

## 50-day Adjusted Weight Report

Most of a lamb's weight gain from birth to 10 weeks of age is a reflection of the dam's milk supply. After that the sire and lamb's own genetics for growth will determine its weight gain, based on the feed you provide. Sheep lactation peaks at around 4 weeks after lambing and then declines steadily until the lamb stops sucking naturally after about 12 weeks postpartum.

Recording a weight before the natural weaning point will help you find the superior ewes in your flock. But it is misleading to make a straight comparison of lamb weights taken on a certain date if you aren't making adjustments for the age and sex of the lambs, the type of birth and rearing, and the age of their dams.

An unadjusted weaning weight will favour single male lambs, born early in the season and raised by mature ewes. A smaller female lamb, born three weeks later and raised as a twin by a young ewe would be overlooked as a replacement, and her dam might even be culled despite her great potential.

The 50-day adjusted weight takes all those variable into account and allows you to compare lambs as if they are all raised exactly the same, and then weighed at exactly 50 days of age. The higher the adjusted 50-day weight the more productive the dam, and the more confidence you will have choosing replacement ewe lambs from your hardest working ewes.

#### Lamb age adjustment to 50 days old at weighing

» Weight gain from birth to weigh date is calculated. If you have not recorded birth weight then the default birth weight is used.

#### Example: Lamb #123

- » Birth weight = 11 lbs; 50-day actual weight = 62 lb:
- » Age in days at weighing = 55 days

Weight gain = (62 - 11) = 51 lb gain divided by 55 days = 0.93 lb/day gain

» Weight is adjusted to 50 days old

Weight adjusted to 50 days = birth weight (11 lb) + 0.93 lb x 50 days (46.5 lb) = 57.5 lb (what this lamb would have weighed when it was exactly 50 days old.)

#### **Adjustment factors**

This table shows the adjustment factors used - these are relative to a basis of 1.00 - i.e a single ram lamb reared by a mature dam. After adjusting for age, weights are further adjusted for non-genetic effects of age of the dam, lamb type of birth and rearing, and lamb sex. The final adjusted 50 day-weight is obtained by multiplying the age-corrected weight by the three environmental adjustment factors for dam age, type of birth and rearing and lamb sex.

#### **Examples:**

Lamb #123 - single-born wether, raised as a single by a 4-year old dam, 62 lb actual weight

- = 57.5 lb (age adjusted weight) x .97 (wether) x 1.00 (born as; raised as single) x 1.00 (4 year-old dam)
- = 55.75 lb adjusted 50-day weight

or lamb #123 - triplet-born ewe lamb, raised as a twin by a 2-year old dam, 62 lb actual weight

- = 57.5 lb (age adjusted weight) x 1.00(ewe lamb) x 1.29 (born as 3; raised as 2) x 1.08 (2 year-old dam)
- = 80.1 lb adjusted 50-day weight

When the two dams are compared in the 50-day adjusted weight report, the young dam that raised good twins will be higher ranked than the older ewe with the single. This is much more accurate than a simple weaning report by litter weight, where lambs could be more than 30 days and 30 lbs apart for non-genetic reasons.





	Class	Factor		
Age of Dam	1 year-old	1.14		
	2 year-old	1.08		
	3 to 6 year-old	1.00		
	Over 6 years old	1.05		
Lamb Sex	Ram	.91		
	Wether	.97		
	Ewe lamb	1.0		
Birth & Rearing Type	Born as: raised as			
	1:1	1.00		
	1:2	1.17		
	2:1	1.11		
	2:2	1.21		
	3:1	1.19		
	3:2	1.29		
	3:3	1.36		

These adjustment factors used in FarmWorks were provided by the American Sheep Industry, Sheep Production Guide 2009.

#### To use this report:

- » Record a weight in FarmWorks (weaning weight, 8-week weight or just an ordinary weight) when lambs are between 35 and 65 days old.
- » The group of lambs you want to compare should be reasonably close in age i.e. born over one cycle (17 days), or maximum one and a half cycles (25 days).
- » Choose a weigh date when the median age of the lambs is close to 50 days. For example, in a group of 100 lambs born between January 1 and January 25 (25 days = 1.5 x 17-day estrus cycles):
- Feb 19 the oldest lambs (born on Jan 1) will be 50 days old but the youngest lambs are too young to weigh.

  March 16 the youngest lambs (born on Jan 25) will be 50 days old but the oldest lambs are too old to weigh.
- Weigh the group March 3 when the middle of the group (born Jan 13) is 50 days old; the oldest and youngest lambs in the group will still be in the 35 to 65 day age range.
- » If there is too wide a spread in lamb ages then the oldest and youngest lambs will be outside of the 35 to 65 day range and will not appear on the 50-day adjusted weight report.
- » If there is a wide range in lamb ages then break one group into several smaller groups to bunch up the lambs of similar ages.
- » This is a dam report, not a lamb report, so put the ewes you want to compare in a management group first to make it easier to select them.



## 50-day Adjusted Weight Report

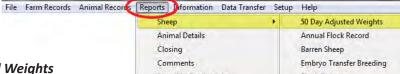
This report is for comparing ewe performance based on lamb growth from birth to 50 days of age. Lamb weights are taken from 35 to 65 days of age, then adjusted either up or down to compensate for the non-genetic factors that influence growth rate.

Note: FarmWorks will accept either imperial (lbs) or metric (Kg). If using lbs ignore the "Kg" symbol on weight fields.

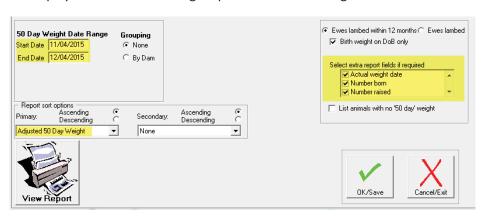
#### Use this report:

- To select replacement ewe lambs based on better criteria than just weaning weight.
- To select replacement ewe lambs from productive young ewes
- To compare ewe performance with adjustments made for lamb age, sex, birth and rearing, and the age of the dam.

### 50-day Adjusted Weight Report



- 1. Go to Reports > Sheep > 50-day Adjusted Weights
- 2. Use the filters to select the ewes you want to compare or use the date rage for when the 50-day weight was taken.
- 3. Select some optional fields from the list on the right-hand side.
- 4. Select *Group by Dam* to display individual lamb weights plus totals and averages for the litter.
- 5. Click View Report.



# 50 Day Adjusted Weight Report grouped by dam filtered by Management Group (Early Group ewes)

Owner: Holding Holding Name:

Date Printed: 14/07/2015

			Foster	Lamb's	_	Siblings		Weigh		Adjusted			
Lamb tag	Sex	Breed	Dam Tag	DoB	Born	Raised	weight	Date	Weight	Weight			
Dam tag:NMF 72B						50 day	weights:	Total: 51.00	Αν <u>α</u>	:51.00	Adj total:	49.23	Adj avg: 49.23
NMF 202C	Wether	Suffolk X		12/02/2015	1	•	4.00	11/04/2015	51.00	49.23			
Dam tag:NMF 2B						50 day	weights:	Total: 55.00	Αν <u>α</u>	:55.00	Adj total:	60.70	Adj avg: 60.70
NMF 227C	Ewe lamb	Suffolk X		12/02/2015	2		4.00	11/04/2015	55.00	60.70			
Dam tag:NMF 382A						50 day	weights:	Total: 88.00	Αν <u>ς</u>	: 44.00	A dj total:	105.48	Adj avg: 52.74
NMF 81C	Wether	Suffolk X		12/02/2015	3	. 2	4.00	11/04/2015	48.00	56.67			
NMF 1C	Ewe lamb	Suffolk X		12/02/2015	3	2	4.00	11/04/2015	40.00	48.81			
Dam tag:NMF 1B	Man agemen	t Tag: 315123	8654			50 day	weights:	Total: 104.0	0 Avg	:52.00	A dj total:	123.21	Adj avg: 61.60
NMF 226C	Wether	Suffolk X		12/02/2015	2	. 2	4.00	11/04/2015	55.00	64.18			
NMF 175C	Ewe lamb	Suffolk X		12/02/2015	2	. 2	4.00	11/04/2015	49.00	59.03			
Dam tag:NMF 667A						50 day	weights:	Total: 139.0	0 Avg	g: 46.33	Adj total:	176.55	Adj avg: 58.85
NMF 174C	Wether	Suffolk X		12/02/2015	3	;	4.00	11/04/2015	49.00	60.97			
NMF 96C	Ewe lamb	Suffolk X		12/02/2015	3	:	4.00	11/04/2015	50.00	64.12			
NMF 16C	Ewe lamb	Suffolk X		12/02/2015	3	;	4.00	11/04/2015	40.00	51.46			