## **Using Horses to Regenerate Land**

by Graeme Hand

Editor's note: The following essay captures some of Graeme Hand's efforts to use horses to regenerate pasture. We asked Graeme to share this information with us because so many of our readers have requested information on how to graze horses in a way that promotes land health.

hen using horses to regenerate land, we create small areas created with temporary electric fencing and portable water. This area contains two horses and is approximately 500 square meters/yards. The horses stay in this area for 3-5 days depending on how much feed is available, and monitoring of dung and ground cover overrides the time we planned. It only takes about 15 minutes to set up the fencing and move the water. Our monitoring is already showing a shift from bare ground to perennials and composting litter with this system.

We always manage for ground cover. The secret is doing the monitoring. Our monitoring has led us to long recovery periods. We usually will wait more than five months before returning to a grazed area. In our monitoring we saw that plants were not regenerating, litter was not building, and animal health was not perfect. With five months recovery we now have no worm problems for the horses, founder, etc. Some people say that horses' grazing style is inherently bad, and they will inevitably damage the land. From our experience I am clear the problem is never the animals, it is always our management.



When animals are handled frequently and well, they become more relaxed. Having lush grass to lie down on helps too!

Another key principle to understand is that horses are designed for large volumes of relatively high fiber feed. Excess protein is a big problem in grazing animal health. The older the plants generally the better balance of protein to energy. To address this, we had tended to give the horses small volumes of high quality feed such as Lucerne / alfalfa hay. But now we don't supplement at all as we always found that the feeding allowed animals to pick up litter by staying too long. This is the way we also run our 200-300 cattle.

We believe well-managed horses are very powerful at regenerating

grasslands. We use them to maintain the grass around the house so we have no need to use herbicides or mow.

Animals become very relaxed when handled often and well. Although I am not sure this is "natural," it is reality. For example, we had a thoroughbred that was dangerous when we first purchased it. Now our kids sit on it bareback while we are shifting temporary fencing.

## **Chook Caravan**

We've also been experimenting with chickens for regenerating land. We put approximately 50 chickens into a used caravan for their nesting area and allow them pasture so we can have free range eggs and improve



Chickens have also contributed to improved land health. There are spots where the chickens have been over two years ago that are still growing more grass than areas not treated by the chickens.

soil health. While the chickens are not an income generating activity, we use the eggs as a reward program for our branded beef. It only takes an hour /week to shift the van and the dogs. We have the chickens follow the cattle, and they usually only range out about 50 meters/yards from the caravan.

Planned grazing is now very simple because we've learned the most important point is making sure recovery isn't too short.

We shift the chickens on a weekly basis with the door left open, but we tie a kelpie (used as cattle dogs) at either end for protection from foxes. We originally didn't have the dogs there, but after losing a few chickens because we forgot to close the door, we decided to tie the dogs to the van

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and have only lost a rooster since. We do not close the door except to lock in the chickens for a big shift. Normally we only shift the caravan 100 meters/yards, and the chickens shift themselves. With weekly shifts, the caravan becomes home, not the ground they roam, so the chickens continue to produce eggs even with moves.

For us, this experiment is a good design of using pets and chickens to regenerate pastures and the area surrounding our home. We have lower costs, better eggs, and less mess. We found it was important to maintain high levels of straw in the caravan to eliminate smells. Now our children take their friends inside the caravan to play in the warmth with the chooks (chickens). We rake the top straw layer and chicken manure out of the caravan with a leaf rake before each shift.



The photo on the left was taken in 2004. The photo above was taken in 2005. As Graeme moved to at least a five-month plant recovery period, he experienced a shift from bare ground to more perennials and composting litter.

We now have spots where the chickens have been that are still growing more grass than areas they haven't been even after two years since the chickens were moved. The manure and straw are left to compost where we leave with no additional labor for spreading necessary.

For us the caravan is an example of how simple changes can lower costs, improve ecosystem function, improve products, and reduce work load. The hard part is working out what the simple changes are for all activities on the farm. But, evaluating actions using the testing questions allows long-term benefits to be gained.

We currently run 200 cattle on 550 acres (220 ha), also on greater than five-month recovery during the growing season, and one or two selections during the non-growing season. We see the land health improving rapidly.





Graeme is working toward not only reduced bare soil but a more effective mineral cycle with composting litter. By not supplementing feed, the horses are less likely to pick up plant litter needed for improved land health.

## With five months recovery we now have no worm problems for the horses.

We only adopt practices that build soil. Monitoring is key to making sure that we are achieving the results of increased soil health. Planned grazing is now very simple because we've learned the most important point is making sure recovery isn't too short. This is a far bigger issue for us than our concern of not grazing too long.

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