

Ministry of Agriculture and Forestry

Pipfruit Monitoring Report

A short-term financial and physical forecast
reflecting grower, consultant and industry perceptions
of pipfruit trends and issues, production and financial figures
in Hawke's Bay and Nelson

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MAF Policy
Ministry of Agriculture and Forestry
PO Box 371
Hastings

Telephone: (06) 870 6304
Facsimile: (06) 870 6305

Copies are available from:

Publications Officer
MAF Information Bureau
PO Box 2526
Wellington

Telephone: (04) 474 4100
Facsimile: (04) 474 4111

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Pipfruit Monitoring Team

Sector Controller: Duane Redward, MAF Policy, Hastings

Model	Model Controller	Telephone
Hawke's Bay	Duane Redward	(06) 870 6304
Nelson	Nick Dalgety	(06) 543 9182

All information for the models has been contracted in by MAF.

Foreword

Monitoring is a process whereby MAF Policy monitors the production and financial status of farms and orchards in terms of cash income and expenditure. Trends, issues and sector concerns are also monitored. The information for the models has been contracted in by MAF.

The report reflects growers' expectations and intentions, and the thoughts of those servicing the sector. They are not MAF price or production predictions.

The model orchards depicted in this report are representative of their orchard type within the region. They are not based on the average orchard in a statistical sense for the regions. However, they have been adjusted to represent real orchards.

From time to time the models are revisited. This results in some changes, and caution should be taken in comparing between years.

Information for each model is drawn from 20 orchardists, and discussions with a wide cross-section of agribusiness.

The aim of each model is to best represent a typical orchard for the region. Budget figures are therefore indicative of the average levels of income and expenditure, management, orchard production, debt and expenditure on development, and capital purchases. Drawings are averaged from the contributing orchards, as are off-orchard income, other cash income and lease costs.

Monitoring is being continually improved to better accommodate the needs of the users of the reports.

The economic orchard surplus (EOS) depicted in the model budgets is calculated as follows:

Gross orchard revenue - working expenses (excluding interest, rent and lease costs) - depreciation - wages of management (WOM).

Wages of management are calculated as follows:

\$31,000 allowance for labour input + 1% of total capital as managerial reward. An upper limit for WOM of \$75,000 has been set.

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Sector Overview

The 2004 season was a particularly difficult year for orchardists. Despite high production resulting in record exports, many orchards made significant cash losses due to a dramatic reduction in pipfruit returns. A number of factors contributed to this, including:

- the high New Zealand dollar (NZD) exchange rate;
- record volumes of NZ fruit;
- high volumes of fruit from other Southern Hemisphere competitors;
- a large carry-over Northern Hemisphere apple stocks and increasing use of Smartfresh™ storage technology, particularly in the United States (US);
- unco-ordinated marketing of apples originating from New Zealand.

Hawke's Bay and Nelson models experienced disposable deficits of -\$148,000 and -\$151,000 respectively. These deficits are offset to a small degree by off-orchard income, although the majority will have to be funded from cash reserves or new borrowing.

The dramatic decrease in income has severely knocked the confidence of growers in the pipfruit industry and will have a flow-on effect for the regional economies of Hawke's Bay and Nelson. Many growers are assessing their current position and, if they experience another poor year financially, may exit the industry. This will result in significant rationalisation, with remaining growers likely to increase the size of their orchards, and unprofitable orchards being removed from production.

Growers surveyed in both Hawke's Bay and Nelson optimistically forecast pipfruit returns to improve in 2005, resulting in breakeven situations for the model orchards. However, industry representatives consulted at meetings in Hawke's Bay and Nelson consider that returns will not increase in 2005 due to the high New Zealand dollar, high levels of carry-over stock in the markets, strong competition from other Southern Hemisphere exporters, rising shipping costs, and a continued unco-ordinated marketing approach from New Zealand.

The MAF forecasts in the table below suggest that returns will decrease further in 2005, primarily due to higher exchange rates.

Apple Exports and Returns

	2002	2003	2004	2005 ^f	2006 ^f
Exports (million cartons)	17.7	17.9	19.9	18.7*	19.0
Export returns (\$/carton) ¹	19.42	21.19	16.12	15.39	17.97
Export value (\$ million) ²	423	435	377	343	400

* At the time of publication, Pipfruit New Zealand had just reviewed this year's apple crop estimate against harvest. Overall the crop appears to be about 4% down. Therefore, the national estimate for export apples is likely to be down 17.9 million rather than the 18.7 million cartons predicted earlier in the year.

^f = forecast

¹FAS

²FOB

For the industry to move forward, many in the industry consider that the following are required:

- research needs to be undertaken to identify new varieties;
- minimum standards for fruit quality need to be adopted industry-wide;
- New Zealand's marketing approach needs more co-ordination; and
- New Zealand should differentiate its apples from competitors on the basis of nil or low residue levels arising from IFP and Eurepgap accreditation.

Hawke's Bay Pipfruit

Model Description

Hawke's Bay is the largest pipfruit-producing district in New Zealand, exporting 50% of the country's pipfruit crop. Most orchards have a mixture of pipfruit varieties and are run by owner-operators. However, there is an increasing trend to corporate ownership not captured by this model.

The model orchard size has increased to 17 planted hectares (ha), up from 15 ha in the previous year. This reflects an industry-wide trend of increased orchard size through both leasing and ownership. The 17 ha consists of 12 ha owned and 5 ha leased. Prior to 2004, it was assumed that 100% of the model orchard was owned. This change reflects the current situation in the pipfruit industry.

Note: Since 2003 this report has been prepared using a 31 December balance date, whereas previous reports used a 30 June balance date. The previous system made year-to-year financial comparisons difficult.

Table 1: Key Parameters

	2000/01	2001/02	2002	2003	2004	2005f
Area available for pipfruit (ha)	15.0	15.0	18.8	18.8	21.3	21.3
Planted area (ha)	12.0	12.0	15.0	15.0	17.0	17.0
Total TCE	31,497	36,844	45,528	45,200	53,636	51,858
Export TCE	19,604	24,056	32,073	32,422	38,045	37,178
Weighted average price (\$/TCE)	11.61	12.30	16.38	15.90	12.80	14.27
Cash orchard revenue (\$)	378,000	423,000	748,000	721,000	689,000	741,000
Cash orchard surplus (\$)	4,000	27,000	211,000	141,000	-31,000	-54,000
Cash disposable profit (\$)	-47,000	-16,000	71,000	-31,000	-148,000	-10,000

Key Points

- Pipfruit returns in 2004 dropped below the cost of production, resulting in large losses and increased borrowings.
- Surveyed growers consider that export returns will increase by an average of \$2 per carton in 2005, resulting in a breakeven situation. However, industry experts consider that prices will remain similar to 2004, resulting in significant losses in 2005.
- The 2005 Hawke's Bay pipfruit crop is expected to be 16% down on 2004 due to a biennial fruit set in Braeburn and widespread hail losses.
- Pipfruit growers, particularly small-medium sized owner-operators, are very nervous about the medium term future, with many looking to exit over the next 12 months. They perceive the risks to be too high and would prefer to lease or sell while property values are reasonable.
- While the number of owner-operator growers is declining, vertically integrated businesses (grower/packer/shipper) are actively growing. This usually occurs by leasing existing orchards, but also by developing new land.

Physical Factors

Climate 2003/04

Winter 2003 began with mild temperatures but ended with a colder than normal July and August, leading to good winter chilling. This was followed by a warm September, resulting in rapid and strong bud-break. October 2003 was cool, but featured many sunny, clear days with reasonably warm day-time temperatures and cool nights, giving ideal conditions for fruit development during the critical post-blossom cell division period. As a result, fruit shape in Hawke's Bay was longer than normal and more "crowned".

The 2003/04 growing season was wet, with above average rainfall in September, December, January and February. This was very good for tree growth, but impacted adversely on fruit quality at outturn, with many lines having difficulty with low pressure and sugar levels.

Average rainfall in October, and a dry November, resulted in good fruit set conditions. This, together with an “on crop” flowering due to frosts in spring 2002, led to exceptionally heavy fruit set, particularly in the Braeburn varieties.

March and April were dry and harvest conditions were very good, with almost no picking days lost because of wet weather. Minimal hail occurred with only one significant storm towards the end of harvest which affected late varieties on a few orchards in the Oamaru and Meeanee districts.

Climate 2004/05

Winter 2004 was long and resulted in good winter chilling. Cold weather during August and early September 2004 delayed bud-break, but once warm temperatures occurred, bud-break was rapid and compact. When spring finally arrived, temperatures for September, October and November were above average, with very good conditions for fruit set and cell division over the critical 50 days after blossom.

December 2004 was very wet and cold with nearly five times its normal rainfall (see Table 2) and average temperatures similar to November. October rainfall was almost three times the average, while September and November and January 2005 were dry. February continued to be dry, with lower than average sunshine and warm night temperatures.

Hail storms causing significant fruit damage occurred in October and December. The December hail was widespread and will have a significant adverse impact on packouts, with increased packing costs.

Very windy conditions prevailed throughout late November and December 2004, and it is anticipated that wind rub damage will be a significant cause of export fruit rejection this season.

Damaging frosts were generally absent this spring and, along with dry weather over the post-blossom period, there are very low levels of fruit russet, particularly in russet-prone varieties such as Pacific Beauty and Pacific Queen.

The dull, cloudy weather, interspersed with short periods of bright sunshine and high temperatures, has increased sunburn injury relative to recent seasons. There is also concern that colour development will lag behind fruit maturity for early-mid season varieties.

Wet weather in October has resulted in black spot infection on some orchards.

European red mite levels, while lower than last season, continue to cause concern, and are much more prevalent in orchards than they were four or five years ago, before the present Integrated Fruit Production spray programme based on “soft” pesticides was introduced.

Woolly apple aphid (WAA) infestation has been obvious on many orchards again this season. However, the warm spring favoured more rapid build-up of the predator Aphilinas Mali to bring WAA under control, with less need for specific insecticide sprays.

Table 2: Hawke’s Bay Weather Data

	2003/04 (rain mm)	2004/05 (rain mm)	Average (rain mm)	2003/04 (GDD)	2004/05 (GDD)	Average (GDD)
September	133	9	32	97	64	49
October	26	68	24	92	124	110
November	56	26	61	138	166	147
December	78	116	25	244	165	225
January 2005	60	32	56	275	248	254
Total	353	251	198	846	767	785

Source: HortPlus (Whakatu weather station)

Production

Since industry deregulation, accurate areas and production data have been difficult to obtain. In the absence of industry-wide data, several data sources have been used to produce the estimates in this report.

2004

Model orchard size increased from 15 to 17 ha, representing the trend in Hawke's Bay of increased orchard size resulting from both leasing and purchasing. Of the 20 growers surveyed in 2005, 13 lease land. The Hawke's Bay model leases 5 ha out of the 17 ha planted.

Gross production increased marginally in 2005 with Fuji, Braeburn and Pacific Beauty production increasing, while Pacific Rose was similar to 2003, and production of Pacific Queen, Royal Gala, Granny Smith and Pink Lady all fell.

Hawke's Bay regional estimates for the 2004 export crop show 11.5 million cartons, representing 57% of the national export crop, up 12% on the 2003 crop. The more favourable spring growing conditions gave increased average fruit size for Royal Gala to 114 count, up from 127 the previous year. Braeburn fruit size was similar to the previous season at average 108 count. Average export packout was down 1% on the previous season at 71%.

2005

Growers estimate that orchard export production will decrease by 2%. Large decreases in Braeburn and Pacific Rose are offset by increased Pacific Beauty and Pacific Queen export production.

Regional estimates indicate the Braeburn, Fuji and "other apples" exports will decrease considerably while Royal Gala will remain relatively stable, resulting in the total district export pipfruit production decreasing by 16% in 2005.

The decrease in export production is due to reduced packouts caused by hail, wind rub, and "off" crops in the biennial bearing Braeburn and Fuji varieties.

Present indications are that average Royal Gala fruit size will be smaller than the 2004 crop, at around 120 count, largely due to growers placing less emphasis on very large sized Royal Gala, which suffered a sharp drop in returns. Braeburn and Fuji fruit size is likely to be larger than in 2004 due to lighter crops on these varieties.

Table 3: National and Hawke's Bay Export Pipfruit Crop (million cartons)

Year	National Crop	Hawke's Bay Crop
2000	19.8	10.3
2001	14.5	7.7
2002	18.5	9.5
2003	18.1	9.2
2004	20.3	11.5
2005 estimate	18.7	9.7

Source: NZ Pipfruit

Financial Factors

2004 Review

Revenue

Gross orchard revenue for the model orchard decreased significantly in 2004 despite export production being 4% higher. This decline in gross revenue was due to the dramatic decrease of 19% in average export return per carton (see Table 4). This has been attributed to a number of factors, including:

- the high NZD exchange rate;
- record volumes of NZ exports;
- high volumes of pipfruit from other Southern Hemisphere competitors;

- large carry-over Northern Hemisphere apple stocks and the increasing use of Smartfresh™, particularly in the US;
- multiple uncoordinated marketing of apples originating from New Zealand.

Table 4: Average FAS Export Returns (\$/TCE)

Variety	2000	2001	2002	2003	2004
Braeburn	14.95	18.39	18.00	20.08	15.42
Granny Smith	27.60	23.19	20.88	20.37	15.28
Royal Gala	15.55	19.69	23.85	21.42	17.50
Fuji	20.91	23.65	27.79	24.72	21.66
Pacific Rose	19.71	20.96	22.16	17.82	13.54
Pink Lady	19.97	25.25	28.74	26.99	25.68
Total apples	16.30	19.75	22.14	21.17	17.12

Source: MAF Farm Monitoring

Expenditure

Cash orchard expenditure increased to \$17.89/export carton in 2004, due to major increases in wages and post-harvest costs. Operating and administration costs have remained stable.

Orchard wages per export carton increased by 10% in 2004 due to the increased cost of employing orchard staff or contractors for pruning, thinning and harvesting. Most of the orchards surveyed now rely on contractors to provide labour during key times of the season, which attracts a higher cost than employing individual staff. Payment based on the amount of apples harvested or the number of trees thinned, as opposed to hourly rates, has increased in an effort to attract and retain sufficient people to undertake the tasks. Growers have also had to increase the rates paid to permanent staff to be able to match other competing industries.

Post-harvest costs rose by 6%/export carton due to increases in packing, packaging and cool storage costs. Post-harvest costs now represent 53% of total cash orchard expenditure per export carton.

Net Result

2004 delivered a disappointing net result, with the model returning a net trading loss of \$52,000 (\$3,059/ha). This net trading loss followed several good seasons for the pipfruit model and is a reflection of the poor market returns experienced in 2004.

The net cash change is a large deficit of \$113,000. This is a major loss for the model orchard. Most orchardists have borrowed more to fund this loss. High land prices have meant further borrowing is possible. It has, however, caused a major mindset change, with growers very nervous about their long-term future.

2005 Forecast

Revenue and expenditure in the 2005 budget, and commented on in the following section, represent the expectations of the 20 growers surveyed. Many industry commentators consider these forecasts optimistic and, for that reason, a section has been added to this report comparing grower and industry forecasts.

Revenue

In 2005, the growers surveyed forecast a slightly reduced crop of 37,200 export cartons, a decrease of 2%. Packouts are forecast to be similar, at around 71%.

Growers forecast returns to be better than 2004, with an average return of \$18.98/export carton. This gives gross orchard revenue of \$740,000 for the model in 2005.

Expenditure

Cash orchard expenditure in 2005 is forecast by growers to be slightly less than in 2004. This is due to a reduction in operating expenses of 8%/export carton as the impact of poor financial performance in 2004 is felt, and growers cut back on operating costs where possible.

Wages, post-harvest costs and administration costs are forecast to be similar to 2004.

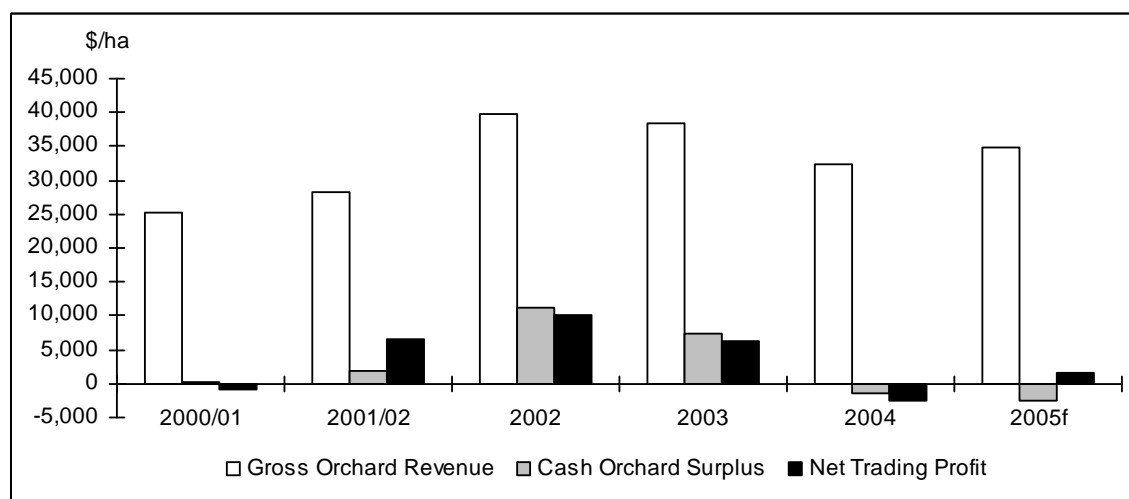
Net Result

Net trading profit is forecast by growers to be \$34,000 in 2005 and, although this is better than the net trading loss in 2004, it is still well below net trading profits of the model in 2002 and 2003.

Drawings are forecast to be reduced in 2005, and expenditure on development and capital purchases are also expected to be well down. No principal repayments are forecast for 2005.

This gives a forecast disposable deficit of \$10,000, or \$0.26/export carton for the model in 2005.

Hawke's Bay Pipfruit Profitability Trends



Industry Forecasts

The model orchard is based on grower expectations. The farm monitoring process also surveys the opinions of industry experts. Grower expectations for the 2005 model forecast have been used in this report. Industry experts believe that in times of hardship, growers' natural reaction is to be too optimistic with their forecasts and budgeting. Industry experts analysed the grower model, and have taken a more conservative stance as indicated in Table 5.

The industry is forecasting a much lower crop of 32,300 export cartons in 2005, a decrease of 15% on 2004. This is due to a combination of the "off" Braeburn and Fuji crop, and a forecast lower export packout of 65%, down from 71% in 2004. The reduction in packout is due to widespread hail damage, wind damage to fruit, and more Pacific Rose being sold through local rather than export markets.

Returns are forecast to be similar to 2004 with an average return of \$17.27/export carton, with no additional fall in the NZD relative to our trading partners, a forecast of similar market conditions to 2004, and the growing impact of Smartfresh™. Foreign exchange rates at time of writing are 10% worse overall than during the 2004 selling season.

Table 5: Industry vs Grower Expectations

	2004	2005 Grower forecast	2005 Industry forecast
Gross TCE/ha	3155	3050	2927
Average packout (%)	71	72	65
Export TCE/ha	2238	2187	1898
Gross revenue (\$)	688,505	741,000	598,000
Orchard expenses (\$)	680,481	643,000	613,000
Disposable surplus/deficit (\$)	-147,736	-10,000	-116,000

Industry forecasts are for cash orchard expenditure to decrease overall due to the smaller crop, but to increase on a per export carton basis by 6% to \$19.00/export carton. This is primarily due to lower

packouts pushing up the per export carton costs. The net result of the industry model is a net trading loss of \$79,000.

While there are few tax payments forecast in 2005, no principal repayments, and heavily reduced expenditure on orchard development and capital items, the industry model still forecasts a disposable cash deficit of \$116,000 for 2005. There will be major ramifications for the New Zealand pipfruit industry if this eventuates (refer Issues and Trends).

Issues and Trends

Poor returns for the 2004 crop have caused the industry attitude to change from being optimistic to pessimistic about the future. The 2004 selling season has been the first season since the market was deregulated where the industry experienced an over-supplied market. The high NZD has compounded the market over-supply problem through reducing the value of returns in NZD terms. Furthermore, the decay in the US dollar (USD) value relative to the European currencies diverted fruit away from Asia and the US markets, adding to the over-supplied European market.

Apple growers are very concerned about the strength of the NZD and view it as a major factor in their low returns, leading to concerns regarding the immediate future. A return to confidence in the longer term is very dependent on a fall in the exchange rate towards its long-term average.

Growers are now aware that their major varieties, Royal Gala and Braeburn, have become commodity items with increasing competition from both carried over Northern Hemisphere product and lower cost Southern Hemisphere producers. In the case of Royal Gala, which responds well to the storage enhancer Smartfresh™, supply competition from other producers, in particular from the Northern Hemisphere, is expected to increase markedly. Smartfresh™ is not yet able to be used by European producers, but will probably gain registration next year. This will mean more competition from stored European product.

New Zealand growers are very worried about the impact Smartfresh™ will have on their future returns. The industry needs to develop strategies to combat the impact of Smartfresh™ by discovering new ways to differentiate their product.

The profit downturn has sharpened grower focus on marketing issues. Those of concern include:

- access to the Australian market,
- market orientated research and development,
- market intelligence on competitor activities,
- shipping quality standards;
- availability of market outlets for fruit;
- poor market co-ordination – too much New Zealand fruit being sold outside of planned programmes, dragging down prices for all New Zealand pipfruit;
- concentration of buying power among fewer powerful supermarkets.

On the positive side, bilateral trading agreements being pursued by the government are viewed by pipfruit growers as opening up marketing opportunities for them.

The multiplicity of exporters is seen as an industry problem. There needs to be rationalisation and consolidation among exporters. This is beginning to happen with various groups such as HB Growers Trust, Mr Apple and KiwiCrunch forming strategic alliances.

There is a strong trend towards vertical integration among the larger post-harvest service providers who are lacking in product supply, through leasing or owning orchards and establishing their own export marketing.

Individual owner/operators, particularly the smaller ones, feel threatened as they perceive the industry power base to be moving away from them towards the larger, vertically integrated corporate organisations.

Choice of exporter by growers is now being made on the basis of exporter performance, with growers remaining loyal to those who have provided their best returns, while rejecting those who have failed to

achieve reasonable prices. Those with fixed price programmes and good local market programmes are being favoured ahead of those selling on consignment.

With falling returns for the main varieties, the industry must diversify its production towards more profitable varieties. Variety choice is limited due to the poor performance of the Pacific series, and the capped production policies applied to the newer varieties of Jazz™ and Tentation™. Growers who have access to these varieties are planting up to their entitlements. Other varieties being planted include high colour strains of Fuji, Royal Gala on dwarf rootstocks, and some Braeburn and Pink Lady.

Growers are removing the non-performing Pacific varieties, older Royal Gala blocks, and poorer blocks of Braeburn. In the event that returns remain low, orchard removals will increase. Lack of income to finance re-development and no clear variety choice available would see the land being retired from pipfruit production.

Properties available for orchard leasing will increase with downward pressure on rents, and only the better-producing properties will be attractive to lessees.

Land values remain high and beyond the productive capability of apple orchards. The recent increase in land values puts apple growers in a stronger financial position than during the last industry downturn due to increased equity. However, if low export apple prices continue, their financial position will rapidly deteriorate.

Production, post harvest, shipping and compliance costs continue to increase. The majority of those costs are beyond the apple growers' control. Being "price takers" rather than "price makers", they are unable to pass these costs on.

Apple production is labour intensive, with peak labour requirements occurring over the summer and autumn seasons when the majority of New Zealand statutory holidays fall. The industry has been particularly disadvantaged by the new Holidays Act which raises labour costs to uneconomic levels, should it be necessary for orchard work to be done on a statutory holiday. This would easily occur in the event of adverse weather disrupting work schedules. Due to reduced apple volume and the impact of hail this year, apple growers are more confident about access to harvest labour than last year. Even so, labour remains a major issue for the industry. There is concern with skill levels, motivation and reliability.

Low returns in the industry limit its ability to attract and hold good permanent staff, leading to a shortage of supervisory skills and middle management infrastructure, as orchards get larger and more complex in their operations.

On a positive note, the industry is very appreciative of the changes government has made to immigration policy to streamline the employment of overseas workers for casual seasonal work.

Apple growers believe their industry needs to improve its image with more emphasis on the positives, such as its IFP programme and adoption of quality assurance programmes such as Eurepgap.

Market feedback has identified the need for more promotion of New Zealand pipfruit in export markets. Since industry deregulation and fragmentation, such activity has fallen away, to the detriment of New Zealand's image in the market.

Hawke's Bay Pipfruit Budget

	2004				2005f			
	Whole orchard	\$ per planted ha	per TCE gross	per TCE export	Whole orchard	\$ per planted ha	per TCE gross	per TCE export
Revenue								
Gross pipfruit income	686,533	40,384	12.80	18.05	740,050	43,532	14.27	19.91
Other orchard income	1,972	116	0.04	0.05	1,360	80	0.03	0.04
Gross orchard revenue	688,505	40,500	12.84	18.10	741,410	43,612	14.30	19.94
Cash orchard expenditure								
Interest	23,749	1,397	0.44	0.62	26,248	1,544	0.51	0.71
Rent and/or lease	15,555	915	0.29	0.41	17,714	1,042	0.34	0.48
Cash orchard surplus	-31,279	-1,840	-0.58	-0.82	54,082	3,181	1.04	1.45
Depreciation	20,723	1,219	0.39	0.54	19,737	1,161	0.38	0.53
Net trading profit	-52,002	-3,059	-0.97	-1.37	34,345	2,020	0.66	0.92
Taxation	19,233	1,131	0.36	0.51	6,697	394	0.13	0.18
Net trading profit after tax	-71,236	-4,190	-1.33	-1.87	27,648	1,626	0.53	0.74
Allocation of Funds								
Add back depreciation	20,723	1,219	0.39	0.54	19,737	1,161	0.38	0.53
Drawings	49,912	2,936	0.93	1.31	44,013	2,589	0.85	1.18
Principal repayments	0	0	0.00	0.00	0	0	0.00	0.00
Development	19,720	1,160	0.37	0.52	2,006	118	0.04	0.05
Capital purchases	27,591	1,623	0.51	0.73	11,050	650	0.21	0.30
Disposable surplus/deficit	-147,736	-8,690	-2.75	-3.88	-9,684	-570	-0.19	-0.26
Other Cash Sources								
Off-orchard income	26,520	1,560	0.49	0.70	27,200	1,600	0.52	0.73
Other cash income	8,653	509	0.16	0.23	0	0	0.00	0.00
Net cash change	-112,563	-6,621	-2.10	-2.96	17,516	1,030	0.34	0.47
Assets and Liabilities								
Land and building (opening)*	1,287,810	107,318	24.01	33.85	1,259,939	104,995	24.30	33.89
Plant and machinery (opening)	68,000	4,000	1.27	1.79	89,811	52,83	1.73	2.42
Total orchard capital	1,355,810	79,754	25.28	35.64	1,349,750	79,397	26.03	36.31
Total debt opening	357,136	21,008	6.66	9.39	469,699	27,629	9.06	12.63
Equity (orchard assets-liabilities)	998,674	58,746	18.62	26.25	880,051	51,768	16.97	23.67

* Land and building value does not include value of leased land. Therefore, per hectare value is total value/area of owned land.

Hawke's Bay Pipfruit Budget

	2004				2005f			
	Whole orchard	\$ per planted ha	per TCE gross	per TCE export	Whole orchard	\$ per planted ha	per TCE gross	per TCE export
Orchard Working Expenses								
Wages								
Pruning	27,115	1,595	0.51	0.71	25,041	1,473	0.48	0.67
Thinning	38,216	2,248	0.71	1.00	36,397	2,141	0.70	0.98
Harvesting	101,371	5,963	1.89	2.66	96,456	5,674	1.86	2.59
Other	23,800	1,400	0.44	0.63	22,423	1,319	0.43	0.60
ACC	3,315	195	0.06	0.09	3,519	207	0.07	0.09
	193,817	11,401	3.61	5.09	183,836	10,814	3.54	4.94
Post-harvest costs								
Packing	131,635	7,743	2.45	3.46	124,917	7,348	2.41	3.36
Packaging	146,853	8,638	2.74	3.86	140,903	8,288	2.72	3.79
Coolstorage	71,144	4,185	1.33	1.87	68,035	4,002	1.31	1.83
Freight	9,654	568	0.18	0.25	8,816	519	0.17	0.24
	359,287	21,135	6.70	9.44	342,671	20,157	6.61	9.22
Operating costs								
Spray and chemicals	38,828	2,284	0.72	1.02	37,944	2,232	0.73	1.02
Pollination	986	58	0.02	0.03	935	55	0.02	0.03
Fertiliser	3,553	209	0.07	0.09	2,873	169	0.06	0.08
Electricity	3,179	187	0.06	0.08	3,026	178	0.06	0.08
Sundry expenses	9,265	545	0.17	0.24	7,667	451	0.15	0.21
Vehicles	17,187	1,011	0.32	0.45	14,501	853	0.28	0.39
Repairs and maintenance	14,501	853	0.27	0.38	11,611	683	0.22	0.31
	87,499	5,147	1.63	2.30	78,557	4,621	1.51	2.11
Administration and property expenses								
Communication	3,485	205	0.06	0.09	3,026	178	0.06	0.08
Rates	5,083	299	0.09	0.13	5,117	301	0.10	0.14
Accountancy, consultancy, legal	5,389	317	0.10	0.14	5,134	302	0.10	0.14
General insurance	3,111	183	0.06	0.08	3,060	180	0.06	0.08
Crop insurance	11,016	648	0.21	0.29	11,220	660	0.22	0.30
Levies and compliance	7,509	442	0.14	0.20	7,260	427	0.14	0.20
Other	4,284	252	0.08	0.11	3,485	205	0.07	0.09
	39,877	2,346	0.74	1.05	38,302	2,253	0.74	1.03
Cash orchard expenditure	680,481	40,028	12.69	17.89	643,366	37,845	12.41	17.31
Calculated Ratios								
Economic orchard surplus (or EBIT)	-57,257	-3,368	-1.07	-1.50	33,809	1,989	0.65	0.91
Cash orchard expenditure/GOR	99%				87%			
EOS/total orchard capital	-4.2%				2.5%			
EOS less interest & lease/equity	-9.7%				-1.2%			
Interest+rent+lease/GOR	5.7%				5.9%			
EOS/GOR	-8.3%				4.6%			
Economic orchard surplus (EOS) is calculated as follows:								
Gross revenue-cash orchard expenditure-depreciation-wages of management.								
Wages of management = \$31,000 + 1% of opening total orchard capital to a maximum of \$75,000								

Hawke's Bay Pipfruit Production and Income Details

Variety	2004							Revenue (\$)
	Area (ha)	Yield/ha (TCE/ha)	Gross yield (TCE)	Export packout (%)	Total export cartons	Export return (\$/TCE)	Non export return (\$/TCE)	
Braeburn	4.68	4,338	20,280	74	14,997	15.42	0.91	236,064
Fuji	2.04	3,455	7,048	68	4,822	21.66	0.81	106,256
Granny Smith	0.43	3,075	1,307	49	634	15.28	4.1	12,444
Pacific Beauty	0.85	898	763	68	520	16.77	0.92	8,947
Pacific Queen	0.68	1,749	1,189	65	779	16.90	0.87	13,518
Pacific Rose	2.04	2,467	5,033	40	2,013	13.54	7.28	49,240
Pink Lady	0.43	2,617	1,112	74	821	25.68	0.86	21,343
Royal Gala	5.87	2,882	16,903	80	13,458	17.50	0.93	238,721
Vacant plantable area	0.00							
Total area available for pipfruit	17.00		53,636	71	38,045	17.12	2.27	686,533

Variety	2005f							Revenue (\$)
	Area (ha)	Yield/ha (TCE/ha)	Gross yield (TCE)	Export packout (%)	Total export cartons	Export return (\$/TCE)	Non export return (\$/TCE)	
Braeburn	4.68	3,848	17,989	75	13,577	17.56	0.96	242,641
Fuji	2.04	3,126	6,377	71	4,501	23.36	0.83	106,699
Granny Smith	0.43	3,346	1,422	49	701	17.17	4.27	15,109
Pacific Beauty	0.85	1,465	1,245	72	894	19.55	0.78	17,744
Pacific Queen	0.68	2,256	1,534	66	1,009	18.90	0.89	19,537
Pacific Rose	2.04	2,482	5,063	38	1,920	18.37	6.87	56,865
Pink Lady	0.43	2,481	1,054	74	782	25.62	1.01	20,314
Royal Gala	5.87	2,928	17,173	80	13,795	18.71	0.9	261,142
Vacant plantable area	0.00							
Total area available for pipfruit	17.00		51,858	72	37,178	18.98	2.35	740,050

Nelson Pipfruit

Model Description

Nelson is the second largest apple district in New Zealand. Nelson's orchards are a mixture of old and new varieties, typically run by owner-operators. Local market fruit is not significant, although larger growers are beginning to supply major brands to this market. Fruit is generally packed off the orchard on contract by a packhouse.

The model pipfruit orchard has increased in size from 14.4 to 19.3 planted hectares (ha) from the previous report. This reflects a trend where some smaller growers are selling up and leaving the industry. The reasons for selling vary but include the grower approaching retirement, a less than desirable growing location, and inadequate economies of scale to provide a sustainable profit. In contrast, other growers are actively buying or leasing more land to achieve better economies on orchard and increase throughput for integrated packhouse and cool store facilities.

Note: *Since 2003 this report has been prepared using a 31 December balance date, whereas previous reports used a 30 June balance date. The previous system made year-to-year financial comparisons difficult.*

Table 1: Key Parameters

	2000/01	2001/02	2002	2003	2004	2005f
Area available for pipfruit (ha)	18.5	18.5	18.5	18.5	26.0	26.0
Planted area (ha)	13.5	14.5	14.4	14.4	19.3	19.3
Total TCE	35,729	38,573	38,588	40,986	60,688	64,856
Export TCE	26,761	28,844	29,235	30,382	47,388	49,592
Weighted average price (\$/TCE)	12.99	16.40	16.40	15.48	12.92	13.17
Cash orchard revenue (\$)	467,000	707,000	642,000	651,000	784,000	854,000
Cash orchard surplus (\$)	-21,000	236,000	141,000	100,000	-41,000	-1,000
Cash disposable profit (\$)	-65,000	146,000	9,000	-14,000	-151,000	-74,000

Key Points

- The orchard experienced a substantial financial loss in 2004, confirming a downward trend in orchard profitability since 2001. A slight improvement in orchard return is forecast this year, although an orchard loss is still anticipated.
- Another difficult year will likely force some growers to exit the industry while they still retain some equity. Rationalisation of players in the industry has occurred, with grower numbers plummeting to 920 from 1488 in 2000, and packhouses falling in the same period to 90 from 130.
- Since hitting a low of US38.95 cents in October 2000, the exchange rate has risen nearly 90% contributing to erosion in grower profitability.
- Benefits are perceived in growers forming supply groups, with vertical integration achieved through close association with post-harvest operations. These groups see themselves as better positioned to adopt new technologies and undertake orchard redevelopment.
- Pipfruit New Zealand recently elected a new Board of Directors incorporating packers and exporters, and developed a new strategic plan out to 2010. Timely enactment of key recommendations in this plan is critical to New Zealand reclaiming its pre-eminent role in international pipfruit marketing.
- New apple variety development is being hampered by lack of access to new varieties and limited availability of dwarf rootstocks.

Physical Factors

Climate 2003/04

Hotter than average January temperatures, followed by a very wet February, caused fruit quality problems later. Above average rainfall in February was initially welcomed by growers as this reduced reliance on irrigation and gave a boost to fruit size. The downside was an increase in the incidence of summer rots across most varieties. Fruit pressures were well down on recent years, translating into poor fruit quality in the market. The markets prefer a crunchy fruit which infers good fruit pressure. These factors, combined with a dramatic increase in pipfruit production, led to a poor year for Nelson pipfruit growers.

The only bright spot was the lack of any significant hail and this was a welcome change from previous years.

Climate 2004/05

A moderate winter was followed by a cooler and late start to spring which had the flow-on effect of delaying bud break. Conditions remained cooler throughout September, with the mean temperature 1°C cooler than the long term average. This delayed the start of flowering. However, once flowering commenced, temperatures improved significantly, and remained higher than the long term average for the critical 50 days after fruit set. These first 50 days after fruit set are critical for good chemical thinning and maximising fruit size.

The majority of the district escaped major damage as hail storms peppered the area for 10 days in late December/early January. The most affected orchards were around the Kina Bluffs, Motueka River and Marriages Road areas. Assessors estimate the hail damage resulted in the loss of about 250,000 export cartons. This represents less than 5% of Nelson's typical annual production.

Table 2: Nelson Weather Data

	2004/05 (mean °C)	Average (mean °C)	2004/05 (GDD)	Average (GDD)	2004/05 (mm rain)	Average (mm rain)
September	9.1	10.1	39	36	139	131
October	12.7	12.3	103	85	159	119
November	14.4	13.9	144	121	52	110
December	14.2	16.0	124	188	124	92
January 2005	17.3	17.6	225	234	83	78
Total			635	664	557	530

Source: HortResearch (Riwaka site)

Production

2004

Nelson produced an estimated 6.5 million tonnes of export pipfruit in 2004. This was an increase of 3% compared with 2003, and came close to the all time record of 6.6 million tonnes produced in 2000.

The planted area for the model orchard increased from 14.4 to 19.3 ha. This increase reflects the trend of Nelson orchards having to expand in search of economies of scale. Also, many smaller orchards have either leased out or sold up their orchards in light of poor economic returns.

The Braeburn and Royal Gala varieties still account for most (80%) of Nelson's total orchard production. Poor market returns for these varieties have definitely affected the livelihoods of all in the industry. Royal Gala experienced a modest increase and Braeburn a more significant increase in production compared with 2003. A 103 average fruit size for Braeburn was slightly bigger than the markets required and a 113 average fruit size for Royal Gala was better than 2003 (123). Of the other varieties, only pears had a significant increase in production, partially offset by lower export pack outs.

2005

This year, the orchard is forecast to increase production by a modest 5%. Production is significantly up on years prior to 2004 due to an increase in the orchard's planted area.

Braeburn

Production is expected to increase as a big crop awaits harvesting. Fruit size is expected to be smaller at a 105 average, which is more in line with market requirements.

Royal Gala

Production is expected to remain stable, with no significant increase in yield expected. This is mainly due to very good chemical thinning applied early in the season. Consequently, a 108 average fruit size is anticipated.

Cox Orange Pippin

Cox Orange Pippin is forecast to increase, steadily clawing back production which has not been seen since the record crop of 2000. Fruit size is good and growers are keen to maximise Cox production because of favourable overseas prices compared with Braeburn and Royal Gala returns.

Fuji and Other Apple Varieties

Fuji and other apple varieties are also forecast to increase production. Other varieties consist mostly of new plantings of varieties such as Jazz and Tentation, where volume is rising as young trees mature.

Pears

Pears are the only variety forecast to decrease in production. Pears are still influenced by biennial bearing tendencies and although chemical thinning options are available to lessen its impact, growers are still coming to terms with how these new tools can be best utilised.

The 2005 growing season has been windier than normal. Consequently, most growers have lowered their expectation of export packout to 76% from an average of 78% achieved last season. Sun burn and sun tinting may affect packouts more than growers anticipate.

Financial Factors

2004 Review

Revenue

A disappointing market outturn in 2004 was confirmed with a final average fruit return for the orchard of \$15.71 per TCE. This fruit return is almost \$4.80 per TCE down on that achieved in the previous year. The severe drop in market price offset any benefit resulting from a favourable growing season and a consequent lift in production and packout. Decent orchard surpluses in the previous two years allowed growers to focus more vigorously on crop management issues.

Individually, the following erosion in price per TCE was noted - Braeburn fell by 28% to \$14.18, Royal Gala by 19% to \$16.75, and pears declined by 37% to \$24.54. Only Cox Orange bucked the trend, increasing 4% to \$18.02.

The dramatic fall in export returns led to much soul searching within the industry. Grower and industry meetings occurred over recent months to identify root causes and implement measures to improve the outlook for 2005. Factors that definitely contributed to this collapse include a rapidly appreciating exchange rate; increased exports from New Zealand; exporters undercutting each other; decreased consumer demand; aggressive competition from other Southern Hemisphere countries; and growing use of Smartfresh™, a new storage technology used in the North American market.

Table 3: Average FAS Export Returns (\$/TCE)

Variety	2002	2003	2004	2005 Grower Forecast	2005 Industry Forecast
Braeburn	18.27	19.83	14.18	15.44	14.50
Cox	18.73	17.30	18.02	19.36	20.00
Royal Gala	19.82	20.79	16.75	17.17	15.65
Fuji	24.19	23.77	20.29	19.88	19.88
Other apples	23.00	20.28	16.64	14.03	14.03
Pears	39.08	39.03	24.54	18.15	28.15
Average Class 1	19.83	20.47	15.71	16.37	15.43

Expenditure

The orchard experienced a net reduction in cash orchard expenditure to \$16.43/export carton (\$17.32 in 2003). The reduction was due mainly to a 15% increase in average gross yield to 3,144 TCE per ha and a 4% increase in export packout to 78%.

Growers expected market conditions in 2004 to be less favourable than the previous year. Consequently, they focused on trying to improve fruit size and packout to better meet market requirements. To achieve this, they undertook more detailed pruning of trees. Cost of chemical thinning sprays was up as growers used new chemistry capable of delivering better thinning results. Cylex and Ammonium Thiosulphate are examples of these new chemistries that are significantly enhancing chemical thinning results and increasing fruit size.

Principal repayments were only slightly down. Growers had experienced two profitable years and hoped that the increase in crop harvested in 2004 would more than offset any softening in market returns. These repayments continued until growers became more aware of the poor market outcome. Subsequently, consideration was given to stopping or reducing repayments.

Reports from exporters of extremely difficult market conditions, and of a consequent drop in expected grower returns, began to filter through in the third quarter of 2004. By this stage, it was too late for many growers to cut spending on capital purchases such as new machinery and orchard redevelopment. Deposits for new trees are often made three years out from planting and by the time growers take possession of the trees, 75% of the tree cost has already been committed.

Net Result

A net trading loss of \$67,000 is the worst result since 2000 and the most disappointing year pipfruit growers have faced since deregulation. The orchard experienced a dramatic drop in market price for the two main apple varieties, Braeburn and Royal Gala. Returns similar to the previous year for these varieties would have added \$200,000 to the bottom line, turning a trading loss into a healthy profit.

Many growers failed to react to the early signs that market conditions were difficult. This was not helped by many exporters not accurately communicating to growers early enough the true nature of the market. When growers did become aware, it was too late to do much about it.

As a consequence of the late notification of poor market returns, several orchards were put up for lease after pruning and the first thinning and chemical sprays had been applied. This has rarely happened in the past, but these growers were desperate to limit their losses. They did not want to incur losses similar to those experienced in 2004. Some of these orchardists could not find anyone suitable to take on a lease arrangement. Subsequently, later in the year, trees were removed by bulldozer from these orchards.

2005 Forecast

Revenue and expenditure in the 2005 budget, and commented on in the following section, represent the expectations of the 20 growers surveyed. Many industry commentators consider these forecasts optimistic and for that reason, a section has been added to this report comparing grower and industry forecasts.

Revenue

In 2005, the model orchard is forecasting a 7% increase in gross yield. The increase in export cartons is less significant given a reduction in predicted packout from 78% in 2004 to 76% forecast in 2005. Growers expect fruit size for the main varieties to be closer to market requirements, with Royal Gala being larger and Braeburn smaller than in 2004.

Growers are forecasting an improvement in the average price per export carton from \$15.71 to \$16.37 in 2005. This is primarily due to growers managing fruit sizing for Braeburn and Royal Gala to better align with market requirements. Returns for larger Braeburn were very disappointing in 2004 so growers are optimistic this will not occur this year.

Expenditure

Cash orchard expenditure per export carton is not expected to vary significantly compared with 2004. However, this side of the business is sure to come under the microscope more should another poor

marketing season occur. Increases in total orchard expenditure are more a reflection of expected increased production rather than specific cost items jumping.

Development costs are forecast to increase in 2005 as growers continue planting new varieties on more intensive planting systems. Growers realise that to remain in the industry, new varieties and improved systems must be developed. The planting of smaller trees on M9 rootstocks and new varieties such as Jazz and Tentation are important in making this transition.

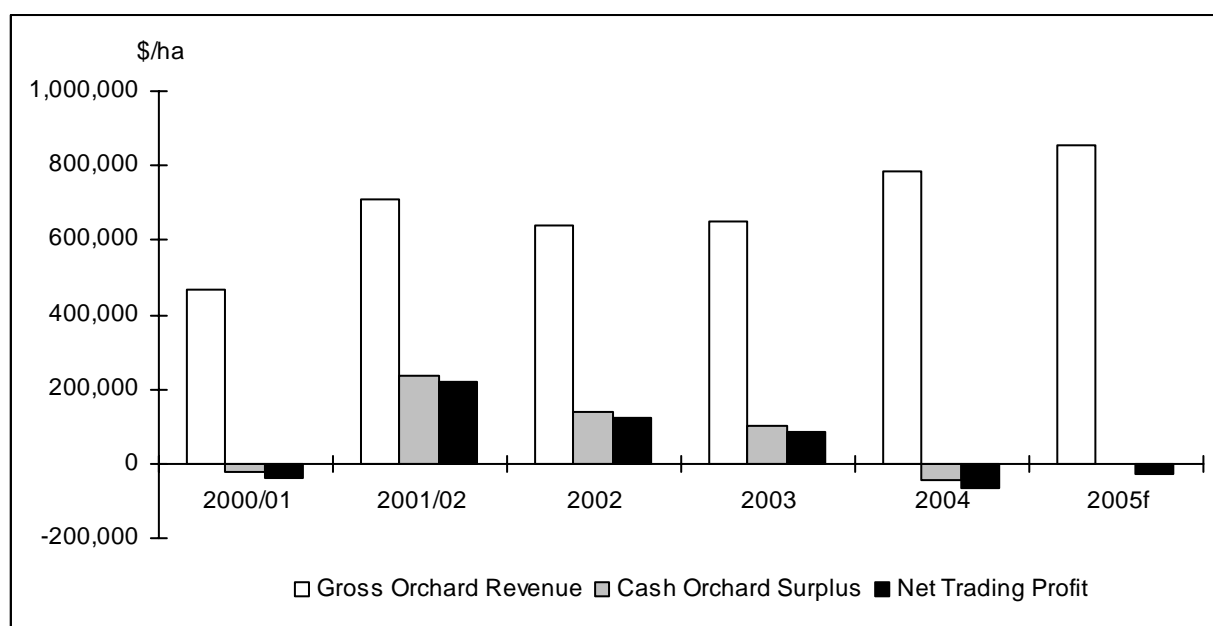
Not surprisingly, taxation allowed for in the 2005 budget is lower than in 2004.

Net Result

The net trading profit forecast is a deficit of \$28,000. Hardly cause for celebration yet it does represent a lift in production and net return compared with the watershed 2004 season.

Making allowance for drawings, principal repayments and development capital, a disposable deficit of \$74,500 is predicted. Off-orchard income will improve the position somewhat, lowering the predicted deficit to \$51,000.

Nelson Pipfruit Profitability Trends



Industry Forecasts

In mid February, the results of the Nelson orchard model were presented to representatives of the pipfruit industry in Nelson. The industry panel included growers, exporters, packhouse operators, bankers, land agents, consultants and seasonal work co-ordinators.

Their forecast for 2005 presents a more sobering view than that of growers, with a disposable deficit of \$112,000, versus \$74,500. They preferred to take a more conservative stance regarding market returns, back about \$1.00 per TCE for Braeburn and \$1.50 per TCE for Royal Gala. However, they expect a small increase of \$0.60 per TCE in the Cox price with low stock carry-over in the English and European markets. Production levels of Cox in New Zealand are steadily increasing, while European levels are declining.

The industry panel predicts the lift in shipping costs will impact on these varieties and the high NZD/USD exchange rate will reduce volumes of Braeburn and Royal Gala to the North American markets. This fruit will head for Europe, placing more pressure on an already over-supplied European market.

Early market reports are confirming that both North America and Europe are experiencing stock over-supply and lower fruit returns for the beginning of the New Zealand selling season. Braeburn and Royal Gala are also now considered commodity varieties, being grown in most countries to a relatively high quality. New Zealand can no longer command premiums in the market place for these varieties to cover for the extra shipping and freight costs to the markets.

It remains to be seen whether the view of grower or industry panel prevails. Difficult market conditions exist in Europe and North America at the time of writing. The strong NZD in relation to the currencies in which New Zealand fruit is traded may have a more significant affect on New Zealand grower returns than either panel expected.

No matter which opinion is correct, many growers will be forced to exit the industry if profitability is not restored soon. They will not want to see the erosion of any more equity.

Table 4: Industry vs Grower Expectations

	2004	2005 Grower forecast	2005 Industry forecast
Gross TCE/ha	3144	3360	3360
Average packout (%)	78	76	76
Export TCE/ha	2455	2570	2570
Export \$/TCE	16.54	17.22	16.28
Gross revenue (\$)	783,393	854,090	807,412
Orchard expenses (\$)	935,393	928,580	919,477
Disposible surplus/deficit (\$)	-151,454	-74,490	-112,065

Issues and Trends

The 2004 season was difficult. Poor market returns were attributed to the high USD; a record export crop; poor quality apples sold offshore; flat market not receptive to the increase in volume; apparent price undercutting by exporters and traders; greater competition from other Southern Hemisphere countries; and poor summer conditions in Europe.

In 2001, at the time deregulation was being introduced, pipfruit growers had the following concerns; maintaining quality standards; quarantine issues and market access; managing market quotas; co-operation amongst exporters to minimise NZ fruit competing against each other; and weak sellers becoming exporters.

Under Pipfruit NZ, the industry has successfully addressed some of these issues (quarantine and market access) while minimum grade standards have only just been endorsed for 2005. Admittedly new issues have been added to the list, but many believe the industry has taken too long to sort out the issues raised in 2001. The reality of the downside to deregulation is starting to hit home. Many growers are asking what lessons have been learned and what will make this year any different from last year.

Communication is paramount. Industry leaders must continue to forge solid lines of communication with overseas market experts, major retail outlets, and other key players in the supply chain.

Accurate communication between exporter and grower about market conditions and outlook must occur more frequently throughout the season so that growers can be better informed and make sound management decisions sooner. Some exporters fear losing market share by being the first to portray soft market conditions. There is no doubt that accurate and timely information will become a key factor in determining which exporter will get a grower's business in the future.

New plantings are predictably utilising the newer varieties such as Jazz and Tentation, predominantly on M9 dwarfing rootstocks. There is also some interest in planting pears, particularly Doyenne du Comice which continues to command very good market premiums. The downside to planting pears is the lack of post-harvest facilities available to pack the fruit directly from the orchard without having to incur additional cool storage costs, and lower packouts if fruit is cool stored any length of time prior to packing.

The demise of Royal Gala and Braeburn returns has brought to the fore the importance of Intellectual Property, which is fast becoming the buzz word around pipfruit growers. Growers, who do not belong to the Jazz or Tentation variety clubs have limited planting options available. It is expected that growers will become more attuned as to how intellectual property will impact on them and their

businesses in the future, particularly as the industry looks to move away from its reliance on Braeburn and Royal Gala varieties.

Growers realise that to remain competitive, development into new varieties must continue. Many growers believe the best return for their investment is to buy new land for planting, which does not suffer from SARD (specific apple replant disorder) or require sterilising, and therefore achieves production quicker than utilising replant land from an existing orchard. However, there is a limit to the availability of suitable bare land for orchard development.

Growers view optimistically the recent announcements by Pipfruit NZ and its new joint venture with Apple & Pear Australia (APAL), HortResearch and Associated International Group of Nurseries (AIGN) on apple breeding. The only fear is this may have come too late and many growers may not be around to benefit from this initiative.

Hail has affected some orchards four years out of the last 11. Combine this with poor market returns and growers in this situation are struggling to survive. The cost of hail insurance is expensive. The majority of the growers surveyed have some hail insurance in place for 2005.

The lack of skilled staff for supervisory and management positions is still a major weakness to the longer-term success of the pipfruit industry. Growers are finding it increasingly difficult to attract suitable staff to fill these roles. Increases in wage rate demands at a time when growers cannot afford them are also a problem.

Nelson's lowest unemployment level since the late 1980s is having a major impact on staff availability, particularly over the busy harvest period. To overcome this, Work & Income NZ are again working with growers by fast-tracking work permit applications for overseas visitors.

The rapid increase in house prices has also led to growers having to provide more worker accommodation. This has placed additional strain on growers.

Age and desirability of tree varieties is a big factor in the marketability of an orchard. It underlines the importance of growers following a policy of regular orchard renewal based on latest research findings.

It is clear that growers looking to improve their management and production have opted to grow on the clear, flat irrigated areas of the Waimea Plains, Moutere, Motueka and Riwaka Valleys. Coastal properties located on the clay, with limited irrigation water and generally with some slope, are a secondary choice. Of course, if they also have sea views, then they attract a higher lifestyle value, far exceeding their productive value.

There has been some interest in "quiet listings" where properties are marketed without advertising. The grower will specify a price and the agency will then research potential buyers. This method is desired where growers are keen to sell but do not want to unsettle loyal workers should the sale process be protracted.

Leasing orchards is still a popular method for committed orchardists to increase their planted area. Purchase of suitable bare land for apple development continues even after a poor economic year. Certainly, once the poor market returns became known, some orchardists tried to lease out their orchards. A few were unsuccessful and felt compelled to bulldoze the orchards. Approximately 50 ha are reported to have suffered this fate. Most of these orchards were in the Mapua and Tasman Hills area. Housing development opportunities commonly provide a viable option for orchardists struggling to survive in the hills.

Since its introduction in 2004, Smartfresh™ applications are forecast to increase in Nelson in 2005. This technology will add up to a \$1.00 per TCE to pipfruit production costs. However, many growers and exporters see it as an essential tool in providing the market with crunchy, firmer and better storing apples.

An increase in charter reefer vessel costs has seen exporters switching to containers this year. One major exporter in Nelson has reduced its reliance on charter reefer vessels from 65% to 35% because of escalating costs of the charter vessels. This shift to containers will cause bottlenecks for both the port and transport companies. Price increases will also limit the availability of containers for those exporters who have not planned ahead. Extra pressure will also be placed on coolstores unable to move fruit out because of a shortage of containers and possible shipping delays. This predicament will

affect other crops such as kiwifruit, as many apple coolstores in Nelson also store kiwifruit later in the season.

Some growers see the present state of the industry as an opportunity. Some have vertically integrated into supply groups, usually closely associated with post harvest operations. They plan to weather the storm given they are in it for the long haul. They will continue to take action on and offshore to cement their place in the future.

Other growers have publicly stated they will exit the industry in 2005 if no significant improvement occurs. They believe that many of the problems that caused the low returns in 2004 are still in place in 2005. Confidence is low and relatively high land values mean that growers can still exit the industry while they have enough equity intact to do so. Banks have so far been supportive of growers, but this may change if equity levels diminish with another bad year forecast in 2005.

Favourable spring weather, a smaller forecast NZ crop and excellent fruit size have had little impact on improving grower confidence. Certainly a significant drop in the NZD and the weeding out of exporters with a short term outlook will do much to assist. 2005 will be a watershed year for many growers.

Nelson Pipfruit Budget

	2004				2005f			
	Whole orchard	\$ per planted ha	per TCE gross	per TCE export	Whole orchard	\$ per planted ha	per TCE gross	per TCE export
Revenue								
Gross pipfruit income	767,881	39,787	12.65	16.20	838,727	43,457	12.93	16.91
Other orchard income	16,058	832	0.26	0.34	15,363	796	0.24	0.31
Gross orchard revenue	783,939	40,619	12.92	16.54	854,090	44,253	13.17	17.22
Cash orchard expenditure	778,805	40,353	12.83	16.43	804,861	41,703	12.41	16.23
Interest	28,622	1,483	0.47	0.60	31,884	1,652	0.49	0.64
Rent and/or lease	17,949	930	0.30	0.38	18,451	956	0.28	0.37
Cash orchard surplus	-41,437	-2,147	-0.68	-0.87	-1,105	-57	-0.02	-0.02
Depreciation	25,823	1,338	0.43	0.54	27,271	1,413	0.42	0.55
Net trading profit	-67,260	-3,485	-1.11	-1.42	-28,376	-1,470	-0.44	-0.57
Taxation	16,258	842	0.27	0.34	-5,533	-287	-0.09	-0.11
Net trading profit after tax	-83,518	-4,327	-1.38	-1.76	-22,843	-1,184	-0.35	-0.46
Allocation of Funds								
Add back depreciation	25,823	1,338	0.43	0.54	27,271	1,413	0.42	0.55
Drawings	39,507	2,047	0.65	0.83	40,028	2,074	0.62	0.81
Principal repayments	10,113	524	0.17	0.21	9,650	500	0.15	0.19
Development	15,479	802	0.26	0.33	23,276	1,206	0.36	0.47
Capital purchases	28,661	1,485	0.47	0.60	5,964	309	0.09	0.12
Disposable surplus/deficit	-151,454	-7,847	-2.50	-3.20	-74,490	-3,860	-1.15	-1.50
Other Cash Sources								
Off-orchard income	24,202	1,254	0.40	0.51	19,879	1,030	0.31	0.40
Other cash income	3,609	187	0.06	0.08	3,609	187	0.06	0.07
Net cash change	-123,643	-6,406	-2.04	-2.61	-51,002	-2,643	-0.79	-1.03
Assets and Liabilities								
Land and building (opening)	1,235,000	63,990	20.35	26.06	1,311,000	67,927	20.21	26.44
Plant and machinery (opening)	104,500	5,415	1.72	2.21	104,500	5,415	1.61	2.11
Total orchard capital	1,339,500	69,404	22.07	28.27	1,415,500	73,342	21.83	28.54
Total debt opening	256,500	13,290	4.23	5.41	323,000	16,736	4.98	6.51
Equity (orchard assets-liabilities)	1,083,000	56,114	17.85	22.85	1,092,500	56,606	16.85	22.03

Nelson Pipfruit Budget

	2004				2005f			
	Whole orchard	\$ per planted ha	per TCE gross	per TCE export	Whole orchard	\$ per planted ha	per TCE gross	per TCE export
Orchard Working Expenses								
Wages								
Pruning	46,860	2,428	0.77	0.99	46,783	2,424	0.72	0.94
Thinning	42,267	2,190	0.70	0.89	41,495	2,150	0.64	0.84
Harvesting	92,853	4,811	1.53	1.96	104,417	5,410	1.61	2.11
Other	39,160	2,029	0.65	0.83	33,215	1,721	0.51	0.67
ACC	4,593	238	0.08	0.10	3,551	184	0.05	0.07
	225,734	11,696	3.72	4.76	229,462	11,889	3.54	4.63
Post-harvest costs								
Packing	135,055	6,998	2.23	2.85	141,337	7,323	2.18	2.85
Packaging	165,857	8,594	2.73	3.50	173,571	8,993	2.68	3.50
Coolstorage	82,928	4,297	1.37	1.75	86,786	4,497	1.34	1.75
Freight	6,069	314	0.10	0.13	7,783	403	0.12	0.16
	389,909	20,203	6.42	8.23	409,476	21,216	6.31	8.26
Operating costs								
Spray and chemicals	54,214	2,809	0.89	1.14	55,681	2,885	0.86	1.12
Pollination	2,528	131	0.04	0.05	6,504	337	0.10	0.13
Fertiliser	7,739	401	0.13	0.16	7,952	412	0.12	0.16
Electricity	4,381	227	0.07	0.09	4,613	239	0.07	0.09
Sundry expenses	9,438	489	0.16	0.20	10,789	559	0.17	0.22
Vehicles	19,416	1,006	0.32	0.41	18,740	971	0.29	0.38
Repairs and maintenance	20,748	1,075	0.34	0.44	17,254	894	0.27	0.35
	118,463	6,138	1.95	2.50	121,532	6,297	1.87	2.45
Administration and property expenses								
Communication	3,320	172	0.05	0.07	3,513	182	0.05	0.07
Rates	6,195	321	0.10	0.13	6,137	318	0.09	0.12
Accountancy, consultancy, legal	6,909	358	0.11	0.15	6,697	347	0.10	0.14
General insurance	4,748	246	0.08	0.10	4,902	254	0.08	0.10
Crop insurance	11,773	610	0.19	0.25	11,522	597	0.18	0.23
Levies and compliance	6,408	332	0.11	0.14	7,045	365	0.11	0.14
Other	5,346	277	0.09	0.11	4,574	237	0.07	0.09
	44,699	2,316	0.74	0.94	44,390	2,300	0.68	0.90
Cash orchard expenditure	778,805	40,353	12.83	16.43	804,861	41,703	12.41	16.23
Calculated Ratios								
Economic orchard surplus (or EBIT)	-65,084	-3,372	-1.07	-1.37	-23,197	-1,202	-0.36	-0.47
Cash orchard expenditure/GOR	99%				94%			
EOS/total orchard capital	-4.9%				-1.6%			
EOS less interest & lease/equity	-10.3%				-6.7%			
Interest+rent+lease/GOR	5.9%				5.9%			
EOS/GOR	-8.3%				-2.7%			
Economic orchard surplus (EOS) is calculated as follows: Gross revenue-cash orchard expenditure-depreciation-wages of management. Wages of management = \$31,000 + 1% of opening total orchard capital to a maximum of \$75,000.								

Nelson Pipfruit Production and Income Details

Variety	2004							Revenue (\$)
	Area (ha)	Yield/ha (TCE/ha)	Gross yield (TCE)	Export packout (%)	Total export cartons	Export return (\$/TCE)	Non export return (\$/TCE)	
Braeburn	7.5	3990	30,033	81	24,327	14.18	1.20	351,797
Royal Gala	6.5	2890	18,685	84	15,696	16.75	1.40	267,088
Cox Orange	1.3	2657	3,333	77	2,567	18.02	1.00	47,016
Fuji	0.8	2818	2,175	68	1,479	20.29	1.00	30,712
Other apples	2.7	2013	5,439	49	2,665	16.64	3.61	54,362
Pears	0.6	1766	1,023	64	654	24.54	2.30	16,906
Vacant plantable area	0.7							
Total area available for pipfruit	20.0		60,688	78	47,388	15.71	1.76	767,881

Variety	2005f							Revenue (\$)
	Area (ha)	Yield/ha (TCE/ha)	Gross yield (TCE)	Export packout (%)	Total export cartons	Export return (\$/TCE)	Non export return (\$/TCE)	
Braeburn	7.5	4380	32,968	79	26,045	15.44	1.20	410,442
Royal Gala	6.5	2919	18,873	83	15,664	17.17	1.10	272,487
Cox Orange	1.3	2833	3,554	71	2,523	19.36	1.10	49,986
Fuji	0.8	2911	2,247	68	1,528	19.88	1.10	31,171
Other apples	2.7	2373	6,412	51	3,270	14.03	3.94	58,257
Pears	0.6	1384	801	70	561	28.15	2.47	16,384
Vacant plantable area	0.7							
Total area available for pipfruit	20.0		64,856	76	49,592	16.37	1.75	838,727