

Forewarned is forearmed

Accurate long-range weather forecasts are proving a useful management aid for the six members of the East Kent cauliflower marketing group, Wantsum Produce, established in 1995.

During the 11 months up to last December only September's weather was wrongly predicted but the forecast's good accuracy for the rest of the period made up for that failure many times over.

Geoffrey Philpott, one of the group's

Wantsum Produce

The group grows about 809ha (2,000 acres) of cauliflower, about half marketed by members themselves and the rest by the Newmarket, Cambs-based import-export company, Holus Bureau. Approximately 60% of the crop goes to supermarkets and the rest to wholesale markets and overseas outlets.

At present each grower packs his own crop but in future this will be done on just three sites where new packhouse and cold store facilities have or are being erected, funded partly by EU grants. The Thanet East and Thanet West facilities have been completed and Thanet Central's will be up and running this spring.

The Thanet East complex, on the Philpotts's Elmwood Farm, comprises a 120ft by 50ft packhouse and a 140-pallet capacity insulated panel cold store. Thanet West's packhouse and cold store, at Robert Montgomery's Monkton Road Farm, Birchington, are much larger, the packhouse being more or less double Thanet East's size and the cold store holding 1,000 pallets. Thanet Central's facilities, on Quex Park Estate, Birchington, are of intermediate size.

All produce will go through the cold stores, equipped with blast cooling and humidity control facilities, to start off the cool marketing chain. They also have plasticised curtain partitions which allow cold air to be directed through the crated cauliflower to achieve rapid cooling to 4C in about 30 minutes.

"Normally produce is moved in and out of the cold stores in 24 hours but for market control purposes we can hold it in perfect condition for five days or longer if necessary," explains Geoffrey Philpott.



Geoff Philpott displays a coded autumn variety, 94/35 bred by Trinity growers

Long-range weather forecasting has been a useful management tool for a group of East Kent growers
Brian Lovelidge reports



A field of Trinity Growres' new January variety Santa Paula on Elmwood Farm runs down from the North Foreland lighthouse within a stone's throw of the sea at Broadstairs



Above: Inside the 140-pallet Thanet East cold store at Elmwood Farm, Broadstairs, one of three run by Wantsum Produce.
Right: Geoff Philpott holds a crate of trimmed cauliflower destined for processing into florets for Marks and Spencer



four founder-members, says that the forecasts, supplied by Weather Action, based at Southbank University, London, are about 85% accurate over 11 months. For a crop as weather-sensitive as cauliflower the cost of forecasting can be recouped quickly provided forecasts are intelligently used, he claims.

Regular analysis

As well as receiving an overview of the next 11 month's weather, the group is provided with more detailed quarterly and fortnightly forecasts. In addition, Weather Watch issue a regular analysis of its forecasts saying where they went wrong and why.

So far they have been badly wrong only once – "last September when wet and windy conditions were predicted but the month turned out to be very dry," admits Geoffrey Philpott who with his son Geoffrey junior grows about 81ha (200 acres) of cauliflower on well-drained chalkland at Elmwood Farm, Broadstairs, much of it within a stone's throw of the sea.

Their other crops include 18.2ha (45 acres) of second early and maincrop potatoes and 4ha (10 acres) of calabrese and winter cabbage.

"Last year Weather Action accurately predicted the very dry spring. They also said that the drought would break in our area on June 12th. In fact they were three days out – it began raining on the 15th," he recalls.

He has used their service to good effect on numerous occasions. In autumn '96,

for example, mild conditions had induced a flush of cauliflower but because a very cold spell was predicted for the second half of November, the group delayed cutting and benefited from the significantly improved wholesale market prices. These were about £1.30/dozen higher than earlier in the month.

In addition, the predicted very cold second half of January 1997 prompted the Philpotts to drop the frost-susceptible varieties they would have harvested at that time and reduce the area of others

maturing then. As a result their crop losses for the period were only around 5% compared with some 25% had they ignored the hard weather warning.

"Weather Action forecast a very cold north easterly air flow for the second half of January and this made me very nervous," confesses Geoffrey Philpott. "As it was the temperature here dropped to

Other ways of fighting infection

Long wet spells can mean disease problems not only for potatoes. Wantsum Produce members have reduced the infection risk in cauliflowers by cultural means as well. They have increased the between-row spacing in their crop by 20cm (8in) to about 91cm (36in). This improves the air flow along the rows, making conditions less conducive for pathogens. The in-row spacing has been adjusted to ensure that the plant population is unchanged.

"The advantage of wider rows was very evident in autumn '95 when Cornish crops were suffering badly from disease and ours was much healthier and their quality better," claims Geoffrey Philpott.

"We're also trying to reduce fungicide usage by majoring on disease resistance in our breeding programme."

This programme, run by Trinity Growers, was established by him about 10 years ago. It has cleaned up numerous open pollinated varieties and produced a wide range of hybrids, some of which will be available through Tozers within a year or two.

An increasing proportion of the Philpotts's crop, currently around one-third, comprises Trinity Growers varieties. They are also widely used by other Wantsum Produce members and help extend their marketing period which now runs from September to June.



One of Wantsum Produce's cold stores equipped with blast cooling and humidity control equipment

only minus 3C, but Cornish growers suffered a lot more because the air reaching them had had a longer land and shorter sea track than ours."

He also capitalised on the prediction of a very long, dry spell last spring by bringing forward his spring top dressing by about three weeks, to early February, and increasing the amount applied by 30%. The good rainfall over the following few weeks ensured that the nitrogen got down to root level before the drought set in.

"We missed a lot of the rain that other areas had. We had a good downpour on March 4th and nothing more until June 15th," he says, "so if we had top-dressed our crop at the usual time it would have been stunted. Even so its quality did suffer a bit because the drought was so severe, but there was nothing we could do about that."

It is also useful to know whether any wet spells are in store as is prompts growers to plan fungicide spray programmes and prepare for the job in advance. It paid off for the Philpotts last summer in their fight against potato blight which unlike many growers, they managed to keep out. They started their protective spray programme much earlier than normal and reduced the spray interval from 10 days to 7 days when infection pressure was high

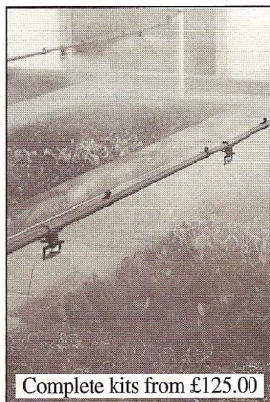
ACCESS

Irrigation Ltd



MIST PROPAGATION

Quality systems for guaranteed success



Complete kits from £125.00

- Choice of 3 controllers
 - Mist
 - Mist wean
 - Multi-stage
- Two delivery systems
 - Overhead pipework for a clear bench plus anti-drip valves for instant shut-off
 - bench mounted
- Precision nozzles for very fine particle mist
- Heat Mats available

High quality mist propagation is essential for successful rooting of cuttings and germination of seedlings, by providing the highest quality control and delivery systems

MAXIMISE PROFITS – MINIMISE LOST STOCK

Ask for leaflet L39

ACCESS IRRIGATION LTD., CRICK NORTHANTS.
NN6 7XS. Tel: Crick (01788) 823811 Fax: 01788 824256

PLEASE QUOTE DEPT. TG 88

YOUR FUTURE
IS OUR
BUSINESS



**SPRING GREENS
ADVANTAGE**

- ❖ **Dark green**
- ❖ **Medium sized**
- ❖ **Vigorous**
- ❖ **Compact**
- ❖ **Uniform**

TOZERS are leading breeders of Spring Greens and Cabbage varieties. Advantage, a TOZER hybrid, packs easily and meets the highest market specifications
Sow Spring, Summer or Autumn.

TOZER

INVESTING IN YOUR FUTURE

Telephone: 01932 862059 Fax: 01932 868973