Hawke's Bay Farming for Resilience Report

March 2024

AGFIRST

Ministry for Primary Industries
Manatū Ahu Matua

ON FARM SUPPORT TEAM

Notes

Annual figures are for the year to 30 June 2024 unless otherwise noted.

Currency figures are in New Zealand dollars.

Some totals may not add up due to rounding.

MPI welcomes feedback on this publication via:
onfarmsupport@mpi.govt.nz for general feedback
fmbdatarequests@mpi.govt.nz for data enquiries

Project background

Hawke's Bay is still recovering from the effects of Cyclone Gabrielle. Good decision making will be key for farming families in their recovery and to grow resilience.

The National Institute of Water and Atmospheric Research (NIWA) officially declared the arrival of El Niño on 29 September 2023. El Niño can bring increased risks of drought and water scarcity, wildfire, heat-related human and animal health concerns, along with flooding. The Ministry for Primary Industries' (MPI) advice is that "it's important to have a plan and to be prepared".

The Hawke's Bay Farming for Resilience pilot project is a collaboration between AgFirst and MPI initiated to support the region in its readiness for a forecast dry period and the challenging financial pressures sheep and beef farmers are currently experiencing.

We aim to improve resilience through the development of key messages for communications both to rural stakeholders and communities, but also to provide intelligence to MPI and other agencies on the status of impacts on our farmers and growers.

The project seeks to pilot an integrated framework that includes a panel of local specialists to provide intelligence, insights, and modelled data to communicate near real-time data and forecast scenarios for messaging and potential on-farm interventions.

The reports will be made available to encourage proactive support to the Hawke's Bay farming community. Recipients will include Hawke's Bay Rural Advisory Group (RAG), farmers, and the agribusiness/rural professional community.

The pilot project will take place over six months delivering reports from February to July 2024.

For more information about El Niño go to: mpi.govt.nz/el-nino

Farm system model details

This project has established three farm categories providing regional farm system models that statistically represent sheep and beef farms in the Hawke's Bay. The data has been modelled by AgFirst in FARMAX® and calibrated by local specialists.

Farm system model 1
Summer Dry Hill

590 effective hectares

< 1,200 mm annual rainfall

18% flat land

12 ha summer rape
12 ha multi graze brassica for summer and winter use.

Used to finish 89% of lambs prime. Balance sold store.

5,166 stock units

No irrigation

60% of feed demand

Crossbred ewe flock breeding own replacements and selling a mix of prime and store lambs.

40% of feed demand

Self-replacing breeding cows and finishing steers.

Farm system model 2
Summer Safe Hill

520 effective hectares

> 1,200 mm annual rainfall

34% flat land

8 ha winter kale
4 ha summer rape
4 ha herb and clover

Finishing 88% of lambs prime.

4,823 stock units

No irrigation

65% of feed demand

Similar to Summer Dry Hill but more lambs finished.

35% of feed demand

Similar beef policy to Summer Dry Hill with the addition of dairy heifer grazing consuming 6% of feed demand.

Farm system model 3
Finishing

440 effective hectares

< 1,200 mm annual rainfall

78% flat land

10 ha winter kale
8 ha summer rape
4 ha fodder beet
50 ha in specialist finishing forage including lucerne, plantain, chicory and clovers.

6,313 stock units

Partial irrigation

52% of feed demand

Main enterprise is lamb finishing. Lambs typically purchased in the autumn and sold in the late winter/early spring.

48% of feed demand

Bull beef finishing with a combination of purchased calves and yearlings to finish as 2-year-olds.

March update

Climate

February was relatively dry. On the Heretaunga and Ruataniwha plains and south coast, rainfall was a third of the monthly average. Northern areas received about half the long-term average. Rainfall was in the normal range for the Ruahine Range and Kotemaori. Soil moisture levels fell rapidly during the month. River flows were mostly near or below average, but groundwater levels were near or above average. Hawke's Bay daytime temperatures were more than 1°C above average.

Near normal rainfall is forecast for March, partly due to increased tropical storm activity. However, conditions could be drier than anticipated if rain-producing weather systems don't eventuate.

Pasture growth and covers

Across the three Hawke's Bay farm system models (see page 2), average pasture growth for February was 18.7 kgDM/ha per day. This is compared to an average year of 19.1 kgDM/ha, or 6% less than expected.

Pasture growth across Hawke's Bay has varied compared to the previous outlook. Daily pasture growth rates on the Summer Dry Hill farm system model were 12.4 kgDM/ha (5% below average), the Summer Safe Hill farm system model were 31 kgDM/ha (19% above average), and the Finishing farm system model were 15.7 kgDM/ha (13% below average). Summer Dry Hill system farmers will need to consider adjusting their livestock numbers or animal performance, such as livestock weight gains, may be compromised.

Average farm pasture covers across the three Hawke's Bay farm system models range from 2,250 to 2,801 kgDM/ha, on average 8% lower than in February.

PastureVibe forecasts that pasture growth rates in March and April will be 54% of the average across all farm system models, based on expected weather conditions. If these more conservative growth rates occur, total pasture covers will have dropped below 1,500 kgDM/ha by mid-April. However, AgFirst have used the long-term average growth rate forecasts due to the abnormal El Niño patterns that have been experienced so far. These forecasts will be updated monthly as further data is received and local conditions observed.

Pasture cover comparison

- Summer Dry Hill — Summer Safe Hill — Finishing
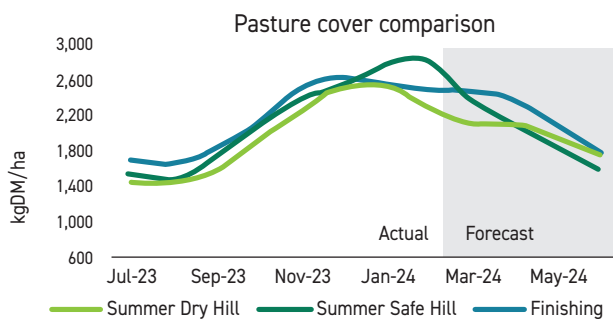
Pasture quality

Pasture quality is variable and may constrain growth rates of younger livestock, especially lambs, on many farms. Farmers have been capitalising on the increased feed availability to improve weight gains, especially in cattle, and have postponed the sale of lambs and prime cattle.

However, growth rates in livestock for Summer Dry Hill and Finishing farm system models were below expectations, partly because of the decline in feed quality. Some farms are starting to offload livestock. A dry autumn may lead to issues of inadequate feed supply and congestion at processing plants.

Combined average pasture quality

■ Green ■ Stem ■ Dead
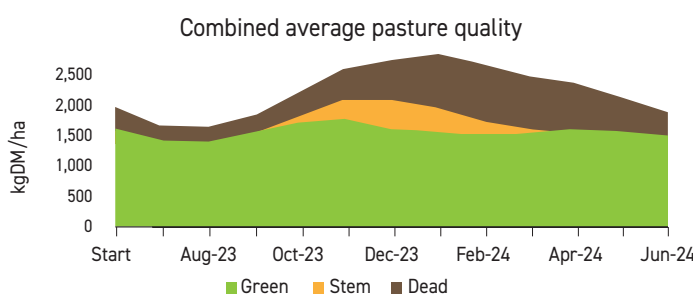
March update
Continued

Economic update

As farms enter the primary processing season, lamb and beef prices are less than previous years. However, prices for both products have strengthened slightly this month due to procurement pressure and positive market signals.

Store market prices have been mixed. The North Island market for all livestock was strong throughout February, but with low volumes. An increase in supply is likely to see prices weaken.

On average, projected farm profitability improved during February. Across the three farm system models, annual meat and wool production increased by 4%, increasing revenue by $65/ha. High interest costs and other costs, however, continue to affect farm profit. Across the farm system models, the weighted average farm profit before tax is positive $21/ha. This is compared to last month's negative return (-$43/ha).

Product pricing

AgFirst provide a monthly update of prime schedules and store livestock prices that populate regional models and allow us to estimate expected financials and the implications of scenarios.

The weighted average indicator prices (March 2024) for prime lamb and beef are a gross schedule of $6.08/kg and $5.81/kg, respectively, across the farm system models. While lamb prices are low, compared to our baseline farm system model prepared at the start of January, March prime lamb and beef prices increased $0.37/kg and $0.47/kg, respectively. These prices may not be sustained for the remainder of the season.

The long-term average store price, relative to the schedule for March, was 46% of the current schedule for ram lambs, 44% for ewe lambs, 67% for R1 bulls and 51% for R2 bulls. Current March store prices for ram lambs are 43% of the schedule, 10-15 cents/kg liveweight below the long-term average store price, while the R2 bull store market is 56% of the schedule, above the long-term average by 15-20 cents/kg liveweight. This is a reflection on both the quality and quantity of available feed and perhaps some farmer optimism on future beef returns.

Over the financial year, the season average schedule is forecast to be $6.40/kg for lamb, $5.90/kg for prime beef, and $5.93/kg for bull beef.

Current physical summary	Farm system model 1: Summer Dry Hill	Farm system model 2: Summer Safe Hill	Farm system model 3: Finishing
Annual meat and wool production (kg/Effective ha)	206	246	331
Total revenue ($/Effective ha)	$989	$1,202	$1,857
Total farm expenses ($/Effective ha)	$826	$931	$1,391
Economic farm surplus (EFS) ($/Effective ha)	$163	$271	$466
Farm profit before tax ($/Effective ha)	-$61	$17	$233

March update
Continued

Things to consider

- Hawke's Bay Regional Council soil moisture monitoring sites show regional variances with many sites now in rapid decline.

- Feed quality is negatively affecting livestock growth rates on some farms.

- Summer Dry Hill system farmers should consider adjusting livestock numbers to get through the late autumn and winter, if March continues to be dry.

- There is a risk that scheduled premium prices may fall and processing space may tighten.

- Evaluate the advantages and disadvantages of retaining finishing livestock into the autumn. Use quality feed to ensure light breeding ewes achieve condition score targets at mating.

- Flystrike has been a constant battle this year. It is important to ensure ewes are well protected before rams are introduced for mating.

- Facial eczema spore counts have been variable, ranging from 5,000 to 55,000 /gram due to increased dead matter in pasture. Fortunately, the cooler nights seem to be helping. It is still best to check spore counts on your own property, especially pre-mating, to ensure your mating paddocks are not high risk.

- Worm resistance is continuing to cause issues on multiple properties with triple drenches not working effectively and novel drenches hard to get due to supply issues.

Checklist

- ☑ Make a plan. Don't be complacent as your feed situation could turn quickly. Consider your stock class priorities for grazing and sale, and develop a feed budget.

- ☑ Set a pasture cover target for the end of April and manage pasture cover to at least meet target as a minimum.

- ☑ Monitor for parasites. Regular faecal egg counts and 10-day drench checks are an important part of your planning to monitor contamination and possible resistance on your property. Refer to www.beeflambnz.com/wormwise

- ☑ Monitor animal health and check spore counts. Keep in touch with your local vet.

- ☑ Check with your stock agent on processor capacity and potential delays.

- ☑ Cash flow is currently driving many on-farm decisions. Review the impacts of stopping spending on next season's production. Keep talking to your bank and/or farm adviser.
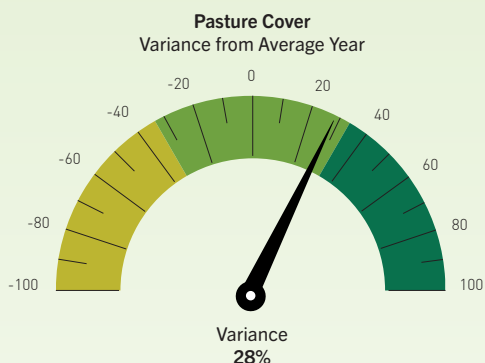
Farm system model 1: Summer Dry Hill
Current situation

Summary

Summer Dry Hill farm system's model average pasture cover is 500 kgDM/ha (28%) higher than an average year.

Pasture Cover
Variance from Average Year

Variance
28%

- Breeding farms that have delayed lamb and cattle sales through to February were able to increase liveweight on most livestock classes, particularly cattle. However, liveweight gains in recent weeks have been lower than farmer expectations.
- Greater feed availability has increased annual meat and wool production by 12 kg/ha, resulting in a 5% gain on livestock sold.
- While prices are down, compared to previous years, lamb and beef market prices have held better than anticipated, increasing the forecast for the lamb annual average by $0.14 to $6.40/kg carcass. The price increase for annual average prime beef compared to our January baseline farm system model, is expected to be $0.18 to average $5.90/kg carcass.

Pasture cover

Pasture covers on 1 March for the Summer Safe Hill farm system model were reported at just over 2,250 kgDM/ha. This was 4 kgDM/ha lower than last month's predicted outlook, but is 500 kgDM/ha (28%) higher than an average year for Summer Dry Hill farms in Hawke's Bay.

The current forecast is based on long term averages for pasture growth and suggests that pasture covers will continue to exceed average levels, due to the unexpectedly higher growth rates over the season. As livestock are retained for longer and pasture growth rates are anticipated to fall, pasture covers should gradually realign with the pasture cover target range as the season progresses.
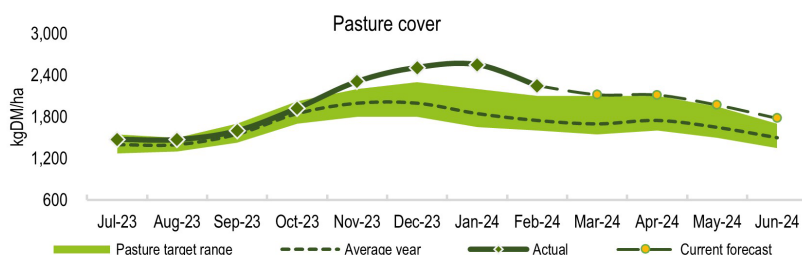
Pasture cover

Pasture growth

February's actual average pasture growth rate was 12.4 kgDM/ha/day. This is 0.6kgDM/ha/day (5%) below the average year due to declining soil moisture conditions.

PastureVibe is forecasting pasture growth rates by using daily climate data supplied by NIWA. Based on Summer Dry Hill farm systems in the Hawke's Bay and NIWA predictions, pasture growth may be significantly lower than an average year in March and April. However, AgFirst has used the long-term average growth rate forecasts due to the abnormal El Niño patterns that have been experienced so far. These forecasts will be updated each month as further data is received and local conditions observed.

Pasture growth

	Actuals								Current forecast				
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Total
Pasture cover (kgDM/ha)	1,476	1,472	1,599	1,923	2,308	2,511	2,553	2,254	2,087	2,036	1,905	1,720	
Pasture growth (kgDM/ha/d)	7.0	14.3	22.5	33.0	44.9	36.0	28.7	12.4	15.7	18.7	13.7	9.7	7.8t
Total feed demand (kgDM/ha/d)	12.6	14.8	17.5	19.8	21.2	21.0	20.4	17.1	15.4	14.9	12.7	11.6	6.5t
Supplements/crop (% of total feed demand)	9%	7%	3%			2%	6%	9%	8.4%			7.8%	4.2%

Farm system model 1: Summer Dry Hill
Comparison to previous month

Commentary

- The previous outlook had predicted a pasture cover of 2,254 kgDM/ha. Pasture cover for 1 March has been updated to reflect 2,250 kgDM/ha for this farm system model. This resulted in an increase of 28% compared to an average year.

- Livestock sales forecast as part of the previous outlook have been amended due to pasture availability as reflected in the sales graphs.

- The impact of increased meat and wool production is expected to improve revenue by $200/ha.

- After deducting other farm expenses, such as interest, rent and drawings (over and above wages and management), the Summer Dry Hill farm system model is still anticipated to incur an overall loss of -$61/ha.
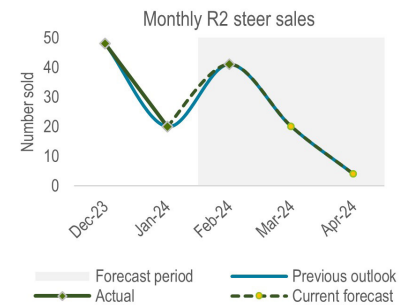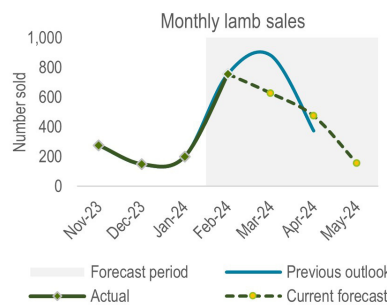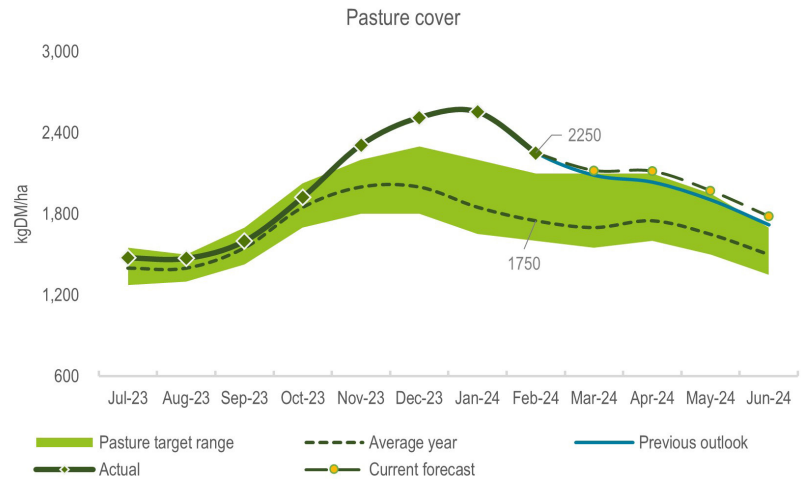
Pasture cover

Monthly lamb sales

Monthly R2 steer sales

		Current situation	Previous month	Variance	
Production and economic summary	Annual meat and wool production (kg/Effective ha)	206	204	1%	⬆
	Total revenue ($/Effective ha)	$989	$924	7%	⬆
	Total farm expenses ($/Effective ha)	$826	$825	0%	▬
	Economic farm surplus (EFS) ($/Effective ha)	$163	$99	65%	⬆
	Farm profit before tax ($/Effective ha)	-$61	-$125	+$64	⬆

Assumptions and caveats

When calculating economic performance metrics set out in the table, the change in livestock inventory uses market value of stock/kg multiplied by liveweights.

Product pricing: AgFirst provide a monthly update of prime schedules sund store livestock that populate these regional price models to estimate expected financials and the implications of scenarios.

The indicator prices currently (March 2024) used in this farm system model for prime lamb is a gross schedule of $6.08/kg and for prime beef, $5.81/kg.

Farm system model 2: Summer Safe Hill
Current situation

Summary

Summer Safe Hill farm system's model average pasture cover is 601 kgDM/ha (27%) higher than an average year.

Pasture Cover
Variance from Average Year

Variance
27%
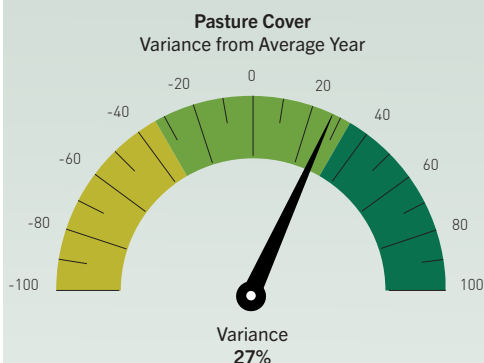
- Farms that have delayed lamb and cattle sales through January and February have been able to increase liveweight on most stock classes.

- This has resulted in a 3% increase in annual meat and wool production to 246 kg/ha against an average year.

- While prices are down compared to previous years, lamb market prices have held better than anticipated, increasing the forecast for the lamb annual average by $6 to $107/head.

Pasture cover

Pasture covers on 1 March for the Summer Safe Hill farm system model were reported at 2,801 kgDM/ha. This was 281 kgDM/ha higher than last month's predicted outlook and 601 kgDM/ha (27%) higher than an average year for Summer Safe Hill Farms in Hawke's Bay.

The quantity of feed remains high, however feed quality may start to decline limiting animal productive performance, such as liveweight gain for lambs and weaner calves on some farms.

The current forecast is based on long term averages for pasture growth and suggests that pasture covers will continue to exceed the average levels, due to the unexpectedly higher growth rates over the season. As livestock are retained for longer and pasture growth rates are anticipated to fall, pasture covers should gradually realign with the target range as the season progresses.
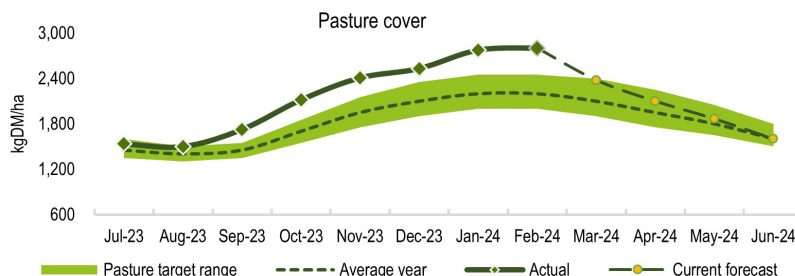
Pasture growth

February's actual average pasture growth rate was 34.2 kgDM/ha/day. This is 5 kgDM/ha/day (19%) higher than the average year due to improved soil moisture conditions.

PastureVibe is forecasting pasture growth rates by using daily climate data supplied by NIWA. Based on Summer Safe Hill farm systems in the Hawke's Bay and NIWA predictions, pasture growth may be significantly lower than an average year in March and April. However, AgFirst has used the long-term average growth rate forecasts due to the abnormal El Niño patterns that have been experienced so far. These forecasts will be updated each month as further data is received and local conditions observed.


	Actuals								Current forecast				
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	**Total**
Pasture cover (kgDM/ha)	1,535	1,500	1,760	2,158	2,461	2,555	2,694	2,801	2,376	2,098	1,866	1,599	
Pasture growth (kgDM/ha/d)	5.8	12.3	26.8	35.5	46.1	39.2	41.8	34.2	23.5	19.9	13.2	8.0	**9.4t**
Total feed demand (kgDM/ha/d)	12.5	14.4	17.3	20.0	22.9	25.6	24.8	22.1	22.6	19.6	14.4	12.2	**7.0t**
Supplements/crop (% of total feed demand)	18%	11%	0.6%				2%	2.3%	0.4%			12.3%	**2.8%**

Farm system model 2: Summer Safe Hill
Comparison to previous month

Commentary

- The previous outlook had predicted a pasture cover of 2,520 kgDM/ha. Pasture cover for 1 March has been updated to reflect 2,801 kgDM/ha for this farm system model. This resulted in an increase of 27% compared to an average year.

- The livestock sales forecast has not been amended for March. The plan to sell lambs in late Autumn has not changed.

- After deducting other farm expenses, such as interest, rent and drawings (over and above wages and management), the Summer Safe Hill farm system model is anticipated to generate an overall farm profit before tax for the year of $17/ha.
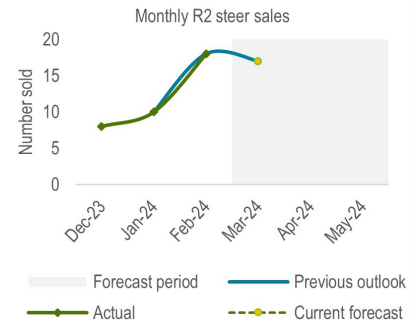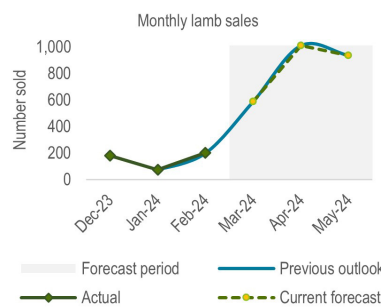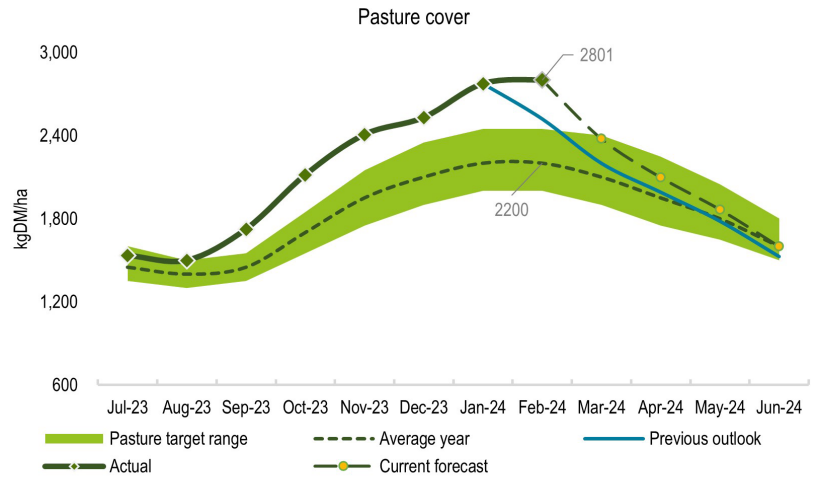
Pasture cover

Monthly lamb sales

Monthly R2 steer sales

		Current situation	Previous month	Variance	
Production and economic summary	Annual meat and wool production (kg/Effective ha)	246	246	0%	▬
	Total revenue ($/Effective ha)	$1,202	$1,138	6%	⬆
	Total farm expenses ($/Effective ha)	$931	$895	4%	⬆
	Economic farm surplus (EFS) ($/Effective ha)	$271	$206	32%	⬆
	Farm profit before tax ($/Effective ha)	$17	-$48	+$65	⬆

Assumptions and caveats

When calculating economic performance metrics set out in the table, the change in livestock inventory uses market value of stock/kg multiplied by liveweights.

Product pricing: AgFirst provide a monthly update of prime schedules and store livestock that populate these regional price models to estimate expected financials and the implications of scenarios.

The indicator prices currently (March 2024) used in this farm system model for prime lamb is a gross schedule of $6.08/kg and for prime beef, $5.81/kg.
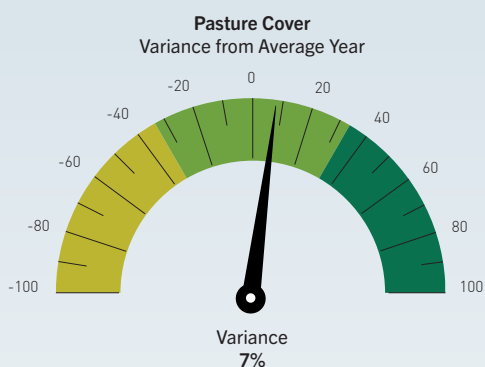
Farm system model 3: Finishing
Current situation

Summary

Finishing farm system's model average pasture cover is 172 kgDM/ha (7%) higher than an average year.

Pasture covers will be providing finishing farms with a degree of confidence, but caution is advised going forward.

Pasture Cover
Variance from Average Year

Variance
7%

- Pasture quality may require attention on some farms to ensure stock are achieving optimum weight gains.

- Moderate increases in available feed have increased annual meat and wool production by 8.6 kg/ha from the base model, resulting in a 2% gain on livestock sold.

- While prices are down, compared to previous years, lamb and beef market prices have held better than anticipated, increasing the forecast for the lamb annual average by $0.14 to $6.40/kg carcass. The price increase for annual average prime beef compared to our January baseline farm system model, is expected to be $0.18 to average $5.90/kg carcass.

Pasture cover

Pasture covers on March 1 for the Finishing farm system model were reported at 2,472 kgDM/ha. This was 83 kgDM/ha lower than last month's predicted outlook and 172 kgDM/ha (7%) higher than an average year for Finishing farms in Hawke's Bay.

Finishing farms pasture cover is within the range of the average year. Farms with more flexible policies may utilise additional feed by buying extra livestock and/or delaying sales of finishing livestock.

Pasture growth

February's actual average pasture growth rate was 15.7 kgDM/ha/day. This is 2.5 kgDM/ha/day (13.7%) lower than the average year due to declining soil moisture conditions.

PastureVibe is forecasting pasture growth rates by using daily climate data supplied by NIWA. Based on finishing farm systems in the Hawke's Bay and NIWA predictions, pasture growth may be significantly lower than an average year in March and April. However, AgFirst has used the long-term average growth rate forecasts due to the abnormal El Niño patterns that have been experienced so far. These forecasts will be updated each month as further data is received and local conditions observed.
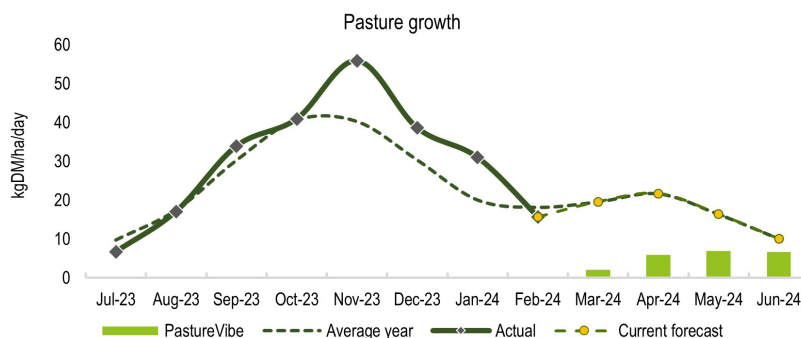
	Actuals								Current forecast				
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Total
Pasture cover (kgDM/ha)	1,690	1,661	1,811	2,122	2,508	2,610	2,569	2,472	2,480	2,385	2,070	1,757	
Pasture growth (kgDM/ha/d)	6.7	17.1	33.9	40.9	55.8	38.5	31	15.7	19.6	21.7	16.4	10.1	9.4t
Total feed demand (kgDM/ha/d)	20.4	26.2	28.9	25.7	21.7	19.3	17.5	12.3	10.7	14.2	18.3	19.4	7.2t
Supplements/crop (% of total feed demand)	30%	20%	2%			3%	6%	13%	7%		5%	28%	9%

Farm system model 3: Finishing
Comparisons to previous month

Commentary

- The previous outlook had predicted a pasture cover of 2,555 kgDM/ha. Pasture cover for 1 March has been updated to reflect 2,472 kgDM/ha for this farm system model. This is 7% above an average year.

- This farm system model purchased an additional 208 lambs in January to finish due to increased pasture availability. There has been no change to the planned sales spread. The R2 steers sales forecast has been revised to reflect that livestock are being held on-farm for longer.

- The wool price has improved by around $0.07/kg greasy which is worth $2 ha. While wool is not a significant contributor on the Finishing farm system model, in tight financial times everything counts.

- After deducting other farm expenses, such as interest, rent and drawings (over and above wages and management), the Finishing farm system model farm profit before tax is $233/ha.
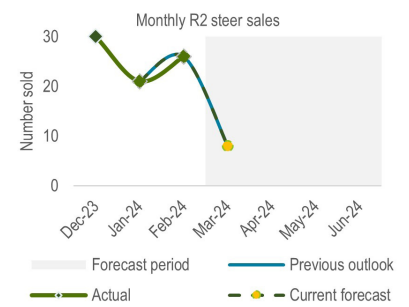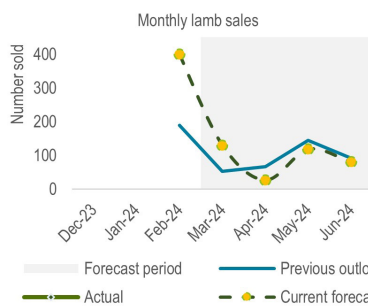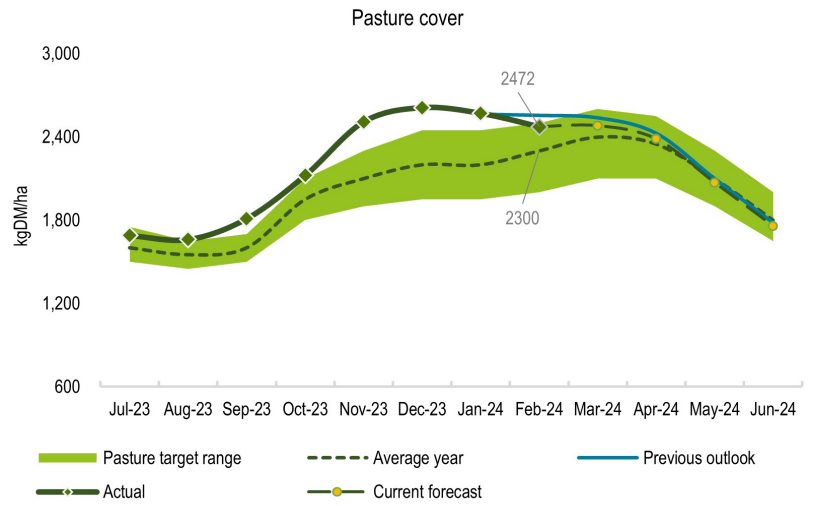
Pasture cover

Monthly lamb sales

Monthly R2 steer sales

		Current situation	Previous month	Variance	
Production and economic summary	Annual meat and wool production (kg carcass/Effective ha)	331	331	0%	▬
	Total revenue ($/Effective ha)	$1,857	$1,796	3%	⬆
	Total farm expenses ($/Effective ha)	$1,391	$1,327	5%	⬆
	Economic farm surplus (EFS) ($/Effective ha)	$466	$405	15%	⬆
	Farm profit before tax ($/Effective ha)	$233	$173	+$60	⬆

Assumptions and caveats

When calculating economic performance metrics set out in the table, the change in livestock inventory uses market value of stock/kg multiplied by liveweights.

Product pricing: AgFirst provide a monthly update of prime schedules and store livestock that populate these regional price models to estimate expected financials and the implications of scenarios.

The indicator prices currently (March 2024) used in this farm system model for prime lamb is a gross schedule of $6.08/kg and for prime beef, $5.81/kg.

Appendix

Climate tools and information

NIWA's Drought Forecasting Dashboard is a one-stop-shop for monitoring and predicting the risk for rainfall, dryness and potential drought across the country and provides week-to-week predictions of up to 35 days.
Access the tool at: shiny.niwa.co.nz/drought-forecast

Hawke's Bay Regional Council has also developed a web tool called the Drought Risk Indicator to help farmers to prepare and plan for dry conditions.
Access the tool at: hbrc.govt.nz/environment/farmers-hub/extreme-dry-hub/drought-risk-indicator

For further information visit the Hawke's Bay Regional Council's website to view its State of Environment reports using the latest data gathered by its science team from environmental monitoring projects.
Read the reports at: hbrc.govt.nz/environment/state-of-the-environment/soe-monthly-reports

Definitions used in this report

Term	Definition
Actuals	Each month the farm system models are updated with actual farm data and performance metrics such as animal growth rates, pasture covers, and livestock sales.
Current forecast	The current forecasts are derived from a combination of actual data, amendments to planned events such as livestock sales and purchases, updated climate forecasts, and insights from the expert panel.
Previous outlook	The forecast that was generated the month before which is compared against the current forecast.
d	Day
t	Tonnes
Pasture target range	The pasture cover target is the zone recommended for the average farm cover measured in kilograms of dry matter per hectare (kgDM/ha). The target depicts the optimum range for balancing pasture growth and animal intake as calculated by long-term FARMAX® modelling.
PastureVibe	PastureVibe is a computer model that calculates pasture growth rate. Supplied with climate data updated nightly by the National Institute of Water and Atmospheric Research (NIWA). PastureVibe can forecast up to three months of future daily pasture growth. For more information go to: www.pasturevibe.com
kgDM/ha	Pasture mass is the amount of pasture per hectare and is usually measured in kilograms of dry matter per hectare (kgDM/ha). Dry matter is the plant material left behind when the water in it is removed. Dry matter per hectare is a unit for measuring pasture production.
Kg product	The net production weight of all animal products produced on farm per effective hectare farmed. This includes: • open and closing livestock numbers and their liveweights converted to carcass weight (kg); • animal sales and purchase numbers and their weights converted to carcass weight (kg); • liveweight of grazing livestock arriving on the property and grazing livestock leaving the property converted to carcass weight (kg); • wool and velvet production including sales less opening weight on-hand plus closing weight on-hand (kg); • total effective grazing area (ha).
Economic farm surplus (EFS)	A measure of farm business profitability, independent of ownership or funding. It is used to compare performance between farms. Farm income minus farm working expenses. EFS includes an adjustment for unpaid family labour and management.
Farm profit before tax	Includes all items in the EFS, but also includes Rent/Lease and Interest to provide a measure of profitability specific to the ownership and debt structure of the farm.
Annual production	The net production of weight in kilos of all animal products (meat and wool) produced on your farm per effective hectare farmed (livestock weights are converted to a carcass weight).