

Grow Shetland

Evaluation report March 2024

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Executive summary

In January 2021 Transition Turriefield was awarded £96,569.76 from the Shetland Islands Council (SIC) Coastal Communities Fund and £17,000 from Highlands and Islands Enterprise, to develop and run the Grow Shetland project. A further £5000 was granted from the Shetland Charitable Trust to support Transition Turriefield during the first year.

The project set out to: increase food growing and access to affordable food and healthy eating throughout Shetland.

Grow Shetland worked with individuals, groups, communities and schools across the isles to:

- Increase confidence in home and community food production
- Increase knowledge and skills for home and community food production
- Increase the number of growing sites and quantity of home and community grown produce throughout Shetland
- Establish effective pathways in to growing and preparing food for those who are more vulnerable to the high cost of food.
- Increase opportunity for involvement in therapeutic horticultural pursuits
- Increase knowledge of cooking and consumption of locally produced seasonal food
- Increase understanding of waste reduction, composting and recycling

Three main strands made up project delivery:

- 1. Working with groups
- 2. Working with individuals
- 3. Development of information and resources

Grow Shetland supported residents to begin, or improve and expand, their food growing by providing Shetland specific information, advice and training. Project staff made visits to sites, drew up plans, suggested crops and rotations, answered queries, created online resources including workshops, supporting materials and video tutorials, as well as providing opportunities for visits to the Turriefield growing site. Groups and communities were directed toward help to access land, as well as given guidance on how to set up and run larger scale initiatives. Groups working with low income households, or vulnerable individuals, were supported to involve their participants in food growing and cooking local produce. Work was carried out with teachers and Parent Councils to establish growing spaces and include food growing as part of the curriculum.

The Grow Shetland project has achieved its aim to increase food growing in Shetland. It is less clear whether there has been an increase in affordable food, due to the difficulties in setting up and maintaining growing projects in services tackling these issues. Project targets were met, or exceeded. The project has been successful in increasing land used for food production by households. Both new and experienced growers have become more confident and achieved better crops as a result of gaining knowledge and skills.

Communal land has also been given over to food production as community groups plan and design their projects. However, they have not been as successful in their outcomes as individual households due to the many hurdles they encounter in setting up and running a larger scale enterprise. Statutory groups initiated growing projects, although, only a very small number of them have succeeded in reaching an operational stage during the lifetime of the project. Where they have, there have been problems in maintaining the project. Schools set up, reignited, or expanded their growing projects and were supported with appropriate teaching materials. Yet, schools suffer similarly to other statutory services in finding staff time to continue their growing projects.

To increase food growing and affordable food in Shetland significantly and long term, further support for individuals, communities and statutory services, will need to be provided. It will require a recognition of the wide range of benefits small scale food growing can bring. It should be embedded in the core work of statutory service and schools. Both financial and social commitment is required to ensure long-lasting food production which contributes to the reduction of food inequality, Shetland's food security and lower carbon emissions for our community.

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Introduction

This report outlines the work undertaken by Transition Turriefield's Grow Shetland project and its evaluation. The work supported individuals, groups, communities and schools to grow more of their own food. This document describes the setting which informed project development; details of project aims objectives and intended outcomes. The evaluation methodology is summarised and findings set out. Participant's own words are used to illustrate their experience of Grow Shetland services and the results of their food growing. Issues faced by community, statutory groups or schools, in setting up and running growing groups are discussed and suggestions given for tackling these issues.

A breakdown of project costs is also included.

Background

Accentuated by concerns about food shortages following the Brexit referendum in 2016, Transition Turriefield began a three year long dialogue with Shetland Islands Council (SIC) focusing on long term food security for the Isles. At that time SIC were developing strategies to fulfil recommendations from Shetland's Commission on Tackling Inequalities¹ and seeking to deliver on both the Shetland Partnership Plan (2018)² targets and implement the Scottish Government's Community Empowerment (Scotland) Act 2015, Part 9³. In 2019 Transition Turriefield ran an online questionnaire, the Get Growing Survey (see appendix 1.), to gather information and evidence of need of support for food growers in Shetland. It demonstrated a clear interest in increasing food production, a need for support and information of growing food in the Shetland climate and provided additional background information for the SIC Fair Food Policy (2020)⁴

Further discussion on the practical implementation of the Fair Food Policy led to ideas for a Shetland wide project to support residents to begin, or improve and expand, food growing. Information, advice and training would be provided for food growing in the Shetland climate. The project would direct groups and communities toward support to help access land, as well as provide guidance on how to set up and run larger scale initiatives. Groups working with low income households, or vulnerable individuals, would be supported to involve their participants in food growing and cooking to increase skills and experience. It would work with schools to establish growing spaces and make use of food growing in the curriculum. Increasing food growing across Shetland would be the first step toward improving food security and more fresh produce available across the isles would begin to reduce inequalities in accessing food.

Transition Turriefield

Transition Turriefield is a community food growing project based in the far west mainland of Shetland. The Community Interest Company was established in 2011 to provide the community with fresh, seasonal, locally produced fruit and vegetables. Education, training, advice and support to encourage others to grow their own food, has been a key part of the organisation since 2013. Launched with support from the Climate Change Fund, Transition Turriefield's Carbon Classroom created training courses and workshops based on our experience of food growing in Shetland's difficult climate. In 2019 we ran our Edible Education project, funded by the National Lottery Community Fund Awards 4 All scheme, to help schools improve the use of their polycrubs. Transition Turriefield continues to work extensively with individuals, groups, communities and schools across Shetland. As well as opening our growing site to enable young people and adults to see local food growing in practice.

¹ On da Level (2016), Shetland's Commission on Tackling Inequalities: http://www.shetland.gov.uk/equal-shetland/evidence.asp

² Shetland Partnership Plan (2018): https://www.shetland.gov.uk/downloads/file/1085/shetland-partnership-plan

³ Community Empowerment (Scotland) Act 2015. Part 9: https://www.legislation.gov.uk/asp/2015/6/part/9/enacted

⁴ Fair Food Policy: https://www.shetland.gov.uk/downloads/file/2447/fair-food-policy-strategy

The Grow Shetland Project

In January 2021 Transition Turriefield was awarded £96,569.76 from the Shetland Islands Council's Coastal Communities Fund and £17,000 from Highlands and Islands Enterprise to develop and run the Grow Shetland project. A further £5000 was granted from Shetland Charitable Trust to support Transition Turriefield during the first year of the project.

Aims and Objectives

The project set out to: *increase food growing and access to affordable food and healthy eating throughout Shetland,* by supporting individuals, groups, communities and schools to grow more of their own food.

The project provided information, training, advice and support based on Transition Turriefield's experience of food growing in Shetland, for the purpose of:

- Increasing confidence in home and community food production
- Increasing knowledge and skills for home and community food production
- Increasing the number of growing sites and quantity of home and community grown produce throughout Shetland
- Establishing effective pathways in to growing and preparing food for those who are more vulnerable to the high cost of food.
- Increasing opportunity for involvement in therapeutic horticultural pursuits
- Increasing knowledge of cooking and consumption of locally produced seasonal food
- · Increasing understanding of waste reduction, composting and recycling

To achieve outcomes of:

- More people are interested in food growing
- More land is used for food growing
- Individuals and groups are supported to create growing spaces and take up food growing
- Individuals and groups gain knowledge, skills and confidence in vegetable and fruit production
- Locally produced food is shared within, and between, communities giving individuals and communities access to fresh, nutritious produce
- Individuals sense of self-worth, sense of belonging and personal confidence increasing as part of a food growing community
- Food waste and linked carbon emissions are reduced

Two posts, together making 0.8 FTE, covered the work to develop and deliver the project over a three year period. Originally intended to run to the end of January 2024, a small underspend in project costs allowed the work to continue for a further two months to 31st March 2024.

Work was informed by the Get Growing survey conducted in 2019, in which 143 responses were received from 11 of the 15 Shetland areas:

- South Mainland
- Central Mainland
- Lerwick
- Bressay
- Westside
- Delting, Lunnasting, Nesting
- Northmavine
- Yell
- Unst
- Fetlar
- Whalsay

There were no responses from: Papa Stour, Skerries, Foula or Fair Isle.

Through the survey Shetland residents identified their need for:

- Shetland specific growing information
- More knowledge and skills in growing
- Online and hard copy resource materials
- Practical face to face and video demonstrations
- Hands on physical experience
- Workshops and training courses
- Peer to peer support and knowledge sharing

Three main strands made up project delivery:

Working with groups

Awareness of a number of groups and schools across Shetland which had under-utilised growing spaces, or staff who lacked confidence in using them effectively, shaped our work with groups. As did responses to our Get Growing survey which demonstrated a high number of individuals expressing an interest in establishing, or being part of, a growing groups to benefit their local community.

The project worked with both existing groups in statutory or community settings; individuals and groups who expressed interest in starting a growing project and with schools with under-used or potential plots. Grow Shetland staff made visits to sites, drew up plans, suggested crops and rotations, answered queries and provided training where required. Where appropriate, the group was linked with a Grower Mentor (see below), SIC Community Development Officers, other community groups and SIC departments for ongoing growing support, other specific knowledge and skills, seeking funds or finding land for growing space. Priority was given to groups who had opportunity to engage low income households, vulnerable individuals or were located in remote rural communities.

Groups and schools were encouraged to share the crops they produced with the wider community, or those with less access to fresh local food.

Working with individuals

Again, the Get Growing survey demonstrated there were individuals across Shetland already growing on a small scale, or with a desire to start growing. Many indicated a need for more knowledge, skills or space to grow more, or better. Non-growers expressed an interested in starting to grow their own, but cited a lack of knowledge, skills, confidence or usable land, to be able to start.

To engage with individual households, we created and delivered workshops and training courses designed to increase knowledge, skills and confidence of beginners and the more experienced grower. In the early stages work was compromised by Covid-19 restrictions, obliging no-contact interventions and workshops were run online. In years two and three (2022 and 2023), we were able to return to face to face input. However, online courses continued to be more popular with participants. Visits to the Turriefield site were also offered to individuals, groups and schools to demonstrate methods and approaches to growing. Social media and emails were used to respond to individual growing queries. Those seeking land were linked with SIC Community Development Officers and other appropriate SIC departments.

Individuals and groups also asked for peer to peer support and knowledge sharing. The project made use of experienced grower's skills and knowledge to create a small network of Grower Mentors to support beginner growers in their local communities. Grower Mentors also encouraged non-growers to consider growing their own.

Grower Mentors received training and supervision sessions to support them in their role. It included interpersonal skills, leadership, health and safety, working with groups and specific growing topics, such as organic growing or fruit tree pruning, as requested by the Grower Mentors.

Development of information and resource materials

Responding to the identified need for Shetland appropriate growing information, and a global cultural increase in reliance on the internet for information, a dedicated Grow Shetland website was developed to host online resources. These included Grow Shetland contact forms, information leaflets, an info exchange, access to Grow Shetland online courses and links to external growing information.

A Transition Turriefield YouTube channel was set up to host the Beginners' Guide videos, created by the Grow Shetland staff, covering basic skills for successful growing.

Further information and support was provided through existing Facebook pages, by responding to publicly posted growing questions and uploading appropriate information.

Grow Shetland Evaluation

Methodology

To understand the impact of Grow Shetland an evaluation strategy was created and implemented at the start of the project. Using the project objectives, targets and indicators were identified; data collection methods were put in place to gather quantitative statistics. Records were kept of meetings with individuals groups and schools, number of requests for support, workshops and courses delivered and number of queries answered.

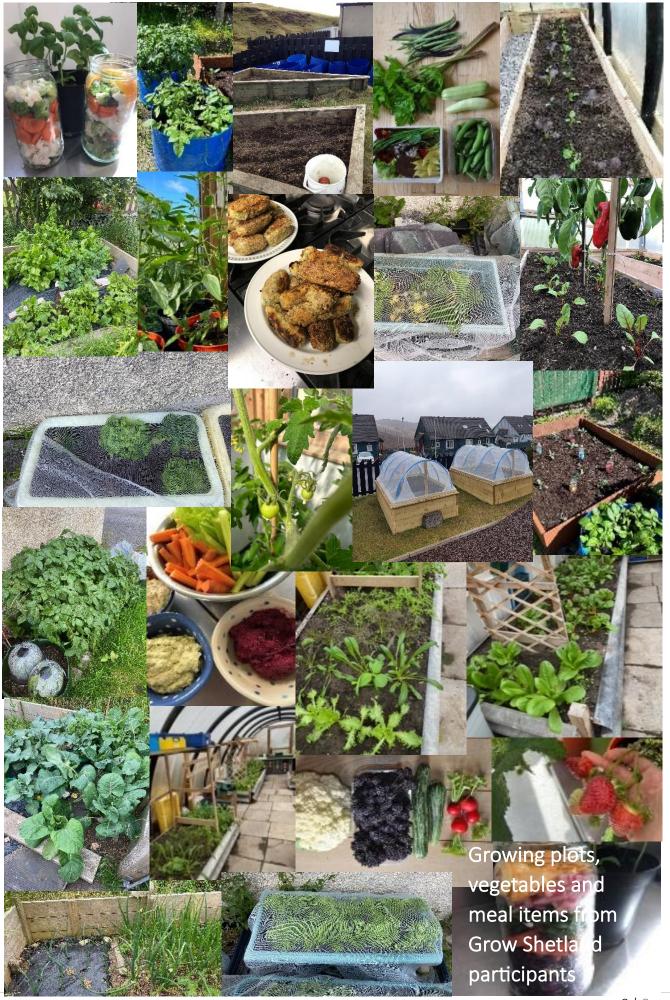
Further quantitative and qualitative data was gathered through follow up questionnaires (see appendix 2 a & b) and interviews with a selection of individuals, groups and schools. One hundred and eighty online questionnaires were sent out to those who had made use of the Grow Shetland project and for whom we had contact details. Fifty five forms were completed, achieving a return rate of 30%. The majority (85%), of respondents were reporting as individuals, with just one from a statutory group, one from a school and 4 representing community groups. A separate form was created for schools which generated 3 responses.

The questionnaires gathered information on Grow Shetland services used, size of plot, experience of growing, composting and food waste reduction, use of produce and perceived benefits of growing. Self-reported size of growing plots has been taken as an indicator of land use. No specific quantities were requested for composting or food waste reduction. Neither has any attempt been made to calculate carbon emission reduction. Respondents indication of their increased composting or food waste reduction was taken to represent positive behaviour change and corresponding reduction in carbon emissions.

Twenty six individuals were interviewed either face to face, via video conference, or telephone. The interview process was conducted with a representative sample of individuals who had indicated through the online form a willingness to provide more detail of their experience; statutory staff involved in setting up or running growing groups; teachers responsible for school growing spaces; leaders of community growing groups; Development Workers from community development companies; SIC Community Development Officers, responsible for supporting community groups and a selection of Grow Shetland Grower Mentors. Those receiving Grower Mentor visits were also contacted, however, only one response was forthcoming. Interviews were informal discussions following a general theme (see appendix 3.).

Interview responses were recorded verbatim. Online forms were submitted without names and no permissions were sought from interviewees to reproduce comments for this document. All quotes are used anonymously to protect individuals and groups living in a small community. This is believed to be particularly important where potentially controversial issues are suggested to be a cause for the poor outcome of a growing project.

Overall feedback from statutory services was limited. Despite repeated attempts to make contact or arrange meetings, for the most part it was unsuccessful. A high number of those approached did not respond or failed to supply information in the evaluation timeframe. At the outset it was agreed with services working with vulnerable people, or those with high support needs, that evaluation of participant experience would be carried out through the service's inhouse evaluation process. Unfortunately the data provided has been limited to brief, worker observations, and three quotes from participants.



Findings

The Grow Shetland project worked with individuals, groups and schools all over mainland Shetland from North Roe to Dunrossness and Nesting to Sandness. As well as the isles of Unst, Yell and Fetlar, Whalsay, Bressay, Papa stour and Foula. No direct contact was had with residents in Fair Isle or Skerries.

Fifty three individuals made contact through the Grow Shetland website contact forms, as did 16 community groups. Others became involved through telephone, email or social media exchange. In addition, 8 expert growers registered an interest in becoming Grower Mentors who went on to provide growing support and advice in their local communities. All contacts were followed up with tailored support, the outcomes of which are detailed below.

Work with Groups

Grow Shetland exceeded its target of supporting 4-8 groups over the life of the project, to explore and develop growing spaces by working with:

- 10 Community groups
- 6 Statutory services, including 3 residential care units
- 9 Schools
- 3 individuals intending to set up a community group or donate land for a community growing project

and establishing 3 geographical growing support groups.

Work with groups and schools included a total of 39 visits to their growing sites. Supported by written development plans, crop suggestions and rotation plans as well as advice on group structure, project management and community involvement. Additionally, workshops were run with residents of the extended community to strengthen knowledge and skills for wider community growing. Recipients reported Shetland appropriate information, personalised plans, comprehensive training, online factsheets and visits to the Transition Turriefield growing site as being useful to help them get started. Development Workers, teachers and others responsible for group management, agreed that Grow Shetland's involvement was positive and that it:

" gave a lot of useful information that carried across into other areas. Your involvement brought a wider discussion to the group, helped bring food for thought and learning that had wider implications and could be applied across projects."

"has given me confidence seeing how veg is grown on a larger scale."

"changed how we considered what we were doing. The slow start gave us time to think about how we would manage the project and who and how people would be involved."

"was a huge benefit to me it increased my knowledge and understanding, taught me how to problem solve with the growing. It was a steep learning curve in how to deal with things. It gave confidence and I feel not so much of a novice, I have a better understanding."

Development Workers also commented that Grow Shetland had been essential for the development of their project:

"We would not have been able to run the growing project without Grow Shetland. It gave us good results for the project and personally for the people involved."

"What we were trying to achieve would have been so much more difficult without Grow Shetland."

Community groups

The majority of community groups expressing interest in growing spaces were from established Community Development organisations. A further two were church based initiatives. Most groups contacting Grow Shetland were in the early planning stages, exploring their options or seeking land. Working with a committee, the need to seek funding and balance needs of volunteers, has delayed nearly all groups. Still, after 2-3 years of work they remain in early stages of development with multiple hurdles to overcome. In many cases there have been barriers which prevented the growing group getting underway quickly. Development Workers described their experience in getting their groups established:

"The community growing project was too expensive to get up and running"

"We have lots of volunteers who are happy to muck in and get things done but no one willing to lead or manage"

"Participants were not interested in the level of work required"

"They [community residents] like to drop in and out with no formal commitment"

"Things get underway and then drop off when enthusiasm wanes"

Another 3 individuals got in touch with intention of developing growing a growing group. Unfortunately none of the groups got underway. The extent of work required by volunteers, volunteer burnout, reluctance to take on a management role, maintaining community interest and a dislike of a formal approach have all impacted on the formation of groups. The lack of group cohesiveness and common goal was also given as a disadvantage to success:

"At the moment it is impossible to create a group dynamic. It is an obstacle, people are working separately. It feels like a vagueness, nothing is planned and there is despondency"

The group most successful in setting up quickly, producing crops and sharing food with the local community, had both land and infrastructure gifted by local individuals. As well as two funded full-time posts to oversee the project. Supported by a non-grant funded external source, it has enabled the group to get up and running within one growing season. The project now provides support to vulnerable people, involving them as volunteers; offers growing space to the local school and nursery and provides fresh food to those in need, free of charge.

At least two other groups involved the wider community in food sharing, creating opportunities to learn new cooking or preserving skills:

"everyone really enjoyed it and it was so good seeing everyone working together and sharing a meal. I made the hummus (broad bean, butter bean and beetroot and walnut) in advance so that they were ready for them to munch on when they came in."

"We split into two groups. My group made the veggie croquettes and the other made Scarpaccia – courgettes, onions, herbs, cheese cooked in the oven with an egg custard. That was really tasty and went down well."

"Thought you might like to see the results of our fermented veggies. Everyone had a great time layering everything"

One group now hosts an annual produce show to bring the community together, show and share their home grown food.

Statutory services

Grow Shetland worked with statutory services which had identified an intention to create and run a food growing project. The services worked with low income families, vulnerable young people, or those with high support needs. The goal was to provide opportunity for therapeutic activities, skills development, social confidence and cooking skills, for their user group. Grow Shetland input ranged from one-off workshops with participants to planning a large educational growing project from scratch. We provided: development and site plans (see appendix 4.), consultation sessions to explore ideas, staff training, Shetland appropriate growing advice, information on building raised beds and practical hands on demonstrations at growing sites.

As projects got underway staff acknowledged the therapeutic benefits, learning and experiential opportunities for vulnerable participants involved in growing food and learning how to cook with it:

"The whole process is hugely valuable, giving skills, knowledge and for them to gain confidence through one to one time. They're gaining confidence in a social setting as well."

"[they]were able to try a wide range of locally grown produce that they would never have tried otherwise."

Participants themselves indicated growing food was a positive experience:

"it's nice to feel useful again, like you are contributing towards your community and making somewhere good to be in for others."

"Thank you all for yesterday at the poly tunel i could feel that my mental health was improving because i was moving around and doing something, not stuck inside and getting wound up at the silliest thing"

"it's so nice being able to use what is grown here for my baking and soups, and know that I helped to grow it".

However, whereas during Covid-19 restrictions outside growing spaces were appreciated as safe spaces to engage with participants, once working conditions returned to normal, the longer term prospects for projects were plagued with issues. Outside growing spaces were no longer essential to achieve goals and staff time was directed elsewhere. Contact with some services also evidenced a rapid turnover of staff, with responsibility for the project being handed over a number of times. We were told staff were taking on the management of growing projects as an add-on to their usual role. Through informal conversations we understand work is assigned to them because they have an vague interest, it is assumed they have space in their remit, or no one else will do it. They often have little experience of growing and not enough time in their working week.

Cuts in budgets, staff vacancies, and illness all reduced the ongoing success of projects. More than one service described difficulties in finding sufficient staff to cover the management of the project:

"There isn't the staff capacity to run the project. We're short of resources."

Additional challenges with participant involvement also contributed to the mothballing of projects. A lack of participants, or participant interest, was described as problematic for justifying the continuation the work:

We just didn't have the numbers. We tried reaching out to different services to get them involved, to work in collaboration. It didn't work."

"It works with the older age group, younger people have different priorities."

"It is difficult for some with a chaotic lifestyle to give time and energy to growing food"

Another project was delayed from the start due to postponed consultations with management and project partners. Here again the project was an add-on to staff responsibilities. Finding time to juggle reorganised meetings with an already full work schedule was challenging for staff when core duties had priority. Resulting in very little advancement over a three year period.

Schools

Grow Shetland contacted all 28 Shetland schools to offer support with potential, or existing growing projects. The project was also promoted through a Head Teacher's training day, linking in with the 'Cost of the School Day' input. Food growing in schools was encouraged as a way of engaging low income households and provide access to fresh, healthy produce.

In 2019 Transition Turriefield's Edible Education project (see appendix 5.) worked with five schools and was well known to teaching staff. With already established food growing projects in these schools they had no need of extensive support. However, they remained in touch for ongoing development and crop specific advice. In addition, Grow Shetland worked with nine further schools, consisting of 8 primary and one high school. Grow Shetland staff carried out 16 site visits; worked with teachers, pupils and Parent Councils; provided development plans, site layout plans, (see appendix 6.) crib sheets for parents, letters of support for growing space funding applications and delivered four workshops to teachers and parents, with a total of 20 participants. Two additional workshops were delivered for 24 primary pupils as part of the SIC Climate Festival in 2022.

Three schools have participated in four Turriefield site visits to learn about growing food in Shetland and better understand the nature of community food growing projects as a business model.

Six of the nine schools worked with responded to the evaluation questions. All schools reported starting new growing projects or, reigniting old projects:

"Grow Shetland input for school was really useful, it gave a really clear idea of what could be achieved, what we could do with the polycrub and I worked with P6 to get things going again. It was helpful for getting us going again".

"seems like we are making some real progress now after what seems like years!"[with the school polycrub]

"The planting plans etc are so useful and as a resource this has been very accessible and really helped me feel like I have a better idea of what I am doing."

Teachers described feeling more knowledgeable and confident in growing food. All respondents also acknowledged the positive link to the curriculum, particularly using it to learn about healthy eating:

"The kids absolutely loved the peas. Some of them had never seen them in the pods before, and some were really excited to tell me about what they grow in their gardens at home."

The pupils enjoy being out and getting jobs done. It gives opportunities for success that look really different, I also think it helps a lot with expectations around things happening instantly"

Three schools used the produce for school lunches and all schools were able to send some produce home with their pupils. Two teachers described the benefits of using the outdoor activity with children to calm stressful situations, or take time out to improve classroom learning.

The most successful growing projects in schools have enthusiastic Head Teachers, or other staff with significant influence throughout the school, who are food growers themselves, or have experienced food growing at some time. Staff are confident in using growing projects to enhance various elements of the curriculum and pupils are fully engaged with the process. On the other hand, we observed a reluctance take up food growing where Head Teachers

have no knowledge and experience of the process. Anecdotally, we were told there are concerns it will take focus away from the curriculum, or take up too much teaching time.

Similar to other statutory groups, schools have difficulty in finding both staff and time required to keep growing projects going:

"It's a big struggle to have the crucial people to do things. The workload in schools pushes it away from doing it."

"Nice extras to the curriculum like growing or art—it's the individuals willingness to take it on and make it work through their own good will without support from the school."

"The service [Grow Shetland] is very helpful, the main difficulty is finding the time in an already busy school day"

A further, significant piece of work with schools was the creation of the 'Growing Food in Schools' pack; a teaching resource for food based growing projects in Shetland schools (see appendix 7.). Coordinated by Grow Shetland, a group of six teaching staff was set up to develop the pack. Meeting four times over a two year period, the group considered the best format and defined the most appropriate content for use by both staff and pupils. They chose the crops to be included and suggested additional supporting material, to best assist teachers in planning food growing focused activities. Pack contents were also informed by materials developed by Transition Turriefield for workshops with pupils at the 2022 SIC Climate Festival. Teaching staff were indispensable for translating factual growing information into pupil friendly instruction cards; researching and writing curriculum links and the overall pack design. Physical packs were made up by Hayfield House staff and distributed to all schools at the end of summer term 2023, ready for the beginning of the following academic year. The pack was added to the Grow Shetland website as a downloadable resource available for teachers and home educators. At the time of evaluating, none of the schools responding to the questionnaire, or during interview, had used the teaching pack, however, teachers spoke of it being helpful:

"The Growing Food in Schools pack is clear and attractive, if you knew nothing you could pick it up and use it. Nothing was overly specialist and you could use borrowed or scrap materials to get going."

"Having the curriculum information already sorted is also very useful"

Geographical Growing Groups

Geographical support groups were established following requests from a number of individuals in the south, north and west Shetland mainland. In each area Grow Shetland staff carried out a needs assessment and held online meetings with potential group members. The groups were supported to define their aims and objectives and organise the next steps. Fledgling groups were also linked with their area SIC Community Development Officer to assist them to set up their group structure.

We considered it important that the groups should be user directed and, acknowledging Grow Shetland's influence would change group dynamics, group members agreed we should step back from the running of the groups. Members then went on to organise their own communication routes and plans for visits to each other's growing plots. Taking place during the height of Covid-19 restrictions, it was thought an excellent way have contact with like-minded people in a safe setting:

"The first visits were limited by covid in outside spaces or polycrubs only. They were really good though."

" it was a social thing after covid, at the first meetings folk could get together in a safe way"

The groups were very successful during their first season:

"Personally I got a lot out of visits. I now have food yards, not even food miles"

"You got info sharing and experience sharing too, swapping and sharing resources"

"It was good though, meeting folk I wouldn't normally have met; sharing experiences. Even with folk I knew it opened up a new conversation"

All groups had chosen to be informal, with no committee structure. Members had made it clear there was no wish to replicate other, existing growing groups or burden anyone with responsibility for the running of the group:

"We decided as a group to have an informal set up, more social than a formal group. We didn't want a Chair or treasurer and thought we'd try to run it without."

"It worked with no formal structure, it was important not to be competitive, we didn't want to be like the gardening clubs either"

However, in subsequent years communication and meetings dropped off for all groups. Within each group 2-3 members initially took on roles for organising events, unfortunately due to work pressures, illness or life returning to normal after period of lockdown, interest in maintaining the groups waned:

"There's no one doing the group at the moment. It worked post covid, now we have good weather and folk are off doing other things"

"It's frustrating we didn't have any structure for the group. Folk wanted it informal—and because there's no committee, there's no motivation"

Some group members reported a willingness in keeping the groups going and saw them as a success for the wider relationships built and the ongoing informal knowledge sharing between participants. However, the wider view was that the groups had served their purpose during the period of Covid-19 restrictions and perhaps were no longer required now that community growing networks were established.

Work with individuals

Here again, Grow Shetland exceeded its target of working with 30 individual households, to start new growing plots or improve existing sites and to encourage 7 households to start composting and reduce food waste. Overall Grow Shetland worked with 279 individuals and delivered:

- 15 face to face workshops with total of 139 participants
- 31 online workshops with 447 attendances from 159 individuals
- 14 site visits to individual plots
- Responded to 140 requests for advice by social media or email
- 25 Turriefield site visits for a total of 104 people
- Engaged, trained and deployed 9 Grower Mentors who worked with 20 growers
- Provided 80 grow packs for households to try growing at home
- Provided 10 large grow packs for use at the Anchor for Families drop in

Feedback on their use of the services and usefulness of the support was evidenced through the online questionnaire. It demonstrated 84% of respondents had used more than three Grow Shetland's services and 71% had used more than

five. Nearly all respondents said they found the services useful with only one being unsure, due to using only having visited the Turriefield site. The most used services were the online workshops and information factsheets, with individuals commenting they frequently referred to the factsheets and revisited workshop recordings:

"I've used the handouts, they are printed out in a folder which I keep referring to—they're really good handouts."

"The factsheets you sent out afterwards were really useful and I still use them"

"Getting the links to the recorded workshops was good too, I could watch again and get a refresher."

Visits to the Turriefield site and specific advice through email, telephone or social media contact were also highly used resources (see figure 1).

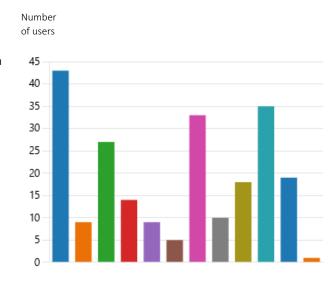
"We visited Turriefield to see what you were doing and how it was being done. It was an effective way of refining learning. Visiting the polytunnels, seeing things in practice is really valuable. That is perhaps the best help you can give to people."

"What is really useful is the Facebook information, just by being in touch and having you respond to questions"

"Grow Shetland has been great—you're always responding to queries!"

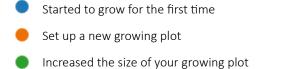
Figure 1.
Online questionnaire responses
Grow Shetland services used:

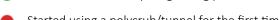
- Online workshops
- In person workshops
- Received advice by email, phone, social media
- Had someone visit your growing space
- Linked up with a Grower Mentor
- Written information specific to your growing
- A visit to the Turriefield site
- Joined a geographical growing group
- Used the Grow Shetland website
- Used the information factsheets
- Watched Grow Shetland tutorial videos
- Other



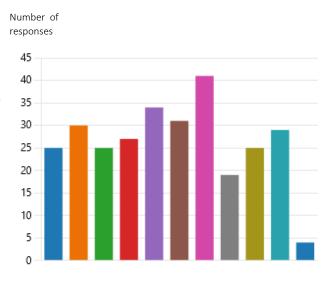
All respondents had either set up a new growing plot (55%) or, increased the size of their growing plot (45%). Nearly half had started to grow for the first time (see figure 2). Plots range in size from 1m² to half an acre, with total land in use for food growing reported in the questionnaire being 10328m² or 2.5 acres. Compared to the growing plots reported in the Get Growing survey—2372m² or approximately 0.6 acres it demonstrates a significant increase in land used for growing. However, although we know anecdotally many of the same individuals completed both forms, this cannot be validated. New growers tended to start with small plots under 10m² with the most common size of plot being approximately 50m². Only twelve respondents specifically mentioned using an undercover growing space.

Figure 2.
Online questionnaire responses
Changes involvement with Grow Shetland made:





- Started using a polycrub/tunnel for the first time
- Become more knowledgeable about growing
- Become more skilled in your growing
- Become more confident in your growing
- Started to compost
- Composted more than you used to
- Reduced the amount of food waste
- Other



A total of 80% had started to compost, or were composting more than they used to, with 53% reducing their food waste:

"Our composting knowledge has changed about what to put in, turning it and how long it should take. I'd had compost for two years that wasn't doing anything and now I have good compost stuff."

"Crops such as salad definitely reduce waste as I can just pick and go rather than have a bag from the shop festering away"

Knowledge and learning, gaining new skills, opportunities to be outdoors, healthier food and lifestyle and a sense of wellbeing were all reported as a significant consequence of growing food at home:

"I find it relaxing and therapeutic"

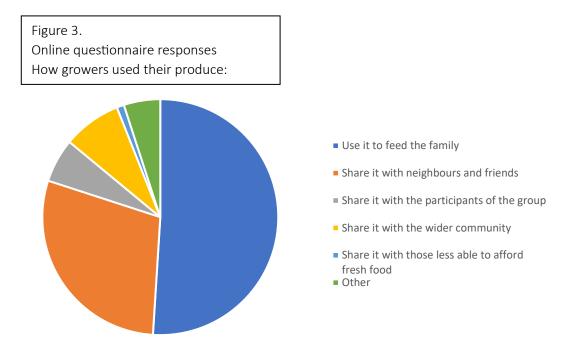
"I think for me well-being and confidence are most important."

"Gives an opportunity to be outside, getting exercise. Understanding the environment and sharing with others the experience"

"so rewarding, interesting as you're always learning"

"It is very important for me to be increasingly living a more sustainable life and that includes growing and storing more of my own food, having shorter food miles, using fewer plastic and unsustainable materials and eating better food that is fresh, with no pesticides and tastes really good!"

The majority of growers (93%) responding to the questionnaire reported using the produce to feed their family. Over half also shared it with neighbours and friends. Where growing food was a group project, the crops were shared between members. Fifteen percent of respondents indicated sharing food with the wider community, two individuals also sold produce to shops, however, only one person shared it with those less able to afford fresh food.



Considering the Grow Shetland project as a whole, our work with individual households has been the most impactful and achieved the most significant increase in food growing across the project. Ongoing contact from growers indicates continued investment by households to provide themselves, family and friends, with seasonal fresh produce.

Grower mentors

Overall the Grower Mentor element of the project was the least successful aspect. Due to Covid-19 and lockdown requirements reducing face to face contact, the induction and deployment of the Grower Mentors was delayed until year two. However, the delay allowed time to put in place the necessary policy and procedure documents, organise insurance and develop the training course for Grower Mentors.

Over the two year period nine Grower Mentors were recruited, trained and deployed. A further two decided not to continue with the training. All individuals in contact with Grow Shetland were offered Grower Mentor support, as were groups and schools where appropriate. Ultimately only 25 support visits took place with 20 mentees. Despite requests for information and support, those getting in touch with Grow Shetland, although willing to talk to Transition Turriefield about their growing, were less keen to speak with a Grower Mentor. Others, well-disposed to meeting with a mentor, did not respond further to the initial contact. Grower Mentors observed:

"Communication is an issue. They don't always respond and you have to spend time chasing them up. so it takes your time. I email and they don't get back and you think maybe they're not interested."

"I was disappointed that some folk didn't get back to me. Folk were saying they would be in touch but didn't.

Gardening comes second to everything else in their lives. There's a lot of folk with good intentions but it falls by the wayside."

Little direct evaluation feedback has been received from those that did take up Grower Mentor visits. However, the single respondent was positive about the input:

"She came along and we had a fab natter. She has given me quite a few ideas. So have started some ideas today, and will hopefully get underway with some of the others soon."

Grower Mentors generally agreed that most mentees were merely looking to chat to someone about food growing and that growers were seeking a boost of confidence in their own skills:

"I also found mentees pushing back when I was giving advice. Thinking they needed to speak to someone but when you're there they remember they know it really. One of the mentees realised what she really needed was confidence to believe in what she already knew. She needed confidence building. They need to know they are doing the right thing."

"I felt the client I had might have asked for help but didn't really need it and then maybe regretted asking"

Individuals seemingly preferred asking for advice from a known source whether it be Transition Turriefield or a well-known member of their own community. The majority of Grower Mentors were not local to the area they live in. The most successful Grower Mentor, achieving half the total mentee visits, had lived in her community all her life. She was well known to the mentees through her local community network, who often approached her directly, rather than having had contact with Grow Shetland first.

All Grower Mentors were reluctant to claim travel expenses and not all work reports were submitted. Most commented that travel expenses were unwarranted:

"We did the payment process and that worked alright, even though I felt it was not necessary, it was only a few miles"

Filling out forms to report work completed seemed overly formal for some. Others thought their visits too informal to be reported as 'work'. More feedback on visits was provided through online supervision sessions, however, these were less frequent than intended due to a lower number of mentees engaging with the service.

Of the nine Grower Mentors, two ended their involvement due to ill health, one through lack of time and another gave up due to a belief her knowledge was not comprehensive enough.

Growpacks

To further support low income households to experience food growing and healthy eating, Grow Shetland provided 80 windowsill growpacks and 10 larger grow packs:

- 40 windowsill growpacks for Hjaltland Housing Association households
- 30 windowsill growpacks to complement five SIC Pop-in workshops
- 10 windowsill growpacks for families through working with Anchor for Families
- 10 large growpacks for Anchor for Families group growing project

Hjaltland Housing Association involves its tenants in family activities each year. In 2021 they chose to encourage more food growing. Grow Shetland worked with them to organise taster growing experiences which could be carried out in the home. Growpacks, suitable for using on a windowsill containing: seeds, pots, compost and instructions suitable for novice growers, were given out. Response to the Hjaltland evaluation was low with only seven returning forms.

Respondents were both novices and those with previous growing experience. All reported enjoying the process, appreciating the grow pack and wanting to grow more. Feedback from families indicated children had enjoyed learning new skills and eating the produce:

"Yes we have some lovely salad now. It's eaten regularly. The kids don't like the spicy salad but love the other"

Grow Shetland worked with SIC Community Development Officers as part of the Winter Pop-ins providing warm spaces and hot lunches. We ran five basic growing workshops in rural communities; one in Whalsay and four in the west mainland. A total of 30 individuals participated in the workshops and all received a windowsill grow pack to take away.

Additional growpacks were provided for the Anchor for Families project with materials to grow produce with their user groups. Ten large pots, compost, seed potatoes, carrot and beetroot seeds were provided for a group growing project. As well as 10 windowsill grow packs, for interested families to try out at home. Both these pieces of work took place after the original Grow Shetland project end date and were not part of the evaluation.

Development of information and resource materials

Beginning the project in January 2021, at the height of the Covid-19 restrictions, it was acknowledged that the most suitable approach to delivering information and resources would be through online methods. Online workshops were developed for use in place of face-to-face training and materials created to supply additional information supporting the workshops (see appendix 8). Tutorial videos providing basic information on a range of growing skills were filmed, edited and uploaded to a linked YouTube channel (see appendix 9). As were recordings of workshops specifically for those who missed an online session.

A dedicated website was designed and built to host accessible information for Shetland growers; provide a forum for sharing knowledge and be a point of contact to access Grow Shetland services (see appendix 10). The Grow Shetland website launched in January 2022 (see appendix 11). A message forum was added to the website titled 'Info Exchange' to allow questions to be asked and knowledge shared by Shetland growers.

At the outset, it was intended a Grow Shetland Facebook page would be created to increase our online presence. Assessment of the already existing, numerous Shetland Facebook pages aimed at local growers, gardeners, and undercover spaces, suggested there was no need for another, very similar, social media space. Instead, we chose to participate in existing Facebook and forum pages as a way to offer additional options for answering queries and providing advice. This was noted as a successful method of passing on information:

"The contribution to the undercover growing FB page, your expertise is absolutely fantastic. People really learn from that. It's accessible to everybody."

The Transition Turriefield Facebook page was used to promote Grow Shetland workshops and new video postings. Original plans also included a growers manual and a regular newsletter sharing hints and tips from growers, as part of the website content. None of this was achieved. The unexpected number of individuals, groups and schools contacting Grow Shetland steered staff time towards more bespoke responses to identified need.

Overall Grow Shetland produced:

- 7 online workshops with:
- 48 supporting handouts
- A dedicated website attracting 6060 visits
- 7 website information factsheets, visited 1291 times
- 10 beginners guide videos receiving a total of 2010 views
- 14 online workshop recordings with a total of 330 views

The Info Exchange element of the Grow Shetland website was used only once throughout the 3 year project. The link for finding out information on accessing land was used 89 times, however, there are no statistics confirming whether users went on to contact SIC to pursue their interest.

Discussion

Most food growing success, and increase in land use for growing, has been demonstrated by individual households. This is, in part, due to the relative simplicity in decision making when choosing to convert an area of garden into a growing plot. Assuming the household has adequate income, resources are accessible and easily put in place. Incentive to keep going is the only requirement and success can be supported by easily accessible, appropriate information and advice. Ongoing motivation is boosted by the results they can achieve.

Not so with larger scale community projects; here there are many more hurdles to overcome. Accessing land can be painfully slow, even when a site is identified. In some cases simply arranging meetings with the appropriate department or landowner can become a drawn out process. Funding needs to be found to purchase land, infrastructure and equipment. Bringing a group of like-minded individuals together, necessary to steer a project, can also be daunting in a remote rural area with low population. Post Covid-19, there is evidence of reduced interesting in volunteering overall; the same few individuals are covering multiple roles and there is a reluctance to take on anything new. Convincing those with no experience of groups with formal structure the necessity of having aims, objectives and development plans for a successful outcome, would seem almost impossible. Potential members are worried about taking on responsibility and the level of long term commitment that is required. They shy away from involvement, rather than being willing to try new experiences. Overseeing and coordinating the year round function of a growing project has to be a highly committed role, perhaps too time consuming and too large an obligation to be voluntary. Grant funding is often available for capital projects, but not to cover staff costs, and never for ongoing long term support. It is unlikely projects will become financially viable enough to cover staff wages, again, leaving the group reliant on voluntary input. Even if a volunteer, or volunteers, are willing to be the mainstay of the group, there are issues of sustainability when these 'leaders' move on, which suggests long term operation would not be possible.

Both statutory and school growing projects have issues of management and long term sustainability too. Even though food growing is understood to be a very useful tool for achieving learning and skills development goals, or delivering interventions in a non-threatening, therapeutic and calming environment, it is not an essential task. Growing projects are not a key requirement of either service. Staff resources are limited in both settings and other client, or pupil, focused duties take priority. Moreover, a growing project requires daily attention and cannot be picked up and put down as required. If there are no participants interested in using a statutory project, or teachers are working with an element of the curriculum not so suited to food production, the growing project still has to be watered, tended and ventilated, if undercover. Polytunnels or crubs, impose a twice daily, seven days a week, year-round duty on whomever is allocated the role of overseeing the project, stretching work time even more thinly. A high number of staff do not have the knowledge, skills or confidence to take on a growing project. The task of initiating, coordinating and managing the project often goes to someone who has an interest in growing, but with little experience. Whilst advice and support can be sought, finding extra time in the working day for an 'add on' task cannot, and the role can bring an unwelcome increase in stress levels. The result is staff choosing to let a project go or pass it on to someone else, leading to a lack of continuity, or more frequently, the suspension of the initiative. In some cases a project has run successfully for a number of years and then ceased abruptly due to loss of staff. Food growing projects which are not embedded in the core work of a statutory service will always be vulnerable to failure.

Home grown produce as a means to provide affordable food for a low income households, those struggling with health concerns or other social issues, requires a high level of support. Although food growing can provide fresh produce, as an activity that all the family can participate in, many have not had the opportunity to experience it themselves. Not only is the cost of creating and maintaining a growing space unjustifiable for the household budget, lifestyles can be too chaotic to commit time and attention to what is often perceived as a hobby pursued by the more wealthy.

Ongoing support and guidance, as well as the provision of materials is necessary. New growing experiences can be provided by schools and statutory groups. However, as discussed above, these projects are not as successful as they might be as a result of minimal commitment, a struggle for resources and limited staff confidence in their ability to grow food.

Community groups have potential to provide locally produced food to those in need in their communities, or as a part of a wider network, if they can overcome the issues of establishing and maintaining a successful initiative. As evidenced by the community group with the most success in setting up quickly and sharing food, adequate funding and a simplified process is key. Whether it be in accessing land or coordination and management of the project, paid staff, dedicated solely to the growing project who overseeing the work and involvement of others, brings significantly better results. Growing projects in statutory groups and schools would also have greater success if fully funded and given dedicated staff time. For this to happen the importance of food growing must be recognised and acknowledged as an essential part of the programme, or curriculum.

As a community, if we are serious in our desire to increase food growing in Shetland on a lasting basis, use locally produced food to reduce food inequalities, improve food security and reduce our carbon emissions, then further investment will be required to make it happen and ensure long term sustainability. Statutory services and schools should embed food growing into their practice. Extensive and ongoing support should be provided to anyone seeking to set up a growing initiative, whether based in a school, statutory service or community. Staff training and Shetland appropriate growing advice should be available. Support should also include opportunity to upskill those involved in the planning, development and management of a growing project. Furthermore, funding to employ paid staff specifically to oversee the project should be accessible and long term. Expecting communities, or under-resourced staff, to develop and run food growing projects without support and financial input, will not accomplish a significant increase in the local produce available in Shetland. Nor will it create meaningful opportunities for the many social, health and environmental benefits associated with small scale food growing. To achieve this, we need to choose to make it happen, by whatever means necessary.

Conclusion

The Grow Shetland project has achieved its aim to increase food growing in Shetland, with more healthy food being eaten by those that grow it. It is less clear whether there has been an increase in affordable food available for low income households, those struggling with health or social issues, due to the difficulties in setting up and maintaining growing projects in services tackling these difficulties.

All Grow Shetland targets were met, or exceeded. The project has been successful in increasing home and community food production, evidenced by households recounting the setting up of new plots, their experiences of starting to grow or more experienced growers enlarging their growing spaces. Both new and experienced growers have become more confident and achieved better crops as a result of gaining knowledge and skills. In addition, descriptions of growing area size suggests more land is being used for food production. Communal land has also been given over to growing food as community groups plan and design their projects. However, they have not been as successful in their outcomes as individual households, due to the many hurdles they encounter in setting up and running a larger scale enterprise.

Statutory groups initiated growing projects, although, only a very small number of them have succeeded in reaching an operational stage during the lifetime of the Grow Shetland project. Those that did, were not able to sustain the project as a result of limited staff time or lack of interest from participants.

Schools set up, reignited, or expanded their growing projects. Those schools which embraced their projects were successful in using food growing as part of the curriculum. The Grow Shetland teaching resource: 'Growing Food in Schools' pack, developed with teaching staff, will support schools long term to continue developing food growing to enhance learning. However, schools suffer similarly to other statutory services from changing staff and too full a workday. There is a risk that food growing projects will not be maintained if staff time is short.

To increase food growing and affordable food in Shetland significantly and long term, further support for individuals, communities, statutory services will need to be provided. It will require a recognition of the wide range of benefits small scale food growing can bring; such as: fresh food and healthy eating, outdoor activity and exercise, learning and skills development, companionship and team building, wellbeing and confidence building, as well as reduced carbon emissions and environmental improvements. Food growing will need to be embedded in the core work of statutory service and schools, with funds allocated to support sufficient staffing to cover the work. Ongoing revenue funding will also be required for community groups to ensure long-lasting food production which contributes to the reduction of food inequality, Shetland's food security and lower carbon emissions for our community.

Financial Information

Costs

Employee costs:	£95,491.20
Staff travel	£1702.02
Website design and support	£14,880.00
Equipment	£3621.79
Grower Mentor travel	£154.55
Grow pack materials	£262.03

Grant income

Total cost of project

SIC Coastal Communities grant	£94,503.55
Highland & Islands Enterprise grant	£16997.32

Total grants £111500.87

Transition Turriefield's contribution £4610.72

In April 2021 Shetland Charitable Trust awarded a grant of £5,000 towards Transition Turriefield's work during year one of the Grow Shetland project.

£116,111.59

Appendices

Appendix 1.

Get Growing Survey Summary

143 respondents

89 (62%) gave contact details

Of the 89, 43 (48%) are willing to share their knowledge to support others to grow more. Another 13 individuals indicated a willingness to share knowledge but didn't leave their contact details. Responses came from 11 of the 15 areas. Shetland divided into:

South Mainland

Central Mainland

Lerwick

Bressav

Westside

Delting, Lunnasting, Nesting

Northmavine

Yell

Unst

Fetlar

Whalsay

There were no responses from:

Papa Stour

Skerries

Foula

Fair Isle

Needs

- By far the biggest need was more information on growing in the Shetland climate, followed by more information on growing in general and how to improve the soil.
- Only in two areas did the need for land figure highly: Lerwick and Central Mainland. It is expected, but unconfirmed, that the need for land in the Central Mainland is in Scalloway; most respondents indicating a need for land in the central mainland did not leave addresses
- · Clearing land, easily available advice and support, gaining skills in tool use were requested by around 30% of respondents
- The need for raising confidence was highlighted by just 18%, small but not to be overlooked
- 15% indicated a need for tools and equipment and help for disabilities or with physical work by was requested by 5-12%

Other things identified which were seen as difficulties, stopped them growing or wanted help with:

- Time was an issue for many people, full time work limited what could be done
- Help with planning, not knowing how to start, what to do when or how to find out. A local idiot's guide to growing needed
- Motivation and support needed to start and keep going. Interest dwindles when faced with problems or no success. Fear of not being able to make it work. Support needed to keep going
- The need for a sense of belonging to a bigger thing and a way to share knowledge; suitable varieties
- Establishing protection, especially to keep pests (rabbits) out
- The weather was off-putting or reason to believe it wouldn't work, the need to build wind protection
- Help with building things, creating protection including polytunnels/crubs
- Grants for polytunnels/crubs
- Costs involved (assum for setting up wind breaks/polytunnels)
- How to improve growing land, increase yields
- Looking after crops when away
- Difficulty managing with physical disabilities/limits
- How to deal with the changing climate

Preferred methods of gaining information:

- Visits to other growing sites,
- Practical work days,
- Training courses
- Online learning.

Information and reference materials were requested by 40% and onsite assistance for troubleshooting and learning both requested by 35% Three skipped the question, implying they didn't want further info

Appendix 2.

- a. Online questionnaire general: https://forms.office.com/r/vy9JAuwNJA
- b. Online questionnaire schools: https://forms.office.com/r/jLPyFsfKfA

Appendix 3.

Grow Shetland interview questions

For:

Community Groups

Schools

Statutory groups

Individuals on courses, sharing land, starting com groups

- How did you get in touch?
- What support were you looking for?
- What did you get?
- Has it been useful?
- What has changed as a result of the intervention?
- Was there anything you asked for you didn't get?
- What do you need now?
- Any other comments?

Grower Mentors

- Why did you want to be involved with Grower Mentoring?
- How did you find the training
- How many Mentees have you worked with
- How did they come to you?
- How much mentoring did you do with them?
- What was successful for you
- What was successful for the mentee
- What needs to be changed?
- Other thoughts?

Appendix 4.

Example development plan

Residential Care Unit Stura, Tingwall

Background

Transition Turriefield has been asked to work with residential care units through the Grow Shetland project, to support the development of food growing sites for the benefit of young people. There are three sites:

- Windybrae, Dunrossness
- Stura, Tingwall
- Grodians, Lerwick

A site visit to Stura took place on 29th June 2021. The residential care unit is new and currently unoccupied. It will be home to young people from birth to 21 years and works to provide as near as possible, a supportive family life in a family home setting.

The building can host 4 young people and has an additional emergency bed for a fifth if required. The young people who will stay at the unit are generally in long term care and remain in the same unit until moving to independent living when old enough.

Current situation

The building sits on a newly landscaped site, which is level, with turf laid on three sides of the building. There are graveled areas on the perimeter in which young bushes and perennials are planted. Land adjacent to the site appears to be quite poor and with a potential for waterlogging, particularly in winter. It is assumed any area chosen for a growing site would have similar characteristics. There is plenty of space to site growing beds where there will be adequate light and wind protection. Staff require space for outdoor activities including ball games. The staff team have little knowledge of horticulture but are keen to incorporate food growing into the life of the unit and are enthusiastic about learning a new skill. As a new residential care unit, daily routines and systems have yet to be established at Stura. Setting up the running of the house will be the priority for staff once the building opens to residents.

Suggested next steps

As with other residential care units, establishing a growing project at Stura will provide opportunities to engage young people in outdoor activities and give openings for non-threatening adult-young person interaction. Incorporating food growing as part of the life of the unit; it being the responsibility of staff and young people, along with the support of management, will improve chances of long term sustainability of the project.

Given the late stage of the current growing season, planning a food growing project to begin early next year (2022) will allow staff time set up the essential routines and systems at Stura. There will be ample run-in time to build and fill growing spaces ready for next season. Raised beds are recommended to avoid issues with the poor soil at the site. Starting on a small scale will allow staff to learn the basics of growing and increase confidence. However, increasing growing beds over time will give adequate space for a worthwhile activity.

The provision of an undercover/protected growing space will extend opportunities with outside food growing activities for young people year-round, in poor weather and also widen the range of crops grown. Ongoing investment will demonstrate the value of the project in the day to day life of the unit, help support long term sustainability and encourage staff to incorporate food growing into their role.

Short term				
Target	Action	Suggestions	Timeframe	
Establish growing area	Build at least one raised bed (suggested 3m x 1m) Prepare and make ready for growing	There are various options for placing growing bed(s) around the property. However, near the kitchen door or sitting room window would be south facing, protected from wind and keep larger areas clear for ball games. There should be sufficient space for any fire escape clearway access. Potential for the Bridges project to build the bed. No need to dig the site, it can be placed directly onto the grass. Consider height of bed required for ease of access.	By March 2022	

Begin food growing	Sow seeds, plant out, crop care, harvest and use Establish staff/young person crop care rota	Soil or compost would need to be brought in (the higher the bed the more soil required). Nutrients might need to be added, depending on quality of the soil Transition Turriefield will supply sowing /planting timetables and suggestions for suitable crops. Demonstration of how to work with growing beds/crops etc can be provided. Can assist with day to day planning if required	March 2022 onwards
Increase staff confidence & young people in growing	Staff training Access to information and support Information available to young people	Insect pest protection might be required Transition Turriefield can work with staff to assess need and tailor training to suit. Site visits are available along with ongoing email/telephone support Transition Turriefield can provide informal inputs with young people and answer questions about growing. Transition Turriefield on site visits are available	Initial training by March 2022 Support ongoing
Incorporate food growing into day to day life of Stura	Staff discussion Action plan Review	Involve all staff, management and Transition Turriefield when required Inform and consult young people	By March 2022
Longer term			
Target	Action	Suggestions	Timeframe
Maintain fertility of growing bed(s)	Feed soil appropriately for crops to be grown	Transition Turriefield can advise	September 2022 onwards
Establish composting	Build/buy compost containers Maintain and use compost	Transition Turriefield can advise	July 2022 onwards
Increase growing area	Add 1-2 more raised beds Consider undercover protection- polytunnel/crub, cold-frame to lengthen growing season, increase variety of crops grown and opportunity for young person involvement Consider planting fruit bushes such as blackcurrant and raspberry	Seek funding Undercover growing will require a little more commitment to provide ventilation and regular watering Will provide fruit with a small amount of care and regular feeding. Would also add features to the landscaped ground	2023 onwards
Evaluate impact of food growing project	Review and amend practice	Involve all staff, management, young people and Transition Turriefield when required	September 2022— ongoing

- If rabbits are a problem, protection of some sort will be required (fencing, netting)
- Sufficient tools and equipment will be required to work with the growing beds. Transition Turriefield can advise on basic equipment list
- Safe tool storage will be required
- Maintenance of the ornamental flower beds will be necessary, and ongoing from the present time, to keep them at their best.

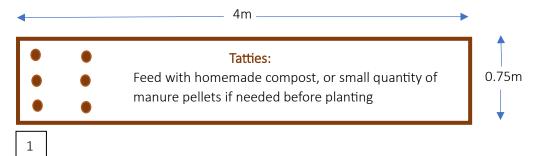
Appendix 5.

Transition Turriefield's Edible Education project report: https://www.turriefieldveg.co.uk/projects-reports/

Appendix 6.

Example plot plan: Hamnavoe primary school

Raised bed suggestions



Tatties: 3x rows of early salad type, 60cm between rows and 30 cm between plants and 3x rows of maincrop 75cm between rows and 40cm between plants

Carrots 3x rainbow and 4x rows of maincrop carrots (autumn

king) 30cms between rows, thin

Beetroot 5x rows 30cm apart, thin plants to 10cms apart

plants to 3-5cm apart

Carrots feed whole bed with light dressing of fish, blood and bonemeal if needed before sowing

Beetroot

2

Lettuce/spicy salad leaves

Feed whole bed with seaweed if needed before planting

herbs

3

Broccoli Red winter kale Peerie neeps
Radish between rows
Feed whole bed with manure pellets and seaweed

4

Onions leeks
Feed whole bed with manure onions
pellets and seaweed

Lettuce 4x rows 30cms apart plants 15cms apart
Spicy salad leaves (rocket etc)
4x rows 30cm apart, plants
15cm apart.
Parsley 2x rows coriander,
chervil 1x row each all 30cms
apart plants 15cm apart

Broccoli 5x rows 30cm apart 30cms between plants
Red winter kale 4x rows 30cms apart, 30cms between plants
Peerie neeps 3 rows 30cms apart thin to 10-15cms between plants pull back seaweed to sow.
Radish sow between broc & kale once planted out.

Onions 6x rows, 15cm between rows and 15cm between sets. Leeks 7x rows 30cm between rows and15cm between plants. Spring onions: 2x rows 30cm between rows and 3-5cm between plants

5

This is the suggested set up, and feeding regime for year one. In subsequent years, assuming you grow the same crops and quantities you should be able to move each crop one bed forward eg:

	Year 1	Year 2	Year3	Year4	Year 5
Bed no. 1	Tatties	Carrots/beetroot	Lettuce/herbs	Broccoli /kale	Onions/leeks
Bed no. 2	Carrots/beetroot	Lettuce/herbs	Broccoli /kale	Onions/leeks	Tatties
Bed no. 3	Lettuce/herbs	Broccoli /kale	Onions/leeks	Tatties	Carrots/beetroot
Bed no. 4	Broccoli /kale	Onions/leeks	Tatties	Carrots/beetroot	Lettuce/herbs
Bed no. 5	Onions/leeks	Tatties	Carrots/beetroot	Lettuce/herbs	Broccoli /kale

The feed regime would then be the simple to follow and the same for each year:

Crop	Feed	If concerned about fertility with previous crop
Tatties	None	Light manure pellets
Carrots/beetroot	None	Fish blood and bonemeal
Lettuce/herbs	None	Seaweed
Broccoli /kale	Heavy manure pellets & seaweed. Lime lightly if pH is lower than 6.8 but at least one month before or after feeding	
Onions/leeks	Light manure pellets & seaweed	

Manure pellets are suggested for safety with young children. All bought products should have been sterilised during manufacture. Fish, blood and bonemeal might not be sterilised. We suggest you check with the Education Department for suitability and that an adult applies the product. Work well into the bed so no product is on the surface and less likely to come in to contact with hands.

Quantities for beds

Crop	Plants to fit in bed	Seeds/sets/ plants needed	
Tatties9 earlies9 early/salad seed tatties		9 early/salad seed tatties	
	6 maincrop	6 maincrop tatties	
Carrots	A few!	One pack of each type of seed, sown sparingly (We can provide	
		both rainbow and maincrop)	
Beetroot	25	One pack (we can provide)	
Lettuce	20	One pack	
Spicy salad leaves	20	One pack	
Herbs	10 parsley	One pack of each	
	5 coriander		
	5 chervil		
Broccoli (calabrese)	10-15	One pack	
Red winter kale	8-12	We can provide seed	
Peerie neeps	15-25	One pack, direct sown sparingly	
Onions	30	One bag of sets	
Leeks	35	We can should be able to provide plants (its getting late to start	
		them off now	
Spring onions	30-50	One pack sown sparingly	

Crops for barrels:

Crop	Crop spacing	Seeds/sets/ plants needed	Feeding & rotation
Garlic	15cm each way	8-10 cloves per bulb, depends on how many you can fit per barrel and how many barrels!	Annual crop, will need to be rotated with other non-onion crops. Feed with seaweed.
Chives	Grows in clumps and will spread	1-2 plants to start	Permanent crop feed with seaweed
Mint	Grows in clumps and will spread		Permanent crop feed with seaweed
Peas	Plant around edge 5cm between plants	20-30? 2-5 packets depends how many to a barrel and how many barrels. Grow up bamboo cane tepee	Annual crop, will need to be rotated with other non-legume crops. Feed with homemade compost
Cucumber	45cm each way	1-2 per barrel. One packet	Annual crop, will need to be rotated with other non-cucurbit crops. Feed well with manure pellets & seaweed
Strawberries	20cm x 30cm	Depends how you plant up barrels and if you manage to get planting spaced down the sides. 5-7 on top.	Semi-permanent, change barrels 3-5 years. Feed well with seaweed and compost

We would suggest a 3 year rotation with garlic, peas and cucumber. Feed as suggested each year for each crop.

Appendix 7.

Growing Food in Schools pack: https://www.growshetland.co.uk/resources-for-growing-food-in-schools/

Appendix 8.

Example of course materials: http://www.turriefieldveg.co.uk/wp-content/uploads/2021/07/Sowing-for-the-school-year.pdf

Appendix 9.

Beginners' Guide videos: https://www.youtube.com/channel/UCJSd09xtxFLn6pf-vv4_QHg

Appendix 10.

Example of contact form https://forms.office.com/r/1npPs010m7

Appendix 11.

Grow Shetland website: https://www.growshetland.co.uk/