

# Apple Growing in Co. Armagh

By BRIAN McGRANE

IN FORMER TIMES apple growing seems to have been fairly widespread, on good soils, and in small plots throughout the North of Ireland. With the passage of time, as apple-growing developed into an industry, it became almost entirely concentrated in North Armagh, an area stretching between Portadown and Armagh City, with the exception of a few orchards still remaining in Fermanagh, East Tyrone and South Antrim.

The earliest record of apple-growing in the area, relates to the planting of an apple tree in the neighbourhood of Armagh. The story is that this tree was planted by St. Patrick at Ceangoba east of Armagh City.

The first actual historical evidence for apple growing in Ulster is contained in the obituary of the Chief of the Macans, who died in the year 1155. The Macan clan ruled in the Barony of O'Neiland, and this same barony is to-day, the main apple growing centre in Ulster and indeed the whole of Ireland. In his obituary Macan is praised for the strong drink made for the use of his clan from apples grown in his orchards. It is noteworthy that the same name is very prominent in the apple industry to-day. Historical records are silent from that time down to the end of the 16th century. Even then the only references to apples, seem to be found in contemporary literature and verse.

Two of the oldest known English apples—the Permain and the Costard—were recorded in 1296 and it is recorded that the Costard sold in Oxford at 1 shilling for 100. I think it is very probable, that these varieties found their way to Ireland. There are records to show, that a variety called Costard, was planted in Co. Armagh in the 19th century, but this must have been some old variety, because the real Costard, was disappearing in England at the end of the 17th century.

In the 17th century there are notices, in the Ulster Plantation Settlement, regarding the setting of fruit trees in orchards and gardens around 1611, but such plantings were most likely confined to the few free-holding tenants at the time. It is unfortunate that there is no information regarding the rentals for the estates granted by James I, to undertakers in O'Neiland.

These documents would likely have given particulars as to the properties, on which apples were being grown.

## Early leases encouraging apple planting.

The earliest leases, which compelled tenants to plant fruit trees are preserved in the records of the Brownlow Estate in O'Neiland. These date from 1666, and the largest orchards consisted of 20 apples, 12 plums, 12 cherries and 6 pear trees. The lease required that "the orchard should be

enclosed by a ditch and quick-sett whitethorn". In a particular instance, a certain Wm. Copeland was to build a house and "also plant an orchard of 12 apple trees, 6 pear trees, 6 plum trees, 6 cherry trees with ditch and quick-sett whitethorn".

Rev. W. Brook, rector of Drumcree wrote from Portadown on the 26th November, 1682, describing the Barony of O'Neiland. He stated that cider was being sold at 30s. per hogshead, and that some people, were making 20 to 30 hogsheads per season.

Seven years later, King William's cider maker, a certain Paul le Kaspar arrived in Portadown to make cider for the army. Lord Drogheda who commanded a regiment stationed at Tandragee, recorded that there was much cider there in the Spring of 1690. These are facts but one would hesitate to ascribe the victory at the Boyne, to the cider from the Portadown district in O'Neiland!

The art of apple-growing, was not confined to Co. Armagh, during this period in the 17th century. Lord Conway had estates, in Down and Antrim, and we learn from preserved correspondence between his Lordship and his agent in 1664, that Portmore in Co. Antrim, is "a place likely for fruit", apple trees were sent from England and planted in 1667. The more precise skills in apple culture, were practised in the 17th century, for we learn, that in March 1668 Lord Conway's gardener received "sufficient scions to graft 1,000 stocks".

Apple-growing in Co. Tyrone, has also a long history, for correspondence by the Earl of Orrory, mentions the cutting down of an ancient apple tree in Caledon in 1739. In the Ordinance Survey for Co. Derry, published in 1837, there are notes on three nurseries which sold apple trees at six pence each. It seems that in these areas much of the apple crop went to make cider, but records also show that in 1802, there was a great demand for fresh apples, and an export trade to Scotland was in existence.

By the end of the 17th century, apple growing had suffered many set-backs, including the revolution of 1642, and later the wars of 1688—90. Furthermore, the beginning of the 18th century saw the introduction of linen weaving into the households, with the consequent neglect of agriculture. Under such pressures one might have expected the industry to disappear, but this did not happen. On the contrary, landlords continued to compel tenants to plant fruit trees, under terms of their leases.

A survey of See Lands of Armagh, made in 1703, gives detailed accounts of apple growing on farms held by the Archbishop's tenants. From this source, we learn that there were orchards in the townlands of Cavan, Ballytree, Money, Bally-

neilly, Ballyhegan and Roghan. These same townlands are to-day in the centre of the main apple growing area in Co. Armagh.

From the beginning of the 19th century onwards, the various surveys and recorded reports, indicate that the planting of orchards was on the increase. Such sources of information are: Coote's Survey of Armagh 1804. Thackeray's visit to Armagh in 1845 and Bassett's Co. Armagh 1888. All these sources indicate that apple growing was an extensive feature in the Portadown, Loughgall and Richhill districts. The census figures taken in 1841 support this evidence of expansion of apple growing in Ulster. The census reckoned that 1,324 acres had been in existence by 1791 and that there was a total of 9,533 acres in 1841.

The list of varieties fashionable around 1880 runs into well over 100 and the following names are some of the most worthwhile varieties; Widow's Whelps, Sugar Sweet, Gilly Flowers, Beauty of Bath, Honey Combs, Lady Fingers, Fox's Whelps, Strawberry Cheeks, Angel Bites and Irish Peach.

In concluding this section I would like to say, that it was a widely held belief, that the introduction of apple growing in the North of Ireland was due to the English Planters in the reign of James I (1603—1625). However, two important facts tend to refute this theory. The first is the earlier historical evidence of apple growing in Ulster, and the second is that the undertakers in the apple growing areas did not come from orchard areas in England. One thing is true however, the settlers in these areas found a tradition in apple growing and a suitable soil, with a fairly high calcium content, which is very suitable for fruit tree growth.

The 1841 census, shows that Ulster had become the most important apple growing province in Ireland and Armagh, Antrim and Tyrone, in that order were the most important growing areas. Towards the end of the 19th century much of the apple crop was used for making cider. Many of the varieties grown at that time were also regarded as good dessert types and some of the very old people alive to-day can recall some of them. Cider making in Ulster became insignificant, and the increased production in England of dessert varieties, in greater demand by the consuming public, presented a bleak future for the Ulster apple growers. Thus in the 1880's the apple industry found itself once again in a difficult period, but this was nothing new to a business that had suffered severe set-backs down through the centuries.

The introduction of the variety Bramley's Seedling saved the situation and gave a new and lasting impetus to the apple industry. This variety is of such tremendous importance to the apple economy in the North of Ireland, that it is worth taking a closer look at its introduction, and rise in popularity, to become the finest of all culinary apples.

This apple was raised at Southwell, Nottinghamshire, by a Mr. Bramley, reputed to be a Shoemaker by profession. An account says that he planted two apple pips in his garden, both grew into trees. Side by side, both bore fruit, one was worthless, the other was a very valuable apple. The valuable one was introduced by Mr. Merryweather, in 1876, and named Bramley's Seedling. In 1884 a new publication called "Garden Work" carried an account of the apple congress held that year, at which Bramley's Seedling was exhibited. Regarding Bramley's Seedling the Committee observed 'fruit large, flat, green, streaked red and very handsome', flesh tender, brisk and acid. It was awarded a First Class certificate and the only other certificate awarded that year went to Grenadier. Thus a Bramley's Seedling/Grenadier partnership which began in 1883, continued right up until the 1970's.

By 1888 there was a regular run on Bramley's Seedling by apple growers in England. In that year Merryweather of Southwell, and Ryder of Saile advertised a total of 70,000 trees, these were all bought by June 1889. At the same time Irish growers were also interested in Bramley's Seedling, and it is on record that Mr. C. J. Nicholson of Cromagill House, Loughgall, wrote to Mr. Merryweather "respecting Bramley's Seedling" and after reading the report of the Apple Congress in 1884, Mr. Nicholson purchased 60 scions of Bramley's Seedling in the Spring of 1885. This may well be the start of Bramley's Seedling in Ireland. Interest spread rapidly. Some growers purchased trees already grafted on Seedling rootstocks, while still others grafted scions on to existing old varieties.

For numerous reasons, progress with planting remained slow. Farm prices had been on a downward trend from the 1870's until 1896. Successful apple growing depended upon the peaceful occupation of the holding over a long period, but this was not possible during a period of frequent and numerous tenant evictions. Tenants who were compelled to plant apple trees by landlords, were subjected to an additional charge per acre, on account of the orchards. The usual additional charge was 2s, 6d. per acre, and in order to get value for money, tenants planted a high rate of trees per acre—there are many instances of 300—400 trees per acre. This led to serious management problems later on.

From 1909 onwards, tenants became owners with the necessary security of tenure, and orchard planting accelerated, so that by 1921 some 7,000 acres had been planted. The vast majority of this acreage was Bramley's Seedling.

The Department of Agriculture was set up in Dublin 1899, and in its first annual report 1900—1, it referred to fruit growing in Meath and Louth and pointed to the difficulties of disposal of the crop. The Dept. mentions the formation of a Co-operative in Drogheda for jam-making and fruit drying. In 1902 the Dept. set up a factory in Portadown for the drying and preserving of fruit

but on making enquiries I can't find anyone who has any knowledge of this operation. According to records both these plants were operated later by private enterprise, with the Dept. of Agriculture acting in an advisory capacity.

Also about this time according to Dept. of Agriculture records, a cheap fruit tree scheme was introduced and continued until 1912, which must have encouraged the rush to plant apple trees at the beginning of the century. It was customary, at that time to interplant the apple trees, with gooseberry and blackcurrant bushes. Incidentally a lot of trees were also planted in the South of Ireland around this time, but a lot of the plantations there, seems to have faded out.

Apple prices were good throughout the period of the First World War. This prosperous situation was not to last, and by 1920 apple prices were affected by the general decline in agricultural prices. Pests and diseases became a serious problem, and in 1923 following an extremely wet summer, apple scab became so serious, that the trees suffered a severe shock, and it became impossible to produce saleable apples. Anything that was produced in 1923 and '24 was sold in bags for processing—mainly cider and apple pulp.

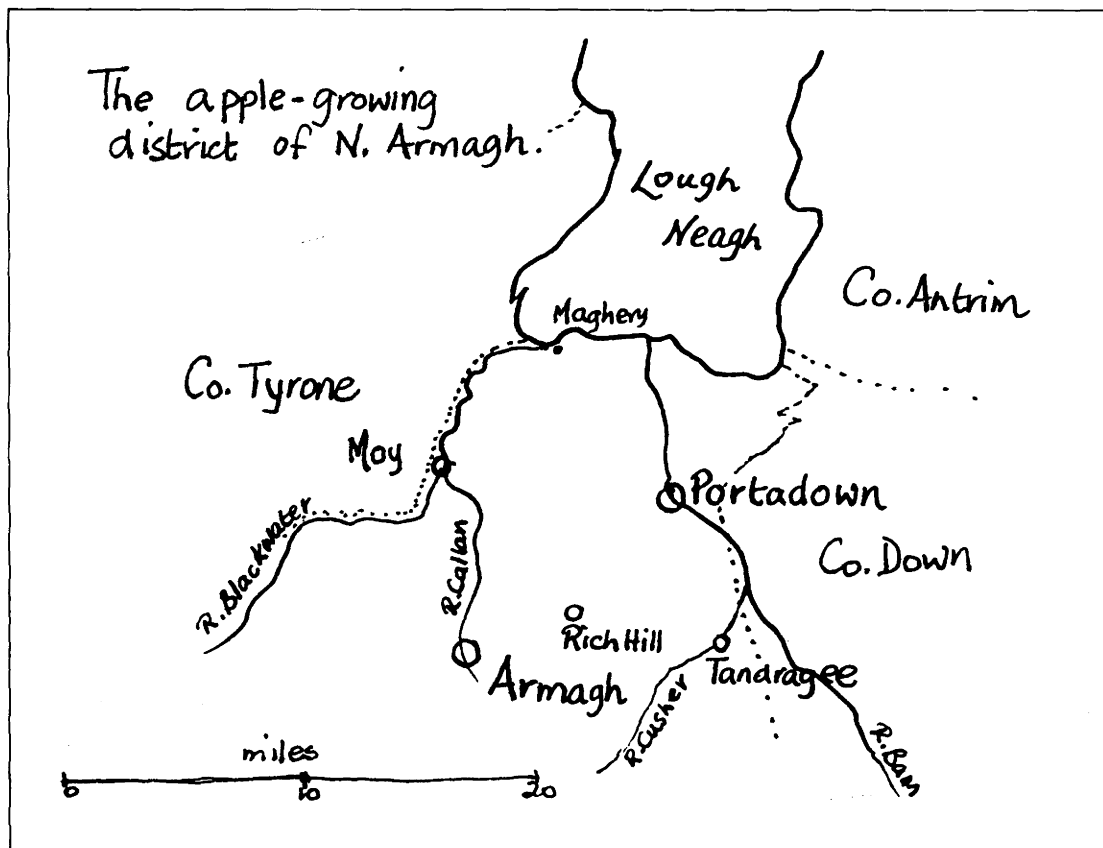
Soon after the setting up of the Northern Ireland Ministry of Agriculture in 1921 a programme of experiments was undertaken, by Dr.

Muskett and Mr. John Hagan, who was horticultural advisory officer for Co. Armagh at that time, to try and find ways and means of controlling apple scab.

The results from Bordeaux Mixture were most encouraging and growers were able to maintain healthy foliage and clean fruit. The advent of tar-oil in 1924, was another great boost for controlling greenfly and caterpillars, since damage from these pests had reached serious proportions.

These important technical developments, gave apple-growers renewed hope for the future; a hope, which did not reach reality due to the outbreak of the Economic Depression. The industry remained at a low ebb until 1937, when, as result of a light crop on the continent Dutch buyers arrived here and bought many orchards of apples, at an agreed price, with the grower carrying out the harvesting operation. This gave the apple-growers a much needed boost, but unfortunately the 1938 crop was completely destroyed by very severe Spring frost. Good times however, were around the corner, as the Second World War was approaching and high prices were the order of the day, for practically the whole of the next decade.

In the immediate years, after the Second World War apple prices held up well until 1949, when there was a very large crop both in England and Ireland, with result that the supply far exceeded



the demand. Also by this time the housewife, who had been restricted in her choice of fruit, was confronted with a wide range of foreign produce, and the demand for culinary apples declined. However, growers had made good money during the war years and they were anxious to look for other ways of disposing of their apples. This led to the introduction of gas-storage capacity, which enabled the Bramley apple to be marketed the year round and thus more apples being consumed.

The first gas-storage facility to be erected in Ireland, was built at Mahon, Portadown in 1948, by a consortium of Belfast fruit wholesalers, together with a local grower and trader namely, Mr. T. G. Troughton of Ballintaggart, Portadown. A few years later it was extended, then having a capacity of 80,000 boxes. The box I refer to, was the standard 50 lb. box, then in use throughout the apple industry. In the early 50's growers began to build their own gas-stores, each grower building to accommodate his own production. This led to an easing of the glut of apples on the market at harvest-time, particularly, in years of a very high yield.

While gas-stores were being introduced the development of the canning industry was also taking place. This new industry utilised fruit which fell below the standards demanded by the fresh fruit market. At the peak of the industry, during the late 50's and early 60's, the apple growing area, supplied about 14 factories, large and small. The preparation of the fruit for this process, entailed the peeling and coring of the apple, which was then put in brine and transported daily to the canning factory. Some of the apple preparation, which was all done by piece-work, was carried out on the factory premises, but by far the greater proportion was prepared in apple-peeling stations around the country, thus giving a lot of seasonal employment.

By far the greater proportion of canned apples, was sold in 6 lb. cans, for the catering industry, with very little of it reaching the shelves of the retail trade, I must also mention here, that in 1961, when almost the entire Bramley crop was wiped out, due to very severe Spring frost, the then Ministry of Agriculture issued licences for the importation of foreign apples, to keep the industry in production. Throughout this period, there was a general rise in the standard of living which resulted in a declining demand for fresh apples, while at the same time an increasing demand for canned apples. We had now reached an age when all kinds of produce was being preserved in cans.

According to Ministry figures for that period, up to 15,000 tons was being canned in some seasons. It was practically all Bramley apples, which made up 80% of total apple production in Northern Ireland, that was being processed, with the exception of a few Grenadiers, in the early part of the season, especially in years of light crops.

In 1950 a research centre was set up at Loughgall, to serve the horticultural industry. Much of its work was carried out on fruit growing—scab eradication, and chemical weed control being of outstanding help to all fruitgrowers. The control of apple-scab, which was referred to earlier, was always a major problem for the apple grower, since the Bramley in particular was very susceptible to this disease.

Over the years there were always new pests and diseases to deal with—Red Spider Mite, for example, was not seen on apple trees in Ireland, until about 1936, while Mildew, which was reckoned never to be a problem in this country, due to our lower temperatures and high rainfall, did eventually arrive in the late 50's. So one can conclude from this, that the battle against pests and diseases is an ongoing one.

At this point one might ask how was the spraying operation carried out down through the years. In the early part of the century, and before that, it seems very little spraying took place, and it was with the coming of the Bramley apple and its susceptibility to apple scab, that a spraying operation of some sort became a must. This operation was carried out with a Knapsack Sprayer, something similiar to what we have to-day. Looking back one would be right in thinking that it was a very arduous task, but we must bear in mind, that orchards, on most holdings, of the time, were not greater than one or two acres, and most holdings would most likely have had such a sprayer for use on their potato crop.

As time progressed, a horse-drawn spraying machine was introduced, which consisted of a 40-gallon wooden barrel, with a manually operated pump on top, placed on a cart frame. While one man operated the pump on the cart another walked behind with hose and lance.

It was not until 1927 that, the first motorised sprayer appeared in Co. Armagh, which was an old cut-down motor car, fitted with a pump and barrel, certainly not much to look at nowadays, but must have been a real breakthrough in those times. Such machines were in common use up until, and during the Second World War. With the advent of the tractor, firm built sprayers, trailed and powered by the tractor, became a common sight in Armagh orchards. This method of spraying enabled one man, to do in a few hours, the work, which hitherto would have taken days.

Perhaps here I should mention the pruning of apple-trees, a job which was carried out in the winter months. Originally it was done by short hand-saw, and a small snaffle-like apparatus, on the end of a long handle. This is something which changed very little down the years, except with the introduction of a saw on a long handle, which enabled the pruner, to remain on the ground. In very recent times pneumatic snaffle-like pruners powered by a tractor mounted compressor, are quickly gaining popularity.



John and Stephen McGrane in a Bramley Orchard at Laurelvale.

There was also a lot of work done on evaluating new rootstocks, as the grower was always looking for a smaller tree, and larger apples. The old Bramley trees, were all grown on crabstock, which tended to produce a very large vigorous tree.

In the late 40's and early 50's there was an increase in the planting of apple trees again, most of which were Bramley seedling, but some dessert varieties were introduced such as Laxton Superb, Lord Lambourne and Laxton Fortune. None of these dessert varieties, were sufficiently successful to become a real commercial venture, thus we see that an expansion of planting in the late 60's and early 70's was almost entirely Bramley Seedling.

In the post-war years specialisation began to creep into all aspects of farming and the apple-growing industry was no exception. Prior to this change most small mixed farms in the area, had from 1—5 acres of orchard, thus we see according to a Ministry census, that as late as 1964, we only had 79 growers with more than 10 acres. In the 60's and 70's, a lot of small orchards were grubbed out, while some of the larger ones were taken in conacre by the specialist growers, who were prepared to invest in plant and machinery. As a result of the 1964 census on apple growing, it was concluded that a lot of new orchards would have to be planted, since it was discovered that 5,800 acres out of a total of 7,500 acres, was over 45 years old.

It was generally felt that over the years, the apple-grower was just about getting a living from his occupation and had little money left to invest in re-planting. Another aspect which discouraged the mixed farmer planting trees was the long delay in getting a return on his investment, while he felt the land could be put to better use. This delay, in many cases, could have been up to ten years. About this time there was much rumour about entering the EEC and most of the experts, painted a very gloomy picture for the apple-growing industry in Northern Ireland.

Before I go any further, perhaps I should look at packaging and marketing in a little more detail. It is thought that in the early part of the last century, most of the apples were sent to market in sacks, but we do know that in the latter half of the last century, and right through until the 1930's, the standard container for apples was the 10 stone apple barrel. This barrel was made of wood and when filled was topped with a hay rope, which was fastened in position with very light ropes.

There was also a keg in use, holding about four or five stone. In the early part of the century there was a thriving apple market in Portadown. Apples bought at this market were railed to Belfast and quite a lot found their way to such places as Glasgow, Edinburgh and markets in the North of England. As was stated earlier, apple prices soared during the First World War, reaching as high as £12 per barrel and finding their way to markets as

far south as London.

The two principal home markets were Dublin and Belfast, the former having become very restricted after the setting up of the Border. At one stage Annaghmore Station was a great centre of activity, when trains were loaded with apples and strawberries when in season, for the Dublin market. It was also common in the early part of the century for some apple growers to take their produce to Belfast market by horse and cart. A few growers used to go and sell their produce and that of others, on the Glasgow market, most notably Mr. Michael Conway and Mr. O. Redmond, staying two and three days at a time.

The largest local buyer and exporter in the Portadown area in those days was James Grew & Co., who also operated a cider factory, a plumping plant and later a canning factory.

Lamb's of Richhill, were also large buyers at the time, operating a jam factory and later a canning factory.

Grew's cider factory ceased operating about 1925. I might note here that the Bramley apple was a poor product for the making of cider.

Between the wars, during the depression, most marketing took place within the U.K. Some apples did find their way to the Dublin market on vouchers which were occasionally issued by the Southern Government. During the 30's the 10 stone barrel was gradually being replaced by a 70 lb. box, which in turn was replaced by a 50 lb. box during the Second World War. By the end of the 40's we were packing apples for the first time in cardboard boxes, at first 40 lb., later reduced to 30 lb., which has survived to the present day, with a certain amount used for cell-packing now.

During the Second World War, there was a great demand for apples in England and Scotland,

with result the export figures rose from 6,000 tons to 16,000 tons per year. Apples did not reach the record high prices of the First World War as price-control was introduced. Nevertheless growers were very happy, particularly as they looked back on the terrible 20's and 30's.

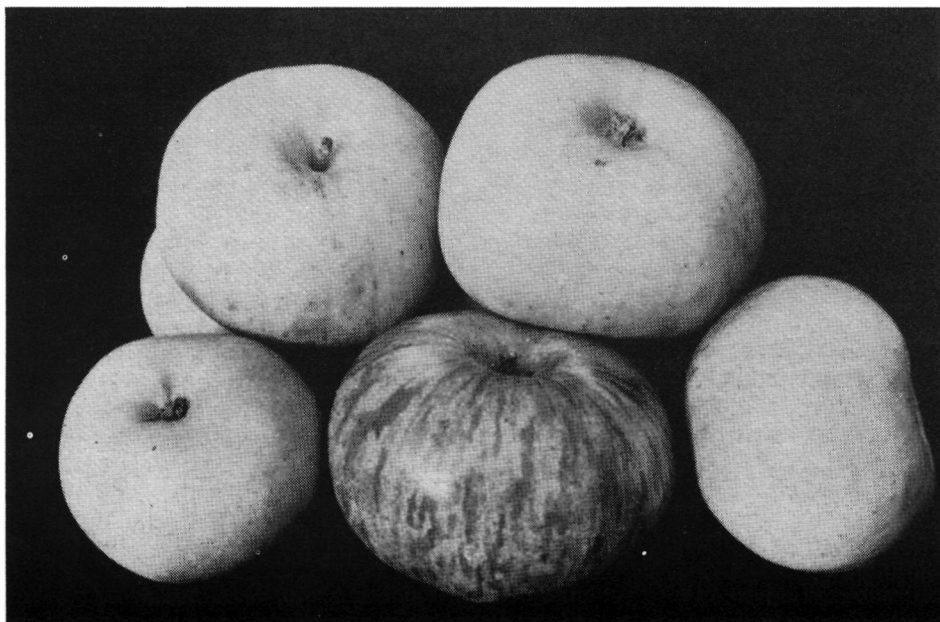
Exports to England and Scotland again fell in the 50's, but in a way was made up for, by a big export of canned apples, while at the same time the Dublin market was opening up despite a tariff barrier, which I think was about 7s. 6d. per box. The Dublin market continued to grow right up until the 80's when it then seemed to level off. During that time the tariff disappeared to the detriment of Southern growers.

In the late 60's the canning business began to shrink, with result that we are left with only about four or five canning factories to-day, while at the same time a new process, know as dicing, was introduced by James Mackie & Co, of Collegelands.

This process did away with the expense of canning and the fresh dices, are exported in polythene bags, placed in boxes, every few days, to the catering industry in England, while at the same time not neglecting the needs of the home market and the Republic of Ireland. This process is carried out the year round, unlike the canning which was seasonal.

Perhaps it is worth mentioning here, that there are pretty large imports of Italian dried and canned apples into the British Isles at any given time and also canned apples from China and Japan, so like most other industries there is no shortage of competition.

As we progressed through the 80's the trade on the fresh apple market, seemed to go in reverse,



Bramley's Seedling apples.

with the arrival of English Bramleys on the Dublin and Belfast markets, which prompts one to ask why can't we supply our own markets.

Perhaps the chief reason for this trend is the demand by the Supermarkets, which are springing up all over the country, for very large Bramley apples, which are more easily grown, in the warm conditions of Southern England.

As the English grower had captured a certain amount of the Irish fresh apple market, it was then up to the Armagh growers to get a greater portion of the processed market in England; hence the great emphasis on processing in Armagh at the present time, with over 17,000 tons being processed in the 1990-91 season, with prospects of even more being done in the present season. It is quite possible that when you buy Mr. Kipling's Apple Pie, you are eating Irish apples.

As a result of the 1964 census it was apparent that the apple industry in N.I. had reached another crisis in its chequered career. Because of too many old orchards and too many small orchards, apple growing, as a viable industry seemed destined to decline and collapse, unless growers put fresh thinking into practice and undertake replacement planting on a large scale. As the industry was built around the Bramley, it was a forgone conclusion that it would be the variety that may be planted on a large scale.

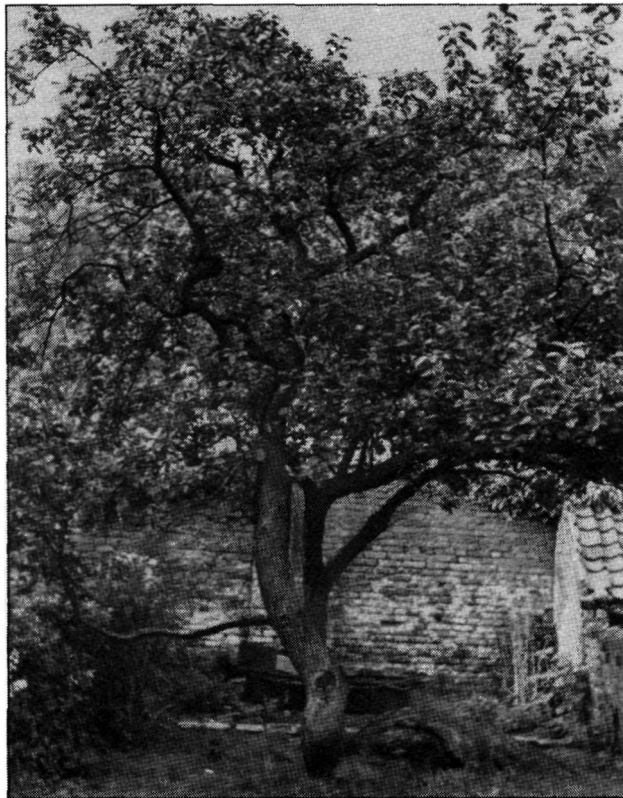
So in 1967 the Ministry of Agriculture introduced a grant aid programme for the planting of Bramley apples. The more specialised growers

took advantage of this, and between 1967 and '74, 1,625 acres were planted under this scheme.

The entire new plantation, was Bramley Seedling intermixed with Grenadiers for pollination purposes. Around this time mechanical handling was being introduced to the apple industry, which enabled a grower to manage a much greater acreage, than would have been possible a few years earlier. The standard 50 lb. box, was being replaced by a wooden bin, which contained approximately 850 lb. These containers were placed in the gas-store by fork-lift, thus eliminating the drugery and expense of man-handling thousands of small boxes.

Upon entry to the EEC the apple industry benefitted from the intervention system, which allows the grower in years of surplus to be paid, a below cost price, to dump that surplus. When it has to be used, the grower just gets by, but makes no money.

Although the emphasis has always been on planting Bramleys, some growers in the last few years, have turned their attention on the dessert apple scene, experimenting with some of the new varieties, which have come on stream in more recent times. How successful this venture will be only time will tell.



The original Bramley's Seedling apple.