APICULTURE

Ministry for Primary Industries 2013 apiculture monitoring programme

KEY POINTS

- The New Zealand honey crop for 2012/13 was estimated at 17 825 tonnes, up 7440 tonnes (72 percent) on the 2011/12 crop of 10 385 tonnes. This is a record honey crop for New Zealand and is due to better than average production in all regions and an increase in the number of hives compared with 2011/12.
- Honey crops in Northland, Waikato and Canterbury were up 60 to 70 percent on last year. The Bay of Plenty and the lower North Island honey crops increased 290 and 105 percent respectively on the low honey crops last season. Otago and Southland by contrast were down 3 percent on their record crop of 2012 but were still 25 percent above their 6 year average.
- Prices paid to beekeepers increased for all honey types due to continued strong world demand, increased exports and low inventory held by honey packers and exporters after the below average crops in 2011 and 2012. Manuka honey prices increased 10 to 20 percent reflecting strong export demand.
- New Zealand honey exports reached 8054 tonnes and $145 million in the year to June 2013, an increase of 5 percent in volume and 20 percent in value on the previous year. The volume of honey exported in retail packs has increased significantly since 2007, with bulk honey exports declining since 2009.
- Sugar prices reduced slightly from around $1300 to $1100 per tonne dry weight during the year. Less sugar was fed in many areas following favourable early spring weather that allowed the bees to collect nectar.
- The number of registered beekeepers increased 12 percent from 3806 in 2012 to 4279 in 2013. Beekeepers with five or fewer hives recorded the greatest increase in numbers. Hives increased by 29 290 (7 percent) over last year; up by 9 percent in the North Island and by 3 percent in the South Island. Records show increases in the number of registered beekeepers and hives each year since 2005.

Table 1: New Zealand honey crop (estimates), 2008 to 2013

Year ended 30 June	2008 (tonnes)	2009 (tonnes)	2010 (tonnes)	2011 (tonnes)	2012 (tonnes)	2013 (tonnes)	6-year average (tonnes)
Northland/Auckland/Hauraki Plains	1 186	1 756	1 285	2 000	1 200	1 905	1 555
Waikato/King Country/Taupo	1 436	1 864	1 584	1 400	1 535	2 465	1 714
Coromandel/Bay of Plenty/Rotorua/Poverty Bay	2 492	2 250	2 376	1 425	845	3 270	2 110
Hawke's Bay/Wairarapa/Manawatu/Taranaki/Wellington	2 755	2 082	2 318	1 965	2 015	4 130	2 544
Marlborough/Nelson/West Coast	966	1 140	1 400	470	940	1 110	1 004
Canterbury/Kaikoura	1 980	1 718	2 200	1 045	1 650	2 815	1 901
Otago/Southland	1 560	1 755	1 390	1 145	2 200	2 130	1 697
New Zealand	**12 375**	**12 565**	**12 553**	**9 450**	**10 385**	**17 825**	**12 526**
Yield/hive (kg)	36.0	34.7	33.3	24.2	24.6	39.4	32.0

Source
AsureQuality Limited.

FINANCIAL PERFORMANCE OF APICULTURE IN 2012/13

Despite the drought in the North Island impacting nectar flows in pastures from mid-summer onwards, the prolonged settled weather from late spring into autumn helped deliver a record New Zealand honey crop for 2012/13. Honey prices continued to increase due to strong global demand, especially for manuka, kanuka and darker bush honeys. Cash payments for honey in many cases meant beekeepers were able to relieve financial pressures that had built up following two years of relatively poor honey crops.

REVENUE

Revenue streams for beekeepers are diverse and variable. Beekeepers unable to access significant manuka sources or in areas where there are no significant horticulture or agriculture crops requiring pollination, are most likely to face income constraints.

Record honey crop

The New Zealand honey crop for 2012/13 is estimated at 17 825 tonnes (a new national record), up 72 percent on the 2011/12 honey crop, and around 40 percent higher than the six-year average. The record honey crop resulted from a higher than average honey yield in all regions, and an increase in the number of registered hives of 29 290 hives, compared with 2011/12. However, honey production per hive at 39.4 kilograms was below the record figure of 40.8 kilograms per hive achieved in the 2002/03 season.

Favourable weather conditions in early summer gave beekeepers high hopes for an excellent honey crop. However, nectar flows in pasture species stopped in many parts of the North Island around Christmas time as drought conditions set in. Despite the drought conditions, which were severe in some areas, beekeepers experienced a prolonged honey season. Tree species such as manuka and kanuka, rata, kamahi and tawari perform better in dry conditions (if not too drought-stressed) and hence had good nectar flows. The prolonged fine weather also meant that bees were not restricted in gathering any nectar that was available.

Regional honey production estimates for the past six years are summarised in Table 1.

Honey crops in Northland, Waikato and Canterbury were up 60 to 70 percent on last year. The Bay of Plenty and the lower North Island honey crops were up 287 and 105 percent respectively, which was very welcome after low honey crops last season. Otago and Southland by contrast were 3 percent down on their record crop of 2011/12 but were still 25 percent above their six-year average.

The difference in honey production in the North and South Islands was very marked again in 2012/13. The North Island honey crop of 11 770 tonnes (37.7 kilograms per hive) was over double the 2012 crop of 5595 tonnes (19.5 kilograms per hive). Meanwhile the South Island crop of 6055 tonnes (43.3 kilograms per hive) was up 26 percent on last year's production of 4790 tonnes (35.2 kilograms per hive).

Hive numbers continue to increase

Hive numbers increased 7 percent from 2011/12 which was a continuation of the increase observed since 2005, and is likely driven by the high prices being paid for manuka honey (Figure 1 and Table 2). The number of registered beekeepers increased 12 percent to 4279 with the greatest increase in those owning five or fewer hives (Table 3).

The largest increase in beekeeper and hive numbers was again in the North Island where beekeeper numbers were up 15 percent and hive numbers increased 9 percent compared with 2011/12 (Table 2).

The increase in hive numbers in the North Island is a reflection of new commercial beekeepers entering the industry and existing operations increasing hive numbers primarily for manuka honey production. Several established bee products processing companies continued to purchase, or create beekeeping operations, and increase hive numbers.

Table 2: New Zealand beekeeper, apiary and hive statistics[1], as at 30 June 2013

	Beekeepers	Apiaries	Hives
Northland/Auckland/Hauraki Plains	1 050	4 353	62 934
Waikato/King Country/Taupo	341	2 949	62 085
Coromandel/Bay of Plenty/Rotorua/Poverty Bay	431	4 029	83 761
Manawatu/Taranaki/Hawke's Bay/Wairarapa/Wellington	935	6 086	103 405
Marlborough/Nelson/West Coast	383	2 335	32 596
Canterbury/Kaikoura	671	3 990	58 035
Otago/Southland	468	3 364	49 202
New Zealand	**4 279**	**27 106**	**452 018**

Note
1 Registered beekeepers, aparies and hives under the National Pest Management Strategy for American Foulbrood.

Source
AsureQuality Limited.

Rising world demand and low inventory of New Zealand stocks lift honey prices

Prices paid to beekeepers for most lines of honey rose again in 2012/13. This was due to world shortages of high quality honeys and increasing consumption of honey particularly in Asian countries. Global supply continues to lag behind demand with unfavourable weather conditions, hive losses from disease or other causes, and static or falling hive numbers affecting honey production in some of the major producing countries like the US, India and Argentina.

Clover and light amber grade honey prices rose on average by 13 to 42 percent in 2012/13, while dark honey prices increased by up to 42 percent.

The 2012/13 season was again notable for the increase in prices from early quotations especially for manuka honey once it became apparent that, while the manuka crop was up on last year, it was not a bumper crop, mainly due a cool early spring in Northland, and also the biennial flowering tendencies of manuka. Very low inventory stocks in New Zealand and increased export demand for manuka especially from China saw honey buyers increasing prices throughout the season. Supplies of dark rewarewa honey, which is often blended with manuka honey, were scarce which helped increase offers for other darker bush blends.

Early offers for bulk manuka honey with no methylglyoxal were $10 to $12 per kilogram but later rose to $13 to $16.50 per kilogram. The bulk price for manuka honey with methylglyoxal ranged from $13 per kilogram to $60 per kilogram, depending on methylglyoxal levels. Prices for manuka honey with lower methylglyoxal levels rose later in the season to $18 to $22 per kilogram. A number of exporters and honey packers were paying cash for some or all of their orders which helped producers with cash flow.

Export revenue up and more honey exported in retails packs

New Zealand honey exports reached 8054 tonnes in the year to June 2013, an increase of 379 tonnes (5 percent) on the previous year (Table 4).

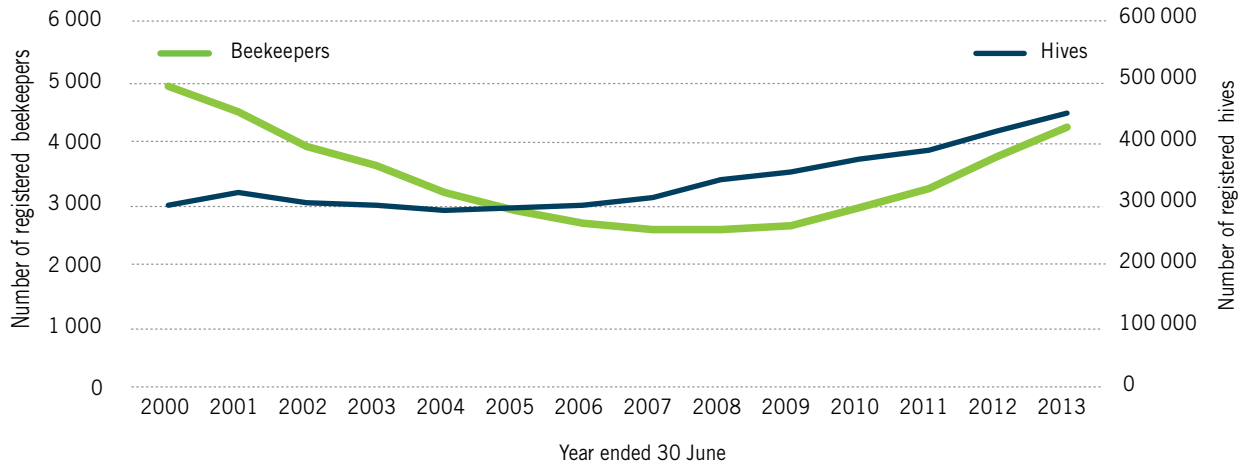
Table 3: Distribution of beekeepers[1] by hive number

As at 30 June	2009	2010	2011	2012	2013
5 hives or less	[1 529]	[1 745]	[2 044]	[2 463]	[2 828]
1 to 50	2 185	2 440	2 722	3 237	3 671
51 to 500 hives	293	319	336	351	379
501 to 1000	100	99	109	115	122
>1000	91	99	100	103	107
Total number of beekeepers	**2 669**	**2 957**	**3 267**	**3 806**	**4 279**

Notes
Beekeepers with 1–50 hives are considered hobbyists. Beekeepers with greater than 350 hives are considered commercial.
1 Registered beekeepers and hives under the National Pest Management Strategy for American Foulbrood.

Source
AsureQuality Limited.

Figure 1: New Zealand registered beekeeper and hive numbers[1], 2000 to 2013



Notes
1 Registered beekeepers and hives under the National Pest Management Strategy for American Foulbrood.
Varroa was discovered in hives in New Zealand in 2000.

Source
AsureQuality Limited.

The UK is the dominant destination for New Zealand honey exports, taking typically 30 percent of the total export volume over the past decade (Figure 2).

China is the world's largest producer of honey and accounted for 39 percent of all the honey purchased by importing countries in 2011[1]. China has emerged as an important market for New Zealand honey exporters in recent years especially for manuka honey (Figure 2). Continuing reduction in tariffs under the New Zealand-China Free Trade Agreement has also helped exporters obtain very good export prices. Exporting to China is not easy and honey exports have been held at the border, and tested for yeasts and moulds and bacteria. New Zealand exporters are being advised not to export to China without testing their product and ensuring it complies.

The volume of honey exported in retail packs has increased significantly since 2007, with bulk honey exports declining since 2009 (Figure 3). The lift in global demand for New Zealand honey, and hence higher prices, means that New Zealand suppliers have been able to invest more in the value-add component of their business. Much of the honey exported in bulk is packed into retail packs in Europe or the UK by companies associated with New Zealand exporters.

OTHER REVENUE SOURCES

Pollination

New gold kiwifruit varieties, recently planted to replace the Psa-V susceptible Hort16A cultivar, are coming into production. Some of these new gold varieties flower later than Hort16A. This means that beekeepers may not be able to use the same hives to pollinate the new gold kiwifruit varieties as well as the later flowering green varieties. This may force some beekeepers to re-assess their provision of pollination services.

1 http://www.fintrac.com/cpanelx_pu/Ethiopia%20CIAFS/12_06_4949_CIAFS%20_1%20Honey%20Final%20Oct%2011.pdf

Established beekeepers, with access to manuka or rewarewa areas, continue to withdraw from providing a kiwifruit pollination service, preferring to produce honey. However, any gaps are being quickly filled by new beekeepers coming into the industry.

Prices for kiwifruit pollination services remained stable in all areas over 2012/13. Prices ranged from $120 to $195 per hive, depending on the level of service provided. The more expensive fees (per hive) in the Bay of Plenty ($165 to $195) include transport to, and placement of the hives within the orchards and three to four, two litre feeds of sugar syrup. Lower fees ($120 to $140) do not.

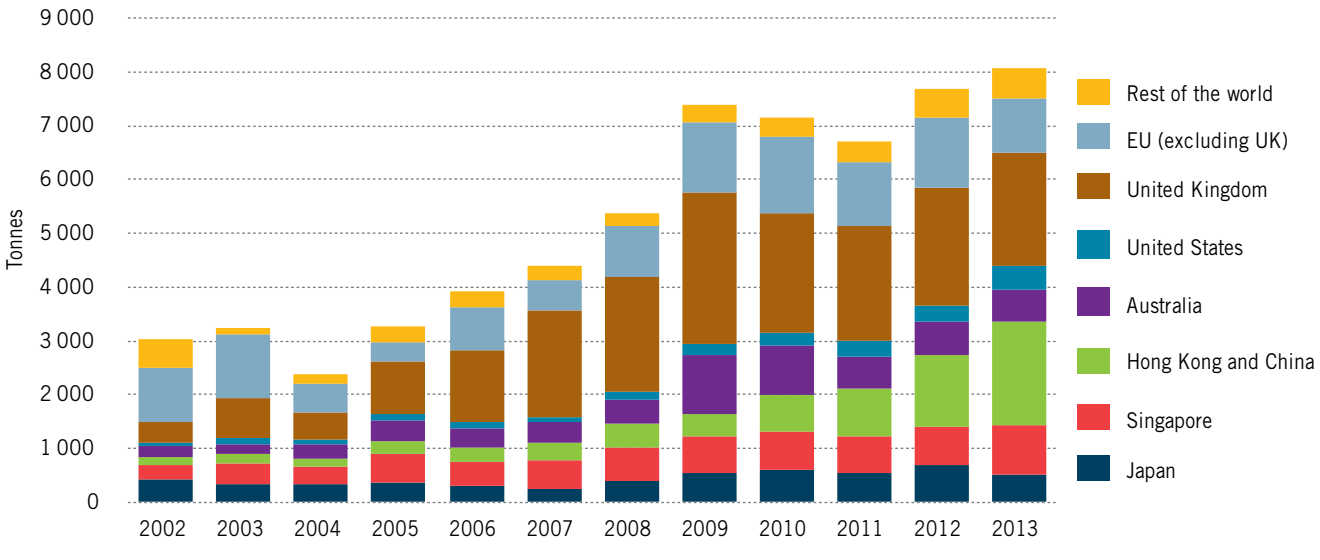
Pollination fees per hive reported for other crops changed little from last season: onions $150, pipfruit and summerfruit $60 to $120, berryfruit $60 to $120, avocados $80 to $115, canola seed crops $100 to $120 and carrot seed crops $150 to $195. The large spread in fees reflects regional differences, the time the hives are required for, the likelihood of pesticide damage, or expected reduction in bee strength if hives are under netting as in some berryfruit blocks.

Live bees

Export of live bees to Canada provides a good income stream for a number of North Island beekeepers. A package of bees generally consists of 1 kg of bees housed within a perforated cardboard tube or a cardboard and wire screen box about the size of a shoe box. The package may, or may not, hold a supply of sugar syrup and a queen bee in a cage.

Demand for live bees from Canada was very strong this season (2013) despite the New Zealand dollar increasing against the Canadian dollar in October 2012 through to January 2013 just when forward orders and shipping arrangements had to be confirmed. The strong demand followed winter losses in Canada and increased prices for honey. Canada took 32 511 x 1kg equivalent packages, an increase of 7559 packages (30 percent) over last season (Table 5).

Figure 2: New Zealand honey exports by destination, 2002 to 2013



Source
Statistics New Zealand.

Table 4: Honey export volumes, value and prices, 2002 to 2013

Year ended 30 June	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Export volume (tonnes)	3 028	3 233	2 394	3 273	3 927	4 411	5 366	7 384	7 147	6 721	7 675	8 054
Export value ($ million fob[1])	20.6	25.5	23.1	33.5	38.4	47.8	62.6	81.0	97.6	101.6	121.1	144.9
Average export price ($ per kg fob)	6.80	7.87	9.65	10.23	9.77	10.83	11.66	10.97	13.66	15.11	15.78	17.99

Note
1 Free on board.

Source
Statistics New Zealand.

For the first time, bulk bees were sourced from the South Island for export in 2013. As packages can only be shipped from Auckland International airport, most bees are produced by beekeepers who can deliver to collection centres in Central Hawke's Bay, Tauranga and Rotorua.

Exports of queen bees dropped significantly in 2013 (Table 5), with the main destinations being Canada (2515), the UK (1160) and France (5).

Prices paid to suppliers of live bulk bees rose 4 percent to $27 to $29 per kilogram. Bees supplied in May, which is very late in the season, received up to $35 per kilogram.

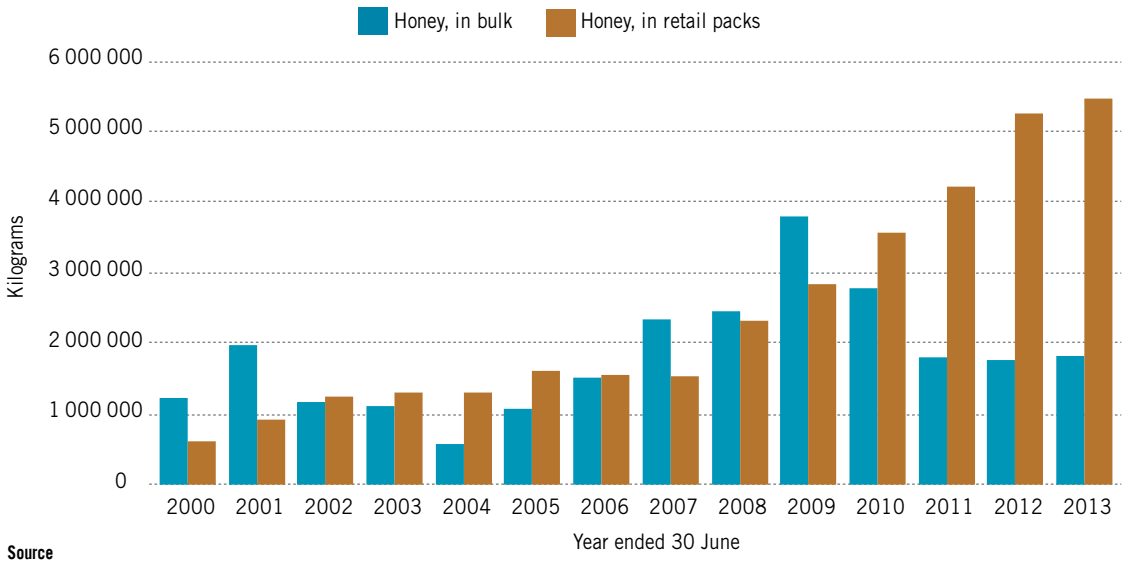
Pollen, propolis and beeswax

Prices paid to suppliers of dried and cleaned pollen in 2012/13 rose 14 percent to an average of $40 per kilogram. However, pollen production continues to fall. Only a few commercial producers now collect pollen as the best pollen production periods coincide with varroa treatments. Pollen traps cannot be activated when non-organic varroacides are being used. Some beekeepers have indicated an intention to re-look at pollen production or reactivate traps used previously, as a means of generating income now prices have improved.

Propolis is a resin collected by bees from some tree species and marketed for its health benefits. Beekeepers gather the propolis off special mats placed in hives or by scraping boxes and frames. The recovery rate of pure propolis from raw propolis is approximately 37 to 47 percent for early season propolis, decreasing to 15 to 25 percent recovery when the nectar flow is on. Bees add more wax to the propolis when honey is being produced. Hive scrapings are reported to yield 30 to 40 percent pure propolis. Beekeepers reportedly received $33 to $100 per kilogram for the raw unprocessed product, with quotes of $220 per kilogram noted for the pure product.

Export demand for beeswax free of varroacides remained strong in 2012/13 and prices lifted by 4 to 12 percent over 2011/12. Supplies were limited as varroacides can contaminate the wax. Light beeswax was in strong demand and prices increased 7 to 13 percent over last season.

Figure 3: New Zealand honey exports by product type (extracted honey), 2000 to 2013



Source
Statistics New Zealand.

Table 5: New Zealand exports of live bees, 2006 to 2013

Year to 30 June[1]	2006	2007	2008	2009	2010	2011	2012	2013
One-kilogram packages[2]	15 711	8 988	22 500	30 083	34 754	31 558	24 952	32 511
Queens	2 554	10 172	3 000	7 000	7 586	14 022	7 516	3 680

Notes
1 Live bees are usually exported from January to May.
2 A one-kilogram package of live bees contains typically 10 000 bees and may or may not contain one queen bee.

Source
AsureQuality Limited.

Most wax produced in New Zealand is used by local beekeepers to coat plastic foundation frames or is manufactured into wax foundation sheets that beekeepers put into wooden frames. The increase in the number of new hives during the year (around 29 300) meant there was less beeswax available for export. New Zealand beeswax exports achieved $1.85 million in the year to 30 June 2013; the primary use is in the manufacture of cosmetics with the main destinations being the US, Germany and Japan.

OPERATING COSTS

Sugar

Sugar prices fell by 12 to 14 percent from around $1300 to $1100 per tonne dry weight during the year, with some quotations of $900 per tonne in June 2013 for dry bagged white sugar ex store. Most beekeepers prefer to buy ready mixed liquid syrup delivered and pay a little extra for this service.

World sugar supplies remain in a surplus situation as a result of increased production in Brazil, India and Mexico. However, prices did not fall as far as expected in 2012/13 due to increased world demand especially from India and China. Sugar prices are expected to remain reasonably stable for 2013/14 albeit with marked fluctuations due to commodity speculator activity, unpredicted demand from China and whether Brazil directs more sugar into alcohol production.

Less sugar was fed to bees during spring 2012 following good climatic conditions in early spring in many parts of the country which allowed bees to collect nectar.

Fuel

Diesel prices ranged from $1.42 to $1.52 per litre for most of the year ending 30 June 2013. Prices peaked at $1.52 to $1.57 per litre from August to February when beekeepers were servicing their hives and incurring the greatest expenditure on fuel. Beekeepers continue to review vehicle usage, pollination contracts, apiary locations and revenue streams. This will become increasingly important as beekeepers often tend to travel long distances chasing manuka flows in remote areas.

Honey drum prices

The range in prices for new or remanufactured honey drums ex-factory remained similar to last year at $58 to $77 each. However, prices beekeepers paid to have drums delivered to their premises rose due to increases in freight and pallet charges. Freight is quite expensive for beekeepers not able to collect their own drums from the manufacturers. Most honey buyers only accept new drums for manuka honey but some packers recycle drums at least once for multi floral honeys or give their suppliers a credit for new drums that can be recycled.

Labour

Wage rates remained similar to last year. Employers usually offer a range of incentives to retain capable staff such as phones, fuel cards, production bonuses, extra holidays, or the use of extracting plant and machinery if staff own their own hives. With the growth of commercial operations in both number and scale, beekeepers have found they need to value and reward good employees or they risk losing them to competitors.

Apiarist is on Immigration New Zealand's Immediate Skills Shortage List for all regions in New Zealand. Many large companies are employing seasonal and permanent apiarists from overseas, in particular from the Philippines.

Table 6: Returns for apiculture products (estimates), 2008 to 2013

Year ended 30 June	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13
Bulk honey ($/kg[1])						
Light (clover type)	2.80-3.75	3.50-5.60	4.00-6.00	4.10-6.80	4.40-7.30	5.00-7.30
Light amber	2.80-3.00	3.70-4.00	3.90-4.50	4.00-5.80	4.30-6.00	5.50-8.50
Dark, including honeydew	2.80-3.70	4.50-5.00	4.00-5.00	4.50-5.00	5.00-6.00	4.50-8.50
Manuka (without methylglyoxal)	8.50-13.25	7.00-12.00	7.00-13.00	8.00-12.00	9.00-15.00	10.45-16.50
Manuka (with methylglyoxal)	12.10-45.00	12.50-56.25	11.00-37.50	12.50-80.50	14.75-50.00	13.00-60.00
Beeswax ($/kg[2])						
Light (residue-free and EU compliant)	6.50-7.00	7.00-8.10	6.80-8.50	8.90-9.00	8.00-9.10	9.00-9.50
Light	...	...	...	7.00-7.80	7.00-7.50	7.50-8.50
Dark	5.00-5.20	4.00-5.20	6.00-6.50	6.00-6.80	5.00-7.50	6.50-7.80
Pollen ($/kg[2])						
Not dried or cleaned	16-18	18-20	13-20	16-20	25-28	25-30
Dried and cleaned	20-30	25-31	30-36	32-38	35-40	40-40
Pollination ($/hive[3])						
Pipfruit, stonefruit and berryfruit	60-96	55-96	53-96	60-120	60-120	60-120
Kiwifruit						
– Hawke's Bay	110-170	140-160	145-170	104-160	104-160	120-180
– Auckland	110-150	115-150	120-150	120-150	120-150	120-150
– Bay of Plenty	110-160	110-160	120-175	110-178	115-200	120-195
– Nelson	100-120	125-145	125-145	120-150	120-150	120-150
Canola and small seeds (carrots)	120-150	120-180	100-150	120-150	100-180	150-195
Live Bees[2]						
Bulk bees ($/one-kilogram package)	22	22	25-26	26-27	27-28	27-29
Queen bees ($ per queen)	...	25	25	25	28	33-37

Notes
All prices are GST exclusive.
... Data not available.
1 Prices paid to beekeepers for bulk honey. The beekeepers supply the packaging (drums or intermediate bulk containers) and cover freight costs to exporter collection points/depots.
2 Prices paid to beekeepers. The beekeepers cover the freight costs to exporter collection points/depots.
3 Prices paid to beekeepers. The prices at the lower end of the range are for hives delivered to depot sites. At the upper end, prices include delivery into the orchard and sugar for 3–4 one-litre feeds to stimulate the bees to collect pollen.

Source
AsureQuality Limited.

Table 7: Estimated expenditure for beekeeping operations ($ excluding GST), 2011/12 and 2012/13

Year ended 30 June			2011/12	2012/13
Labour	Worker	**$ / hour**	16–27	15–25
	Manager	**$ / hour**	25–50	25–50
	Average working week	**hours**	45	45
	Average ratio of hives per fulltime equivalent (FTE)	**hives:FTE (pre-varroa)**	350:1 (800:1)	350:1 (800:1)
Fuel	Variable - dependant on world price and exchange rate		Variable	
Sugar	Bulk sugar (variable depending on overseas price and NZ exchange rate)	**$ per tonne**	1227–1307	1050–1150
Varroa treatment	Varroa treatment (variable according to hive strength and product(s) used)	**$ per hive**	24–25	22–25
	Varroa strips (applied at recommended two treatments per year)	**$ per 1000 plus strips**	24–25	24–25
Protein supplements	Hives may require 1–2 kilograms per year	**$ per 20 kilogram bag**	162	162
Contract extraction costs	Extraction of manuka honey (costs more as the frames must be pricked first to release the honey)	**$ per frame**	1.10–1.66	1.20–1.56
	Extraction of clover honey	**$ per frame**	1.00–1.35	1.00–1.37
Hives	Perfect condition hive, includes 2 brood boxes, floor, lid and 1 honey super, no bees, assembled and paraffin waxed	**$ per hive**	273	251
	Reasonable condition hive, includes 2 brood boxes and 1–4 honey boxes with bees	**$ per hive**	250–400+	350–400
	4–5 Frame nucleus hive; new hives includes nuclei box	**$ per hive**	100–185	100–230
	Repairs and maintenance, 7% of hive purchase price	**$ per hive**	17–28	24–28
	Wax to coat plastic frames	**$ per kilogram**	8–9	10–11
	Hive Strappers, used as required	**$ per unit**	10–12	10–12
Bees	Queen bees	**$ per bee**	25–35	33–37
	Select queens	**$ per bee**	60–120	200
Protective clothing	Single piece suit	**$ per suit**	140	140
Honey drums	New or re-manufactured honey drum (holds approximately 300kg of honey)	**$ per drum**	57–77	58–77
Apiary rentals paid to landowner	Manuka sites (rental is paid either as a per hive rate, percentage of crop when sold or a combination of both)	**$ per hive**	...	30–180
		% of crop	10–25	10–30
		$ per hive + % of crop	...	$10–50 + 10–25%
	Non-Manuka sites		Variable but often 500 grams honey per hive	
Compliance costs	Risk Management Programme (RMP) annual audit costs	**$ for processing RMP**	up to 1300	up to 1300
		$ for a storage RMP	up to 750	up to 750
	MPI Food Safety Authority annual fees	**$ if require export eligibility**	578	578
		$ if only processing for consumption within NZ	258	258
	Auditing of electronic certificates	**$ per eligible document**	65	up to 65
		$ per month auditing 10% of eligibility declarations raised	65	65 if Edecs raised
	Tutin tests	**$ per sample** (first sample)	125	125
		$ per composite (up to 10 samples can be composited)	15	15
	American Foulbrood Strategy Levy	**$ per beekeeper**	20	20
		$ per apiary	13	14
National Beekeepers' Association Membership (voluntary)	Hobby beekeeper (1–10 hives)	**$ per membership**	126	130
	Sideline to small commercial (11–250 hives)	**$ per membership**	n/a	162–319
	Commercial operations (251–3001+hives)	**$ per membership**	480–4139	513–3000
	Corporate membership	**$ per membership**	261	274
	Beekeeping clubs	**$ per membership**	174–235	243
Beekeeping Industry Group membership	Voluntary – affiliated with Federated Farmers	**$ per membership**	100–500	104–520

Source
AsureQuality Limited.

INDUSTRY ISSUES AND DEVELOPMENTS

PESTS AND DISEASES

The apiculture industry remains very concerned about the risk of exotic bee pests and diseases being introduced via a biosecurity breach at the border or from imported honey if the Import Health Standard (IHS) for bee products is amended by the Ministry for Primary Industries (MPI). MPI is currently developing an IHS that effectively manages the pest and disease risks from imports of honey. This process will address the potential risks presented from imports of honey from any country. It replaces the earlier IHS process which addressed risks from honey imports from Australia.

The industry continues to take legal advice on the issue and recently joined the New Zealand pork industry as a co-defendant in their court case to stop imports of fresh pork.

VARROA RESISTANCE TO MITICIDES SPREADING

Resistance to the synthetic pyrethroid active ingredients in Apistan® and Bayvarol® was reported by more beekeepers in Northland, Auckland, the Coromandel and the Bay of Plenty. However, most beekeepers appear to be managing varroa by using other registered chemicals on an alternating basis. Many of these alternate chemicals require more frequent application and monitoring. Beekeepers will incur extra costs if resistance spreads.

NEONICOTINOIDS

There has been particular attention focused internationally on the possible impact of neonicotinoid insecticides on bee health and as a possible cause of colony collapse disorder. These systemic pesticides are commonly used as a seed dressing where they are absorbed by the seed and remain effective during the early stages of plant growth. They are also used as foliar sprays.

The key concern expressed about this group of insecticides is about possible chronic rather than acute effects. Some research has suggested that very low levels of these pesticides, perhaps in combination with viruses or other stresses on bees, may result in bee and hive losses.

From December 2013 the EU will restrict some field uses of three neonicotinoid pesticides including seed treatment, soil application, and foliar treatment on plants and cereals that are attractive to bees. The restriction will be reviewed within two years, during which time further studies will take place on the possible impacts of the pesticide ban on bee health. These European studies may provide answers to a number of questions about bee health and the use of neonicotinoids.

There is little scientific evidence that neonicotinoid pesticides, when used according to label, are influencing bee health in New Zealand. The use of neonicotinoids is subject to controls imposed by the Environmental Protection Authority (EPA) and MPI's Agricultural Compounds and Veterinary Medicines group.

Both MPI and the EPA are closely monitoring international developments on neonicotinoids and their potential impacts on bee health.

C4 CANE SUGARS IN HONEY

The internationally accepted laboratory test AOAC 998, designed to detect adulteration with cane sugar, was often giving false positive results, particularly for manuka honey. A number of export consignments to the US, France and recently Hong Kong have failed the AOAC 998 test. Scientists at GNS Science have led a collaborative effort to determine the status of New Zealand honeys and in particular the reason for the apparent false positives with manuka honeys.

GNS worked on modifying the test and this is now accepted by the Association of Official Analytical Chemists (AOAC) as more able to accurately identify contamination. It recognises the profile of C3 sugar (nectar sugars) and allows atypical honeys, such as manuka, to have a slightly higher C4 level provided its carbon isotope value is within a certain limit.

INFORMATION ABOUT THE COMMENTARY

Information in this commentary report is sourced from interviewing beekeepers, honey packers and exporters, reviewing export documents, the apiary database, published reports and data from Statistics New Zealand.

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