USING CATTLE AS ‘TOOLS’ FOR RANGELAND RESTORATION

CATTLE ARE STOCK POSTED OVERNIGHT WITHIN AGREED COMMUNAL GRAZING AREAS / CAMPS (USING HERDERS, NOT FENCES), WITH MOBILE KRAAL PLACED ON AREAS CLEARED OF WATTLE.

HOOF TRAMPLING (a form of “bioturbation”) ASSISTS WITH ‘KICK STARTING’ RECOVERY OF GRASSLAND ON THESE CLEARED AREAS, THROUGH BREAKING UP CAPPED IMPERMEABLE SURFACE, AND DEPOSITING NUTRIENTS AND GRASS SEED IN MANURE. TEST SITE AT MOTSENG WAS CLEARED OF WATTLE, FOLLOWED BY UNPLANNED BURN.

NOTE POLE AS FIXED POINT IN PHOTOS OF TEST SITE AT MOTSENG VILLAGE: KRAAL WAS PLACED TO RIGHT OF THIS POLE. HERD OF 200 CATTLE WAS KRAALED NIGHTLY HERE FOR 3 WEEKS.

5 April 2014: 1 week overnight kraaling on right
16 April 2014: after 2 weeks kraaling
November 2014: trampled area on right

Above left: Note rainfall infiltration difference between untrampled capped soil surface (above left) and trampled surface (above right)

VIEW FROM BELOW SAME SITE, LOOKING UP TOWARDS POLE ALONG WESTERN EDGE OF KRAAL SITE (trample zone now to left of picture). NOTE DIFFERENCE IN TEXTURE OF SOIL SURFACE, and PERMEABILITY FOR EFFECTIVE RAINFALL INFILTRATION

April 2014
June 2014
November 2014

Note importance of keeping stock Off the regrowth area for about 3 months until grass sods and basal cover are re-established. This should be done as part of the managed herding plan.

REGROWTH OBSERVATIONS IN JUNE 2014

<table>
<thead>
<tr>
<th>TYPE OF PLANTS</th>
<th>INSIDE / TRAMPLED</th>
<th>OUTSIDE / UNTRAMPLED</th>
</tr>
</thead>
<tbody>
<tr>
<td>grasses</td>
<td>100</td>
<td>22</td>
</tr>
<tr>
<td>wattle seedlings</td>
<td>1</td>
<td>13</td>
</tr>
</tbody>
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