NSW GOVERNMENT | Local Land Services

Sheep Calendar of Operations

New South Wales South Coast

Year:

www.southeast.lls.nsw.gov.au

Sheep Calendar of Operations

Version 1, published December 2020

This calendar has been produced as a result of South East Local Land Services customers and our Farmers Network members desire to learn and implement management practices which will improve the efficiency of their sheep operations. While each farm will operate differently, the calendar is designed to help remind land managers and assist them with forward planning of activities which may occur during specific months, breeding and management cycles.

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Acknowledgements: South East Local Land Services would like to acknowledge the original author Colin Langford (Agricultural Consultant - former Livestock Officer, NSW DPI) and contributions from other regional Local Land Services staff including Amanda Britton - Senior Land Services Officer (Pasture), Hayden Kingston - Land Services Officer (Projects), Mark Doyle - District Veterinarian.
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LOCAL CONTACTS

SOUTH EAST LOCAL LAND SERVICES

Local Land Services was established under the Local Land Services Act 2013 to provide quality, customer-focused services to landholders and the community across New South Wales.

Our Region: South East Local Land Services (LLS) covers 55,600 square kilometres of south-east NSW—from Stanwell Park in the north to the Victorian border in the south and westward from Boorowa in the north to Thredbo in the south. The area covers 698 kilometres of coastline or 40% of the NSW coast. The South East LLS region has a diverse climate ranging from alpine environment to coastal areas through to grazing pastures at places such as Boorowa. Annual regional rainfall averages 730mm and is highest in the Snowy Mountains at over 2,000mm. Annual totals are also high on the south coast and hinterland (nearly 900mm), but lower on the western slopes (over 600mm).

What We Do: We connect people with groups, information, support and funding to improve agricultural productivity and better manage our natural resources. Our experienced staff can answer questions on issues including:

- agricultural production
- biosecurity
- natural resource management
- help during emergencies.

We can support you with information and resources to:

- improve your agricultural productivity
- control declared pests and meet your legal obligations
- manage and improve our natural resources.

Projects, Programs and Funding: Local Land Services delivers a wide variety of projects and programs focussed on managing feral and invasive species, improving long term viability and agricultural sustainability, protecting threatened and endangered species and vegetation communities and the engagement of small landholders in better land management.

Local Land Services administer a variety of funding opportunities to assist farmers, landholders, Landcare, Aboriginal community groups and other partners to assist and promote the adoption of sustainable land management practices.

For more information contact your Local Land Services Office or call 1300 795 299 from Monday to Friday during business hours.

SOUTH EAST LOCAL LAND SERVICES ADMINISTRIVE OFFICE LOCATIONS:

BERRY
02 4464 6000

YASS
02 6118 7700

BEGA
02 6491 7800

COOMA
02 6455 7200

GOULBURN
02 4824 1900

BRAIDWOOD
02 4842 2594

www.southeast.lls.nsw.gov.au

MANAGING FARM BIOSECURITY

LIVESTOCK PRODUCTION ASSURANCE (LPA) PROGRAM

The LPA program is the Australian livestock industry's on-farm assurance program covering food safety, animal welfare and biosecurity. It provides evidence of livestock history and on-farm practices when transferring livestock through the value chain. LPA is a voluntary industry program, however the majority of meat processors require livestock to be sourced from LPA-accredited properties. Producers who become LPA accredited commit to carrying out specific on-farm practices in order to fulfil their responsibility to produce red meat that is safe, ethically produced and with due consideration of biosecurity.

FARM BIOSECURITY PLANS

A farm biosecurity plan is a practical way of showing how you are preventing the introduction of pests, disease, weeds and contaminants to your property, spreading around your property, or spreading from your property.

From 1 October 2017 all Australian red meat producers are required to have a Farm Biosecurity Plan in place and implement best-practice biosecurity practices in their on-farm management as a requirement of LPA. As a minimum, each Property Identification Code (PIC) must have a documented Farm Biosecurity Plan that addresses each of the following points:

(a) Manage and record the introduction and movement of livestock in a way that minimises the risk of introducing and/or spreading infectious diseases

(b) Where reasonable and practical, control people, equipment and vehicles entering the property, thus minimising the potential for property contamination and, if possible, keep a record of such movements

(c) Prevent and control animal diseases on-farm by regularly monitoring and managing livestock.

For more information about Farm Biosecurity Plans and to download a free easy-to-follow template visit:

Integrity Systems website
www.integritysystems.com.au

Animal Health Australia's website
www.farmbiosecurity.com.au

Good record keeping underlies LPA and biosecurity practices - tools such as these templates and this calendar may be useful

BIOSECURITY AWARE

Remember if you spot anything unusual on your farm or in your community, call the Plant Pest Hotline 1800 084 881 or the Emergency Animal Disease Watch Hotline 1800 675 888.

Farm Biosecurity Signs are available at your Local Land Services office.

MOVING AND SELLING LIVESTOCK

Australia is a world leader in disease control and traceability of stock consigned for human consumption. To maintain this status, stock activity needs to be monitored. Some of the key information you need to be aware of include:

Property Identification Codes

In NSW, all properties that run livestock such as cattle, sheep, goats, pigs, bison, buffalo, deer, camelids, equines (ie horses and donkeys) and poultry (100 or more) are required to have a property identification code (PIC) when trading or moving livestock.

A PIC is a unique eight-character code assigned by Local Land Services to properties with livestock and placed into a district register.

A PIC allows all movements of cattle, sheep and goats to sale, slaughter or any other property to be monitored and recorded on the NLIS database and traced when required. Traces may be required when chemical and antibiotic residues are detected in meat or disease is detected in animals and to issue an emergency response when required.

If you have any questions about PICs or you'd like to get one contact your Local Land Services office or call 1300 795 299.

National Livestock Identification System (NLIS)

www.nlis.com.au

The National Livestock Identification System (NLIS) is Australia's system for the identification and traceability of cattle, sheep and goats. As animals are bought, sold and moved along the supply chain, they must be tagged with an NLIS-accredited tag or device. Each movement they make to a location with a different PIC is recorded centrally on the NLIS Database by people with NLIS accounts. NLIS accounts are free to open and operate.

Using this information, NLIS is able to provide a life history of an animal's residency, and to discern which other animal's livestock may have come into contact with. NLIS is required to facilitate the traceability of animals in accordance with the National Traceability and Performance Standards.

National Vendor Declaration (NVD)

National Vendor Declarations (NVDs) are required for any movement of stock to be sold to processors, saleyards or for private sales. NVDs may also be used for movements of stock between properties with different PICs in place of a transported stock statement (ie moving stock to agistment). Order your NVDs via the Livestock Production Assurance (LPA) website (integritysystems.com.au) or by phone 1800 683 111.

Transported Stock Statements

Transported Stock Statements (TSS) are required for any movement of stock where an NVD is not required (eg transporting stock for agistment).

TSS books can be purchased from your Local Land Services office.

Animal Health Statements

Animal Health Statements (AHS) for cattle, sheep and goats are not mandatory in NSW. However they may be required for some stock movements, especially interstate or through certain saleyards. As part of showground biosecurity and the management of animal health, agricultural show societies require exhibitors to complete a declaration on the health status of animals participating in shows. Download AHS from
www.farmbiosecurity.com.au

Annual Stock Returns

Local Land Services works with land managers and the community to improve primary production and healthy landscapes. Along with stock identification and traceability systems, the information on your Annual Land and Stock Return (ALSR) is invaluable in the event of an emergency disease outbreak or natural disaster. ALSR information is due at the end of August each year and can be done online at www.lls.nsw.gov.au/alsr. For more information contact your Local Land Services Office or call 1300 795 299.

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HOW TO USE THIS CALENDAR

Information provided in this Sheep Calendar of Operations has been sourced from the NSW DPI training program, PROFarm, including workshops such as PROGRAZE™ and LANDSCAN™. This calendar provides sheep producers a brief checklist of technical information that is time-specific for each month of your production year. Its purpose is to provide information to maximize the efficiency of your breeding flock and your management. This Calendar is a guide only and timing of specific management activities may vary with breed/flock management goals. Consult your South East LLS office, Rural Produce Store Advisor or your Veterinarian for more specific advice on management activities listed within the Calendar if required.

Assumptions for the sheep enterprise

Aim of flock is to produce prime lambs – approximately 20-22 kg carcase weight at 7-9 months of age

Breed is a first cross ewe (Border Leicester X Merino) which requires shearing. If you are running a shedding flock you may still need to consider shearing times and flystrike depending on breed and shedding percentage (dorper cross).

There is only one lambing per year and this occurs in August. If lambing more frequently than this you need to ensure that you have enough high quality feed in late pregnancy and during lactation or animal health (and consequent animal welfare) issues may arise.

Joining should be for a restricted period of 5-6 weeks and the ram/s should be removed and kept separate from the ewes when joining is not occurring.

Pasture

It is important to identify the species that are growing in your pastures. This calendar is based on "tropical" kikuyu and "temperate" annual ryegrass. Pasture species can be grouped into a number of categories:

- tropical (summer-growing) or temperate (winter-growing)
- annual or perennial,
- native and introduced,
- grasses or legumes (clovers and other plants that can fix nitrogen in soils), and
- broad-leaf plants (some are "weeds", but may be grazed at times).

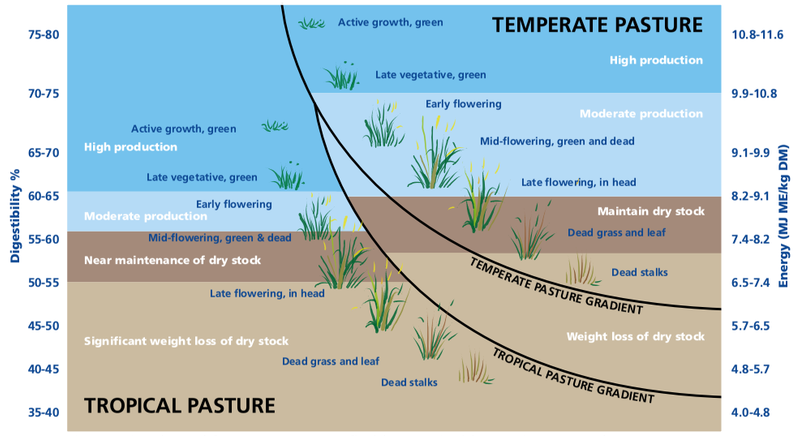


Figure 1 is adapted from Prograze, Profitable Sustainable Grazing Manual, NSW Department of Primary Industries, 8th Edition 2011

Pasture plants of different species and varieties vary greatly in their response to grazing. Knowledge of how individual pasture plants respond to grazing is essential for pasture performance and persistence. It's also important to learn about where and what time of year different species grow, and how to manage for a diverse, productive and sustainable pasture. This will include managing soil fertility, controlling weeds and maintaining ground cover to prevent soil erosion.

Numerous characteristics of the pasture influence pasture intake and performance by livestock. Of these factors, pasture quantity and quality are the most important. Gaining skills in estimating pasture quality and quantity is key to improved grazing management and understanding the pasture benchmarks used in this guide.

Livestock

Nutrient requirements of livestock are most cost effectively met through pasture. When pasture quantity or quality benchmarks are not met, supplementary feeding will be required (offering pellets or grain in addition to the pasture) to prevent weight loss. Weight loss may occur:

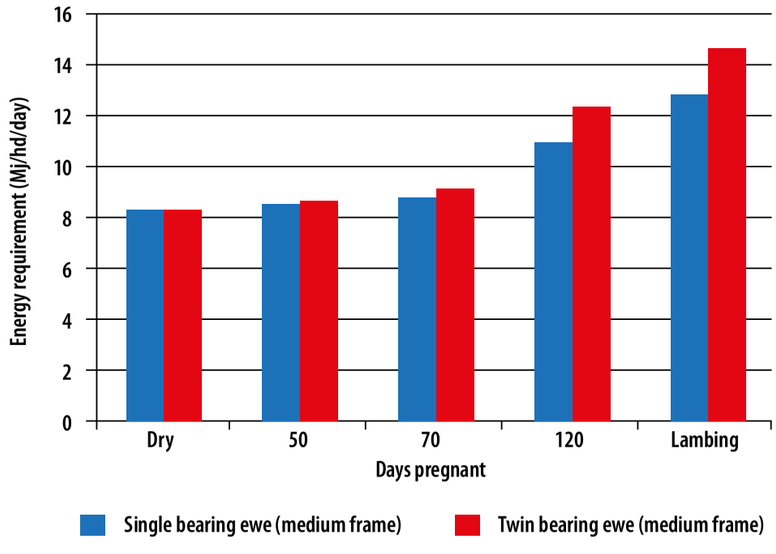
- when grazing pasture of poor quality (low digestibility), eg. late summer, or
- if there is not enough quantity:
  - » seasonally, eg. "the winter feed gap", or
  - » driven by climatic conditions, such as drought.

Weight loss and poor body condition can become a welfare issue. Also beware of your animals becoming overfat, as this can also cause health issues (sometimes weight loss is inevitable and even desirable). Ensure you have the appropriate skills to plan, manage and take action to maintain good animal welfare.

Figure 2 shows how energy requirements vary for single and twin bearing ewes. Energy requirements increase dramatically during the last 3-4 weeks of pregnancy and continue to climb until the ewe hits peak lactation, which occurs around 8 weeks after lambing. This sudden change in energy requirement can cause rapid weight loss, particularly if nutritional requirements (via pasture and/or a suitable supplement) are not met.

In most environments throughout Southern Australia late winter/ spring lambing means that pasture supply is more closely aligned with livestock feed requirements, thereby reducing the need for supplementary feeding and the overall cost of production.

Figure 2: Energy requirements of single and twin bearing ewes during pregnancy



PROGRAZE™

PROGRAZE™ is a series of workshops that develops producers skills in pasture and livestock assessment, their interactions and management. Workshops are coordinated by the Agricultural Team for Local Land Services across the southeast region. Prograze participants learn "targets" for the amount and quality of pasture required at critical time points in this calendar, which should be used as important reminders.

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JANUARY

SHEEP MANAGEMENT

Monitor for blowfly activity.

Weigh weaners every 6 weeks to monitor growth.

NUTRITION

Evaporation in the summer months can be very high.

Sheep must have adequate good clean water.

Dry Sheep - 10L per day (min)

Lactating Ewes - 14L per day (min)

Weaner Lambs - 6L per day (min)

High quality pasture is required for weaner growth in order to achieve 70% growth potential or better.

Supplement weaners if pasture below required quality.

Feed rams lupins for 2 months prior to joining to increase their fertility (150gms per day).

Rams should be on the farm at least 6 weeks prior to joining.

HEALTH

Conduct pooled or individual worm egg counts to monitor worm status of animals prior to any management activities where sheep will be mustered and handled. Local Land Services offer test kits. If worm counts are high based on laboratory results, drench with an effective drench and retest in 7-10 days. For guidance on worm control refer to page 32, or contact your District Veterinarian at your local LLS office.

Monitor all sheep for flystrike throughout summer. Shear struck wool and a 5cm barrier of clean wool around the strike close to the skin. Apply a registered flystrike dressing to the shorn area. Make sure maggots are killed to break the lifecycle.

PASTURE MANAGEMENT

Evaluate if pastures will match livestock requirements over the autumn-winter period. If you need to improve quantity and quality consider a pasture improvement program. Discuss with your agriculture advisor or commercial agronomist the best time for soil testing, sowing and fertiliser applications.

1. Improve temperate species composition, options may include: annual species (e.g. oats, ryegrass, brassicas forage herbs); or perennial species (e.g. ryegrass, lucerne, cocksfoot, phalaris).
2. Based on soil test results (less than 2yrs old), develop a fertiliser application plan and nutrient budget for individual paddocks.
3. Order seed, fertiliser and engage contractor.

NOTES

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Information provided in this calendar has been sourced from NSW DPI's training program, PROFarm.

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JANUARY

FEBRUARY

SHEEP MANAGEMENT

Monitor for blowfly activity.

Weigh weaners every 6 weeks to monitor growth.

NUTRITION

Weaners still require high quality pasture. Supplement with grain or pellets if required.

Ensure ewes are in appropriate condition for joining (Fat score 2.5 - 3.0 for Merino, 3.0 - 3.5 for X Bred)

Purchase supplementary feed based on quality test.

Feed rams lupins for 2 months prior to joining to increase their fertility (150gms per day).

HEALTH

Conduct pooled or individual worm egg counts to monitor worm status of animals prior to any management activities where sheep will be mustered and handled. Local Land Services offer test kits. If worm counts are high based on laboratory results drench with an effective drench and retest in 7-10 days. For guidance on worm control refer to page 32, or contact your District Veterinarian at your local LLS office.

Drench for liver fluke if tests, abattoir surveillance or clinical syndromes have shown it to be present on your property. Use a different drench to the active one used in April.

Monitor all sheep for flystrike throughout summer.

PASTURE MANAGEMENT

Manage excess feed by making silage usually in February-March. After grazing or mulching, top-dress with nitrogen and allow 3-5 weeks growth then harvest.

Prepare pastures for winter feed (temperate species).

Reduce the summer active pasture (kikuyu) sward by heavy grazing, forage harvesting or mulching after the previous grazing and allowing the mat to decompose. Herbicides can provide a valuable suppression method by stopping the competition (from kikuyu) to newly growing seedlings (ryegrass).

Monitor for summer active pests and weeds and develop a control plan in conjunction with advice from your local agricultural advisor, commercial agronomist or local Council weeds officer. Control plants when they are young and before flowering.

PEST MANAGEMENT

Join your local Feral Fighter program to control invasive species such as wild dogs and foxes in Autumn. Contact your Local Land Services office.

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FEBRUARY

MARCH

SHEEP MANAGEMENT

Join rams with ewes (1 ram per 35-50 ewes).

First joining can be as early as 7-9 months or as late as 18 months depending on breed, season of birth and nutrition. The target bodyweight for maidens ewes is 80% of mature adult weight at the time of joining, regardless of age. Mature adult weight can vary quite a bit depending, but is generally around 55kg for Merino ewes and 70-80kg for First X ewes.

Weigh weaners every 6 weeks to monitor growth.

LAMB SALES

Reminder: NLIS compliance when livestock are leaving the farm.

Contact your Local Land Service Office for more details on NLIS and PIC's.

NUTRITION

Ensure ewes are in appropriate condition for joining (Fat score 2.5 - 3.0 for Merino, 3.0 - 3.5 for X Bred).

Ensure ewes do not undergo dramatic weight loss during and soon after joining to avoid foetal loss.

Weaners still require high quality pasture. Supplement with grain or pellets if required.

HEALTH

Conduct pooled or individual worm egg counts to monitor worm status of animals once there has been significant rain (20+ mm) that has follow-up rain (10+ mm) within the past few weeks. If worm counts are high based on laboratory results drench with an effective drench and retest in 7-10 days. Repeat the WormTest in 4–6 weeks. Include a request for liver fluke in your WormTest. Test for liver fluke three times a year (autumn, winter and summer) for at least two years (i.e. 6 tests).

Prepare low worm-risk paddocks for lambing.

For guidance on worm control refer to page 32, or contact your District Veterinarian at your local LLS office.

Monitor all sheep for flystrike.

PASTURE MANAGEMENT

Undertake soil testing of nominated paddocks/areas.

Manage kikuyu by grazing to 2.5 cm in March-April. Keep kikuyu short through autumn to allow light penetration of clover and temperate grass seedlings.

Consider sowing temperate species for autumn/winter/spring feed. The optimal time to start sowing ryegrass into kikuyu (other summer active) pastures is when the minimum air temperature has fallen below 15°C. At this time the soil is still warm enough to get good establishment and growth of ryegrass but close enough to the onset of colder weather to restrict competition from kikuyu.

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MARCH

APRIL

SHEEP MANAGEMENT

Remove rams from ewes middle of the month (5-6 week joining period).

Inspect rams and cull on teeth, testes and feet.

Sell cull rams.

Weigh weaners every 6 weeks to monitor growth.

LAMB SALES

Reminder: NLIS compliance when livestock are leaving the farm.

Contact your Local Land Service Office for more details on NLIS and PIC's.

NUTRITION

Select and manage lambing paddocks for lambing – have a bulk of high quality green feed available for lambing.

Don't let ewes drop below fat score 2.5 after joining.

HEALTH

Conduct pooled or individual worm egg counts to monitor worm status of animals once there has been significant rain (20+ mm) that has follow-up rain (10+ mm) within the past few weeks. Local Land Services offer test kits. If worm counts are high based on laboratory results drench with an effective drench and retest in 7-10 days. Repeat the WormTest in 4–6 weeks.

Drench for liver fluke if tests or clinical syndromes have shown it to be present on your property. Make sure this drench is effective for all life stages of liver fluke. For guidance on worm control refer to page 32, or contact your District Veterinarian at your local LLS office.

Select lambing paddocks that will provide shelter and start preparing them to be low worm-risk.

PASTURE MANAGEMENT

Apply lime or gypsum if required as per soil test results.

Manage kikuyu by grazing or mulching to 2.5 cm in March-April keep short through autumn-winter to allow light penetration for clover and ryegrass seedlings.

Inspect and monitor germinating pastures regularly for signs of pest damage e.g. red-legged earth mite, blue oat mite, slugs, snails, curl grub (as they feed on the cotyledon) while cockchafers or scarab beetles feed on plant roots.

Control temperate broadleaf weeds i.e. fireweed, thistles.

PEST MANAGEMENT

Join your local Feral Fighter program to control invasive species such as wild dogs and foxes. Contact your Local Land Services office.

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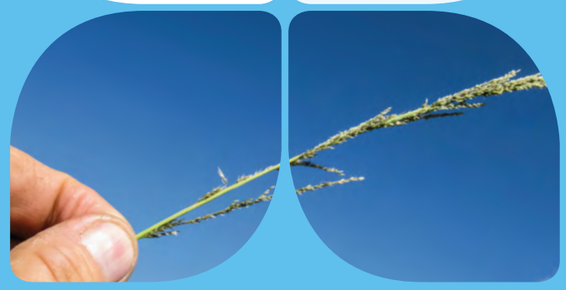

MAY

SHEEP MANAGEMENT

Weigh weaners every 6 weeks to monitor growth.

Lamb Sales – sell remaining lambs from last year to reduce stocking rate over winter.

Have ewes scanned for pregnancy diagnosis so that twin and single bearing ewes can be managed separately .

NUTRITION

Manage ewe grazing to ensure ewes are no more than Fat Score 3.5 (Merino) at lambing (Fat Score 4.0 for X Breds).

HEALTH

Conduct pooled or individual worm egg counts to monitor worm status of animals once there has been significant rain (20+ mm) that has follow-up rain (10+ mm) within the past few weeks. If worm counts are high based on laboratory results drench with an effective drench and retest in 7-10 days. Repeat the WormTest in 4–6 weeks. For guidance on worm control refer to page 32, or contact your District Veterinarian at your local LLS office.

PASTURE MANAGEMENT

Check the lambing paddock to see whether the pasture targets will be met.

Assess and control temperate broadleaf weeds before flowering in winter/spring i.e. fireweed, thistles.

Check pastures are ready for first grazing based on leaf stage, canopy closure and root anchoring.

Check pasture for insect pest damage from aphid, red legged earth mite or blue oat mite.

Ryegrass pastures: graze at the 2.5-3 leaf stage and before pastures have lodged to avoid yellowing and death of lower leaves. Top-dress with nitrogen 30-60 kg N/ha (60-125 kg urea/ha) after every second grazing, if conditions are favourable.

Oat crop: graze when well anchored and reach the tillering stage (depending on variety).

Brassicas: grazing is essential to maximise plant yield, feed quality and feed utilisation and minimise the potential for animal health disorders. Actual stage of grazing is dependent on variety.

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MAY

JUNE

SHEEP MANAGEMENT

Middle of month - crutch all ewes for lambing.

Have ewes scanned for pregnancy diagnosis so that twin and single bearing ewes can be managed separately

Start preparing a low worm paddock for weaners to go into in November.

NUTRITION

Manage ewe grazing to ensure ewes are no more than Fat Score 3.5 (Merino) at lambing (Fat Score 4.0 for X Breds).

Supplement ewes if pasture quantity or quality are not adequate to maintain fat score.

Select and prepare weaning paddocks – aim to have a bulk of high quality green feed.

HEALTH

Conduct pooled or individual worm egg counts to monitor worm status of animals prior to crutching. Include a request for liver fluke in your WormTest. Test for liver fluke three times a year (autumn, winter and summer) for at least two years (i.e. 6 tests). If worm counts are high based on laboratory results drench with an effective drench and retest in 7-10 days. Repeat the WormTest in 4–6 weeks. For guidance on worm control refer to page 32, or contact your District Veterinarian at your local LLS office.

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Total rain												
Total days												
YTD totals*												
Last year												

*Rainfall year to date totals.

Sheep calendar of operations: monthly summary

Year:

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Rams			Move to Ewes	Inspect and cull rams Sell cull rams Drench for fluke		Vaccinate: 6 in 1 booster				Inspect rams for soundness Purchase new rams	Shear all adult animals Inspect and fat score ewes Sell cull ewes	
Ewes			Joining: remove ram middle of April Six weeks maximum			Crutch all ewes for lambing Vaccinate: 6 in 1 booster	**Move ewes into lamb paddock**	Lambing Go to lamb for managment				
Target growth weights	Ensure adequate quality and quantity of feed to maintain ewes at fat score 3											
	Conduct worm test every 4-6 weeks, monitor for babers pole worm. Drench if worms counts are high											**0.7-.8 kg/day**
Lamb									Lamb marking (castrate, NLIS tag) Vaccinate: 6 in 1 (1st dose) and OJD	Vaccinate: 6 in 1 (second dose) 4-6 weeks later	Wean lambs based on weight Move lambs into weaning paddock Drench for worms	Go to weaners for management
Weaners Target growth weights			Lamb sales Join maiden ewes (ensure min weight of 40kg merino and 55kg crossbreeds)		Sell remaining lambs							
	Weigh weaners every 6 weeks to monitor growth											
	Ewe weaners over Summer/Autumn: 100g/hd/day (min)					Ewe weaners at 30kg by 31 August			Ewe weaners at 44kg by end of November			

SHEEP MANAGEMENT TIPS

FAT SCORING

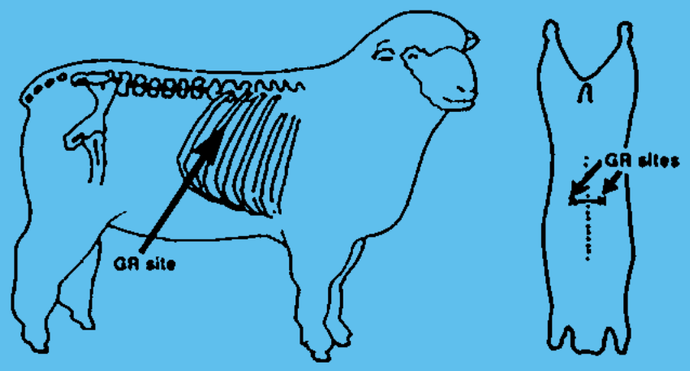
Improving the productivity and viability of sheep breeding enterprises relies on a good understanding of feed requirements over the year. These requirements must be matched to available pasture, pasture improvement and supplement feeding requirements.

The use of fat scoring can assist in setting nutritional requirements for the breeding flock and drafting stock for selling.Fat scoring is carried out on standing relaxed animals (in a race) and involves feeling the amount of fat over the long ribs. The specific location is about 10-11cm from the midline on the second last long rib. In this location, fat is the main tissue and is a good indicator of general fatness.

Visual assessment of sheep can be quite misleading due to the amount of wool cover and so for accuracy requires careful palpation of the long ribs.

Identify the area on the sheep to place your hand (see figure right), known as the GR site. Get your fingers through the wool onto the skin. Apply some pressure and move your fingers over the long ribs. The amount of `boniness' will determine the fat score.

Within flocks variations in fat scores can occur between individuals due to age, health issues and time of year. Ideally producers should aim to have their flock between fat score 2.5 and 3.5 depending on seasonal conditions and management cycles.



FAT SCORE DESCRIPTION

Score 1: Individual ribs are easily felt and no tissue can be felt (sliding) over the ribs. Depressions are quite obvious between ribs.

Score 2: Individual ribs are felt with some tissue able to be felt over the ribs. Depressions between ribs are obvious.

Score 3: Individual ribs can be felt but they are more rounded with tissue movement being felt over the ribs. The depression between ribs is less obvious.

Score 4: The ribs can be just felt with no depression between the ribs. Tissue movement over the ribs is apparent.

Score 5: Ribs cannot be felt.

RAINFALL CHART

Year:

DATE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1												
2												
3												
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16												

Select weaning and start preparing them to be low worm-risk.

Vaccinate ewes at crutching with their 6 in 1 annual booster.

Vaccinate rams with their 6 in 1 annual booster.

Vaccinate ewe lambs with their 6 in 1 annual booster.

PASTURE MANAGEMENT

Monitor pasture growth and check paddocks for late pregnancy and lambing. Consider supplementary feeding that may be required for the last month of pregnancy and/or lambing. Identify need and source feed early to ensure it is available when needed.

Assess late sown paddocks for first grazing.

Top-dress with nitrogen 30-60 kg N/ha (60-125 kg urea/ha) after every second grazing, if conditions are favourable.

Plan winter grazings/feeding budgets.

FARM BIOSECURITY PLAN

During winter is a great time to review and update your annual Farm Biosecurity Plan ahead of a busy Spring period.

17	18	19	20
21	22	23	24
25	26	27	28
29	30		

JUNE

JULY

SHEEP MANAGEMENT

Move ewes into lambing paddocks in last week of month.

NUTRITION

Energy requirements of pregnant ewes increase dramatically during the last month of pregnancy, especially for twin bearing ewes (Figure 2, pg 5).

Pregnant Ewe (last month) - 700kg DM/ha (75% digestibility).

Ewes require high quality pasture to meet the requirements of rapid foetal growth.

Supplement if pasture quantity or quality fall below target levels.

HEALTH

Conduct pooled or individual worm egg counts to monitor worm status of ewes prior to lambing. Include a larval culture in this test.

Local Land Services offer test kits. If worm counts are high based on laboratory results drench with an effective drench and retest in 7-10 days. For guidance on worm control refer to page 32, or contact your District Veterinarian at your local LLS office.

Consider supplementing late pregnant ewes with calcium and magnesium licks or blocks.

PASTURE MANAGEMENT

Monitor winter grazing/feeding budgets to prevent weight loss.

Identify if you have a true pasture surplus and choose which paddocks will be locked up for silage/hay production.

Engage contractors with the intent to conserve feed.

Investigate the use of a summer fodder crop i.e. forage sorghum, millet, rape, brassicas (turnip, swede, kale, chicory).

PEST MANAGEMENT

Join your local Feral Fighter program to control invasive species such as wild dogs and foxes in Spring. Contact your Local Land Services office.

NSW GOVERNMENT Local Land Services

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9	10	11	12
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17	18	19	20
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29	30	31	

PROGRAZE™
Profitable, sustainable grazing

Pregnant Ewe (last month) - 700kg DM/ha (75% digestibility)

AUGUST

SHEEP MANAGEMENT

Monitor lambing daily whilst minimising disturbance to the flock. Try to minimise assistance as this can interfere with maternal bonding.

If lambing ewes need to be supplemented, consider using a self-feeder to minimise disturbance. If you do not have a self-feeder, feed after lunch to avoid ewe-lamb disturbance.

NUTRITION

Continue to supplement ewes during lambing if pasture is below the minimum benchmark levels.

- Lambing ewes with **singles**: 1000 - 1200kg DM/ha (65% digestibility or better)
- Lambing ewes with **twins**: 1300 - 1500kg DM/ha (70% digestibility or better).

HEALTH

Conduct pooled or individual worm egg counts to monitor worm status of animals. If worm counts are high based on laboratory results drench with an effective drench and retest in 7-10 days. Repeat the WormTest in 4–6 weeks.

Drench for liver fluke if tests, abattoir surveillance or clinical syndromes have shown it to be present on your property. Use a different drench to the active one used in April. For guidance on worm control refer to page 32, or contact your District Veterinarian at your local LLS office.

PASTURE MANAGEMENT

Continue to plan winter grazing/ feeding budgets.

Early maturing ryegrass varieties may start flowering (weather dependent particularly if August is dry and hot).

Prepare paddocks for fodder conservation.

After grazing, slash/mulch and top dress with either nitrogen or a blended (NPK) fertiliser.

Become familiar with weed seedlings such as fireweed, thistles and giant parramatta grass. Control plants when they are young and before flowering for the most effective management.

PEST MANAGEMENT

Join your local Feral Fighter program to control invasive species such as wild dogs and foxes in Spring. Contact your Local Land Services office.

NSW GOVERNMENT Local Land Services

Information provided in this calendar has been sourced from NSW DPI's training program, PROFarm.

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SEPTEMBER

SHEEP MANAGEMENT

Mark lambs two weeks after the end of lambing. This includes tail docking, castration, vaccinations, NLIS tag etc. (V-tag for OJD vaccinates). If docking tails, the best method is to use rubber rings or a gas-heated tail-docking knife, preferably designed to remove the woolly skin on the tip of the tail.

While lambs can be marked up until 12 weeks of age, delaying marking beyond eight weeks of age results in slower healing and increased risk of complications.

Reference: "A producer's guide to sheep husbandry practices" (MLA).

NUTRITION

Select quantity and quality of pasture to match the needs of the lactating ewe.

HEALTH

Conduct pooled or individual worm egg counts to monitor worm status of animals. If worm counts are high based on laboratory results drench with an effective drench and retest in 7-10 days. Repeat the WormTest in 4–6 weeks.

For guidance on worm control refer to page 32, or contact your District Veterinarian at your local LLS office.

Vaccinate lambs with their first 6 in 1 vaccine.

Vaccinate lambs with an OJD vaccine if the disease is on property or wishing to sell surplus animals to an OJD infected area. Lambs should be vaccinated before they are 14 weeks old.

Discuss options for pain management at marking with your private veterinarian or local LLS District Vet.

Apply a chemical treatment around marking wounds if marking with hot-knife or knife methods to prevent flystrike.

PASTURE MANAGEMENT

Graze ryegrass pastures based on leaf stage or canopy closure.

Early maturing ryegrass varieties may start flowering (weather dependent).

Depending on the season, fodder conservation may start early. Aim to harvest ryegrass when seed heads first start to appear. Dry matter yields will be highest when seeds are fully developed.

Consider supplementary feeding if pastures are inadequate for livestock needs.

Identify paddocks for soil testing. Do not test paddocks which have had a fertiliser treatment in the 3-4 months before testing.

NSW GOVERNMENT Local Land Services

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13	14	15	16

17	18	19	20
21	22	23	24
25	26	27	28
29	30		

OCTOBER

SHEEP MANAGEMENT

Inspect remaining rams to ensure soundness.

Purchase replacement rams from an accredited Ovine Brucellosis free flock.

NUTRITION

Select quantity and quality of pasture to match the needs of the lactating ewe.

HEALTH

Conduct pooled or individual worm egg counts to monitor worm status of animals. If worm counts are high based on laboratory results drench with an effective drench and retest in 7-10 days. Repeat the WormTest in 4–6 weeks.

For guidance on worm control refer to page 32, or contact your District Veterinarian at your local LLS office.

Vaccinate: Lambs with second dose of 6 in 1.

PASTURE MANAGEMENT

Silage production – assess chosen paddocks for readiness.

Annuals: mid-season maturing ryegrass varieties may start flowering (weather dependent), monitor for signs of rust and fungal disease particularly in humid seasons and graze crop before palatability is reduced.

Perennials: lock-up and allow to set seed, increasing persistence.

Grass weeds: monitor germination of weed seedlings such as giant parramatta grass, Coolatai grass and African lovegrass. Become familiar with juvenile plants to prevent growth and spread.

NOTES

NSW GOVERNMENT Local Land Services

Information provided in this calendar has been sourced from NSW DPI's training program, PROFarm.

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25	26	27	28
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PROGRAZE™
Profitable, sustainable grazing

Lactating ewe (single), 1,000kg DM/ha (75% digestibility)

Lactating ewe (twins) - 1,500kg DM/ha (75% digestibility)

NOVEMBER

SHEEP MANAGEMENT

Middle of month – Drench and wean all lambs into weaning paddock (preferably a paddock with low worm burden).

Weigh lambs for weaning weight

Shear all adult animals: this timing will assist with summer fly-strike prevention, if labour is available. Can be done at the same time as weaning.

After shearing inspect all ewes and cull on udder and teeth faults.

Sell cull ewes.

Purchase replacement ewes (if required) with an accompanying National Sheep Health Statement.

Reminder: NLIS compliance when livestock are leaving the farm.

Contact your Local Land Service Office for more details on NLIS and PIC's.

NUTRITION

Select quantity and quality of pasture to match the needs of the weaned lamb.

Aim to maintain ewes at Fat Score 3 till joining.

If ewes are below Fat Score 3 at weaning – provide with good quality feed to enable them to reach this target by joining.

HEALTH

Drench all lambs for roundworms at weaning.

In most years all sheep will need a worm drench now in late spring/early summer. In dry or drought years, conduct pooled or individual worm egg counts to monitor worm status of animals beforehand. If worm counts are high based on laboratory results drench with an effective drench and retest in 7-10 days. For guidance on worm control refer to page 32, or contact your District Veterinarian at your local LLS office.

Within 24 hours of shearing, treat all sheep on property for lice if necessary.

PASTURE MANAGEMENT

Begin silage/early hay production.

Manage newly sown pastures with light grazing and possible topdressing applications of an NPK fertiliser.

Manage existing pastures.

Ryegrass: rotationally graze with back fence.

Annuals: mid-season maturing ryegrass varieties may start flowering (weather dependent).

Perennials: lock-up to allow seed to set (not necessary every year - rotate different paddocks each year).

Kikuyu: maintain legumes and pasture quality by grazing when 18-20 cm high or when runners have 4.5 leaves.

NSW GOVERNMENT Local Land Services

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1	2	3	4
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17	18	19	20
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29	30		

PROGRAZE™
Profitable, sustainable grazing

Dry sheep - 600kg DM/ha (68% digestibility)
Growing weaner - 800kg DM/ha (75% digestibility)

DECEMBER

SHEEP MANAGEMENT

To reduce flystrike risk over summer, treat all sheep with a long-acting flystrike preventative chemical by jet or spray-on application.

Weigh weaners every 6 weeks to monitor growth.

NUTRITION

Select quantity and quality of pasture to match the needs of the weaned lamb.

Aim to maintain ewes at Fat Score 3 till joining.

If ewes are below Fat Score 3 at weaning – provide with good quality feed to enable them to reach this target by joining.

Fat Score rams – aim to have Fat Score 3.5 at the time of joining.

HEALTH

Conduct pooled or individual worm egg counts to monitor worm status of animals prior to any management activities where sheep will be mustered and handled. If worm counts are high based on laboratory results drench with an effective drench and retest in 7-10 days.

Conduct a WormTest for liver fluke three times a year (autumn, winter and summer) for at least two years (i.e. 6 tests).

For guidance on worm control refer to page 32, or contact your District Veterinarian at your local LLS office.

Monitor all sheep for flystrike throughout summer. Shear struck wool and a 5cm barrier of clean wool around the strike close to the skin. Apply a registered flystrike dressing to the shorn area. Make sure maggots are killed to break the lifecycle.

PASTURE MANAGEMENT

Silage and hay production continues with identified paddocks that have been locked up.

Annuals: mid-late season maturing ryegrass varieties may start flowering (weather dependent).

Kikuyu: maintain legumes and pastures quality by grazing when 18-20 cm high or when runners have 4.5 leaves, rotationally graze with back fence, mulch after grazing to remove old rank growth.

Prepare a management plan for the control of summer active and perennial grass weeds eg: giant parramatta grass. Reduce the spread by not mulching small infested areas within clean paddocks. Wash down your tractor and follow good farm biosecurity practices.

NSW GOVERNMENT Local Land Services

Information provided in this calendar has been sourced from NSW DPI's training program, PROFarm.

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17	18	19	20
21	22	23	24
25	26	27	28
29	30	31	

PROGRAZE™
Profitable, sustainable grazing

Growing weaner - 1,700kg DM/ha (68% digestibility)

EVERY BIT COUNTS - ENGAGING SMALL LANDHOLDERS

www.lls.nsw.gov.au/ebc

Small farms and lifestyle properties play an important role in managing the patchwork of natural and agricultural environments across the south east landscape. As many large properties are divided into smaller farms and lifestyle holdings they remain a key piece in the puzzle to ensure large scale healthy environmental systems are maintained.

The Every Bit Counts program (funded by the NSW Environmental Trust) has been developed to provide access to the best available knowledge, advice and peer-to-peer support networks in a manner that recognises the wide range of priorities and land uses that exist on small farms and lifestyle properties.

CONNECTING WITH YOUR LOCAL FARMER NETWORK

Across the southeast region there are a number of farmer networks established to help provide support through workshops, field days and newsletters; connecting you with like-minded landholders and keeping you up to date with the latest news, events and funding available. Combined, these Farmer Networks have over 1,700 landholders engaged and connected with Local Land Services staff, NSW DPI and Industry research programs and projects. Why not join your local group today and get connected!

smallfarms.net.au
Small Farms and Rural Living Network

SOUTH COAST/SOUTHERN HIGHLANDS

The Small Farms Network is a free support service for people who live on or manage rural and peri-urban properties. The Network provides support to all landholders ranging from half a hectare to several hundred hectares. Established in 2004, the Network has over 910 members and sends out a regular newsletter promoting a wide variety of farming and sustainable living events.

BEGA AND EUROBODALLA NETWORKS

The Bega and Eurobodalla Farmer Networks aims to find efficient and creative ways for landholders to learn and implement sustainable farming practices. Becoming a member of the Farmers' Network will enable you to receive our newsletter and invitations to upcoming events.

Contact the Bega Local Land Service Office 02 6491 7800.

small farms network
CAPITAL REGION

BUNGENDORE / SOUTHERN TABLELANDS

The Small Farms Network Capital Region is a grassroots information service run by small farmers for small farmers. Our network runs field days, workshops and other events packed with high quality information relevant to managing small rural properties in the NSW Southern Tablelands. For more information visit: www.smallfarmscapital.org

NSW GOVERNMENT Department of Primary Industries

NSW DEPARTMENT OF PRIMARY INDUSTRIES

The Department of Primary Industries (NSW DPI) works to increase the value of primary industries and drive economic growth across NSW. NSW DPI manages a broad range of initiatives from resource to industry, including natural resource management, research and development, pest and disease management, food safety, industry engagement and market access and competition. A variety of resources are available on the NSW DPI website for all livestock producers in NSW - www.dpi.nsw.gov.au

PRIMEFACTS

Primefacts are available on the NSW DPI website for sheep livestock producers including:

- Health, disease and welfare
- Feeding and nutrition
- Soil health and pasture management
- Breeding
- Business management, farm budgets and marketing

TOCAL SKILLS TRAINING & BOOKSHOP

Tocal Skills Training (previously known as PROfarm), is the training program developed by NSW DPI to meet the needs of farmers, primary industries, agribusiness and the community and includes the popular SMARTtrain® chemical accreditation program.
www.tocal.nsw.gov.au

Tocal College has published close to 100 books on all aspects of agriculture and land management. These books are high quality, accurate and reliable references on topics such as livestock, pastures, irrigation, weed management, natural resource management, beekeeping, machinery, farming skills and farm management.
www.tocal.nsw.edu.au/publications

NSW DPI APPS

A range of useful apps are available on Google Play or iTunes for landholders to help manage their farming enterprise.

NSW WeedWise

NSW Weed Wise: The NSW WeedWise app provides key information to help users reduce the impact of weeds in New South Wales (NSW). The app profiles over 300 weeds, describing biosecurity duties under the NSW Biosecurity Act 2015, control information and registered herbicide options.

NSW Drought Feed Calculator: The Drought Feed Calculator is an essential tool for sheep and cattle producers dealing with drought and dry seasons. It enables busy farmers to make informed decisions and save money. Farmers in any location can easily and quickly determine the minimum feed requirement for a range of animals with different nutritional needs.

MAKING MORE FROM SHEEP

www.makingmorefromsheep.com.au

Australian Wool Innovation (AWI) and Meat and Livestock Australia (MLA) have joined forces to develop 'Making More From Sheep', a best practice package of information, tools and learning opportunities for Australian sheep producers, including 13 linked modules in the manual, which cover subjects ranging from soils and pasture to wool and meat marketing, animal health, genetics and farm sustainability.

SHEEP CONNECT NSW

www.sheepconnectnsw.com.au

The Sheep Connect NSW grower network is AWI's key investment in extension for the NSW sheep and wool industries. The network provides a source of relevant, timely and technically sound information to the industry via a range of methods of delivery.

WORMS IN SHEEP

Internal parasites cause major health problems in Australian sheep. As such, managers must be vigilant when developing and implementing a control program. Internal parasite control needs to include an integrated approach, including the effective use of drenches, grazing management, flock management - including "early" weaning, breeding sheep more resistant to worms, nutrition, and regular worm egg count monitoring *(WormTest)*.

WORMTESTS

Worm Testing refers to the worm burden levels in livestock by identifying the number of worm eggs in faeces. Some laboratories can also perform a

Worm egg count (epg) thresholds		
Class of sheep or time of year	No culture OR less than 60% barber's pole	Greater than 60% barber's pole
Ewes (dry to mid-pregnancy) or wethers	250	400
Ewes pre-lambing	150	250
Sheep under 18 months or rams	150	300
Time of 1st or 2nd summer drench	100	100

'Larval Culture' (also called a 'Larval Differentiation') to identify the types of worms present and their proportion (the importance of this varies according to location). Testing can assist in determining whether sheep should be drenched, what drench group should be used and when to conduct another WormTest. On the South Coast the worms of greatest importance are round worms (eg barbers pole, small brown stomach worm and black scour worm), fluke (liver and stomach flukes) and flatworms (tapeworms). Of these, barbers pole worm is the most prevalent and destructive. It is essential that worm egg counts be regularly monitored to avoid ill health or death in the flock. This is especially the case from March till October, 4–6 weeks after significant rain that has follow-up rain, including the autumn break.

OTHER IMPORTANT DATES:

- Young sheep: May/June before the more severe winter weather arrives.
- Pre-lambing (also include a larval culture if barber's pole worm have been a problem in the past year).
- Prior to other management activities (such as crutching, joining, shearing and weaning).
- At 6–8 week intervals after a drench was given.
- And at other non-routine times as described in the Drench Decision Guide www.wormboss.com.au/sheep-goats/programs.

OTHER FACTORS

An integrated approach to worm control includes strategic grazing management to reduce paddock contamination with worm eggs and larvae. Set stocking in a single paddock can allow worms to build up. Consider dividing paddocks so that pastures can be spelled or cross-graze with another species. Prevent sheep from grazing in the 'worm zone' by keeping the pasture sward at least 5cm in height. Effective grazing management will reduce the need for chemical (drench) intervention and at the same time provide nutrition to allow sheep to better deal with parasites. Sheep immunity (dependent on genetics and nutrition) and environmental factors and can be a major obstacle for worms. Immunity can significantly reduce the numbers of incoming infective larvae that are able to establish. A proportion of those that do establish may be damaged by host immune responses so the worms die and are expelled sooner, or are less able to reproduce. Consider breeding with sheep that are more resistant to worms.

DRENCHING

An effective drench should always be used when controlling worms. A drench resistance test *(DrenchTest)* should be conducted to determine any worm resistance to available drenches. Use an effective drench based on your worm resistance testing. It is better to use a drench with one effective ingredient than a drench with three ineffective ones. About 1 week after drenching, a *DrenchCheck* should be performed to ensure effectiveness of the drench used. There needs to be a greater than 90% reduction in the worm egg count for a drench to be considered effective. Contact your local District Veterinarian on 1300 795 299 for advice and assistance on all worm related issues.

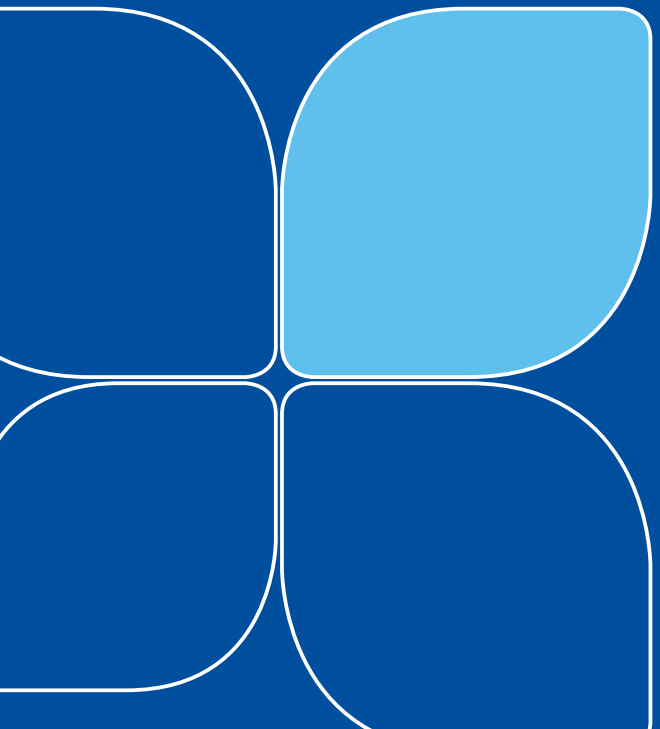
PARABOSS

http://www.paraboss.com.au/

Paraboss provides sheep producers and industry professionals with practical and cost-effective recommendations to control sheep parasites. The **WormBoss**, **FlyBoss** and **LiceBoss** web sites are sources of detailed management information, regional programs and decision support tools that assist sheep producers to manage the major parasite risks for sheep.

They have been developed by expert panels of parasitologists and veterinarians from across Australia.

NOTES



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BERRY
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BEGA
02 6491 7800

GOULBURN
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YASS
02 6118 7700

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www.southeast.lls.nsw.gov.au