



WESTERN

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GRDC™ GROWNOTES™



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GRAINS RESEARCH
& DEVELOPMENT
CORPORATION

VETCH

SECTION 13

MARKETING

PRICE DETERMINANTS FOR FEED GRAINS IN WESTERN MARKETS | ENSURING
ACCESS TO MARKETS FOR WESTERN AUSTRALIAN FEED GRAINS | HAY |
HAY DEMAND | HAY SUPPLY | HOW THE MARKET OPERATES | MARKET
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Marketing

The final step in generating farm income is converting the tonnes produced into dollars at the farmgate. This section provides best-in-class marketing guidelines for managing price variability to protect income and cashflow.



13.1 Price determinants for feed grains in western markets

Stockfeed markets are the biggest consumers of grain domestically in Australia. Whilst the majority of the grain produced in WA is exported, the domestic stock feed market consumes 600kt of feed grain per annum, representing ~5% of total Australian stock feed consumption and approximately 5% of average WA's winter grain production.

Whilst the Western Australian stock feed market is small relative to the rest of Australia it is growing as intensive pig and poultry industries in particular expand their WA foot print. This trend is being driven by the availability of land, the regulatory environment and the availability of feed grains.

The largest market for stock feed in WA is the poultry market including eggs and chicken meat accounting for 30%, followed by pig meat production, dairy, beef and then sheep industries.

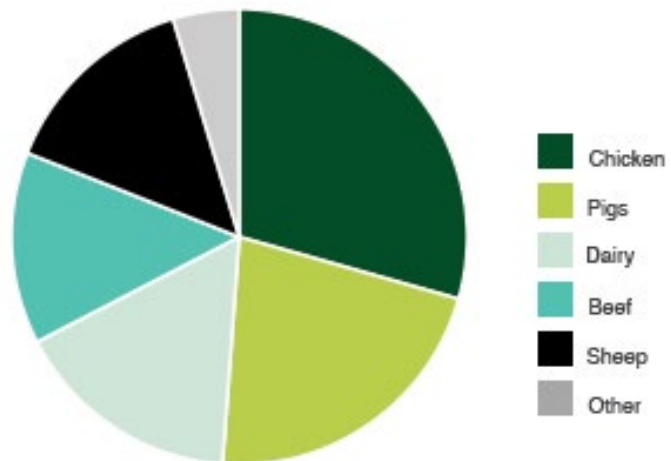


Figure 1: Sources of demand for stock feed in Western Australia

The key drivers of prices for feed grains in Western Australia include;

- Rate of exports and remaining supply of feed grains for domestic markets.
- Commodity prices in the consuming industry (ie meat prices)
- Consumption trends in domestic livestock markets.
- Livestock health
- Number of animals on feed.
- Seasonality / supply of pasture and fodder vs grains.
- Imports of alternate feed sources (ie soy bean meal)
- Rate of live export of sheep from WA.
- Prices of competing feed grains.

Demand for grain from stock feed markets tends to be steady throughout the year. However knowing there is strong competition from the export market for WA grain, some buyers will seek to secure requirements shortly after harvest when the supply of grain is more certain.

13.1.1 Executing tonnes into cash

When it comes to accessing domestic stockfeed markets, there are several ways this can be approached.

1. Sale to a feed miller or manufacturer.
2. Sale direct to farm or end user.
3. Sale to a trader or merchant who on-sells the grain to the stockfeed market.

Each organisation will differ in terms of how they manage grain purchases, the professionalism of the enterprise, and management around grain requirements and grain purchases, documentation and record-keeping.

Hence it is particularly prudent when making sales into these markets to be vigilant in maintaining records of contracts, even when they are executed by phone. It is strongly advised that the seller keeps a written record of the particulars of the contract including price, quantity, quality, delivery and payment terms to protect themselves in the event of a dispute with the other party as to the details of the sale agreement.

It is even better practice to send a contract confirmation to the buyer in the event they don't provide one to you, or even as well as. Grain Trade Australia provides standard form contract documents that can be completed by either party and returned to the buyer by email as confirmation of the verbal contract. This way, any misunderstandings that might have taken place on the phone can be quickly identified and rectified immediately, while the conversation is still fresh in both your minds rather than waiting until delivery to identify a problem.

13.1.2 How to sell for cash

Like any market transaction, a cash grain transaction occurs when a bid by the buyer is matched by an offer from the seller. Cash contracts are made up of the following components, with each component requiring a level of risk management:

Price

- Future price is largely unpredictable, hence devising a selling plan to put current prices into the context of the farm business is critical to manage price risk.

Quantity and Quality

- When entering a cash contract, you are committing to delivery of the nominated amount of grain at the quality specified. Hence production and quality risk must be managed.

Delivery terms

- Timing of title transfer from the grower to the buyer is agreed at time of contracting. If this requires delivery direct to end users, it relies on prudent execution management to ensure delivery within the contracted period.

Payment terms

- In Australia, the traditional method of contracting requires title of grain to be transferred ahead of payment; hence counterparty risk must be managed.

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Grain Trade Australia is the industry body ensuring the efficient facilitation of commercial activities across the grain supply chain. This includes contract trade and dispute resolution rules. All wheat contracts in Australia should refer to GTA trade and dispute resolution rules.

Quantity (tonnage) and quality (bin grade) determine the actuals of your commitment. Production and execution risk must be managed.

Price is negotiable at time of contracting. Price basis or price point is important as it determines where in the supply chain the transaction will occur and so what costs will come out of the price before the growers net return.

Timing of delivery (title transfer) is agreed upon at time of contracting. Hence growers negotiate execution and storage risk they may have to manage.

Whilst the majority of transactions are on the premise that title of grain is transferred ahead of payment this is negotiable. Managing counterparty risk is critical.

GTA Contract No.3 CONTRACT CONFIRMATION

GTA Trade Rules and Dispute Resolution Rules apply to this contract



This Contract is confirmation between:

BUYER
 Contract No: _____
 Name: _____
 Company: _____
 Address: _____
 Buyer ABN: _____
 NGR No: _____

SELLER
 Contract No: _____
 Name: _____
 Company: _____
 Address: _____
 Seller ABN: _____
 NGR No: _____

The Buyer and Seller agree to transact this Contract subject to the following Terms and Conditions:

Commodity: _____ GTA Commodity Reference: _____
 Grade: _____ Inspection: _____ (Origin - Destination)
 Quantity: _____ Tolerance: _____ (Refer over)
 Packaging: _____ Weights: _____ (Origin - Destination)
 Price: _____ Excl/Incl/Free GST _____
 Price Basis: _____
 Delivery/Shipment Period: _____ (Delivered, Shipped, Free In Store, Free On Board, Ex-Farm, etc.)
 Delivery Point and Conveyance: _____ (Road, Rail, Delivered Container Terminal, Freight, Rated Basing Point, Loading Weight requirements if applicable)
 Payment Terms: The buyer agrees to pay the seller within _____. In the absence of a declaration, payment will be 30 days end of week of delivery.
 Levies and Statutory Charges: Any industry, statutory or government levies which are not included in the price shall be deducted as required by law.
 Disclosures: Is any of the crop referred to in this contract subject to a mortgage, Encumbrance or lien and/or Plant Breeders Rights and/or EPR liabilities and/or registered or unregistered Security Interest? NO YES (Please appropriate box) If "yes" please provide details:

 Other Special Terms and Conditions:

All Contract Terms and Conditions as set out above and on the reverse of this page form part of this Contract. Terms and Conditions written on the face of this Contract Confirmation shall overrule all printed Terms and Conditions on the reverse with which they conflict to the extent of the inconsistency. This Contract comprises the entire agreement between Buyer and Seller with respect to the subject matter of this Contract.

Recipient Created Tax Invoice (RCTI).
 To assist with the processing of the Goods and Services Tax compliance, the buyer may prepare, for the seller, a Recipient Created Tax Invoice (RCTI). If the seller requires this service they are required to sign this authorisation.

Incorporation of GTA Trade & Dispute Resolution Rules:
 This contract expressly incorporates the GTA Trade Rules in force at the time of this contract and Dispute Resolution Rules in force at the commencement of the arbitration, under which any dispute, controversy or claim arising out of, relating to or in connection with this contract, including any question regarding its existence, validity or termination, shall be resolved by arbitration.

Please issue a RCTI (Please)

Buyer's Name: _____ PRINT NAME
 Buyer's Signature: _____
 Date: _____

Seller's Name: _____ PRINT NAME
 Seller's Signature: _____
 Date: _____

This Contract has been executed and this form serves as confirmation and should be signed and a copy returned to the buyer/seller immediately. 2014 Edition ©GTA. For GTA member use only.

Figure 2: Typical cash contracting as per Grain Trade Australia standards.

13.1.3 Counterparty risk

Most sales involve transferring title of grain prior to being paid. The risk of a counterparty defaulting when selling grain is very real and must be managed. Conducting business in a commercial and professional manner minimises this risk.

There is not much point selling for an extra \$5/t if you don't get paid.

Counterparty risk management includes:

1. Dealing only with known and trusted counterparties.
2. Conduct a credit check (banks will do this) before dealing with a buyer they are unsure of.
3. Only sell a small amount of grain to unknown counterparties.
4. Consider credit insurance or a letter of credit from the buyer.
5. Never deliver a second load of grain if payment has not been received for the first.
6. If possible, do not part with title of grain before payment or request a cash deposit of part of the value ahead of delivery. Payment terms are negotiable at time of contracting.

Above all, act commercially to ensure the time invested in a selling strategy is not wasted by poor counterparty risk management. Achieving \$5/t more and not getting paid is a disastrous outcome.

13.1.4 Read market signals

The appetite of buyers to buy a particular commodity will differ over time depending on market circumstances. Ideally growers should aim to sell their commodity when buyer appetite is strong and stand aside from the market when buyers are not very interested in buying the commodity.

Principle: 'Sell when there is buyer appetite' – when buyers are chasing grain, growers have more market power to demand a price when selling.

Buyer appetite can be monitored by:

- i. The number of buyers at or near the best bid in a public bid line-up. If there are many buyers, it could indicate buyer appetite is strong. However, if there is one buyer \$5/t above the next-best bid, it may mean cash prices are susceptible to falling \$5/t if that buyer satisfies their buying appetite.
- ii. Monitoring actual trades against public indicative bids. When trades are occurring above indicative public bids it may indicate strong appetite from merchants and the ability for growers to offer their grain at price premiums to public bids.

13.1.5 Know the specifications of your grain

Feed 'grades' of grain as defined by bulk handler receival standards can have very broad quality specifications. For the lowest grades there is often no minimum tolerances on screenings or protein, hence no two parcels are the same.

However, the important factor for the stockfeed market is not what 'grade' the grain is but its energy and protein components, which ultimately determine conversion into meat or other animal products. Hence, having your grain tested and knowing your specifications helps the buyer to know exactly what the value of the grain will be in their production system.

Without this information the buyer may base their pricing on the 'minimum' specification or likely worst-case scenario to protect themselves in the event they receive grain of the lowest quality allowable in the grade specifications. However, knowing why your grain was downgraded and the specifications of the load, the buyer may be able to pay premiums for the exact quality you are offering, above the minimum specification.

13.2 Ensuring access to markets for Western Australian feed grains

Planning where to store the commodity is important in ensuring access to the market that is likely to yield the highest return.

13.2.1 Storage and logistics

Return on investment from grain-handling and storage expenses is optimised when storage is considered in light of market access to maximise returns as well as harvest logistics.

Storage alternatives include variations around the bulk handling system, private off-farm storage and on-farm storage. **Delivery and quality management** are key considerations in deciding where to store your commodity.

Commodities destined for the domestic end-user market (such as feedlot, processor, or container packer) may be more suited to on-farm or private storage to increase delivery flexibility.

Storing commodities on-farm requires **prudent quality management** to ensure delivery at agreed specifications. The business can be exposed to high risk if this aspect is not well-planned. Penalties for out-of-specification grain on arrival at a buyer's weighbridge can be expensive. The buyer has no obligation to accept delivery of an out-of-specification load. This means the grower may have to incur the cost of taking the load elsewhere while also potentially finding a new buyer. Hence there is potential for a distressed sale which can be costly.

On-farm storage also requires **prudent delivery management** to ensure commodities are received by the buyer on time with appropriate weighbridge and sampling tickets.

Principle: 'Storage is all about market access' – storage decisions depend on quality management and expected markets.

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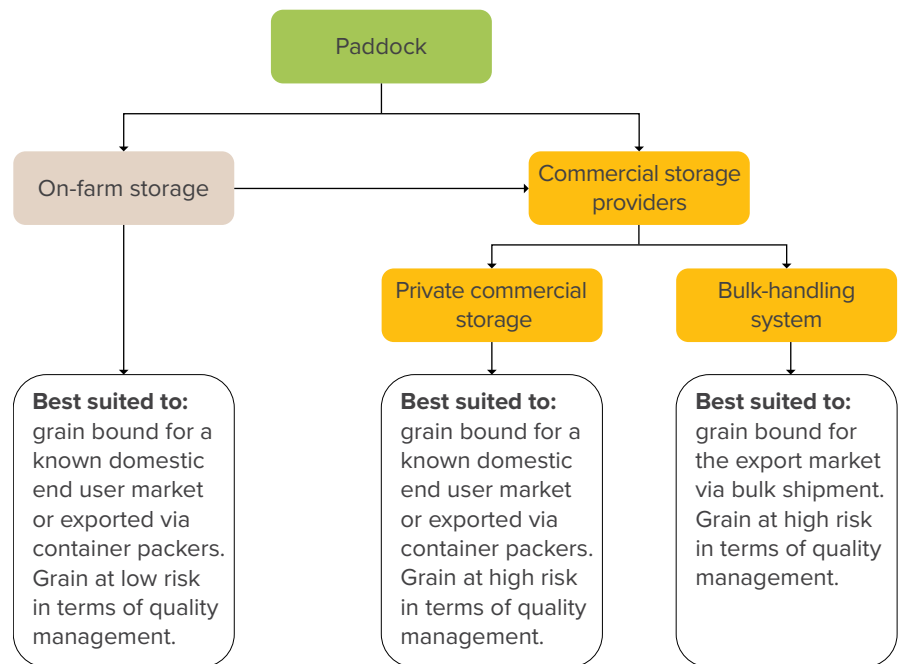


Figure 3: Grain storage decision-making.

Note: Decisions around storage alternatives of harvested commodities depend on market access and quality management requirements.

13.2.2 Separate the delivery decision from the pricing decision

Organised stockfeed buyers with a clear outlook as to what their grain requirements will be across the season may seek to purchase their grain in advance of delivery. That is, they may purchase grain in March for delivery between May and July. This provides the seller the opportunity to obtain price certainty immediately while delivery may not take place until some point in the future.

The benefit of this is that a seller can capture strong value when it presents, even though it may not be a convenient time to arrange delivery. Or you can create cashflow certainty for a known future commitment at today's price.

13.2.3 Cost of carrying grain

Storing grain to access sales opportunities post-harvest invokes a cost to 'carry' grain. Price targets for carried grain need to account for the cost of carry.

Carry costs for canola are typically \$4–5/t per month consisting of:

- i. monthly storage fee charged by a commercial provider (typically about \$1.50–\$2/t per month)
- ii. the interest associated with having wealth tied up in grain rather than cash or against debt (about \$2.50–\$3/t per month depending on the price of the commodity and interest rates).

The price of carried grain therefore needs to be \$4–5/t per month higher than was offered at harvest.

The cost of carry applies to storing grain on-farm as there is a cost of capital invested in farm storage plus the interest component; \$4–5/t per month is a reasonable assumption for on-farm storage.

Principle: 'Carrying grain is not free' – the cost of carrying grain needs to be accounted for if holding grain and selling it after harvest is part of the selling strategy.

Principles summarised

1. 'Always keep written records' – thorough record-keeping is everyone's responsibility, not just the buyer's.
2. 'Seller beware' – know your counterparty.
3. 'Know your specs' – grades don't always convey quality.
4. 'Separate the delivery decision from the pricing decision'.
5. 'Sell when there is buyer appetite' – when buyers are chasing grain, growers have more market power to demand a price when selling.
6. 'Storage is all about market access' – storage decisions depend on quality management and expected markets.
7. 'Carrying grain is not free' – the cost of carrying grain needs to be accounted for if holding grain and selling it after harvest is part of the selling strategy.

13.3 Hay

Understanding the dynamics of hay markets can improve grain growers' returns when cutting crops for hay.

Hay can be very profitable. However, it requires a working knowledge of livestock industries and their quality requirements. Quality is a critical issue and vetch quality is heavily influenced by the growth stage at which it is cut. Yet cutting at optimum quality means that maximum yield is not achievable.

Hay is usually used as a grazing supplement. In a widespread drought, the growing conditions that pose a threat to grain production also limit pasture and silage production, which can result in a peak in hay demand and prices in local and other domestic markets.

In general terms, dairy farmers buy the most hay, followed by sheep farmers and beef producers. Most hay is sold at baling, in late spring, but depending on the timing and scale of the autumn break, April and May can be another peak trading period.

Producing vetch hay for export markets is generally not the norm. A longer-term approach is required when producing export hay and contract arrangements with a hay processing plant are required.¹

The market for hay does not have the sophistication of grain. Growers need to be aware that compared to grain, hay:

- is mainly produced and consumed on-farm, hence the traded portion is smaller;
- is not readily accumulated, stored or traded;
- has a greater variation in quality;
- buyers with many feeding objectives tend to give contrary pricing signals;
- price is not always directly linked to quality;
- price is influenced greatly by marketing relationships;
- trade occurs commonly between regular farmer trading partners and not via merchants; and
- trade is conducted via a traditional word-of-mouth basis.

13.4 Hay demand

Hay demand varies greatly from season to season. As much as 62% of hay produced is used by the dairy sector. With about two-thirds of the country's dairy cows in Victoria, this demand is focused here. Beef feedlots are a large factor in the markets of northern NSW and Queensland but are often limited due to reduced operating margins. In Western Australia dairy and beef herds are both potential markets for vetch hay as it offers a high-protein fodder source.

¹ GRDC (2016) Marketing important for hay producers. GRDC Grains Research Updates Newsletter 43, <https://grdc.com.au/archive/grdc-newsletters/grdc-grains-research-update-newsletter-southern-region/grdc-grains-research-update-newsletter-issue-43/marketing-important-for-hay-producers>

13.5 Hay supply

Pasture hay has traditionally dominated Australian hay production. Silage is an expanding source of fodder, as is alkalage. Oaten hay targeted at export is also an increasing trend.

Total hay production can be boosted by the contribution of a late flush of pasture hay in regions and failure of cereal crops from frost or drought being cut for hay. With shortages of irrigation water there is also an expanding role for dryland producers of hay, particularly for cereal and vetch hay. There is often a strong demand for high-protein hay created by the low production of clover and lucerne hay.

13.6 How the market operates

In a 'normal', non-drought year exporters will be aiming to fill the majority of their plant's pressing capacity in spring. These export prices for cereal hay in early spring set a benchmark for domestic cereal hay values, as well as those for pasture hay. Export quality requirements of low moisture, high sugars and the cosmetics of greenness, mean that domestic consumers are often prepared to buy hay of a lower quality at a reduced price.

It would be tidy if the market was to pay purely on payment for energy. However, ruminant rations have upper limits on the proportion of grain. For proper rumen function, cattle and sheep must have a portion of the ration containing a functional fibre such as hay.

Unlike grain, forward contracting of hay has not been widely accepted. With new written agreements available from Grain Trade Australia (see example [Figure 1](#)) and a sustained demand for a reliable source of hay, we should see the frequency of forward contracting of hay increase.²

13.6.1 How the domestic market operates

Pastures provide the bulk of feed for ruminants and fodder is only a smaller supplementary feed. When droughts hit a broad range of grazing regions, the demand for hay can spike dramatically. The volatility of hay prices is also enhanced by how tightly growers retain their hay for on-farm use. Only around 40% of hay produced is typically sold each year.

Irrigation regions rely on affordable irrigation water to produce fodder through either extending the growing season and/or to irrigate highly productive summer crops.

² Handley D (2008) Hay: what's driving the market? GRDC Update Papers, <https://grdc.com.au/resources-and-publications/grdc-update-papers/tab-content/grdc-update-papers/2008/06/hay-whats-driving-the-marke>

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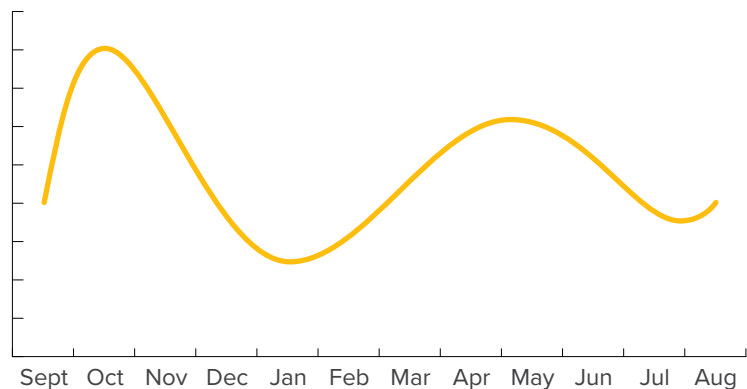


Figure 4: Typical hay trade volumes.

Source: JumbukAg Consulting <https://grdc.com.au/resources-and-publications/grdc-update-papers/tab-content/grdc-update-papers/2016/08/markets-for-hay-whats-under-the-bonnet>

Hay prices are volatile but no more so than wheat prices. Droughts have changed the buying behaviour of many hay buyers. Hay has been the greatest limiting factor for many dairy farmers during these dry times. Dairy farmers tend to be the most astute group of buyers as their margins are tight and the optimum nutritional performance of their cows is paramount.

13.7 Market intelligence

The Australian Fodder Industry Association (AFIA) regularly produces a newsletter, 'Focus on Fodder' (<http://www.afia.org.au/index.php/news-events/focus-on-fodder>) and a 'Hay report' (<http://www.afia.org.au/index.php/resources/hay-report>) to assist growers in understanding hay markets and prices.

There is also a National Hay report produced by Dairy Australia (purchases of hay and grain) (<http://www.dairyaustralia.com.au/Pastures-and-Feeding/Supplements/Hay-and-grain-report/National-hay-report.aspx>). This includes historic cereal hay prices versus grain, but does not cover vetch hay.

13.8 Determining market outlook

Broadacre croppers who are growing hay primarily as a cash crop, see their dairy clients as a critical sector that underpins their annual sales. Pressure comes when new season opening milk prices are considered low or below costs of production. How dairy farmers react to lower prices and how their budgetary changes impact on their buying behaviour is unclear. Rather than building hay stocks some industry analysts suggest that dairy farmers are likely to make just enough hay for the feed gaps of a typical season.

A discouraging hay demand outlook from the dairy sector may also encourage some vetch growers to plough their crops in rather than cut for hay. This would be more likely if these growers have hay shed space that they would like to free up for their expanded export oaten hay commitments. Irrigated lucerne hay growers are also reducing their production due to the dairy 'crisis' and high cost of irrigated water.

This could provide some opportunities for vetch and oaten hay sellers as tight hay stocks could remove any supply buffer. The new 2017 season will be opening with some of the lowest stocks of carryover hay since 2010. If this combines with some lean hay production from the dairy sector and a late break in 2017, the hay market may be vulnerable to some spikes in demand.

But prices are likely to fall. Hay sellers may find they could face stronger demand if the opening prices for hay are much cheaper than current rates. If pasture and cereal hay prices are well under \$200 a tonne, delivered to farm, it may be financially

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prudent for dairy farmers to buy hay and maximise the grazing from the home-grown pastures.

13.9 Conclusion

Hay will continue to be an option for grain growers for a range of reasons. Success can be improved with some awareness of pasture production and the quality needs of hay buyers.³

3 Pearce C (2016) Markets for hay: what's under the bonnet. GRDC Update Papers, <https://grdc.com.au/resources-and-publications/grdc-update-papers/tab-content/grdc-update-papers/2016/08/markets-for-hay-whats-under-the-bonnet>