



Department of
Primary Industries and
Regional Development

*We're working for
Western Australia.*

Western Australian premium honey products

Business opportunity outline



Demand for premium Western Australian **monofloral honey** products is growing.

Western Australian (WA) honeys are becoming well known for having some of the highest antibacterial and antimicrobial properties ever found in honey.

Jarrah and Marri honey in particular have some of the world's highest antioxidant levels. WA's integrity measures ensure the local honey industry is free from many of the pests and diseases that impact honey production elsewhere. These clear advantages provide unique opportunities to produce and market premium honey products using some of the world's purest and most functional honey.

Clear opportunity for **growth**

WA's monofloral honey is made from unique plant species found only in WA and global demand is growing. A historically producer-driven industry structure combined with biosecurity-driven protection from competition have held back consumer-focused marketing, which means WA Jarrah and Marri honey are 20 years behind Manuka in penetrating the lucrative global market for premium medical and functional honey products.

The time is right to invest in developing new premium honey products, improving branding and better marketing the unique properties of WA monofloral honeys.

#1

Australian state for available area per beekeeper.

#2

(Jarrah Honey)

Most valuable Australian honey after Manuka.

Solid drivers

Increasing awareness of the benefits of a healthy lifestyle and consumer preference for natural, nutritious food products, are driving consumer demands for high-value premium honeys such as WA's Jarrah and Marri honey.

Health, nutrition, and wellness

The rise of the health-conscious consumer is increasing the demand for food products with more nutritional content. This has seen growing demand for honey as it boasts an excellent source of numerous nutritional ingredients including vitamins, minerals, calcium, and antioxidants. Additionally, consumers seeking out natural sweeteners are driving demand for this healthier choice. With low glucose and high fructose levels, Jarrah honey has a low glycaemic index, making it relatively safer to consume than other honeys.

Functional properties

Honey has numerous well-recognised medicinal properties, such as improving metabolic function, maintaining blood pressure levels, reducing the risk of diabetes, and healing burn wounds. The growing body of knowledge surrounding the antibacterial, antimicrobial, antifungal and antioxidant qualities of WA monofloral honey is driving both price and demand. In a 2011 study Jarrah honey consistently produced very high levels of natural hydrogen peroxide when compared and tested against other honeys. Jarrah is a natural "peroxide" honey which also contains methylglyoxal components, both of which are antimicrobial components.

Additionally, Jarrah honey is believed to contain other antibacterial phytochemicals which contribute to its antimicrobial properties. All these factors make it excellent in boosting the healing process of wounds, burns, throat and skin infections.

Increasing application of honey

Honey is widely used in many applications besides food and beverages, such as cosmetics and pharmaceuticals. With the functional benefits of premium honey products becoming more widely understood and accepted, further applications are expected, in turn supporting market growth. Value-added products leveraging off WA's premium functional honeys is therefore seen as opportunity for investment.

Rapidly growing demand

Worldwide annual honey production was 1.8 million tonnes worth US\$5.8 billion in 2019. Of this, 628,000 tonnes crossed borders with a value of US\$2.0 billion. Global expenditure on honey has grown at 7% per annum compound annual growth rate (CAGR) over the last 20 years, which is driving up demand for imported honey and growing trade value through solid price increases.

Shifting to premium

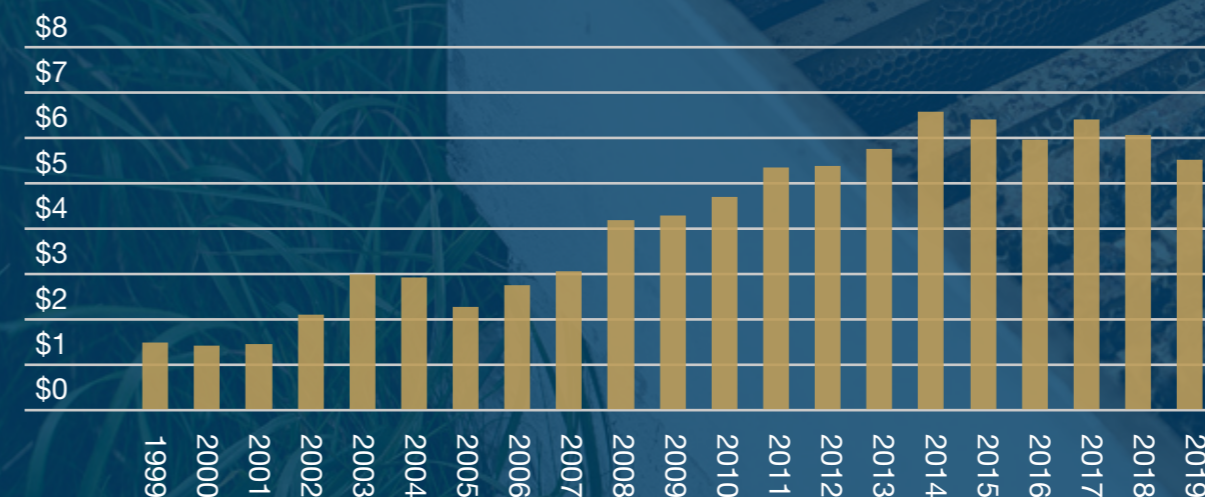
As well as the baseline demand for everyday honey, there is also growing awareness of and demand for premium and super-premium honey, particularly those with unique health-giving properties.

While this trend was initially driven by Australian and New Zealand Manuka honey, there is now growing global awareness of the

unique properties of other Australian honey varieties, particularly Jarrah, Marri and Karri, which grow only in WA's south west. In 2016 Jarrah honey had a farm-gate value of \$7 per kilogram and by 2021 this had risen to \$25 per kilogram.

Adding value to generic honey by marketing other benefits and uses, or adding functional ingredients, is another key strategy for many firms in the industry.

Global honey market value (US\$; billion; 1999 to 2019).



7%
CAGR



Growth in global expenditure on honey over past two decades

8%
CAGR



Growth in value of global honey trade over past two decades

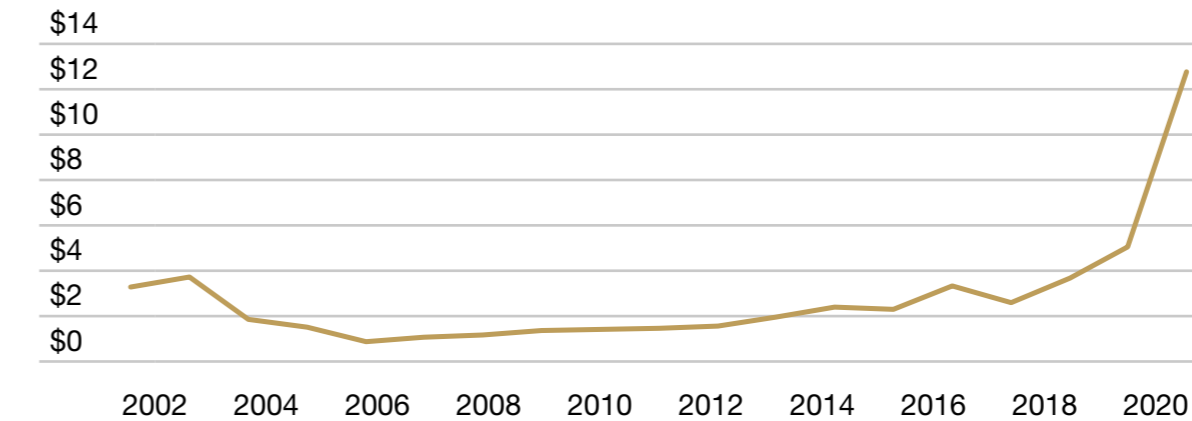
Exports



Growing exports

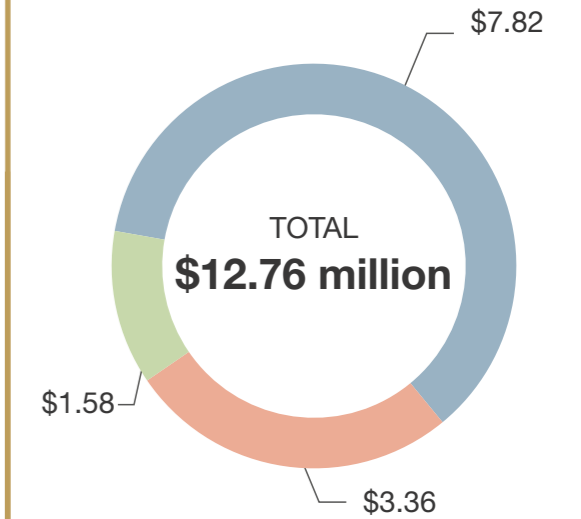
Total WA honey exports (HS040900) were worth \$12.76 million in the 2020 financial year. WA honey exports are showing strong and increasing growth, achieving an 8% CAGR between financial years 2002 and 2020, a 25% CAGR between financial years 2011 and 2020, and a 147% CAGR between financial years 2019 and 2020.

WA honey export value
(AU\$; million; 2002 to 2020 financial years)



WA honey exported in 2020 financial year was either containerised natural honey up to 4 kg (HS04090020), containerised natural honey exceeding 4kg (HS04090030) or natural comb or section honey (HS04090010). Containerised honey up to 4kg was WA's largest export by value at \$7.82 million, representing more than 61% of WA honey exports.

WA honey export category value
(AU\$; million; 2020 financial year)

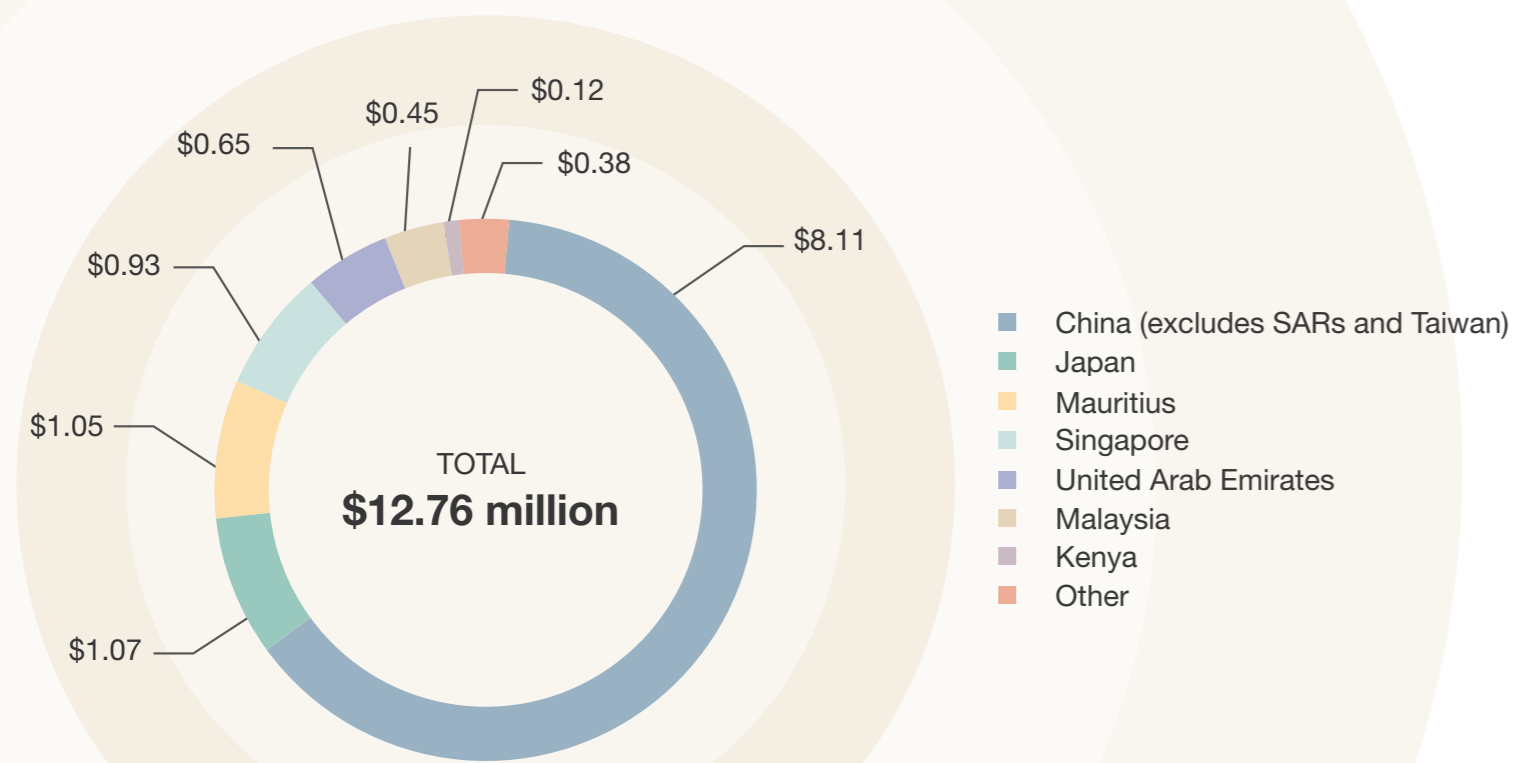


- HS04090020 - Natural honey (excl. comb or section honey), in containers not exceeding 4kg (prepacks only).
- HS04090010 - Natural comb or section honey.
- HS04090030 - Natural honey (excl. comb or section honey), in containers exceeding 4kg (bulk).

Key markets

Key export markets for WA honey include China, Japan, Mauritius, Singapore, United Arab Emirates, Malaysia and Kenya.

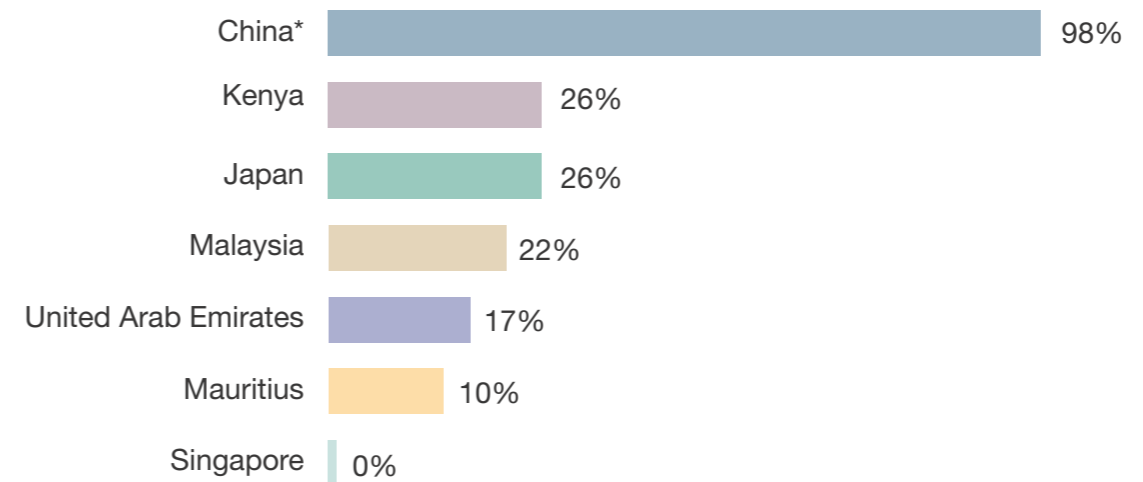
Australian protein concentrate export value
(AU\$, million; 2020 financial year)



Market growth

WA honey exports are growing strongly in numerous markets across Asia and Africa. China (98%), Kenya (26%), Japan (26%), Malaysia (22%), United Arab Emirates (17%) and Mauritius (10%) are all growing strongly.

WA honey export value 9 year growth rate
(AU\$, CAGR 2011 to 2020 financial years)

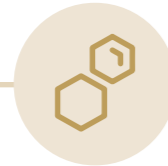


*Excludes special administrative regions (SARs) and Taiwan.

Distinct advantage

WA honey from our pristine hardwood forests and coastal wildflower regions is renowned for its superior quality.

Our apiculture industry is committed to quality assurance and products that are clean, safe and free from chemical contamination. This commitment offers a distinct trade advantage in exporting honey, beeswax, bee pollen, package bees, nucleus beehives and queen bees.



A large producer

WA is a large and successful honey producing region. We account for about 7% of Australian hives and 10 to 12% of total Australian honey production. WA is one of the world's top 50 honey producers and we typically produce between 3,000 and 4,500 tonnes of honey every year with volumes remaining stable for more than 50 years. Any inter-year production variations are driven primarily by weather events.

Two broad segments

WA Honey producers fall into two broad segments: commercial and hobbyists. In 2019 there were 157 commercial beekeepers with more than 50 hives each. They supply 2,000 to 3,000 tonnes of honey annually and operate on a large scale transporting their hives from district to district. WA has 22 honey packers.

There are also approximately 3,800 smaller producers and hobbyists that keep a few hives each as a minor supplementary activity. This group supplies approximately 1,000 to 1,500 tonnes annually and sell in community markets or give their product away to friends. Converting these hobbyists to commercial beekeepers presents an opportunity to grow the industry. Pollination services also play a significant role in the WA honey producers' revenues.

Low-cost sites

Use of State land for honey production is low cost. Site rental fees are \$110 per annum for a site in the south west and \$55 for other areas. Site application fees for every five sites are \$155 in the south west and \$75 elsewhere.

World-class yields

WA professional beekeepers achieve world class yields of 91.6 kilograms per hive. This is significantly higher than the average United States beekeeper (25.3 kilograms per hive), New Zealand (25.1 kilograms per hive) or Argentina (26.4 kilograms per hive). It is also significantly more than most other Australian states. These high yields are driven partly by regulations that specify apiary permits on State lands are not granted for sites within three kilometres of an existing site.

Cohesive and well-regulated

WA's honey industry is cohesive and well-organised. The Australian Honey Bee Industry Council (AHBIC) is the peak national industry body, supported by the Honey Packers and Marketers Association of Australia, Australian Queen Bee Breeders Association, National Council of Pollination Associations, CRC Honey Bee Products (based in Perth), Australian Manuka Honey Association and others. AHBIC also runs B-QUAL Australia, a Hazard Analysis and Critical Control Point project auditing food safety and providing compliance and quality assurance to the industry.

The industry is supported by the Bee Industry Council of WA, the WA Beekeepers Association, the WA Apiarist's Society, WA Honey Research Development Group and the Pollination Association of WA. Jarrah Honey WA is the certification agency for authentic Jarrah honey suppliers.

WA's honey industry is currently dominated by Hive + Wellness (Capilano), a single company that controls about 70% of the Australian honey market. As WA's main processor, Capilano collects surplus honey from other producers to supplement produce from its own hives.

WA has many other successful and innovative honey producers and processors with leaders including Honey For Life, Bee Happy, Australian Honey Ventures, Forest Fresh, Fewster's Farm, House of Honey and MediTree.

Focused on selected products

WA Beekeepers depend on a combination of public and private land. Almost two-thirds of WA's honey is produced from native flora in conservation areas and state forests. We have 26 million hectares of national parks, conservation parks and reserves, marine parks and reserves, regional parks, nature reserves, and timber reserves.

Apiary sites are well-regulated and located mainly in the southwest (73%). Bee sites on public land have rights attached and can only be transferred with the sale of a beekeeping business. There are strict rules regarding the placement of apiaries, including a minimum of three kilometres distance between each to reduce the spread of disease.

All apiaries sited on public land are managed by the Department of Biodiversity, Conservation and Attractions.

WA's beekeeping industry has access to unique wildflowers in our pristine forests and coastal reserves, which are essential for honey production and industry sustainability. These areas are free from chemical contamination, which ensures that WA's honey products are clean and safe for consumption.



Jarrah

Jarrah (*Eucalyptus marginata*) is WA's principal timber with Jarrah forests covering more than 1.2 million hectares. The forests' size makes them free from agricultural or industrial contamination and pollution. The trees prefer the ancient iron-rich lateritic soils, which absorb rainwater during winter and become very dry during summer.

Jarrah trees are very slow-growing, taking up to 120 years to reach maturity, and live for up to 1,000 years. The trees grow up to 40 metres tall with large leaf canopies and trunks up to three metres in diameter. Jarrah trees typically produce flowers only once every two years, from late spring to early summer. The flowering pattern is variable and depends on sufficient rainfall during winter and warmth during spring. Hives along the south coast produce higher volumes of honey because of the area's higher rainfall.

Jarrah's cream-coloured blossoms yield a rich medium to dark honey with a strong amber colour, lower in glucose than other honey varieties with a deep and complex flavour. Jarrah is considered one of the world's most premier medicinal honeys, with its extraordinary natural anti-microbial and anti-fungal properties, high fructose and low glucose levels, high antioxidant content, plus other beneficial vitamins, minerals and natural chemicals.

Jarrah honey has a very high total activity rating, with some products achieving a 50+ rating, making it not only rich in taste, but providing antimicrobial qualities as well. Jarrah honey is excellent in boosting the healing process of sore throats, minor wounds and burns and other ailments. Jarrah honey is up to 50% more antimicrobial than Manuka honey and contains three times more antioxidants.

Marri

Marri (*Eucalyptus/Corymbia calophylla*) is the most widespread of WA's commercial eucalypts. Marri honey is collected from the rich and ancient Marri forests of WA's southwest. Sometimes referred to as Red Gums because of their deep red sap, Marri trees yield beautiful cream-coloured blossoms from which bees gather pollen to produce honey. Though the flowers emit a strong fragrance, Marri honey has a subtle flavour profile with a rich medium to dark amber colour.

Marri has distinct medical and healing properties, however research on these is less developed than for Jarrah.

Others

While WA is well known for its Jarrah and Marri honey, we also produce honey from a wide range of other native forest species, including Karri, Hakea, Wandoo, Acorn Banksia, Coastal Peppermint, White Gum and various Blackbutt species, among others. Many of these species exhibit high medicinal properties.

Local species of *leptospermum* (tea tree) with high activity levels also show huge potential in WA, with the *nitens* and *subtenuae* species showing the highest levels of dihydroxyacetone. There is potential for regenerative plantings and plantations, which can produce honey, as well as timber for carbon credits.

A protected and supported industry

The WA government has stringent biosecurity measures to prohibit raw untreated honey, live bees and second-hand hive equipment from entering the state.

As a result, local honeybees are free of many of the pests and diseases found in other parts of Australia and around the world. WA is also free of serious exotic bee mites such as varroa and European Foul Brood, which means we can produce chemical free honey products with access into high-value markets.

Due to WA's highly regulated environment, local producers do not compete with imported honey from China, Brazil or Argentina, and local specialty Jarrah honey does not need to compete with Manuka honey from New Zealand. This almost complete protection from imports in conjunction with the exclusionary regulations surrounding hives in state forests maintains premium products and increases returns to the industry.

Several initiatives have been introduced to maintain quality standards and to ensure WA's bees remain free of exotic bee diseases and pests. A surveillance and monitoring system has been established with bee industry funding assistance and the industry manages a queen bee breeding program.

The Department of Primary Industries and Regional Development has contributed more than \$1 million for projects in collaboration with Chem Centre and the Bee Industry Council of WA through its Agribusiness Innovation Fund to develop B-QUAL, a certification process to provide consumers with confidence in the integrity, traceability and quality of WA's monofloral honeys.

This aligns with National Association of Testing Authorities approved certification methodology and has identified new mechanisms of microbial and therapeutic activity in Jarrah and Marri honey.

Additional support from this funding has provided improved monofloral honey production by optimising locations, hive placement and bee nutrition.

Growth ready environment



Safe, secure, productive apiculture



Productive Beekeepers



Value-added processing opportunity



World class distribution



Skilled workforce



Strong research and development capabilities



Supportive business environment

#9

Forbes
'Best Countries for
Business 2019'
(Australia)

#3

Heritage Foundation
'Index of Economic
Freedom 2021'
(Australia)

Close to key markets

WA is close to Asia, particularly East Asia and South East Asia, both of which large and growing markets. WA is the natural and logical supplier of temperate climate, premium foods like honey to the tropical climate countries of South East Asia and well-positioned to supply East Asia and the Middle East.

WA's honey industry has been exporting for more 100 years and has supplied to many Asian countries for that time. WA honey has a reputation as a high-quality, premium product.

Ease of doing business

Australia is politically and economically stable and a safe country in which to do business. WA businesses have sound governance and represent low sovereign risk to investors and customers.

Fast time to market-free trade agreements

WA is geographically and strategically well-placed to supply Asia's rapidly expanding markets. We are in the same time zone as much of South Asia and within five days can ship to Indonesia, six days to Singapore and eight days to Southern China. Australia has Free Trade Agreements in place or under negotiation with more than 25 countries and regions and our combination of great location and privileged access means we are uniquely positioned as the premium temperate climate food "breadbasket" of the Asia region.



Attracting investment

Producing premium, value-added honey products in WA is attractive. Numerous firms have already invested in the WA honey sector and with more than 95% of honey still sold in raw form with limited value added, there is significant potential for growth. WA's honey industry has vast opportunities to attract further investment.

Firms are currently investing to secure new sites to increase honey volumes. Firms like Bee Central are investing in developing premium, high dihydroxyacetone plantation species, whilst Australian Honey Ventures are developing new high-value functional products, that through marketing and market development have recently achieved \$80-600 per kilogram business-to-consumer.

WA's honey industry has attractive returns. Commercial honey firms work on a 30% return on investment and with high-value honey products that can increase to 50-60%. Cosmetics that focus on honey products can make an 80% return on investment.

The industry is also investing in traceable, measurable systems to identify antimicrobial, antioxidant and species properties.

Additional investment is required to:

- Develop a core "WA story" based on provenance, assurance and species' key properties;
- Advance high-value medicinal honey products;
- Add value to everyday honey focusing on functional properties and benefits;
- Extend honey into other channels and products (e.g. Beverages, cosmetics);
- Progress the agronomy around plantations (in particular for local high activity honey species); and
- Develop markets and high-value products for pollens, honeycomb, propolis, royal jelly and bee venom.

Investment in WA's honey industry would suit a wide range of investors, including large Australian firms looking for growth, investors with access to new markets, existing local firms and start-ups.

Existing WA industry examples

WA has a large and well-developed honey industry. A number of firms stand out as potential partners for a honey processing venture.



Supporting investment

The WA government is committed to working closely with investors to develop WA's premium honey industry. The Department of Primary Industries and Regional Development's Investment Services team offers a range of investment concierge services to de-risk and support investment.

The team is made up of experienced industry professionals, who operate with a commercial focus, bringing together businesses, government departments and agencies to support industry investment initiatives.



How we can help

Information to support investment decisions

As a central point of contact for information and advice on investing in WA's agriculture, fisheries, and food and beverage sectors, we provide:

- Information on conducting business in WA.
- Various data and market intelligence.
- Background on relevant regulatory requirements and approval processes.

Investment facilitation

Drawing on in-depth knowledge of the agribusiness, food and beverage industry, and extensive business networks in Australia and overseas, our team can provide guidance and introductions to help secure the investment or opportunity you are looking for. We can:

- Provide introductions to WA agribusiness, food and beverage businesses.
- Identify investment and research partnership opportunities.
- Help plan and conduct site visits to assess opportunities.
- Identify access to available natural resources and infrastructure.
- Identify suitable investor and investment opportunities.

Regulatory approval support

Understanding and securing the required regulatory approvals for your project can be a roadblock to investment. We can provide assistance to streamline processes and simplify your dealings with relevant government departments and agencies by:

- Providing information and guidance on WA's regulatory environment.
- Helping obtain regulatory approvals.
- Coordinating with other government departments and agencies.

Investment-ready project support

Our team is available to provide support to identify and develop your project or business' potential, including guidance on raising capital and getting your project investment-ready.

We can also work with you to provide information on the different types of investment available and investment partners.

By understanding your goals and requirements, we can assist you to identify and develop your project's potential.

Support available

A wide range of national and state-based agencies, industry bodies and research institutions across Australia are available to support the industry in research and development, commercialisation and investment.



We understand your project and investment requirements are unique.

To get started or expand on your Western Australian investment journey, contact us today.

Speak to our Investment Services team for support and guidance:

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Sources: DPIRD, Heritage Foundation, Forbes, UN Comtrade, UN FAO, Australian Bureau of Statistics, DFAT, Australian Honey Bee industry 2014-15 survey, Geosciences Australia, BeeAware, CIE Future Directions for the Australian Honey Bee Industry 2005, Australia's State of the Forests Report 2018, Australia Honey Ventures, Hive+Wellness, Capilano, DPIRD, Department of Biodiversity, Conservation and Attractions, industry interviews, Coriolis and DPIRD analysis and estimates.

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