

Drought Management— The Australian Way

story and photos by Duane McCartney



Roger and Jenny Landsberg have been instrumental in initiating the formation of the new and exciting Australian Land Care Movement—a producer driven organization that promotes sustainable range management in the harsh environment of the Australian outback. The Landsbergs operate an 80,000 acre cattle station—that's Australian for a really big ranch—in the outback of Queensland, Australia. During the past few years Roger and Jenny have been practicing conservation grazing management while maintaining a profitable and sustainable cattle operation during their 10 years of drought. My wife and I are part of a group of range scientists and land managers from Kenya, Namibia, South Africa, Nepal, Britain and North America, who were invited to stay on the Landsberg's Trafalgar Station for two days to experience life in the Australian outback.

Roger and Jenny's Trafalgar Station has been in the family for over 80 years. Roger's grandfather bought it fully stocked in 1913 with 3,000 cattle and 300 horses, one man-made water facility and one divisional fence which virtually halved the property. Today Trafalgar Station is an excellent example of how an Australian outback station can be managed as a sustainable enterprise even after 10 years of the worst drought in the history of the region.

Our group heads inland from Charter Towers, an old gold mining town, about a six hour drive south of Cairns, Australia. As we head into the outback, the pavement narrows to one lane. Vehicles pull over to the dirt shoulder as the big cattle trains go roaring by. That's three 40 foot double decker cattle liners all hooked together and pulled by one tractor—and they really move! We are traveling in the eucalyptus savanna grazing lands. Grassy understory dominates the region with pockets of open grassland. The area is predominantly tussock grasses with a wide range of summer annual grasses, forbs and native legumes. Soils are poor and severely deficient in phosphorus. When it rains, as it has during the past two years, the region can receive 500 to 700 mm. However, rainfall is extremely variable between years and 80% falls between December and April (Australia's summer).

Our bus now turns onto a narrow gravel road. The only indication of civilization is a simple "Trafalgar" sign at the road junction. Half-an-hour passes and we find ourselves at a lonely cattle gate. Once through, the road leads to an open grazing area and in the distance we can see the windmill and yard site of the Landsberg's Trafalgar Station.

After formal introductions are made, our hosts and their three young children show us to our tent accommodation with large air mattresses and heavy sleeping bags. It is winter in Australia and temperatures can get down to freezing. Jenny and Roger, besides operating a grazing operation, are also part of the American "People to People" program, where American students spend two nights on a "real" Australian cattle station during their three week journey from Sydney to Cairns. This year they have already hosted 500 students—a tour bus load at a time.

The Landsberg family has greatly improved Trafalgar Station since 1913 when one fence divided the property in half. Today there are 150 miles of fence, 50 grazing paddocks, many developed water sites, working corrals and an electronic

scale and electric cattle identification system. Apparently Roger is one of a very few innovators in all of Queensland using electronics and computers to manage a station.

We all pile into two 4-wheel drive Toyota land cruisers and head to the grazing paddocks—the biggest being 18,000 acres. Roger checks his watering sites once a week. It's a 50-mile circuit for him and I thought that I had a lot of pasture to watch back home in Canada!

We head down a dirt trail, through the eucalyptus woodlands and grazing area. There is plenty of dried grass under the eucalyptus tree canopy. Australia has over 300 different kinds of eucalyptus trees and some types are the sole food source for the famous Koala bears. Roger brings the American students out to this area on the station to demonstrate his love of the land. He explains that by using land care or conservation management through the drought years, he has been able to keep Trafalgar Station a viable and sustainable operation. Most of the students come from the big American cities and have never been on a farm, let alone a real Australian outback cattle station. Cattle management and land care are completely foreign to them. Roger tells us about two teenage American girls threatening to have their parents sue the "People to People" program organizers if they had to sleep in "tents" on a cattle station. The girls later

confessed, that Roger and Jenny's station experience was the best part of their entire Australian trip.

In the early days the station was in open forest country. This allowed for easy "mustering" (that's Australian for roundup). Now part of the region is in dense shrub cover. This is the legacy of "no fire" for brush control program of the 1970s and 1980s. Roger has re-introduced fire as an important management tool on Trafalgar. Opponents of "burning off" argue that it is a waste of grazing resource to "spell" (that's Australian for resting a paddock for a year) and the grass could be better utilized by grazing stock. This is true in the short term but Roger is managing for the long term and is willing to accept these "perceived" sacrifices. Roger tells our group that fire has the added advantage of promoting green pick, thus increasing animal production. Fire can be used to manipulate native pastures by creating a more desirable composition and controlling the woody weeds which overtake the landscape. "Locking up" paddocks or "spelling" paddocks for a year improves the fuel loads for fire. It also allows Roger to use these areas of extra grass for grazing in years of drought rather than being forced to sell off parts of the

herd. Today 15 to 20% of Roger's station is spelled each year on a rotational basis. With the many divisional fences this is relatively easy. Through the combined benefits of conservation stocking and resting paddocks, there is a noticeable change in the density of perennial grasses on Trafalgar compared to the rest of the region.

In the past, Roger has cleared eucalyptus regrowth using a 600 ft. off shore oil rig anchor chain pulled between two large caterpillar bulldozers. The process proved to be too expensive as the control of the sucker regrowth had to be done every six to eight years. Roger now maintains about 10% of the total area of Trafalgar as cleared grazing land. The balance remains in the native state.

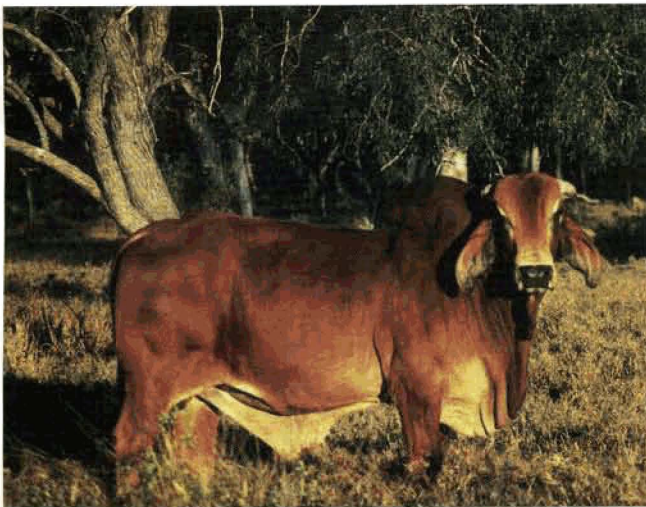
Our tour continues but suddenly the lead vehicle stops. A group of kangaroos have been sighted. These are the first our group has ever seen in the wild. There are many different types and species of kangaroos in Australia and we had seen several different types in the game park back in Sydney. We carry on and finally arrive at the river crossing. During the wet season, this river is a torrent of water. Now in the dry season (July–August) the dry riverbed is



The International tour group of range managers from around the world listening to Roger explain his cattle management program.



A typical eucalyptus woodland and grazing area on Trafalgar Station.



This Brahman (cow) is typical of the quality of the cattle herd at Trafalgar Station.

covered in huge boulders. There is no obvious path to follow and in "bull" low the 4-wheel drive kicks into action and we proceed to bounce and groan our way through the boulders and up the steep embankment. Our son back home in Saskatoon would have given anything to bring his rusted out 1978 Toyota Land Cruiser here to bounce through this course!

Finally we arrive at the water hole and cattle camp. In earlier days the cattle hands would stay out here. It consisted of a shed roof with no walls, wood cookstove, bunk beds, a table and a couple of chairs. It was a simple existence in those days. Now two people operate the station. Two extra casual cow hands are brought on at mustering time. Roger rents a helicopter for the roundup and in three hours they can accomplish what used to take 5 people two days.

The sun sinks quickly as our group starts the long trek back to the house. With numerous gates to open and close along the way, we inevitably let one of the young saddle horses escape through the gate to roam in the 18,000 acre paddock.

Jenny and a helper have been busily preparing the evening meal. Drinks are served on a large patio in front of the open kitchen and outdoor eating area. Roger recently built the new kitchen facility to accommodate the bus loads of American students. Over supper, Roger shares more of his love and enthusiasm for Trafalgar Station. His grandfather

started with British cattle but they couldn't survive the many droughts. The family introduced Brahman cattle in 1958 and now the herd consists of about 3,000 head. A large portion of the core herd are Brahman-Limousin cows mated to Brangus bulls. The steer and heifer calves are ideal for the local butcher trade. There is only one major meat processing facility in the area and international markets are of utmost importance. Cattle are marketed at 2 1/2 to 3 1/2 years of age to produce a 660 lb. carcass with 6-13 mm (1/4-1/2 inch) of backfat. Twenty percent of the beef market is in Japan with other markets in Korea and America. However, with the significant down turn in these export markets, Roger has diversified into the Asian live export trade for young feedlot type cattle. This young cattle market has the added benefit of being able to relieve grazing pressure during drought. With global beef trade and changing economics in traditional importing countries, Roger and the Australian red meat industry do not put all their faith in any one market.

Roger's key aim of cattle management is to increase the productivity of the herd and improve profitability while maintaining a herd size that is sustainable during the drought periods. Only 40% of the available forage is grazed in any one year. The balance is left for next year and if it

doesn't rain he grazes the extra grass rather than relying on feeding supplements and stored feed. His mottos are: *Managing always for drought* and *Always lower your risks.*

A stringent culling program is used along with a well managed heifer breeding and pregnancy testing program. The bulls remain with the commercial herd year round due to lack of breeding paddocks. All cows are pregnancy checked in August/September (spring) and open cows are sold. Cows have access to a phosphorus/urea lick. This has resulted in weaning percentages around the acceptable 75% range. Weaning weights range from 300 to 450 lbs. Cull cows are spayed and fattened on grass for several months before selling. In good condition, they are sold for fair market value. Roger uses electronic identification tags on his cattle but he needs better feedback on carcass grades from the meat processor. In order to get feedback on the quality of his cattle, Roger personally follows them through the kill floor. Lack of suitable integrated computer programs for keeping track of animal weights and electronic ear tag information is a major constraint to the operation. As Roger states: "It's very difficult to get an electronic scale or computer rep to come out to an outback cattle station for a service call",..... and Roger's nearest neighbor is 25 miles and 25 gates away.



Roger demonstrates his calf tripping table.



Some of Roger Landsberg's bulls that are for private sale.

The station also produces Brahman crossed breeding bulls for sale to other commercial breeders. Roger's stud bull cost him \$30,000 and, along with some AI (artificial insemination) breeding from off shore bulls, he is able to privately sell herd sires in the \$1,500 to \$5,000 range.

Cattle diseases are relatively small with botulism being the most prevalent and fatal. It occurs when cattle eat dirt or old bones in an effort to consume phosphorus. The disease can be easily prevented through a yearly vaccination.

Jenny now joins us in the after dinner conversation and shares the trials and joys of home schooling. This is distance education in the truest sense. Roger, like most other station kids, was home schooled with his four sisters until Grade 9. In those days there was very little opportunity for socialization amongst other boys. As a result, Roger quit boarding school in Grade 10 due to social classroom pressures. For many station families in the past, home schooling was not an option and mother and children had to move to town for the school year.

Jenny has worked very hard to educate her four children. Roger built a small classroom facility adjacent to the house. Regular school hours are from 7:30 a.m. to 3:00 p.m. and each child is taught to learn independence. Every day each child has a 30 minute teaching session on the two-way radio with about 10 other neighbor children in the district

and the teacher in Charter Towers. In some remote areas some of these lessons might take place in the truck while the father is out tending the cattle. Years ago a traveling teacher would come and stay on the stations for a week at a time. However, this is not the case any more. Jenny's biggest difficulty is challenging the gifted child without upsetting the other siblings. The home school prepared lesson program is designed for the average child with little emphasis on the gifted child that needs a challenge or the one that is having difficulty learning. Both Jenny and Roger want their children to have lots of social contact with their peers. There are planned sporting events at the public schools in Charter Towers several times each year. Through e-mail, and the radio telephone, their children are able to keep in touch with others in the region. The radio phone is the main link with the outside world and the daily mothers' chat lines are of utmost importance to the isolated women. Jenny had to improvise and develop most of the additional teaching materials on her own as very little additional educational or testing material is provided. In the past, Jenny's other challenge was teaching three children in different grades while nursing a baby at the same time.

The exposure of their children to the visits of the American students through the "People to People" program has been of great benefit. Children stay in home school until Grade 7 or 12 years of age.

They then go to a boarding school in Charter Towers where her oldest son is presently attending. Many station kids in the past have been encouraged to come straight home after schooling but Jenny and Roger will be encouraging their children to get different educational and job experiences before thinking of returning to life on an outback cattle station.

The evening continues, a camp fire is lit, and Roger fetches his guitar and begins to sing some old folk songs. Our multi-national group joins him in Australia's most popular song, "Waltzing Matilda". Many songs later the members of our group slowly make their way to their respective tents. The night is crisp and there are a thousand stars in the southern sky. The Southern Cross—the equivalent constellation to our Big Dipper—can be easily identified. As I drift off to sleep I recall Roger's comment of why anyone in their right mind would calve cows in a Canadian winter. And I wonder, why anyone would ranch in an area where three of the most deadly snakes in the world come into your front yard.

Good night from Trafalgar Station in Queensland, Australia.

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