

A botanical garden and a wide variety of audiences, a commitment to the public and the promotion of scientific vocations. The case of school audiences.

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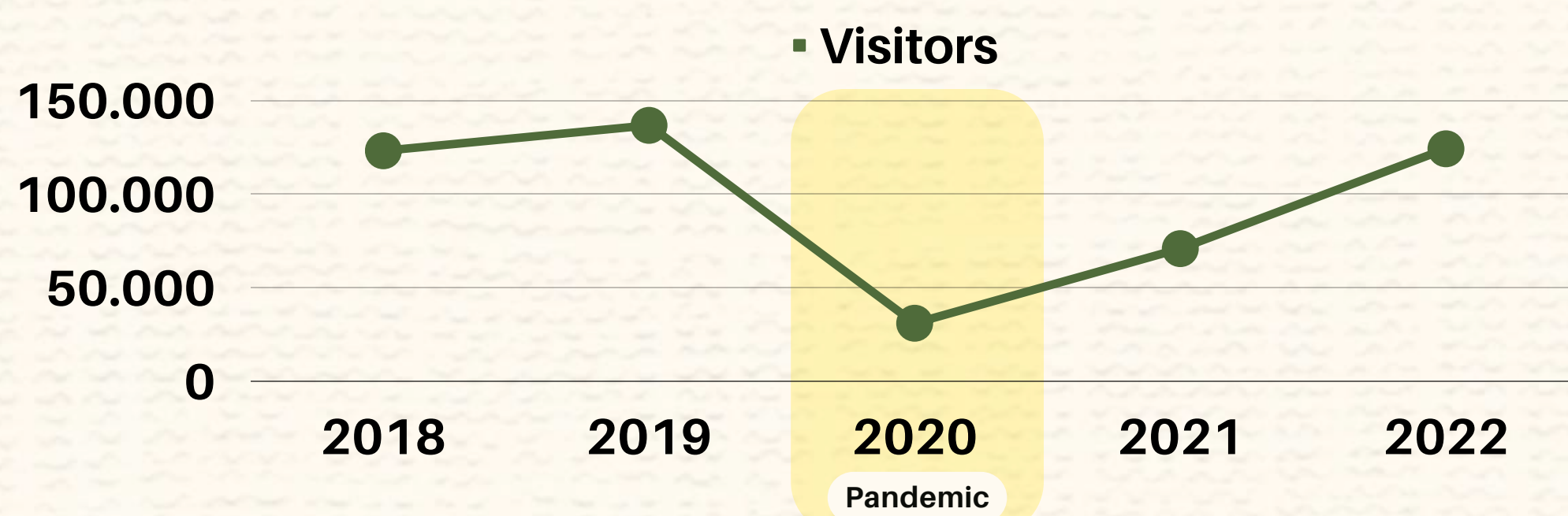
INTRODUCTION AND OBJECTIVES

In recent years, the Marimurtra Botanical Garden, nestled in the stunning cliffs of Costa Brava (Blanes, Girona), has diversified its activities to cater to diverse audiences. The central goal is to foster scientific vocations and deepen botany knowledge. Originally conceived by Carl Faust, a nature and science enthusiast who collaborated with leading botanists, Marimurtra now welcomes over 120,000 visitors annually.



This influx of visitors has enabled us to design tailored activities and guided tours. Notably, our educational programs have evolved to engage younger audiences, particularly students, offering more hands-on experiences with the aim of **promoting scientific vocations, encouraging interest in botany and awakening curiosity for the natural environment**. These efforts not only showcase our commitment to these objectives but also align with the broader mission of the Carl Faust Private Foundation, dedicated to the 'protection and promotion of Mediterranean biological studies, especially botany.'

By diversifying our outreach and educational initiatives, we take significant steps toward fulfilling the Foundation's mission, supporting scientific research, and advancing public understanding and appreciation of Mediterranean flora.



METHODOLOGY

To fulfill the objective of promoting scientific vocations, Marimurtra Botanical Garden has broadened its outreach to diverse audiences, implementing a comprehensive methodology covering various areas of action:

- 1 Audience Segmentation:** Diverse target audiences, including school groups, organized groups, and individual visitors, are identified, including various profiles, from students to professionals and nature enthusiasts.
- 2 Adaptation of Differentiated Activities:** building on this segmentation, activities have been designed specifically for each type of audience. Each activity is tailored in terms of content, format, and offers varying degrees of technical difficulty to ensure a relevant and engaging educational experience.
- 3 Knowledge Levels:** Programs are crafted to accommodate a wide range of knowledge and skills, from introductory activities to advanced programs for university students and professionals.
- 4 Specialized Team:** An expert team of guides and educators in biology, botany, and natural sciences ensures activities are finely tuned to meet the needs of each audience.
- 5 Continuous Evaluation:** To maintain the effectiveness of this methodology, ongoing assessments of activities are conducted, and feedback from visitors is collected. This allows for continuous refinement and improvement of our educational strategies to ensure they align with the Foundation's objectives.

In relation to the school audience, special focus is placed on designing and developing educational offerings. The ongoing transformation of educational programs aligns with the 'hands-on science' methodology, emphasizing active student participation and practical learning. This transformation encompasses the following key steps

- 1 Interactive Educational Program:** Promoting students' direct engagement with the botanical and scientific environment, with the goal of involving them in activities like data collection, experiments, and firsthand observations.
- 2 Integration of Practical Learning Experiences:** Practical learning experiences have been introduced to enable active student participation in botanical research. These include hands-on activities like planting and nurturing plants, crafting aromatic sachets, and more. The ultimate aim is to incorporate activities that encompass sample collection, the utilization of scientific instruments, and the execution of experiments.
- 3 Development of Educational Materials and Interactive Resources:** Supplementary educational materials have been developed to complement the practical activities within the garden. These resources consist of comprehensive activity guides and online materials designed to facilitate in-depth learning both before and after the visit.
- 4 Continuous Assessment and Feedback:** Following the conclusion of each activity, feedback is solicited from educators and teachers. The primary objective of this feedback process is to assess the efficacy of the ongoing transformation methodology and make necessary adjustments to ensure the sustained relevance and educational impact of the activities.

RESULTS

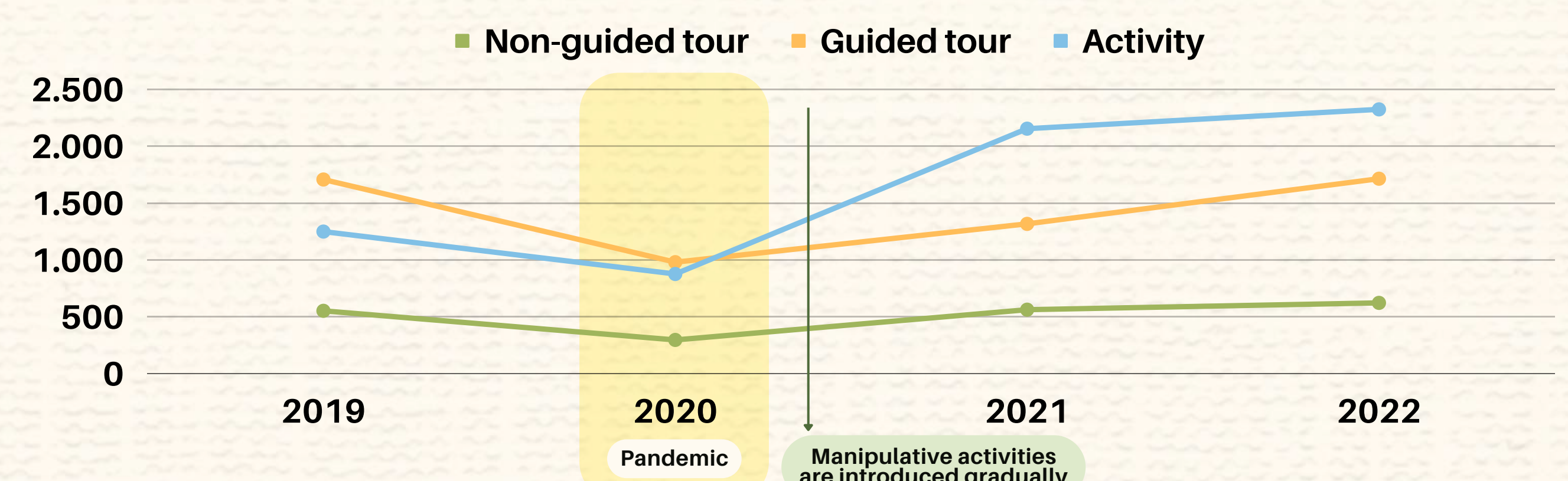
As a result, a wide array of current activities is showcased at the Marimurtra Botanical Garden, tailored to diverse audience categories, comprising school groups, organized groups, and individual visitors. These activities encompass a varied spectrum of technical levels, ranging from basic guided tours to advanced sustainable management workshops.

	Yoga	Matins (workshops)	Jornades Tècniques	Science Week	Botanical Snorkel	Seasonal Guided Tour	Christmas activities	Guided Tours	School activities	Monographic
Botanical knowledge	1 leaf	2 leaves	3 leaves	2 leaves	1 leaf	1 leaf	1 leaf	1 leaf	2 leaves	2 leaves
Individual / familiar										
Groups										
Schools										

The case of school audiences

Regarding the school audience, it is noteworthy that the transition to activities following the 'hands-on science' methodology commenced gradual implementation in 2021. Presently, these activities surpass traditional format activities in number. The adoption of the 'hands-on science' approach has led to substantial modifications in the nature of activities, integrating hands-on and participatory components.

The shift to this methodology has produced notable outcomes, manifested in heightened student involvement and a considerable upsurge in interaction with botanical and scientific content



CONCLUSIONS

- The favorable outcomes achieved with the school audience are thought to be a result of the reconfiguration of activities and an enhancement of the communication strategy. Current analyses are in progress to determine the respective contributions of these factors. Furthermore, positive feedback from educators and teachers has been consistently received.
- These successful results have stimulated an increasing interest in the implementation of similar changes in activities tailored for other audience categories. The impact and effectiveness of this shift towards a more practical and participatory approach are being assessed, taking into account variables such as hands-on engagement and alterations in the communication strategy.
- As a last conclusion, the changes mentioned in the activities are considered a significant step toward achieving the objectives of promoting scientific vocations, encouraging interest in botany, and awakening curiosity for the natural environment.

Acknowledgements

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