

SOS-UK FOOD GROWING RESOURCE



STUDENTS
ORGANISING FOR
SUSTAINABILITY
UNITED KINGDOM



CONTENT

Part 1: Getting started

Part 2: What to grow

Part 3: Soil health, cover crops and crop rotation

Part 4: No dig

Part 5: Compost

Part 6: Seeds

Part 7: Sources of help

Part 8: Frequently asked questions and some good practice



STUDENTS
ORGANISING FOR
SUSTAINABILITY
UNITED KINGDOM

Part 1: Getting started



STUDENTS
ORGANISING FOR
SUSTAINABILITY
UNITED KINGDOM

LAND

The first thing you will need to do is to identify a suitable space for food growing. This could be unused, overgrown land or perhaps some growing containers which are no longer being used. If you are a student, get in touch with your students' union and tell them about your idea, they should be able to put you in contact with the right department(s) to explore options and get permissions.



What to think about

- How much sun and wind does the space get?
- Is there access to water nearby? Could you install a water butt to collect rainwater?
- Is there a space nearby where you could store tools and can you get materials such as compost and tools to the site easily?
- The size of the space will determine how much food you are able to produce, so map out the area and make a rough sketch of its potential layout.

What to think about

- Land being used purely for food growing does not normally need any planning permission as long as you have permission from the landowner to use the space you should be able to create your food growing site. However, it is always best to keep clear communication with the university's estates department/landowner about your plans.
- What is already available in the space? Will you have to build raised beds? Is there space for a green house or polytunnel? Be mindful of ensuring inclusive accessibility for your participants.
- Consider reaching out to other local growing projects for advice and assistance.

Tools

What tools you need can vary based on the size of your site and what you are planning to grow. Your most important tool is your hands, but here are a few tools no food grower should be without:

- Hand forks and hand trowels.
- Watering cans / watering hose.
- Spade and fork.
- Wheelbarrow.
- Garden rake.
- Gloves.
- Pruning shears / secateurs.
- Garden shears.



Part 2: What to grow



STUDENTS
ORGANISING FOR
SUSTAINABILITY
UNITED KINGDOM

What to grow

Planning what you grow is dependent on the space, environment (including soil health and weather patterns), time, and resources available to you.

Do you want to specialise in a certain crop, experiment with multiple varieties or let your market decide? What culturally appropriate foods can you grow? Circulate a survey to potential volunteers and/or customers asking what they would like to purchase or eat to help guide your decision. It can also be worth looking at similar growing projects and ask for advice and support on what to grow.



Edible Campus, University of Lancaster

What to grow

Here's a list of vegetables that are great to grow during term time.

September - December	January - June
<ul style="list-style-type: none">• Leafy Greens: Winter (Chard, perpetual spincah, kale, rocket)• Radish• Spring Onion• Broad Beans• Peas• Garlic• Green manure• Wildflowers	<ul style="list-style-type: none">• Leafy greens: Winter (Chard, perpetual spinach, kale,rocket)• Leafy greens: Spring (Chard, kale, rocket, spinach, lettuce, mustard greens)• Peas / beans• Radish• Beetroots• Onions• Leeks• Sweetcorn• Squash

What to grow

It's great to grow things that will capture the imagination of students! In addition to familiar items why not think about...

- An unusual herb bed for tasting, cooking and exploring; e.g. hot lips, curry mint and sea kale
- Vegetables are expensive for students to purchase e.g. asparagus and strawberries (use early varieties for term time harvest)
- Consider introducing perennial crops to your plot. These are plants that will grow again every year and this can help you save both time and money. Well-known perennials such as fruit trees and fruit bushes are a great addition to any food garden!
- Electric daisies
- Items for herbal tea; e.g. lemon balm, mint & rosehip
- Looking for a historic connection to the area e.g. specific fruit varieties
- Consider keeping bees for honey









Growing Calendar

Once you have decided what you would like to grow, it can be very useful to add these into a growing calendar. This will act as a schedule to help you know when to sow your seeds, when to plant out your seedlings and when to harvest your produce. Great for planning ahead and organising growing sessions for volunteers.

SOS-UK have created a [GROWING CALENDAR](#) template that you can print and fill in.



GROWING CALENDAR

		SOW = sow seeds PLANT = plant out seedling												✓ = SOW INDOORS ✓ = SOW OUTDOORS	
VEGETABLE		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC		
Lettuce 	SOW		✓	✓	✓	✓	✓	✓	✓	✓	✓				
	PLANT				🌱	🌱	🌱	🌱	🌱	🌱	🌱				
	HARVEST	👉	👉	👉	👉	👉	👉	👉	👉	👉	👉	👉	👉		
Radish 	SOW	✓	✓	✓	✓	✓	✓	✓	✓						
	PLANT	👉				🌱	🌱	🌱	🌱	🌱	🌱	🌱	🌱		
	HARVEST	👉				👉	👉	👉	👉	👉	👉	👉	👉		
Peppers 	SOW		✓	✓	✓										
	PLANT					🌱	🌱								
	HARVEST						👉	👉	👉	👉	👉				
Carrot 	SOW			✓	✓	✓			✓						
	PLANT					🌱	🌱	🌱	🌱	🌱	🌱	🌱	🌱		
	HARVEST					👉	👉	👉	👉	👉	👉	👉	👉		
Beetroot 	SOW		✓	✓	✓	✓	✓								
	PLANT			🌱	🌱	🌱	🌱	🌱	🌱	🌱	🌱	🌱	🌱		
	HARVEST					👉	👉	👉	👉	👉	👉	👉	👉		
Tomatoes 	SOW			✓	✓										
	PLANT					🌱	🌱								
	HARVEST							👉	👉	👉	👉				
Potatoes 	SOW														
	PLANT			🌱	🌱	🌱									
	HARVEST					👉	👉	👉	👉	👉	👉	👉	👉		
Spinach / Chard 	SOW			✓	✓	✓	✓	✓	✓	✓	✓				
	PLANT				🌱	🌱	🌱								
	HARVEST	👉	👉	👉	👉	👉	👉	👉	👉	👉	👉	👉	👉		

Part 3: Soil health, cover crops and crop rotation



STUDENTS
ORGANISING FOR
SUSTAINABILITY
UNITED KINGDOM



SOIL HEALTH

Soil is the very foundation of your project/enterprise, yet often soil is taken for granted, and receives little attention. A functional soil system requires all organisms to be present for a healthy soil. That means that we need to feed, nurture, and sustain life in the soil through diversity.

At SOS-UK we advocate for growing methods e.g. no dig, that prioritise soil health.



Planting for soil health

Plants play a big role in ensuring healthy soil. Plant roots turn weathered rock minerals into fertile topsoil by exuding root exudates, and it is these root exudates that allows the plants to change the soil structure and create room for air and water to move around. Different plants produce different root exudates, and these release different nutrients for the soil to absorb. So, planting a diverse mix of plants together results in lots of different nutrients being released, and different root lengths support access to water and oxygen in the soil.



Companion planting

- Improve soil structure and rooting depth.
- Recycle and retain nutrients.
- Increase water and nutrient holding capacity.
- Produce metabolic by-products that:
 - Promote plant growth.
 - Protect the plant from disease.
 - Sequester carbon.



The benefits to companion planting are many, including improved soil structure, increased nutrients, increased water retention, and as a result healthier plants. Growing multiple crops also allows for ‘failing’ crops, so if one crop is not doing so well you still have another to harvest.

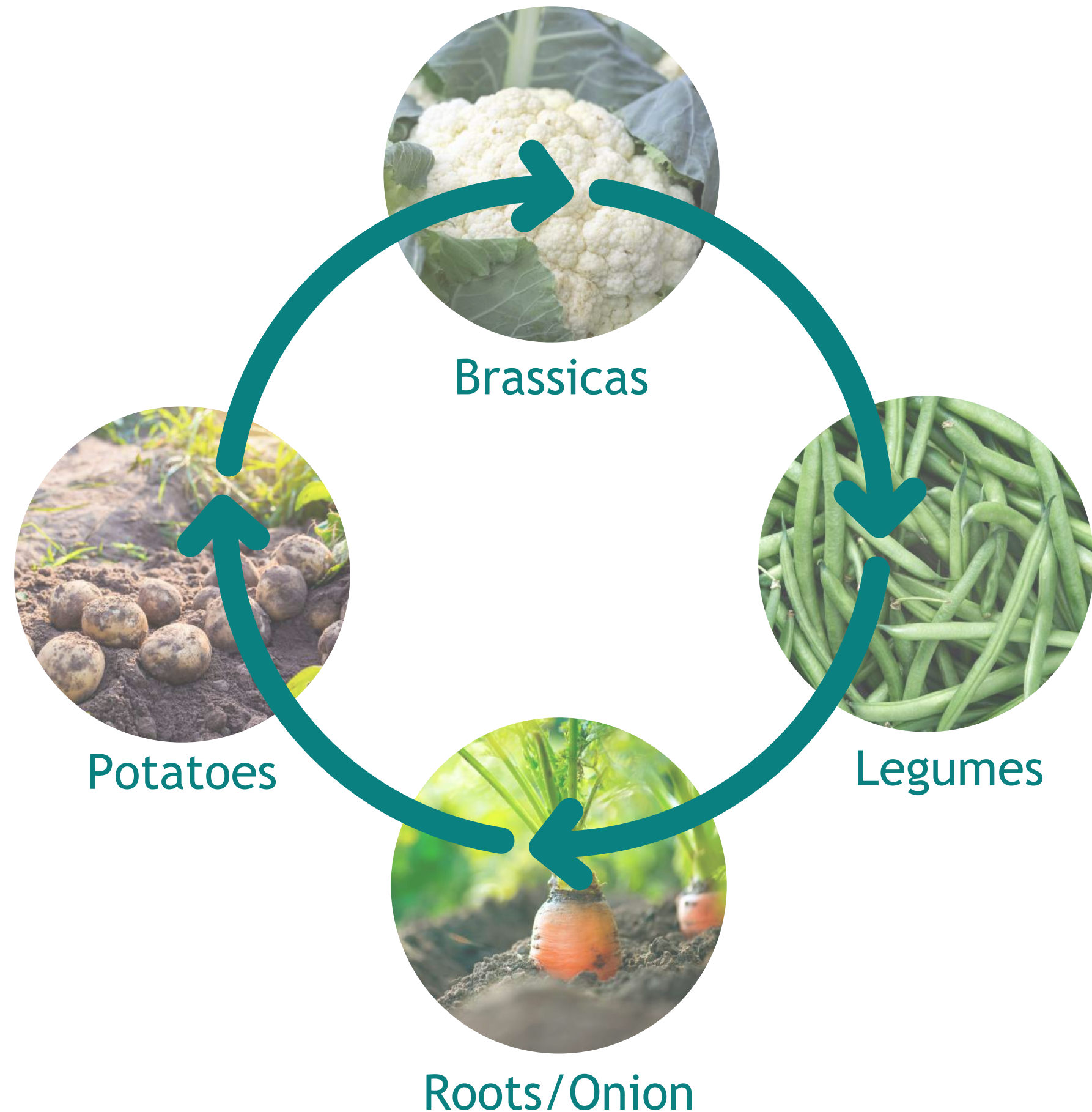
Cover crops

Giving your soil time to recover and rejuvenate is an important part of caring for the soil. However, soil should never be left bare, and planting cover crops is a great way to avoid this whilst taking care of your soil in between growing produce for your enterprise. Cover crops are often grasses and legumes that bring different properties and benefits to your soil. Common cover crops can be broad beans, phacelia, rye grass, flax and clover to mention just a few. Growing a mix of cover crops from different families is ideal for supporting soil biology, and a four-family mix is best for ultimate benefits!



Crop rotation

Introducing a crop rotation system for your growing site is an important part of ensuring happy and fertile soil. Together with your grow plan, keep a record of what gets planted where and do your best to avoid planting the same plant family in the same place.



Crop rotation

For example, if you have a bed planted with potatoes, you want to avoid planting tomatoes in that same bed after you have harvested the potatoes. These plants belong to the same family (Nightshade/Solanaceae) and will have the same requirements for what they take from the soil, but also what they can give to the soil. When growing the same crop or crop family in the same place over and over, you are not adding anything to the soil in terms of nutrients and may end up depleting your soil as the plant exhaust one nutrient and leave a lot of another, making the soil unbalanced which can lead to a build-up of pests and diseases for that particular plant.



Growhampton, Roehampton Students' Union

Sample crop rotation

If you are a student led site ideally choose crops that can be harvested during term time, and do not require high maintenance over summer.

Some vegetables can be sown outside the period listed, however the suggested timing leads to harvest (and most of the maintenance) within term time.

This is based off 8 beds of 1.2m x 2.4m, so it will need adjusting according to your set up!

Sample crop rotation - year 1

01



Early peas → followed by broad beans in autumn

Salad crops → followed by climbing french beans for drying

02



Swede | Turnip | Mustard
Spring & autumn

Coriander | Squash | Spinach
followed by

03



Early potatoes → followed by Leeks

Main potatoes → followed by autumn sown onions

04



Early Carrots | followed by winter greens | Main Carrots

Beetroot | followed by garlic | Parsnip

Sample crop rotation - year 2

01



Early carrots followed by winter greens | Main Carrots

Beetroot followed by garlic | Parsnip

02



Early peas → followed by broad beans in autumn

Salad crops → followed by climbing french beans for drying

03



Swede | Turnip | Mustard
Spring & autumn

Coriander followed by Squash | Spinach

04



Early potatoes → followed by Leeks

Main potatoes → followed by autumn sown onions

Sample crop rotation - year 3

01



Early potatoes → followed by Leeks

Main potatoes → followed by autumn sown onions

02



Early Carrots followed by winter greens | Main Carrots

Beetroot followed by garlic | Parsnip

03



Early peas → followed by broad beans in autumn

Salad crops → followed by climbing french beans for drying

04



Swede | Turnip | Mustard
Spring & autumn

Coriander followed by Squash | Spinach

Sample crop rotation - year 4

01



Swede | Turnip | Mustard
Spring & autumn

Coriander | followed by Squash | Spinach

02



Early potatoes → followed by Leeks

Main potatoes → followed by autumn sown onions

03



Early Carrots | followed by winter greens | Main Carrots

Beetroot | followed by garlic | Parsnip

04



Early peas → followed by broad beans in autumn

Salad crops → followed by climbing french beans for drying

Part 4: No dig



STUDENTS
ORGANISING FOR
SUSTAINABILITY
UNITED KINGDOM



No dig - Growing for soil health and nutrition

Adopting a no dig approach to your growing site is a great way to leave the soil structure intact whilst creating the potential to increase soil carbon, water retention and produce food with higher nutritional benefits. Charles Dowding, a well-known no-dig gardener and author of 9 books, has been supporting Student Eats and we're now focusing our support towards no-dig growing methods.



Photo: <https://charlesdowding.co.uk/>

No dig training

SOS-UK offer a half day training session that will help you to develop a no-dig system for term-time harvesting and will cover planning planting, composting systems, seed saving, volunteer recruitment & retention as well as how to measure impact. This is a course especially designed with the campus environment in mind. Contact Student Eats for your 90% discount code for the online no dig course.



Photo credit: SOS-UK

Part 5: Compost



STUDENTS
ORGANISING FOR
SUSTAINABILITY
UNITED KINGDOM



COMPOST

There are many benefits to making your own compost, not only will it support the health of your soil and provide you with free, nutritious compost for your growing beds, but it is also a fun and educational way for participants to learn about the soil food web and watch their food scraps and garden waste turn into one of the world's greatest resources.

Making your own compost introduces a closed loop system to your growing site, where nothing is wasted. Throw together grass cuttings, weeds (no-seed heads), cardboard and food scraps and it will all be recycled and transformed into nutrient-rich compost for your site.

Consider making space for a compost heap as one of the first thing you do when setting up your growing site. In this first stage of the process you will probably produce a lot of waste materials that you need to put somewhere, and it is worth turning this waste into something really useful.

Simple step-by-step guide for making your own compost:



Step 1:

Create a compost area: this can depend on the space you have available, but you do not need a large area to get started. You need space to create two plots for your compost, one to fill and one for turning your compost in to. The beds can be made with anything that is available to you e.g. pallets, planks of wood, bricks, etc.

Step 2:

Filling the beds: the garden waste you place in to the beds needs to be a mix of green and brown waste which will provide nitrogen and carbon to your compost. For example, you could mix weeds and food waste with dead leaves and cardboard, and the finer you chop or shred the organic matter the faster it will decompose. You should throw your waste straight on to the ground to allow worms to join in the feast.

Step 3:

Turning your compost: Once you have piled up a fair bit of compost, turn it weekly or now and then when it starts to smell. When your pile gets smelly, it is a sign to give it a turn as you want to get some oxygen in there. Use a garden fork to turn your compost from one bed to the other.



Part 6: Seeds



STUDENTS
ORGANISING FOR
SUSTAINABILITY
UNITED KINGDOM



SEEDS

Seeds are the most valuable resource on this earth, and although seeds are generally inexpensive, they should play an important role in your project/enterprise operations. You might have to purchase your first lot of organic seeds, but there are many ways to sustain your growing site moving forward, ensuring resilience and community building.



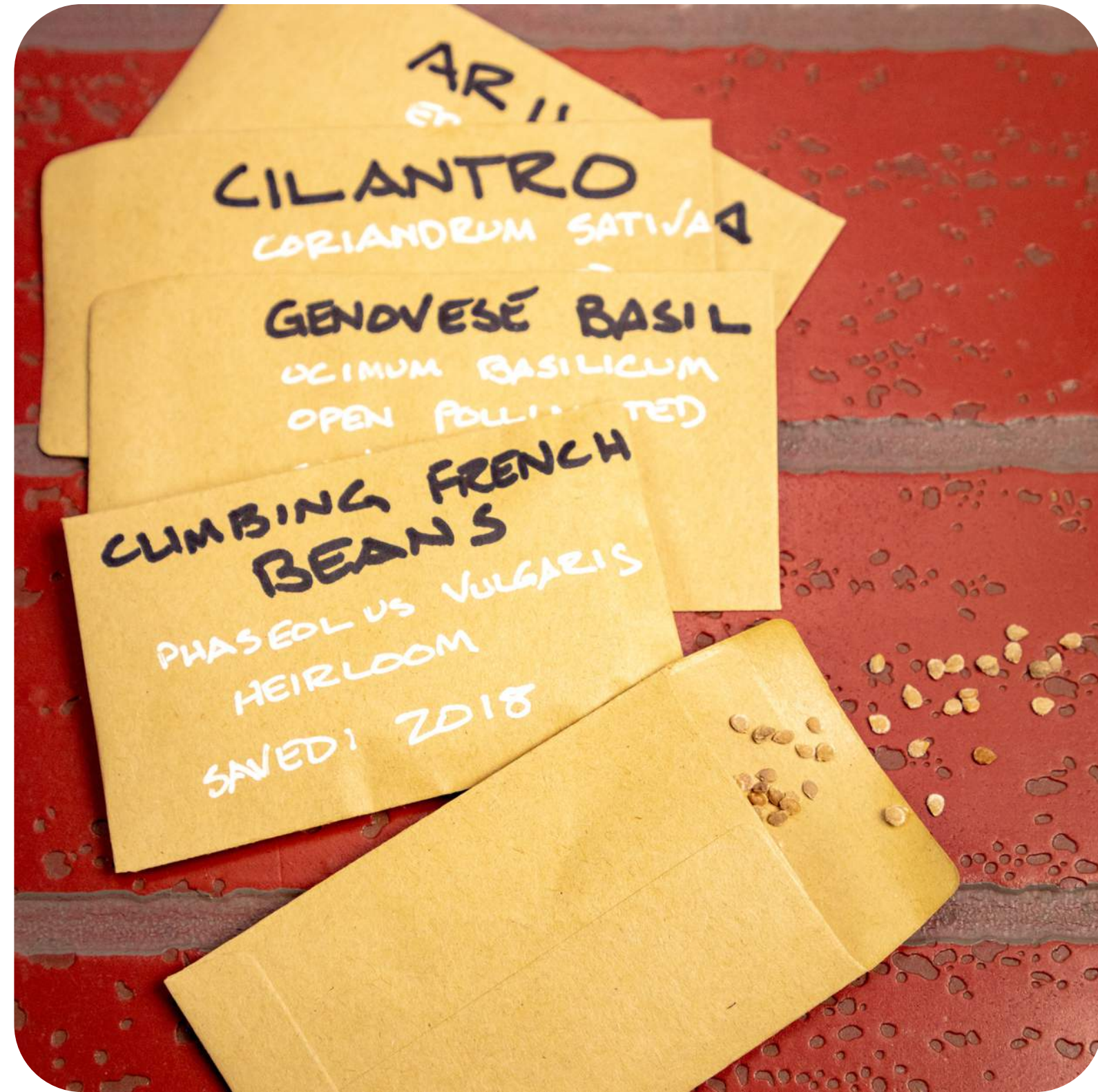
Seed saving

There are many benefits to saving seeds, one of them is that saving seeds will save you money as you do not have to purchase new seeds each year. This means letting some varieties, that do not produce fruits, go to seed. Saving your own seeds can some times seem a bit complicated, but it is definitely worth the effort!



Seed sharing

Keep a record of the crop varieties you have saved seeds from, and get in touch with local allotments, other growing projects or attend a seed swap event. This is a great way of networking and building community whilst getting hold of new varieties of fruit and vegetables to grow on site. You can also swap unused seed packets (in date).



Storage

Your collected seeds should be dried and stored in paper packets or envelopes in an airtight container, placed in a dark and cool place i.e. a freezer if available, until you are ready to use them.



Part 7: Sources of help



STUDENTS
ORGANISING FOR
SUSTAINABILITY
UNITED KINGDOM



ASK YOUR PEERS

Asking your peers for advice is often the best way to gaining information about what works, what does not, and any challenges you might face when setting up a food growing project on campus.

GROW TO SELL

The benefits of growing your own food are many, and setting up a food growing site on campus will act as an educational tool and community builder. It will provide new opportunities for young people to develop employability skills, increase food literacy and foster wider environmental activism among young people.

Check out our ['Grow to Sell' handbook](#).



The background image shows a close-up of a food dehydrator. It features several metal mesh trays stacked vertically. On the trays, there are various types of fresh herbs, including long, narrow leaves (possibly sage) and smaller, more delicate leaves. The herbs are laid out in rows, likely for drying. The lighting is bright, highlighting the textures of the herbs and the mesh trays.

PRESERVE TO SELL

Exploring food preserving is a great way to reconnect with the food that we eat, to extend the availability of the produce you grow and to reduce food waste. Teach students about the ancient art of preserve making and basic cooking skills and spark conversations around the journey of food, seasonality, and food waste.

Check out our ['Preserve to Sell' handbook](#).

Health and Safety

When growing food on campus you have to ensure that yourself and volunteers are properly trained in tool use and aware of any potential dangers of working on a growing site. You have to have a risk assessment in place for the area you are working in and the activities that will take place. Make sure you have good routines in place and that these routines and guidelines are clearly communicated to all the people involved.

You can have a look at our risk assessment example for food growing.





Inclusivity

We urge all our food growing sites and enterprises to cultivate a culture where everyone feels welcome and appreciated irrespective of age, gender, race/ethnicity, faith, sexual orientation and abilities. Creating a food garden is to transform a landscape where diversity is fundamental for soil health, plant health, wildlife, and successful harvest. This interconnectedness should be reflected in the people who care for it so that we can learn from each other, share experiences, and take action to allow our growth to flourish.

ROOTZ INTO FOOD GROWING

Learn more of how to incorporate anti-racist, equity-led practices into your enterprise.

RESEARCH

- [Charles Dowding No-Dig](#)
- [Royal Horticultural Society](#)
- [National Trust](#)
- [WEN](#)
- [Garden Organic](#)

Part 8: Frequently asked questions and some good practice



STUDENTS
ORGANISING FOR
SUSTAINABILITY
UNITED KINGDOM



1. How do we get funding for our growing space?

An ever asked question and not something that can be covered by a few slides but here are a few ideas:

- Start-up costs can be high, but using recycled materials can be a way to save, try checking with your estates team and local exchange sites such as Freecycle.
- You might want to look for grants to build more expensive items such as storage sheds, glasshouses and polytunnels. As a starting point look at '[Awards for All](#)' and the '[Aviva Community Fund](#)'.

1. How do we get funding for our growing space?

- Use unwanted space, turning an unsightly area into a lovely edible garden is likely to be a winner. It worked with the Edible Bus Stop route which started off as one area and is now spreading across London.
- Running costs can be kept low if you reuse resources, save seeds and plan carefully.
- Subscribe to our Food & Farming newsletter and follow SOS-UK on social media to receive occasional updates about campaigns, funding and other great opportunities. You can al

2. How do I get 'big jobs' completed?

Use people power to get big jobs completed! Events such as sustainability awards and team building days are great excuses to build some new raised beds or create an upcycled seating area. Community open days can also be a great chance to use extra hands for planting or weeding!



Leeds Beckett Allotment, LBSU

3. Do I need a greenhouse or polytunnel?

This will depend on your space and budget (you might want to secure a grant). These spaces can be very useful to:

- extend the growing season and propagate.
- grow culturally relevant items for international students.
- hide away from the rain during wet gardening sessions.

... but beware of watering loads, especially during hot weather and for areas that can't be accessed over the weekend. Installing solar powered irrigation systems during set up can be very useful to help reduce this problem.

Sign up to our [NEWSLETTER](#) for updates and opportunities from the Water Conservation Trust.

4. How do I get students to initially engage in the growing space?

- Fresher's stalls are a great way to engage with, especially new, students. Turn it into a competition e.g. guess the weight of the marrow at a fresher's fair event where the winner gets a hamper and use the opportunity to get a mailing list started.
- Remember to also offer other roles so that those without 'green fingers' can get involved, for example do you need a student to hold a marketing & communications or finance role within the team?
- Hold open days

4. How do I get students to initially engage in the growing space?

- Give away free food and drink at the gardening sessions, especially cake and things made from the garden.
- Encourage those who engage to bring a friend
- Don't give a new person a bad job to start with, get them hooked first!



4. How do I get students to initially engage in the growing space?

... don't underestimate the impact that you are having and don't lose faith - building momentum takes time, the more people that join the more people that will want to join!



5. Should the growing space be open to staff & community members?

This will be dependent on your site but growing sites often work well when they have a varied workforce with a collective vision.

- Staff, community members and PhD students (if applicable) are present all year round, often covering for watering and planting when students aren't present.
- A staff/long term presence can help with group structure & facilitation. Students often look to these members for information as it's not unusual for those joining the garden to have little horticultural knowledge, but they are normally keen to learn!

6. How to engage with staff & community members

- Tap into staff champion networks
- Hold open days, and invite local community groups
- Put the growing site onto Google Maps



Edible Campus, Lancaster University

6. How to engage with staff & community members

- Have working days with local community groups /companies /organisations and internal staff teams.
- Ensure that everyone feels welcome in the space, it will help encourage its use as a 'living lab' and as an educational or meeting space.
- Allow chatting & socialising to take place during growing sessions, it's a chance for most people to get away from their desk and is often a reason they attend. Growing has lots of mental health benefits and helps break down social barriers!

7. Should we run the garden as a collective or individual plots?

This really depends on the set up of your space(s) and your groups vision! Both management techniques have their benefit, although always having some shared space helps to get new people involved. However:

- Ensure that within shared areas growers feel empowered, and where possible hand over decision making of what gets planted to the group.
- Ensure that any individually/group allocated plots or spaces are only allocated for a fixed time e.g. 12 months, and then review to ensure they are maintained.

8. What is a forest garden?

Forest gardens aim for edible plants to occupy all niches at a variety of heights, increasing biodiversity and decreasing the need for weeding and other human maintenance.



Ground e.g. mint, other herbs, strawberries



Bushes e.g. blackcurrant, rosehip or gooseberry and fruit canes



Trees/canopy e.g. apples, quince, plum

9. How can we support biodiversity?

- Leaving areas wild, some ‘weeds’ are very important for biodiversity for example nettles support 40+ kinds of insect, are a source of seeds for certain bird species i.e. chaffinches and support many other mammals and amphibians;
- Creating habitat within your growing space e.g. making log piles and ponds (even a small pond can be highly beneficial!)
- Planting veg, fruit and flowers which attract pollinators;
- Growing food organically or with permaculture principles.



Growhampton, Roehampton Students' Union

10. What non food crops can I grow that will be useful in the growing space?

Willow is extremely useful, it can be used to create:

- Hurdles to define paths - helping to funnel people through the garden
- Hedges (can also be created with hazel)
- Baskets and other useful resources.

Flax (Linseed) can be used to make ties, these can be used in place of string



Leeds Beckett Allotment, LBSU

11. Creating compost and fertiliser

- Allow staff & students to bring compostable items from their homes and office, although you might need to have display signs up to explain what can & can't be composted.
- Make fertiliser out of non-food plants, soak leaves in a bucket with a lid on for two weeks, dilute 1 to 10:

Borage

Nettles

Comfrey

Even duck weed!

- Use free range chicken poo pellets



12. How can I make the growing space double as a more formal garden, for high profile events?

- Grow things that look nice but that you can eat e.g. edible flowers!
- Create lovely flower arrangements from what is in the garden and take those to indoor areas or event.
- Mix pollinator flowers and food to create a pretty growing space, varying height and flowers type can be very valuable for biodiversity here.
- Pinterest is your hero!



Contact us if you have got
any questions:

foodandfarming@sos-uk.org



Growhampton, Roehampton Students' Union



STUDENTS
ORGANISING FOR
SUSTAINABILITY
UNITED KINGDOM



Website:

<https://www.sos-uk.org/project/food-and-farming>