

# Research on people, forest gardens and wildlife

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## Overview

- Background
- History of Forest Gardens in the UK
- Aims and Objectives
- Key findings
- Conclusions





## *Background*



## Background



Pilgrim, E.S. *et al.* (2010) Interactions Among Agricultural Production and Other Ecosystem Services Delivered from European Temperate Grassland Systems. *Advances in Agronomy* **109**, 118-154

- Reduce reliance on annual crops
- Potential solutions
  - Agroforestry system
  - Switch from annual to perennial crop plants
  - Own-growers



*Background*



Globally, over 800 million urban own growers (2014)

Resurgence in own-growing in UK & USA

- Know food's origin
- Sustainable food systems

Surge of own-growing during Covid-19 pandemic

[www.exeter.ac.uk/centres/crpr](http://www.exeter.ac.uk/centres/crpr)



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Marc Diacono [otterfarm.co.uk](http://otterfarm.co.uk)



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## **Robert Hart**

- Influenced by Toyohiko Kagawa's 3-D Forest Farming integrate conservation, trees and livestock
- Sought additional inspiration from Tropical Home Gardens
  - Kerala (India)
  - Java
  - Chagga people of Tanzania
  - Kandyan people, Sri Lanka
  - Maya & Zapotecs Mexico & Central America



- In Britain approximately 2000 – 5000 forest gardens
- Globally forest gardens are gaining in popularity
  - Small-scale food system promote wildlife
  - Choose plants that suit site
  - Less maintenance



Ann Parkinson's FG: 2 years old





*Young FG: 6 years old*



*Young FG: 5 years old*



*Mix FG: 4 years old*



*Mix FG: 6 years old*



*Mix FG: 9 years old*



*Young FG: 10 years old*



*Mature FG: 21 years old*



*Mature FG: 25 years old*



*Mature FG: 33 years old*



## Aims

Explore Forest Garden concept

- Alternative food resources
- Motivation behind their creation



8 year old Forest Gardens: L to R Totnes Devon, Axmouth Devon and Norfolk

We define a forest garden as a:

“multi-storey combination, comprising three or more layers  
various trees and crops, sometimes with domestic animals,  
around the homestead or close to dwellings .”

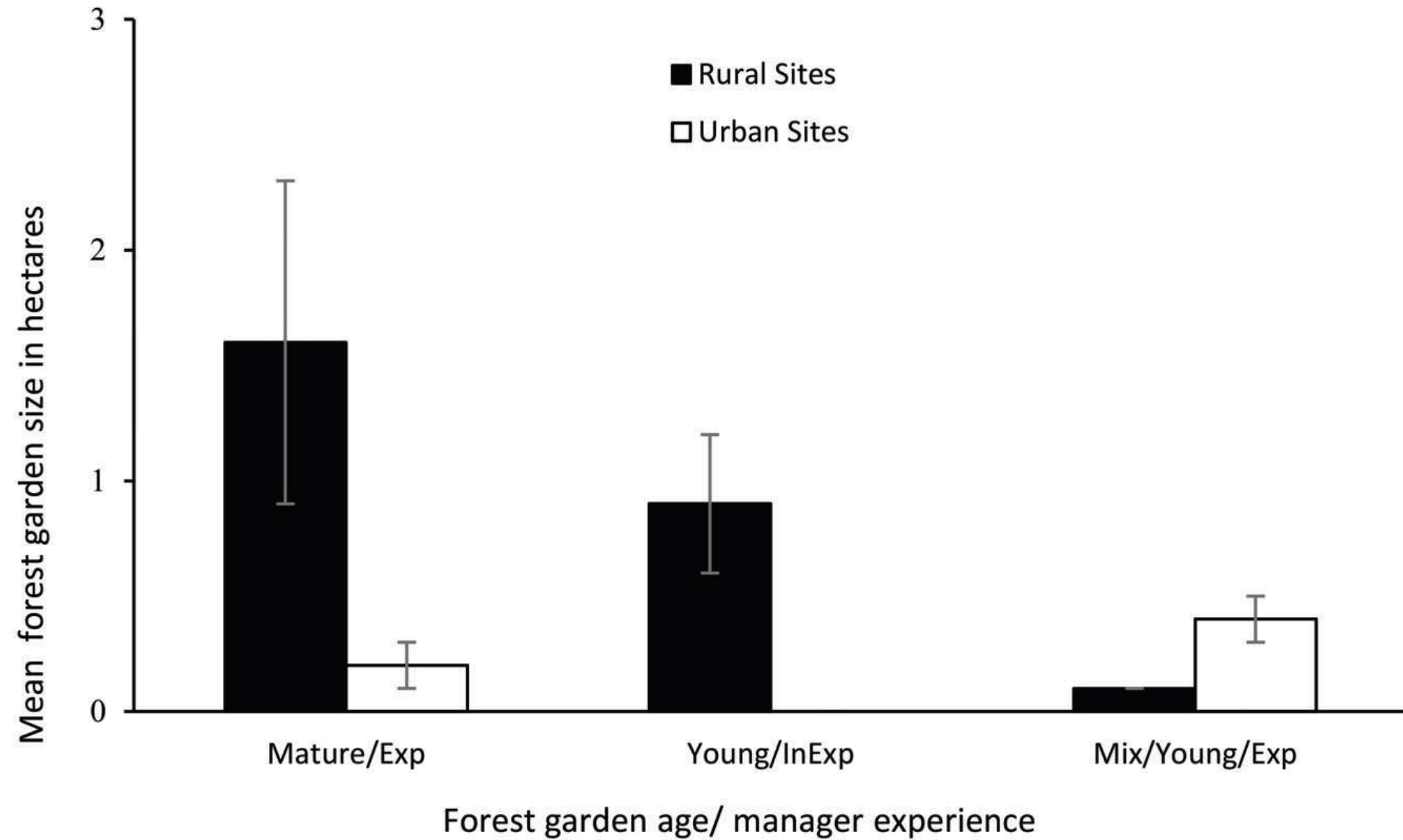




## Telephone interviews

- 21 *Mature FG/experienced manager* FG were  $\geq 15$  years
- 20 *Young FG/inexperienced manager*: FG were  $\leq 10$  years old.
- 10 *Mixed/ Young FG/ experienced manager*: where respondents had set up a *Young* FG following their experience of managing or working on a *Mature* system.

*Key findings*

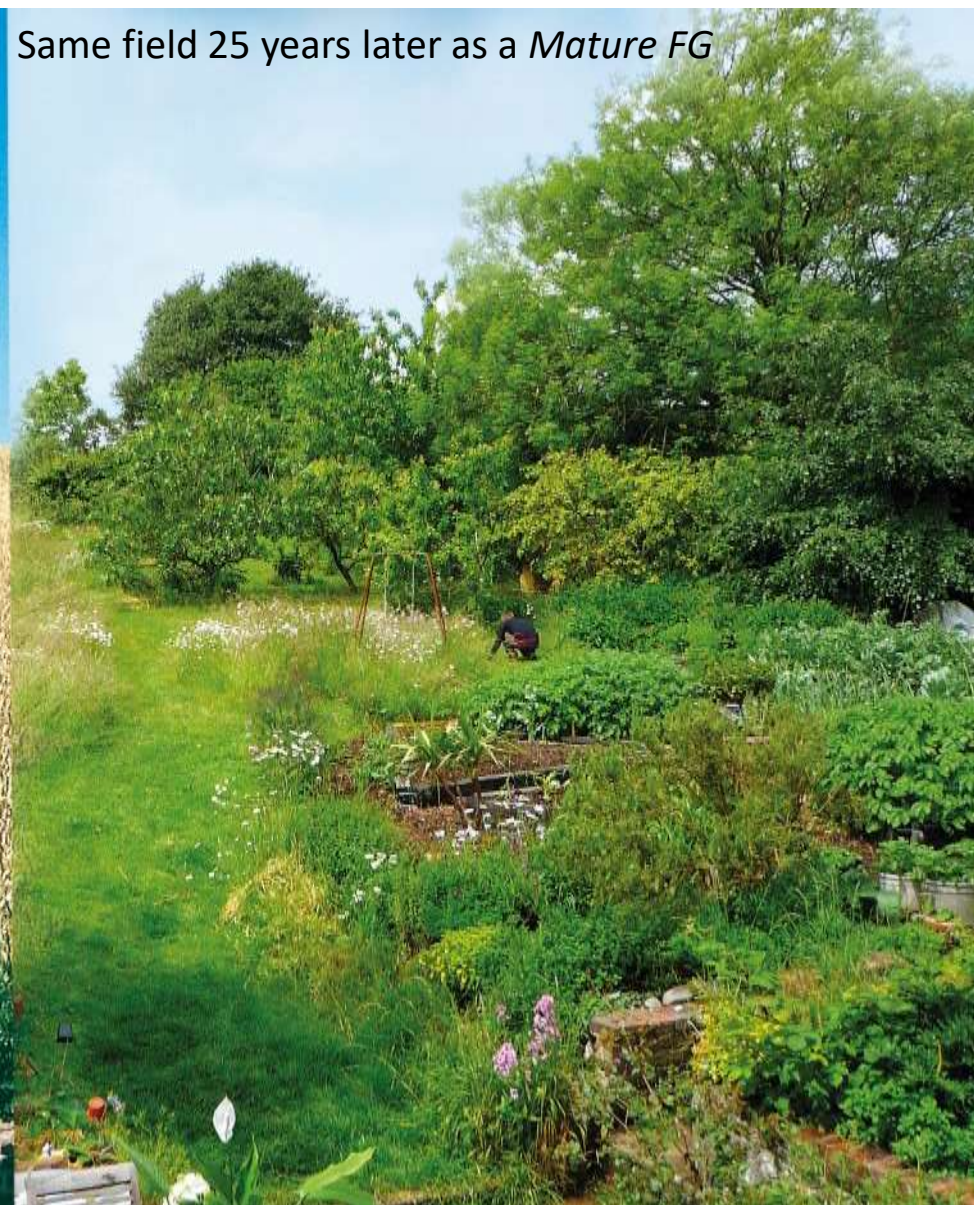




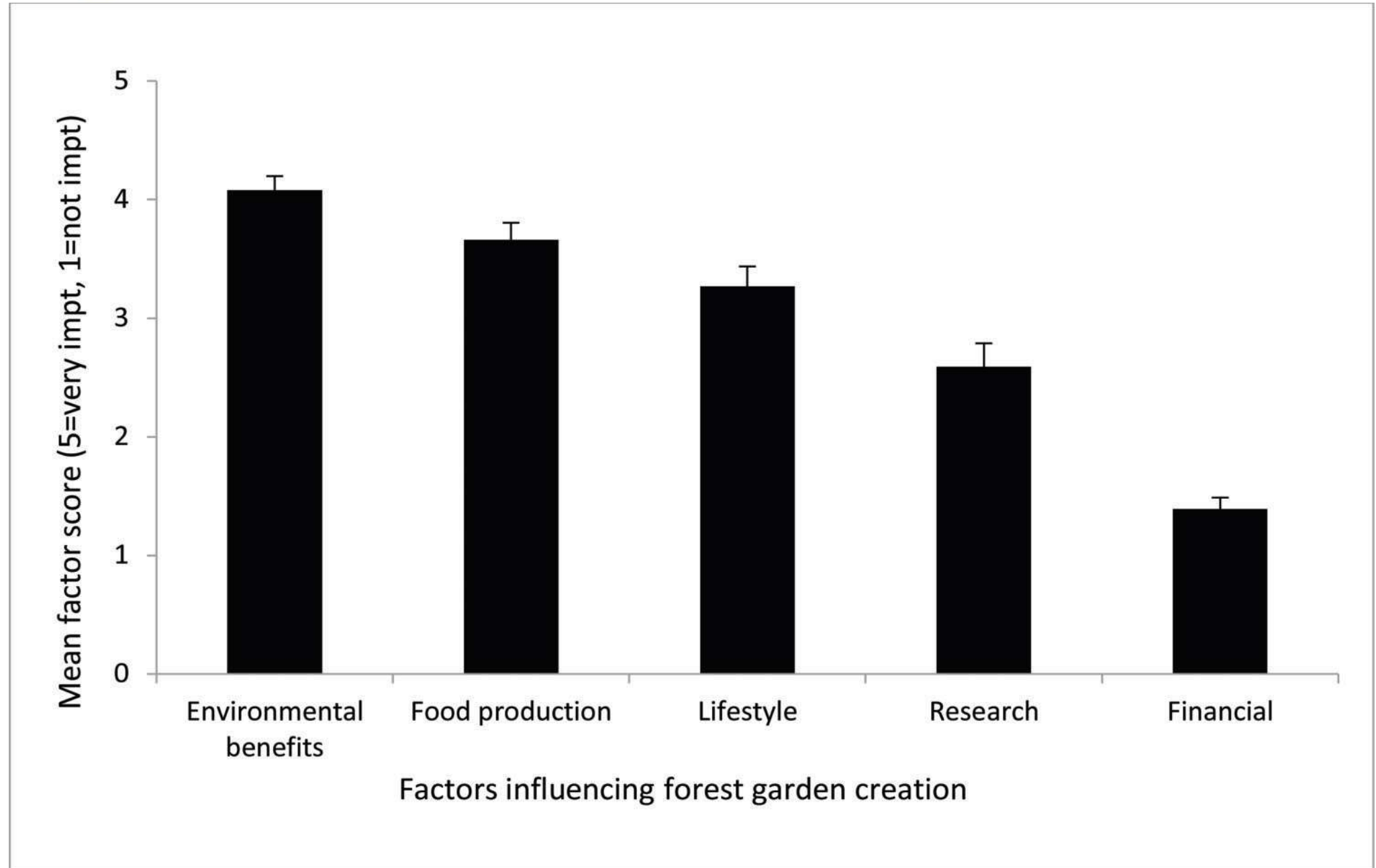


Arable field on underlying chalk soil

Same field 25 years later as a *Mature FG*



*Key findings*



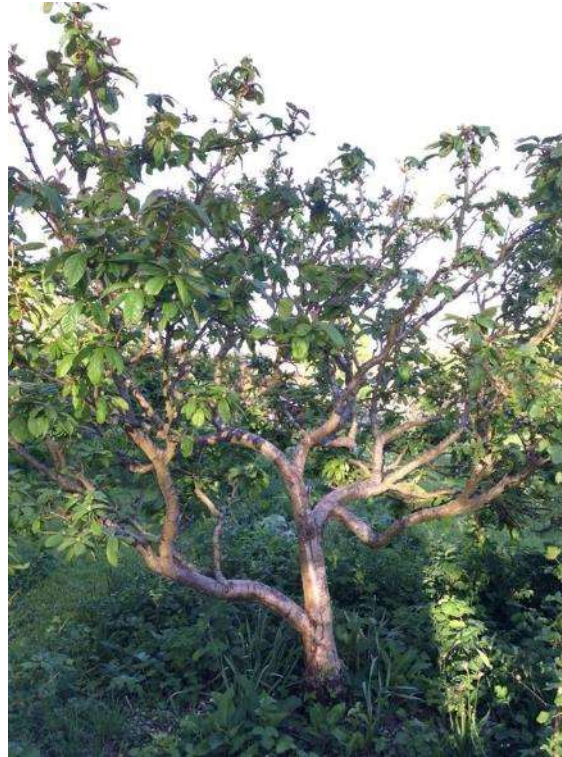


*Key findings*

76.5% specifically grow local varieties



Hambleton Deux ans: local apple tree variety and Medlar:  
Harlands 25 year old Forest Garden South Downs



Quince: 5 year Old Forest  
Garden Devon



*Results*

Most common plant in the Canopy layer: Apple tree in 96.1 % of forest gardens

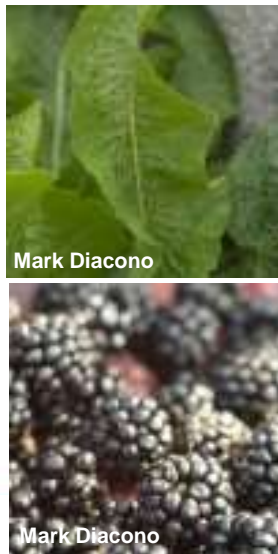


23 year old Urban Forest Garden, Hatfield



Key findings

Most common plant in the :	Plant	% of FG
• Fruit bush/Shrub layer:	Blackcurrant	96.1
• Perennial herb/vegetable Layer:	Comfrey	92.1
• Ground cover:	Strawberry	80.4
• Rhizosphere/root layer:	Horseradish	45.1
• Climber:	Blackberry	84.3



**Key findings: interested in cultural food experiences**



Mark Diacono



Mark Diacono



Image reproduced from Portlandnursery



25 year old FG, S Downs



26 year old FG Cornwall



26 year old FG Cornwall



**Key findings: Foraging based diet**

20 year old FG Cornwall



Ground elder: image garden organic

5 year old FG Devon



5 year old FG Devon



Harland's 25 year old FG S Downs

## Conclusion

### Typically British forest gardens are

- Privately owned
- Motivated by environmental protection and wellbeing
- Small <0.6ha (roughly 1 football pitch)
- On sloping land of little agricultural value
- Highly diverse on av. 64 plant species spread over 4 layers

Pilgrim, E. S., Osborne, J., & Winter, M. (2018). Evaluating the multiple benefits of multi-layered agroforestry systems. *IJAM* 7 (2) 4-16 <https://doi.org/10.5836/ijam/2018-07-04>



CAT forest garden: 7 years old image Chloe Ward



Monkey Sanctuary 21 year old



# Thank you for Listening

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