

HortaFCUL

2024 annual activity report



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Faculdade de Ciências da Universidade de Lisboa



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INTRODUCTION

HortaFCUL celebrated 15 years of existence last year. From the initial letter sent to the Director’s Board in 2009 asking for an opportunity to develop a community permaculture project in th campus, our collective has come a long way to establish itself as a knowledge hub and a source of valuable social and environmental tools not only for FCUL but also for many other national and international projects and institutions. We believe our mission and accomplishments should be recorded and remembered for future learning. For this reason, we compiled all the outputs from HortaFCUL’s either as main facilitator or co-creator during 2024.

A PERMANENT LEARNING CULTURE

“The development of a permanent learning culture, valuing critical thinking and intellectual autonomy”

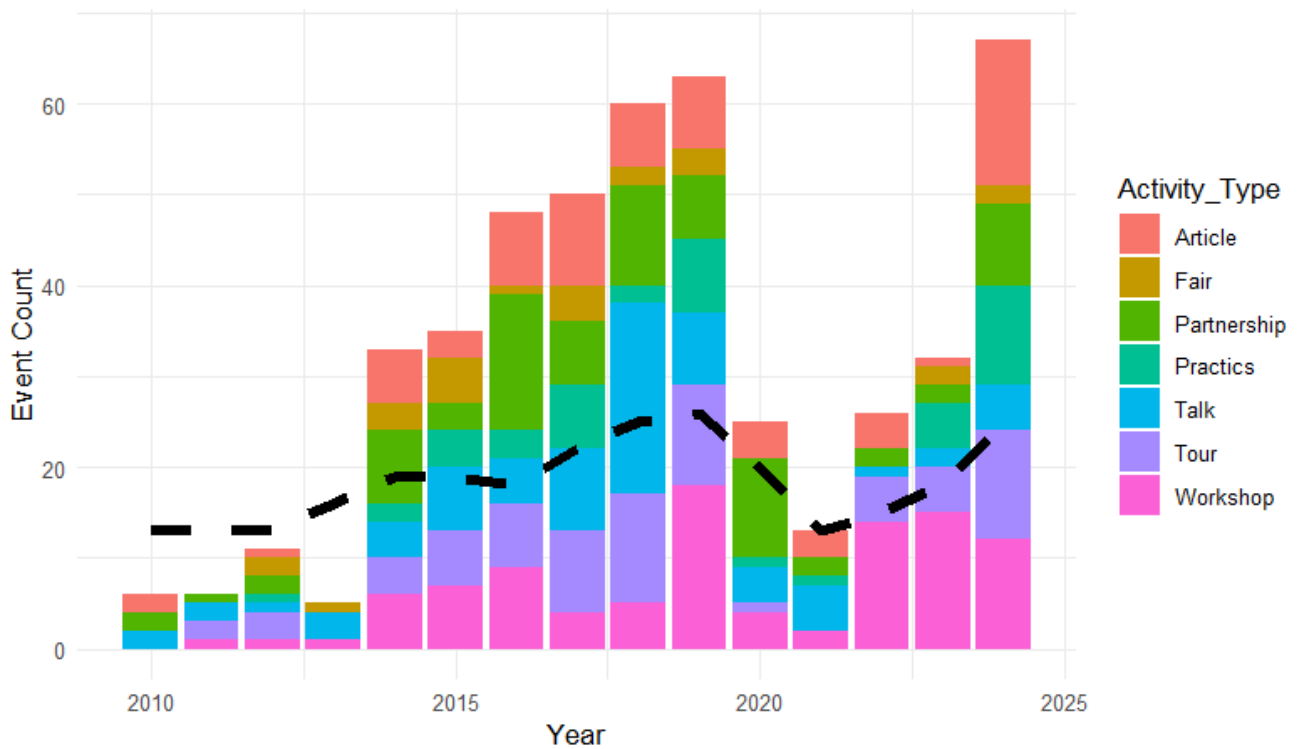


Fig. 1 HortaFCUL’s total activity from 2010 to 2024. Each color represents an activity type, as described in the side legend. Dashed line describes the variation in number of active community members (aka. guardians) for each year.

PEOPLE

HortaFCUL is a project which invests mainly in its social capital, as people are the vital matrix that supports the social and economic components. Social ecosystem services are by far the most valuable outcomes at HortaFCUL and they deserve to be mentioned first and foremost.

GUARDIANS



Fig. 1 HortaFCUL's 15 years celebration poster with 70 former and active guardians.

In 2024, HortaFCUL had the support of 24 active guardians. Average guardian involvement duration in the project is 6.6 years. There were 24 working days, in which an average of 7 guardians took part in the activities (730h of voluntary work). The top 20% most active guardians were involved in 68.5% of the total events/outputs this year. Female guardians were involved in 22% of the whole activity output.

40%

Female guardians

87.5%

Students or alumni at FCUL

730h

of accumulated voluntary work

2.05

average guardians involved in each activity output (excluding working days)

76%

have Biology background

6

are current students at FCUL



MEETINGS

.Between January and December 2024, HortaFCUL held 18 online meetings between guardians to discuss, celebrate and decide on the various topics that came up in the project's agenda. In these meetings we use the 5 A's tool, which underlines the need to promote effective and productive meetings between members by assigning 5 rotational roles (in Portuguese, all 5 role names start with an A, thus, the origin of the term): the Admiral, or Almirante (meeting facilitator, makes sure all the topics are addressed and allocates fair talking times to the meetings' participants), the Minuter, or Atado (registers all the important information discussed in the meeting and will be the admiral in the next meeting), the Welcomer, or Acolhedor (makes sure that people who arrive late are well-informed while not disturbing the meeting), the Watcher, or Alcoviteiro (surveys conflicts, challenges and social interactions during the meeting, gives uncommented feedback to the group and/or individuals at the end of the meeting) and the Time-keeper, or Acertado (guarantees that the Admiral and all the group are responsible for the time available). Moreover, 5A's meetings require pragmatism, trust and conscious participation to ensure that the meeting produces clear and objective decisions in a short time.

208

discussed topics
1 topic every 5 minutes

19

guardian attenders
6 guardians per meeting
Minimum = 3; Maximum = 11

16

presences
the highest participation frequency
for one guardian

19%

female participation
percentage

10

guardians had 3 or less
presences

35%

Percentage of active
guardians *in loco*

VOLUNTEERS

During the working days, a total of 100 to 150 volunteers, according to the best estimates, were welcomed to integrate the project's tasks. Although no information on these volunteers was registered, guardian perception tells that they were from diverse backgrounds, however there was a clear predominance of female volunteers this year.



Fig. 3 A working day in October in which the majority of volunteers were women.

ACTION

“Action without vision is disappointing and vision without action is delusive”
A practical contribution to FCUL's sustainability

At HortaFCL, permanent learning is expressed through learning-by-doing and action-research frameworks. In other words, people involved in the project like to plan and reflect about what they do without ever losing the practical meaning of the project and the impact we aim to have on Earth. The reasons why we develop our activity can be found within the Three Permaculture Ethical Principles: Earth Care, People Care and Fair Share, because no project is complete without considering environmental (Earth), social (People) and economic (Fair) benefits.

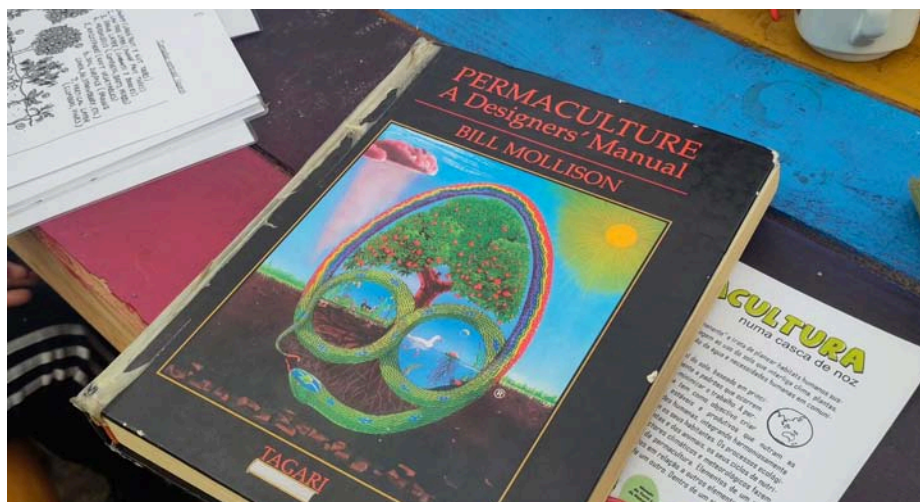


Fig. 4 Front cover of the “Permaculture: a designers’ manual” by Bill Mollison. Picture taken during the Introduction to Permaculture’s Course (30th November).

COMPOST

This year, HortaFCUL made 3 piles of compost, each with an average of 8m³ of gardening residuals. Total compost production was estimated to be 5.5 metric tons.



Fig. 5 Turning a pile of compost at PermaLab (November).

VERMICOMPOST

In April, the organic residuals circuit was expanded to all the cafeterias at FCUL, adding the C7 canteen and the C6 restaurant to fully close the organic cycle at campus. Between February and December (no data was collected in January), 6,5 metric tons of organic residuals from FCUL's cafeterias were transformed into vermicompost. In total PermaLab produced 5.6 m³ of vermicompost (approximately 4000 kg).



Fig. 6 Sieving vermicompost with a new upcycled device made of communication cables and fruit boxes (October).

PLANTATIONS

In 2024, HortaFCUL expanded another 100m² of the plantations in Bioilhas@MARE and Bioilhas@C5 and restored part of the understory layer at Horta do C2.



Fig. 7 Taking care of Bioilhas@MARE This picture depicts the work of female volunteers weeding the plant nests.

CROPS AND MEALS

HortaFCUL organized 22 community dinners after the working days, from the 4th January to the 19th December. Every meal included at least one ingredient produced at PermaLab. We estimate a total of 240 meals served to the community and an average cost of 3,5 euros per person. Although the crop yield was not recorded, a list of vegetables, legumes and fruits used in the cooking process was compiled.

Fall/Winter crops: beetroots, cabbages, chards, fava beans, leek, lettuce, spinach, sweet potato.

Spring/Summer crops: aubergine, beans, corn, pepper, pumpkin, tomato, yacon.

Aromatic herbs: rosemary, bay, mint, sage, parsley, coriander

Herbal infusions: lemon verbena, lemongrass, mint, citronella, melissa





Fig. 8 Fall crop plantation (top) and a community dinner at PermaLab (bottom).

MAJOR INTERVENTIONS

FCULresta's amphitheatre (April)

In April, HortaFCUL welcomed 4 student volunteers from France. This occasion served as a pretext to advance with the construction of a new amphitheatre at FCULresta. This intervention used obsolete stone blocks that have been kept in a landfill at Estádio Universitário. With the support of G3S, these materials were collected and brought to FCULresta. The construction work lasted 4 days and involved 5 guardians.

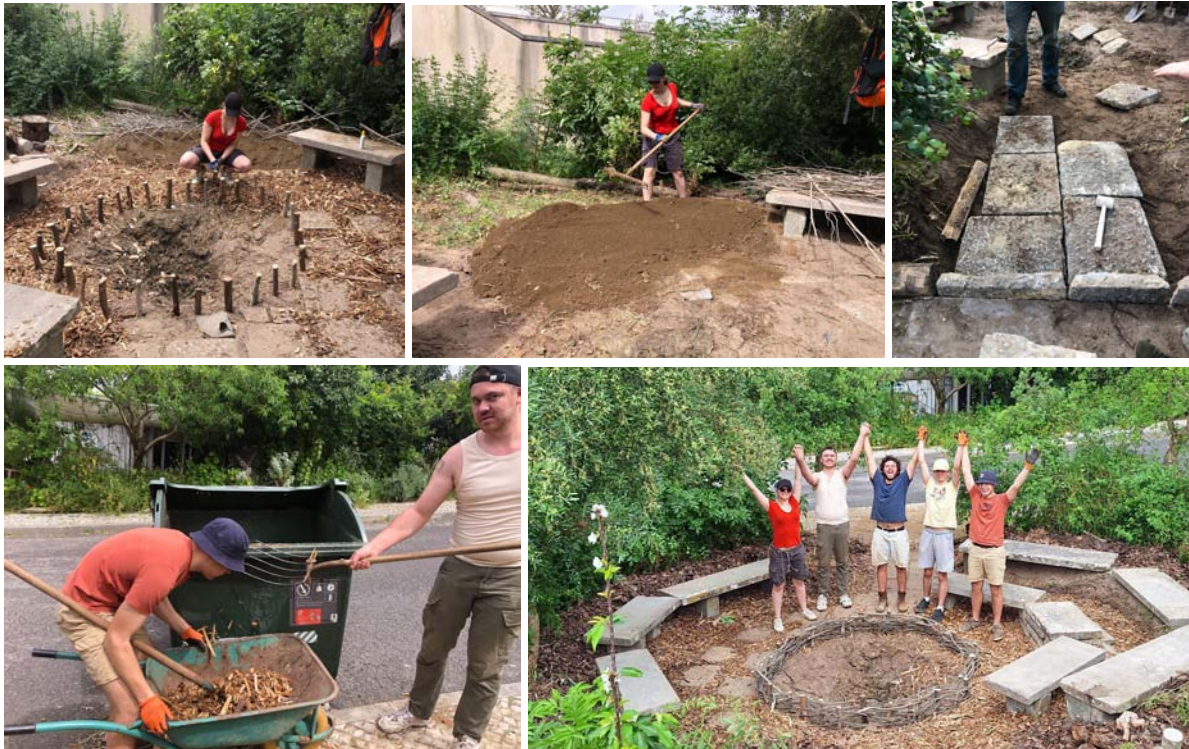


Fig. 9 Pictures portraying the construction process of the amphitheatre with the French volunteers (April).

BEFORE

AFTER



Fig. 10 Pictures depicting the before and the aftermath of the intervention

Restructuring HortaFCUL's shelter (September-November)

HortaFCUL's shelter at C2 has been frequently used by the community as a leisure place since its construction in 2018. However there was little investment on long-term furniture for the shelter itself. Once again, with FCUL's crucial financial support, HortaFCUL was able to acquire the right wooden materials to build new robust benches, offering a long-term solution for those who want to enjoy Horta's leisure spots.



Fig. 11 Construction process of the new bench at the C2 shelter.

Greenhouse's new furniture (October-November)

At the beginning of 2024, FCUL received a call from Faculdade de Medicina da Universidade de Lisboa (FMUL), asking if the faculty would be interested in collecting wooden furniture materials that were removed from classrooms at FMUL. HortaFCUL assumed the transfer of that material to PermaLab and used it to build new furniture infrastructure at the green house to store its own materials and tools.



Fig. 12 Loading the materials at FMUL (left) and the working group (right)



Fig. 13 The final result of the working table and shelves.

Chicken-tractor reinforcement (December)

In 2023, HortaFCUL witnessed the slaughter of 3 chicken broods by dogs and the theft of 1 brood. To prevent these kinds of situations, HortaFCUL asked FCUL to support the acquisition of more robust material to reinforce the chicken tractor. This work will be completed in January 2025 and HortaFCUL will establish a long-term partnership with Professor Madalena Lordelo (ISA/ULisboa) research group to study the ecosystem services provided by chickens in the food production loop at PermaLab.



Fig. 14 Replacing the old metal wire with new steel fences to better protect the hens against any predator.

WORKSHOPS

HortaFCUL organized and co-organized a total of 12 workshops/courses last year, investing 96h of guardian's time to facilitate them. Participation totaled 174 people, at least and 75% of these events were held at campus.

Month	Event	Location	Guardians	Participants	Hours	Days	Partners
1	Project support at a school food garden	Marvila	2	40?	6	1	?

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Month	Event	Location	Guardians	Participants	Hours	Days	Partners
2	Successional agroforestry workshop	Barreiro	3	13	8	1	Habitação Colaborativa de Brejos Faria
2	Cooking workshop	PermaLab	1	15	5	1	Ass. Granular ANP/WWF
3	Mushroom production at home	Cabeça Gorda, Alentejo	2	10	2	1	Dilena Fungi
3	Quick course on residual separation in FCUL's cafeterias	Campus	1	10	3	1	FCUL
4	Sustainability Week's workshop	PermaLab	1	5	2	1	SW organization committee
4	A Permanent Food Garden	PermaLab	2	12	32	4	—
7	Introduction to Permaculture Course	PermaLab	2	12	8	1	—
9	Agroforestry Management	PermaLab	5	12	8	1	—
10	Mushroom production	PermaLab	2	20	8	1	Dilena Fungi
11	Introduction to Permaculture Course 2.0	PermaLab	5	10	7	1	—
12	Mushroom production	PermaLab	2	15	8	1	Dilena Fungi



Fig. 15 Pictures taken at (from upper left corner, clockwise) the Permaculture Introduction Course (November), the homemade mushroom production workshop (October), succession agroforestry workshop at Brejos Faria (February) and, the agroforestry management introduction course (September).

EXPANDING KNOWLEDGE

Our contribution to expand the limits of scientific knowledge while promoting good quality practical education through formal and informal research

GUIDED TOURS

HortaFCUL welcomed 13 different institutions and associations to visit its facilities, which included 6 educational institutions. In total, 366 students, from elementary to higher education, visited HortaFCUL from January to December. Number of participants in these guided tours totaled 425 people.

Month	Event	Guardians	Participants	Hours	Days
2	Sobral de Monte Agraço's Elementary School visit	1	27	3	1
2	Greek students visit under PERMALABS project	2	25	2	1
3	School visit with Fernando Namora school's students and Polish students	2	39	1	1
5	NOVA FCSH's interchange students visit	1	20	3	1
5	Ciências Open Day visits	3	15	2	1
9	Ponta Delgada's Community garden project visit	2	5	2	1
9	Welcome Session visits	4	15	6	1
10	Senior nursing home residents visit	1	7	2	1
11	Visit to Horta during ECOPATIOS Design Lab event	1	20	2	1
11	NOVA FCSH's interchange students visit	2	40	3	2
11	Colégio Moderno's school visit	1	160	2	2
12	Luis Madureira school visit	1	40	3	1
12	Parents visit from Escola da Torre	1	12	3	1



Fig. 16 Guided tours at HortaFCUL (from the upper left corner, clockwise). Visit of a FCSH exchange program class (Food and Gastronomy course, November), an activity about vermicomposting with elementary school children (December), a guided tour with elderly people from a nursing home at Alvalade (October) and a visit of a school parents group from Escola da Torre (December).

TALKS AND ARTICLES

Last year, HortaFCUL's work resulted in 17 published articles. There were 3 scientific publications (one MSc thesis, a short note and one report), 1 international news story, 7 regional and national level articles and 6 campus level testimonies. Adding to this, HortaFCUL participated in 1 debate and 3 talks and organized 1 infoshot. Total estimated outreach at these talks was 150 people.

Month	Output	Event	Guardians	Partner	Outreach	Access link
1	Article	Reportagem francesa sobre a FCULresta	3	France 24	French audience	Access here
1	Article	Living the sustainable development - HortaFCUL report	8	CE3C	Campus researcher audience	Access here
1	Article	Masters thesis on agrivoltaics	4	Campus Solar	Academic community	Access here
1	Article	CE3C post on HortaFCUL's report	NA	CE3C	Academic community	Access here
1	Article	FCUL's news piece on the report	NA	FCUL	Campus community	—
2	Talk	Infoshot HortaFCUL report	8	NA	HortaFCUL community	—
2	Article	HortaFCUL's new webpage	2	FCUL	Campus community	Access here
3	Article	Opinion article on Forests International Day	1	FCUL	Campus community	Access here
4	Talk	HortaFCUL's report presentation	1	FEE EcoCampus Conf. Inter. Campus Sustentáveis	Academic community	—
4	Article	News piece	4	Público	National audience	Access here
4	Article	Opinion article	1	LPP	Lisbon's community	Access here
4	Talk	Debate participation	1	Comissão Organizadora Semana Sustentabilidade	Campus community	Access here
5	Article	News piece	1	LPP	Lisbon's community	Access here
5	Article	Testimony on the construction of the amphitheatre	1	FCUL	Campus community	—
6	Article	News piece	3	GreenSavers	National audience	Access here
6	Article	news piece	2	Antena1	National audience	Access here
9	Talk	Presentation to the Biology community	2	FCUL	Campus community	—
9	Article	Short article on composting	3	Marie Curie Alumni Association	Academic international community	Access here
11	Talk	FCULresta's presentation	1	ECOPatios Design Lab	Academic community	—
12	Article	Article on upcycling	1	FCUL	Campus community	Access here

12	Article	News piece	1	TSF	National audience	Access here
12	Article	News piece	1	Lusa	National audience	Access here



Fig. 17 Presentations at (from left to right) the Biology department welcome session, ECOPatios Design Lab (ISTécnico) and during first classes week at campus.

PARTNERSHIPS AND COLLABORATIONS

In 2024, HortaFCUL kept its international partnerships with several agroecological projects in Europe by sending participants to three practical learning programs. Adding to this, a new research collaboration with several European Business and Management institutions is underway. At a local level, HortaFCUL continued its partnership with Jardins Abertos and started a new collaboration with BIP/ZIP Regenera(te) Loios, whose goal is to create a 2000m² agroforest for the local community at Loios neighbourhood, Marvila.

Month	Partnership	Location	Guardians	Duration	Main Partner
1	PermaLABS: Envisioning sustainable futures in higher education business departments inspired by Permaculture design principles"	Europe, several locations	2	1.5 years	PERMALABS (https://www.permalabs.eu/)
2	Activities facilitation on circular economy	Lisboa	1	1 week	Circular Economy Portugal
4	Sending organization: ERASMUS Ambassadors of Change	Northern Lights, France	1	2 months	Northern Lights
4	Consultors at University project	Lisboa	1	1 month	Forward College
4	Partner garden at Jardins Abertos event	PermaLab	7	1 month	Jardins Abertos
6	Participation at the Regador Festival	Lisboa	2	1 weekend	Associação Regador
8	Participation at the Erasmus+ Natural Connection	Itália	2	1 week	?
9	Collaboration with Campus Solar project	FCUL	1	1 year	Campus Solar
12	Colab with OutCiências	FCUL	1	1 day	OutCiências
12	Collaboration with the project Regenera(te) Loios	Lisboa	4	1 year	Associação Tempo de Mudar



Fig. 18 2024's Partnerships and collaborations (from the upper left corner, clockwise). Erasmus+ Natural Connection in Italy (August), Pre-event session with Jardins Abertos volunteers (April), PERMALABS kick-off meeting at Rotterdam (January) and Regador's Festival (June).

AWARDS AND DISTINCTIONS

FCULresta distinguished at the EU DEAR: Development Education and Awareness Raising (February)

FCULresta was recognized by the DEAR program as one of the most impactful initiatives promoted by European citizens regarding environmental and social development.

https://capacity4dev.europa.eu/news/new-forests-town_en

Recognition for the impact on FCUL campus community (April)

This year FCUL Director's Board awarded HortaFCUL a distinction which honors the path trailed by the guardians in 15 years of existence. This comes after years of continuous praise for the work developed by our project at the campus, as it is one of the most influential bottom-up initiatives at university level.



Shortlist at the 2024 International Green Gown Awards (category Creating Impact, September)

The Green Gown Awards recognise the exceptional sustainability initiatives being undertaken by universities and colleges across the world. This year, HortaFCUL competed with other 11 institutions in the final shortlist for the prize.

<https://www.greengownawards.org/our-2024-international-finalists>

Shortlist of the 2025 LUSH Spring Prize Award in partnership with Permaculture Association Magazine (December)

ANNUAL ACTIVITY REPORT 2024



For the third time, HortaFUL submitted an application to this contest and passed due diligence to the next selection phase.

FINANCIAL CYCLE

SUMMARY

Description	Value
Total Income (2024)	3 313.53 €
Total Spending (2024)	3 404.78 €
Net Amount (2024)	-91.25 €
Operating fund	285.63 €
Available Funds	194.38 €

Access full financial report at this [link](#)

GIFT TABLE RESULTS

- **16 refills** from January to December
- **150-200** donated plants
Species:
Pineapple sage (*Salvia elegans*), Boldo (*Plectranthus barbatus*), *Chlorophytum comosum*, *Pelargonium citrodorum*, *Pelargonium peltatum*, Lavender (*Lavandula sp.*), Rosemary (*Salvia rosmarinus*), Sage (*Salvia officinalis*),
- **~0.5 m3** of donated compost
- **Total income:** 146 euros (2017/18: 312 euros)



FINAL REMARKS

2024 marked an exceptional recovery in terms of activity outputs for the project, surpassing the record activity level from 2019 (prior to the pandemic). This scenario has exceeded the expectations of the community, although these results should be looked at carefully, as the recording of activities was made with an added rigor that was simply not possible before 2023. This means that the output result may be underestimated in past years. Nonetheless, we can say there was a meaningful growth of activity during 2024.

This activity increase came with a bigger cost in terms of human resources. Although we identified 24 active guardians this year, their energy input into the project was very unbalanced. Only one-fourth of these guardians secured continuous project functioning throughout 2024 and almost 70% of the total activity output relied on only one-fifth of the guardian community. The project is still struggling with the lack of integration of new volunteers into the sociocratic structure and this needs to be addressed as briefly as possible.

Despite the rigor for this year's registering routine, there are aspects to improve: Compost production should be thoroughly tracked, as well as food production. The introduction of a new brood will serve as a scientific platform to study these production systems in urban context. Moreover, the project will have the capacity to integrate more interns into its structure to develop personal projects inserted in a major collective framework.

ACKNOWLEDGEMENTS

First and foremost, we'd like to thank all the people, - volunteers, friends and guardians - who got involved at HortaFCUL and gave a part of themselves to the project. We're also grateful for all the help and support that we receive from the FCUL Director's Board, the administration and the Department of Health, Security and Sustainability (G3S). Without their investment in the project, much of our initiatives would not be possible. We'd like to express our gratitude for all the work and dedication of FCUL staff teams, specially the surveillance, the cafeterias, the cleaning and the maintenance teams. They are the backbone of this institution and everyday they make sure everything the campus is ready for 6000 Ciências community members.



The new chicken flock is composed of 3 hens and 1 rooster *pedrês-portuguesa* and 2 hens *branca*. These individuals were kindly donated by the Avian Biodiversity Center at Instituto Superior de Agronomia.