



# Experiences of involving communities in citizen science



## Projects that attracted high numbers of participants

- Anything that gives out free seeds for people to try
  - Novel crop
  - Attractant plants





# Projects that attracted high numbers of participants

- Trials with a clear benefit to the gardener eg
  - Soils testing method
  - Testing liquid feeds
  - Testing slug control methods







#### Attracting diversity

- Publicise outside your normal comfort zone
- Go and see people and talk to them
- Offer people something relevant
- Take an interest in what they do







#### Attracting diversity

- Offer a clear learning experience
- Go to existing sessions
- Offer other benefits:
  - Games
  - Family activities
  - Food







#### Removing barriers

- Address negative perceptions of science
- Location
- Cost
- Language
- Cultural barriers
- Time
- Public holidays





#### Sustaining engagement

- Design of experiment:
  - Clear instructions
  - Realistic expectations
  - Length of time

Members' Experiments 2020

#### Getting a head start with green manures

#### Background

One of the most important elements of organic growing is to care for the soil not just the plants you are growing. This ensures that you will continue to grow healthy food plants in future years. Green manures play an important part of soil care, but are often neglected by growers. Growing a green manure over the winter rather than leaving the soil bare is where they can have most benefit. They protect the soil, improve soil structure and prevent nutrients from being leached out by rainfall.

Winter green manures are ideally established in early September. The problem <u>is</u>, that at this time, we are often still harvesting from our food plants, so the space isn't ready for sowing a green manure. By the time we have cleared the plot, it is often well into October. This is usually too late to get a green manure to establish reliably.



Yellow trefoil

We would like to look at the possibility of sowing a green manure much earlier, under the food plants in the spring as an alternative method of getting a green manure going ready for the winter. The idea sounds simple:

- 1. Plant out the food crop
- 2. Establish the green manure underneath the food crop at a similar time
- 3. The green manure grows slowly underneath the food crop
- Harvest and remove the food crop, allowing the green manure, which is already established, to grow over the winter.

This is not always as easy as it sounds. We want to get the green manure to establish well, but not so well that it competes against the food crop. Achieving this balance can depend on the timing of sowing of both the food crop and the green manure, the soil <u>conditions</u> and the vigour of both plants.

Traditionally in organic systems, farmers have sometimes undersown spring sown cereals. Usually less vigorous types of green manures are chosen such as yellow trefoil (Medicago lupuling), or small leafed varieties of white clover (Trifolium repens). However, this technique isn't commonly practised with vegetables in the UK.

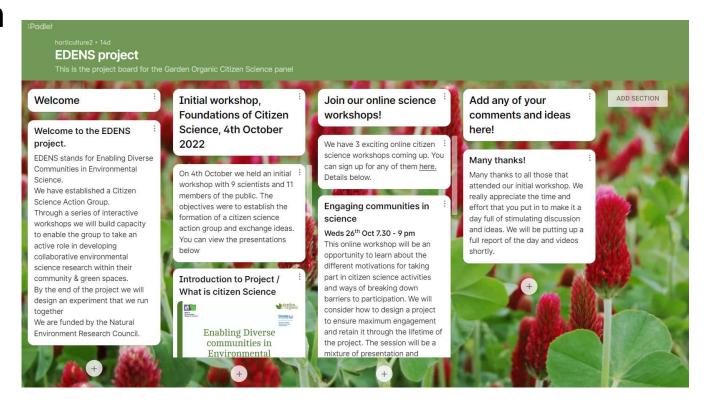
We would like to look at whether it is possible to establish an overwinter green manure of yellow trefoil by sowing it underneath a plot of climbing French beans. Yellow trefoil is a low-growing biennial legume that is often considered an ideal candidate for undersowing.





#### Sustaining engagement

- Feedback and communication during the trial
  - Key points / reminders
  - Social media
  - Project board
  - Newsletters
  - Events







# Taking the messages out to communities





#### Environment Research Council Taking science out to communities

#### Headline grabbing facts



One teaspoon of soil can hold more organisms than there are people on the planet





### Natural Environment Research Council Taking science out to communities

#### Relevant comparisons







# Natural Environment Activities invoking discussion







#### In situ demonstrations







#### Hold an event





Natural Environment Research Council



#### Tell people's stories

#### Carmen from Malta



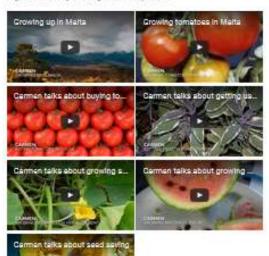
Carmen giver up in the historic area of Ratast in Mata, in a close bolt community. Her family given their own food on the tempora of the family biane, which they shared with their relibits, chickens and pigeoms.

Comer's curtiest childhood memories involve the delicious torration the family gree, also, preserved and sundried.

In the 1970s Carmen repend to England and closely remembers the mist, damp and the cultine which she found difficult to adjust in.

Camers now grows her own food on her Hidlands allotment, including a wide erray of traditional Haltess produces

Find out more about Malines tomators, growing watermelons in the Midlands and Carmen's thoughts on English tomators by following the sudio clips halow.





To return to the main Growing From Your Roots page please click here.



# Hold a quiz

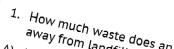


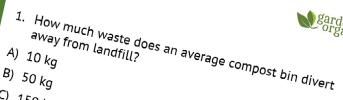


# Compost quiz time!









- B) 50 kg
- C) <sub>150 kg</sub>
- D) 300 kg





- 6. Which of the following would make the best mix for A) 1 part coir and 1 part leafmould

- B) 1 part home compost and 1 part loam
- C) 1 part worm compost and 1 part home compost D) 1 part loam and 1 part horse manure

- 9. Which of the following is most likely to survive in a home compost bin?
- A) Blight on tomato leaves
- B) Clubroot on brassica roots
- C) Powdery mildew on courgette leaves
- D) Rust on French beans





#### Games



Top of the heap



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#### Worms and ladders





W 62	61	You leave 60 your wormery in the sun	59	58	58	57
50	51	52	53	54	55	56
49	48	47	Your 46 wormery is full of fruit flies	You produce lovely worm compost	44	43
36	37	38	39	40	41	You let <sup>42</sup> your wormery freeze
35	Your Wormery doesn't smell	Your 33 wormery is full of ants	32	31	30	29
22	23	24	25	26	27	28
	20	19	18	17 Your worms try and escape	You can 16 go on holdday for 2 weeks	15
Your 8 wormery fits nicety in your kitchen	9	10	You feed 11 the worms tittle and often	12	13	14
7	6	5	4	] 3	2	1