

Ecological Land Co-operative

ILLUSTRATIVE

SMALLHOLDER

FUNCTIONAL NEED

Field to the south of Copyhold Cottages,
formerly part of Wilbees Farm,
Arlington, Hailsham, BN26 6RU

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Ecological Land Co-operative
Unit B04, The Brighton Eco-centre,
Brighton, BN1 3PB

Tel: 01273 766 672

Web: www.ecologicaland.coop

For a Living, Working Countryside

This document has been prepared by the Ecological Land Co-operative Ltd. It is written to be read in conjunction with the planning application, plans and other documents accompanying the application.

ILLUSTRATIVE SMALLHOLDER FUNCTIONAL NEED

1. We have not submitted business plans for the three proposed smallholding businesses with this application. Only after a consent is granted can we responsibly advertise smallholdings and invite applicants to submit their business plans. By involving prospective smallholders before a consent has been secured we are effectively asking individuals and families to put their lives on hold for an unknown period while we work our way through the planning process with an unknown outcome.
2. At Greenham Reach, the Ecological Land Co-operative's (ELC) first project, we recruited prospective smallholders at the local planning authority's (LPA) request in May and June in 2011 and the LPA refused our applications a year later. The appeal was allowed in April 2013, two years later. By then, all of the original applicants for our smallholdings had taken up farm business opportunities elsewhere.
3. The documentation evidencing functional need submitted with our Greenham Reach applications included an agricultural appraisal by Rebecca Laughton MSc, an appraiser specialising in small-scale and ecological food production. Her appraisals can be downloaded from here:
<http://ecologicaland.coop/planning-documentation>
4. What follows to support this application is an example smallholder functional need, using the functional needs as set out for one of the three smallholder businesses proposed for Greenham Reach, Plot C. As above, the original applicants for Plot C - Mr and Mrs Guskov - did not purchase the smallholding, due to being offered a plant nursery before planning consent was granted for Greenham Reach. The smallholding was bought by Ruth O'Brien and Alex Wilson.
5. The proposed business for Plot C was as follows:
 - a. A market garden (1ha), plus two medium size polytunnels

- b. Vegetable and herb nursery, to propagate seedlings for market garden and to sell to other growers.
 - c. An agroforestry enterprise (1ha), to provide top and soft fruit, mushrooms on logs, herbs and perennial vegetables and provide firewood for space heating (dwelling, polytunnels, poultry brooder shed).
 - d. Processed Food (jams, chutneys, pickles etc) made from surplus and non-marketable produce
 - e. A poultry enterprise (300 birds on about 0.3 hectares) to supply pure breed point of lay hens for sale.
6. Ruth and Alex's business is not dissimilar to that of the business proposed by the Guskovs, the principal difference being that in place of a chicken hatchery, Ruth and Alex have developed a micro-dairy with Golden Guernsey goats.
7. Ruth and Alex's business can be viewed on-line here:
<https://steepholding.wordpress.com/>
8. The following table sets of the functional needs of the Guskovs' proposed business. References to other planning decision within the table below are to decisions referenced in **Appendix 10: Table of Planning Decisions for Farm/Horticultural Businesses on less than 10 acres.**

Arlington Smallholdings Illustrative Smallholder Functional Need

Functional need	Reasoning ¹	Where this has been accepted (other than Greenham Reach appeals)
<p>Polytunnel ventilation and temperature control</p>	<p>Constant monitoring is required of the polytunnels to ensure they do not get too hot or cold and this can only be carried out by visiting the site and manually adjusting vents or the proposed wood burning stoves. The Guskovs' proposed plug plants are particularly susceptible to extremes in temperature but the proposed greenhouse vegetables (tomatoes, etc.) must be also protected from low temperatures. In the case of tomatoes and cucumbers, which are sown in January, replacement of the plants would be a lengthy procedure resulting in financial losses since the start of the cropping season would be delayed by a month or two. Heating will be provided by wood burning stoves, combined with a thermal mass system using water tanks. It is sometimes necessary to make a decision fairly late at night about whether or not to use heating, in order to conserve resources.</p>	<p>Deciding on <u>Rosebarn Nursery</u> the Inspector noted that polytunnels could be required to be opened at around 5 a.m., "as crops have been lost in the past due to the tunnels not being opened until 7 or 8 a.m.". In the case of <u>Sydling Brook</u> the inspector found that: "automatic sensors could remotely warn of actual low temperatures but would still require action on site late at night or early in the morning".</p>
<p>Protection of seedlings (in polytunnels and glasshouses)</p>	<p>The early season production of sensitive seedlings such as tomato, peppers, aubergines and cucumbers, is an intensive process requiring frequent attention. In January, when the seeds are sown they must be kept at a constant temperature of 18°C to ensure germination. Most growers propagating their own seedlings operate an alarm system connected to their house, to alert them to a sudden drop in temperature during the night. By living on site the Guskovs can respond immediately to the problem, thus avoiding significant losses. In addition, the seedlings will require regular watering, and it will be necessary to attend to polytunnel ventilation according to weather conditions. It will be particularly important that seedlings are raised successfully if they are being sold on to other local growers. It would be hard for those growers to find an alternative supplier of the right plant varieties at the scale they need at short notice, thus causing financial losses due to delays in cropping.</p>	<p>Inspectors have found that a) although environmental controls may break down infrequently, when they do, losses would be critical to the business (<u>Bee Organics</u>); and b) that both seedlings and environmental controls require regular, including night-time and early morning checks (<u>Sydling Brook and Trevalon Organics</u>).</p>

¹ Largely taken from the accompanying Agricultural Appraisal

Arlington Smallholdings Illustrative Smallholder Functional Need

Functional need	Reasoning	Where this has been accepted (other than Greenham Reach appeals)
Irrigating polytunnels	The polytunnel crops must receive enough water through the summer months. Watering before sunrise and after sunset is the best way of avoiding water loss through evapotranspiration and leaf damage from 'burning'.	From <u>Sydling Brook</u> : "irrigation in polytunnels is best done at night or first thing in the morning ... automated systems are prone to failure" Inspector.
Early harvesting of fragile crops	During the summer leafy crops, such as salads, are best harvested early in the morning before they wilt in the heat, to prolong shelf-life. Good shelf-life is significant to the success of this element of the business as leaf quality and consistency are key to retaining customers, particularly restaurants.	From <u>Sydling Brook</u> "summer crops such as lettuce have to be harvested at cool times (early in the morning or late in the evening)" and "box packing... Is usually done in the evenings when it is cool" Inspector.
Pest control	From Sydling Brook "Slugs are one of the most destructive pests in polytunnels. The conditions needed for the young plants are also ideal for the breeding and feeding of slugs. One slug bite can destroy a newly germinated seed and one slug can kill many young plants in a single night. Damage can be caused to larger plants like lettuce, tomatoes and cucumbers. Clearly an organic grower cannot use normal pesticides for control. There is a raft of other measures against slugs, including biological controls, but one of the most effective is waiting until it is dark and picking the slugs off the plants by hand, using a head light, and destroying them. This is a time consuming manual job which has to be done regularly during hours of darkness... large pests can also be a serious problem. One such large pest on the loose undetected can devastate the crops overnight. Deer might be controllable by mechanical scarers but such noises are disruptive to other residents and are not always effective. Rooks and pheasants become scarer resistant, and badgers can get through rabbit and other types of fences. The best method of control is the appellants walking their dog around the property late at night and /or early in the morning. The presence of the dog frightens-off any larger pests encountered and its residual scent provides additional longer-term deterrence"	Inspectors found that controlling pests creates a functional need to be on site in the cases of <u>Woodland Organics, Strong Orchard</u> and <u>Sydling Brook</u> ".

Arlington Smallholdings Illustrative Smallholder Functional Need

Functional need	Reasoning	Where this has been accepted (other than Greenham Reach appeals)
Weather related emergencies	<p>The Guskovs will need to be on-hand to close vents and doors in case of rain and in the event of high winds, cut the plastic to save the polytunnel frame from being bent. Such a decision can only be made by someone present on-site. Alternatively, a wind-break barrier made from bales, can sometimes protect the tunnel and save the plastic. The delay caused by having to travel to the site in the middle of a windy night to check for damage might mean that remedial action was taken too late. Also from <u>Rosebarn Nursery</u> "snow could also hinder or prevent the operation of the solar panels which provide energy to heat the propagators There is also a greater risk in the winter of the solar and wind powered batteries running low at night, requiring use of the emergency generator. The loss of plants and produce would be likely to result without someone on site at most times to deal with such emergencies." Inspector</p>	<p>This issue was recognised by inspectors in four cases. <u>Rosebarn Nursery</u> is particularly appropriate as it is also off-grid: "it is clear that judgements are required on site at short notice as to what action should be taken in the light of weather conditions at the site itself ... It would be very difficult if not impossible for appropriate and timely action to protect crops to be taken without someone being present on the site at most times, and without such action serious loss of crops could occur. Given the limited availability of power on the site, automatic warning systems would not provide a solution...Any snow damage to the polytunnels could lead to loss of growing plants if not addressed quickly" Inspector.</p>
Watering an open field area	<p>The Guskovs will be watering their field crops manually and this is best done either very late or early in the morning.</p>	<p>From <u>Sydling Brook</u>: "[watering] should also be done either very late or early in the morning" Inspector</p>
Preventing frost damage	<p>In winter plants must be covered at sunset to protect them from frost and at sunrise this must be removed to allow daylight and moisture to get to the plants.</p>	<p>For <u>Woodland Organics</u> "the appellant loses a significant amount of his produce to unexpected night frosts. The appellant considers that his virtually continuous presence on site is required to ... take the necessary action to limit the harm caused by unexpected frosts". Also of relevance is that the predecessor to Annex 1 of PPS7, <u>Annex 1 of PPG7</u> specifically identified frost damage as part of functional need.</p>

Arlington Smallholdings Illustrative Smallholder Functional Need

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<p>Egg incubation and chick rearing</p>	<p>Egg incubation is a delicate process, requiring frequent monitoring of the temperature and humidity of the eggs, followed by the heating of the newly-hatched chicks. There is a risk that the chicks will overheat, as much as die of cold, if the heating system does not act as predicted. Due to the site being off-grid, the electricity to power the heat lamps will come from renewable energy sources, and the incubation will require more diligent monitoring than a mains system. The wood burning stove that will keep the chicks warm from three weeks old will also need regular refuelling. A back-up bio-diesel generator is also available if the renewable options fail. In total 340 chicks will be raised each year (divided into 3 batches), and this would be too large a number to keep in a domestic (probably rental) situation were Mr. and Mrs. Guskov unable to live on site.</p>	<p>From <u>Venn Copse</u>: "To my mind, the essential need for a worker to be readily available to deal with emergencies particularly arises because of the susceptibility of the chickens to changes in temperature during the first three weeks of their lives and the need for a worker to be able to respond promptly to changes in temperature which are most likely to occur during the night" Inspector.</p> <p>From <u>Beech Ridge Farm</u>: "There are automated systems that regulate temperature and water supply, but these require regular monitoring and rapid response in the event of failure, to prevent significant loss of stock numbers .. " Officer's report.</p>
<p>Chicken protection</p>	<p>The chickens require a least twice daily attention for letting out, feeding and watering, egg collection and putting in again at dusk. In the summer they will stay out until 9 or 10pm, meaning that were the family not resident on site it would be necessary for someone to return to the farm to shut up the chickens. It is during this dusk period that they are at greatest risk from fox attack. Due to the focus being on raising pure-bred point of lay pullets, the value of each bird and the investment which has gone into it, means that protection from foxes is a particular concern.</p>	<p>The protection of poultry, and other stock is acknowledged by the Inspectors deciding <u>Woodland Organics</u>, <u>Strong Orchard</u> and <u>Beech Ridge Farm</u>.</p>

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Overnight presence during lambing	The sheep will need daily checking and an overnight presence at lambing time.	At <u>Blackthorn Farm</u> , lambing was accepted as a functional need in the West Dorset District Council commissioned appraisal by Reading Agricultural Consultants, contributing to the planning committee decision to give temporary permission in September 2010.
Range and quantity of activities	The proposed farm business is labour intensive, including a wide range of crops and animals, and of items produced, most of which will require the attention of the Guskovs on most evenings and most mornings. The Guskovs will be living off-grid and the infrastructure (solar PV, compost toilet, W.E.T. system, etc.) will need maintaining. The Guskovs will also be contributing to the ELC's programme of education and hosting an annual school visit and open day. All of these taken together makes a strong case for there being a functional need for an agricultural workers dwelling.	This has been accepted for <u>Bee Organics</u> , <u>Coppergon</u> , <u>Sydling Brook</u> , <u>Trevalon Organics</u> , and <u>Five Penny Farm</u> . In deciding <u>Five Penny</u> the Inspector wrote "one of main features of this enterprise is the diversity of the crops grown, the animals on site, and the variety of items produced ... [this] makes the enterprise very labour intensive and give rise to the need for the physical presence of one or more of the appellants on the site throughout a long working day, frequently during the evenings, and sometimes at night".
Security	While this alone is not a reason for on-site accommodation, for the business proposed the agricultural assessors believes that security is a legitimate concern. There are instances of animal theft or abuse when a site is not attended, as well as petty theft of equipment such as tractors, electric fence batteries and posts and metal for scrap.	This was given as one of the grounds that established a functional need at <u>Rosebarn Nursery</u> .