

THE ROLE OF CATTLE AT LION MATCH FORESTRY

LION MATCH FORESTERS MAKE GOOD USE OF THE SYMBIOTIC RELATIONSHIP BETWEEN NGUNI CATTLE AND PLANTATIONS

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Lion Match's silviculture team



SA Forestry magazine was invited to visit Lion Match Forestry's beautiful Clifton estate near Lothair in Mpumalanga to meet their new weed control team.

They're black, white and brown, the only fuel they need is grass, and they multiply without interference from anyone. It all sounded too good to be true, so we took the long drive to Sihanahana to check the facts.

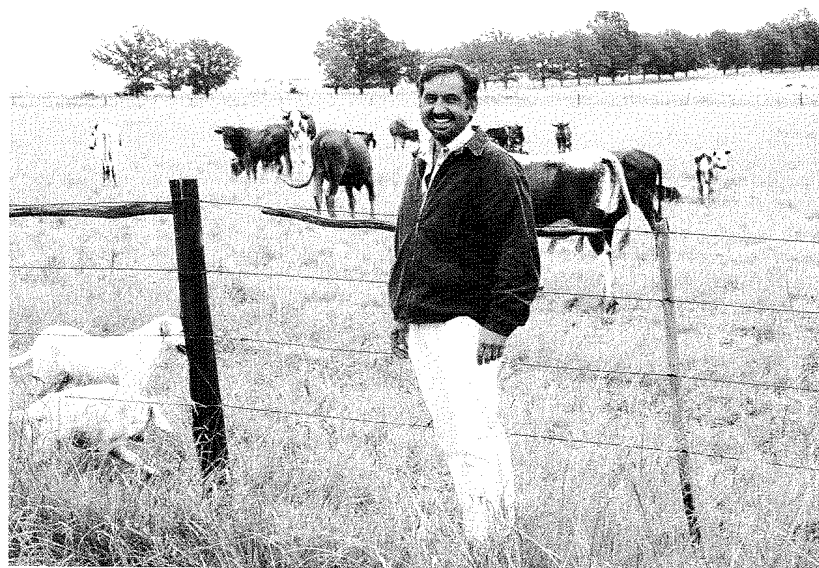
Lion Match Forestry's chief forester, Eugene Kraamwinkel, talks cattle farming almost as passionately as he talks forestry. Some three years ago he decided to try using cattle to control the grass and weeds that grow between the trees on the company's Mpumalanga estates. The wide open espacement of the Lion Match plantations is designed to encourage the growth of big, tall trees suitable for the manufacture of matches, but this also allows in a bit of sunlight which encourages the growth of grasses and weeds.

"We do a nine-metre pruning and harsh thinnings to get veneer-size logs as quickly as possible, so we open the canopy and let sunlight in, which encourages the weeds and grasses to come up," said Eugene. The pine compartments are planted at 1 333 stems per hectare, and thinned down to 280 SPH.

After considerable research, Eugene decided to experiment with Africa's indigenous Nguni cattle because they are hardy, they calve unassisted and they pick up weight quickly. And because they're low intensity feeders and a bit smaller, they need less land than most other breeds to remain healthy and strong. Eugene describes them as "low maintenance cattle".



Every 7th row is harvested during the thinnings operation to create an extraction route. The extra sunlight also encourages the grasses to grow.



Lion Match Forestry's chief forester, Eugene Kraamwinkel.

Starting off with 10 head, he has built the herd up to 107. When SA Forestry magazine visited they were grazing happily in the unplanted areas at Clifton. Just before winter, when the ground is starting to dry out, they are moved into the plantations (both poplar and pine) to graze between the trees.

This is the only time they need to be minded by the labour, and this continues right through winter. The cattle are only used in compartments after the trees have received the first two-metre pruning at four years.

Eugene says that the cattle keep the grass short and eliminate most of the weeds, like blackjack and wattle. The labour just has to go in and clean up the odd bugweed after the cattle have done their job. So effective are the cattle, that Eugene says they saved R194 000 in grass cutting expenses alone last year.

An additional benefit is that they trample all over the brushlines so they break down faster, thus helping to reduce the fuel load in the compartments.

The Nguni's require little maintenance, and calve once a year. They sell the excess bulls, but keep the cows. They don't have to feed them through the winter, but do supplement with bales in the kraal at night.

They normally move them from estate to estate by truck, but last year there were no trucks available and so they walked the entire herd from Witbank to Clifton – a distance of 40 kms – in one day. Eugene said the cattle handled it easily, and some of the cows gave birth the very next day. He says they're now experimenting with Nguni-Jersey crosses to

NGUNI HERDS

Nguni herds
Shift silently as spirits.
Across the face of the earth.

Back and back they go,
generation upon generation
through Africa's history,
forming a bond between man and beast.
Reckoned in honour,
pride and wealth.

To reflect an eternal
forming and dissolving pattern
of shadows and sunlight,
mud, pebbles, rocks
and grains of sand.

In the silence of heat,
under thorn tree branches,
alongside pools of water and cliffs,
across centuries, the sounds of bellows,
the blowing of cattle breath
and voices calling,
echo through a haze of dust.

Spoor of cattle and men
lie stretched out over plains and mountains.
Their marked skins and graves,
eternal signs of temporary ownership,
are alone and deserted,
lost, disintegrated in the veld,
forgotten.

Now we stand,
in this time and place,
to admire Nguni Cattle, their distant past,
innocence and patience,
patterns of spots, horns, blemishes
and intimate family conversations.

Remember the old links,
but loosen the bridle
of today's constraints.
Free your thoughts to wander with us,
to dream.

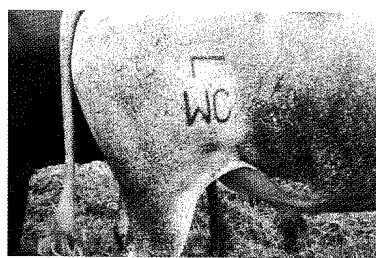
*Translated into English by
Margaret Epstein*

see if they can also get some milk
from the cows.

Eugene is responsible for the
forestry operations at all Lion Match
plantations. There is 1 300 ha on the
farm Witbank near Sheepmoor, 2
100 ha near Lothair on three estates,
Clifton, Sandcliff and Frere and
1825 ha in the Umvoti area near to
Greytown. In addition there are
some 400 hectares of poplars on
small stands at Sheepmoor, Piet
Retief and in Greytown in the KZN
Midlands. The pine species used are
Patula, Eliotti and Gregii. The poplar
makes the best matches, but they are
being phased out because they only



*Poplars, like these
growing at Lion Match's
Greytown estate, make the
best matches but are being
phased out because they
grow in the vleis.*



*The unique Lion
Match branding.*

grow in the wet vleis where it's no
longer allowed to grow
commercial trees.

Contractors do all the pruning and
harvesting, using a motormanual
system (chainsaws and tractors).
The last thinning is done at 19
years. Every seventh row is
harvested to provide space for an extraction route. The two base logs
from the last thinnings operation are sent to the match factory, and the
rest is sold to pulp mills. "We tried growing poplar under irrigation in
drier areas, but it wasn't successful," said Eugene. He says when
planted in the right areas, poplar
has extremely high growth and
produces very clean timber with
long fibres, ideal for the
manufacture of matches. Poplars
do not grow in winter at all, so
there are no hard growth rings in
the timber.



*A ring and line treatment is
all these seedlings
need to grow.*

The Clifton estate, which SA
Forestry magazine visited, is all
pine. Some of the compartments
were previously planted to gum.

They are left for two years, and the big stumps removed with a stump
grinder, and then re-planted with pine. They do a ring weeding and a
line spray, and just keep the grass cut between the rows. The pines are
harvested at 25-30 years, and the poplar at 18-27 years.

The harvested logs are transported to the match factory at Rosslyn,
near Pretoria, where they are peeled in a lathe right down to a 10 cm
core. The company has another match factory in Mozambique.

According to Eugene, 125 tons of timber produces 50 to 75 tons of
matches.