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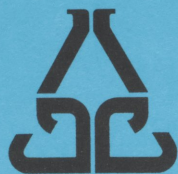
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*Fruit - Marketing*

*Econ Res Series #22*



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**PICK-YOUR-OWN**  
**FRUIT MARKETING**



Dublin.

An Foras Talúntais





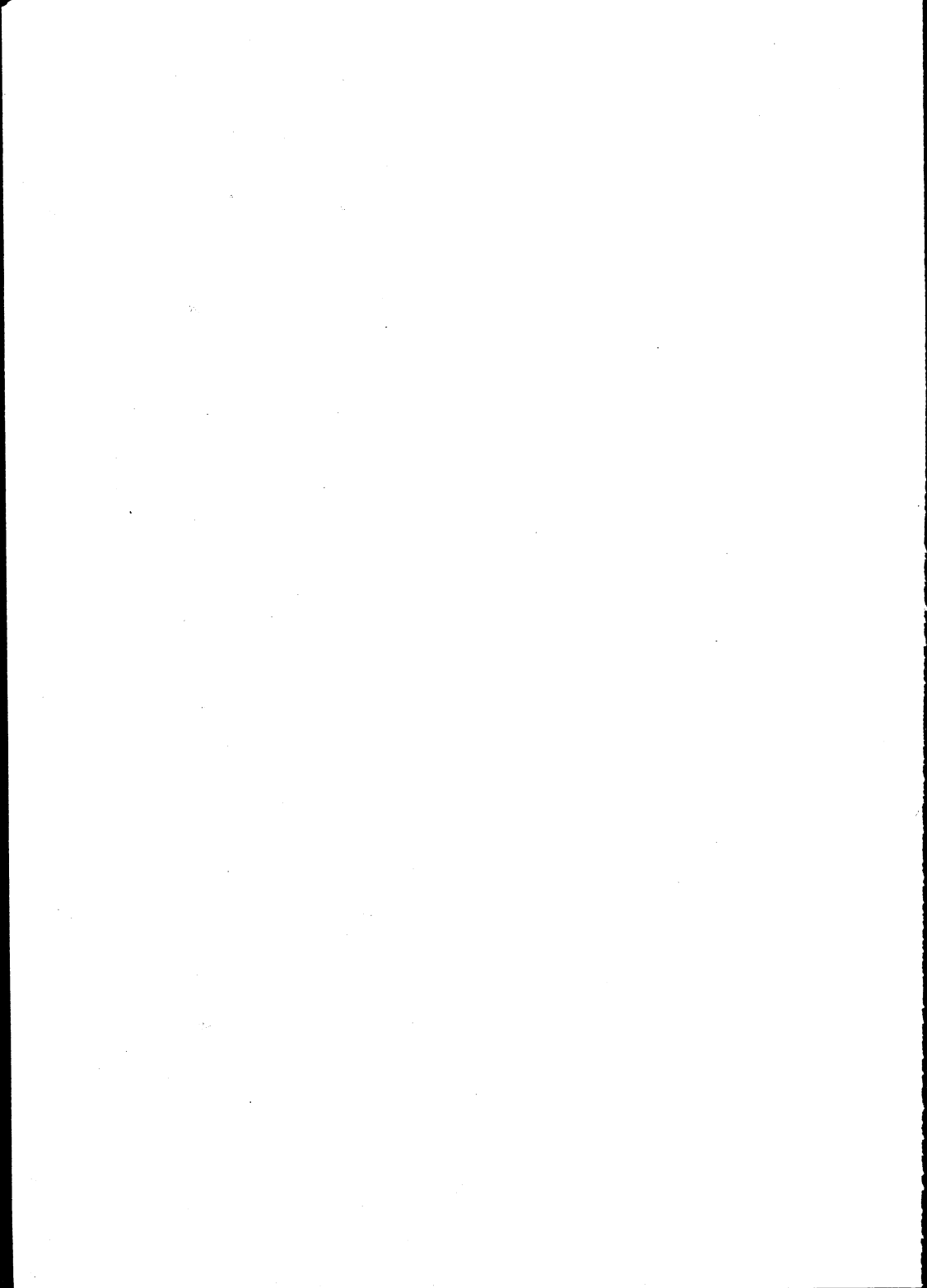
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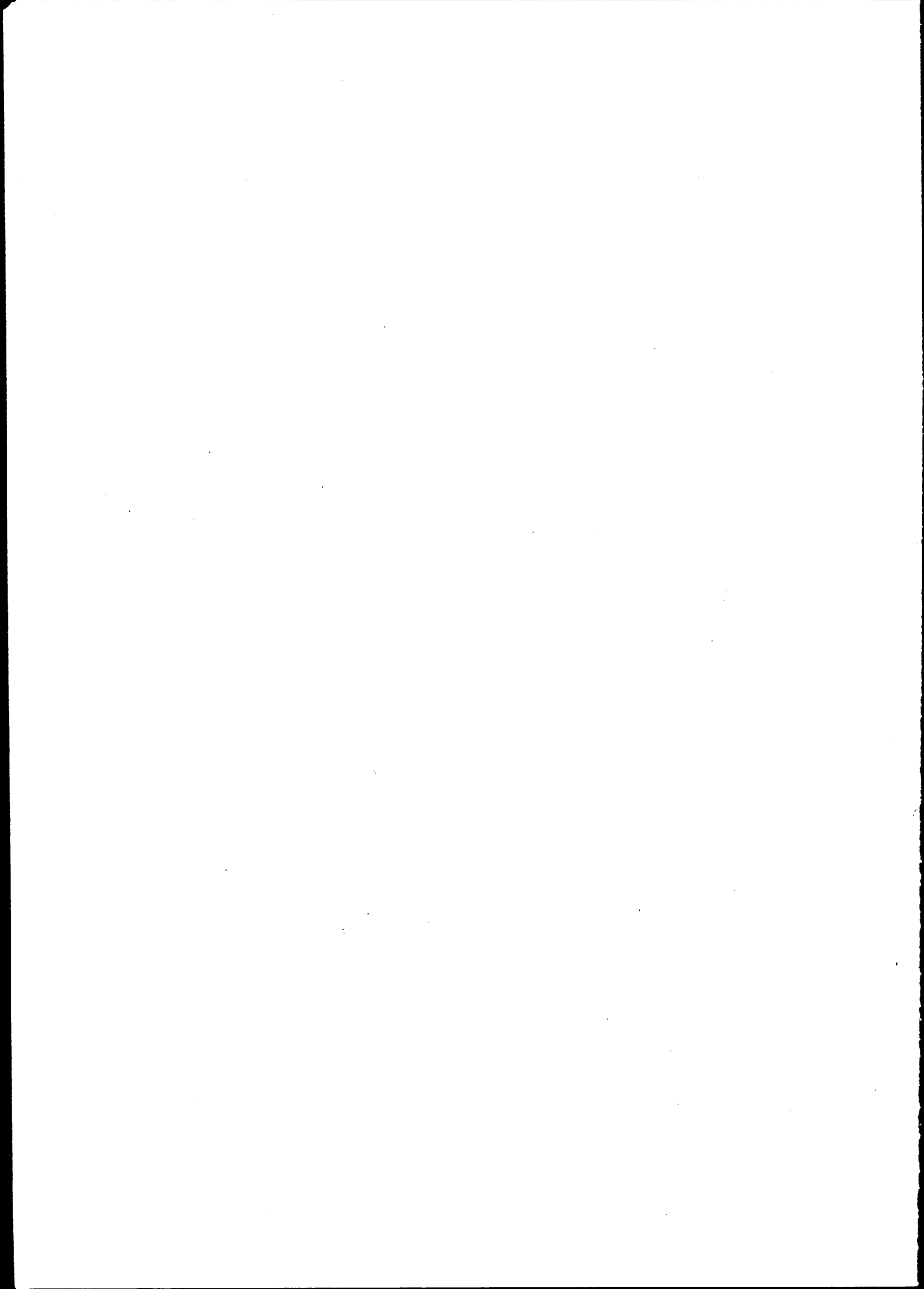
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## INTRODUCTION

Pick-your-own (p-y-o) marketing of fruit and vegetables has become very important in the United States and Canada in the last few years. In Wisconsin, for instance, 10% of the strawberry crop was p-y-o ten years ago and 90% is now. Growers have large acreages, sometimes over 1,000 acres, of p-y-o. Some of the crops marketed in this way are peaches, black-eyed peas, ordinary peas, squash, cucumbers, peppers, strawberries under plastic, sweetcorn, okra, blueberries, Christmas trees and carrots. In Ontario this type of marketing is so important that the Ministry of Agriculture has appointed a roadside marketing specialist, much of whose time is spent on p-y-o.

A pick-your-own marketing system is, as a rule, one where the customer drives to the farm, picks the fruit and vegetables, pays for them, and takes them home. All marketing and harvesting is contracted into one transaction and several marketing operations such as assembly, wholesaling and packaging are dispensed with entirely.

On this side of the Atlantic p-y-o businesses have been operating for many years but they have not made any big impact, and little is known about what the system involves and what the economic implications are. Kinsealy Research Centre planted a trial crop of 2½ acres of p-y-o strawberries to examine the implications. We carried out several market research studies, finding out who came, why they came and what they bought. In this booklet we present some of our own results and summarise the work on the subject that has been done in the United States and Canada. Some of the American experience is not yet relevant to us because of differences in scale. The numbers that appear in brackets throughout the text refer to the bibliography at the back. We are particularly interested in pick-your-own strawberries, but we felt that much would be lost, and nothing gained, if we did not mention ideas which, while irrelevant to strawberry growers, were important to tree-fruit growers.

### *Benefits to the Grower*

The reasons why p-y-o suits the producer have been succinctly set out by G.J. Stadelbacher (1) and may be paraphrased as follows:



- (i) Prices are constant throughout the season even if the whole-sale market is glutted.
- (ii) Weekends and holidays increase sales rather than leave the wholesale market glutted on Monday morning.
- (iii) Labour shortages are not disastrous: if harvesting is delayed through lack of a market, fully ripened fruit can be sold through p-y-o.
- (iv) Problems in obtaining casual labour vanish.
- (v) Packaging costs are reduced. With strawberries neither punnets nor outers need be supplied, as the customer brings his own container or buys a chip. With apples plastic bags are sufficient (2).
- (vi) Yields of some fruit like gooseberries are increased by 20-40% if the fruit is left on the bush until it is fully ripe.
- (vii) Hail-damaged or soft fruit can be sold p-y-o where it would be quite unacceptable on the market. Many of today's growers were forced into the business by a catastrophe like hail or frost.
- (viii) Farm visits give city dwellers what is possibly their only contact with agriculture and this may reduce the strength of the political anti-farm lobby.

We have found that people got into the business because the factory could not take all their strawberries, because recruiting and supervising labour took too long and caused too many headaches or because there was a clear market opportunity. Some people open their fields to p-y-o at a low price after most of the crop has been harvested in order to clean them out and to make money from strawberries that would otherwise have gone to waste.

#### LOCATION

The first essential for pick-your-own strawberries is a good site. Kinsealy Research Station has a perfect site. It is only three or four miles from Dublin, which has a population of 750,000 and it is two miles from each of three dormitory towns with a combined population of 15,000. It is on the Dublin-Malahide road so most of the people

who commute from Malahide (population about 7,000) or who go to Dublin on shopping expeditions pass our site and see our sign.

Because the site is on a main road travelled by so many potential customers we do not have to do much advertising. A notice at the side of the road attracted as many customers as we needed. Forty-two per cent of our customers learned about the strawberries from this notice. The remainder heard about them from friends. If we had had any difficulty in selling the strawberries, we would have advertised with posters in the local shops, leaflets through the letter box in local housing estates then, perhaps, newspaper advertising.

Half our customers came from the nearby dormitory area, which is the area we expected to get nearly all customers from. A quarter came from the outskirts of Dublin, within four miles of us, which was not altogether a surprise, though we did not aim any advertising at them. The big surprise was that fully one quarter of all customers travelled over five miles and four percent travelled over seven miles, either from the other side of the city or from the country.

This shows that the advertising gets to far more people than those directly exposed to it and that there is a large untapped market. The fact that people from far away could find the field easily confirms the importance of having the field on a main road.

When choosing a site it is also essential to consider the income of the local population. Most of the people in the towns to the north of us are middle class commuters. Nearly all our customers came in their own cars (3% came with friends) and 45% of these were in two-car families. As quite a few men commute by train, many women in the area can drive to the field when picking starts at 3 p.m. This is important; if the women had had to wait until their husbands returned or if they had had to take a bus, our sales would have been much lower.

Another advantage of having customers from a high income group is that half the customers had deep freezers and we estimate that in Kinsealy 40% of the pick was frozen. Many of the customers returned again and again for strawberries for freezing. Some freeze the strawberries and make small lots of jam from them throughout the year.

The major disadvantage of the site is that it is so close to its customers that many people come to buy a pound or two for dinner and eat another pound while they are picking. Children in particular frequently make no pretence at filling a punnet. The more people that come in a party the more is eaten for every sale. The most flagrant was the family that brought along six children with plentiful supplies of sugar and cream. Table I shows that half the groups consisted of four or more people and ten percent of six or more people.

TABLE I: Number of people in a group, Kinsealy 1974

No. of people	% of groups	% of people
1	10	3
2	20	12
3	20	18
4	22	26
5	16	24
6	10	18

We would estimate that between one and two pounds of strawberries are eaten for every sale. Table 2 shows that 62% of strawberries were sold in lots of seven lb or more so our estimate is that one fifth of the total available was eaten. If our average sale had been two pounds, as it might have been if we had been in a poorer area or nearer a town, half the crop would not have been paid for.

There are several ways of dealing with this. The most effective is to give the pickers chips which would hold six pounds. Most people try to fill this punnet and we observed that if they were given a 1 lb punnet they were quite happy to fill this.

Another solution is to charge a high price when a high proportion of the crop is eaten (i.e. when the average amount bought is small), possibly even a price higher than that in the local supermarket. Since this means that jam makers are subsidising the people who eat more than they pay for, a sliding scale might be more effective, a minimum charge of £1, 25p a pound up to 10 lb and 20p a lb for anything over this,

with possibly a special price of 15p a lb for anything over 50 lb in order to attract the bulk buyers who eat a negligible amount.

TABLE 2: Number of lb of strawberries bought by each customer (Kinsealy 1974)

No. of lb	% of customers	% of strawberries
0 - 3.5	18	5
3.6 - 7.0	36	32
7.1 -10.5	6	9
10.6 -14.0	8	17
14.1 -17.5	1	3
17.5 -21.0	3	9
Over -21.0	5	25

There would no doubt be some pooling of purchases, but it would nevertheless attract the big spenders and discourage big eaters.

As our site is on the main road leading to a popular beach we have a large number of Saturday and Sunday customers, most of whom had not thought of buying strawberries when they set out, and most of whom buy only a small quantity.

It is interesting to compare this with another farm that is in what seems to be a much worse location. The farm is ten miles out of Dublin, 16 miles from the city centre, and is further out than the dormitory towns, so few commuters see its signs. It is two miles off the main road, along a narrow, winding country road. To attract customers it has to advertise in the newspapers, signpost from the main road and charge a low price, 60% less than our price.

There are compensating advantages. Those customers who will travel this far for cheaper strawberries are interested in buying large quantities for freezing so the average purchase is from 50 to 100 lb and the amount eaten is negligible. Fewer customers are needed to pick the crop so one person can cope with supervision and collecting money for 11 acres, with a little help from time to time. A car park is not needed as the few cars that do come can fit in the yard. People picking large quantities are more organised, and pick each row thoroughly while patches are left untouched if they jump from row to row, and leave as

soon as they have only a few pounds picked.

The analysis in Table 3 suggests that this apparently inferior site may be no worse than our prime site.

TABLE 3: Returns from two p-y-o sites (estimated)

	Convenient site	Distant site
Car park = 20% of total area	-20%	0
Amount eaten	-15%	0
Amount not picked	-15%	- 5%
Reduction in yield through wide spacing	-15%	0
Amount sold	35%	95%
Price	25p	10p
Revenue	875x	950x

If the extra supervision cost is also taken into account the distant site may be very much better. These figures are, of course, hypothetical as we have not been able to measure amount eaten or amount not picked with any accuracy. We have not allowed for the possibility that the car park may be a hay field that is fully profitable in its own right, nor have we allowed for the effect of a minimum charge, or sliding price scale.

Another location that has been extremely successful is on a suburban railway line well outside London. Leaflets are handed out at Waterloo Station and a large number of city dwellers travel out by train. Here again the time and expense of travel can be expected to discourage those people who want only a small amount.

Discouraging the small buyer may not be a good thing if, as is sometimes claimed (3) people come to buy a small quantity for immediate consumption then return later, with friends, to buy large quantities for jamming or freezing, or if the small customer tells a lot of his jam-making friends about the p-y-o field.

We found that a higher percentage of the strawberries we sold in 1975 were for eating fresh than in 1974, over half, compared with one-third (Table 4). This is believed to be largely due to competition from p-y-o operations selling much cheaper strawberries five or six miles further from Dublin.

TABLE 4: What customers bought p-y-o strawberries for at Kinsealy Research Centre 1975

Bought for	% of customers	% of strawberries
Eating fresh	54	47
Jam	20	20
Freezing	10	14
Combinations of eating fresh, jamming and freezing	16	19
	100	100

Note: This shows that a higher percentage of the crop was bought for eating fresh than the previous year, over half compared with one third. This is believed to be largely due to competition from p-y-o operators selling much cheaper strawberries five or six miles further from Dublin.

The people who buy the strawberries for eating fresh tend to buy small quantities - 38% bought less than five lb. The jam makers buy a little more, but only 9% buy more than 10 lb. People buying for freezing take the largest quantities, with a quarter of the customers buying over 10 lb and 44% of sales being in quantities of 10 lb or more (Tables 5, 6). It seems that a lot of housewives like to make a few pots of jam each year, while freezer owners find they have to freeze large quantities of whatever suitable fruits or vegetables are available if they are to keep their freezers full and to make any savings from them.

TABLE 5: Percentage of customers buying different quantities of strawberries, Kinsealy 1975  
% of customers

Quantity bought	For eating fresh	For jam	For freezing
Under 5 lb	38	18	6
5 - 9.9	49	74	71
10 - 14.9	10	9	6
15 - 19.9	1	-	12
20 - 24.9	1	-	6
	<hr/> 100	<hr/> 100	<hr/> 100

Note: For simplicity those who bought for both jam and eating fresh, both jam and freezing, etc. have been ignored.

TABLE 6: Percentage of strawberries bought by customers buying different quantities, Kinsealy 1975

Quantity bought lb.	For eating fresh	For jam	For freezing
Under 5 lb	15	6	2
5 - 9.9 lb	59	78	55
10 -14.9 lb	20	16	8
15 -19.9 lb	3	0	22
20 -24.9 lb	4	0	14
	<hr/> 100	<hr/> 100	<hr/> 100

#### ENTERTAINMENT

Experience in the United States and Canada suggests that the p-y-o operation should not be considered merely as a method of selling strawberries: it is also a method of selling entertainment. If people drive ten or twenty miles to pick their own strawberries when they could get good strawberries at much the same price in the local supermarket they must be looking for something in addition to the strawberries.

Many city people have never seen a farm and are enchanted with the



idea of travelling in the back of a wagon over a bumpy farm road, and of seeing tractors and cows. People who grew up on farms or who visited farms a lot as children are keen to take their children to see the farm. On a large operation it would be worth having some farm animals on display, a pen full of piglets or young lambs, for instance. The farmer's children could make a good income out of giving donkey rides.

In the United States it is common for the children to make money selling home-made doughnuts, lemonade and cider - home-made cider is a big attraction in p-y-o orchards, but it could not be made or sold in this way on the farm under Irish licencing laws.

Many customers believe they get better food if it is freshly harvested. They think of farm-fresh food as being full of vitamins and goodness. Naturally if they think this is so they should be encouraged. The farm might have a restaurant selling home made food, fresh from the field (4) or a salad bar or it might provide a barbeque pit where people can cook their own food and picnic. One English grower (5) feels that it is necessary to sell food and drink if he is to encourage people to travel any great distance to his farm.

In the United States p-y-o farms are now listed as "preferred type land-use industries for near urban areas" because they provide as much pleasure as parks or even more and they cost the taxpayer nothing (1).

On one 800 acre farm in the USA the following entertainment is provided to sell apples - hiking trails in a 60 acre wood, a game reserve, an outdoor chapel, picnic tables and a baseball diamond. A "Blossom Queen" ceremony is held with 1,000 people attending. People are invited to see such sights as mechanical apple harvesters in operation. Photographs of customers are taken, perhaps when they have picked an unusually large apple, and these are sent to them at Christmas. There is a gift shop, a farm market, a p-y-o and a rent-a-tree operation (3).

Once a farmer has set up the checkout to collect money for the strawberries he can sell other farm product like cabbages, carrots and mushrooms, at good prices and he can sell bought-in goods like cream and ice cream. This all helps the country atmosphere and gives the customer the pleasure of buying freshly harvested food.

Either of these operations, the fresh-cooked food or the vegetable sales, could become a year-round operation if a farmer builds a farm

shop. This can become a really large business: one farm bakery and year-round-roadsides market in New Jersey employs 200 people, but still goes to a lot of trouble to keep its rural, farm atmosphere (6).

If the p-y-o operation is geared to selling strawberries and nothing else it cannot stand competition. If the farmer down the road starts selling at the same price he halves the sales. If he cuts prices or offers entertainment he will take away the whole market. The farmer with a pick-your-own business can make himself immune from this sort of competition by providing a little more entertainment each year and building up customer loyalty(4).

### *Playgrounds*

In any big p-y-o operation there should be playgrounds for the children. These have several advantages. Most young children eat more fruit than they buy which is very important when people come with all their children and possibly their neighbour's children. We found that two thirds of our customers came in groups of four or more, so the ratio of eaten to paid for strawberries was too high. Young children can also cause a lot of damage, either deliberately or accidentally, and teenagers can be worse.

Young children get bored with picking fairly easily and soon start asking if it is time to go home, so their parents end up picking less than they intended. Children who were bored do not ask their parents to go strawberry picking again.

Some growers give rides to children whose parents are picking (7). Others provide hay for them to jump in (accident insurance is essential).

### SUPERVISION

If customers are left to themselves they walk into a field and start picking the rows nearest the gate, crossing from one row to another whenever they think they see a better patch in the next row. This causes some damage to plants but, more important, it means that the picking is hard and customers go away unsatisfied while the corner of the field furthest from the gate is hardly touched, and by no means all of the field is picked. A supervision system means that each customer has a chance of picking top-quality fruit in a reasonable time.

It also means that total sales from the field are much higher, by perhaps as much as 20%.

The easiest form of supervision is to divide the field into sections and to rope off all but one on weekdays and all but three at the week-ends. If the picking areas are well signposted and supervisors are there to ask people to leave the fenced area, there should be no difficulty in enforcing this, though the occasional troublemaker may have to be ejected (8, 9). Most people, again, pick the corner of the plot nearest the gate, and, finding few strawberries, complain that all the best strawberries have been fenced off. The supervisor must then explain tactfully that there are better strawberries in the open plot. Some growers are tempted to say that the fenced-off strawberries have been sprayed; it silences all immediate criticism but it may reduce sales in the longer term. With peaches, apples, etc. it is better to plant so that varieties next to the one being picked are obviously not yet ripe, rather than having the next plot looking more attractive than the one being picked(4).

In America close supervision is considered necessary. Customers are assigned a row, or one side of the row and are asked to pick that row bare before moving to the next row. Notices state the rules clearly "Pick the plants clean", "Stay on your assigned row", "Do not step on plants", "Mark your stopping place" (8,9,10).

Miller (9) describes an operation where these rules are strictly applied. Each morning he decides how much of the plot is ready to pick, he then marks it. Customers are told that he only stays open until the allocated area is picked clean, so that those customers who are admitted are certain of good picking. He assigns two rows to a group of pickers, as he finds this better than assigning one row to a person. He asks each customer how much he intends to pick and assigns him a suitable patch. At every opportunity he tells customers that this is to ensure that they get a patch that nobody else has picked over. He marks each group's row with a coloured stake and also marks where in the row they stopped picking. Supervision is much easier if rows are short, a point made by most writers on the subject.

The full supervision method seems to work well in the United States and Canada, but no one appears to have tried it in Ireland. It is estimated that one person can supervise 50-75 strawberry pickers (II)

but that one person is needed to 10 or 15 pickers with tree crops (2). It helps if the supervisor wears a uniform of some sort.

We found that customers are constantly asking for advice on how to freeze or to make jam or why jam has not set and that this was keeping supervisors busy. Farmers should consult the advisory service and obtain leaflets from the home economics expert and these can be given away or sold.

#### *Damage to crops*

There is generally a lot less damage from pick-it-yourself than there would be from paid pickers (2,11,12,13). Still some growers feel it is best to keep young children out of the picking area, especially with crops like tomatoes and cucumbers where the children will not keep themselves occupied eating the fruit(14). The only report of serious damage was when a grower over-advertised, so thousands of customers came, picked all that was available in a few hours and climbed old, brittle peach trees looking for something to pick (15). Nevertheless all growers should have someone in the field to prevent children running across the rows of strawberries or otherwise causing trouble. Dogs should be forbidden, both as a hygienic measure and to prevent damage (14).

To reduce damage in our strawberry fields, we planted our rows 42" apart instead of the normal 30-36" (13). This probably reduced yield but it made picking much easier.

#### CAR PARKS

Supermarkets have found that the provision of parking adds enormously to their turnover. Where possible they have car parks so big that there is always plenty of space, otherwise people think twice about calling at the shop and trade falls off considerably.

We have found that a two acre car park, serving five acres of strawberries, was never full on weekdays and seldom on Saturdays and Sundays, though on some Sunday afternoons cars were parked half a mile down the road, partly because our p-y-o site is on the road to a popular beach. About 100 cars can park on an acre.

The amount of space needed depends on many factors. Parking on

narrow country lanes may be impractical. If there is heavy concentration of business on Saturday and Sunday or at one time of day more space is needed. If the fields are open from 3 to 7 p.m. more space is needed than if they are open from 10 a.m. to 10 p.m. If people buy, on average, six lb, less space is needed than if they buy one lb. We have seen a farm with 11 acres open from 10 a.m. to 10 p.m., with an average sale in the region of 50 lb, using the farm yard as a car park, without, apparently, causing serious inconvenience to the farmer.

Where there is no suitable parking place next to the field or the orchard, farmers sometimes let customers drive into the orchard. This can lead to problems such as having to inspect the boot of the car when customers leave, so many farmers prefer to let the customers park in a suitable spot and then travel to the field on a wagon. Several people have reported that this is one of the most popular attractions of the p-y-o operation. City people enjoy travelling on a real farm cart and sitting on bales of hay. Several growers deck the wagon with flags and bunting (2) and one has gone as far as to dress the driver and assistants in gaffers' smocks (6).

Of course people are likely to buy more if transport is provided than if they have to carry the containers to the carpark (2, 7). One way around this is to provide handcarts for the customers to carry their purchase to the car park(7).

In a pick-your-own operation where many crops are on sale and customers drive to the field to find what they want, it is important to have adequate, wide roads so customers are not tempted to park on the field. Eyman (14) with 85 acres of p-y-o vegetables had 25% of this under roadways.

If the fields are not fenced off with one gate where the money is taken some people may avoid paying. This is especially so where people can park on a main road next to the orchard, rather than in a clearly defined car park (13).

Chudleigh (4) finds it necessary to have a one way system. Customers park, go to the information tent, get containers, pick the produce, and then go to a check-out at another part of the field. He finds this helps crowd control, and also that "if new customers see people leaving a particular row with what they think is just the type

of apples they came to pick you will have difficulty directing that picker into any other row than the one they saw that full bag leave".

Because of the difficulties in supervision and in collecting money when the fields are overrun with people, some farmers close the fields when the car park is full (4) or when there are just enough customers to pick the crop that is ripe that day (9).

The car park takes up valuable land and if this land is not productive its cost must be allowed for in the strawberry costings. We have found it satisfactory to grow grass and to take a crop of hay in mid June, just before picking begins.

#### ADVERTISING

The aim of advertising is to get just sufficient customers each day to pick the fruit that is ready each day. Over-advertising can damage business as much as under-advertising. Several growers started by advertising their few acres in large circulation daily newspapers. The result was that thousands of people descended on a single farm and picked what was available in half an hour. A lot of damage was caused by customers searching each plant for some strawberries to justify their journey, and angry customers did not worry about the damage they caused as they walked off the field empty-handed. Police had to be called in to handle the traffic jams. When the crop had recovered somewhat and the next pick was ready, it was re-advertised but very few people turned up (2,10,11,15).

We found that a sign by the roadside was adequate when we were starting off with 2½ acres, and as we expanded to 5 acres it was still adequate in reminding our existing customers and attracting some new ones. An English grower advertises to Womens' Institutes, his main customers, (5) and he attracts coach parties in mid week by advertising in womens' magazines.

Other farms, which are not on a main road, must advertise elsewhere. Newspaper advertisements do attract customers, but the number attracted depends on the distance from the city. A farmer ten miles from the outskirts of Dublin finds the response just sufficient to keep his 11 acres picked. It is important to choose the newspaper carefully. According to one grower interviewed advertisements in

the quality newspapers tend to attract well-behaved customers who buy large quantities of strawberries (50 lb-150 lb) for freezing, while advertisements in the tabloids attract a rougher crowd, who do some damage in the field and who buy much less.

Useful and cheap sources of publicity are placards in local shops. Leaflets put through the letter boxes in local housing estates also get a quick response. Both placards and leaflets should have maps and directions. We would use these two methods to the full before resorting to newspaper advertising. Placards and leaflets should be put in the areas where the freezer owners, who are likely to buy large quantities, are concentrated. This gives the maximum return per pound spent on advertising and these are the customers wanted for other reasons.

Some farmers ask their customers to write their name and address on a postcard. At the beginning of the next season the postcards are sent to customers saying when the picking will begin. The postcards are sent off in waves, so the customers do not all arrive on the first day of picking. If the customers are undesirable for any reason the farmer tears up their cards and they are not invited next year. It is not worth keeping a list of people who came in previous years because of the extra work involved, especially where a high percentage of the population can be expected to move in any year (2,8,10,11).

The press may be interested in a story especially if p-y-o is new in the area. We got an unsolicited story on the woman's page of a Dublin newspaper. If the business is unusual in any other way, e.g. combined with rent-a-tree or with some entertainment, a letter to the local paper or television station saying what is happening and what is unusual about it, may bring results.

Since most advertising is by word of mouth, it is important that all customers enjoy themselves when picking and are satisfied when they leave. Staff should be extremely polite at all times. It may be better to employ specially selected and trained local people, perhaps students or retired farmers, on a part-time basis, rather than to divert farm workers from their usual tasks. They should be trained to tell the customer the advantages of p-y-o and to give some of the reasons why p-y-o prices are not as low as they would like. The farm should be tidy, weed free, and well maintained so



that customers will feel they are getting a professionally grown product for their money.

There may be regulations limiting or prohibiting the use of signs at the side of the road. The regulations on flashing lights near an airport, on signs that can be confused with traffic signs, signs that obscure traffic and signs that are confusing or distracting at danger spots like intersections, will be strictly enforced. A temporary sign advertising the sale of goods at a site not normally used for selling is permitted in most areas. ADAS has prepared a pamphlet summarising the regulations in force in England and Wales (16).

#### MARKET RESEARCH

The farmer could do his own market research very easily by asking a sample of perhaps one in twenty customers a few simple questions such as :

Where do you live ?

Did you travel here in your own car ?

Friend's car

Bus

Walk or bicycle

How did you hear about this strawberry picking ?

Newspaper

Roadside sign

Friend

Leaflets

Placard in shops

How many pounds did you pick ?

What are you going to do with them ?

Eat fresh

Make jam

Freeze

How many people are with you ?

How many of these are children ?

What improvements would you like to see here next year ?

Have you come here in previous years ?

Have you been here before last year ?

The question "Where do you live" will show whether people in all areas know about the p-y-o strawberries and how far they are willing to come. This information can be used to plan advertising. The question on how they heard about the field can also be used to find out the effectiveness of different forms of advertising. The importance of the quantity picked has been explained above, as has the question on the number of children. It may be that one type of advertising attracted more desirable customers, and this advertising should be intensified. If a lot of people have visited the p-y-o field in previous years and the percentage who are making their first trip of the season decreases through the season, it means that the customers are satisfied and are coming back. If not, something is seriously wrong.

Customers should be asked what improvements they want, so they can see that the survey is helping them. Their comments are of obvious practical value. Suggestions about new crops should be considered as the business can grow in this way. Some American farms rely very heavily on p-y-o and 100% p-y-o farms have been planned(17).

#### PRICING

Pricing is one of the most difficult problems, yet it is the key to success. Where there are rivals in the neighbourhood, a farmer must keep his prices broadly in line with theirs: if his price is too high he sells nothing, if it is too low he may start a price war or he may not get a high enough return.

When we started we had a first-class site and no rivals so we could have charged a much higher price. Children were picking our strawberries and selling them at two of the local shops where they were retailing at 40p a lb - twice our price of 20p. The right price to charge depends on the location of the field and the type of customer.

It would pay farmers to have an informal talk with their rivals to discuss pricing, in case one of them cuts prices unnecessarily and sells below cost. This is particularly important when a new producer

thinks he must cut prices to the minimum in order to break into the market, and when he does not realize that yields are much lower with p-y-o. It should be remembered that cutting the price by 10% does not reduce profit by 10%: it may turn a profit into a loss. On the other hand it might increase sales so the profit increases:

Generally speaking it is more profitable to advertise than to cut prices in order to get more business from a rival.

Some people suggest that prices should be held constant throughout the season. Others hold a final one-day sale to clean out the field at a low price (I4). We feel it is better to cut prices as picking becomes more difficult but have seen no evidence to support either theory. We have, however, seen a farmer who decided there was nothing left to pick, and was forced into business again by people wanting to try anyway. All customers arriving were told that there were very few strawberries left and it was not worth picking, yet as much as 1,500 lb a day were sold.

We give customers good weight as we feel that they prefer to get a few ounces free and pay a high price rather than to pay the exact amount to the last berry even if the price is a little lower.

Blakeley (2) stresses the importance of correct money handling techniques to avoid arguments with customers. The note should not be put into the cash drawer until change has been given and accepted. It should be held in a spring clip on top of the till. Change should be counted, first into the salesman's hand, then into the customer's hand, only then should the note be put into the till. This procedure reduces arguments, and keeps the customers' confidence.

### *Containers*

We have found, after some trial and error, that the most efficient method of selling is to hand out containers, chips holding six lb, to customers as they enter the field. When they come to the checkout the chips are weighed (the weight of the chip is 0.33 lb ) and this is taken into account when working out the price). The customers then have the option of tipping the strawberries into their own containers or buying the chips at 5p each.

Some growers permit customers to take their own containers into

the field. The containers are weighed, and marked with the price of an equivalent weight of strawberries - a one lb container is marked 25p. When the full container is weighed, 25p is taken off the price (2,8,11).

Some people sell strawberries by volume. This is illegal in the United Kingdom and the general consensus is that it is open to abuse and leads to many arguments about over-full containers, so it is better to sell by weight, even if this takes a little longer (9,10,11, 18).

One grower (9) lends customers wooden trays which hold six, one-quart boxes to encourage them to pick more, but he may lose as many as 800 trays a year as people like to take them home.

Some containers must be available for those customers who just drop in when they see the sign, and we find that nearly everybody buys a container. The grower should not, of course accept customers' containers, which may have been used for anything, in exchange for his own (2).

Blakeley (2) suggests that supervisors should be able to negotiate prices with customers, letting a customer have fruit at half price if he finishes a row for instance, but this leads to complications at the checkout - he suggests two-way radio communications between the field supervisor and the checkout.

#### *Breaking into a new market*

If a farmer wants to get into pick-your-own and his neighbours are already in the business, he will have great difficulty, especially if they have built up a reputation for providing entertainment as well as selling strawberries.

His location is important. If the customer has to pass two or three rivals before reaching the new p-y-o field, the business is not likely to be successful. If, on the other hand, the customer comes to the new p-y-o field first, there are many customers who will drive in, either because they do not mind where they buy or because they have forgotten where they went last year.

If his rivals were crowded out with customers last year, or if they did not have to advertise to clear their crop there may be a large,

untapped market. He may find, though, that there is only enough business for two farms, and that all three will lose money if they have to divide the existing business among them.

Price competition should be avoided if possible. A farmer can of course attract some customers by price cutting but his rivals can be expected to retaliate. This benefits everybody if the previous price had been too high and was reducing total sales, but more often everybody is worse off. Price cutting should only be considered when the farmer is certain that he is doing everything right, that he is advertising as well as possible and that his farm can easily be found by potential customers.

Since the farmer cannot go into p-y-o strawberries in a big way in a short period, unless he is switching from picking for market or processing, his neighbours will see what he is doing and check that they are running their businesses properly so it is more difficult for a newcomer to break into the business.

Non-price competition - the entertainment aspect - is likely to be crucial.

## OTHER CONSIDERATIONS

### *Insurance*

It is essential to have some form of liability insurance in case someone gets hurt on the farm. This is particularly important when tree fruit is being picked. The insurance should cover retailers' risks too - what happens if the farmer wrongfully accuses a customer of going out without paying ? (4).

Insurance does not just mean going to an insurance broker and buying suitable cover. It also means taking precautions to see that accidents do not happen. Any farmyard may have machinery, abandoned equipment and pesticide containers lying around and these should be removed before the public is admitted.

With apples it is wisest to stick to intensive plantings on dwarfing rootstocks rather than let the public loose on 25 ft trees with shaky ladders. However, many people do p-y-o on large trees, especially with peaches (4,19) and to minimise the number of accidents, Blakeley (2) suggests not providing ladders to customers, picking

the tops of tall trees (so the customers only harvest everything available from the ground), not permitting cars into the orchard and displaying rules forbidding the climbing of trees and the use of ladders.

Some p-y-o operators employ a nurse to deal with cuts, scratches, insect bites and any emergency (I2) but this is only justified when there are large acreages of crops, especially tree crops.

Livestock should be kept well away from the public and ponds, river banks, etc, should be fenced off with toddler proof and child resistant fencing (II). If wagons are used to take people to the field, the wheels should be protected.

#### *Legal advice*

Legal advice should be obtained before starting a p-y-o operation. The advice to us was to check our insurance. In some areas regulations and byelaws must be taken into account.

A notice might be displayed saying the farmer was not responsible for damage to cars or loss of property.

EEC regulations on grading and labelling do not apply for farm level sales. No VAT is payable on fruit and vegetable sales.

#### *Weighing scales*

Platform scales are quicker to work than balance scales, especially if different prices are charged for different quantities. They should be checked every day and everytime they are set up. If they overread the weight the farmer can be prosecuted and if they underread the weight, the farmer may lose a few ounces on each of 500 purchases on one day - perhaps 100 lb of fruit.

#### *Cash register*

A cash register should be used whether or not the farmer is collecting the money. The cashier should be someone whom the farmer trusts and he should give a cash register slip to each customer. If the farmer is handling the cash it is equally important to know how much cash was received.

From the register it is possible to find out how much of each crop

was sold on each day of the week, how many customers came each day, what the average purchase was, what percentage of purchases were less than seven lb, how much of the business was done in the morning - all information which is very important in planning.

Cash registers can be hired but since there is seldom an electricity supply at the checkout, a hand operated machine is needed and some of these are no longer reliable. Early booking is essential. If they are not available a hand-operated adding machine may be used, but this gives less information and means that the cashier must be entirely trustworthy.

#### *Toilet facilities*

When the pick-your-own business reaches any size lavatories must be provided, so that people can pick all day, and pick large quantities. Portable lavatories can be hired. Teichman (3) has found that the old-fashioned outhouse or privy is something of a tourist attraction in its own way.

Cold water, for washing off the juice, and perhaps drinking water should be available.

#### *Fencing*

We put up a six-foot barbed wire fence mainly to keep out casual passers by and to provide a psychological barrier: any youth could climb it in ten seconds. We did not have any theft after it was put up.

Other people have found that it is essential to have a fence between the field and the road or between the field and the carpark, otherwise people drive away without paying for the fruit.

#### *Weed control*

It is essential that strawberry fields should be weed-free and it is desirable that other pick-your-own crops should be. For some crops it may be worth leaving grassed alley-ways between the rows so the pickers are not walking in mud after rain, even if this does cause a small drop in yield. Watson (8) suggests that for heavy, wet land it is worth spreading a lot of straw between rows of strawberries so picking can begin immediately after rain; he had no mud problems even after 3" of rain. In Kinsealy we have been reluctant to use straw



because of the botrytis problem, because of the cost, because we have excellent weed control, because very little fruit is damaged by splashing, and because we have not had any mud problem. Overall herbicide treatment with no cultivation generally provides good soil conditions for picking.

#### *Rent-a-tree*

We have no experience of the rent-a-tree system, the one described is that followed by Teichman (3) who rents out 1,000 trees in the U.S.A. The system, he feels, must be integrated with a farm market and p-y-o operation and cannot be operated separately. The aim is to give the entertainment of p-y-o throughout the year.

Most rentings are done at blossom time, when the whole family comes out to choose a tree. The tree is numbered and the family is given a card permitting them to enter the orchard at any time and to pick fruit from that tree. Many families picnic in the orchard and invite friends along throughout the year.

Customers are told that it is a commercial operation and spraying is necessary. The orchard may be closed after spraying but customers are notified in advance.

#### *Selling picked fruit*

It may pay to have some fruit picked for people who want to buy but do not have time to pick their own. We did this one year, when we were picking for market as well, but we sold less than 20 lb a day.

#### *Hours of opening*

The longer the hours of opening the more customers can be expected, and the more customers can be handled with a given labour force, and the less strain there is on the parking space. On the other hand there is little point in staying open 12 hours a day if 90% of customers come between 5 p.m. and 7 p.m. or, more important, 90% of sales are made then.

The choice depends on the area: in our area, most people come in the evening, when the family car comes home and when it is possible to leave one parent in charge of the children, or to make a family group to pick strawberries. For this reason we opened from 3 p.m.

to 7.30 p.m. on week days.

Other farms, catering more for two-car families, stay open from 10 a.m. to 10 p.m. Some mothers find it convenient to go picking when the children are at school. Naturally it is possible for each customer to pick larger quantities when the fields are open this long. When the customers are spread over a long day like this they do not use much parking space and only one or two people are needed to supervise and collect money.

At weekends, of course, the fields must be open as long as possible otherwise thousands of people will converge on the field in the few hours when it is open, causing chaos.

### CONCLUSIONS

The farmer going into p-y-o has to take an enormous number of factors into account in planning the business and in working out its profitability. We have found that for this reason every p-y-o operation described in the literature uses a different system. It is impossible to draw up costings for p-y-o in the same way as for strawberries for processing.

Because of wide spacing, the amount eaten, the amount left unpicked and the large parking space, yields on the whole area, including the parking space, can be very low. We sold less than two tons per acre from a crop that would have yielded 5-6 tons per acre if picked in the normal way. In our circumstances, being able to charge a high price and not being willing to spend too long obtaining and supervising picking gangs, the system is satisfactory, but other farmers who have more time in June and cannot charge such a high price, might find strawberries for fresh market or processing more profitable.

Farmers who can get high yields, by attracting customers who pick thoroughly, eat little, do not use much parking space and do not mind narrow rows, are in a good position. They should get a price well above the 10p per lb paid by the processors, they do not have to pay 3p per lb for picking (20) or the cost of transporting pickers or the picked crop.

We must emphasise though that there are very few pickers in this category, and that as the number of p-y-o businesses increases the

number of these pickers per business will fall sharply. Only the grower who devotes a lot of time and attention to attracting these customers and seeing that they are satisfied can hope to stay in business at such low prices.

If the p-y-o venture is to increase beyond a few acres and is to survive in the face of intense competition, the farmer will have to provide lavatories, a playground, picnic tables and entertainment.

Some of the entertainment can be self-financing, like donkey rides and picnic food.

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