

Pasture Renovation – Is it worth the work

John Butler - Anembo Park Alpacas

Green pasture in summer – could it really be true?

Why would you kill of a pasture only to resow that pasture again ? That was the question I was asking myself on the drive home from a pasture management course a few years ago. There was plenty of talk and information of fertilizers, weed control, grazing management, cell grazing etc, but killing it, to replant it, seemed on odd thing to do. If the pasture was growing and not full of weeds then what could you possible gain.

The property we were visiting for this particular days course, had just purchased a new seed drill worth \$30,000, and were planning to resowing approximately 20% of the property each year for 5 years, then 10 – 15 % each year thereafter. This farmer was an astute business man, successful in many different businesses and I know he didn't like to throw money away.

As the group visited different properties and were given the rundown on the property history it became clear that pasture renovation for some farmers is an essential part of keeping the pasture performing to its maximum. Some of the properties visited had trouble maintaining the stock numbers as the years went by, despite what seemed to be good soil test results. Others were each year increasing the amount of fertilizer used to maintain the same stock numbers. While others preferred to let the property perform in a comfort zone below maximum capacity, while still putting on large amounts of fertilizer.

When we purchase our property we acquired paddocks full of bent grass, fog grass, paspallum, sweet vernal and flat weeds. At the time we purchased we knew very little (bordering on zero) about pastures and how to assess and maintain them, we had no idea what we had just bought. Through cell grazing techniques learnt in the course we were able to change the composition of the pasture and now had some clover and a little rye coming through, with the fog and passpallum diminishing. This convinced me that there was more to stocking a paddock with animals than meets the eye.

As the seasons progressed I was amazed at the differences in the pasture. To an untrained eye most pasture can look OK in autumn and spring but in winter and summer the differences become more obvious. To my surprise that first winter the chap that sprayed out his pasture and had resewn with new pasture species was growing two to three times the kilograms of feed the rest of the group were growing. “New species” he proclaimed “Get rid of the old tired stuff and put in the new stuff”.

What he was referring to was the fact that although the grass keeps growing year after year, it is getting older and older and hence produces less and less. There are new species of plants being developed all the time which can outperform the plant they are derived from, and can therefore assist in increasing the carrying capacity of the property.

I thought we could turn our place on its head just by grazing management and fertilizer application, but now it was apparent that I was in effect feeding steroids to a geriatric. Our paddocks were full of old tired species that needed to be replaced.

The beef farmers I had been attending the course with were all rye grass and clover converts, and didn't entertain anything else. When I told the group that I was putting in a mix from Stephen Pasture Seeds (SPS) they were full of good reports for this long established company. When I went on to explain the mix contained no rye grass, but had some herbs in it they all thought I was mad. One member of the group told me he had just spent hundreds of dollars spraying out weeds that I am about to plant and that I need my head read. As we approach the end of summer and I look out over a green pasture I realise putting in that seed mix is one of the best decisions I have made.

The SPS Alpaca Mix contains

Advance Tall Fescue

Kara Cocksfoot

Au Triumph Fescue

Goulburn Sub Clover

Prestige White Clover

Tonic Plantain

Grouse Chicory

The mix is 60% Fescue 10% Cocksfoot 15% Clover and 15% Perennial Herbs

If you plant some of this in your pasture and see what seems like rabbits ears appearing i.e. a tall fast growing wide (2-3 cm) leaf on a plant it is not a weed but either Plantain or Chicory. These herbs develop a deep taproot that can access minerals and moisture deeper than most grasses. Since the start of the year (6 weeks) we have had 19 mm of rain (normal year over 50mm) but the pasture keeps growing.

After grazing down to 3-4 cm the alpacas are rotated on to the next paddock to rest the previous one. With no rain at the start of January the pasture grew 10-12 cm (total height 13-16) in just over 3 weeks, at which time the alpacas were moved back in to the paddock.

As we have not renovated all paddocks we find using 3 renovated paddocks with 3 unimproved paddocks and varying the rotation times works well. Another benefit is that these new species have a better digestibility than the old pasture. This translates to the animals needing to eat less feed to get their required daily intake of energy and minerals, and less dung to deal with.

The advise from Stephen Seed is that fertilizer requirements are very important to establishing a new pasture and that the pasture is *not* suited to set stocking, it must be rested by using rotational grazing techniques.

We were able to sow the new pasture in March 2001 as the autumn break had brought the required follow up rain. In 2002 we had to wait until early May as there wasn't sufficient rain prior. After the pasture is sown animals should not graze the paddock until you are able to pull at a clump of grass and have the roots stay in the ground i.e. it breaks off similar to an animal chewing it off. In 2001 this was a period of 7 weeks when we put them in for a quick graze then off the paddock for about 8 weeks. In 2002 this period was 14 weeks before putting them in for a quick graze. The difference I believe was the cooler weather slowed the root development and the paddocks soil test was not as good.

Your new pasture should you choose to sow it, will need to have sufficient grazing pressure to keep the length below 15cm. This will allow light to the base of the plant and assist the plant in tillering i.e. the pasture thickens up filling in the gaps between the seed drill rows. Having done all this your new pasture is looking great DO NOT be tempted to cut it for hay the first year. Allow the root system another year to become fully established. An immature root system cut for hay in its first year most probable will not survive summer or will be in very poor shape and unable to respond to the autumn break.

What does it cost and is it worth it?

Seed prices may vary from year to year. Last year it cost around \$7 per Kg and is recommended to be sown at a rate of 25Kg/Ha ie \$175 / Ha . Most alpaca breeders, myself included, will be using a contractor to kill the old and sow the new pasture. The total cost last year was in the order of \$250 / Ha, plus fertilizer costs.

During the pasture course I learnt to measure the amount of feed available for the animals to eat, at what rate it is growing at and therefore do some forecasting on the amount of hay and hard feed required. To my surprise the paddocks on our property prior to putting in new pasture were producing 5-6 Ton DM/HA (dry matter per Hectare). The new pasture is producing 10-12 Ton DM/HA with more even growth through out the year.

In a normal year round bales of hay would be \$100 / Ton and since the new pasture has grown an extra 5 Ton of feed / HA or \$500 of feed / HA for sowing cost of around \$250/Ha it is worth the effort. Don't get carried away. Growing feed that you can't eat is a waste of money, do some planning as to how much renovating you will need to do and over how many years you plan to do it.

Happy pasture renovating