

Care farming: Defining the 'offer' in England

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Foreword

Natural England commission a range of reports from external contractors to provide evidence and advice to assist us in delivering our duties. The views in this report are those of the authors and do not necessarily represent those of Natural England.

Background

The Natural Environment White Paper “*The Natural Choice: securing the value of nature*” (Department for Environment, Food and Rural Affairs, 2011) sets out the need to strengthen the connection between people and nature. However, the White Paper also acknowledges that the opportunities to benefit from spending time in the natural environment are currently not open to everyone, which can contribute to health and other inequalities. Natural England is committed to increasing the number and range of people who can experience and benefit from access to the natural environment, and through the Outdoors for All Programme is leading the Government’s ambition that ‘everyone should have fair access to a good quality natural environment’.

Care farms provide health, social and educational care services through supervised, structured programmes of farming-related activities for a wide range of people, including those with learning disabilities, people with Autism Spectrum Disorders (ASD), those with a drug history, people on probation, young people at risk and older people, as well as those suffering from the effects of work-related stress or ill-health or mental health issues. Care farming is a commitment within the White Paper which Natural England supports through the Higher Level Stewardship Educational Access option. See [Natural England - Higher Level Stewardship](#).

The full extent and potential of these valuable care farming services is however not fully understood by relevant bodies that commission these types of services, so Natural England engaged Care Farming UK to undertake a review of the care farming sector to better define the full range of health, social and education services it provides. The findings from this collaborative project with Care Farming UK, the University of Essex and the University of Leeds will be used to inform work underway to drive up standards and to increase the scale and coherence of service provision.

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Further information

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Executive summary

Background

The Natural Environment White Paper “*The Natural Choice: securing the value of nature*” (Department for Environment, Food and Rural Affairs, 2011) sets out the need to strengthen the connection between people and nature, and acknowledges that currently not everyone has the opportunity to spend time in the natural environment, leading to health and other inequalities. Natural England is committed to increasing the number and range of people who can experience and benefit from access to the natural environment, and through the Outdoors for All Programme is leading the Government’s ambition that ‘everyone should have fair access to a good quality natural environment’.

Natural England engaged Care Farming UK to undertake a review of the care farming sector to better define the full range of health and education services provided by the sector, for example support for people with learning difficulties, autism, mental illness and dementia as well as skills training and support for young people at risk and offenders. The findings from this collaborative project with Care Farming UK, the University of Essex and the University of Leeds, will be used to inform work underway to drive up standards and to increase the scale and coherence of service provision, thereby improving the ‘offer’ care farming can make to the relevant health, probation and education commissioning bodies. Care farming is a commitment within the Natural Environment White Paper which Natural England supports through the Higher Level Stewardship Educational Access option. See [Natural England - Higher Level Stewardship](#).

In the UK there are approximately 230 care farms (Care farming UK, 2014) with an additional 25 care farms in the Republic of Ireland (SoFab, 2014). Care farming is defined as the therapeutic use of agricultural landscapes and farming practices (Hassink, 2003; Haubenhofer et al., 2010; Care Farming UK, 2013) and is one of a growing number of nature-based interventions, which provide a range of services for less healthy or vulnerable groups within society. Care farms provide health, social and educational care services through supervised, structured programmes of farming-related activities for a wide range of people, including those with learning disabilities, people with autism spectrum disorders (ASD), those with a drug history, people on probation, young people at risk and older people, as well as those suffering from the effects of work-related stress or ill-health or mental health issues (Hine et al., 2008a; Pederson et al., 2011; Iancu et al., 2013a; Bragg, 2013; Bragg, 2014). All care farms offer some elements of farming (involving crops, horticulture, livestock husbandry, use of machinery or woodland management etc.); but there is much variety across care farms in terms of the context, the client group and the type of farm (Relf, 2006; Hine et al., 2008a ; Sempik et al., 2010; Bragg, 2014).

Methodology

Data available on many aspects of care farming (such as the types of clients currently using care farms, the length of programmes, frequency and duration of visits, and charges) are currently limited and not available for analysis across the country. Natural England and Care Farming UK recognised the need to categorise and bring together the services that care farms offer, and the available evidence of their effectiveness, to inform commissioning bodies. In answer to this need, this research aims to i) categorise and map data for the current provision of care farming services across England; and ii) to make accessible all non-commercially sensitive data and evidence of benefits, to a wider audience, in particular to

commissioners¹. A questionnaire-based approach to the research was taken and a questionnaire (on line and word version) and a supporting structured interview were developed. All known care farmers in England were contacted by email, post or phone, together with a subset of occasional care farmers. Independent researchers from the University of Essex analysed the data and reported the findings.

In this study, a care farm is defined as: *'A care farm utilises the whole or part of a farm to provide health, social or educational care services for one or a range of vulnerable groups of people, providing a supervised, structured programme of farming-related activities, rather than occasional one-off visits'*; and an occasional care farm as: *'farms or nature reserves providing care farm services on an occasional basis'*. The findings of this research are reported according to these two farm classifications.

Key findings

- There were a total of 169 responses to the care farming survey, comprising 142 care farms and 27 occasional care farms. Care farms in England cater for a wide range of vulnerable groups, but the majority of farms provide services for people with learning difficulties (93%), autism spectrum disorders (ASD) (84%), mental ill-health (75%) and young people at risk (64%). Most care farms in England are providing care farming services for at least five or more different participant groups.
- The majority of care farms (90%) reported that they provide social care outcomes for their clients, followed by educational (83%) and health care (80%) outcomes, with most care farms (66%) delivering all three types of outcome.
- Most care farms (82%) provide sessions lasting a full day, approximately half also provide sessions lasting half a day and a third provide a mixture of both. The average care farm provides 5 sessions a week, suggesting that most care farms are offering a day session, five days a week.
- The average number of clients at each care farm per week is 34, although it ranges from 1 to a maximum of 300. Most clients (90%) attend care farms between 1 and 3 times a week. On average care farm programmes last for 30 weeks. Care farmers in this survey stressed that the length of time a client attends a care farm is designed to meet the needs of the client.
- Costs for attending a care farm vary depending on the client's needs and types of services provided, but the mean cost per session for an unsupported client is £48 and for an accompanied client is £47 per session. The majority of care farms include group supervision, drinks and snacks, personal protective equipment and structured activities in the charge and a small proportion of care farms also include meals, qualifications and transport.
- The majority of care farms (76%) are not currently running at full capacity. The current operating capacity of care farms varies but the mean operating capacity is 58%. 91% of care farms said that they would be able to offer more sessions if they had additional resources, i.e. financial resources, extra staff and additional land or buildings.

¹ Commissioners is a broad term for those organisations, and individuals, who pay for the services available from care farms, and include Health & Well-being Boards, Clinical Commissioning Groups, local authorities, Probation Trusts, and organisations that will influence commissioning such as Public Health England

- Funding was identified as the most significant challenge facing care farmers, in addition to securing contracts and recognition of the value of care farms and care farming services.

Discussion

Care farms in England typically provide day sessions for their clients costing around £50 per session, with a client attending regularly between 1-3 times a week, for an average of six and a half months. This review has shown that care farms in England offer multiple social, health and educational outcomes to a wide variety of vulnerable client groups through farming activities. The number of different care farm contexts, offering different activities for many client groups, suggests that the potential for bespoke care is significant. The fact that care farms typically cater for an average of five different client groups at any one time also has positive implications for increased social inclusion and for breaking down barriers and prejudices between social groups. Care farming also provides clients with improvements to multiple health, social and educational outcomes simultaneously, a finding in line with other studies on care farming (Bragg, 2014).

Currently, there are 194 care farms known to be operating in England and 230 in the UK. Given that the care farms in this study provide services for a mean number of 34 clients each a week, we can estimate that 194 care farms provide services for a total of 6,596 vulnerable people per week in England, and 7,820 per week across the UK.

The majority of care farmers in this research stated that their care farm was not currently running at full capacity, with the mean operating capacity standing at 58%. So if all the places at existing care farms were filled, care farms could provide up to 11,376 clients per week with care farming services in England and 13,483 clients per week in the UK. In addition with extra financial resources and an increase in staffing and better physical infrastructure, many care farmers said that they would be able to expand their current provision in the future. There is therefore a significant amount of latent potential for care farming to expand as an option in health, social and educational care.

The findings from this review improves our understanding of the strengths, weaknesses and gaps in the current care farming services provided in England, thereby providing critical information to underpin improvements in the 'offer' to relevant health, probation and education commissioning bodies. Through Care Farming UK², Commissioners and local authorities will have access to new and up to date information regarding the provision of care farming services, which will allow them to better assess current and potential care farming services in their area.

Recommendations

- Although there are 194 care farms currently operating in England, these are not all running at full capacity, suggesting that there is significant latent potential for up-scaling current care farming services.
- Care Farming UK in partnership with the Department of Health, Public Health England, DEFRA, Natural England, the Department of Education and the Ministry of Justice need to develop an integrated, strategic approach to care farming to help drive up the scale and quality of service provision and better targeting those users with the greatest need.
- Networks of care farm practitioners need to be significantly strengthened where they exist, and established in areas where there is greatest need but with no existing support network.

² For more information contact: enquiries@carefarminguk.org

- Whilst there are many different commissioning organisations that currently refer clients to care farms in England, there are likely to be others who are as yet completely unaware of the potential of care farming.
- There is an urgent need to work with health and social care, education and probation commissioning agencies to raise their awareness of care farming services.
- Referral to care farms should be incorporated into health and social care referral systems, particularly in light of the recent changes involving Clinical Commissioning Groups and Health and Wellbeing Boards.
- With the introduction of personal health budgets there is an urgent need for greater support for individuals in receipt of direct payments to better understand the benefits of and secure access to green care treatments.
- There is a need for better quality evaluation to provide information and evidence on care farming service performance in improving health and social outcomes for clients.
- Future studies should incorporate standardised validated measures of client outcomes (such as wellbeing, quality of life, self-efficacy, general health etc.) in order to highlight effectiveness and to allow comparison of care farming with other treatment or care options.
- Closer contact with other countries where the care farming sector is more established, would be very helpful when designing responses to common challenges and opportunities, and to share best practice.

1 Introduction

1.1 Background

Natural England engaged Care Farming UK to undertake a review of the care farming sector to better define the full range of health and education services provided by the sector, for example support for people with learning difficulties, autism, mental illness and dementia as well as skills training and support for young people at risk and offenders. The findings from this collaborative project with Care Farming UK, the University of Essex and the University of Leeds (Appendix 1 for further details), will be used to inform work underway to drive up standards and to increase the scale and coherence of service provision, thereby improving the 'offer' care farming can make to the relevant health, probation and education commissioning bodies. Care farming is a commitment within the Natural Environment White Paper which Natural England supports through the Higher Level Stewardship Educational Access option. See [Natural England - Higher Level Stewardship](#).

1.2 Care farming in the UK and Europe

1.2.1 What is care farming and who is it for?

Care farming (also known as social farming) is defined as the therapeutic use of agricultural landscapes and farming practices (Hassink, 2003; Haubehofer et al., 2010; Care Farming UK, 2013). Care farming is one of a range of nature-based interventions, which provide a range of applications for less healthy or vulnerable groups within society. Such nature-based interventions have been collectively termed 'green care' (Pretty, 2006; Hine et al., 2008a, b; Sempik et al., 2010; Sempik and Bragg, 2013) and include: Social and Therapeutic Horticulture (STH); Animal Assisted Interventions (AAI); care farming; green exercise therapy; ecotherapy; facilitated environmental conservation; and wilderness therapy.

Green care interventions take place in a number of different natural contexts and consequently involve various landscape types, all of which allow slightly different approaches. This results in a wide range of interventions which enables the choice of the most appropriate treatment option for a specific individual as 'bespoke' care. Green care has been described as an 'umbrella' term for a range of nature-based interventions for vulnerable people, which vary depending on the type of natural context (Hine et al., 2008 b). Green care initiatives usually consist of a facilitated, regular and specific intervention, for a particular participant (or group of service users), rather than simply a 'natural' experience for the general public (Sempik et al 2010; Sempik and Bragg, 2013).

There are numerous different green care intervention types, and although the area of green care is very diverse, the common linking ethos is the contact with nature, - using a coherent and deliberate strategy to generate health, social or educational benefits using nature.

On care farms, components of either the whole or part of the farm are used to provide health, social or educational care through a supervised, structured programme of farming-related activities. Such activities can include: animal care (feeding, cleaning, moving livestock); collecting eggs, crop management (sowing, maintenance, harvesting); horticultural activities; land and forest management activities. Care farms provide services for a wide range of people, including those with defined medical or social needs (e.g. psychiatric patients, those suffering from mild to moderate depression, people with learning disabilities, people with autism spectrum disorders (ASD), those with a drug history, people on probation, young people at risk or older people) as well as those suffering from the effects of work-related stress or ill-health (Hine et al., 2008a; Pederson et al., 2011; Lancu et al.,

2013a; Bragg, 2013; Bragg, 2014). All care farms offer some elements of farming (involving crops, horticulture, livestock husbandry, use of machinery or woodland management etc.); but there is much variety across care farms in terms of the context, the client group and the type of farm (Relf, 2006; Hine et al., 2008a; Sempik et al., 2010; Bragg, 2014).

1.2.2 The evidence

Published research on care farming is relatively recent (within the last 10 years), largely originates from The Netherlands and Norway and is comprised of both qualitative and quantitative data from various client groups visiting different types of care farm. Generalised findings imply that many participants benefit from the relationship between the farmer (and their family and other staff); being part of a social community; engaging in meaningful activities in a green environment; and for some the possibility for work opportunities (Berget et al., 2007; Kam and Siu, 2010; Pederson et al., 2011, 2012; Elings, 2012; Iancu et al., 2013a, b). The fact that the farm provides an informal, non-care context which is closer to everyday life than a clinic is also valued (Hassink et al., 2007; Hassink et al., 2010; Bragg et al., 2013; Bragg, 2014).

The literature identifies the following effects on the psychological and social health of participants as measured both with quantitative and qualitative methods: an increase in i) social inclusion; ii) social and work skills; iii) empowerment; iv) social functioning; v) coping ability; vi) social rehabilitation; vii) cognitive functioning and wellbeing; viii) improvements in self-esteem; and ix) mood; and x) reduction in depression and anxiety related symptoms. As with many other forms of green care, there is still a shortage of robust scientific research supporting care farming, despite the large amounts of positive anecdotal and qualitative data.

Natural England and Care Farming UK have commissioned a literature review of all relevant care farming evidence. The Review is being undertaken by researchers from the Universities of Essex, Leeds, Nottingham, Bournemouth and Worcester, Cardiff Metropolitan University together with The Federation of City Farms and Community Gardens, The Bulmer Foundation and Linking Environment and Farming (LEAF), and preliminary findings are shown in Appendix 2.

In addition, a systematic review of care farming research undertaken by a team at the University of Leeds together with colleagues from University of Essex and Wageningen University (The Netherlands) commenced in early 2014, as part of a National Institute Health Research funded research project³. This systematic review (registered with the Campbell Collaboration) focuses on the effectiveness of care farms for improving quality of life in disadvantaged populations (publication expected at the end of 2014).

1.2.3 The scale and context of care farming in Europe

Care farming is a growing treatment option in Europe (Hassink et al., 2006; Haubehofer et al., 2010; Elings, 2012), but the scale and context of care farming in different countries varies widely. The Netherlands leads the way with over 1100 care farms; Norway has over 600; in Belgium, Italy, Austria and Germany there are several hundred (Haubehofer et al., 2010); the UK currently has 230 (Care farming UK, 2014); and in Sweden, Slovenia and Finland, care farming is in the early stages, but numbers are increasing (Haubehofer et al., 2010).

³ For more details of this project see:

http://medhealth.leeds.ac.uk/info/561/research/1045/understanding_the_impacts_of_care_farms_on_health_and_wellbeing

Care farming is a thriving sector and is considered almost 'mainstream' in The Netherlands and Belgium (Haubehofer et al., 2010), compared to other countries where the sector is less developed. In The Netherlands care farming has originated both from the farming and from the healthcare sector; in Norway and Italy care farming is strongly agriculture based (care farming emerged from farming and then linked with healthcare; in comparison to Germany for example, where care farming is strongly healthcare based (care farming arose from healthcare and linked with agriculture).

1.2.4 Care farming in the UK

In the UK there are approximately 230 care farms (Care farming UK, 2014) with an additional 25 care farms in the Republic of Ireland (SoFab, 2014). In the UK, care farming has largely stemmed from agriculture, with links made with health and social care, probation services and other sectors, although a minority of care farms have developed as a response to a need identified by health, education or religious organisations. In Ireland the context appears to be slightly different, as a survey in 2007 estimated there were around 10 private care farms and around 80 institutional farms or sheltered workshops offering care farm type services (McGloin and O Connor, 2007).

There are a number of regional and national care farming organisations which provide supporting services for care farmers in the UK and Ireland and which promote and facilitate the development of care farming. [Care Farming UK](#) is a charity which supports care farmers across the UK (more details see section 1.2) and it has strong links with [Care Farming Scotland](#), which supports care farmers in Scotland and the [Social Farming Across Borders](#) (SoFab) project, which supports care farmers in Northern Ireland and in Eire. Other more informal groups exist in Wales and county groupings and networks are emerging across England, all of which are supported by Care Farming UK.

A wide range of commissioning organisations currently commission care farm services, but the majority of farms have clients referred to them by social services, Community Mental Health Teams and education services; together with clients who are self-referred, referred by family or from 'other' sources (Hine et al., 2008a; Bragg, 2013). Funding sources for care farms therefore vary extensively: care farms access client fees originating from personal budgets; from Local Authority Social Services; self generated funds; charitable trust donations and some care farmers also receive funding for care farm visits through Educational Access payments as part of the Higher Level Stewardship scheme (see section 1.1) (Bragg, 2013).

There is a growing interest in health, social or educational care on farms, and in addition to established care farms, there are an increasing number of more 'mainstream' farms in the UK which are starting to offer care farm type services to vulnerable people on an occasional or ad hoc basis. One project which has supported farmers and nature reserves in offering sensory rich visits for vulnerable and disadvantaged people on their farms has been [Let Nature Feed Your Senses](#) (LNFYS). LNFYS is a project run in partnership by Linking Environment and Farming (LEAF) and The Sensory Trust, and is one of a number of environmentally based projects funded by the Big Lottery Fund's Access to Nature programme⁴. Another Big Lottery funded scheme that has helped a number of farm-based care initiatives emerge is the [Ecominds](#) programme (managed by Mind) which funded 130 environmental projects in England that help people living with mental health problems get involved in green activities to improve confidence, self-esteem, and their physical and mental health.

⁴ managed by Natural England

What is increasingly clear, is that care farming continues to develop across the UK, to provide health (both mental and physical), social and educational benefits through farming, for a wide range of people (Bragg, 2014).

1.3 Methodology

Data available on many aspects of care farming (such as the types of clients currently using care farms, the length of programmes, frequency and duration of visits, and charges) are currently limited and not available for analysis across the country. Natural England and Care Farming UK recognised that work was needed to categorise and brigade the services that care farms offer, and the available evidence, so that it makes sense and is useful to commissioning bodies. In answer to this need, this research was commissioned in order to i) categorise and map data for the current provision of care farming services across England; and ii) to make accessible all non-commercially sensitive data and evidence of benefits, to a wider audience, in particular to commissioners⁵. A questionnaire-based approach to the research was taken.

1.3.1 Formulation of questionnaire and sampling strategy

A questionnaire and a supporting structured interview were developed, based on a refined version of questions used in a pilot survey undertaken by LNFYS and questions identified by Care Farming UK and the wider care farming research group. The questionnaire was then developed using Survey Monkey and a covering letter and link to the online survey were subsequently emailed to farmers by Care Farming UK in January 2014. All known care farmers in England, as identified by the Care Farming UK database, were contacted, together with a subset of occasional care farmers as identified by the Care Farming UK database and the LNFYS project.

A reminder email or postal letter was sent out to those who did not respond to the survey after two weeks, followed by a standardised telephone interview (mirroring the online questionnaire) conducted with non-respondents after that. The telephone interviews and data entry were carried out by an experienced former staff member of Care Farming UK and data were collated by Survey Monkey in a series of Microsoft Excel spreadsheets. Independent researchers from the University of Essex exported the data and transferred data to an SPSS database for sorting and analysis. The University of Essex analysed the data and reported the findings, before distributing the draft report to the wider group for comment and editing.

1.3.2 Definition of care farm and occasional care farm

It was necessary to agree a clear definition of what constitutes both a 'care farm' and an 'occasional care farm' for the purposes of this study, to allow for clear comparisons across provision. As a result a care farm has been defined as:

'A care farm utilises the whole or part of a farm to provide health, social or educational care services for one or a range of vulnerable groups of people, providing a supervised, structured programme of farming-related activities, rather than occasional one-off visits'

and an occasional care farm as:

'farms or nature reserves providing care farm services on an occasional basis'.

⁵ Commissioners is a broad term for those organisations, and individuals, who pay for the services available from care farms, and include Health & Well-being Boards, Clinical Commissioning Groups, local authorities, Probation Trusts, and organisations that will influence commissioning such as Public Health England

The findings of this research are therefore split and reported according to these two farm classifications.

2 Results of survey

2.1 Number and type of farm included in the survey

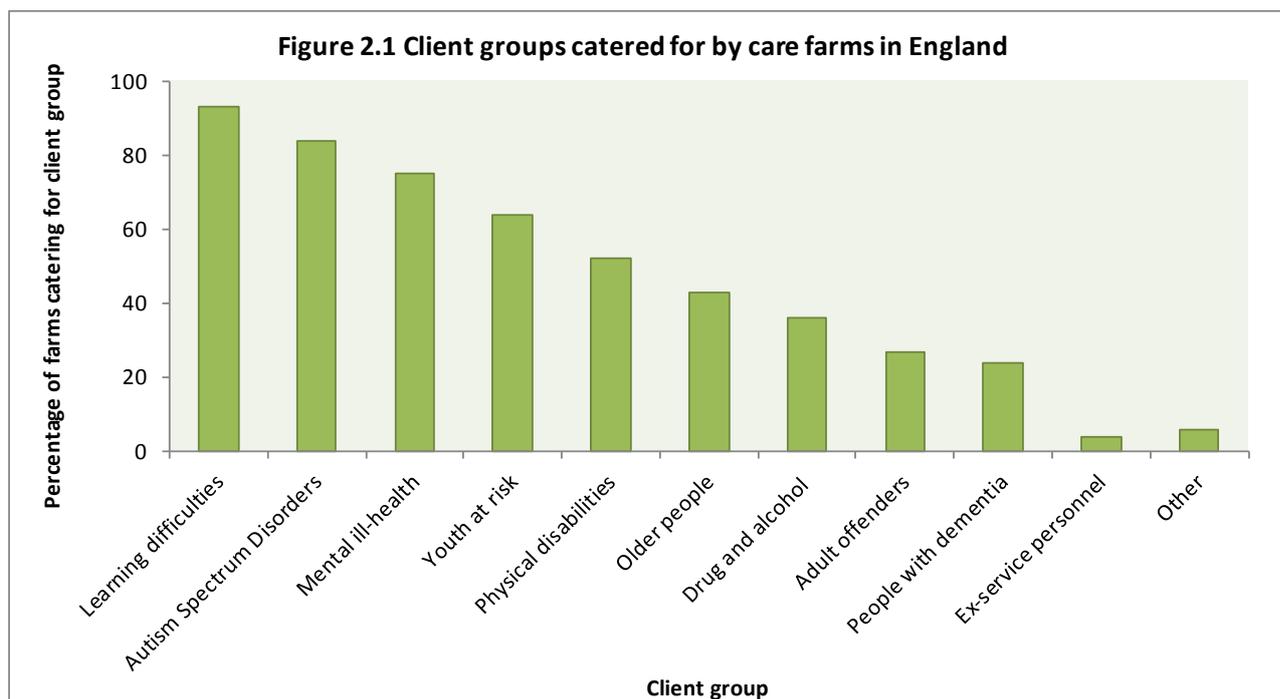
A total of 169 farms responded to the survey. The majority are care farms (84%; n=142), whilst 16% (n=27) are occasional care farms. The survey response rate from care farms was 73%, with 142 of the total 194 care farms in England completing the questionnaire. 242 farms thought to be providing occasional care farming services in England and Wales were contacted, and 27 of these farms completed a questionnaire, representing a response rate of approximately 11%⁶. The regional distribution of care farms across England can be seen at: <http://www.carefarminguk.org/map>.

2.2 Client groups

The care farms in the survey were asked to identify the participant groups for whom they provide care farming services.

2.2.1 Care farms

The majority of care farms in England provide services for people with learning difficulties (93%), autism spectrum disorders (84%), mental ill-health (75%) and young people at risk (64%) – as shown in Figure 2.1 and Table 2.1.



Those care farms that identified that they provided services for ‘other’ groups, said they also provided services for people suffering from brain injuries, vulnerable mothers and families, the homeless and the long term unemployed. The number of different client groups that care farms cater for varied between 1 and 10, the mean being 5. 63% of care farms in England are providing care farming services for at least five or more different participant groups.

⁶ It must be noted however that the 27 represents the farms in England who responded, there were responses from farms in Wales (n=1) but these are beyond the remit of this particular study

Table 2.1 Client groups attending care farms

Client Group	Percentage of Care Farms	Client Group	Percentage of Care Farms
People with learning difficulties	93%	Drug and alcohol problems	36%
Autism spectrum disorders	84%	Adult offenders	27%
People with mental ill-health	75%	People with dementia	24%
Young people at risk	64%	Ex-service personnel	4%
Physical disabilities	52%	Other	6%
Older people	43%		

Note: Percentage of Care Farms represents the percentage of care farms catering for each group (N=142).

2.2.2 Occasional care farms

The majority of occasional care farms also said that they provide services for people with learning difficulties (74%), those with mental ill-health (70%) and young people at risk (67%). Over half of occasional care farms also cater for those with autistic spectrum disorders and for older people (both at 56%). The number of different client groups that occasional care farms cater for varies from 1 to 8 with the average being 4 groups. As with care farms, the majority of occasional care farms (66%) provide care farming services for five or more different participant groups.

2.3 Care farm outcomes

As part of the survey farms were also asked to identify whether they were providing health care, social care or educational outcomes for their clients.

2.3.1 Care farms

The majority of care farms (90%) reported that they provide social outcomes for their clients, followed by educational (83%) and health (80%) outcomes. Over 66% of care farms deliver all three types of outcome.

2.3.2 Occasional care farms

The majority of occasional care farms (92%) reported that they provide educational outcomes for their clients, followed by health (85%) and social (77%) outcomes.

2.4 About the care farm sessions and programmes

Care farmers were asked several details about the types of care farming sessions they provide including the length of a typical session, how many sessions they are able to provide each week, how many clients they cater for on a weekly basis and also the average duration of the care farm programme.

2.4.1 Length of care farm session

Care farms

Of the care farms who responded to this question (n=131), the majority of care farms (82%) provide sessions lasting a full day, approximately half also provide sessions lasting half a day (51%), and 34% provide a mixture of both.

Occasional care farms

By contrast, most occasional care farmers (86%) told us their sessions typically last for half a day rather than for a full day.

2.4.2 Number of care farming sessions provided in a week

Care farmers were asked to indicate how many care farming session times they provide on their farms per week and how many clients attend the care farm in a typical week.

Care farms

The number of weekly care farming sessions held by the care farms varies from 1 to 18 with a mean of 5 sessions a week.

The majority (94%) of care farmers currently offer between 1 and 10 sessions a week. Given that the majority of care farms offer full day sessions, this suggests that most care farms are offering a day session, five days a week.

Occasional care farms

Perhaps unsurprisingly given that these are termed 'occasional' care farms, these farms provide less care farming sessions, with the majority (93%) of occasional farms providing 3 or less sessions a week, with a mean of 2 sessions a week.

2.4.3 Number of clients attending care farms per week

The care farms were asked on average how many clients attended their farm each week.

Care farms

The mean number of clients catered for at each care farm per week is 34, although it ranges from 1 to a maximum of 300. The majority of care farms (80%) see up to 50 clients a week but 4 care farms cater for over 100 clients per week.

Occasional care farms

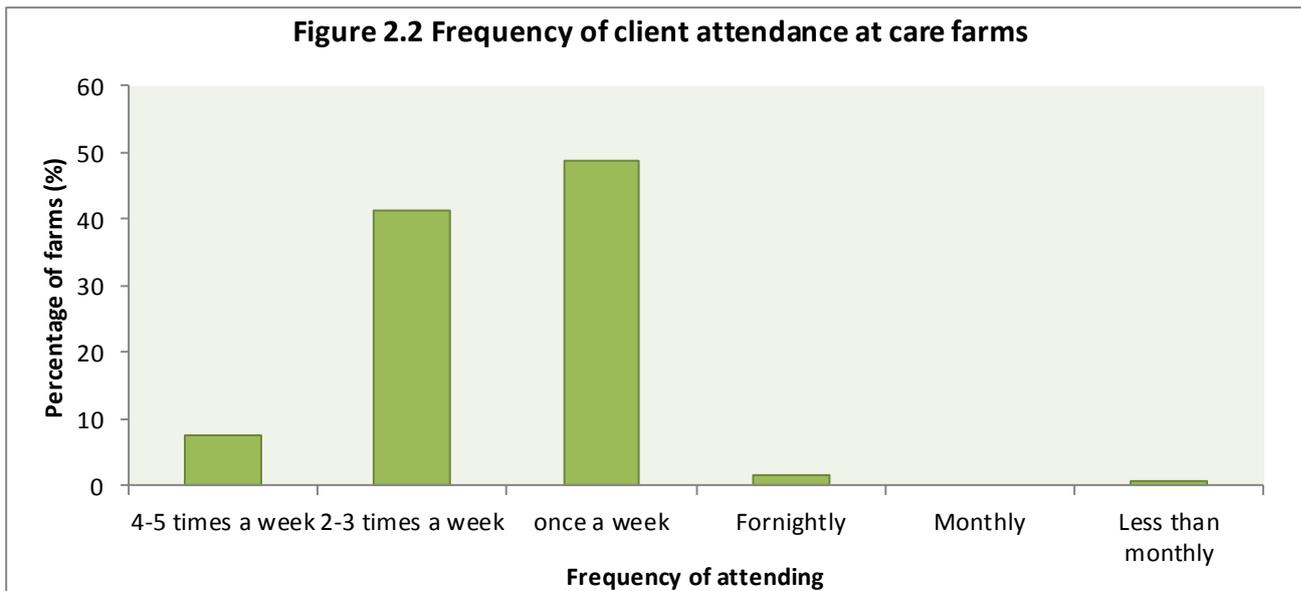
Occasional care farms cater for between 1 and 100 clients per week with an average of 14 each week and the majority (95%) cater for up to 30 clients in a week.

2.4.4 Frequency of attending and duration of care farm programme

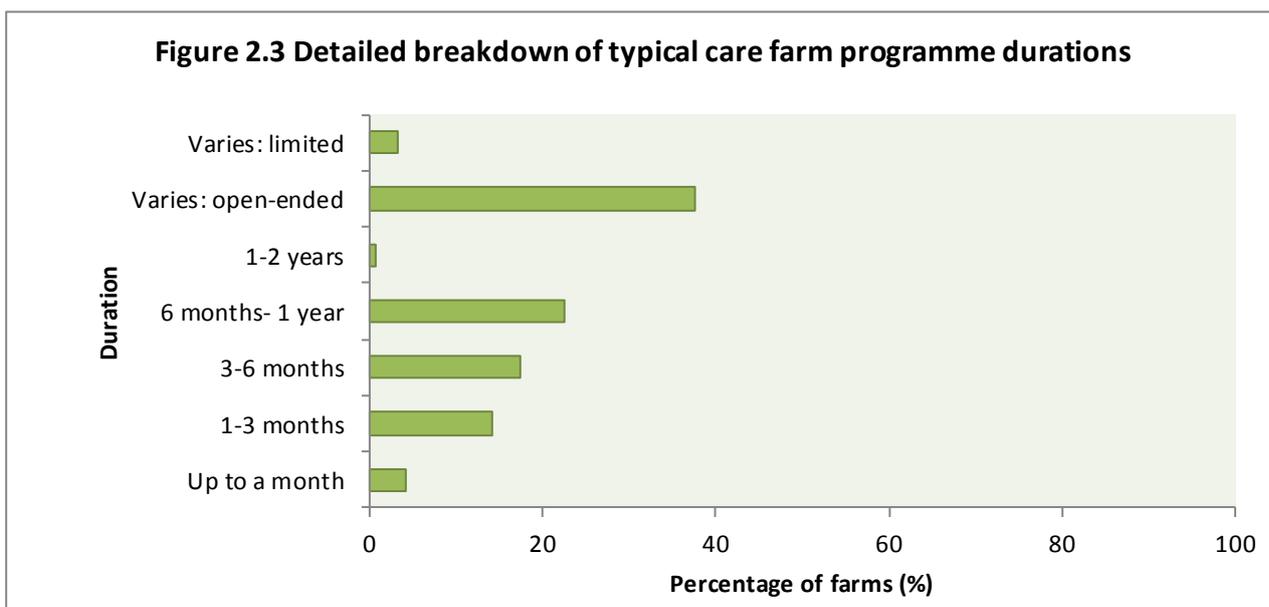
Care farmers were asked how frequently their clients typically attended their care farm. Each farm was also asked the length of a typical care farming programme in weeks (where ranges were provided, the midpoint of this range was taken).

Care farms

The majority of clients (90%) attend care farms between 1 and 3 times a week (Figure 2.2). In terms of care farm programme duration this varies from 1 week to over 2 years, but on average care farm programmes last for 30 weeks with 98% lasting for a year or less. However many care farmers did stress that the length of time a client attends a care farm for varies from person to person and that the emphasis is on determining the appropriate duration for each client on an individual basis (i.e. that participants are enrolled on a programme for as long as they need).



Those care farms which provided varied programme lengths but of a limited duration, stated that their programme could last up to 3 years. A further breakdown of care farm duration is shown in Figure 2.3.



Occasional care farms

At the occasional care farms, the majority of participants visited either once a week or less. Those who visited ‘less than monthly’ were reported to visit either as a ‘one off’ visit or between one and three times a year. The duration of the programme varied from between 1 and 30 weeks with an average of 12 weeks (3 months).

2.5 Cost of care farming sessions and activities included in the cost

Each farm was asked the cost of each care farming session, including costs for unsupported or unaccompanied clients and for clients who are supported (i.e. attend with a carer). In addition, care farmers were asked which services these charges included.

2.5.1 Cost of care farm session

Care farms

The cost per session for an unsupported client ranged from no charge to £300 per session, with a mean charge of £48. Costs for supported clients were similar ranging from no charge to £275 with a mean charge of £47 per session.

Occasional care farms

The cost per session for an unsupported client ranged from no charge to £220 per session, with a mean charge of £42. Costs for supported clients were less, ranging from no charge to £150 with a mean charge of £16 per session.

2.5.2 Activities included in the care farm session

Care farms

The majority of care farms include group supervision, drinks and snacks, personal protective equipment and structured activities. A small proportion of care farms include meals, qualifications and transport (Figure 2.4 and Table 2.2). Approximately 8% of care farms include other activities in the price, such as: psychotherapy or occupational therapy, produce to take home, mentoring, social events, arts and crafts, work experience and cookery sessions.

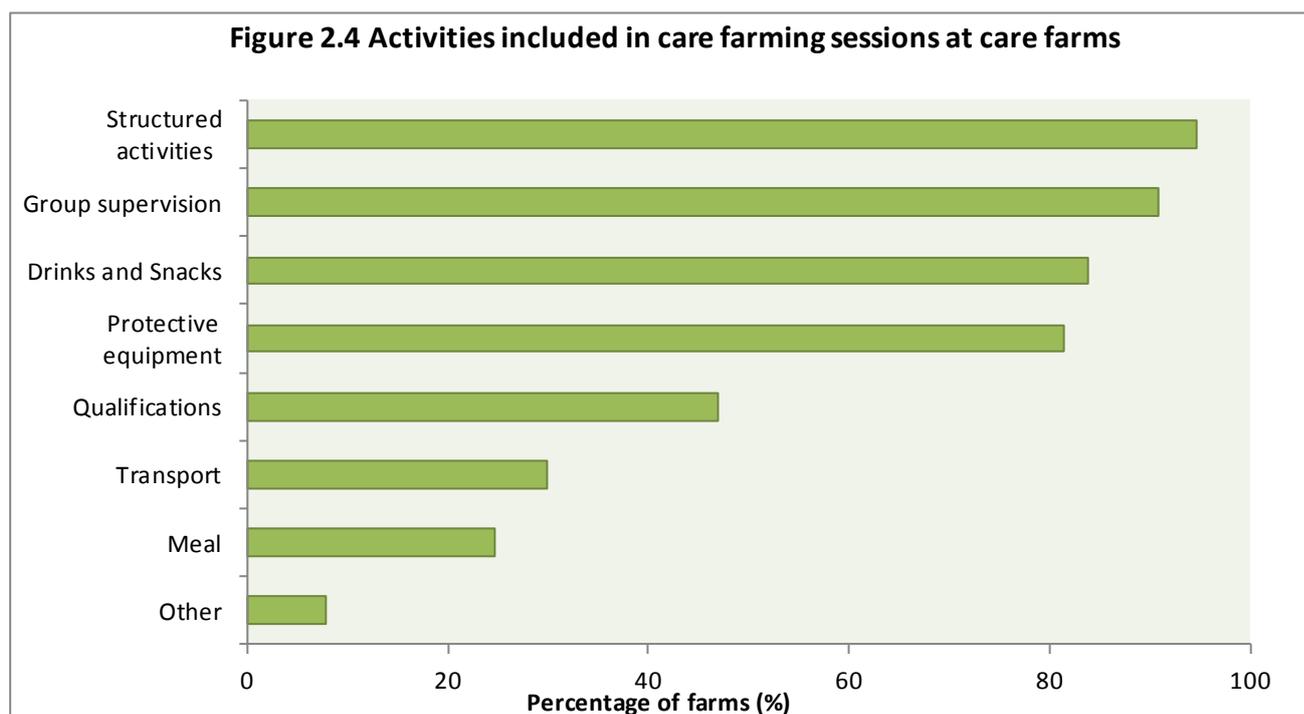


Table 2.2 Proportion of care farms including particular activities and services within the session charge

Activities included	Care farms (%)	Activities included	Care farms (%)
Structured activities	95	Qualifications	47
Group supervision	91	Transport	30
Drinks and Snacks	84	Meal	25
Protective equipment	82	Other	8

Occasional care farms

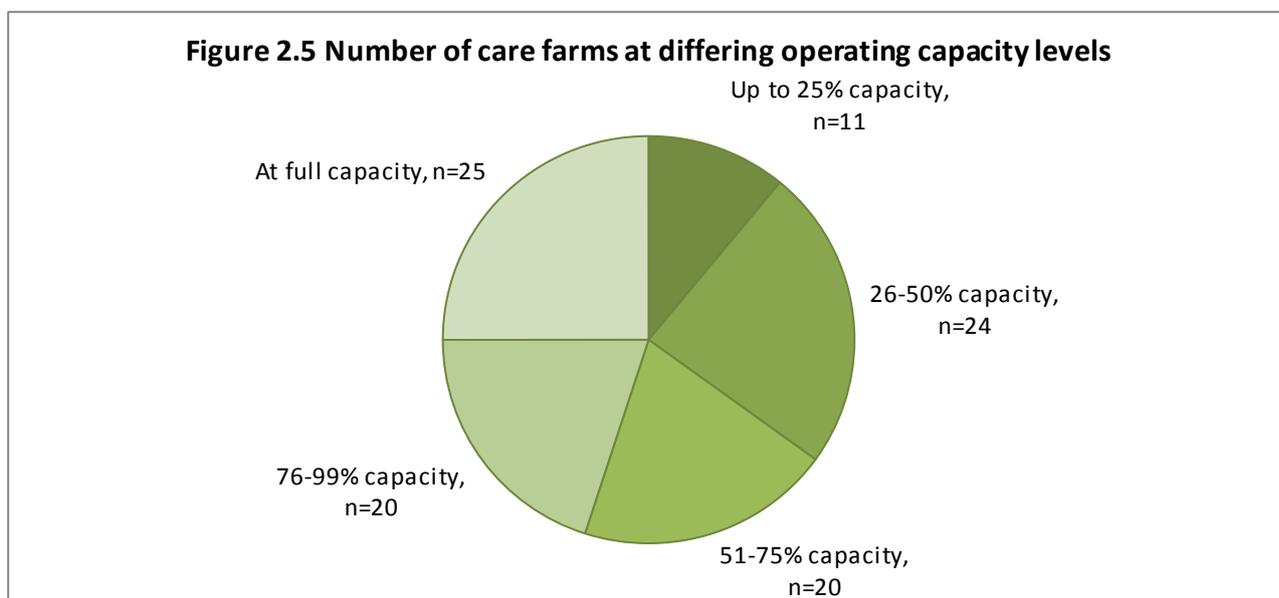
In contrast, occasional care farms tend to include group supervision, drinks and snacks and supervised activities. Few include a meal, personal protective equipment, transport or qualifications. Only 4% of occasional care farms said that other services are included in the cost.

2.6 Care farm capacity and additional resources

All farms were asked i) if they are currently operating at their full capacity; ii) if not at full capacity, what proportion of their capacity they are operating; and iii) whether they would be able to offer more sessions if they had further resources. Farmers were then asked specifically whether additional land or buildings, staff or financial resources would enable them to provide more sessions

2.6.1 Care farms

The majority of care farms (n=99; 76%) are not currently running at full capacity, and 32 (24%) are at capacity (Figure 2.5).



Care farmers who stated that they were not running at full capacity at the present time, said if they could fill the empty client places, they would be able to cater for more clients on existing resources. Those care farms which are not currently running at full capacity varied in being at between 4% to 97% capacity, with a mean capacity of 58%.

Furthermore, the vast majority (91%) of care farms said that they would be able to offer more sessions if they had additional resources. In terms of additional resources, most care farmers said that in order to further increase capacity, they would need more financial resources (85%) and staff (84%) and 43% highlighted the need for additional land or buildings.

Some care farmers (6%) also said that there were other resources they would need including resources for agricultural plans, clients and long term contracts, council referrals, support from professional bodies and additional farm machinery.

2.6.2 Occasional care farms

The majority of occasional care farms in this survey (n=23; 92%) are also not currently running at full capacity, and only 2 (8%) are at capacity. Occasional care farms which were not at full capacity varied in being at between 2% to 80% capacity, with a mean capacity of 31%. 80% of occasional care farms said that they would be able to offer more sessions if they had additional resources. In terms of additional resources, most occasional care farmers said that in order to further increase capacity, they would need more financial resources (91%) and staff (76%) and 10% highlighted the need for additional land or buildings.

2.7 Challenges to Care Farming

Finally, care farmers and occasional care farmers were asked to identify the three main challenges to care farming in England, in their own words. All responses from care farmers and occasional care farmers are displayed by theme below. For care farmers, funding was identified as the most significant challenge to care farming services, in addition to securing contracts and recognition of the value of care farms and care farming services. Similarly, for occasional care farmers, funding was a key challenge, along with availability of appropriate land and buildings and transportation of clients to farms.

2.7.1 Funding issues

Comments relating to funding issues facing care farms are shown in Box 2.1.

Box 2.1 Comments from farmers relating to funding issues facing care farms

<p style="text-align: center;">Care farms:</p> <p style="text-align: center;"><i>“Funding, especially re social services clients”</i></p> <p style="text-align: center;"><i>“Payment on time”</i></p> <p style="text-align: center;"><i>“County council affecting direct payments”</i></p> <p style="text-align: center;"><i>“Cutting of public funding through direct payments”</i></p> <p style="text-align: center;"><i>“Reduction in daily rate paid by authorities”</i></p> <p style="text-align: center;"><i>“Under cutting each other”</i></p> <p style="text-align: center;"><i>“Clients obtaining funding”</i></p> <p style="text-align: center;"><i>“Funding to provide more access for wheelchair users”</i></p> <p style="text-align: center;"><i>“Maintaining levels of funding for the long term”</i></p> <p style="text-align: center;"><i>“Funding for new service users”</i></p> <p style="text-align: center;"><i>“Jumping through funding bodies hoops”</i></p> <p style="text-align: center;"><i>“Unable to secure additional funds from charities/trusts and through donations”</i></p> <p style="text-align: center;"><i>“Cuts in funding for youth contracts”</i></p> <p style="text-align: center;"><i>“Moving from grant funding to contract/personal budget funding”</i></p> <p style="text-align: center;"><i>“Establishing clear funding schemes”</i></p> <p style="text-align: center;"><i>“High cost of animal care”</i></p> <p style="text-align: center;"><i>“Sustainability”</i></p> <p style="text-align: center;">Occasional care farms:</p> <p style="text-align: center;"><i>“Financial support”</i></p> <p style="text-align: center;"><i>“Lack of sustainable funding”</i></p> <p style="text-align: center;"><i>“Creating a clear business plan with financial viability”</i></p> <p style="text-align: center;"><i>“Loss of grant funding”</i></p>

2.7.2 Contracts and clients

Comments from farmers relating to contacts and clients are shown in Box 2.2.

Box 2.2 Comments from farmers relating to contract and client issues facing care farms and occasional care farms

<p style="text-align: center;">Care farms:</p> <p style="text-align: center;"><i>“Possible withdrawal of social services contracts”</i></p> <p style="text-align: center;"><i>“Clients losing interest due to waiting too long for funding”</i></p> <p style="text-align: center;"><i>“Recent reorganisation of mental health-care teams”</i></p> <p style="text-align: center;"><i>“Low numbers may mean we have to close”</i></p> <p style="text-align: center;"><i>“Council strategy”</i></p> <p style="text-align: center;"><i>“Failure of commissioning services to take up opportunities”</i></p> <p style="text-align: center;"><i>“Lack of regular business”</i></p> <p style="text-align: center;"><i>“Adult placements are disappearing as they are unable to get funding”</i></p> <p style="text-align: center;"><i>“Low levels of statutory support in the form of contract income or grants”</i></p> <p style="text-align: center;">Occasional care farms:</p> <p style="text-align: center;"><i>“Liaison with commissioning groups”</i></p> <p style="text-align: center;"><i>“Connecting with appropriate clients”</i></p>

2.7.3 Recognition of the value of care farming services

Comments relating to recognising the value of care farming services as related by care farms and occasional care farms are shown in Box 2.3.

Box 2.3 Comments from farmers relating to recognising the value of care farms

<p style="text-align: center;">Care farms:</p> <p style="text-align: center;"><i>“GP’s not recognising the purpose and value of care farms”</i></p> <p style="text-align: center;"><i>“An umbrella organisation to direct clients to suitable provision”</i></p> <p style="text-align: center;"><i>“Lack of knowledge by care commissioners”</i></p> <p style="text-align: center;"><i>“Care farm provision still needs acceptance by those in mental health as a valid provision”</i></p> <p style="text-align: center;"><i>“Acknowledgement of the value of care farming”</i></p> <p style="text-align: center;"><i>“Making people aware that we exist”</i></p> <p style="text-align: center;"><i>“Public knowledge of care farming”</i></p> <p style="text-align: center;"><i>“Raising awareness to identify the provision of care farming especially with social services and sub-contractors”</i></p> <p style="text-align: center;"><i>“Limited support for care farming within our commission services”</i></p> <p style="text-align: center;"><i>“Lack of regional support/understanding of care farming”</i></p> <p style="text-align: center;"><i>“Convincing providers of the benefits”</i></p> <p style="text-align: center;">Occasional care farms:</p> <p style="text-align: center;"><i>“Being recognised for all the potential value on offer”</i></p> <p style="text-align: center;"><i>“Communicating our purpose effectively”</i></p> <p style="text-align: center;"><i>“Advertising”</i></p> <p style="text-align: center;"><i>“Problems with promoting/marketing”</i></p>
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2.7.4 Staffing

Comments relating to staffing issues facing care farms and occasional care farms are shown in Box 2.4.

Box 2.4 Comments from farmers relating to staffing issues facing care farms and occasional care farms

<p style="text-align: center;">Care farms:</p> <p style="text-align: center;"><i>“Having the right volunteers or being able to employ people”</i> <i>“Finding good, well-trained staff”</i> <i>“Funding for quality and well-trained staff”</i> <i>“Finding the right staff to support the clients”</i></p> <p style="text-align: center;">Occasional care farms:</p> <p style="text-align: center;"><i>“Training for staff required”</i> <i>“Building a team who will work together”</i> <i>“Funding to train existing staff”</i> <i>“Not being allowed to have volunteers to help”</i> <i>“Funding staff time”</i></p>
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2.7.5 Land and buildings

Comments relating to land and building issues facing care farms and occasional care farms are shown in Box 2.5.

Box 2.5 Comments from farmers relating to land and building issues facing care farms and occasional care farms

<p style="text-align: center;">Care farms:</p> <p style="text-align: center;"><i>“Possible industrial development on adjacent field”</i> <i>“Land resources to give more space to expand”</i> <i>“Adequate animal enclosures”</i> <i>“Financial resources to maintain buildings and make them fit for purpose”</i> <i>“Converting some of the buildings to make them suitable for the activities we have in mind”</i> <i>“Planning permission for new buildings”</i></p> <p style="text-align: center;">Occasional care farms:</p> <p style="text-align: center;"><i>“Providing suitable under-cover/indoor areas when weather is bad”</i> <i>“Old farm buildings need developing”</i> <i>“Space”</i> <i>“Facilities not great in bad weather/winter which restricts our availability”</i> <i>“Making the site more accessible”</i> <i>“Finding a suitable plot”</i></p>
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2.7.6 Transportation issues

Comments relating to transportation issues facing care farms and occasional care farms are shown in Box 2.6.

Box 2.6. Comments from farmers relating to transport issues facing care farms and occasional care farms

<p style="text-align: center;">Care farms:</p> <p style="text-align: center;"><i>“Local push from authority to cut transport charge or use public transport in a rural area”</i> <i>“Covering the cost of transport, many of our service users are unable to use public transport”</i> <i>“Lack of public transport”</i> <i>“Local transport as in very rural area”</i> <i>“Transport to our care farm”</i></p> <p style="text-align: center;">Occasional care farms:</p> <p style="text-align: center;"><i>“Transport costs for groups visiting”</i> <i>“Transport for groups”</i> <i>“Travel time from schools”</i> <i>“getting people here”</i> <i>“Cost of transport”</i></p>

2.7.7 Weather and other issues

Comments relating to weather and other issues facing care farms and occasional care farms are shown in Box 2.7.

Box 2.7 Comments from farmers relating to weather and other issues facing care farms and occasional care farms

<p style="text-align: center;">Care farms: <i>“Very muddy site in wet weather”</i> <i>“Continuous rain”</i> <i>“Wind! And funding to create more windbreaks to create more growing areas”</i></p> <p style="text-align: center;">Occasional care farms: <i>“Weather”</i> <i>“Innovative ideas for winter months”</i> <i>“Finding the time to organise each visit”</i> <i>“Limited time and space”</i></p>

2.8 Key Findings

- There were a total of 169 responses to the care farming survey, comprising 142 care farms and 27 ‘farms or nature reserves providing care farm services on an occasional basis’. The survey response rate from care farms was high at 73%, which represents 142 of the total 194 care farms in England having completed the questionnaire.
- Care farms in England cater for a wide range of vulnerable groups, but the majority of farms provide services for people with learning difficulties (93%), autism spectrum disorders (ASD) (84%), mental ill-health (75%) and young people at risk (64%). Most care farms in England are providing care farming services for at least five or more different participant groups.
- The majority of care farms (90%) reported that they provide social care outcomes for their clients, followed by educational (83%) and health care (80%) outcomes, with most care farms (66%) delivering all three types of outcome.
- The majority of care farms (82%) provide sessions lasting a full day, approximately half also provide sessions lasting half a day and a third provide a mixture of both. The average care farm provides 5 sessions a week, suggesting that most care farms are offering a day session, five days a week.
- The mean number of clients at each care farm per week is 34, although it ranges from 1 to a maximum of 300. Most clients (90%) attend care farms between 1 and 3 times a week. In terms of care farm programme duration this varies, but on average care farm programmes last for 30 weeks. Care farmers in this survey stressed that the length of time a client attends a care farm varies from person to person and that the emphasis is on determining the duration to meet the needs of the client on a case by case basis.
- Costs for attending a care farm vary depending on the client’s needs and types of services provided, but the mean cost per session for an unsupported client is £48 and for an accompanied client is £47 per session. The majority of care farms include group supervision, drinks and snacks, personal protective equipment and structured activities in the charge and a small proportion of care farms also include meals, qualifications and transport.

- The majority of care farms (76%) are not currently running at full capacity. The current operating capacity of care farms varies but the mean operating capacity is 58%. 91% of care farms said that they would be able to offer more sessions if they had additional resources, i.e. financial resources, extra staff and additional land or buildings.
- Funding was identified as the most significant challenge facing care farmers, in addition to securing contracts and recognition of the value of care farms and care farming services.

3 Discussion and recommendations

3.1 Discussion

In comparing the results of this survey to a survey of care farmers carried out by Care Farming UK and the University of Essex in 2012 (Bragg, 2013), it has been shown that numbers of care farms in England and the UK have continued to grow. In addition there has been an increasing interest in care farming by the farming sector and a rise in the number of farmers wanting to provide care farm services on an occasional or ad hoc basis (Bragg et al., 2012). Although this research accessed the majority (if not all) of the care farms in England, it is likely that it has reached only a sample of the occasional care farmers, providing farm-based services less frequently.

Although there is much variation, care farms in England typically provide day sessions for their clients costing around £50 per session, with a client attending regularly between 1-3 times a week, for an average of six and a half months. This review has shown that care farms in England offer multiple social, health and educational outcomes to a wide variety of vulnerable client groups through farming activities. The number of different care farm contexts, offering different activities for many client groups, suggests that the potential for bespoke care is significant. The fact that care farms typically cater for an average of five different client groups at any one time also has positive implications for increased social inclusion and for breaking down barriers and prejudices between social groups.

This review has found that care farming can potentially provide clients with improvements to multiple health, social and educational outcomes at the same time, a finding in line with other studies on care farming (Bragg, 2014). However this factor is often not taken into account by the traditional measures of 'success' applied to conventional healthcare, social care or educational interventions available (Bragg et al., 2013).

The results of this study could be extrapolated to provide an estimate of the extent of care farming in England and also for the whole of the UK. Currently, there are 194 care farms known to be operating in England and 230 in the UK. Given that the care farms in this study provide services for a mean number of 34 clients each a week, 194 care farms provide services for an estimated total of 6,596 vulnerable people per week in England, and 7,820 per week across the UK.

Furthermore, the majority of care farmers in this research stated that their care farm was not currently running at full capacity, with the mean operating capacity standing at 58%. So if all the places at existing care farms were filled, care farms could provide up to 11,376 clients per week with care farming services in England and 13,483 clients per week in the UK. In addition with extra financial resources and an increase in staffing and better physical infrastructure, many care farmers said that they would be able to expand their current provision in the future. There is therefore a significant amount of latent potential for care farming to expand as an option in health, social and educational care.

The findings from this review improves our understanding of the strengths, weaknesses and gaps in the current care farming services provided in England, thereby providing critical information to underpin improvements in the 'offer' to relevant health, probation and education commissioning bodies. Through Care Farming UK⁷, Commissioners and local authorities will have access to new and up to date information regarding the provision of care farming services, which will allow them to better assess how to access the current and

⁷ For more information contact: enquiries@carefarminguk.org

potential care farming services in their area. In addition, it is anticipated that as a result of this increased information given to commissioners, that care farmers will be better engaged in appreciating how to present their offers and updating information on the availability of their services. Researchers and other interested parties (including clients and their families) will also have access to new data gathered from across England, increasing the understanding and promotion of care farming provision still further.

3.2 Recommendations

- Although there are 194 care farms currently operating in England, these are not all running at full capacity, suggesting that there is significant latent potential for up-scaling current care farming services.
- Care Farming UK in partnership with the Department of Health, Public Health England, DEFRA, Natural England, the Department of Education and the Ministry of Justice need to develop an integrated, strategic approach to care farming to help drive up the scale and quality of service provision and better targeting those users with the greatest need.
- Networks of care farm practitioners need to be significantly strengthened where they exist, and established in areas where there is greatest need but with no existing support network.
- Whilst there are many different commissioning organisations that currently refer clients to care farms in England, there are likely to be others who are as yet completely unaware of the potential of care farming.
- There is an urgent need to work with health and social care, education and probation commissioning agencies to raise their awareness of care farming services.
- Referral to care farms should be incorporated into health and social care referral systems, particularly in light of the recent changes involving Clinical Commissioning Groups and Health and Wellbeing Boards.
- With the introduction of personal health budgets there is an urgent need for greater support for individuals in receipt of direct payments to better understand the benefits of and secure access to green care treatments.
- There is a need for better quality evaluation to provide information and evidence on care farming service performance in improving health and social outcomes for clients.
- Future studies should incorporate standardised validated measures of client outcomes (such as wellbeing, quality of life, self-efficacy, general health etc.) in order to highlight effectiveness and to allow comparison of care farming with other treatment or care options.
- Closer contact with other countries where the care farming sector is more established, would be very helpful when designing responses to common challenges and opportunities, and to share best practice.

4 References

- Berget, B., and Braastad, B. O. (2011). Animal-assisted therapy with farm animals for persons with psychiatric disorders. *Ann Ist Super Sanità*, 47(4), 384-390.
- Berget, B., Ekeberg, O., and Braastad, B. O. (2008a). Animal-assisted therapy with farm animals for persons with psychiatric disorders: Effects on self-efficacy, coping ability and quality of life, a randomized controlled trial. *Clinical Practice and Epidemiology in Mental Health*, 4 (9).
- Berget, B., Ekeberg, O., and Braastad, B. O. (2008b). Attitudes to animal-assisted therapy with farm animals among health staff and farmers. *Journal of Psychiatric and Mental Health Nursing*, 15, 576–581.
- Berget, B., Ekeberg, O., Pedersen, I., and Braastad, B. O. (2011). Animal-Assisted Therapy with Farm Animals for Persons with Psychiatric Disorders: Effects on Anxiety and Depression, a Randomized Controlled Trial. *Occupational Therapy in Mental Health*, 27, 50–64.
- Berget, B., Skarsaune, I., Ekeberg, O., and Braastad, B. (2007). Humans with Mental Disorders Working with Farm Animals: A Behavioral Study. *Occupational Therapy in Mental Health*, 23(2), 101-117.
- Bragg, R. (2013). *Care farming in the UK – Key Facts and Figures*. Summary report for Natural England. Colchester, University of Essex.
- Bragg, R. (2014). *Nature-based interventions for mental wellbeing and sustainable behaviour: the potential for green care in the UK*. PhD Thesis (unpublished). Colchester, University of Essex.
- Bragg, R., Wood, C., Barton, J. and Pretty, J. (2012). *Let Nature Feed Your Senses: Engaging people with nature, food and farming*. University of Essex Report for LEAF, Stoneleigh: LEAF.
- Bragg, R., Wood, C. and Barton, J. (2013). *Ecominds: Effects on Mental Wellbeing*. London: Mind.
- Care Farming UK. (2013) Website: <http://www.carefarminguk.org/>
- De Bruin, S.R., Oosting, S.J., Tobi, H., Blauw, Y.H., Schols, J.M., De Groot, C.P. (2010). Day care at green care farms: A novel way to stimulate dietary intake of community-dwelling older people with dementia? *J Nutr Health Aging*. 14(5), 352-357.
- Defra. (2011a). *The natural choice: securing the value of nature*, Natural Environment White Paper. London: The Stationery Office.
- Elings, M., Haubenhof, D., Hassink, J., Rietberg, P and Michon, H. (2011). *Effecten van zorgboerderijen en andere dagbestedingsprojecten voor mensen met een psychiatrische of verslavingszorgachtergrond*.
- Elings, M. (2012). *Effects of Care Farms: Scientific research on the benefits of care farms to clients*, Task Force Multifunctional Agriculture, Plant Research International, Trimbos Institute and Practikon/Radboud University. Wageningen UR.
- Elings, M., and Hassink, J. (2008). Green care farms, a safe community between illness or addiction and the wider society. *International Journal of Therapeutic Communities*, 29, 310-321.
- Elings, M., Haubenhof, D., Hassink, J., Rietberg, P. and Michon, H. (2011). *Effecten van zorgboerderijen en andere dagbestedingsprojecten voor mensen met een psychiatrische of verslavingszorgachtergrond*. Wageningen: Plant Research. Cited in Elings, M. (2012) (as above). International en Trimbos-instituut.
- Gonzalez, M., Hartig, T., Patil, G., Martinsen, E. and Kirkevold, M. (2009). Therapeutic Horticulture in Clinical Depression: A Prospective Study. *Research and Theory for Nursing Practice: An International Journal*, Vol. 23,4 312-328.

- Hassink, J. and van Dijk, M. (eds). (2006). *Farming for Health: Green-care farming across Europe and the United States of America*. Springer. Dordrecht. Also available at website: http://library.wur.nl/frontis/farming_for_health/
- Hassink, J. (2003). Combining agricultural production and care for persons with disabilities: a new role of agriculture and farm animals. Wageningen University, Netherlands In: A.Cirstovao and L.O. Zorini (Eds), *Farming and Rural Systems Research and Extension. Local identities and Globalisation*. Fifth IFSA European Symposium, 8-11 April 2002, Florence. Agenzia Regionale per lo Sviluppo e l'Innovazione nel Settore Agro-forestale della Regione Toscana (ARSIA) Florence, pp. 332–341.
- Hassink, J., R. de Meyer, P. van der Sman & J. Veerman. (2011). Effectiviteit van ervaren leren op de boerderij. *Tijdschrift voor de Orthopedagogiek* 50 (2):51-63; Cited in Elings, M. (2012) (see above).
- Hassink, J., Elings, M., Zweekhorst, M., van den Nieuwenhuizen, N., and Smit, A. (2010). Care farms in the Netherlands: Attractive empowerment-oriented and strengths-based practices in the community. *Health and Place*, 16, 423-430.
- Hassink, J., Zwartbol, C., Agricola, H. J., Elings, M., and Thissen, J. T. N. M. (2007). Current status and potential of care farms in the Netherlands. *Njas-Wageningen Journal of Life Sciences*, 55(1), 21-36.
- Haubenhofer, D. K., Elings, M., Hassink, J. and Hine, R. (2010). The development of green care in Western European countries. *Explore*, 6, 106-111.
- Hegarty, J. (2010). *W.E.L.L.I.E.S: a project of fun, personal/social development activities with plants, animals and the countryside for people with mental health challenges*. External Evaluation Report.
- Hine R. (2008). Care farming: Bringing together agriculture and health. *ECOS* 29(2), 42-51.
- Hine, R., Peacock, J. and Pretty, J. (2008a). Care farming in the UK: Contexts, benefits and links with therapeutic communities. *Int. Journal of Therapeutic Communities* 29(3) 245-260.
- Hine, R. Peacock, J. and Pretty J. (2008b). Care Farming in the UK: A scoping study. Report for NCFI(UK). Available at: <http://www.carefarminguk.org/sites/carefarminguk.org/files/UK%20Care%20Farming%20Research%20Study.pdf>
- Iancu, S., Hoogendoorn, A., Zweekhorst, M., Veltman, D., Bunders, J., and van Balkom, A. (2013a). Farm-based interventions for people with mental disorders: A systematic review of literature. *Disability and Rehabilitation* (under review).
- Iancu, S., Zweekhorst, M., Veltman, D., van Balkom, A., and Bunders, J. (2013b). Mental health recovery on care farms and day centres. A qualitative comparative study of users' perspectives. *Disability and Rehabilitation* (in press).
- Kam, M. C. Y., and Siu, A. M. H. (2010). Evaluation of a horticultural activity programme for persons with psychiatric illness. *Hong Kong Journal of Occupational Therapy*, 20, 80-86.
- Leck, C. (2013). The impact of care farming in the UK. PhD Thesis (unpublished). Worcester, University of Worcester.
- McGloin, A. and O Connor, D. (2007). An Overview of Social Farming in Ireland: The State of the Art. Report for the SOFAR Project. Available at: <http://www.socialfarmingacrossborders.org/images/custom/uploads/40/files/4C833FCB.pdf>
- Pedersen, I., Martinsen, E. W., Berget, B., and Braastad, B. O. (2012). Farm animal-assisted intervention for people with clinical depression: A randomized controlled trial. *Anthrozoos*, 25, 149-160.

- Pedersen, I., Nordaunet, T., Martinsen, E. W., Berget, B., and Braastad, B. O. (2011). Farm animal-assisted intervention: relationship between work and contact with farm animals and change in depression, anxiety, and self-efficacy among persons with clinical depression. *Issues in mental health nursing*, 32, 493-500.
- Pretty, J. (2006). *From Green Exercise to Green Care: A New Opportunity for Farming in the UK?* Colchester: University of Essex.
- Relf, D. (2006). Agriculture and health care. The care of plants and animals for therapy and rehabilitation in the United States. In J. Hassink and M. van Dijk (Eds.), *Farming for health. Green-care farming across Europe and the United States of America* (Vol. 13). Dordrecht: Springer.
- Scholl, S., Grall, G., Petzl, V., Röthler, M., Slotta-Bachmayr L. and Kotrschal, K. (2008). Behavioural Effects of Goats on Disabled Persons. *Journal of Therapeutic communities*, 29, 3.
- Sempik, J. and Bragg, R. (2013). Green Care: origins and activities. In Gallis C. (Eds) 2013. *Green Care: for Human Therapy, Social innovation, Rural economy, and Education*. NOVA Science Publishers, New York.
- Sempik, J., Hine, R. and Wilcox, D. eds. (2010). *Green Care: A Conceptual Framework, A Report of the Working Group on the Health Benefits of Green Care, COST Action 866, Green Care in Agriculture*, Loughborough: Centre for Child and Family Research, Loughborough University.
- SoFab. (2014). Social Farming Across Borders. Pers. Comm. 30th March 2014.

Appendix 1 The research team involved in this study

This Natural England commissioned research involves three key organisations: Care Farming UK, The Green Exercise Research Team at the University of Essex and the Academic Unit of Public Health at the University of Leeds. Further details of the three organisations can be found in sections 1-3 below.

In addition there is a wider care farming research group, which is working collaboratively to collate the care farming evidence, made up of researchers from the Universities of Essex, Leeds, Nottingham, Bournemouth and Worcester, and Cardiff Metropolitan University together with The Federation of City Farms and Community Gardens, The Bulmer Foundation and Linking Environment and Farming (LEAF).

1) Care Farming UK

Care Farming UK is a professional charitable company accountable to its members; and a network which provides a voice and supportive services for care farmers, to inspire decision makers and to develop policies and actions that will support care farming in the UK. Care Farming UK is led by care farmers and care farming experts, and has four strategic objectives to:

- Support care farmers - improvement in the quality and provision of services provided by care farms and to support the development of a community of practitioners;
- Develop networks - enabling care farming networks to develop across the UK that will support the practice and capacity of individual care farms and facilitate relationships with local commissioners;
- Raise the profile - increasing the profile and awareness of the impact of care farming at both a UK and national level; and
- Expand the evidence - developing the evidence-base for the effectiveness of care farming, and to disseminate this evidence.

More information on the work of Care Farming UK, including case studies and a Code of Practice are available on the [Care Farming UK](#) website, alongside details of care farms, country and regional networks, and research evidence.

2) The Green Exercise Research Team at the University of Essex

The Green Exercise Research Team involved in this study forms part of the Essex Sustainability Institute (ESI) at the University of Essex. There is growing empirical evidence to show that exposure to nature brings substantial mental health benefits and at the same time, physical activity is known to result in positive physical and mental health outcomes. Over the last 10 years at the University of Essex, these ideas have been combined into a programme of research on 'green exercise' (activity in the presence of nature) and 'green care' (therapeutic applications of green exercise and other nature based interventions). These address current concerns about the adverse health effects of modern diets, sedentary lifestyles and a disconnection with nature, along with growing evidence that stress and mental ill-health have become substantial health problems for many people in industrialised societies. This cross-disciplinary University of Essex project team is engaged in primary research on i) the health benefits of green exercise – investigating the mental and physical health benefits of physical activities under exposure to different rural and urban environments; ii) measuring connection to nature; and iii) evaluating a wide variety of green care options in varying contexts (including care farming, facilitated green exercise, ecotherapy and wilderness therapy); and is currently leading research in this field. The Green Exercise Research Team were also involved in conducting the original research that

supported Mind's Ecotherapy campaign in 2007 and the Ecominds Programme from 2008-2013. More information on this research can be found at the [Green Exercise](#) website.

3) Academic Unit of Public Health, University of Leeds

The University of Leeds' Academic Unit of Public Health is committed to the integration of research, teaching and practice of public health, and has a particular focus on improving the health and well-being of disadvantaged populations in order to lessen inequalities. Members of the Academic Unit of Public Health form a multidisciplinary team drawn from a range of backgrounds such as medicine, public health practice and policy, health promotion, ethics, psychology and sociology. The aim of the unit is to contribute to improving the health of the public through high quality research, teaching, and consultancy. In collaboration with other units within the University, and with the Universities of Essex and Wageningen and West Yorkshire Probation Trust, the team are studying the impacts of care farms on offender health and wellbeing through the ECO study – Evaluating Community Orders (funded by NIHR Public Health Research Programme). More information on the ECO study and other areas of work can be found at the [Academic Unit of Public Health](#) website.

Appendix 2 Preliminary literature review of the health, social and educational benefits of care farming

The table overleaf summarises the key evidence relating to benefits for various client groups from care farming, derived from current published peer-reviewed literature. It must be noted however that this is very much a 'work in progress'. There are client groups where the literature search has not yet taken place, including those with ASDs, Ex-service personnel (with PTSD), young offenders and adult offenders.

Participants in this literature review include:

Dr Rachel Bragg (University of Essex),

Dr Debbie Clayton (Cardiff Metropolitan University),

Ian Eggington-Metters (The Federation of City Farms and Community Gardens),

Dr Helen Elsey (University of Leeds),

Dr Chris Leck (University of Worcester),

David Marshall (The Bulmer Foundation),

Dr Andrew Mayers (University of Bournemouth),

Dr Jenny Mercer (Cardiff Metropolitan University),

Dr Joe Sempik (University of Nottingham),

James Taylor (Let Nature Feed Your Senses).

Client group	Outcomes/benefits	Evidence from published peer-reviewed literature
All participants in care farming activities (benefits seen for all groups)	Improved general psychological and mental wellbeing	There is considerable qualitative evidence and some quantitative research concluding that care farming improves general well-being. Elings, 2012; Bragg et al 2013a; Leck, 2013; Bragg, 2014.
	Improved social interactions and better social inclusion	Elings and Hassink, 2008; Hassink et al., 2010; Elings et al., 2011; Bragg et al 2013a; Hassink et al., 2007; Leck, 2013.
	Increased feelings of empowerment	Elings and Hassink, 2008; Hassink et al., 2010.
Mental ill health	Reduced symptoms of mental ill health (e.g. anxiety and depression)	There is evidence from both care farming and social and therapeutic horticulture that farming/gardening activities cause a reduction in symptoms of anxiety and depression Gonzalez et al, 2009, Berget and Braastad, 2011; Pederson et al., 2011, 2012; Bragg et al., 2013; Bragg, 2014.
	Improvement in coping ability and social functioning	A randomised controlled study of care farming showed an increase in the self-efficacy of clients attending the programme Berget et al, 2008a; Hassink et al., 2010; Pederson et al., 2011, 2012.
	Improved life/ work skills and social interaction	Elings and Hassink, 2008; Hassink et al., 2010; Elings et al., 2011, Bragg et al 2013 Berget et al., 2007; Berget et al., 2008a, b; Iancu 2013b; Leck, 2013.
	Increased self-esteem, mood and mental wellbeing	Hine et al., 2008a; Hegarty, 2010; Elings et al., 2011; Bragg et al., 2013; Bragg, 2014; Leck, 2013.
Learning difficulties	Improved life skills and social interaction	Scholl et al., 2008; Leck, 2013.
	Improved mental wellbeing	Leck, 2013.
Physical disabilities	Learned new skills and adaptive behaviours	Scholl et al., 2008.
Young people at risk	Improved self-esteem and self-respect	Hassink et al., 2011.
	Reduced challenging behaviour	Hassink et al., 2011; Leck, 2013.
	Improved mental wellbeing	Leck, 2013.
	Improved social interaction	Leck, 2013.
People with dementia	Improved wellbeing	Increased cognitive functioning and wellbeing De Bruin, 2009; De Bruin et al., 2010.
People with drug and alcohol problems	Reduce use of addictive substances	Elings et al., 2011.
	Improve mental wellbeing	Hine et al., 2008; Leck, 2013.

Note: References for this matrix can be found in the main references section (Chapter 4).