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Sheep industry turn-off update

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Western Australia's sheep industry saw a marked slowdown in activity during the first quarter of 2026, with total turn-off falling sharply due to reduced slaughter rates and no live sheep export shipments.

Total sheep and lamb turn-off reached 1.18 million head (between January and March 2026), down 22% year-on-year and below the 10-year average.

Domestic slaughter trends diverged across categories. Adult sheep slaughter fell by 52% to fewer than 300,000 head, while lamb slaughter remained stable, rising slightly by 2% to about 720,000 head. Lambs now account for the majority of processing activity, making up 62% of total turn-off, compared to just 25% for adult sheep.

The live export sector experienced the most significant disruption. After declining by 25% in 2025, no live sheep were exported from WA between January and March 2026. With seasonal export constraints

approaching, shipments are expected to remain limited through the year.

In contrast, interstate transfers surged, increasing 187% year-on-year to over 150,000 head, with lambs accounting for most of the movement. This reflects strong eastern states demand, particularly following major livestock sales in March.

These shifts suggest a changing dynamic within the industry. Lower turn-off – especially of breeding sheep, indicates that producers may be retaining stock to rebuild flocks after several years of decline. The WA sheep flock has already fallen from 12.8 million in 2022 to an estimated 10.1 – 10.9 million by late 2025, but current conditions could support stabilisation or recovery.

While stronger sheep prices are boosting confidence, rising input costs such as fuel and fertiliser remain a challenge. Overall, the March quarter points to a transitional period for the WA sheep industry, with reduced supply potentially laying the groundwork for future rebuilding.

Read the full report in the Sheep Industry Update

Yardstick Merino Sire Evaluation: 2025-drop update

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Introduction

The Yardstick Merino Sire Evaluation is Western Australia's central Merino sire evaluation trial. Its purpose is to provide independent and objective comparisons of progeny of Merino sires under the same environmental and management conditions. By evaluating the performance of progeny from a range of sires joined to a common ewe base, breeders can make more informed ram selection decisions based on measured genetic performance rather than visual assessment alone.

The Yardstick trial is a partnership between the Department of Primary Industries and Regional Development (DPIRD) and the Federation of Performance Sheep Breeders of Western Australia (FPSBWA) under the guidance of the Australian Merino Sire Evaluation Association (AMSEA). Two link sires are included each year, provided by AMSEA which provide genetic linkage between evaluation sites and years across Australia. All raw data collected is submitted to AMSEA for further analysis, and the adjusted data is then circulated to entrants and the wider public by FPSBWA.

Each year, approximately 600 ewes are artificially inseminated with semen from 12 nominated sires, producing around 600-700 progeny for evaluation. Progeny are measured from lamb marking through to hogget age, with more than 35 production, wool, carcase and visual traits recorded.

Explanation of traits and stage codes reported

Data was collected for the 2025-drop progeny. The age codes reported are below:

M: Marking – 14 to 39 days (2 to 6 weeks)

W: Weaning – 40 to 149 days (6 weeks to 5 months).

The abbreviations for the measurements are listed below:

Wt: Body weight (kg)

CS: Condition Score (1-5)

WEC: Worm Egg Count (%)

BRWR: Breech Wrinkle (1-5)

BCOV: Breech Cover (1-5)

Adjusted sire means and Flock breeding values

Raw data is not published as there is no adjustment for factors including the progeny's birth type (single, twin or triplet), rear type, sex, age of dam and the number of progeny a sire has in the analysis. Instead, the data is reported as Adjusted Sire Means (ASM) which is adjusted data that corrects for these factors. These adjustments improve the accuracy of the result and adjustments are based of the actual influence of these factors on the drop. No account is made for trait heritability and genetic correlations between traits. Comparisons can then be made on the progeny of each sire based on the genetic differences of these factors within the drop. The data is reported as an ASM for each sire as well as a progeny group average at the bottom of the table.

Flock breeding values (FBVs) are another type of data reported. FBVs are calculated from data recorded within-site and within-drop and express the expected genetic performance of a sire relative to another sire in the evaluation when mated to the same standard of ewes. Use of FBVs allows for further improvement in the accuracy of sire results as there is additional adjustment to account for the association between traits and heritability of traits. FBVs are expressed as a deviation from the progeny of the average sire used in the drop at an individual site and the average sire is set as zero.

Results

Weight and Condition Score

Breeders flock, Sire number	Number of Progeny	Adjusted Sire Means WWT (kg)	Adjusted Sire Means CS Weaning
Anderson Poll, 220417	55	30.0	3.5
Benefield Poll, 200055 (Link Sire)	51	29.4	3.4
Billandri Poll, 230524	42	30.2	3.5
Boolading Blues Poll, 230438	55	29.4	3.4
Coromandel Poll, 240139	55	29.2	3.4
Darkan RBC Poll, 210335	46	29.8	3.5
Edale, 22Z121	54	30.0	3.5
Ejanding Poll, 215492 (Link Sire)	54	29.9	3.4
Glenerin, 230446	55	27.4	3.4
Hazeldean, 000440	50	27.8	3.4
Wattle Dale, 222094	57	30.6	3.5
Wiringa Park Poll, 241400	50	28.0	3.4
Progeny group average	**52**	**29.3** kg	**3.4**

Number of Progeny is at Weaning

Table 1: Weight and Condition score – Adjusted sire means

The 2025-drop progeny were weaned on 14 October 2025 and had an average weaning weight of 29.3 and average condition score of 3.4 (Table 1). Weaning weight ranged from 27.4 to 30.6kg and condition score ranged from 3.3 to 3.4. The sires that were the 3 top trait leaders are identified with the blue highlight.

Visual Traits

Breeders flock, Sire number	Number of Progeny	Breech Scores Marking BRWR	Breech Scores Marking BCOV
Anderson Poll, 220417	55	2.0	2.9
Benefield Poll, 200055 (Link Sire)	51	1.7	2.9
Billandri Poll, 230524	42	3.1	3.3
Boolading Blues Poll, 230438	55	3.0	3.2
Coromandel Poll, 240139	55	2.7	3.2
Darkan RBC Poll, 210335	46	2.5	3.1
Edale, 22Z121	54	3.3	3.2
Ejanding Poll, 215492 (Link Sire)	54	2.8	3.2
Glenerin, 230446	55	2.8	2.9
Hazeldean, 000440	50	2.9	3.5
Wattle Dale, 222094	57	3.3	3.2
Wiringa Park Poll, 241400	50	2.7	3.2
Progeny group average	**52**	**2.7**	**3.1**

Number of Progeny is at Weaning

Table 2: Visual traits assessed at lamb marking – Adjusted sire means

The 2025-drop progeny were marked between 12 – 14 August 2025 at approximately 4-6 weeks of age. The average breech wrinkle was 2.7 and the average breech cover was 3.1 (Table 2). Breech wrinkle ranged from 1.7 to 3.3 and Breech cover ranged from 2.9 to 3.5.

Flock breeding value

Weight and WEC

Breeders flock, Sire number	Number of Progeny	Flock Breeding Values WWT (kg)	Flock Breeding Values WWEC (%)
Anderson Poll, 220417	55	1.8	-88.5
Benefield Poll, 200055 (Link Sire)	51	0.5	3.2
Billandri Poll, 230524	42	2.2	22.4
Boolading Blues Poll, 230438	55	-0.8	24.8
Coromandel Poll, 240139	55	0.1	-8.1
Darkan RBC Poll, 210335	46	2.0	-2.6
Edale, 22Z121	54	1.4	47.0
Ejanding Poll, 215492 (Link Sire)	54	0.8	25.7
Glenerin, 230446	55	-4.0	-8.5
Hazeldean, 000440	50	-2.1	39.7
Wattle Dale, 222094	57	2.1	30.3
Wiringa Park Poll, 241400	50	-3.1	8.3

Number of Progeny is at Weaning

Table 3: Weaning weight and Worm Egg Count (WEC) flock breeding values

The weaning weight FBVs ranged from -4kg to +2.2kg (Table 3). FBVs can be used only within-drop to predict how the progeny of a sire will perform. For example, when 2 sires are joined to an evenly classed line of ewes, the difference between their breeding values is first calculated. When comparing a ram with a WWT of +2kg to a ram with a WWT of -4kg, there is a 6 kg difference. Based on 50% of the ram's genes contributing to the offspring, the progeny of the +2kg ram would be 3kg heavier than the progeny of the -4kg WWT ram.

Worm egg counts (WEC) were measured for individual animals at weaning (Table 3). WEC behaves differently to other traits as it is generally not normally distributed and can be extremely right skewed, with lots of zeros and the variation increases with the mean. Hence an ASM doesn't represent the average of a sire group. In the analysis of the WEC data, additional mathematical calculations are used to transform the data prior to analysis. The resultant FBV better reflects the average of the progeny of any one sire and is expressed as a percentage in relation to the average ram (set at 0). Lower numbers are more desirable, and the 3 traits leaders are highlighted in blue.

Visual Traits

Breeders flock, Sire number	Number of Progeny	Flock Breeding Values	
		EBRWR	EBCOV
Anderson Poll, 220417	55	-1.32	-0.41
Benefield Poll, 200055 (Link Sire)	51	-1.73	-0.40
Billandri Poll, 230524	42	0.80	0.18
Boolading Blues Poll, 230438	55	0.55	0.03
Coromandel Poll, 240139	55	-0.06	0.08
Darkan RBC Poll, 210335	46	-0.36	-0.07
Edale, 22Z121	54	0.94	0.20
Ejanding Poll, 215492 (Link Sire)	54	0.04	0.04
Glenerin, 230446	55	0.20	-0.41
Hazeldean, 000440	50	0.16	0.52
Wattle Dale, 222094	57	1.15	0.19
Wiringa Park Poll, 241400	50	-0.04	0.13

Number of Progeny is at Weaning

Table 4: Early breech wrinkle and early breech cover flock breeding values

The FBVs for early breech wrinkle ranged from -1.73 to +1.15 indicating there was just over 2 whole scores difference between the progeny of the sires (Table 4). Further, FBVs for early breech cover ranged from -0.41 to +0.52 with nearly a whole score difference between the progeny in breech cover. Another breech wrinkle and breech cover assessment will be done following hogget shearing.

Further information

For more information, visit the Merino Superior Sires website or the Yardstick webpage on the DPIRD website.

Sheep feedlot licensing and support through DPIRD

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Are you thinking about constructing a new sheep feedlot?

Do you have an existing sheep feedlot that may require licensing?

Feeling overwhelmed with the process and need help?

The Agribusiness Development team at DPIRD has spent many years chaperoning agribusinesses through regulatory processes. This includes translating the rules and regulations into a language that you can understand, assistance with identifying who you need to talk to, and support in figuring out what is required to comply with the regulatory environment.

There are a number of approvals that may be required before constructing and operating a sheep feedlot in WA. Planning and building approvals may be required from your Local Government. Sheep feedlots that have the capacity for an annual throughput greater than 10,000 head per year may also require a works approval and license from the Department of Water and Environmental Regulation (DWER). In all circumstances, early engagement with these regulatory bodies is recommended.

The siting of a feedlot is integral to its long-term success. There are 3 key considerations when siting a feedlot:

- **Access to soils that are suitable for constructing an intensive animal facility.** It is recommended that a permeability test of the soil is conducted early in the process. If in situ soils aren't suitable, then clays can be imported, or a synthetic liner may be required. Clays are ideal as they limit infiltration, and a thin gravel cap can be installed for workability. Sandy soils are to be avoided at all costs, unless the sandy topsoil can be scraped away.
- **Distance to groundwater and surface water.** Maintaining separation distances to these resources ensures they are protected from the impacts of nutrient-rich feedlot waste streams. Figuring out the distance to surface water is easy, but often a bit of work is required to determine the distance to groundwater. Existing bores can be useful, but sometimes a groundwater well or groundwater test pit are required.
- **Distance to neighbouring residences.** Maintaining separation distances from neighbours preserves amenity and minimises the likelihood of complaints. There is a separation distance calculation that can tell you how far away you need to be from your nearest neighbours.

A sheep feedlot is no different to any other intensive animal facility in that waste management needs to be front and centre during the planning stages. Both solid and liquid waste will need to be appropriately managed. In practice, this usually means the construction of drains and a pond to contain runoff from the pens, as well as a nutrient budget for the application of solid and/or liquid wastes to paddocks. DPIRD's Agribusiness Development team can assist with pond sizing and spreading rate calculations.

DPIRD's Best Practice for the Design, Construction and Operation of Sheep Feedlots document provides guidance for prospective sheep feedlot operators on siting and design considerations and regulatory approvals. For more information on the licensing of sheep feedlots, visit the DPIRD website at https://www.dpird.wa.gov.au/businesses/livestock-farming/agribusiness-development/.

For more information on the support offered by the Agribusiness Development team at DPIRD, please contact agribusiness@dpird.wa.gov.au.

Sheep, worms and evolution

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The gastro-intestinal worm, or helminth, is a wonder of evolution and a remarkable survivor. Its life-cycle has to include a phase living in drops of water on pasture at temperatures of less than 10°C, passage through the rumen where there is no oxygen, the temperature is 40°C and the pH neutral, passage through the highly acid abomasum at pH 2-3, before finally settling in the intestine where it can grow and reproduce.

Having achieved that feat, it then causes havoc in the host animal and costs the Australian sheep industry more than $300 million every year. To make matters worse, in Merinos in particular, worm infection causes scouring that attracts the blowfly, adding losses of another $200 million per year, as well as penalties for soiled wool and rejection at the abattoir. This whole problem has been made progressively worse as the worms developed resistance to anthelmintic medication (drenches).

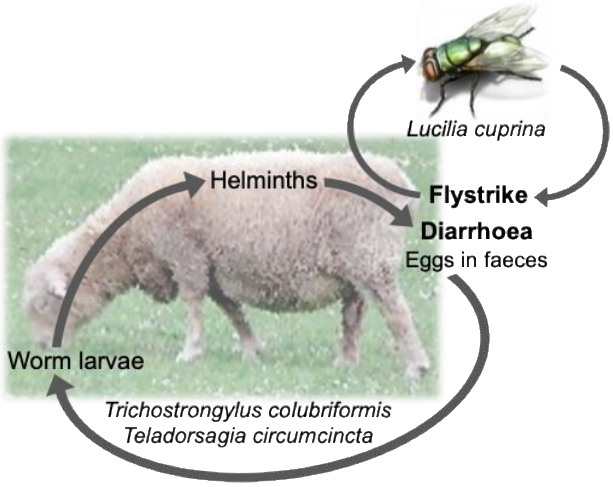

Image 1: The helminth–flystrike complex that plagues Merino sheep

Beginning in the early 1990s, Johan Greeff and John Karlsson worked on a genetic solution; breeding for resistance to both worms and flies, and they made good progress by selecting for low worm-egg count in sheep faeces. Then, around 2014, in the quest to accelerate genetic gain, we began looking at the immune system of the sheep and how it responds to invasion by *Trichostrongylus colubriformis* (Black scour worm) and *Teladorsagia circumcincta* (Brown stomach worm - once known as *Ostertagia circumcincta*). The initial focus was on the worm-induced inflammation that led to scouring (Hassan *et al* 2022ab). The aim was to compare worm-resistant and worm susceptible sheep to find the genes in the sheep gut that were triggered by infection. In this way, selection for an indirect phenotype (worm-egg count) might be replaced by a more direct genomic selection.

We found that helminth infection was associated with increased numbers of immune-system cells (eosinophils, mast cells) in the ileum – a surprise because the ileum is not the site of infection by the major helminth species. However, this observation was supported by increased expression of the key genes responsible for inflammation and reduced expression of genes involved in ion transport. It thus seems very likely that responses in the ileum contribute to the development and severity of diarrhoea in diarrhoea-susceptible sheep.

As is typical with science, basic research led to some other unexpected discoveries.

First was the interaction between the worms and the population of microbes, the ‘microbiome’, in the gut of the sheep (Paz *et al* 2022). These days, the gut microbiome is a hot topic in many aspects of human health and it occupies the excellent minds at the *Marshall Centre for Infectious Diseases, Research and Training*, established by Prof Barry Marshall after he won the Nobel Prize in 2005. Common ground led to our sheep-worm team joining forces with the Marshall Centre, where Erwin Paz and Shamshad Ul Hassan discovered the interplay between the sheep gut microbiome, the sheep immune system, and the life-cycle of the worm.

The second new discovery was that the sheep gut was not the only site with a microbiome involved in the problem. The gut of the worm had its own microbiome! This ‘nematobiome’ was found to be entirely distinct from the bacteria in the sheep gut, with three potentially new bacterial species (Paz *et al* 2024, 2026). The ‘nematobiome’ appears to support the parasite through producing antioxidants, scavenging nutrients, and defending the worm against microbial competitors. These unexpected insights into how parasites persist in hostile environments will hopefully lead to new avenues for control strategies.

Given the problem of resistance to anthelmintic medication, we also decided to search for gene products in the worm that could be used as drug targets or to develop vaccines. That quest would be greatly accelerated by the availability of a high-quality worm genome so we could identify genes that play key roles in the host-parasite interaction. The available ‘draft’ genome for *Teladorsagia circumcincta* was highly fragmented and impeded investigation, so we set out to improve on it.

A major technical hurdle was the sheer difficulty of getting at the worm’s genes, but after a lot of trial-and-error, a technique was developed that provided high-quality DNA. We were then able to greatly refine the existing draft genome. We also gained a more complete proteome. We now have a suitable foundation for the identification of potential targets for vaccine and drug development.

Another wonderful outcome of the research was the production, by Associate Professor Peta Clode of this beautiful photograph:

Image 2: A female *Teladorsagia circumcincta* (the small white bar on the bottom right represents 1mm). Image captured by Peta Clode (Centre for Microscopy, Characterisation & Analysis; The University of Western Australia)

Getting back to the evolution context – in essence, evolution is the outcome of a clash between environmental challenges and the genome of the animal, and the same applies to the worm-sheep relationship. It is a complex interaction among the genomes of the sheep, the worm, and their respective gut microbiomes. It seems very likely that new solutions to this big industry problem will arise from this new perspective on sheep-worm biology.

Acknowledgements

The authors did not work alone in this research. We were greatly helped by: Johan Greeff and Dieter Palmer (DPIRD); Eng Chua and Alfred Tay (Marshall Centre); Prapawan Krommarin, Shimin Liu, Alma Fulurija and Parwinder Kaur (UWA).

Support available for sheep communities through industry transition

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Western Australian sheep producing communities are facing a major industry shift as the live sheep export trade by sea is phased out. For many producers, the change is forcing decisions about enterprise mix, flock numbers, selling pathways, infrastructure, cash flow and long-term viability. Some businesses are moving towards more crop-based systems, while others are identifying alternative sheep markets and adjusting to a different trading environment. That transition is happening alongside seasonal uncertainty, rising input costs and long working hours, adding pressure to decisions that affect families, employees and communities.

The Community Wellbeing Program is delivering practical mental health and wellbeing activities across WA's sheep producing regions to support people through this period. The program is funded through the Australian Government's Sheep Industry Transition Assistance Package and administered by the Department of Primary Industries and Regional Development (DPIRD). Through the program, Rural Aid, Holyoake and Blue Tree Project are delivering complementary support, including free counselling, mental health training and community connection activities.

Image 1. The Blue Tree Project will be hitting the road from June 20 to July 2

Image 2. Rural Aid counsellor Louise O'Neill, The Unbreakable Farmer founder Warren Davies, and Blue Tree Project founder Kendall Whyte

Rural Aid: free counselling for farming communities

Rural Aid has expanded its counselling support in WA, with additional regionally based counsellors now available to support farming families and agricultural communities. The free, confidential service is available to farmers, partners, children, farm employees and their families, as well as people connected to agriculture, including truck drivers, shearers and stock workers.

Counselling is not asset or income tested and can be delivered on farm, by phone or via telehealth. WA-based Rural Aid counsellors include Chris Gibbs in York, Jo Ashworth in Kalannie, Louise O'Neill in Denmark and Roger Hitchcock in Narrogin.

Rural Aid Manager Mental Health and Wellbeing Myfanwy Pitcher said the service was designed to make support easier to access.

"Farming communities are incredibly resilient, but resilience does not mean people should have to carry pressure alone," Ms Pitcher said.

"Our counsellors understand rural life and can work with people in ways that suit them, whether that is on farm, over the phone or through telehealth."

Ms Pitcher said early conversations could help people manage stress, make decisions and plan through difficult periods before pressure reached crisis point.

Holyoake: mental health training that communities can book

Holyoake is delivering free mental health and wellbeing training for farming communities, agribusinesses, grower groups, shires, sporting clubs, schools and local organisations.

Three workshop options are available:

- Standard Mental Health First Aid helps participants recognise common mental health problems, provide initial support and guide someone towards professional help.
- Accidental Counsellor supports people who may unexpectedly find themselves helping someone in distress, with a focus on listening, empathy, boundaries and referral pathways.
- AgriBalance+ is tailored to agricultural communities, helping participants understand stress, change and cumulative pressure while building practical skills to recognise risk and respond safely.

Holyoake Prevention Services Manager Jo Drayton brings more than 25 years' experience in mental health, wellbeing and suicide prevention, along with a strong understanding of agricultural life and seasonal pressures.

Ms Drayton said the workshops were designed for people who were often the first to notice when someone was under pressure, including neighbours, family members, workmates, clients and local service providers.

"These workshops are about giving people the confidence to recognise when someone may be under pressure, respond safely and help connect them with appropriate support," Ms Drayton said.

Communities can contact jdrayton@holyoake.org.au to arrange a workshop in their area, allowing training to be delivered in response to local needs and pressures.

Blue Tree Project: connection through local events

Blue Tree Project is delivering a regional tour through WA sheep producing communities, using local events to build connection and encourage conversations around mental health.

The tour will run from June 22 to July 2, visiting Quairading, Kondinin, Newdegate, Gibson, Esperance, Jerramungup, Gnowangerup, Katanning and Wickepin. Activities include school visits, tree painting, football club events and community gatherings, creating familiar and approachable spaces for people to come together and check in with each other.

Blue Tree Project Founder Kendall Whyte said the tour was about creating opportunities for conversations that may not happen in more formal settings.

“A Blue Tree event is never just about painting a tree,” Ms Whyte said.

“It gives people a reason to gather, reconnect and start conversations that can sometimes be difficult to have one-on-one.”

Ms Whyte said community connection was especially important for towns working through major change, with the live sheep export phase-out affecting businesses, families, local services and the social fabric of communities that have relied on the sheep industry for generations.

Together, the three organisations provide multiple entry points for support, from one-on-one counselling to practical training and local community events.

For producers, families, agricultural workers and community members, the key message is simple: support is available, and people do not need to wait until they are in crisis to reach out.

Backing producers through a season of change

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Across Western Australia, growers continue to navigate uncertainty. Changing markets, volatile seasons, rising input costs and the increasing pressure to keep farm businesses strong for the next generation. While financial strain is often the first sign that something isn't right, what many people experience goes much deeper.

At Rural West, our job is to work alongside you - offering free, confidential and independent support.

Rural West is WA's free Rural Financial Counselling Service, delivering strategic business financial counselling to primary producers and eligible regional businesses across the state. Our team of experienced Rural Financial Counsellors understand your position, explore your options and plan a way forward. Whether that's strengthening the enterprise you have, adapting your operation or exploring something new.

Spotting the early signs

Financial difficulties rarely appear overnight, they build slowly and often go unnoticed. Warning signs worth acting on include debt creeping up, repeatedly adjusting loan terms, juggling which creditors get paid first, inconsistent tax payments, putting off machinery replacement or not drawing a fair wage for yourself.

Support through the live export phase-out

For producers and related businesses affected by the live sheep export phase-out, Rural West can help you assess your situation and weigh the options ahead. Including what the transition may mean for your enterprise and if you are suited to relevant grants and transition assistance before you apply. Whether you are directly in the sheep supply chain or feel the flow-on effects through shearing, transport or livestock services, it pays to plan early.

Reach out today

Recognising the signs early and reaching out before they escalate, puts you in a far stronger position. Visit www.ruralwest.com.au to learn more.

Contact Rural West today at 1800 612 004 or email enquiries@ruralwest.com.au

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