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Range Management Newsletter

Official newsletter of the Australian Rangeland Society

Editor - Dr T. Fatchen, Roseworthy Agricultural College, Roseworthy, S.A. 5371

No. 78/4 December, 1978.

EDITORIAL

The Editor's letterbox is now groaning under the weight of contributions received. As a result, this issue contains a fat section on mechanical regeneration of rangelands, some Kangaroo chasing, and some springboards for more discussion. Many thanks for the mail - don't let it stop.

Some cries of wrath and chagrin have reached me because of the late arrival of the RMN. The last two issues have been bedevilled by delays in production, printing and distribution. Hopefully, this issue will appear nearly on time (but just in case, have a pleasant Easter). Publication involves several people spread across the continent, and delays are often unavoidable - particularly as the work is voluntary, and must often take second place. Nonetheless, please bear with us - RMN is at least appearing every three months, even though they've been the wrong ones lately.

TIM FATCHEN
Editor

Deadline for next issue : February 28th, 1979.

1979 CONFERENCE AND A.G.M. - ROSEWORTHY, S.A.

The conference and annual general meeting for 1979 will be held at Roseworthy Agricultural College, Roseworthy, S.A. on Tuesday 15th and Wednesday 16th May, 1979.

Two field tours are definitely on offer, the first a one-day tour of the north-east S.A. pastoral areas on Monday 14th May; and the other a two-day tour through the north-east, lower Flinders Ranges and Whyalla districts, on Thursday 17th and Friday 18th of May.

All members will receive shortly a printed brochure for firm registration, with information in detail.

Deadline for papers has been put back to 31st January 1979, more in hope than anger, as present contributions still include none from graziers (see below). Please put pen to paper and make your voice heard.

Papers received after the deadline might possibly be handled, but unless they are already typed and duplicated, the chances of mailing them out to members beforehand are minimal.

ON CONFERENCES AND PAPERS

From: Dr Brian Roberts, Darling Downs Institute of Advanced Education, Toowoomba, Qld.

Combined sessions of graziers and scientists are essential if we are to maintain realism and an appreciation by both groups of the other's point of view. This is particularly important for the young scientist who all too often disregards the way in which range management must be an integrated applied science, within which he usually selects only a small facet for his study. If more of our researchers could specialize in generalizing, the application of results would be considerably easier.

We should beware of the simplistic evaluation which equates the amount of "scientific hand data" with the value of the contribution. I can't help thinking that the (qualitative) utterances of Bill Bolton Smith and Geoff Rodda should carry considerable weight and that some of our quantitative reports are extremely difficult to evaluate when asking "so what?". I write this to encourage our grazier members not to be backward in coming forward with papers on their experience, observations and opinions.

(MORAL: Graziers! Papers for the conference please. Ed)

GOVERNMENT AID (?) FOR CONFERENCE ATTENDANCE

From: John Childs, Hon. Sec. A.R.S., P.O. Box 282, Charleville, 4470

Following a recent Executive Council meeting (20 July, 1978), I wrote to the Department of Primary Industries, Canberra, seeing information on the availability of financial support for primary producers to attend Australian Rangeland Society Conferences and Workshops.

Similar letters have been written to the Australian Wool Corporation and the Australian Meat and Livestock Corporation.

To date (11 Sept), only the Department of Primary Industry have replied.

DEPARTMENT OF PRIMARY INDUSTRY

Canberra, A.C.T. 2600 16 August, 1978.

"Dear Mr Childs,

"Thank you for your letter of 1 August 1978 in which you enquired about the possibility of Commonwealth Extension Services Grant (CESG) funds being available to assist primary producer members of the Australian Rangeland Society to attend Society Conferences and Workshops.

"I am aware of the valuable function that your Society performs in trying to improve communication between researchers, extension officers and primary producers on matters relating to rangelands research. However, I regret to advise that financing primary producers to attend conferences is not the type of activity suitable for CESG funding.

"I am not aware of any other funds available from within the resources of this Department which could be used to assist your primary producer members.

Yours sincerely,
(sgd) P.B. ALLAN
Acting Assistant Secretary
Extension Services Branch"

LATE ENTRY

MINUTES OF THE SEVENTEENTH COUNCIL MEETING OF THE AUSTRALIAN RANGELAND SOCIETY

Held at 8.30am on Wednesday, 29 November, 1978 at Charleville

Present: Dr W.H. Burrows, Chairman; Mr G.R. Lee, Treasurer; Mr J.R. Childs, Secretary.

Apologies: J. Vickery, R. Condon

Previous Minutes: Were accepted and signed as a true and correct record. Burrows/Childs

Matters Arising: 1. Audit provisions for subbranches. To be further considered by the auditor.

2. "That membership subscription for 1979 be $16, with a $2 discount given to those members who pay their subscription within the first 6 months of the year that is before 1 July, 1979". Burrows/Lee

3. "That those members who have not paid their 1978 subscription as at this date (29 November 1978) will not receive issues of the Society's Newsletter after the March 1979 issue". Childs/Lee

4. "That those who have not paid either their 1977 or 1978 subscriptions will not receive copies of the Society's Newsletter after the December 1978 issue". All members in arrears have been notified twice in 1978 of their membership subscription status by the Treasurer. Childs/Lee

5. The Secretary will write an article for the newletter detailing the subscription and discount for 1979. A "tear off" subscription form will be added to the December Newsletter.

Correspondence Inward was received and outward endorsed. Burrows/Lee

Matters Arising: The President is to ring Mr Wilcox re the Rangemans News article and Mr Howes re-publication details.

Treasurer's Report & Membership report: Will follow in March Newsletter(Ed.)

General Business. The emblem. Those submitted were discussed. It was deceided to ask for more submissions. Artists' impressions of the submissions will be displayed for comment at the March 1979 Meeting. There being no further business, the meeting closed at 9.40am.
W.H. Burrows, Chairman,; J.R. Childs, Secretary.

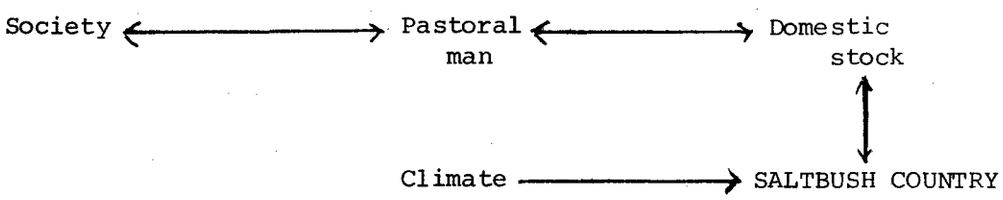
SALTBUSH FIELD DAY: BROKEN HILL

From: Roger Stanley, Broken Hill Branch of the A.R.S.

The recent field day on management of saltbush country organised by the rangelands programme of the C.S.I.R.O. Division of Land Resources Management for the Broken Hill Branch of the Australian Rangeland Society was an interesting and instructive day.

Unfortunately, however, the day was poorly attended - we picked a bad time (competition from other events), bad weather and a blowfly wave, and of the 40 people present only 12 represented the grazing industry.

The day was held on Dr Dean Graetz experimental site (Graetz River Downs) on the Mundi Mundi plain, and was based on a framework which looked something like this:



It would be too hard a job to summarise the information which was presented on the day. Anyone who is interested may obtain a copy of the booklet containing the material presented, by writing to the Secretary of the Broken Hill Branch of the Australian Rangeland Society, P.O. Box 531, Broken Hill, 2880. Please note that although the day was poorly attended and we have a number of spare copies of the booklet, the supply is not unlimited and we would prefer that you have a definite interest in obtaining a copy. Graziers will be given preferential treatment, so if you have bush country please take up the offer while it lasts! Contents:

"THE MANAGEMENT OF SALTBUSH COUNTRY"

The saltbush country of Australia	Dean Graetz*
The saltbush country of the Barrier Range and Mundi Mundi Plain	Roger Stanley# John Lawrie#
Diets of sheep and cattle on saltbush country	Dean Graetz*
Demonstration of diet collection methods	Brian Dixon*
Overgrazing: causes and consequences	Dean Graetz* David Tongway
Animal productivity on saltbush country	Allan Wilson*
Rainfall and risk	Dean Graetz*
Management of saltbush country - A.Experimental studies	Dean Graetz*
- B. Management Options	Allan Wilson
- C.Pressures and Constraints on Management	Mike Young

*C.S.I.R.O. Deniliquin.

Soil Conservation Service, Broken Hill

Hopefully we will select a better day for the next function of the Broken Hill Branch and get a good attendance, particularly of grazier members, as we research and extension people have as much to lean from the grazier as he does from us (in fact probably more!).

In the hard-red country around Cobar, carrying capacity can be lifted by at least 5 times over that of a bare ridge, and probably more.

Assuming 2 years spell after furrowing, production of 5.5 kg wool per head per year, cost per head per year to run sheep of $5, and wool price of 200 cents per kg, the cost-benefits for a 100 hectare area on which carrying capacity has risen from 1 per 12 hectares (i.e. 8 sheep) to 1 per 2 hectares (50 sheep) are as follows:

	Progressive Extra Cost $			Progressive Extra Returns $
Year 1	Furrowing: 100 ha @$10 =		1000	0
Year 2			1000	0
Year 3	+ 42 sheep @ $5	(210)	1210	462 (42 x 5.5kg x 200 cpkg)
Year 4	+	210	1420	924
Year 5	+	210	1630	1386
Year 6	+	210	1840	1848

area spelled

After the sixth year money starts to be made, although increased returns from the treated country begin in the third year. Additional benefits are the provision of good quality feed on which sheep can be held during shearing, blow-fly waves, times of grass seed fall, or even for lambing or fattening. Furrow-lines at Cobar that have been grazed for up to 13 years still retain their identity well.

The main value of furrows has been shown to be in their aiding infiltration of water into the soil. On hard-red soils up to 85% of rainfall can be lost as runoff and falls of about 35 mm of rain are needed to wet the soil to any depth on untreated areas. In furrow-lines and adjacent to them, the soil remains moist for a large proportion of the time. Furrows also trap moving soil and seeds.

Detailed results of the trial and associated information have been published as a book, limited copies of which are available from

Soil Conservationist,
P.O. Box 211,
COBAR, N.S.W. 2835

References:

Cunningham, G.M., Walker, P.J., Green, D.R. (1976) Rehabilitation of Arid Lands. 10 years of Research at Cobar, N.S.W. Soil Conservation Service Sydney.

Cunningham, G.M. (1969) Contour Furrowing and the Estimation of Contour Furrowing Costs in the Cobar Area. J. Soil Cons. Serv. N.S.W. 25:134-148.

A GRIM FAIRY TALE (without pictures)

From: Roger Oxley, C.S.I.R.O. Division of Land Resources Management, Deniliquin N.S.W. 2710

Once upon a time in parts of N.S.W. and Qld there were no sheep, no cattle, no rabbits and the land grew lots of nice grass. Then came the search for new lands to graze and the sheep moved along the great rivers to eat the new pastures.

We all know what happened.

The sheep and rabbits ate all the grass, there was no rain to grow any new grass, the winds blew the soil away, fires were discouraged. Shrubs revelled under these conditions and grew in such profusion that much of the country became virtually useless as a grazing proposition.

This story is obviously not new. However, it would be nice to have it illustrated with pictures.

Graziers, how about looking through your old photo albums for pictures showing the country as it used to be early this century or perhaps even before 1900. You may have a photo of a tank being excavated, yards or fences being erected or general views of your property. If you have any such photos and could show me exactly where (and when) they were taken, the same spot could be rephotographed now and so the story could be illustrated.

If you think that you can help, I would be very interested to hear from you.

COST/BENEFIT FIGURES FOR MECHANICAL REGENERATION OF RANGELAND

From: Peter Walker, Soil Conservation Service of N.S.W., Cobar.

The Soil Conservation Service at Cobar has carried out extensive trial work on the use of contour furrowing as a range reclamation method.

The site used is on a typical "hard-red" ridge, which, at the time of furrowing was estimated to carry 1 sheep per 12 hectares and had a vegetation cover of about 3 per cent. Parts of the ridge were furrowed in 1963 and other parts in 1968, with furrows spaced at either 1.5 or 3 metres apart.

The furrows were built with a single-furrow mouldboard plough, pulled by a 62 hp tractor and at that time (1969) the cost per hectare was approximately $4.40 (tractor and operator hired).

After a spell of from 18 months to 3 years for volunteer establishment of native pasture species, the area was stocked with wethers on a rotational basis on 5 furrowed paddocks, at an overall stocking rate of 1 sheep per 2 hectares. This rate has been maintained continually since then which included the latter part of the 1964-67 drought and the very dry year 1972. Considerably more stock could have been carried since favourable seasonal conditions set in mid-1973. In 1972 the wethers cut an average of 5.5 kg (12 lbs) per head and were fat, while sheep were dying on some properties in the district.

Current furrowing costs are estimated at $10 per hectare, assuming a hire cost of $15 per hour for tractor and operator, a speed of 5 km per hour and 3 metre furrow spacing. Obviously, the cost will depend on the size of the tractor, hardness of the soil, speed of operation and spacing of the furrows. Use of the grazier's own implements and labour would reduce this cost.

RESERVATIONS ON COST/BENEFIT ANALYSES

From: Dr Brian Roberts, Biology Department, Darling Downs Institute of Advanced Education, Toowoomba, Qld. 4350

I suggest that since each case of mechanical regeneration is unique in its combination of soil, seed supply and season, it is not possible to predict either economic benefits or biological success in a particular area from other case histories.

We have probably all seen scalded areas with slight slope, which despite being destocked for several seasons, do not respond to sparing even when reasonable rains occur. Given a source of seed (blown in or actually sown) and two or three weeks of moist weather (how often does that happen?) then establishment may occur. We can probably all quote both successes and failures we have known with mechanical regeneration. I submit that while we may be able to put a cost on the operation predicting the benefits is almost totally dependent on the luck of the rain that follows, particularly how it is distributed. My own experience in the same paddock in successive years, where all factors but rain are comparable between years, shows this clearly. I would also suggest that because of the effect of animals' hooves, some soils regenerate better under light grazing than under no grazing. On some sandier soils neither mechanical means nor destocking is required for successful regeneration.

COSTS IN SOUTH AUSTRALIA

From: Garnham Skipper, Manunda Station, Yunta, S.A. 5440

There were seven square miles of 'clay pan' country on Manunda in 1943, when I came there. These had absolutely nothing on them - wouldn't carry a sleepy lizard - and we were paying rent on it. In 1946, we tried out ripping using a double furrow plough with rips half a chain apart, at a cost of $1.40 per hour for 64 hours. More was done in 1947 for a total of 1184 hours, $1657.60, and 1813 ha. With a faster plant and a mouldboard plough on three-point linkage, half the area was covered again in 1953 with two rips between the old furrows. Cost was 40½ hours at $3.50 per hour for $141.75. Overall, the whole operation on 1813 ha cost $1799.35 ($0.99/ha).

The rains after the operations were: 1946 - 207mm, 1947 - 221mm and 1953 - 154mm, 1954 - 192mm, 1955 - 295mm.

The area is now fully bushed and grassed and in excellent heart. Prior to the treatment, the area was a dustbowl, detrimental to the value of the wool clip, but there is no dust at all now. The land is regularly stocked.

(The station now possesses a fourdisc pitter, which was bought for $354 and is used whenever there are moments to spare to pit odd patches. With assistance from the S.A. Agriculture Dept., 59 hours were spent "tidying up" in June 1977. A rain of 63mm in November, 1977, appeared to have no effect, but June, 1978, rains (61mm) have brought on the quickest regeneration I have seen - 80% of pits showing a good growth of herbage.)

The point is, even with high cost of works today, why pay rent on bare country?

WATERPONDING

Pastoralists thinking of attacking their own scalds with machinery should also bear in mind the possibilities of water ponding. A road grader or wheel tractor is used to construct banks 30 to 45cm high to contain runoff in a network of shallow ponds over the scald. The water initiates the reclamation by percolating through the scald and leaching salts down the soil profile. The clay subsoil subsequently swells and heaves, giving a deeply cracked surface which traps seed and readily absorbs water. In a study at Nyngan, N.S.W., the increase in dry matter yield per annum went from almost nil to 2460Kg/ha, for an initial cost of $1.60 ha (1967). Details of the operation and its costs are given in -

Cunningham, G.M. (1970). Waterponding on scalds. J. Soil. Cons. NSW 26, 146-171

Cunningham, G.M., Quilty, J.A. and Thompson, D.F. (1974). Productivity of waterponded scalds. J. Soil Cons. NSW 30, 185-200

PITTING AND CONTOUR RIPPING - YET MORE COMMENTS

From: Roger Stanley, - Soil Conservation Service of N.S.W., Broken Hill.
Brian Clarke - Kayrunnera Station, via Broken Hill.

Unfortunately Brian Clarke's article "by The Handful" (RMN 78/2) has apparently given a wrong impression of his attitude to reclamation, which is certainly not "casual or contemptuous" as K.D. Afford suggests (RMN 78/3 pp 7-8). Brian's spare time is limited, and as the deadline for the next issue is only days away he has asked me to try and "clarify the picture" on his behalf.

Before Brian's father took over Kayrunnera the property had few improvements, and in dry times up to 10,000 sheep used to water at a well not far from the homestead. Consequently large areas of bladder saltbush and bluebush pastures were killed and the area round the house became a dustbowl.

Since 1967 Brian has successfully reclaimed some 700 ha of this country by contour ripping. Brian put many hours into the development of a ripper point which would not wear too quickly on the hard soils in the area, and came up with a rip spacing which he considers best for the general slope and rainfall of the country. The ripping treatment has resulted in good natural regeneration of the bush, and with a good run of seasons the areas between rip lines now support good annual and perennial growth.

One of the reasons Brian wrote "By The Handful" was that in the West Darling country few graziers have bothered to use mechanical reclamation techniques, despite their proven success. Throwing seed into a flowing creek is, by comparison, much less time-consuming, and Brian hopes that positive results from this technique will encourage people to use other revegetation methods.

Some details of Brian's ripping are as follows:

Machinery: single ripper attached to 3-point linkage of MF 35 tractor.

Rip Spacing: 4 metres - rips roughly on the contour (no surveying)

Average Speed: 10 kph.

Cost: $7.00 per hour ($2.00 per hectare) including operator, at that time (1967-1970).

Benefits:

Estimating benefits is not an easy thing - Peter Walker (Soil Conservation Service, Cobar) has done a detailed analysis of the cost and benefit of contour furrowing at Cobar (see this issue). We have decided to take a different and much simpler approach, as follows:

Additional land is very hard to get in New South Wales. Bare degraded country is unproductive, and virtually the only way most graziers can increase the number of stock they can safely run is to reclaim these degraded areas, which we think can be made to carry as much as nearby non-degraded soils. It also means cleaner wool, less dust and less erosion.

Reclamation of a degraded area is better than buying and maintaining the same acreage of non-degraded land so long as the current cost of treatment is equal to or less than the cost of the additional land. When additional land is not available we feel that mechanical reclamation methods are definitely worthwhile, especially when done in periods when labour is not tied up elsewhere. These methods represent one of the avenues open to New South Wales graziers to safely run more stock.

The Soil Conservation Service is currently looking at the effectiveness of tyne pitting as a reclamation technique on different soil types throughout the Western Division. A final evaluation of the technique is not yet possible, but we do consider that it can be successful on brown gibber soils, desert loam soils and limestone soils, and would take the same approach to estimating the benefits of pitting.

As a final comment, I was most interested in K.D. Afford's guidelines for mechanical reclamation, and would hope that other graziers who may be able to add to these put pen to paper as a further contribution on this topic.

WESTERN DIVISION SCRUB CLEARING

From: D.W. Chalmers, Tillara Station, Balranald, N.S.W. 2715.

I would like to put down some of my experiences, and results, of Mallee clearing operations on Tillara Station, commencing in the early sixties. At that time, the holding of Tillara was 90% scrub. This has now been reduced to approximately 50% scrub.

Mallee pulling operations were started in this district by Gren. Price from South Australia, using two D8 bulldozers with a long loop of heavy cable behind. Later contractors used ship's anchor chain. It was uneconomic to pull small areas with this equipment, as the time lost in turning added greatly to costs.

The pulled Mallee was left lying for two to three years. Any patches of less dense Mallee was stacked on to green stumps with wheel tractor and front mounted rake. The burning of this gave a good kill of re-growth. The main blocks of Mallee were burned in the Autumn, this being a critical operation in choosing a day with suitable weather conditions; a hot day with a light northerly wind was best. Great care was taken to see that standing Mallee strips and extensive spinifex ridges were not burned.

As the land was to be used for grazing only, any method of killing re-growth by spraying or mechanical removal was considered far too costly. The shoots and seedlings have been progressively killed out by sheer hard work, with axe and mattock, during the Autumn months, by my son, David.

Fallen shoots and debris packed by hand onto tough stumps, and re-burned twelve months later, also gave a good kill. There was a 50% death of surviving stumps with each year of shoot removal. This has been rewarding, however, as it has eliminated the forced sale or loss of stock during a moderately dry spell.

A great variety of shrubs, including several different salt bushes, have appeared on the cleared land, and formerly over-grazed natural clearings are showing good regeneration.

The pods of Harbinger and Cyprus Medic were spread at every opportunity and are now well established. This has transformed the holding from an unexplored wilderness to an attractive park-like appearance, with little or no evidence of soil erosion.

GROW YOUR OWN - SALTBUSH SOWING IN CHILE

From: Andrew G. Robertson, 13 Fitzgerald St., Balwyn, Vic. 3103

The following deals with some very interesting research aimed at range improvement, in arid coastal Chile, through the introduction of plantations of chenopods (salt bushes, blue bushes etc) to poor quality native grasslands. The work is being carried out by I.N.I.A. (Institute de Investigaciones Agropecunarias) at its experimental station "Los Vilos", 210 km north of Santiago at latitude 32°S.

The annual average rainfall of "Los Vilos" is 250mm. Rain falls in winter, and occasionally spring, and has a high annual variation. The whole zone around "Los Vilos" is a vast marine plateau and the soils are largely alluvial. The native vegetation is a sparse perennial grassland with some areas of thick coastal scrub. Dry matter production in the grasslands varies from 300 - 3000 kg/ha. depending on seasonal rainfall. Wool and meat production is low from these naturally poor rangelands and there is a considerable problem in the zone due to overgrazing by herds of goats and sheep owned by very poor communities.

The chenopods being tested for introduction to the zone are the following -

From Australia:	Atriplex nummularia
	Atriplex semibacata
	Kochia brevifolia
North America:	Atriplex lentiformis
	Atriplex caniscens
Israel:	Atriplex halimus
Chile:	Atriplex conquinbensis
	Atriplex repanda

Also from Australia come Acacia cyanophylla and Galenia segunda.

The major, and most interesting research at "Los Vilos" is the vegetative propogation of chenopods and other trial species. In October cuttings of the top fifteen centimetres of apical shoots and leaves are selected from adult bushes and planted into plastic tubes of moist soil. In the following winter/spring the young bushes are transplanted into the field. With practise, the success rate of turning cuttings into bushes is nearly 100%. No artificial watering is required after transplanting and the bushes grow very quickly to maturity in the field.

Experimental work began only in December, 1975 under I.N.I.A. and so precise estimates of productivity are very preliminary. However, trials carried out by another Chilean dryland research group in the early seventies maintained that mature plantations of Atriplex semibacata, at a density of 1,000 bushes per hectare raised the productivity of native grasslands near "Los Vilos" from one dry sheep to four hectares to two sheep to the hectare on a year round basis.

Trials to determine the optimum density for grazing production of Atriplex repanda and A. nummularia are also in progress, testing plantings at intervals of 1.5,2,3 and 4 metres. The feasibility of seeding chenopods over large areas is being examined. At present all seed is picked by hand. It has been found that seed of Kochia brevifolia has to be used in the same year of harvest while Atriplex seeds seem to remain viable for up to four years.

The actual method of seeding involves firstly, immersing seeds in water at 95°C and leaving to cool in solution for twenty-four hours. The seeds are then sown directly into land that has been lightly disced. Using Atriplex repanda, A. semibacata and Kochia brevifolia good stands have been established on rainfall as low as 97mm in the year of sowing and 145mm in the second year.

Present work with Galenia segunda indicates that the optimum time of seeding is in May, before the expected winter rainfall. Stands of this species become progressively poorer when seeded in June, July, August and September.

The I.N.I.A. estimates that chenopod plantation establishment by seeding costs about 3.0 pesos (Aust.$0.10) per plant against 1.5 pesos by vegetative propogation. Labour is cheap in Chile and its component is high in the above calculations. The Chilean Government is backing the chenopod research by funding 80% of the cost of establishment on commercial farms. Inspections are made of plantations to make sure that at least 1,000 plants per hectare have survived before payment is made. Many farms have established huge nurseries of chenopod cuttings and will probably continue to improve the carrying capacity of their rangelands by this method even when the Government subsidy finishes.

There seems to be good potential for this simple vegetative propogation of chenopods in Australia. The methods are simple and quick. However, Chile has two advantages over Australia in the widespread adaptation of this form of range improvement; firstly, labour is cheap and relatively plentiful and secondly there are few rabbits in the "Los Vilos" area.

Sheep stations in the winter rainfall areas of Australia might find application in establishing strategic plantations of chenopods in lambing or weaner paddocks or for simply increasing the density of current stands. Of course the methods also have application in dry coastal grazing lands and salt affected pastures.

Further information on the continuing research can be obtained by writing to -

Fernando Squella
Subsestacion Experimental Los Vilos
Casilla 40
LOS VILOS
CHILE.

KANGAROOS, PARKS AND ASSORTED COMMENTS

This is a summary of the approach to Park management at Sturt National Park, Tibboburra, N.S.W., as it relates to questions raised in previous RMN's, extracted from a press release by John Gerritsen, Senior Range, 28/7/77.

On management - the Park has a local advisory committee of 7: 4 representing pastoral organizations, 2 from the Parks service, 1 from the Soil Conservation Service. Committee meets 3 times per year and advises and reviews aspects such as buildings and improvements, roads and boundaries, fire management, noxious weeds and animal control. There is thus plenty of pastoralist input.

The Park pays local P.P. Board and Wild Dog Board rates as would be paid if it were a pastoral holding, including costs of dingo control work by Works Department.

Fencing (6 wire steel suspension) is handled on a basis of Park supplies, neighbours erect. Three-quarters of all stock waters are maintained and several new waters have been added.

Kangaroos since 1973 have been carefully monitored (by Dr Martin Denny, paid for by Queensland!) So, all in all, the picture here is not as black as members may think. The N.S.W. Park Service does have consideration for its neighbours. Other States?

From: Brian Roberts, Darling Downs Institute of Advanced Education, Toowoomba, Qld. 4350

Domestic stock and fires have long been hot issues in National Parks. Geoff Rodda (RMN 78/3) suggests light stocking of Parkland in western N.S.W. In the same issue, Gray and Taylor emphasis water supply as the main factor determining stock reduction in drought. Both letters indicate the need for a balance between numbers, forage and water. I suggest that whether Parks require stocking depends on the accumulation of feed. There may be sufficient Kangaroos to keep the balance - if only they'd stay on Park lands! (Equally, the Fowler's Gap paddocks may deteriorate more rapidly if they are all provided with reliable waters and stock numbers are guaged on water rather than feed supply. In the same way, Parks could ruin their land by a combination of Kangaroo-proof fences and too much water.)

From: Garnham Skipper, Manunda Station, Yunta, S.A. 5440

I agree very much with Geoff Rodda's remarks and ideas on Kangaroos and Parks. Outside the Parks, there are also weaknesses in the destruction permit and harvesting systems, in that most of the big bucks are being shot out, but not the does. This hardly makes much difference to the population, for the does are producing as quickly as the bucks go out. Also, with reds being the main targets, I have noted an increase in the "scrubbers" (euros) in my area.

OPEN SEASON ON SACRED SHEEP

From: Malcolm Whyte, Willow Point, Wentworth, N.S.W.

I feel considerably bugged by dogma. It seems to be associated with past experience and is somewhat stifling to experimentation. I do not believe past experience is of any great value to anyone unless they particularly like histories or revelling in nostalgia.

The particular dogma in question is people saying, "sheep walk three miles to water". This unwritten "law" seems to have been bandied around for quite a while and is still doing the rounds.

Of course sheep can walk three miles to water, (in fact 30 miles if you drive them hard!) but it seems obvious that a sheep, to do its best, would not walk at all (which I guess would mean housing in batteries like chooks. How would they perform thus housed?). It would seem the more waters available the better, but I would like to know in what way sheep growth is related to food intake and the distances they walk. It should be a simple equation but I haven't seen an answer. As to actual distances, my own experiences are of sheep grazing in an egg-shaped pattern, 1½ miles south, less than ½ mile north, and one mile or so east and west from waters; much less than 3 miles in any direction. On this pattern waters could be 2 miles apart, and ½ mile south of northern fences.

(Editor's note: there is a large body of research, associated with movements in paddocks, which apparently is not getting back to pastoralists. Concise statements of experiments and general observations would be welcome, as would comments on the value of history!)

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