



Gardening WITH Schools



Foreword:

Over the past two years, it has been my privilege to Chair the Steering Committee of the Gardening with Schools project and to witness first hand its exciting development.

The project was initiated as a result of NFWI-Wales' concern about the rise in childhood obesity, the disturbing gaps in children's knowledge of food and the decline in the time spent by children playing and learning outdoors.

The purpose was to give children the opportunity to gain practical experience of creating vegetable and wildlife areas and to take part in hands on activities such as planting and weeding. WI members supported the children's efforts by going into local schools to help assist with these activities. One of the strengths of the project is the inter generational links which have developed and which are clear to see within the body of this booklet, children and WI members working together to create beautiful areas within their school grounds or growing vegetables which the children had an opportunity to savour once their crops had grown.

I would like to thank everyone involved in the project, WI members, the schools, the children, Medwyn Williams, the project adviser, the steering committee and our sponsors the Millennium Stadium Charitable Trust, Welsh Assembly Government's Health Challenge Wales Voluntary Sector Grant Scheme, Humax, Suttons Seeds, Westlands and Marshalls for their commitment, enthusiasm and overall contribution to the success of this project.

Marylyn Haines Evans,

Chair of the Federations of Wales / Steering Committee



Introduction:

When I was invited to assist the Women's Institute on a consultancy role with their Schools project, it really reminded me of how I started off my gardening career as a child. I must have been about 8 years old when my father, a farm worker at the time, had the foresight to offer me a square yard of his vegetable garden. He then gave me three packets of seed to sow, Mustard, Radish and Cress, not the most exciting of salading vegetables, but they were certainly instrumental in getting me hooked on gardening.

The reason was that they were three quick germinating vegetables thereby keeping a child's interest alive. They were also quick to harvest and within just a few short weeks I invited my best friend over for lunch, a sumptuous thick sandwich of Mustard, Radish and Cress with lashings of Salad Cream! I really hope that somewhere in Wales another child or two may well be inspired like I was and will eventually make their own mark on the Horticultural world. If they do, it will be thanks to the small hard working team of the WI at Cardiff as well as the numerous volunteers throughout Wales who have so willingly donated their precious time.

Just as the Mustard, Radish and Cress got me hooked, I'm sure that the potato bags, that were so generously supplied by Humax, will also be an ideal prop to maintain a child's interest. If we can nurture children to the great outdoors in general and to gardening in particular, there is no doubt that the whole of Society will benefit in the long run. The health benefits derived from eating a range of vegetables are so immense that by catching the children young, we may well have sown the seed of another acorn and we all know what comes from little acorns. Long may the scheme continue and flourish from year to year.

Medwyn Williams MBE

Adviser on the NFWI - Wales' Gardening With Schools Project



Background

The National Federation of Women's Institutes has a long-standing history of commitment to improving the nation's diet and health, particularly regarding food and sustainability issues. The idea to develop the Gardening with School project initiated from the Federations of Wales Committee in an attempt to address the following concerns:

- the dramatic rise in childhood obesity
- the disturbing gaps in children's knowledge of food and the countryside as identified in a study by Farming and Countryside Education in 2003
- the decline in time spent by children playing and learning outdoors and that children were not getting the environmental experiences that previous generations would have had.

The purpose of the project was to give children an opportunity to gain practical experience of creating vegetable and wildlife areas and to take part in activities such as planting and garden maintenance.

Federations appointed voluntary co-ordinators and a briefing session was organised to introduce co-ordinators to the project and give advice on working with schools and developing gardens. A resource pack was produced for each co-ordinator and a Steering Committee was set up to guide and monitor the project. Partnerships were developed at all levels and schools were contacted through their local education authorities and linked where possible with WI members who were interested in taking part in the project at a local level. All WI members involved in the project underwent a Criminal Records Bureau disclosure check.

The project has been a huge success with over 100 gardens being developed. It has also helped to develop stronger communities by establishing intergenerational links which will continue into the future.

We hope that this case studies booklet which features some of the gardens developed, will inspire many more schools and community groups to develop gardens for the benefit of people's health and wellbeing, as a place for children to learn and play and as a safe habitat for wildlife.



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1. Aberporth WI (Ceredigion) working with Aberporth Primary School

Six WI members took part in the project and a bursary won by Irene Dansie enabled them to buy bulbs for the school. The bulbs were planted in various containers and the pupils were enthusiastic helpers. The resulting display of spring flowers was very colourful and enjoyed by all.

In consultation with the Headteacher and his staff in the Spring of 2007, two raised beds and some containers for growing vegetables and a mix of wild flowers were prepared. Sutton Seeds provided a variety of quick-growing vegetable seeds, and Humax supplied a potato bag and tubers.

WI members worked with groups of enthusiastic Infants but the project suffered in the hot, dry weather of April and May, particularly as access to water was extremely difficult. Germination was slow. The heavy rains of early summer redressed the situation however. Participants were able to harvest a rewarding crop of potatoes, carrots, lettuces, radishes, beans and peas.

The WI members' reward was the look of excitement and delight on the faces of the pupils. The tomatoes were left to ripen and the flowers left to bloom in the late summer.



2. Bodedern WI (Anglesey) working with Bryngwran Primary School

Bryngwran Primary School's Gardening Project involved growing vegetables including lettuce, beetroot, potatoes, onions, shallots and cabbages. They had a successful crop and were also fortunate to be able to learn how to cook these vegetables and then eat them. The school had the support of the local community council and with this support had been able to create wild areas where wild flowers and trees had been planted. The school also forged links with a project being run by Barnardos who are hoping to help develop the front garden of the school. The school is fortunate that it has a very enthusiastic Headteacher and the school also received free Humax bags for growing potatoes, salad crops and tomatoes.

3. Bryncoch WI (Glamorgan) working with Ysgol Gymraeg Pontardawe

The garden was started in June 2007 with a grant of £500 received by the school for the project. Tools were purchased for the pupils with some of this money and members of Bryncoch WI volunteered to help get the project off the ground. Parents also prepared a small area, by digging up the grass and turning over the soil.

Three members of Bryncoch WI and 2 parents met each week, weather permitting to help the pupils.

Vegetable plants were donated and tomato plants were planted. The pupils planted sunflower seeds in pots to take home and look after, and then brought the plants back to school for planting out. A quiet area which was already established was replanted with sensory herbs. Pots were planted with bedding plants to add colour.

In September the area was dug over again and bulbs were purchased and planted. The pupils were eager to help and asked for work to do.

A classroom had been set aside for the pupils to work in on wet days. Seeds were being sown at the beginning of 2008, which were looked after by the children and planted out at the appropriate time.

Another area of the school's grounds has been allocated to the project and with the help of the willing volunteers the garden project will develop further.

4. Bryngwyn WI (Powys-Radnor) working with Rhosgoch County Primary School

The Gardening Club met every Wednesday after school and was organised by a very knowledgeable parent who was helped by many other keen parents who attended regularly and also WI members. Usually between 6 and 10 pupils chose to go to the club, not always the same ones although pupils between the ages of 5 and 9 were the most enthusiastic. They purchased a poly tunnel under which they grew beetroot, cucumber, marrows, beans and lettuce - a watering rota was set up for this.

Outside they had a lot of success with soft fruit despite the rain. Some of the fruit was gathered and made into jam which was used by the breakfast club. They also grew potatoes, peas, cabbage and carrots in raised beds and mixed flowers in boxes by the school entrance.

The club experienced a problem over Health and Safety with cooking and eating vegetables so the pupils wrote to Powys County Council and the school meals service who in turn granted them permission to cook and eat their vegetables as long as they had the approval of the Headteacher and school cook.

A competition was held for the tallest sunflower and three prizes of garden tools were awarded by Friends of the School Association to the winners. The school was also awarded £6,600 from the National Lottery Breathing Spaces Fund to create a mini bog garden adjacent to the school garden which will act as an information point and be a mini replica of the Rhosgoch Bog (National Nature Reserve).



5. Capel Seion WI (Ceredigion) working with Capel Seion Primary School

The 2006 project began too late for planting in 2006 so planting took place in Spring 2007. The WI purchased 2 books for the school and prepared a small bed. The seeds were planted under glass and planted out as appropriate.

6. Carreglefn WI (Anglesey) working with Carreglefn Primary School

Carreglefn Primary School's Project also involved growing vegetables. They have a vegetable patch which is away from the school grounds and every Friday work was carried out on the patch with the Headteacher and members from Carreglefn WI helping on a regular basis. The pupils of this school were very enthusiastic about growing vegetables. Parents helped to prepare the raised beds and gave every encouragement to pupils to grow different types of vegetables. The school cook was delighted when the pupils brought her some vegetables to cook. The pupils and their teacher have taken photographs of the different tasks when growing seeds and these have been publicised on the school website.

7. Catwg WI (Glamorgan) working with Catwg Primary School

The garden in Catwg Primary School was started in 2000 as a Millennium project. The pupils decided they would like to improve the entrance to their school by creating a garden. They were helped to fund it initially by a local store and college.

Over the years a sensory garden, herb garden and a Japanese garden were added, together with flower beds, paths and seating areas. A gardening club was formed and they met once a week. Over the next two years a vegetable garden was added and a greenhouse and potting shed. The pupils propagated seeds and planted many annuals.

Members of Catwg WI became involved with the garden just over 4 years ago when the gentleman who helped to maintain the gardens had to retire due to ill health. Three of the WI members had grandchildren attending the school. Catwg WI had a very good relationship with both the Headteacher and the staff at the school and when they heard that the school could not get help to work in the garden they decided they would volunteer. Eight members of Catwg WI continue to meet once a week to garden. They work for about 1 hour, depending on the time of year and in conjunction with one of the teachers they carry out the jobs the pupils are unable to do for example, cutting borders, hedges, etc. The WI members also helped the pupils to plant bulbs and bedding plants and parents often left a bag of shrubs or cuttings and the members of Catwg WI helped the pupils decide where to plant them.

The school is aware of helping the environment and in the garden evidence of this can be seen. As far as possible they tried to make the garden ECO friendly and fly the blue ECO flag from their flag post. They also created the ECO symbol in the garden near to the entrance to the school for all to see. They created a wildlife garden and pond, which won 1st prize in the Neath/Port Talbot Wildlife Gardening Competition.

The garden project does not stop there. A new development is taking place where a footpath is being created. This will meander through an area of mature trees to the main school buildings and will have a quiet area of seating and flower beds.

The members of Catwg WI are very much involved with this new project. Many people pass favourable comments about the garden and it brings great enjoyment not only to the pupils and parents of the school but to the whole village. The Headteacher is very keen for the WI to work together with his staff in furthering a good working relationship. Catwg WI was invited to the Harvest Thanksgiving where some of the produce from the vegetable garden was on show.

The Headteacher is very proud of the school garden and the children have won many prizes for their efforts. This year they have won 2 prizes, 1st prize for the Neath/Port Talbot Schools section of the Gardens in Bloom and 2nd Prize for the Wildlife Garden.

Catwg WI is only too pleased to help the school and it is very rewarding to work alongside the pupils and see what they can achieve.



8. Deganwy WI (Gwynedd-Caernarfon) working with Ysgol Deganwy

Members of Deganwy WI were very successful in helping to set up and organise the growing of vegetables in raised beds in a specific part of the school grounds. Once the heavy work had been done by a landscape company, they were able to set up a rota of crops and grow a wide variety of vegetables, some of which they were able to sell at the school fair and others they were able to eat. This gave the pupils a chance to see how things grow and to taste for themselves a wider choice of vegetables than perhaps they already knew. Compost bins have been established to deal with the waste and show how easy this is to do and small groups of the pupils have worked on a regular basis with staff and WI members on this project. Tools and watering cans were purchased from available funding and hopefully in the future they will continue to expand their gardening projects.



9. Forden WI (Powys-Montgomery) working with Forden Church in Wales Primary School

The project met on Friday afternoons and WI members worked with 6 pupils at a time (alternating on a regular basis). This particular project received great co-operation from the Headteacher.

Forden School is a village school that has around 81 pupils on its roll. Through their involvement with the project they have been able to increase the attractive appearance and bio-diversity of the school grounds. A parent constructed four raised beds (one for each class). The beds were kept deliberately small (6' x 3') so that the job of maintaining them did not become too overwhelming - nobody likes weeding! The WI took a gardening club on a Friday afternoon and the club discussed, chose and planted a range of vegetable seeds. The seeds were raised in a small plastic greenhouse. They previously tried raising seeds in the classroom but as many other schools have found, the resulting seedlings were very 'leggy'. Once the seedlings were planted out the volunteers visited the school every Friday and took a small group of pupils to tend the beds. As the crops came to fruition they were harvested, cooked (where appropriate) and taken around the classes for pupils to taste. The crop that produced the most interest was the radishes (also the best cropper) most pupils had never tasted them and the peppery taste was a surprise! The most popular crop was (no surprise) the strawberries!

The second project was to create a flower garden at the front of the school. B&Q donated rope edge tiles and trellis and parents helped dig up areas of tarmac to create beds designed to complement the Victorian building. The volunteers brought in splits from their own gardens and pupils helped plant these and sowed annual seeds directly into the ground. The garden had a bit of a hard start (remember the wet summer?) but by the time school started back in September it was looking great. It has really enhanced the area at the front of the school and the Infants have already used it for a minibeast hunt.

Simon Newson, Headteacher of Forden Church in Wales Primary School commented "Without the fantastic support of the 3 ladies from the WI it would have been difficult to keep these projects going. As well as giving time on Friday afternoons they also kept the gardens in order during the holidays. All the pupils really enjoy gardening and look forward to their 'turn' with the volunteers. During the project everyone had an opportunity to get their hands dirty and we are all looking forward to further years of great gardening".

10. Grosvenor WI (Powys-Radnor) working with Llandrindod Wells County Primary School - Cefnlllys

This project formed an Eco group which was run by one of the school staff. The group met most Tuesdays after school during term time and WI members and their husbands helped with the running of it. The group had between 16-20 pupils aged between 7 and 11 years old and included a disabled pupil who is in a wheelchair and is very involved. At the first session seeds from Sutton Seeds were planted in seed trays donated by local residents and each group of 4-5 pupils had an adult to help them. Later on in the year the pupils planted bulbs and were taught how to replant young plants into larger pots ready for their summer fete! The Eco group continues to meet on a regular basis.



11. Lampeter WI (Ceredigion) working with Ffynnonbedr Primary School

WI members helped the school pupils to understand the life cycle of annual plants. Seedlings were planted in containers all over the school and the school won the category of best educational/residential establishment of 'Lampeter in Bloom'.

12. Llanbedr & Talybont WI (Gwynedd-Caernarfon) working with Ysgol Porth y Felin

The initial meeting with this school outlined a need to transform an area into a place for parents to wait for their children, but this has since evolved into developing the whole of a wider space into a place to encourage wild life and enhance the school grounds. Suitable plants to encourage more species of wildlife were purchased and a pond is on the agenda! Lots of smaller corners are being used to grow different things in consultation with the pupils and the ongoing plan is to continue to develop this area with plenty of interesting projects for the pupils to access in different ways.

13. Llanbedr & Talybont WI (Gwynedd-Caernarfon) working with Ysgol Glanwydden

This school needed help to develop an area of ground into a long border. A plan was drawn up for them identifying a range of plants giving seasonal interest and containing different types of plants to give a wide growing range. A garden club was formed and met on a weekly basis up until the Autumn and will restart in Spring 2008 with the help of WI. Trees were purchased and planted and compost bins were set up. Much interest has been shown in making the grounds more attractive for both people and wildlife.

14. Llanddewi Brefi WI (Ceredigion) working with Llanddewi Brefi Primary School

There is no green area attached to the local school so WI members and school pupils planted herbs and vegetables in tyres around the school. Members also acquired two old baths which they have adapted up to health and safety standards to grow potatoes and pumpkins.

15. Llanfaelog WI (Anglesey) working with Pencarnisiog Primary School

Pencarnisiog Primary School Project was perhaps the most adventurous one in this Federation. The school has been linked to Llanfaelog WI and one of the WI members helped the school to design a garden which took a long time to plan. It is hoped that railway sleepers can be placed on an area of ground to create a segmented garden with herbs, flowers, vegetables and fruit. There was also a requirement for the school to have some playground equipment removed. Seeds have already been planted by the pupils for next year and these include radishes and biennials. Native trees have also been planted to give some protection to the site from the wind and also to encourage bird life to visit the school grounds.

16. Llangadog WI (Sir Gâr) working with Llangadog Primary School

Llangadog WI these days is a very small Institute and membership mainly consists of the over sixties age range. Despite this, two willing WI members aided by the official photographer have made a wonderful two way learning contribution at the local school.

Without doubt, the most valuable was the interaction between the age groups - pupils between the ages 3 and 9 and WI members over 60! The pupils' enthusiasm was boundless especially when it came to searching out worms and slugs and for telling us what their fathers, grandmas and the man next door grew in their gardens. One event that will always be remembered was when one little boy, who possibly grew up in a local alternative community, pointed out that there were plenty of worms that could help things grow in the school compost heap. In the way of a knowledgeable six year old he rightly assumed that we had no idea about these things!

Rhiannon Scott, WI member says "The Llangadog project will never make television gardening headlines but it has given both WI members and local school pupils a lot of pleasure. It is an ongoing commitment and seasonal vegetables will be grown e.g. pumpkin in the autumn. During 2008 we hope that the strawberry plants that pupils in year 2 asked us to plant will have fruited".



17. Llangoed WI (Anglesey) working with Llangoed Primary School

Llangoed Infant Pupils have been busy working with their teacher and two members of Llangoed WI. The WI members had to do some of the digging and preparing the soil because the square planters had not been weeded or used for some time. They encouraged the pupils to plant seeds and some perennial plants. The pupils enjoyed watching the plants grow and cut some of the flowers to display in their classroom. The two WI members visited the school once a week and worked in the classroom helping the young pupils to experiment with the growing of cress and beans in jam jars. The project is ongoing and the school is hoping to obtain grant aid to develop further areas of the school.

18. Llangristiolus WI (Anglesey) working with Llangristiolus Primary School

Younger members of the WI were involved in this project and the WI raised £50 which they donated to the project for the pupils to visit their local garden centre to choose and buy a selection of plants. This was an interesting experience for both pupils and staff because the pupils did not have any idea of how to plant anything - they even wanted to leave the plant in the pot and plant it in the hole as it was! The WI Project Co-ordinator spoke to the pupils about how to plant and the importance of having a big enough area for the roots to spread. She also donated perennial plants from her own garden to the school and suggested that they try to buy some adult trowels and other tools for Year 6 pupils as they were struggling with the small tools that the Infants used. It is hoped that pupils will have the experience of growing vegetables also.

19. Llanover WI (Gwent) working with Fairwater Junior School

Four WI members have been involved in this project.

Fortunately the school already had raised beds and the pupils cleaned them up and planted flowers, bulbs and herbs. A flat plot was prepared by pupils where potatoes and other vegetables were grown.

Tools, pots and compost were purchased from the Rural Community Action grant.

20. Llawhaden WI (Pembrokeshire) working with St Aiden's Church in Wales Voluntary Controlled School

The project has been running for over two years. The WI volunteers took responsibility of the vegetable plots within the school grounds which consist of three raised beds. They also helped with the wildlife area and pond.

WI members met on a Thursday morning and worked with different age groups of around six or seven pupils at any one time. Approximately 45 pupils from three year groups have been involved in the project. The school has had a vegetable plot for five years and mainly relied on parents and grandparents to help but due to CRB checks, insurance and health and safety, the school found it increasingly difficult to sustain any help.

Being a rural school, WI volunteers found that many pupils had greenhouses at home and were always encouraged by their families to help. The pupils had some wonderful "words of wisdom" on how to grow vegetables and fruit and what they did at home.

In 2007 the project had well stocked pots with one Infant and one Junior plot and a competition on who had the greatest yield. The pupils weeded the plots in March, then prepared the soil ready to plant in April. WI volunteers showed the pupils how to double dig and mark out the plot and dig trenches. They grew potatoes, runner beans, broad beans, peas, carrots, courgettes and shallots and dried chicken manure was used as a fertiliser which caused great excitement amongst the pupils. Weeding, thinning out and putting bean and pea sticks in was the last job.

There were cats using the vegetable plots as toilets early on in the season but as a healthy eating school, orange peel was scattered on the soil which proved to be an excellent deterrent.

Pupils were learning all the time, measuring, counting and experiencing weather temperatures and observing nature all around them without them realising they were. The resources in the school were good with a range of garden forks and spades, hand forks and spades, rakes, three compost bins, two watering cans and a water butt. The only thing that was lacking was a good gardening glove so Llawhaden WI purchased seven pairs of children's rubber coated gloves which were used successfully when dealing with nettles and brambles.



Although the weather was a trying factor – April too hot and dry and June too wet, the only casualties were the pots in the Infant sector because there was either not enough water or too much.

Routine definitely helped – keeping to a set day and time for both volunteers and pupils as school life is always very busy. The volunteers allowed the pupils to lead and enjoy themselves and gave advice, a helping hand and encouragement. Everyone who took part in the project enjoyed the time in the school and great satisfaction and much pleasure was reaped from working alongside the pupils.

Plans for 2008 include a cold frame and a sustainable greenhouse made from large plastic drink bottles. Information has been sought on how to construct the frame and everyone is busy collecting bottles.

Ann Newberry visited the school in July 2007 to present the school with a certificate of participation in the project and also to view the garden and grounds. She spoke to the teacher co-ordinator and acting Headteacher who said that they were delighted with the involvement of the WI in the project. They commented on how much the pupils were getting out of the project, learning how things grow, tasting and eating the wonderful array of fruit and vegetables and also recorded their thanks to Marshall's for providing free seeds.



21. Llwyngwrl WI (Gwynedd-Meirionnydd) working with Llwyngwrl Primary School

Llwyngwrl Primary School and their Headteacher worked alongside WI members on a raised vegetable garden. Parental help was enlisted for some of the heavy digging. Pupils were very much involved with the process and showed a marked degree of commitment particularly when the time came to harvest the fruits of their labour. Regular maintenance sessions involving weeding and watering were carried out. The garden was highly productive and the pupils entered the local Garden Show winning a 1st for Broad Beans and a 2nd for their Potatoes.

22. Menevia WI (Pembrokeshire) working with Ysgol Bro Dewi Primary School

Since March 2006 Menevia WI has worked with pupils of Ysgol Bro Dewi (YBD) Primary School to develop and maintain a vegetable garden, a flower garden around a newly established eco-pond and plant up containers. Their main aim was to help pupils understand the link between the earth, the environment and what they eat in a fun and practical environment.

During term time (April to November), 8 volunteer WI members worked in pairs on a rota with up to 8 children for an hour each Tuesday afternoon. The school selected the pupils so that over a period of time each pupil got the opportunity to work in the garden (the volunteers kept an eye on the garden during the summer holiday).

In March 2006 (at short notice) Menevia WI learnt that YBD had registered an interest in the WI Gardening with Schools project. Following a meeting with the Headteacher, it was decided that the WI would “give it a go” and plans got underway which included drafting an agreement with the school. Since then we have established a vegetable plot from a piece of waste land, cleared and planted around the eco-pond and obtained and planted up 2 containers.

Pupils successfully grew sunflowers, marigolds, nasturtiums, sweet peas, tomatoes, carrots, radish, lettuce, brussel sprouts, leeks, spring cabbage, pumpkin and hundreds of spring bulbs. The less successful vegetables were runner beans and chard.

In 2007, very simple low beds with gravel paths were constructed to make the beds more accessible and easier to work in wet weather. WI members also harvested and made a trellis to support climbing plants. In addition to the above peas and sugar snap peas were grown during 2007 using willow trellis for support. Pupils removed the old beech hedge which was not doing well and replanted with lavender which it is hoped will form a compact border around the vegetable patch in due course.

To the WI members' surprise, pupils at the school learnt more than gardening skills. They learnt to measure distances (between plants and rows) and volumes (plant food ratio to water) and tying knots (it seems that Velcro fasteners on shoes meant that pupils could no longer tie knots!). Also, one of the WI members became so enthused that she took up growing her own vegetables in containers at home.

With regards to resources, the school had a few tools from a previous project and authorised spending up to £50 for some additional equipment, bulbs and plants to help the project get off the ground. Many WI members also donated plants and seeds. In October 2006 the St. David's Lions kindly donated £100 to help purchase timber, paint and new containers. In addition, a local Nursery and the St David's County Market have also generously donated plants to the project.



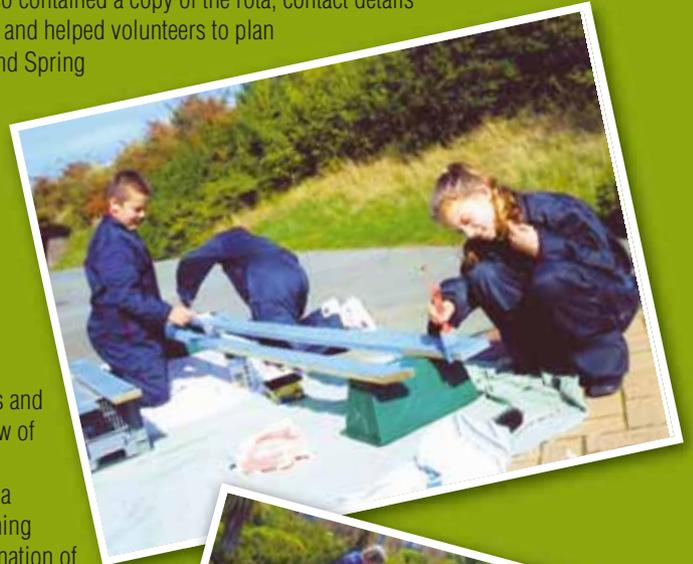
WI members quickly learnt that 8 is the maximum number of pupils that can be safely and productively managed in the small garden environment. It was also essential to have 2 volunteers present to supervise the whole group in the event that a pupil needs individual attention. Health & Safety was a paramount consideration and a short discussion about safety e.g. carrying tools safely, at the start of each session and washing hands at the end was essential.

Communication between the school and volunteers was essential for the project to run smoothly. A committed co-ordinator was required to maintain momentum and interest. An up to date logbook was kept of what had been done each week, what needed doing the following week and a planting plan to follow which was passed on to the next volunteer on the rota. The logbook also contained a copy of the rota, contact details and the agreement with the school for reference. It was a very useful reminder and helped volunteers to plan their sessions. In addition the volunteers met before the start of the Autumn and Spring terms to discuss the season's plans. The co-ordinator also met periodically with the Headteacher to check arrangements and ensure that he had a copy of the rota and volunteers' contact details.

Susan Preece of Menevia WI said "We have been amazed at the generosity the project has received in the form of money and donation of plants - don't be afraid to ask! Also never underestimate how long it will take to get the Criminal Records Bureau checks completed for the volunteers".

Raymond Griffiths, Headteacher of Ysgol Bro Dewi comments "The school garden makes use of an area on the ground that was given over to ornamental planting. Due to a poor selection of plants, it was difficult to control the weeds and as it was near the main entrance to the school, was an unsightly feature in view of all visitors. We started work on clearing the garden with the aid of a Land for Learning grant to buy materials such as forks and spades, a compost bin and a water butt. While the work was in progress, we found out about the WI Gardening with Schools project which resulted in WI volunteers completing the transformation of the plot into a vegetable and flower garden. They have also taken over the day to day work of planting, harvesting and weeding, coming in once a week during the season to tend the garden. The beauty of the project is that we can release small, manageable groups of pupils to carry out meaningful work on the garden without a teacher having to leave the classroom. A class of pupils would be too much to manage at the same time but five or six pupils can be given instructions and proper supervision while they work on the garden. They obviously learnt the skills of gardening but also began to understand about the wider issues of food miles, recycling and care of living things."

The project is well established and the WI hopes to be able to continue along the same line in future, possibly working more closely with the school, getting pupils to plan what they want to grow and starting some bedding plants off from seed in the classroom.



23. Penally WI (Pembrokeshire) working with St Teilos Catholic Primary School

This project has been a small-scale garden project in the heart of Tenby town. The school has no land available for gardening and their funding is quite restricted.

In consultation with the school in 2006, it was agreed to concentrate on planting flower tubs and hanging baskets. Four members of the WI worked with the pupils throughout the summer term and because the school has a fairly small number of pupils it was possible to involve all of them on a rota system throughout each session.

The school was entered into the Tenby in Bloom competition and they achieved a first in class. The baskets and tubs were then sold at the end of the school year to provide funds to continue the project in 2007.

2007 proved more problematical. Because of timetable restrictions and the nature of the activities, the school was only able to participate in this activity during the summer term. The poor weather resulted in some days being cancelled and as the term wore on other school activities had to be re-scheduled into gardening slots.

Unfortunately, during 2007, the Penally Village School was closed which caused the WI to concentrate their support on the remaining village facilities rather than spreading efforts over the surrounding areas. Despite this, they managed to work with many pupils and again entered the Tenby in Bloom competition and achieved a second in class.

The school asked the WI if they would work with them again during 2008 and it is planned to involve more WI members in the project and also increase the range of plants grown. They are hoping to hold a seed planting session at one of their WI meetings when they can utilise the help of some of their less mobile members and also encourage them to care at home for some of the seedlings and plug plants. They also hope to encourage the school to try hanging baskets of tomatoes and herb and salad tubs in addition to flowers.

The school genuinely appears to enjoy participating in the project and has been very supportive and welcoming. The school was delighted to be presented with a certificate of involvement from the WI. WI members that have been involved in the project have met many more friendly people in their community - teachers, pupils and parents who now stop and chat to the WI gardening ladies.

24. Pennant WI (Ceredigion) working with Pennant Primary School

The WI was late in registering this project and consequently only received a compost voucher in 2006 but no seeds. Discussions with the local garden centre owner led to the beginning of a 'How to make a garden leaflet' for those pupils taking part.

In 2007, members and pupils planned and created a raised bed in a small area for planting peas, beans and potatoes and covered the rest of the area with black plastic for use in 2008. A compost/recycling bin was purchased and seeds were started in classrooms to show the pupils root and stem growth. The harvest has been good in relation to the quantity planted and the project will hopefully continue on a larger scale during Spring 2008.

25. Pontyates WI (Sir Gâr) working with Ysgol Gwynfryn

Six WI members volunteered to work with pupils and a small piece of ground which had overgrown shrubs and under trees was cleared. A selection of vegetables and flowers were sown along with WI donated plants. Groups of approximately 15 pupils at a time were involved each week enabling all the pupils to be involved and the staff were enthusiastic, supportive and helpful.

In the Spring of 2007 the school started on their own to prepare the ground for the coming season before the WI volunteers went in.

The school has been very grateful for the WI support and will certainly be continuing with the garden.

Pontyates WI was approached early in 2007 by Pontyates Primary School who had heard about the Gardening with Schools Project and were keen to be involved. This school had a piece of ground cleared ready for WI volunteers to start. Once again many of the pupils were involved and were gardening in tyres and pots alongside the plot of ground. They are keen to continue.



26. Portskewett & Sudbrook WI (Gwent) working with Sandy Lane Infant School

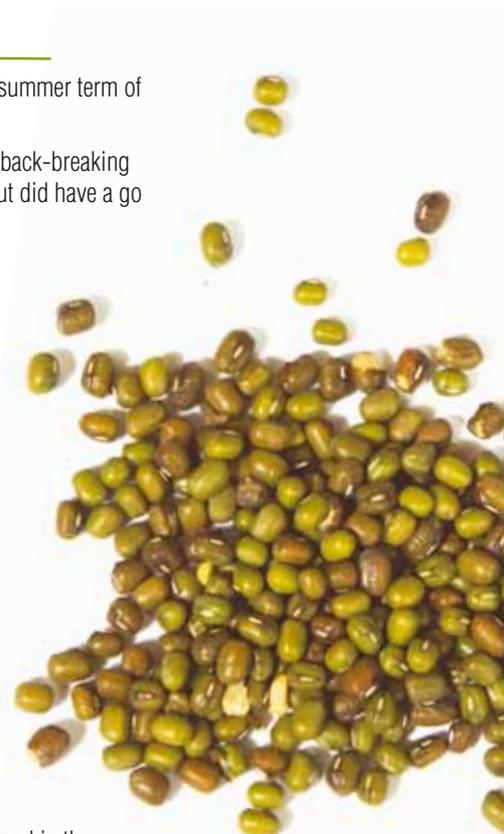
Two WI members worked with the pupils on this project. The project started at the beginning of the summer term of 2006. The aim was, alongside the pupils, to create a vegetable garden.

Two vegetable plots were measured out and the digging began! Members commented that it was a "back-breaking job, but satisfying when finished". The pupils in the Infant classes were unable to take part in this but did have a go at turning the top soil when able to and searched with great enthusiasm for worms and creepy crawlies!

Having no funds, members begged and borrowed and planted seeds and a few small plants with varying degrees of success as follows:

- Sunflowers – a great favourite with the pupils – these grew well
- Courgettes & Marrow – Courgettes were successful but the marrows were not started early enough
- French Beans & Peas – small but successful crops
- Tomatoes (in pots) – not very successful, got blown over and damaged – very small crop
- Cabbage – A favourite with caterpillars! Managed to harvest a couple
- Leeks – All lost soon after transplanting
- Purple Sprouting Broccoli – The only plants left in over winter and cropped nicely
- Lettuce – successful

Along with the pupils, WI members enjoyed their first season immensely. Pupils were excited picking their own crops and their enthusiasm and excitement was such a reward. Excess plants grown were sold at a school fair but no one seemed to know what to do with the produce and children were not allowed to take it home. Some produce was sampled during picking and in the classroom and teachers and volunteers also bought produce to take home.





The WI members' commitment to the project was approximately 2 hours per week and relied on teachers and pupils to water plants etc in between their visits and in the hot weather. On rainy days, volunteers helped pupils to create a scrapbook as a record of their hard work.

Many lessons were learned in the first year.

The second year began in mid February 2007 and from the Rural Community Action grant the following were purchased:

- Mini greenhouse to aid seed propagation
- Hose (carrying water cans over a distance was a previous problem)
 - Multipurpose compost, grow bags and fertilizer
 - Mushroom growing kit and seed potatoes

During 2007 sweet peas, cosmos, aubergine and chilli seeds were planted, tyres were recycled and used to grow potatoes and a herb garden was planted.

Sandy Lane Infants School has been earmarked for closure in June 2008. The school is appealing against the proposal. The future of the project is uncertain but the WI will continue to assist with this worthwhile project as long as the school remains open.

27. Portskewett & Sudbrook WI (Gwent) working with Undy Primary School

Our WI volunteer in this school is also a member of staff at the school. She helps the pupils at lunchtimes with planting, watering etc. She is also on hand with harvesting and tasting.

The Rural Community Action money was used to purchase herbs, flowers, pots, hanging baskets, compost and watering agents.

The school reports: We started to develop the Junior Courtyard into a garden that has a vegetable and flower patch. The vegetables and fruit being grown are potatoes, onions, garlic, radish, tomatoes, carrots, runner beans, lettuce, cucumber and strawberries. The flower patch will hopefully have a variety of bedding plants and climbers that are bright, colourful and scented. The pupils are fully involved in all aspects of the gardening and they have been responsible for growing the fruit and vegetables from seeds. The school is encouraging wildlife in their garden by having a bird feeder and birdbath. The whole school has also been involved by producing a sensory garden for each year group which has things like herbs for smell and brightly coloured flowers for sight in them.

The pupils collect left over foods suitable for composting for use in their garden and the school also has a water butt to conserve rain water. The project is so beneficial to pupils of all ages and is an important part of the school's curriculum. The school envisages the project being sustained for many years so that all pupils will eventually have a part to play in the school garden. The school is also grateful for the kind support shown and rests assured that the funding has been used in a very exciting way.



28. Raglan, Llandenny & Gwynfryn WI (Gwent) working with Raglan Voluntary Controlled Primary School

The WI has been working with Raglan Primary School for over two years. There are up to five WI volunteers working with pupils for one afternoon a week.

For the second year of the project, Raglan WI was fortunate to secure a grant from GAVO (Gwent Association of Voluntary Organisations). Part of the grant was used to build raised vegetable beds at the school from 6" wide tanalised timber boards. Thirteen raised beds were built in total – two beds were three boards deep for deep-rooted crops, ten beds were two boards deep for other crops and one bed was one board deep for strawberries. The beds were lined on the base with recycled cardboard packaging and the sides with recycled plastic sheeting. Wormtech also provided three tonnes of compost free of charge.



Under supervision, Year 6 pupils built the beds using tape measures, saws and hammers. Seeds were sown in the classroom by Year 4 pupils and grown on in a WI member's greenhouse as the previous year's seedlings grew leggy! The pupils planted out the hardened-off seedlings of sweetcorn, lettuce, tomatoes, pumpkins, herbs and flowers. They sowed peas, carrots, beetroot, spring onions, potatoes, shallots, sunflowers, courgettes, and wild flowers straight into the beds and planted up large tubs with summer bedding plants for display around the school buildings.

The raised beds are managed on organic principles and have been a great success. In the garden area there are two compost bins where the children compost waste fruit peelings and shredded paper. A water butt collects water from a nearby roof. Autumn leaves are collected for the two lead-mould bins.

The judges of "Wales in Bloom" and "Britain in Bloom" were impressed by the garden. The school won £150 in garden vouchers from the Potato Council's heaviest crop competition.



29. Rhayader WI (Powys-Radnor) working with Rhayader Church in Wales Primary School

This project has also formed an Eco Club and started by spending a whole day gardening with 25 Year 3 pupils. The garden had not been cultivated for some years and had to be cleared of weeds and grass. A heap of soil in the school grounds was sieved and carted to the garden and mixed with compost and placed in containers and then seeds were sown. A variety of plants were grown successfully and pupils have eaten lettuce and radishes that they grew. Unfortunately mice ate the broad beans! The garden is not large but it is fenced in and contains a water butt, two compost bins, a shed for tools and some fixed wooden containers. The project continues to build on what has already been achieved so far.



30. St Cynnwr WI (Sir Gâr) working with Llangunor Primary School

In the Spring of 2006 St Cynnwr WI was approached to help to create a perennial flower bed with the Nursery class. Having just become involved with the Gardening with Schools Project they decided to try their hands at growing vegetables along with the flowers and having received seeds from Marshalls they duly sowed in the early summer. Unfortunately with little success as the few seedlings that managed to poke their heads above the "baked clay soil" were promptly eaten by the local garden residents! However, a very enthusiastic teacher galvanised his pupils into sowing seeds and prepared a good sized vegetable plot and after digging in some compost they were all ready for planting. Every class within the school was involved as they were each given space for a vegetable in the garden. To help in raising some capital, wooden window boxes were made and planted up with bedding plants for selling to parents. Meanwhile two undaunted WI members continued to work with small groups of Nursery pupils to plant containers in a walled garden and started with perennial flower cuttings which were taken from their own gardens or begged from others. Later in the year they planted lots of spring bulbs (by this time a garden pond had been cleared and another small perennial garden was in progress). The seeds received from Sutton Seeds in Spring 2007 were shared amongst the classes for sowing (with varying degrees of success) along with a potato grow-bag from Humax. Raised wooden boxes were again planted up with bedding plants along with some spring bulbs grown in pots the previous year. These boxes have been laid out to spell the school name and look very attractive.

The school is fortunate to have plenty of ground which has enabled the pupils to plant up several fruit trees and they hope to expand on these in the future. They also hope to continue to fill the flower beds and with the odd trim here and there they should continue to give some colour in the years to come.



31. The Narth WI (Gwent) working with Trellech Primary School

Four volunteers from The Narth WI worked with pupils at Trellech Primary School. The project started in late spring 2006 after the PTA had cleared the plot. An attempt was made to sow seeds in the classroom but this did not prove to be successful due to the lack of heat and watering. They had a rethink and planted seed potatoes, onion sets and tomato plants which proved more successful and the pupils were allowed to take home new potatoes, onions and marrows. They also planted leeks, brussel sprouts, cabbages and marrows as small plants. The pupils enjoyed this and became very adept at handling them. Much time was spent watering and weeding. After this pupils aged 6/7 planted a raised flower bed with seeds and many plant donations. During the Easter holidays in 2007 the school was fortunate to get volunteers to make raised beds and plants from seeds started by WI members in their own greenhouses. The soil in the plot was not very conducive to planting so the Wormtech compost was used in the raised beds. The Head mistress at the school was very supportive and enthusiastic about the project and provided a shed, water butt and compost bins. The project has continued and more varieties of vegetables have been grown. From the Rural Community Action Grant a wheelbarrow, border forks, hand forks, trowels, seed potatoes and onions were purchased.



32. Worthenbury WI (Clwyd-Flint) working with Ysgol Sant Dunawd

One member of the WI helps at the school one afternoon a week.

Before the Gardening with Schools project started the school had an established garden under the care of the NNEB who is based in the nursery/reception class. The pupils from the younger classes garden for either a morning or an afternoon each week and are taught the importance of wearing gloves. The more senior pupils in the school use the garden for science projects such as factors affecting growth rates. It was thrilling that one of the senior pupils won the Word Search Competition.

The pupils experience all the stages of growing fruit, flowers and vegetables and plant the seeds in pots or directly into the ground that they helped to prepare. In 2007 the nursery pupils each planted a conker in a pot. They were very excited when the shoots appeared and enjoyed watering and monitoring their progress.

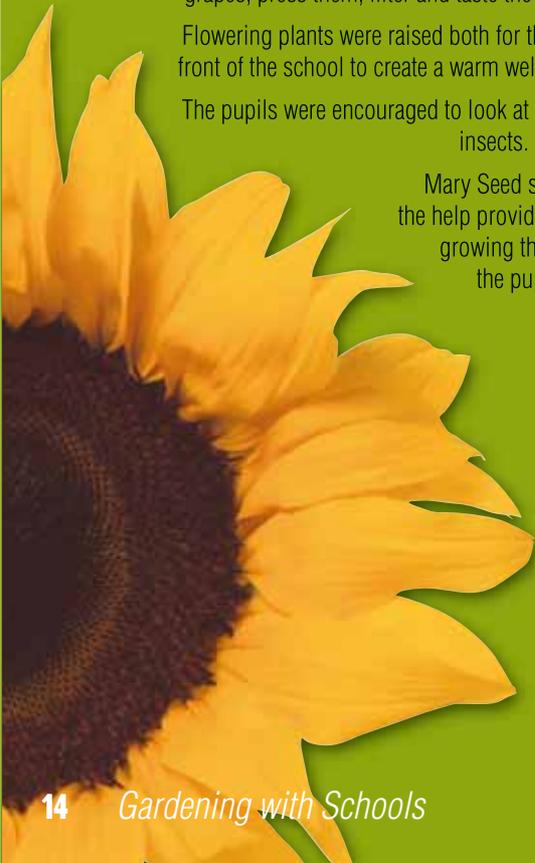
Apart from tomatoes a wide variety of vegetables were grown including: potatoes, leeks, broccoli, onions, broad beans, pumpkins and carrots and most recently they tried growing garlic. The vegetables were harvested and often cooked in school for the children to eat – predating James Martin! – It was amazing what the pupils will try and eat when they have grown it. Sometimes surplus produce was sold to parents at school fund raising events. All waste from the garden was composted and attempts were made to make leaf mould.

There is a large herb bed, an apple and a cherry tree, and even a grape vine. In 2006 the pupils were able to visit a local vineyard, pick grapes, press them, filter and taste the juice.

Flowering plants were raised both for their colour and with wildlife in mind. Some were planted in tubs or in other small beds at the front of the school to create a warm welcome for visitors.

The pupils were encouraged to look at the wildlife that is in the garden and were taught the importance of worms and other beneficial insects. They were keen bird watchers and took part in the RSPB bird watching surveys.

Mary Seed said "The WI/school partnership proved to be very successful. The school was thrilled to have the help provided by the WI, not only to provide an extra body to enable more pupils to experience the joy of growing things, but also to add to the bank of knowledge already present. On the other side, to be part of the pupil's enthusiasm has been a delight."



Acknowledgements

NFWI-Wales would like to thank the members of the Gardening with Schools Steering Committee for their guidance and support – Marylyn Haines Evans, Chair; Medwyn Williams, NFWI's Adviser on the project; Jane Oakes and Sarah Loftis, Montgomeryshire Wildlife Trust; Kelvin Rees, Headteacher of Catwg Primary School; Simon Newson, Headteacher of Forden Church in Wales School; Linda Lewis, WI Co-ordinator for Gwent Federation and Ann Newberry, WI Co-ordinator for Pembrokeshire Federation.

We would also like to thank Trevor Roach, National Botanic Garden of Wales for facilitating a Networking day in January 2007.

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And finally thanks to the WI Federation Co-ordinators for their hard work and dedication:

- **Anglesey** – Yvonne Tatam
- **Ceredigion** – Kathleen Martin
- **Clwyd-Denbigh** – Myfanwy Jones
- **Clwyd-Flint** – Mary Seed
- **Glamorgan** – Carol Atkinson
- **Gwent** – Linda Lewis
- **Gwynedd-Caernarfon** – Jill Scarff and Ann Jones
- **Gwynedd-Meirionnydd** – Jeanette Hudson and Nia Webster
- **Pembrokeshire** – Ann Newberry
- **Powys-Montgomery** – Issidy Hafner
- **Powys-Radnor** – Mollie Moore
- **Carmarthenshire** – Chris Burton

And to the WIs for their achievements and contribution to the success of the projects.

Further information on the project and case studies is available from:-

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WI Federation Co-ordinators Comments:

Kathleen Martin, Ceredigion

Twenty two schools originally showed interest in the project in 2006 and we were able to provide local WI support to 15 of the schools. Thirty seven of our members were willing to help with the project and were CRB checked. Each school group averaged 10-15 pupils.

Linda Lewis, Gwent

Securing a grant from Rural Community Action, Monmouthshire for £1910 also enabled WIs taking part in the project to hold a networking meeting, a workshop and buy equipment for their partnership schools. Using the money to build raised beds proved to be the most successful way forward. From the pupils' point of view the most successful vegetable grown was pumpkins although from the volunteers' point of view the most successful vegetables grown were Lollo Rosa Lettuce and Herbs. The most successful flower grown was Sunflowers in the ground and Marigolds in pots.

Linda was also successful in raising additional sponsorship and support from Chepstow Garden Centre, Wormtech, Llanbadoc Garden Centre (Usk), National Vegetable Society and Yorkshire Tea.

Jill Scarff, Gwynedd-Caernarfon

We hope that two other schools in the Conwy Valley will show interest in this scheme and that we can start working with them during Spring 2008. This scheme is one that should grow over the years and I am sure as it gathers momentum more of our members will want to take part in it.

Nia Webster, Gwynedd-Meirionnydd

The vegetable garden at Llwyngwrl School was the most ambitious with pupils involved at all stages. Highly successful, multi disciplinary teams comprising of pupils, headteachers, staff and WI members were set up at Ysgol Talfarnau, Ysgol Friog and Ysgol y Traeth, all of whom produced a variety of multi faceted flower beds and hanging baskets. Our main difficulty was getting volunteers for digging purposes although I enjoyed the experience so much that I am keen to work with my local garden club in the future.

Issidy Hafner, Powys-Montgomery

One of our projects was set up but did not progress well due to adversity from parents. There were also other schools that were interested in the project but could not be partnered with volunteers. I have organised workshops for "Gardening in Schools and At home" which was attended each month by around 12 people.

Ann Newberry, Pembrokeshire

Pembrokeshire Federation had 18 schools involved in the project since the start and 52 WI members. They feel that their most successful project was in Ysgol Bro Dewi and Menevia WI. This project was a "big hit" with the school and WI alike. The WI has a gardening group which got involved in this project and they received many compliments from the school and community. Pupils also thoroughly enjoyed working on the garden.

As a result of the project St Teilos School has tubs and hanging baskets which they sell at the end of year to raise funds for the following year. The school also won in their class in Tenby in Bloom.

Croesgoch School pupils personally asked WI members to come back again the following year because they enjoyed the project so much.

The most successful vegetable grown was potatoes and the most successful flowers grown were Marigolds and Sunflowers. It is hoped that all fourteen projects registered during 2007 will carry on.

WI members in Pembrokeshire found it most productive to work with small groups of pupils, around 6-8 at a time.

The Gardening with Schools Project also resulted in the WI in Pembrokeshire being asked to help with the "Grow it, Cook it, Eat it" event run by Pembrokeshire County Council every year for primary school pupils. This event is held over five days in September and involves over 1000 children from schools all over the county. The WI is involved in the Gardening Marquee where they help children pot up herbs which they take back to school with them. WI members also have the opportunity to talk with the children about the various fruit and vegetable plants on show. All WI members involved with the event have thoroughly enjoyed the experience and sometimes meet up with the children they garden with at school.

Mollie Moore, Powys-Radnor

Powys-Radnor has forged partnerships with six schools and approximately 14 WI members were involved in these projects. The most successful vegetables grown were peas which pupils enjoyed eating and marrows because of their size. Pupils also liked growing sunflowers as they were all able to grow their own and these flowers grew quite tall.

WI members involved with all the schools comment on the interest and enthusiasm of the pupils and how much they have gained and learned especially about what life is like in school these days compared to their own school days. The project continues to grow and two more schools started projects in the latter part of 2007.