Greenham Reach
Annual Monitoring Report
Year 4

19th November 2016 to 18th November 2017

Report prepared by the Ecological Land Cooperative detailing progress to date against the aims and objectives of our site Management Plan for Greenham Reach smallholdings.



Ecological
Land
Cooperative

For a living, working countryside







The transformation of Wild Geese Acres' no dig salad beds over 3 years

Contents

About The ELC 5

About This Report 6

About Greenham Reach 7

Landscape Character 8

Ecosystems and Biodiversity 10

Dr. Wilson's Ecology Report 11

Ecologic Consultants' Report 12

Soil Fertility 13

Water 14

Energy, Carbon Emissions and Bio-Sequestration 15

Ecological Footprint Assessment 16

Animal Husbandry 17

Construction

Open Day

School Visits 18

Transport 19

Common Areas and Facilities

Volunteers

Barriers to Growth 20

Land-Based Livelihoods 21

Elder Farm 22

Wild Geese Acres 23

Steepholding 24

Dwellings Tied

Discounted Lease

Monitoring, Action Plans and Breaches 25

Financial Information 26



About the ELC

The Ecological Land Cooperative (ELC) is a social enterprise, established to address the lack of affordable sites for ecological land-based livelihoods in England and Wales. We work to address a range of complex and deep-rooted social and environmental challenges in a uniquely simple, pragmatic way: by removing barriers to land access for sustainable uses.

Our mission and core business is the creation of residential smallholdings aimed at new entrants to horticulture and mixed farming, and we protect our sites for affordability and ecological agricultural use in perpetuity. Greenham Reach is our first cluster of smallholdings.

Our vision is of a living, working countryside, providing sustainable rural livelihoods to smallholders alongside a range of benefits to communities and ecosystems. Small-scale ecological production protects the environment and reduces greenhouse gas emissions by reducing fossil fuel use. Such businesses help build a vibrant, living countryside in which people flourish alongside our cherished landscapes and natural biodiversity, and have a crucial role to play in ensuring food and energy security.

They also provide employment, access to local, sustainable food and crafts and educational opportunities for urban visitors, helping to maintain rural skills and to improve ecological literacy.

Our model is to create clusters of smallholdings. This helps us to keep costs down through the provision of shared infrastructure, shared planning applications and subsequent site monitoring. It allows the smallholders to work together and provide mutual support.



About This Report

This report relates to Greenham Reach, the Ecological Land Cooperative's (ELC) first project. Greenham Reach is a cluster of three affordable smallholdings in Greenham, Mid Devon.

The ELC offered the smallholdings on long-term tenure to three ecological food and herb producers, subject to compliance with a rigorous site Management Plan. Although each smallholding operates as a separate business, the ELC has overall responsibility for compliance with the terms of both the Management Plan and the planning permission (i.e. the planning conditions) and we work with the smallholders to ensure that this is achieved. The Management Plan can be accessed via our website, www.ecologicalland.coop.

This report is structured to reflect the objectives and requirements outlined in the site Management Plan. The principal aims of the Plan are to: maintain and enhance the habitats and species diversity; maintain and enhance the landscape quality; and facilitate the provision of low-impact livelihoods and an increase in productivity, without prejudice to the first two aims.

This report is the fourth annual evaluation of how we have performed against the aims and objectives set out in the Management Plan. The report is structured following the themes used in the Management Plan and details activities at the site in the fourth year (19th November 2016 to 18th November 2017) since our temporary five year planning permission was granted.

We are pleased to say that we can repeat what we said last year: "We continue to be very happy with the progress at Greenham Reach to date".

After four years, these three small farms have all developed a strong basis for a successful business, are selling some excellent produce via local outlets or direct from the farm, and are having a very beneficial effect on wildlife.

This is the last report before the end of our five year temporary planning permission; we are pleased to say that there are no breaches of the Management Plan, and that overall the development is clearly a success.

We will be applying for permanent permission for all these holdings because we believe their hard work has been rewarded with a productive, bio-diverse site and that they are clearly a benefit to the local economy.

As Dr Philip Wilson's ecology report this year points out, Greenham Reach could now be regarded as an important local site for wildlife. All the holdings can point to happy customers and increasing demand. In addition, local volunteers have been helped into employment, numerous people have attended skill building courses and the visits from local schools have been a great success.

In total, these holdings are clearly satisfying the three elements of sustainability: social, environmental and economic.

We believe this is clear proof that small family farms such as these, with good oversight to ensure positive effects, can continue to be a bedrock of thriving local, rural communities, much as they have been for hundreds of years.

They deserve the support of all of us.



About Greenham Reach

Our cooperative's first development is a cluster of three affordable smallholdings for new entrants to ecological agriculture, located in Devon. A 5-year temporary planning permission was granted in 2013, allowing us to use our 22 acre greenfield site for three farm businesses including constructing a barn, track and three temporary residential agricultural workers' dwellings, each tied to an agricultural holding of between 5.5 and 8.5 acres.

Since then, three families have been developing their smallholdings.

Elder Farm is a business centred around herb production; Wild Geese Acres focuses on intensive salad production and has now expanded to include sheep, pigs and flowers; and Steepholding is a mixed enterprise including fruit, a veg box scheme and a micro dairy herd of Golden Guernsey goats.

For more information about Greenham Reach, please visit our website:
www.ecologicalland.coop



Ecological Land Cooperative smallholdings at Greenham Reach
Site Plan Drawing 2018

Landscape Character

Management Plan Objective: ' It is important that Greenham Reach will maintain and enhance Mid Devon's typical landscape features as well as the specific nature of the locality and the site itself.'

We continue to be satisfied with the landscape character. Land use has changed considerably in the last four years. With a number of people now working on the farms every day, new habitats, significant amounts of production and tree growth across the three holdings, Greenham Reach is now a busy and bountiful cluster of small farm activity and wildlife.

Visual Amenity

Greenham Reach occupies 22 acres across three plots, bounded on all sides by hedgerows. There have been no significant additions to building developments and those that are there have living or constructed screens around them. One non residential caravan has been removed from Elder Farm. Perennial crops, fruit trees and shelterbelts all continue to grow and the smallholdings are becoming more hidden in the landscape. There is a small increase in covered polytunnel area, but the vast majority of growing remains in the open air, and in the small mixed farm tradition.

Parish Council Statement

We wrote to the parish council in November 2017 in accordance with our Management Plan. We have no comments from them to report this year.

Hedgerows

Existing hedgerows remain in good condition, and the new boundary hedges and shelterbelts are growing on strongly. Some limited thinning work has been carried out in places on the older hedges, while many new native trees have been planted alongside them.

Trees

The newly planted shelterbelt at the south end of the water meadow on Steepholding has taken well and is growing on strongly. Along the entrance track the planted trees such as Red Alder continue to do well, while others like the Oaks have been much slower to take. Across the site, much tree growth has been exceptional, others have struggled- reflecting a mixture of waterlogging in difficult ground and possibly lower quality root stock or planting conditions. However taken as a whole, well over 1000 trees have been planted across previously bare fields and the vast majority are doing well.

Grassland

The major area of open grassland that now remains at Greenham Reach is on the lower part of Steepholding . The semi improved steep meadow classed as MG5c has retained its value under close supervision and planned grazing from sheep and goats. Encroaching scrub and bramble has been significantly reduced. The flatter fields along the River Tone are in acceptable condition, with the topping regime having kept the rush under control. The slightly raised southern area of this field is now fenced off for market garden expansion.

The larger field in Wild Geese Acres was suffering from a heavy weed burden earlier in the year, but a new regime of cutting with a flail mower is now in place and should see rewards next year. Having been recently under arable cultivation, a mixed ground cover is to be expected and creating a good quality pasture under the trees will take time.

Riverside

No significant work has taken place along the River Tone. The riparian edge retains a very natural, unmanaged character.

Waste management

Waste continues to be managed well. Most 'waste' on the farms is used as some kind of input to the system, eg food waste is composted and added to soil, while grey water is used as irrigation for trees.

Invasive Species

The Himalayan Balsam along the river continues to be managed well, with the work of Steepholding, plus a drier year, keeping it at bay. There are no reports of other problems.



Ecosystems and Biodiversity

Management Plan Objective: 'The enhancement of the site's existing ecosystem and biodiversity.'

We have had two separate ecological reports commissioned this year. One is from Ecologic Consultants, who have been visiting for the last three years and making a more qualititive assessment, particularly of the MG5c meadow.

The second was from Philip Wilson who co-wrote our first ecological report back in 2009; he was looking at overall changes since then. In summary, the natural ecosystems and wildlife remain well cared for and biodiversity is increasing.

Both reports give a positive bill of health for Greenham Reach. A noteworthy highlight is that an adder was seen on Wild Geese Acres in August.

Dr Wilson's report highlights that in a very short space of time, these fields have been positively transformed and can now be considered a site of significant local importance for biodiversity. This is a credit to the hard work of all at Greenham Reach and the restorative potential of Agroecology.

The assessment of the valuable grassland did show a drop in the overall percentage of positive herb cover from 64% to 45%. However, the assessor pointed out that this could be the result of the random choice of quadrants that were assessed , as well as the unknown effects of weather or other factors. It is still well within the accepted range of herb cover to indicate a healthy lowland meadow.

We will be continuing with this survey over the next few years to build up a better long term understanding of the meadow and its annual fluctuations.

In the next two pages we select some of the key highlights from the two reports. Both reports are available from us in full, on request.



A bee on a limnanthes flower at Steepholding.

Dr Wilson's Ecology Report

An ecological survey of the site was carried out in August 2009 (Wilson & Reed, 2009), and the purpose of this report is to make an expert assessment of the impact of changes to land use.

Change between 2009 and 2017

"There have been large scale changes to the site over this period, most of which have occurred since 2014 when the three smallholder families took up residence. The most obvious change has been in the former plateau fields A and B. These were formerly arable, with a single crop each year farmed conventionally with typical inputs of fertilisers and agrochemicals. These have now been transformed in a very short space of time into a mosaic of large perennial herb beds, planted shrubs, vegetable growing areas, tussocky grassland and pasture. These offer a great structural diversity for wildlife and a massive source of nectar and pollen for flower-feeding invertebrates including bees, lepidoptera and hoverflies."

"A significant length of additional hedge has been planted to separate the three holdings. There has been a good establishment of the planted trees, with some very rapid growth, particularly in the new shelter belt at the south of the escarpment. When more mature, these hedges will be a valuable resource for breeding birds and will provide feeding areas for a wide range of wildlife throughout the year."

Potential for further ecological improvement

"The smallholders at Greenham Reach have greatly improved the site for wildlife since 2014. It has been transformed from a typical area of Devon/Somerset mixed farmland with moderate value to biodiversity into a highly diverse site with abundant potential to support a wide range and abundance of plants and animals. It is appreciated that the smallholders have only been in residence for four years and that much more work remains to be done in making the farms fully sustainable and productive. Nevertheless, the extent of their achievement is very impressive and an example to anyone attempting a similar venture."



Conclusions

"In 2009 the site consisted of two intensively managed arable fields and two fields of permanent flood plain pasture with a small area of species-rich, agriculturally unimproved grassland with mature hedges."

"Between 2014 when the first smallholders moved in and 2017, three small farm units have been established, increasing the diversity of habitats and management over the whole site, but particularly on the former arable fields."

"These fields may now be of considerable local importance for nectar and pollen-feeding insects and associated species."

"Within another four years of work at the same rate it is likely that Greenham Reach will become an even more valuable place for wildlife and an important site for demonstrating techniques and possibilities for environmental enhancement in a very small area."

Dr Philip Wilson and Marian Reed, 2018.

Ecologic Consultants' Report

Data gathered in 2014 suggested that the lowland meadow was found to be species rich and this was also the case in 2015, 2016 and 2017. The meadow has retained it's species-rich status throughout the three successive surveys carried out by Ecologic Consultants Ecologists.

Site Assessment Report

"Throughout the three successive surveys carried out by Ecologic Consultant Ecologists the area of invasive scrub has been substantially reduced by good grazing management. The creation of new habitats, the orchard and new hedgerow, together with the informed management of the existing habitats has resulted in an overall biodiversity increase on the land at Greenham Reach."

"Ecologic have been impressed by the smallholders' commitment to maintaining and improving the wildlife value of the site and their ability to action the advice given."

Species-rich MG5c Grassland

"In all consecutive years of survey (2014-2017) the MG5c species-rich grassland was found to support an array of herbaceous species and a number of insects."

"In 2016 hoverflies, bees, butterflies (small skipper, ringlet and meadow brown) and moths were seen. In 2017 the meadow was again found to be thriving with insect life. Butterflies recorded include meadow brown, common blue, gatekeeper and small skipper."

Hedgerows

"As in 2014 the mature hedgerows on site were still found to be in excellent condition (minimum height of 2.5m, minimum width of 1.5m and continuous with no more than 10% gaps). These hedgerows were found to also be in excellent condition in 2017."

"The thick nature and irregular management mean that these hedgerows offer excellent sheltering and foraging habitat for a number of invertebrates, birds and mammals."

"The newly planted hedgerows are also growing well and are starting to provide good additional habitat for a range of faunal species."

Other Habitats

"The newly planted orchard is developing well and provides good nectaring, sheltering and foraging habitat. A number of newly planted trees adjacent to the entrance trackway are looking in excellent health. These trees provide additional structure and a good foraging resource for insects."

Hannah Gibbons MCIEEM, Ecologic Consultants.



Soil Fertility

Management Plan Objective: 'To stimulate microbiological life in the soil and improve soil fertility, and then to maintain good soil fertility and microbiological life indefinitely.'

We remain happy that the soil is being well cared for, with no sign of poisons, artificial fertilisers or erosion problems.

We took seven soil samples this year for lab analysis and our own soil observations three times over the year. We now have lab results from five of the years since 2009. Sadly, because we have used different laboratories over this time and have tested from a variety of locations around the whole 22 acres, the results are not as standardised as they could be. However we can see that there are no major problems and we can note a number of things.

The acidity levels across the holdings have slightly reduced over the last 6 years, particularly where work is happening. This year the ph ranged from a very acid 4.8 on the steep, grazed MG5c area, to 7.6 where commercial market gardening is in operation and there have been soil and compost additions.

Organic matter (OM) levels have increased, in some cases very markedly where recent additions were made. In 2014 the average OM percentage across 5 tests was 7.58%.

In 2017 the average across 7 tests was 10.3%.

Trace mineral levels have increased significantly where the soil has been managed for commercial growing. Adding manures and composts has presumably brought some in, and aerating the soil with human toil has reduced compaction and made existing elements more available.

Our history of soil testing here is far too limited to make conclusive statements. However we can say that so far there appears to be a win-win situation where both soil health and food productivity are rising together, rather than the former being at the expense of the latter as occurs with some production systems. This offers strong support for the agroecological idea that having people on the ground, working hard on soil and crops, is beneficial on many levels.

Stockproofing and Soil Erosion

No erosion problems have been identified. Stockproofing is in sound condition,

There is new fencing on Steepholding water meadow to allow for a new market garden area.

Composting and Manure

There are no reports of any problems and waste is being dealt with well.



Water

Management Plan Objective: 'Water is not only the basis for the ecological health of the site, its quality is important in order to avoid the potential for damaging contamination either of site or of nearby water courses.'

Water quality is good at Greenham Reach. The council water tests this year were passed and there is no sign of any contamination problems either on the holdings or downstream.

Greywater

Greywater continues to be disposed of around the holdings in a sensitive way, and onto trees at dry times of year.

Water Use

With the borehole and water filtration system now working well, in addition to the rainwater collection, access to water for consumption has been less of a problem this year.

However the extra levels of electricity needed to run the filtration system have caused significant extra load onto the solar system, compounded by the lack of the wind turbine which could have provided additional support.

Designs for storage ponds and enhanced soak-aways are progressing. There is no shortage of rainfall in this location, but a longer term design and installation for storing and using water to create a really sustainable, holistic solution would require considerable investment.

Secure storage of chemicals

As with previous reports, the limited amounts of fuel and oils that could be hazardous, are well stored with no sign of any problems. Electricity needs continue to be met by the 4.32 kwh solar system. Domestic space heating is with wood fuel. Fossil fuels are used to run road vehicles, site machinery and the generator which acts as a winter back up to the solar system. We are satisfied that the holdings comply with the Management Plan in this area.

Heritage tomatoes at Steepholding



Energy, Carbon Emissions and Bio-Sequestration

Management Plan Objective: 'Sustainable development requires that households use significantly less fossil fuel... the ELC [also] aims for its sites to be exemplars of bio-sequestration (the absorption and storage of carbon dioxide).'

Ecological Footprinting

The results of the Ecological Footprint Assessment can be seen on page 16. The full report is available on request.

Energy Use/Solar Array

Plans to develop more food processing space inside the barn have meant that the batteries are now housed in an external shelter.

Solar systems in the UK can struggle in the winter months due to longer, darker evenings and limited sunlight. In order to address this, the smallholders planned to erect a small scale 9 metre wind turbine on a single metal pole. After receiving funding to help with this they attended a course last winter and aimed to put this up at the end of 2016.

Unfortunately the planning status of the turbine was not clear and MDDC wanted a specific planning application. This planning process has been continuing all year and was still not resolved by December 2017. The turbine is ready but not installed. ELC believes the turbine to be small scale, domestic and of negligible impact on the landscape, either visually, audibly, or on wildlife. The increase in electricity it could have supplied has been sorely missed in the winter months and has caused an additional and unnecessary challenge for the smallholders.



Challenges like this can have a serious impact on quality of life and on the ability of people to create profitable farm businesses in new locations, and it is currently a real hindrance to success.

Total power generated to date: 13505kwh. The holdings have used between 1300 and 2300 kwh each, and the communal use has been 4741kwh on powering tools and fridges.

Bio-Sequestration

As we said last year, the key for bio-sequestration (soaking up carbon from the atmosphere) is perennial plantings and good soil management. Greenham Reach continues to be a good example of productive farming systems that maintain high levels of bio-sequestration, with plenty of undisturbed grassland and new trees.

Ploughing and harrowing has taken place on one acre of Elder Farm, for their necessary field scale herb production.

WGA practices a no dig system of cultivation, adding compost onto existing beds.

Steepholding cultivates using digging but with limited soil disturbance.

Ecological Footprint Assessment

The Ecological Land Cooperative commissioned Geo and Co. Ltd sustainability consultants to review the Ecological Footprints of the households at Greenham Reach.

The households previously had their Ecological Footprints calculated in January 2014 based on data from the year up to December 2013, representing their lives prior to moving into the site. A comparison can therefore be drawn between their impacts before and since moving onto the development.

Elder Farm

The Ecological Footprint of the household in 2017 was calculated to be 2.25 gha per capita. This compares to a per capita Ecological Footprint of 2.52 gha in 2013. This is a reduction of 10.9% on the household's Ecological Footprint before they moved onto the site and is approximately 45% of the most recently published average Ecological Footprint of a citizen of the United Kingdom which was calculated by the Global Footprint Network to be 5.1gha.

Wild Geese Acres

The Ecological Footprint of the household in 2017 was calculated to be 2.44 gha per capita. This compares to a per capita Ecological Footprint of 4.41 gha in 2013. This is a reduction of 46% on the households Ecological Footprint before they moved onto the site and is approximately 48% of the average UK footprint (5.1 gha).

Steepholding

The Ecological Footprint of the household in 2017 was calculated to be 2.33 gha per capita. This compares to a per capita Ecological Footprint of 3.67 gha in 2013. This is a reduction of 36.7% on the household's Ecological Footprint before they moved onto the site and is approximately 46% of the average UK footprint (5.1 gha).



Conclusions

On average, taking all three households together, the per capita Ecological Footprint is 2.33 gha which is around 46% of the most comparable average UK Ecological Footprint . The 'One Planet' Ecological Footprint which would represent a sustainable lifestyle is around 1.7 gha . Clearly the households at Greenham Reach are much closer to achieving this goal than the average UK citizen. To achieve this goal they would need to reduce their average Ecological Footprint by a further 28%.

There are plausible changes which could reduce the household's Ecological Footprints further towards the goal of a One Planet Footprint. These include:

• Better insulated homes with improved energy performance across a range of energy uses.

• An increase in vehicle efficiency to reduce carbon impacts, such as electric vehicles powered from on-site renewables.

• A continued increase in the production of a variety of locally grown foods for domestic use and increased substitutions from processed and imported foods to locally produced foods.

• Increased sharing of resources and equipment could potentially reduce the impacts from many items.

A significant part of anyone's footprint is the impact from industry and public services, which individuals have very little control over.

A reduction of these impacts in line with the targets of the Climate Change Bill would mean lower figures for everyone. These impacts account for 1.1 gha of the per capita figures calculated (45-50% of the totals).

Bill Knight for Geo and Co. Ltd.

Animal Husbandry

Management Plan Objective:' The ELC believes that animals should be managed with care for their welfare and health. As set out by the Farm Animal Welfare Council, animals should be managed in a such a way as they enjoy the five freedoms from: malnutrition, physical discomfort and extremes of temperature, injury and disease, fear and distress, and unnecessary restrictions on behaviour.'

There have been no reports of animal mistreatment or cruelty.

Elder farm continues to keep a small flock of four hens and two geese for domestic use.

Wild Geese Acres has expanded the sheep herd this year, which is co-owned with Steepholding. The herd gave birth to 28 lambs this year. They are rotated around paddocks and given extra hay and feed at lambing and winter times.

Five rare breed pigs – Oxford Sandy and Blacks – went to slaughter in the summer with some of the meat sold and some used domestically. Four more are being kept over the winter.

The flock of four geese continue to keep the grass down around the market garden.

Steepholding's herd of Golden Guernsey goats has expanded and now comprises four nanny goats, one goatling, and six goat kids in the main shed, and one male billy with two male wethers in a separate paddock. Hens continue to provide eggs from the orchard area below the market garden.



Oxford Sandy and Black piglets at Wild Geese Acres

Construction

Management Plan Objective: 'Constructed Dwellings should meet at least level 4 of the Code for Sustainable Homes'

Smallholders have not constructed permanent dwellings. The Code for Sustainable Homes that was referred to in our original Management Plan was withdrawn in 2015.

Steepholding has one main goat shed built out of timber, with three other much smaller timber goat structures in the paddocks for shelter.

Wild Geese Acres has only a small tool shed in the market garden.

Elder Farm has a temporary mobile structure as a tool shed.

For any permanent dwellings we have updated our dwelling guidelines so that designs should show how buildings will deal with the following issues: construction process, energy use, Co^2 emissions, water use, construction materials, waste and pollution, health of occupants, management of domestic processes, and the ecology and setting in the landscape.

Open Day

Management Plan Objective: 'The objective of the annual open day is to spread understanding of the ELC's approach to sustainable agriculture and living.'

The Open day was held on September 30th 2017. It was successful and well attended by approximately 75 people. Many local people came to see the source of the produce that they had been buying. It was great to hear their enthusiasm for the farms and the food produce on them for local consumption, and for all parties to feel an increasing level of connection to the local community.

Ivor on Steepholding raised over £70 on the refreshments stall for the community run pre-school at Stawley.

We also held an Investors' Open Day this year. This was to give potential investors in ELC a chance to see the reality of the new farm opportunities we are offering.

School Visits

Management Plan Objective: 'Sharing the ELC's approach to sustainable agriculture and low impact living.'

There were two successful school visits in the summer of 2017. Appley primary school brought around 15 children and Stawley primary school came with 20 children. The youngsters took part in a range of activities; looking at how different food came from different parts of the farm, and the different sensory experiences of a range of products.



Transport

Management Plan Objective: 'The project provides an integrated livelihood and residential scheme which will by its very nature result in a low traffic development. However, smallholders will be limited on the number of vehicles on site and number of vehicle journeys.'

We have assessed site progress against this objective via traffic counter data (as stipulated in the Management Plan) and a count of the number of vehicles kept on site, as detailed below. The count for the year was 5838. This is equivalent to 2.6 return journeys per day per holding – but of course it includes visitors and deliveries to the whole site, not just outward trips. This is higher than the current agreement with MDDC of 4380 movements for the year. This is one area of the Management Plan where our original expectations were a little too high.

An average of 2.6 return journeys a day for a family plus a business is certainly not excessive by the standards of rural England. It is more than we wanted but still a low overall traffic impact and below average. (By comparison the National Traffic Survey 2015/6 shows the average number of journeys from a rural dwelling per person is 542. So for a couple, that would be 2168 individual movements , which is more than the 1946 average per holding at Greenham Reach).

Moreover, it is also a reflection of the success of the holdings, and of their economic activity. In fact, restricting vehicle movements in the early set-up phase is counter productive to the establishment of a successful holding. It would be more reasonable to expect a reduction in journeys once the infrastructure is established and local transport patterns are clearer. This situation exemplifies the considerable complexities of defining and approaching real 'sustainability'

Vehicle movements are measured electronically at the access to the whole site so we have no way of knowing how the figures break down across holdings or for visitors, deliveries and so on.

There are a number of things we may be able to do to reduce the number of movements or mitigate the effect. These might include increased renewable energy production to power electric bikes or cars, further encouragement for visitors to come by bicycle, increased sharing of outward bound journey's, or more detailed monitoring of transport patterns. We will be working with the smallholders in order to address this issue.

Vehicle Numbers

The Management Plan allows for a maximum of four vehicles to be owned and kept on site overnight at Greenham Reach. This continues to be adhered to.

Traffic Advisor

We have spoken to all smallholders regarding traffic numbers but have not engaged a traffic advisor to offer further guidance.



Common Areas and Facilities

Management Plan Objective: 'The common parts and shared facilities... are provided by the ELC in order to support smallholders in developing and managing their businesses. The common parts within the site remain outside of individuals holdings and are maintained by the ELC in accordance with the lease.'

A major step forward this year was the completion of the access track around the three holdings. Thanks to a grant from Lush the track was installed in a loop that starts and ends at the communal barn and greatly improves access to Steepholding and Wild Geese Acres, particularly in winter. The barn continues to be well used, housing tools, the solar electrics and water filtration system, machinery, communal refrigeration, as well as collecting rainwater for the water system.

Volunteers

Volunteers have again played a crucial role in work activities across all three holdings. All the holdings have had a mixture of WWOOFERS (people staying on the farm as part of the World Wide Opportunities on Organic Farms network) and volunteers who come for the day.

In total there have been about 4500 hours donated by people - in return they get skills, experience and conviviality – as well as food and board in some cases.

Wild Geese Acres has been very successful at providing training, opportunities and skills to people that have allowed them to go on to future employment, and this may be one of the greatest achievements of Greenham Reach so far. Two people gained employment, at a local garden and a tree nursery, after volunteering on a weekly basis, and another got a part-time job in a mental health project where he intends to start a no-dig vegetable garden.

Barriers to Growth

Whilst many barriers have now been overcome it's not quite plain sailing yet – as for any farm.

Additional grant funding from Lush has been very productive and much valued, but issues around power generation and water conservation and filtration could still benefit from more expenditure.

As noted last year, finding supplementary ways to reward the holdings for the exemplary work they do with agricultural training and improving mental well-being would be very useful.

Planning regulations that looked for ways to improve the sustainability and success of small farms rather than offering additional bureaucracy would be highly appreciated.



Land Based Livelihoods

'Management Plan Objective: 'The ELC exists to support the creation of land-based livelihoods. At Greenham Reach this comprises the growing of crops and/or livestock and/or bees for personal use and for sale'

All the smallholdings continue to grow and produce well. We are happy that the holdings are beginning to 'bed' into the landscape more and that income levels are increasing for all of them.

All holdings are now making a profit and all holdings have at least one full-time equivalent person active on the farm, in line with the requirements of the lease.



Elder Farm

Work on the smallholding has increased again this year, with a great display of herb and flower varieties in high summer.
In particular the acre of field scale herbs has come into production, and this has recently resulted in a contract to supply bulk dried herbs for a major herb buyer. An additional polytunnel is now in use, to allow more flexibility and production in covered space.

The long perennial beds have seen a mixture of varieties: yarrow, echinacea, calendula, thyme and other popular herbs. They have also created a drying room for their produce, the lack of which was a significant barrier last year.

The range of flowering plants such as phacelia, sunflowers and calendula (pictured below) has been great for insect life and there is now a bee hive to help take advantage of this.

Some of the elder trees have been moved due to soil conditions and slow growth. Commercial production from these will not be significant for a few years so this needs to be factored into the business planning.

Sales of medicinal herbs have been good and together with the addition of products like the cough syrup and teas have seen a profit this year.





Sunflowers on Elder Farm



Herbal produce for sale

Wild Geese Acres







Cut flowers and luscious leaves salad bags are sold from Wild Geese Acres

The half acre of intensive market garden continues to produce well. They are now producing more herbs and flowers as well as the salad and vegetables, responding to local demand from pubs and restaurants.

The salad bags continue to be in demand with supply often unable to keep up. A particular highlight this year was the melon crop, delicious water melons grew alongside cantaloupes and honeydews in the polytunnel.

The 6 acre silvopastoral field is now divided into two pastures and two pig pens at the northern end. 139 new trees have been planted this year. The expanded sheep herd had a successful lambing season, with 16 lambs due to go to the abattoir in January 2018 and the rest to supplement the herd.

The field itself has suffered from high populations of nettle, thistle and dock – not surprising in a field recently down to arable production. However management of this field needs to be increased to ensure the situation does not deteriorate.
The pig business has also become established. The pigs slaughtered last year were made into sausages and sold in meat boxes to local customers, or consumed by volunteers.

Sales to March 2016 have nearly tripled since the previous year, and now represent a small but reasonable income.

Steepholding

The growing system here is now becoming clearer as early trials and possibilities have been developed or discarded. The number of members of the CSA (community supported agriculture) box scheme is increasing, up to 32 by December, with lots of great feedback from customers.

Fruit tree sales have been steady, with a dedicated website, and work continues to establish the goat dairy and increase milk production. They now have around 2 acres of market garden, with one acre of orchard, fruit and chickens roaming underneath.

The market garden is laid out on 75 cm by 11 meter beds, in an 8 year rotation. They are preparing the new growing area to allow expansion of the veg box to the target of 40 boxes a week. Sales up to March 2017 have seen a significant increase and the business is now showing a clear profit. Increasing numbers of box scheme customers over 2017 should see this situation improve further.

Eggs are delivered regularly to many box customers and goat and lamb meat is also sold locally.

The goats and the sheep are rotated around the different pastures and paddocks. The water meadow fields remain well cared for and are grazed or topped depending on need.





The expanding Golden Guernsey Goat herd



Steepholding's Alex Wilson and Ruth O'Brien

Dwellings Tied

Management Plan Objective: 'The three temporary dwellings at Greenham Reach are to stay tied to their land holding.'

The dwellings are all still tied to their holding, in accordance with the site planning permission.

The leaseholders are resident in the dwellings and there is no subletting, nor any sale of the land.

Discounted Lease

'Management Plan Objective: 'It is central to the ELC's approach that the initial purchase of the lease, and its resale, will be at an affordable price.'

As last year, we are not yet in a position to comment on the affordability of the leases relative to smallholder income, as the businesses are still in an early stage of development. We look forward to reporting on this aspect more fully in subsequent annual audits.

In the period covered by this report none of the original smallholders sold their smallholding. We are satisfied that the site management complies with the Management Plan in this area.

Monitoring, Action Plans and Breaches

There have been no new or additional problems this year.

Now that Elder Farm has increased its agricultural production there is no need to continue with their Action Plan process. This process has not been easy for either Elder Farm or ELC but we hope we have now reached a satisfactory position.

It has been a big learning curve for everyone. With Elder Farm now helping to advise other herbal production businesses and their own expanding contracts, they are in a good position to continue.

We will be evaluating the Management Plan and the system of reporting breaches over the coming year.



Financial Information

Detailed below are the costs to the Ecological Land Cooperative associated with Greenham Reach in the 2017 financial year. The grant carried forward from 2016 has been spent on infrastructure costs including the laying of a new circular track around the smallholdings and the erection of a wind turbine. The legal and professional fees relate to the preparation of the planning application for permanent permission which will be submitted in 2018. Although this financial reporting is not a requirement of the Management Plan, it does form an important part of the context in which the site continues to develop.

ELC P&L for Greenham Reach, 2017	£
Income	
Feed In Tariff	514
Grant Income (Greenham Reach)	0
Management Fees	150
Monitoring Fees	1,211
Total Income	**1,875**
Expenses	
Greenham Reach Property Costs	
Infrastructure	15,250
Legal and Professional Fees	4,166
Staff Costs	2,632
Travel & Subsistence	242
Site Monitoring	
Staff Costs	2,451
Surveys and Tests	521
Travel and Subsistence	126
Other	
Insurance	120
Total Expenses	**25,508**
2016 Grant funds brought forward	**16,054**
Surplus (Loss) for the year 2017	**(7,579)**

Donate land for ecological smallholdings

We are looking for donations of land which we will protect for ecological agriculture in perpetuity.

Do you have land that;
- is 20 acres or more, or near to one of our existing sites
- has good vehicle access
- a south/east/west facing
- is below 200m altitude

If you have land to donate or know of land for sale or rent then please get in touch.



To find out more please contact us:
T **01273 766 672**
E **info@ecologicalland.coop**
W **ecologicalland.coop**

Get in touch:

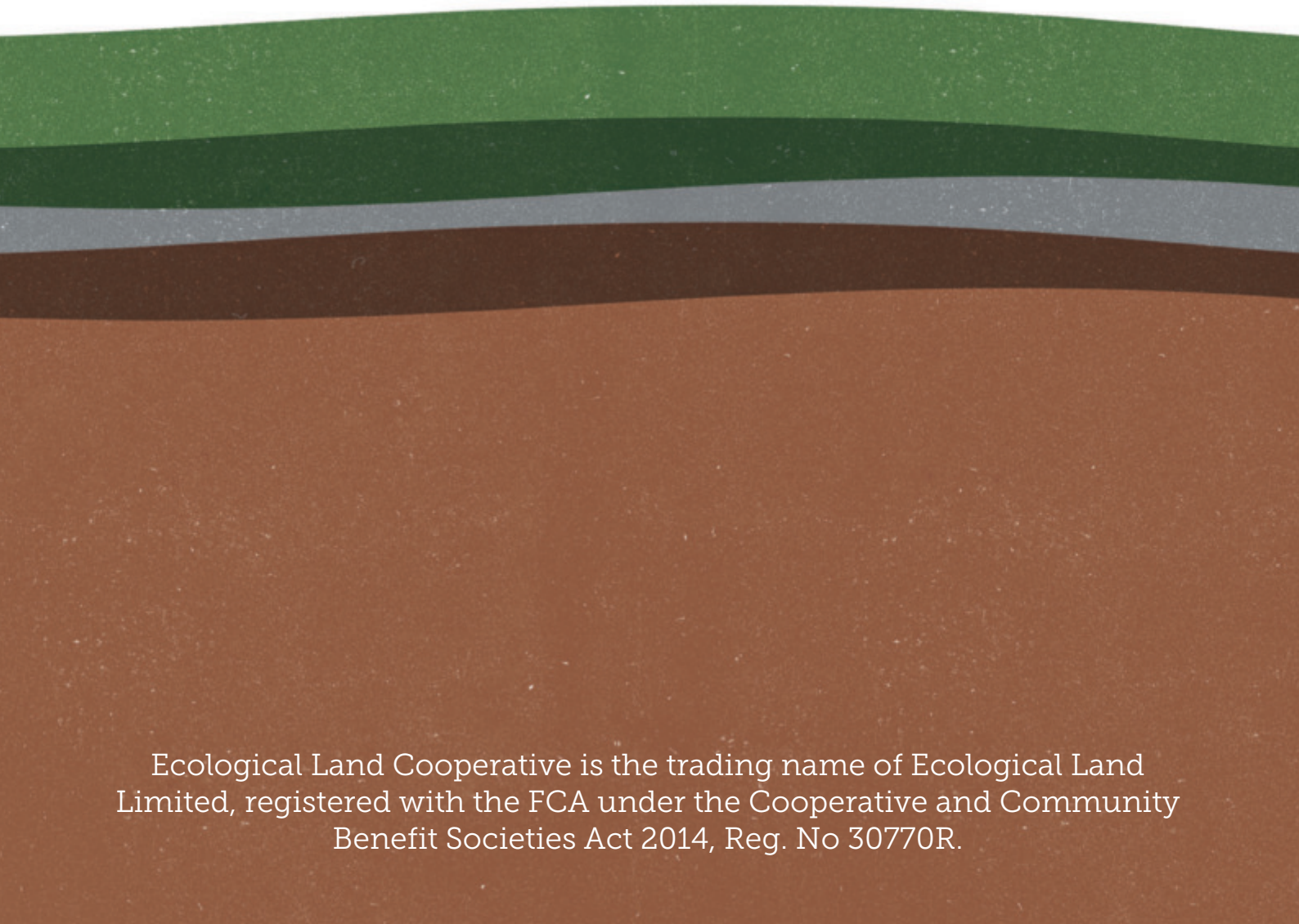
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