

Integrated Livestock Classes

Take home messages

Plan ahead and have the right feed for the right classes of stock

Do not overcomplicate the system and ensure the right resources and labour skills are available, be careful of too high workload at times.

Integrated systems should enhance to overall business, not stifle production in other areas.

Current issues and projects

	sheep	cattle	deer	Comments
1 (Wayne Pawsey)	yes finishing	yes finishing	venison and velvet	Over complicated system, Phasing out velveting
2 (Grant Charteris)	12%	14%	85%	Cattle used as a lever for deer Can adjust cattle numbers to suit pasture
3 (John Hamilton)	50%	No	50%	Keep stock classes separate. No cattle and wanting to keep John's disease out
4 (Lindsay)	50%	25%	25%	Hinds on hill, Cows sometimes join them. A few lambs and cows on fattening paddocks on flat. Velvet's on flat. Not a lot of integration. Need more? Esp. for parasite control.
5 Cam	yes 2200 lambs @140% finish all	20	340 hinds, finish weaner deer	All flat. Timing tight as need to get deer away in time to look after ewes and lambs. It's a jigsaw
Simon				Fully integrated, Flat priority fattening. Hinds set stocked on hill with cattle. Cows calve with deer. All deer fattened in one mob. 1-2 day shifts. Cattle compliment deer well and grow well following deer. Sheep not so good as graze too low.
Steve Wright	120 ewes	60 steers	800 hinds + 180 stags	95% deer fenced. Finish everything
Hawkes Bay Geoff	yes	yes	yes	Sheep for ragwort control. MA cows pasture quality control. Diversity. Culled half the sheep and will continue to do this and increase deer. Less, but do them better. Is 3 classes too much?
Ken	33%	33%	33%	Sheep for ragwort control. Challenge having enough feed in the deer unit. Worm burden decrease for some worms but young deer picked up haemonchus from the sheep. Decreasing sheep increasing deer. Not enough sheep for whole property. How do we prioritise animal feed?

	sheep	cattle	deer	Comments
Doug	no	yes	yes	Sheep did compliment deer for ragwort and tick control but couldn't justify economically. Fattening bulls with deer for pasture quality. Will buy/borrow in sheep for ragwort. Major tick problem. Sheep shorn and dipped 2x.
William	yes	yes	yes	Three way rotation deer-cattle-sheep. Sheep for tick control. Capability of staff with different classes of stock is an issue. Benefit is mitigating risk of single livestock classes.
Ben	yes	yes	yes	Young cattle for pasture control. Quality pasture for finishing deer. Challenge when difficult to procure deer. Buy finishing lambs instead. Lambs compete well with deer on finishing returns.
Richard	yes	yes	yes	Hinds calve on hill. Challenge to maintain critical pasture levels in Autumn. Need to get lambs away on time. Sheep good for ragwort, deer for spring cash flow, calves for pasture quality.
Glen	no	yes	yes	Got rid of sheep as they were a hindrance to optimum deer growth. Since getting rid of sheep deer performance has improved. No cattle on weaner country. Deer unit understocked with deer.
	5000 ewes	yes	yes	1200 hinds finishing all progeny. 160 velvet stags 200 beef cows and finishing cattle
	50%		50%	1200 ewes. 360hinds, 100 velvet stags
	1%	14%	85%	Cattle important. Lever to run deer in the way wanted
	yes	yes	yes	Fully integrated, flat 400ha all deer fenced. Weaners, cattle, lambs depending on who needs it. Cows calve in the deer. Weaner on 1-2day shifts
Kevin	yes ragwort	1000 R1	1000 weaner	Dairy support. not grazed in same paddocks. Ewes bought in short term for ragwort. Experimented with cattle/deer balance. Flexible system.
Andy	5% ragwort	bull beef	yes	Summer dry. Rule: In rotation but not together. Integration has increased carrying capacity by 60% Important to get deer away early to ensure enough feed for lactating hinds in January.

Group discussions and advice on integrated livestock classes

Work load

Velveting and lambing can cause high spring workload

With 3 stock classes there is no let-up with work
Can become too complicated especially if velveting as well as finishing
Need to have staff skilled with all livestock classes.
If too many livestock classes, there is the risk that you will tend to focus on classes of stock you enjoy working with the most.

Income

Diversification of income streams
Reduced financial risk
Consider cost of production as well as total production

Cattle

Can co-graze with deer OK although some people have had issues such as heifers worrying yearling hinds during fawning. One farmer stopped grazing cattle with fawning hinds and increased fawn survival by 6-8%. Others have not had any issues.
Good for pasture quality control
Good for lungworm control
Relief valve. Cattle add flexibility to the system. Easy trading stock and can be pushed on poorer pasture.
Buying weaner bulls in December might suit the system when deer leave.
One farmer commented that cattle are calved in paddocks with deer without any issues.

Sheep?

Good for lungworm control
MCF not seen to be a major problem anymore
Useful for ragwort control
Graze too low in some circumstances and reduce optimum growth in young deer
Compete with deer more than cattle and grow dags.
Can be used for tick control - see below

Within species integration

Can be useful
Velvet stags good for summer clean up and lower priority feed during late summer when hinds need high quality

Deer fenced area

Having all farm deer fenced increases flexibility
Lower deer stocking rate on deer area compared to whole farm stocking rate.
Top up fencing might not be best and might have to reconfigure fencelines.
Be prepared to subdivide or use electrics.

Weed control

Ragwort - sheep are partially effective. Varies between farms

Matching feed supply and demand

Match feed demand with pasture growth curve and plan to have high quality feed for the classes of stock that need it.
Feed budgeting
Feed prioritisation

Stock class selection and feed types. - Specialist crops or pastures
 Maximise growth to ensure stock are gone at the right time.
 Feed quality for young growing stock is more important than pasture height as long as
 1600kgDM+

Disease control/risk

LUNGWORM control very good with sheep and cattle
 OSTERTAGIA control maybe achieved at some level
 HAEMONCHUS Sheep can pass Haemonchus onto deer
 TICKS Sheep can be run through deer blocks and shorn and dipped a couple of times.
 MCF not really seen as a big issue on most farms anymore. Used to be a major
 consideration for grazing deer with sheep. Sheep shed the virus which is often fatal to deer.
 LEPTOSPIROSIS can be passed from sheep and cattle to deer
 JOHNES disease can be passed from cattle and sheep to deer. Cattle strain thought to be
 worse.
 Develop good animal health risk management plan for all classes of stock.

Other Challenges

Prioritising and seeing big picture at all times - Think on farm level, not paddock level
 Maintaining right skills.
 Avoid overgrazing deer paddocks, don't treat as second class citizens
 Staff expertise across all classes of stock challenge on larger properties.

General Advice

Keep it simple
 Don't over-prioritise
 Integration should enhance, not stifle the property
 Farm species you like
 Plan ahead. Next year's breeding, next priority stock of class...
 Parasite control is a bonus by default. Main benefit is pasture control.
 Different classes of stock in rotation better in most cases than together. Except cattle can
 be lightly spread amongst deer during spring/summer for pasture control.
 Measure and monitor results

Feed priorities for integrating systems

	Hinds	Stags	Weaners	Cattle	Sheep
Jan	High quality and quantity. Grass @ ME10+ residuals 1200kgDM+ 4-5kgDM/day	Low priority if in good condition. Otherwise need to gain weight prior to mating	NA 13 months can be held if required, except replacement hinds, treat as MA hinds	Lactating cows high priority	Lambs high priority. 2000kgDM, 11.5MJME for optimum growth

Feb	High quality and quantity. Grass @ ME10+ residuals 1200kgDM+ 4-5kgDM/day	Low priority if in good condition.	Eating significant grass under hinds. High quality increases weaning weights		
March	If weaned, medium priority for oestrus and getting into fawn. If not weaned, need best quality feed, probably with supplements	Breeding stags with hinds. Low natural intake. Some high quality feed on offer may reduce weight loss.	Weaning feed. High palatability, familiar feed. 1600kgDM, 11.5MJME, high legume for optimum growth.		
April	Medium priority until end of mating				
May	Maintenance if in good condition. Aim for 3.5 going into winter				
June - Nov					
Dec			Try to get weaner away by Christmas to allow feed for lambs.		