

Public and private policy affecting the grazing of animals on commercial cider apple orchards in the UK

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The aims of the project were to:

- Identify the parts of public policy of relevance to; grazing of animals on commercial cider apple orchards and orchard floor harvesting of apples in relation to faecal contamination.
- Identify private sector organisations with company policy relevant to grazing animals on commercial cider apple orchards.
- Determine the implications of each policy for growers keeping or planning to keep animals in their cider orchards in the UK.

Introduction

The grazing of animals in orchards is a traditional practice dating back centuries. It is still practiced in many traditional orchards today, however since the introduction of bush orchards in the 1960's there has been a decline in its use as a management technique. Recent concerns surrounding the long term sustainability of commercial cider orchards have caused cider producing companies, such as Heineken, to re-examine the possibility of grazing in orchards. The potential benefits of grazing could reduce costs of mowing, control weeds, help minimise apple scab through eating or trampling leaves, and provide a second income from the land, increasing its net productivity.

Prior to the introduction of sheep or other livestock onto cider orchards, it is necessary to identify any public or private policy which may affect this practice. What follows is a report on such policies, found through desk-based research utilising websites, journals and accessing copies of contracts between cider producers and growers.

Public Policy

Faecal Contamination

When considering public policy which will affect the grazing of animals on commercial cider apple orchards it is especially important to consider the possibility of faecal contamination. This is due to the fact that cider apples are generally harvested from the orchard floor after the mechanical shaking of trees (Copas & Umpelby 2002). There was some controversy in 2004 when it was suggested that the Food Standards Agency (FSA) may ban grazing in orchards (Born & Sapsted 2004). This followed reports of consumers in America contracting *e.coli* after consuming unpasteurised apple juice, believed to have been contaminated with animal faeces (Born & Sapsted 2004).

The Herefordshire Orchard Topic Group responded to this concern by contacting the FSA to clarify their position with regards to the banning of livestock grazing in orchards. In an email correspondence dated 9/8/2004, David Alexander of the FSA Microbiological Safety Division confirmed that '...the FSA has no intention of threatening the practice of grazing animals in

orchards'. He also went on to say that '...our statement applies to all classes of livestock used to graze orchards and it also applies to all orchards, not just apple' (Alexander 2004).

The FSA have since released advice for growers to reduce the risks of microbial contamination via its 'Managing Farm Manures for Food Safety' guidelines. Crucially these guidelines advise on good practice and are not required by law. The guidelines are also specifically aimed at 'ready-to-eat' crops and state that:

'Fruit such as apples and pears that have come into contact with the ground should not be used for human consumption either as fresh fruit or unpasteurised juice, where livestock have grazed in the orchard within 12 months of harvest.' (FSA 2009)

However as explained in the 'Regulatory Impact Assessment' for the guidelines, cider apples and perry pears are not considered as ready-to-eat crops and have been excluded because:

'most cider is pasteurised or sterilised by other processes and also, the products of the fermentation are likely to kill pathogens' (FSA no date).

The FSA consider that the risk of faecal contamination of products from cider apple orchards is insignificant enough not to include them in their safety guidelines and any grazing of animals in cider orchards is therefore unaffected by them. In 'Growing Cider Apples, a guide to good orchard practice' it is suggested that stock should ideally be removed at least 56 days before fruit collection in order to avoid contamination of faeces and the associated disease risks (Copas & Umpelby 2002).

Single Farm Payment

Other policy which may affect farmers wishing to graze their orchard is that of the Single Payment Scheme (SPS). This scheme pays farmers for the land that they manage or own. It applies throughout the EU and was adopted by the UK government in 2005 (Burgess et al 2006). When introduced, land under permanent crops such as that used to grow orchard fruit was not eligible (Burgess et al 2006). This again led to concern over the potential impact on orchards in that they may be grubbed up by farmers in order to become eligible for the scheme. There was particular concern over the loss of traditional orchards which are important habitats for biodiversity. This was overcome through Defra developing criteria that define orchards of particular environmental value to be eligible for the single farm payment. Amongst other conditions this included orchards where;

'Livestock (normally sheep) graze throughout the orchards, and have access to and utilise vegetation growing on the floor of the whole orchard, apart from within tree-guards around individual trees' (Burgess et al 2006).

This confirmed that the grazing of orchards is considered by Defra to be an environmentally beneficial practice and alleviated fears that there would be a large scale loss of traditional orchards. The Defra criteria did not however cover commercial orchards, which generally aren't as biodiverse as traditional orchards, and these were not included in the SPS until 2009, when all land growing permanent crops, including orchards, was classified as eligible for the single payment scheme (Rural Payment Agency 2009). The current SPS handbook for 2010 does not include a separate land use code for grazed orchards however it does use the code PC2 for land under permanent crops (Rural Payment Agency 2010). This would suggest therefore that any land used for the dual purpose of orchards and grazing could apply for the SPS under permanent crop land.

It is not specified in the SPS handbook whether a grazed orchard could be classed as permanent pasture. Permanent pasture is defined as land:

- Used to grow grasses or other herbaceous forage, either self-seeded or sown.
- Not included in crop rotation for five years or longer.
- Not been set-aside during a five year period under the SPS options.
- Not taken out of production under certain agri-environment schemes. (Rural Payment Agency 2010)

This could imply that a grazed orchard may qualify for permanent pasture, although it is unlikely to apply to a commercial orchard.

Environmental Stewardship

Owners of orchards may be eligible for payments through the Environmental Stewardship (ES) scheme. This provides funding to farmers and other land managers in England who deliver effective environmental management on their land, over and above that required for the SPS (Natural England 2010a). Commercial bush orchards are eligible for the Entry Level Stewardship (ELS) however the practice of grazing animals in the orchard does not count towards the point allocations, despite the potential environmental benefits of reduced fungicide spray and mowing (Natural England 2010a). At Higher Level Stewardship (HLS) the payments are only relevant to traditional orchards where management may include among other options, '...managing the sward through hay-cutting or grazing – without the use of fertiliser' and '...protecting trees from damage by livestock' (Natural England 2010b). Traditional orchards are defined by the HLS handbook as;

'widely spaced standard or half-standard fruit trees, of old and often scarce varieties, grown on vigorous rootstocks and planted at low densities, usually less than 150 trees per ha in permanent grassland' (Natural England 2010b).

Owners of commercial orchards will not therefore be eligible for HLS payments, although companies which produce organic cider from traditional orchards may be able to take advantage of the HLS scheme utilising the grazing of animals to achieve the requirements.

Glastir is the equivalent of the ES scheme in Wales. This scheme offers payments at the All Wales Element level for those farmers who wish to restore traditional orchards or plant a new orchard on improved land. Orchards must however be planted traditionally at no less than 10 metres apart and '...may be managed by grazing' (Farmers Union of Wales no date).

Pesticide Policy

Although livestock grazing is designed to reduce the need for applying herbicides and fungicides, in commercial orchards it may still be necessary to spray on occasion. The Code of Practice for Using Plant Protection Products published by Defra in respect of Part III of the Food and Environment Protection Act 1985 (FEPA) states:

'Any period of time when animals need to be kept away from the treated area will be specified on the product label...It is good practice to keep livestock (including horses) out of treated areas until the weeds have died and completely disappeared whether or not the product label of the herbicide used says that livestock have to be kept off the land for a set period.' (Defra 2006)

This is especially important for farmers who need to apply pesticides to an orchard and wish to graze their animals in it as it will determine when livestock will be able to access the land.

Private Policy

Producers of cider are conscious of the fact that grazing in orchards may be perceived by consumers in different ways. The romantic image of sheep grazing amongst blossoming apple trees is an appealing one, however the thought of faecal contamination of apples is rather less so. Many companies will therefore tailor their policy towards grazing with this in mind. A high priority for cider companies is also the health of their apple trees which are particularly vulnerable to damage from grazing before maturity (Copas & Umpelby 2002). This could affect future crop yields and therefore the profitability of an orchard.

Bulmers

Bulmers owned by Heineken, is the largest cider producer in the country. It currently offers 10 year, 25 year and 30 year contracts to its growers. The 10 year contract applies to standard orchard growers and expired long-term bush orchard growers which are renewed on expiry. There is no mention of livestock in these contracts as it is assumed that standard trees will be adequately guarded and old bush tree orchards are at a lower risk from livestock damage (Fairs 2010). This suggests that any grower on a 10 year contract is free to graze livestock on his or her orchard if they so wish. The 25 and 30 year contracts contain a clause stating that the grower ‘...shall not graze or permit to be grazed any livestock in the Orchards’; however the 25 year contract also adds ‘...without the prior written consent of the company’. This suggests that those growers under 25 year contract may still graze their orchards with the permission of Bulmers. The main reason for these conditions is that the company wishes to make sure that the trees survive to produce the anticipated fruit volumes and are not destroyed by grazing before maturity (Fairs 2010).

Westons Cider

Weston’s cider has 150 acres of bush orchards and about 50 acres of traditional, organic orchards. They also contract out to approximately 250 local farmers. Their current policy towards grazing is that sheep are limited to 120 days per annum on their traditional orchards and must be removed at least 8 weeks before harvest. This is to prevent overgrazing and is in line with the good orchard practice guide to prevent faecal contamination. They do not currently practice grazing on their bush orchards.

Thatchers Cider

Thatchers company policy states that sheep should only be grazed in standard orchards and must be removed from the orchard 8 weeks prior to harvest.

Aspalls Cider

Aspalls cider does not currently have a company policy with regards to grazing in orchards.

Implications of Public and Private Policies on Growers

The potential impacts of public policy on the grazing of animals in cider orchards are limited. There are no legal restrictions from a faecal contamination point of view preventing grazing in an orchard. The FSA do not consider faecal contamination a risk due to the pasteurisation and fermentation processes inherent in cider production, however good orchard practice suggests removal of livestock

at least 56 days before harvest. It must also be noted that not all ciders are pasteurised, particularly by small scale producers.

An owner of an orchard can apply for payment under the Single Payment Scheme using the code PC2 for permanent crops. There is no specific code for a grazed orchard and there is no restriction of payment stated in the 2010 SPS Handbook if grazing were to take place in an orchard. There is also no guidance as to whether a grazed orchard could be registered as permanent pasture.

The grazing of intensively managed orchards is not included as a management option for Entry Level Stewardship despite the potential environmental benefits. It is however included as a management option in the Higher Level Stewardship scheme but is only applicable to traditional low density orchards.

The main implications for orchard owners are anticipated to be from their contracts with cider producers. Many contracts may state that grazing is prohibited in orchards in order to protect the health of their trees. Other companies may be concerned about the public perception of potential faecal contamination, despite the FSA guidelines not considering it to be a problem. If grazing is not prevented in the contract, it may be possible for orchard owners to graze their orchards depending on the practicalities of their individual orchards.

Appendix

List of Policies Affecting Animal Grazing in Orchards

Policy	Organisation	Implications on Grazing Orchards
'Managing Farm Manures for Safety Guidelines'	Food Standards Agency	No affect on farmers who adhere to good orchard practice guidelines.
Single Farm Payment	Rural Payments Agency	Growers can apply for the scheme and register their orchards as 'permanent crops' whether grazed or not.
Environmental Stewardship: Entry Level Stewardship	Natural England	No benefits for grazing orchards.
Environmental Stewardship: Higher Level Stewardship	Natural England	Potential payments for traditionally grazed orchards.
Glastir: All Wales Element	Welsh Assembly Government	Potential Payments for restoring or establishing new traditionally grazed orchards in Wales.
Code of Practice for Using Plant Protection Products	Defra	Keep animals away from areas treated with herbicide as directed by product label.
10 Year Contract	Bulmers	No anticipated problems as 10 year contracts apply to well

		established bush and standard orchards.
25 Year Contract	Bulmers	'shall not graze or permit to be grazed any livestock in the orchard without written consent of the company'.
30 Year Contract	Bulmers	'shall not graze or permit to be grazed any livestock in the orchard'.
Company Policy: Grazing on Traditional Organic Orchards only	Westons	Grazing limited to 120 days per annum and must be removed 8 weeks before harvest.
No Company Policy	Aspalls	N/A

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