banking NM +2		Seed data management
21/07/2022 Thursday	Counting NM		Shipping and Plant Heal	lth SB	Seed bank design and management talk and tour [KM]		open session (HO)
22/07/2022 Friday	Wakehurst Garden Tour						
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