Why polytunnels are used

The British soft fruit industry, one of the few agricultural success stories of the last ten years, faces a crisis as moves are being made to prevent the use of the polytunnel.

British-grown soft fruits, such as strawberries and raspberries, have become an important and successful rural business. Berries now represent the most important market in which UK fruit growers are involved. Sales in UK supermarkets of home-grown berries have increased 130% in the last four years.

The success of the British soft fruit industry can be largely attributed to the use of the polytunnel (sometimes called a Spanish tunnel) which was introduced to British farming in 1993.

These temporary plastic structures were developed from similar designs used by farmers in Spain to protect their winter salad crops. Polytunnels consist of a tubular steel framework of hoops over which polythene is secured. The movable tunnels are erected and dismantled by farm staff or horticultural contractors at the end of each growing season - a maximum period of six months of any year.

The polythene film has a life of 3-10 years after which it is sent to a recycling plant.

How the polytunnel has benefited the British soft fruit industry

Ten years ago British soft fruit was seen as an unreliable product, beset by unpredictable weather conditions, prone to disease and damage.

The British strawberry is seen as a traditional treat, but, in fact, it is very difficult to grow. Summer rain not only prevents harvesting, but spoils the fruit and produces high-cost waste as labour costs prevent the picking of poor quality berries. British-grown berries were produced from June to July and distributed through green-grocers and pick-your-own establishments. Most were used for the processing of jam and other fruit products most notably because the berries were not of high enough quality. Spain, France and America (many of whose farmers use polytunnels) were more successful in the growing of high quality fruit due to more reliable climates and, as a result they dominated the UK market with imports. The devastating impact on returns coupled with the increase in growing costs caused many British farmers to give up the cultivation of soft fruit.

Today the polytunnel is used to protect 80% of the soft fruit sold through supermarkets. It provides protection not only to strawberries, raspberries and blackberries, but to tomatoes, onions, potatoes, peppers and flowers.

Supermarkets represent 85% of the British retail business – that is, their demands for high quality fruit and prompt, consistent deliveries throughout the season must be met if a fruit farmer is to have a viable business. The farmer who cannot meet these standards is 'de-listed' or dropped as a supplier.

Prior to the introduction of polytunnels in England only 50% of the soft fruit yield was Grade 1 fruit; now it is nearer 90%.

For a soft fruit grower, all of which are privately-owned family-run businesses, this represents the difference between having a business and going out of business.
Polytunnels allow the fruit farmer to:

- Extend the fruit season from May to mid-autumn where once it was limited to eight weeks in June and July. This means that British berries can dominate a market place once filled with fruit imported from Spain France and America.
- Guarantee quality in a market that demands very high standards. Berries are nutritious, as well as delicious fruits, and thanks to an assured level of quality and availability provided by protecting the fruit with polytunnels, supermarkets increasingly provide more shelf space to them. The increase in sales of British strawberries reflects the public’s demand for them.
- Guarantee competitive prices in a market beset with price increases. The introduction of the polytunnel has reduced wastage, increased yields and enabled labour costs to be kept under control. The price of a punnet of strawberries bought through a supermarket has remained stable for the last ten years.
- Reduce the use of pesticides by up to 50%. The polytunnel protects the fruit from moisture which reduces the need to spray with chemicals to prevent diseases such as botrytis. (grey mould) dirty mildew and black spot. They also provide an environment conducive to the use of natural pest control where one insect is used to target another in a confined area. This includes the encouragement of predatory insects as a biological control against spider mites and thrips.

Beetle-banks are made to house the ground beetles which are natural predators of the weevils and slugs that attack soft fruits. Polytunnels ensure that their population is well maintained and is able to migrate to other areas to hunt down pests. The use of polytunnels are essential to these endeavours because they are a natural way to protect the plants from disease and from the weather.

As supermarkets stock organic food, so soft fruit farmers are expected to grow crops both conventionally and organically. They would not be able to produce organically grown berries to the necessary commercial quality and yield without the use of crop protection.

- Increase employment and strengthen rural economies. The success of the soft fruit industry has enabled farms to employ 5,000 more staff on a permanent basis and 50,000 on a seasonal basis. Harvesting soft fruit is labour intensive as every berry needs to be picked by hand. Approximately 15,200 of the 50,000 seasonal workers are foreign students employed through the Home Office approved, and monitored, Seasonal Agricultural Workers Scheme (SAWS). The scheme employs students from non-EU countries who are all in full time education in their home countries and requires that they return no later than 6 months after arriving in the UK.

Polytunnels are taking over the countryside. Polytunnels used for growing berries cover 0.11% of UK agricultural land as a whole, and only a small percentage of the land of any one farm. Furthermore they are removed at the end of each growing season and during the season are rotated.

Figures produced by the ADAS Centre for Sustainable Crop Management for 2004 list the total areas of tunnelled UK soft fruit farms as follows:

- Strawberries – 1,097 hectares (2,709 acres)
- Raspberries and other cane fruit – 295 hectares (738 acres)
- Cherries – 92 hectares (227 acres)

UK soft fruit growers must comply with a code of practice which seeks to minimise any interruption of a neighbour’s views by screening polytunnels with the planting of hedgerows and trees. Meanwhile manufacturers are developing plastic sheeting that is less reflective and many fruit farms have allied with some of the larger food organisations to implement conservation projects.

Polytunnels damage the environment British Summer Fruits represents 98% of all British soft and stone fruit growers supplying supermarkets, all of whom adhere to British Retailer Consortium standards of agricultural practice. This guarantees high levels of safety in all areas of production, including responsibility to the consumer and to the environment. All growers and pack houses are members of the Assured Produce Scheme which promotes safe and environmentally friendly production of fruit, salads and vegetables.

Common misconceptions about polytunnels

Polytunnels are erected without planning permission

Due to the transient nature of polytunnels, the Courts, who ultimately make planning judgments, have held that numerous temporary structures, including certain types of polytunnels, are not buildings but a use of land and therefore are outside the scope of planning control and do not need planning permission. However planning permission is still something of a grey area and in certain circumstances depending on permanence, physical structure and attachment to the land a polytunnel may require planning permission. In cases of doubt a procedure known as a lawful development certificate exists and this may be submitted to a local authority by a grower to establish whether planning permission is required.

Fruit farmers stabilise the soil and make it useless

Stabilisation is not a common practice but fungation is sometimes used to prevent a fungal pathogen that lives in the soil and which causes a total disease known as verticillium. A fruit farm will fungate the specific area on which the crop is grown – usually 90% of the field. This destroys organisms 6-8 inches below the surface of the soil. Polythene sheeting is used to protect those parts of the land that are not being fungated. Stabilising soil does not cause permanent damage. The soil returns to its previous state within 12 months.

Polytunnels are taking over the countryside. Polytunnels used for growing berries cover 0.11% of UK agricultural land as a whole, and only a small percentage of the land of any one farm. Furthermore they are removed at the end of each growing season and during the season are rotated. Figures produced by the ADAS Centre for Sustainable Crop Management for 2004 list the total areas of tunnelled UK soft fruit farms as follows:

- Strawberries – 1,097 hectares (2,709 acres)
- Raspberries and other cane fruit – 295 hectares (738 acres)
- Cherries – 92 hectares (227 acres)

UK soft fruit growers must comply with a code of practice which seeks to minimise any interruption of a neighbour’s views by screening polytunnels with the planting of hedgerows and trees. Meanwhile manufacturers are developing plastic sheeting that is less reflective and many fruit farms have allied with some of the larger food organisations to implement conservation projects.

Polytunnels damage the environment British Summer Fruits represents 98% of all British soft and stone fruit growers supplying supermarkets, all of whom adhere to British Retailer Consortium standards of agricultural practice. This guarantees high levels of safety in all areas of production, including responsibility to the consumer and to the environment. All growers and pack houses are members of the Assured Produce Scheme which promotes safe and environmentally friendly production of fruit, salads and vegetables.

Personal accountability is assured both by independent audits and by packaging which bears the name and address of the farm.

Many growers are also members of Tesco’s Natures Choice, Marks & Spencer’s Field to Fork, the Countryside Stewardship Scheme, PAWG (Farm Wildlife Advisory Group) and LEAF (Linking Environment and Farming). The latter organisation implements independent audits to ensure its own standards are met.

Research conducted by Tesco, Sainsbury and Waitrose in 2004 found that customers wish to buy locally grown produce. Members of the public know that fresh foods offer more nutritional value and local delivery ensures less environmentally damaging ‘food miles.’ Freight carried long distance by air and road significantly increases global pollution.

Polytunnels use more pesticides Polytunnels reduce the need for pesticides (see above). Those that are approved by the Pesticide Safety Directorate. The chemicals that are used are the same as those used on other fruit and vegetables. They are regulated by the EU and approved by the Pesticide Safety Directorate, a government body. Residue levels are constantly checked to ensure they remain within acceptable government levels.

The enclosed nature of the tunnels greatly reduces the risk of sprays drifting away from the target crop. Imported fruit, most of which is also grown under polytunnels, is subject to the rules of the country of origin and may have been sprayed by products not approved for use in the UK.

Polytunnels are not temporary Polytunnels are portable, temporary structures. Under the Voluntary Code of Practice – which British Summer Fruit growers should adhere to – the polythene covering over the frames must be removed for a minimum period of at least six months in any calendar year.

Cheap labour is exploited. Soft fruit farming is incredibly labour intensive. Every berry must be picked by hand. Students from abroad started to be employed when growers found that they could not recruit from the local work forces. Seasonal staff from abroad are entitled to the same rates of pay and conditions of employment as British workers. These are set by the Agricultural Wages Board. They are legally enforceable and guaranteed by the legal minimum wage. SAWS operators set standards for accommodation and it is usual for caravans to be provided by the grower. Ethical audits are also implemented where the welfare of seasonal staff is monitored by both supermarkets and SAWS operators.

Excess water causes floods and drainage problems. Polytunnels increase the amount of run off from sloping fields as rain is shed into the tunnel leg rows. Careful management using drains and gullies allow this to be diverted into water courses where it is used for irrigation.