



Australian Wool  
Innovation Limited

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# PLANNING FOR A NON-MULESED MERINO ENTERPRISE



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**For recent publications about breech strike prevention visit AWI's website at [www.wool.com/flystrikelatest](http://www.wool.com/flystrikelatest)**

**Other websites include:**

**FlyBoss;** [www.flyboss.com.au](http://www.flyboss.com.au)

**WormBoss;** [www.wormboss.com.au](http://www.wormboss.com.au)

**MERINOSELECT;** [www.sheepgenetics.org.au/Breeding-services/MERINOSELECT-Home](http://www.sheepgenetics.org.au/Breeding-services/MERINOSELECT-Home)

**AWEX;** [www.awex.com.au](http://www.awex.com.au)



**Breech Strike Resistance Flock CSIRO Armidale - Resistant and Susceptible Line Differences, Final Joining 2014**

	Breech Wrinkle ASBV	Breech Cover ASBV	Dag ASBV	Breech Strike% 2014/15 (no chemical prevention)
<b>Resistant Sires</b>	-0.4	-0.1	0.0	
<b>Susceptible Sires</b>	+0.6	+0.2	0.1	
<b>Difference</b>	1.2	0.3	0.1	
<b>Resistant Ewes</b>	-0.6	-0.1	-0.1	2%
<b>Susceptible Ewes</b>	+0.7	+0.3	0.2	33%
<b>Difference</b>	1.3	0.4	0.3	31%



**Breech Strike Project - Resistant Line Fine Wool Sires - CSIRO Armidale**



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# PLANNING FOR A NON-MULESED MERINO ENTERPRISE

REPORT ON THE INTERVIEWS OF 40  
WOOLGROWERS WITH A DIVERSE RANGE  
OF ENVIRONMENTS AND MERINO TYPES

By Geoff Lindon, AWI, Feb 2018

This report outlines the key learnings from a number of wool-growing enterprises that have moved to a non-mulesed enterprise. It is intended to assist other woolgrowers in their consideration and planning to also move to a non-mulesed Merino enterprise.

While mulesing has been shown to reduce breech strike by 90% (CSIRO Armidale), in 2016/17, 7% of the Australian Merino Clip (less than 24.5 microns) and 14% of wool finer than 17.5 microns was declared as Non-Mulesed through AWEX's National Wool Declaration. Non-Mulesed wool volumes continue to increase each year and Australia is now a major producer of Non-Mulesed and Ceased-Mulesed Merino wool. Moving to a non-mulesed enterprise isn't easy, however these interviews with businesses that have successfully made the move demonstrate that it can be done.

Key learnings from these businesses when considering a move to a non-mulesed Merino enterprise include:

- It is important to have a detailed plan in place before starting the move to a non-mulesed enterprise, that has the support of everyone in your business, including staff, contractors, shearers, livestock agents and ram suppliers.
- The business needs to be brave, organised and determined to make it work especially in the early years.
- Moving to a non-mulesed enterprise often requires fundamental change to the whole business.



# INTRODUCTION

Increasing numbers of Merino enterprises are moving away from relying on mulesing as their main tool to reduce the risk of breech flystrike. Instead, enterprises are turning to other control methods, such as breeding for low breech wrinkle and dags, increasing reliance on worm and fly control chemicals, additional crutching and accelerated shearing to manage the risk of breech flystrike on their properties.

To understand the successes, and potential pitfalls of moving to non-mulesed enterprises, interviews were held with forty wool-growers that have either never mulesed or recently ceased mulesing. Several additional businesses that continue to mules or have returned to mulesing were also interviewed.

There are large variations between wool-growing regions and Merino types in the risk and incidence of breech strike. Woolgrowers interviewed came from low, medium and high rainfall areas, from coastal to high-altitude regions, from cold temperate Mediterranean regions and hot sub-tropical regions, from windy open plains, to mist filled damp valleys, from pasture improved areas to natural vegetation, from heavy clay flood plain country to steep timbered tablelands, from dryland low stocking rate pastures to irrigated high stocking rate pastures. Their Merino sheep types varied from 12 microns to 23 microns, with low to high wrinkle and low to high dags.

The interviews highlighted the large diversity in woolgrower's

- climate, environment and thus risk of breech strike;
- type of Merinos (Superfine, Fine, and Wools from Spanish, Peppin, SA Merino, and Dohne backgrounds);

- enterprise mix (specialty wool-growing to highly diverse livestock and farming enterprises);
- business structure and size (sole trader to family partnerships and corporates);
- calendar of operations (times and lengths of joining, crutching, lambing, shearing, jetting);
- animal health programs (due to varying risk of parasites and diseases); and
- skills, attitudes and philosophical approaches to sheep management, changing markets and appetite for risk.

Whilst there were common themes across the non-mulesed enterprises; due to the large diversity, they were addressed and managed very differently. There is not one recipe. Each woolgrower needs to have a plan that is relevant to them.

*“Woolgrowers are in the prime position to determine the best management practices to ensure good welfare outcomes for their sheep.”*

Woolgrowers that contributed to this report were interviewed either by telephone or during property visits. Most interviews lasted for an hour with several lasting up to 3 hours. The time and commitment of the woolgrowers interviewed is gratefully appreciated.

# KEY THEMES TO CONSIDER FOR MOVING TO A NON-MULESED MERINO ENTERPRISE

## 1. PLAN FOR SUCCESS

All the woolgrowers interviewed highlighted the importance of having a well-considered **detailed plan** in writing before starting the move to a non-mulesed enterprise. Most woolgrowers interviewed considered the move to a non-mulesed Merino enterprise for years yet, once committed to do so, still took another 1 to 3 years of specific planning before doing so. Many reported that it will take another decade or more for them to achieve their original goals. Several enterprises cited a lack of planning, increased breech strike and lower financial returns, as the key reason they returned to mulesing.

*“I spent 5 years planning to stop mulesing, production has increased since but there were many things I changed, and I cannot isolate the impact of any one practice change.”*

*“It took me 20 years of breeding, to get down to 1% breech strike and retain my wool type. Now flystrike is non-existent.”*

It is important that the plan has the full support of everyone in your business, including management, staff, contractors, shearers, livestock agents and ram suppliers. Many of the woolgrowers interviewed spent some time finding the right people to work with to support their wish to move to a non-mulesed merino enterprise.

*“I went through a few livestock agents and shearing contractors before I found the right ones.”*

Moving to a non-mules enterprise caused some problems in sourcing and keeping contractors willing to work with their sheep.

*“I cannot find reliable shearers to shear my non-mulesed sheep, they keep getting better offers.”*

**The business needs to be organised and determined to make it work in the early years.**

Moving to a non-mulesed enterprise is a big step with significant animal welfare and production risks. Some woolgrowers commented that after all the planning it still took a leap of faith to make the change. A good number of woolgrowers were also of the view that after several years it was easier than they first thought and other issues were now the focus of the business.

*“Hardest thing was being brave enough to start.”*

## 2. THINK BEYOND MULESING

Most of the woolgrowers interviewed acknowledged that ceasing to mules is a step in a journey rather than a destination and is part of a larger requirement for **continuous improvement in animal welfare**. Their journey to improve animal welfare did not start or cease with the decision to cease mulesing.

*“My animal health program needs to be very flexible but being forced into this approach, by our customers, has benefited the rest of my business.”*

*“Time Controlled Grazing made it very easy for us, but the main benefit was growing double the grass in a normal season. Worm management has been exceptional, and the effort and cost spent on drenching is now being put to better use.”*

## 3. SHEEP TYPE

With hindsight, many businesses felt they ceased mulesing while their sheep's breech wrinkle score was too high, requiring an urgent focus on breeding to reduce breech and tail wrinkle, to the detriment of other traits. Their advice where possible, is to create a low wrinkle flock prior to ceasing to mules.

*“Once wrinkle is low, growers can cease mulesing much more easily.”*



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Woolgrowers reported that there are Merino types that are genuine non-mulesed types, based on their breech wrinkle scores. They believe that there is a shortage of rams that have low wrinkle and high fleece weight, particularly for the fine and super fine Merino type. There is also a shortage of genetics that are genuinely low dag animals. There was frustration in how to confidently find rams that met the low wrinkle, low dag and high worm resistance criteria. Woolgrowers are aware it will take some time for ram breeders to breed low wrinkle, high fleece weight, low dag rams.

*“Not enough studs collect wrinkle, cover and dag information.”*

Some non-mulesed enterprises commenced breeding their own flock rams as they could not source the rams they needed while avoiding undoing hard earned gains they had made in their commercial ewe flock. Conversely, others stopped breeding their own rams because the ram breeding enterprise became too complicated and took focus off the commercial flock at the wrong time.

*“I now have good confidence in the Breech Wrinkle ASBV, but it took a few years to consolidate.”*

*“Pick long stapled sheep and the wrinkle will fall quickly.”*

As more enterprises move to non-mulesed, the demand for productive, low strike sheep types is increasing and ram breeders are responding to the demand.

The breeding objective of the ram supplier and their local environment in which they select their sheep assumes greater importance for non-mulesed enterprises. The woolgrowers interviewed reported a preference for replacement rams from non-mulesed ram suppliers that were selecting for low breech traits and higher fleece weight, who allowed their progeny to be naturally challenged in an environment similar to their own, (ie the Ram breeder did not use high levels of chemical protection).

*“Got to breed hardy, good doing sheep for non-mulesed enterprises, the season can move against you very quickly.”*

*“I changed ram supplier at the same time I ceased mulesing, I think the new ram source will add 0.5 of a kg to fleece weights, at the same micron with much less wrinkle.”*

*“At the same breech wrinkle score, tight wrinkle is far worse than loose wrinkle, it is slower to dry.”*

To reduce flystrike, the woolgrowers interviewed had a priority order well aligned with the research recommendations:

- 1. Lower Wrinkle**
- 2. Lower Dags and Urine Stain**
- 3. Lower Worm Egg Counts**
- 4. Lower Breech Cover (bare width is more important than bare length)**
- 5. Lower body strike (lower micron and variability) and poll strike (increase the number of polled sires)**

*“Very heavy cutting sheep in high rainfall damp sultry conditions get too much fleece rot and body strike.”*

*“Polls have lowered horn strike to almost nothing.”*

*“The tail wrinkle is the last wrinkle to go, and it can take some time to get rid of it.”*



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#### 4. FOCUS ON MANAGEMENT

The key to the success of non-mulesed enterprises was a **flexible management approach** and the ability to react quickly to an unseasonal high risk or incidence of strike. Businesses with a greater focus on the wool enterprise appeared more able to react quickly compared to businesses with other large enterprises and thus less likely to be able to tactically react with sufficient speed.

*“I needed to simplify my other enterprises to make the non-mulesed Merino enterprise work.”*

Husbandry programs were heavily influenced by **sheep type and environmental risks**. One woolgrower in a hot, low worm region, did not drench, did not jet or crutch in most years!!; his whole focus was on high cutting, low wrinkle genetics. At the other extreme, some woolgrowers were either crutching 5 times per year or using flystrike prevention chemicals 3 times per year or a combination thereof.

*“An extra bunghole crutch over a portable sheep handling plant in February, made all the difference in controlling breech strike.”*

*“The hand piece is the best alternative to mulesing we are likely to find.”*

*“My sheep have a bit of wrinkle when they are young, but they lose most of it by the time they are 4 to 5 years old.”*

*“Crutching with dags is not pretty, it is the worst time of the year.”*

A woolgrower who introduced lower wrinkle and cover sheep, quickly found they were less suited to their environment with fleece rot and body strike increasing 7 to 11 times compared to their original sheep. Jetting for body strike became a priority. They quickly decided to slow the rate of progress with breech wrinkle choosing a sheep type that had

been long bred in the local environment.

There was a strongly held view that **improved flock husbandry and management** was important to reduce the risk of breech strike for non-mulesed Merino enterprises. Increasing condition score both genetically and through increased nutrition, reducing risks of other parasites and diseases and thus general health and robustness of the flock is believed to lead to a reduced risk of breech strike.

In most cases it required increased labour for additional surveillance, crutching, stain management, worm control and chemical prevention. However, the extent of the extra labour required varied across environments and sheep types.

It is generally viewed as easier to move to a non-mulesed enterprise with younger labour (i.e. physical ability to treat individual sheep in the paddock and perform extra yard operations) or where there is access to casual contract labour. Other woolgrowers found that upgraded sheep handling equipment that reduced the demand for labour was essential. New sheep handling equipment is a focus for larger growers for both crutching, bung holing, drenching and jetting. A throughput of 1,000 sheep per hour for effective jetting using new electronic handling equipment was regularly quoted.

*“The electronic sheep handler has turned it into a manageable proposition.”*

*“New low-labour electronic jetting equipment has made a big difference.”*

*“New automated sheep handling equipment has taken a lot of the gut bust out.”*

*“Our 50 year old with good dogs is just as good as our 20 year olds.”*

*“Handlers are good but more strategically placed holding yards have also helped.”*







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**Long acting chemical control** options were a focus for enterprises in high strike, high worm and high dag environments. Long acting fly prevention along with long acting drench injectables and capsules become a more important aspect of the animal health program after ceasing to mules. The short-term need for these products overrode the longer-term concerns regarding increased parasite resistance, but woolgrowers are aware that managing the longer-term resistance issue is part of the future continuous improvement plan required for non-mulesing enterprises; it just had to take a lower priority in the early years in a non-mulesed enterprise.

*“It is important to use enough chemical in the first 2 years, err on the side of more not less. Then back it off in future years.”*

Most businesses have **shorter joinings**, ranging from 3 to 6 weeks. This reduces the risk and consequences of an unexpected fly wave during lambing when management options are limited. Short joining and lambing makes accelerated shearing (every 6 months or every 8-9 months) easier to manage, with one grower having moved to joining for one cycle only (17 days). **Early weaning** (oldest lamb 10 to 12 weeks of age) again increased management flexibility but the practice was more common in medium Merino types rather than super fine types. Medium wool flocks were also more likely to move to 8-9 month shearing and then 6 monthly shearing, after ceasing to mules if they had sheep high in staple length.

*“All my ram clients are now shearing every 6 months.”*

**The woolgrowers interviewed had very different approaches and attitudes** to the use of worm and fly chemicals to avoid mulesing. Some non-mulesed enterprises minimised the use of chemicals

preferring to crutch and or bung hole instead, but invariably need the fall back option of chemical control for fly wave conditions. Others almost totally rely on increased worm and fly chemical to keep the incidence of strike low if their calendar of operations resulted in crutching during low flystrike risk months. A few enterprises used the **FlyBoss Flystrike Risk Tool** to plan and adjust husbandry programs.

All enterprises were concerned about how, in a sudden severe fly wave, they could protect their sheep particularly if they cannot access their animals due to floods, personal illness, etc.

*“I can manage the risk of strike in the normal spring and summer seasons, what annoys me is the level of breech strike out of the traditional fly seasons.”*

*“I run body strike resistant sheep and I don't like using prevention chemical. I do try and avoid handling sheep when they are wet and especially if they are wet to the skin.”*

*“Worm capsules were the break-through to get dags lower.”*

*“I've stopped mulesing, but I want to stop drenching and jetting in the next 10 years as well.”*

There were divergent views on what tail length reduced the risk of strike and if short tails or tail stripping increased cervical and or tail cancers. Anecdotally from the woolgrowers surveyed, there appears to be less cancer in cooler cloudy climates and the need for 3 joints to remain on the tail increased as sun intensity and sun hours increased. In higher dag regions there was greater use of the TePari gas knife for tailing.

*“I reduced the size of the mules, then went to tail stripping and have now moved to non-mulesing.”*



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## 5. FINANCIAL IMPACT

The additional cost of moving to a non-mulesed enterprise varied; figures quoted by growers were around \$2-3 dollars per head per year or 50c/kg greasy per year for husbandry costs. However, most woolgrowers were unclear on the details because a range of variables changed, making it difficult to attribute costs accurately. **In general, the focus for woolgrowers was on improving the future demand and viability of wool, their determination to succeed and to make it a good financial decision as soon as possible. No business interviewed moved to a non-mulesed enterprise with the intention to improve immediate financial gain.**

*“The market is sending woolgrowers mixed messages, small but increasing wool premiums and continuing large restocker discounts.”*

*“I need an extra 50c per kg greasy to break even just on husbandry costs.”*

*It is hard to say but I think it costs us around \$2 to \$3 dollars a head extra in extra animal husbandry costs, which does not include labour or impact on restocker sales.”*

*“I need 10% more lambs to make up for the lower fleece weight; I am not sure if I am getting them.”*

The interviews of non-mulesed enterprises did not include in-depth financial review however a general picture emerged of how businesses manage to minimise costs and increase their income.

There was a general view that the increased animal health costs and a large part of the direct labour cost was offset by the improved husbandry and higher condition score, but a much larger survey is required to evidence this view.

The key considerations after making sure that the incidence of breech strike was under control was reducing the discount on restocker sale sheep and maximising the wool sale premium.

### RESTOCKER SALE SHEEP DISCOUNTS

The discount for non-mulesed restocker sheep sales is the biggest financial cost for most businesses but this was variable between regions). It was addressed in a variety of ways;

- Returning to mulesing:
  - the discount on restocker sales, along with increased flystrike were the key reasons that businesses returned to mulesing.
- “Avoiding” the discount by:
  - retaining older ewes in the Merino flock or moving them to the prime lamb flock (up to 7 and 8 years of age) and then selling them direct to the abattoir. This “avoided” the discount on unmulesed 5 years old ewes.
  - classing out young ewes and retaining them for first cross lamb production.
- Retaining wethers for wool production



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Enterprises with lower lambing percentages and low relative numbers of restocker sheep sales (ultra-fine types, or areas where there are wild dogs, OJD or high stocking rates) are less impacted by the discounts.

Anecdotally the size of the discounts vary between regions, depending on abattoir competition and proximity to high profile restocker sale yards. The size of the non-mulesed discount on 1 to 5 years old ewes, ranged from 0% to 40% with 25% being a rough guide. To further minimize surplus sheep discounts, businesses use a range of options such as:

- Using livestock agents with strong links to other non-mulesed businesses;
- Sellers creating their own contact list of non-mulesed restockers;
- Using Auctions Plus to reduce the cost of passing in sheep;
- Classing out high wrinkle ewes early, selling them as prime lambs off grass or via a feedlot;
- Selling the high wrinkle ewe hoggets via the abattoir and penning the lower wrinkle saleyard sheep on skin and wrinkle type;
- Selling restockers preg tested in lamb to prime lamb sires. If sold off-shears and treated with CLiK the sale is more transparent and helps reduce the likelihood of discounting.

### WOOL PRICE PREMIUMS

The premiums for non-mulesed wool have been very small to modest and in most cases, are yet to cover the additional enterprise costs.

However, the premiums are increasing particularly for direct sales with tight traceability. To increase the premiums for non-mulesed wool, businesses are using a range of options:

- Declaring “Non-Mulesed” on the National Wool Declaration and crutching 3 months before shearing to reduce stain;
- Participating in other Quality Assurance Scheme such as SustainaWOOL and Responsible Wool Standard;
- Visiting overseas mills and brands, creating their own brand for boutique products and formally marketing their “wool” and “story” to the supply chain;
- Participation in the Zegna Wool Prize;
- Selling at specific auction sales with forward notification to buyers;
- Obtaining first stage processing feedback data; and
- Obtaining advice on how best to prepare the clip to maximise competition.

*“Mulesing is great insurance against breech strike, I have found out I don’t need it, but you have to be vigilant 24/7.”*



## SUMMARY

There is such a wide array of variables that contribute to the risk and consequences of breech strike: Merino type and sheep enterprise, environment, business type and local markets to name a few. The person in the prime position to determine what is the best lifetime animal welfare outcome is the individual woolgrower responsible for the sheep.

*“The market is pulling us in all directions but the market is still the best way by far to resolve the issue.”*

### CHECKLIST FOR MOVING TO A NON-MULESED MERINO ENTERPRISE

- Plan ahead - a more flexible management approach is likely to be required
- Review flock calendar of operations (joining time and length, date of crutching and shearing) and animal health program (Worm and fly control, vaccinations, drench and jet programs) refer to FlyBoss.com.au
- Get all people in the business on board
- Understand how your environment is different to others, consult local growers
- The focus needs to be on improving lifetime welfare and having a continuous animal welfare improvement approach, rather than mulesing itself;
- Reduce wrinkle and increase production using a sheep type well suited to your environment. Consult your genetic advisor or ram supplier;
- Access additional labour;
- Find preferred livestock and wool selling brokers;
- Review all Quality Assurance programs available to you;
- Minimise restocker sheep sale discounts;
- Maximise wool price premiums; and
- Be determined to make it work

### OTHER QUOTES FROM WOOLGROWERS INTERVIEWED

*“I now mules my sheep not only to significantly reduce the risk of breech strike, but also for other ‘welfare’ reasons such as reducing dags and stain, crutching cuts, use of chemicals and injury risk to shearers.”*

*“If you have the right sheep it is not an issue going non-mulesed in my environment, but I am in a low risk environment.”*

*“Trials are needed to compare non-mulesed mobs of sheep across a range of sheep types and environments, but trials must also take place between ‘mulesed sheep types’ and ‘non-mulesed sheep types’ run under similar management. I got 5 to 10% breech strike in the years soon after ceasing to mules, 10 years later it is down to 2%.”*

*“The shearers whinge, but they keep coming back.”*

*“If there was an alternative to mulesing I would go back to it.”*

*“Rotational grazing lowers dags.”*

*“Worms are a much bigger problem than flystrike.”*

*“Time Controlled Grazing is ideal for reducing worms and drenching, it has solved the need for expensive worm control options.”*

*“Our superfine customers have strongly impressed upon us the need to cease mulesing but, in reality this is only part of the story, ceasing mulesing is part of the animal welfare improvement journey.”*

*“You need to keep non-mulesed sheep in better condition and they need to be more robust.”*

*“It is an important discipline to formally review our animal health program every year.”*

*“I can understand growers’ reluctance to change, but it is easier after several good cash flow years.”*

*“The supply chain made a lot of noise about mulesing, so I stopped, thinking I was doing the right thing, but they did not back their rhetoric with any price signals; add in the extra costs and time and the 33% to 50% discount for non-mulesed restockers and I went back to mulesing. My ram supplier is running a non-mulesed enterprise and I am so glad that he is, I know I can cease when there are clear price signals.”*

*“Need to be precautionary not reactionary to make it work.”*



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*"It is likely that the demand for non-mulesed dams for prime lamb production will increase and hence the discount for non-mulesed dams, well-suited to prime lamb production is likely to decline."*

*"The change in the definition of 'Ceased Mulesed' to only include businesses that buy non-mulesed restockers, will increase the demand for non-mulesed restocker ewes."*

*"Not mulesing is more work and it costs more but the premiums are increasing, and it will soon be a good financial decision."*

*"Financial returns from not mulesing will improve, but it is hard work."*

*"Superfine wool prices are still half what they were in 1986, not sure how much longer I can hang in there even at 2,400 cents kg clean."*

*"All my ram buyers could go non-mulesed, but only 3 have. Overwhelmingly it is due to the 25% price penalty when selling non-mulesed restocker ewes. The younger the ewe, the larger the penalty."*

*"I join the classed out young ewes and cast for age ewes to the prime lamb sires, but the breeding objectives were in conflict between the merino and cross bred enterprises. I had to move away from the superfine Merino type."*

*"Good visual sheep classing is important, need to cull any sheep struck."*

*"I demand a refund for any ram purchased that gets struck."*

*"The discount on non-mulesed sheep has reduced in recent years."*

*"I don't want to tell my ram supplier that I do not mules, I don't want him selecting low wrinkle sheep for me to select for, I want to pick the heavy cutting low wrinkle rams."*

*"The Industry needs more information on how to find and breed high cutting, high growth, moderate mature weight, low wrinkle animals."*

*"It is difficult to be objective about the impact of lower wrinkle on our wool cuts, the ASBVs for fleece weight went down and we are now trying to turn that around."*

*"I reckon I need rams at least minus 0.6 for breech wrinkle but probably closer to minus 0.8 if I am not to overly rely on chemicals" (YFD of minus 1)."*

*"Buyers are looking for rams around minus 1.0 for wrinkle (ASBV) and plus 20 for yearling greasy fleece weight but wrinkle type is also important" (YFD of minus 1)."*

*"It is rare to find a true super fine type with an Adult FD of less than minus 3 that also has a breech wrinkle of less the zero."*

*"It has taken time to get to like the non-mulesed open backed long staple length type, but they are still too big."*

*"Need to get the right skins as well as the low wrinkle."*

*"Don't think our 12-month fleece harvest went backwards as I started 6 monthly shearing, but I think it is going backwards now, it is difficult to find low wrinkle high fleece weight flock rams."*

*"Skins must be plain, pliable and soft."*

*"I lost too much fleece weight, I had to start using breeding values, but it took a while to turn it around."*

*"It would be good to form a non-mules network where growers can contact other local growers for advice rather than growers with different sheep in different climates."*

*"I am keen to meet businesses that have ceased mulesing in an open, honest and transparent seminar."*

*"We started mulesing in 1976 and ceased in 1979, it's not that difficult when you know how."*

*"Mulesing is an on-going risk to my superfine merino business."*

*"I made some mistakes in the early years, but it is part of the journey, a big one was cutting the tails too short for 2 years; I should have also gone harder on reducing breech wrinkle."*

*"A UK visitor walked off the place after seeing mulesing, I realised I needed to make a change."*

*"The wives were asking do we need to keep mulesing?"*

*"You need to be vigilant to make non-mulesing work."*

*"I just needed to be brave enough to take the final step and stop; I never liked mulesing, but I hated flystrike, but you do need good doing low wrinkle sheep."*

*"Going non-mulesed has simply not been an issue for me, but it does cost more."*

*"It was terrifying the first year, but we wanted to make this work."*



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