SINGLETON ARGUS
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Cattle trial clearly shows better weigh gained on mine rehab land

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Local News

WEIGHTS: Glencore's land & property manager, Nigel Charnock, Gary Johncock, general manager, Colinta and agronomist Neil Nelson with some of the trial steers.

With an increasing amount of land expected to be retired from open cut mining in coming years finding productive and sustainable long term uses for that land is vital.

Rehabilitation of that land, in previous years, has more than not resulted in the establishment of native woodlands but more land is now being returned to pastures for livestock production.

Gathering data on how successful miners have been in developing this land is now of great interest.

In attempt to evaluate how their rehabilitated mine lands are performing Glencore has been conducting, for the last five years, a cattle grazing trial at its Liddell Mine near Muuswellbrook in the Hunter Valley.

The current trial is coming to an end but the results clearly show cattle grazing rehabilitated pastures grew quicker and were heavier.

Steers entering the trial came from the company's Hunter based Colinta Holdings. Colinta exists alongside a number of Glencore's mining operations throughout Australia running 44,000 head of mainly Charolais and Charbray cattle.

In the trial two 50 hectare paddocks were set aside one unmined with mainly native wiregrass, redgrass pastures and the other a rehab block.

That land had undergone a typical rehabilitation regime 10 years ago that involved the application fertilser and a pasture mix consisting of Rhodes Grass, lucerne, medics and clovers.

Because of exiting rehab practices the land remained untouched for five to six years resulting in the pastures becoming Rhodes Grass dominant.

Advising Glencore on the trial was Singleton based agronomist Neil Nelson who said perhaps in the future mining companies and regulators should consider putting stock on the pastures earlier to lesson the dominance of Rhodes Grass.

Three lots of steers (20 head) passed through the trial with the first two mobs being blood tested on entry and exit which usually occurred 18 months later.

This test detected nothing untoward with the steers except a lowering of copper levels in the steers on the rehab land.

Armed with that information half the steers in the current trial (trial 3) cattle were given a copper supplementation which has so far shown no benefit to cattle weight gain in either rehabilitated or natural pasture.

Mr Nelson said from equal weights at the start of the trials, the cattle grazing rehabilitated pasture gained more weight than those grazing natural pasture under the same management conditions.

"The cattle and pastures have been compared under the same stocking rates, same fertiliser application and same animal health treatments," he said.

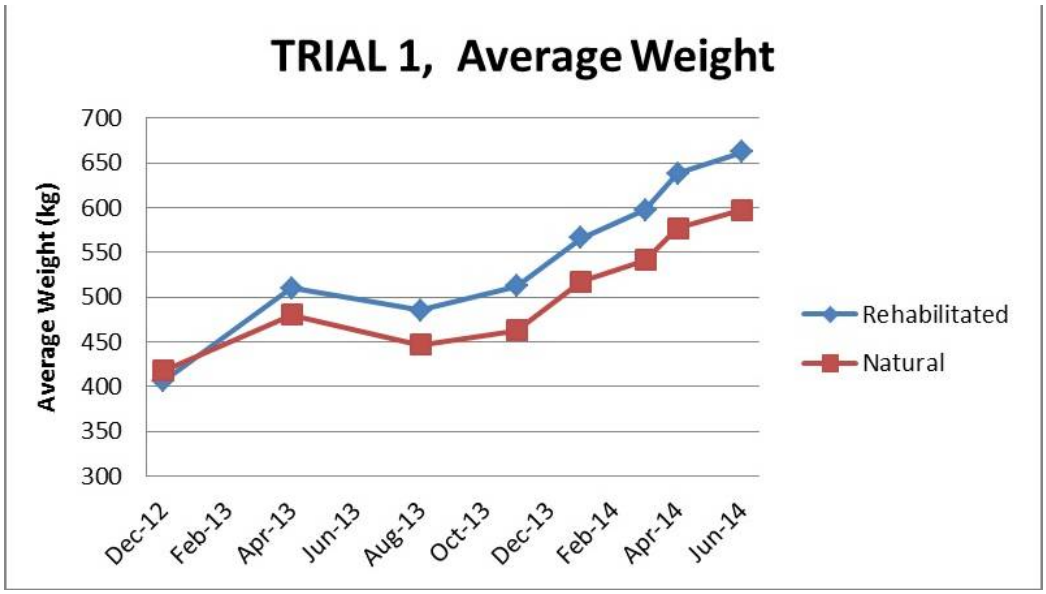
"Cattle grazing the rehabilitated pastures had on average the following weight advantage over those grazing natural pasture."

Trial 1: 79 kg per head heavier.

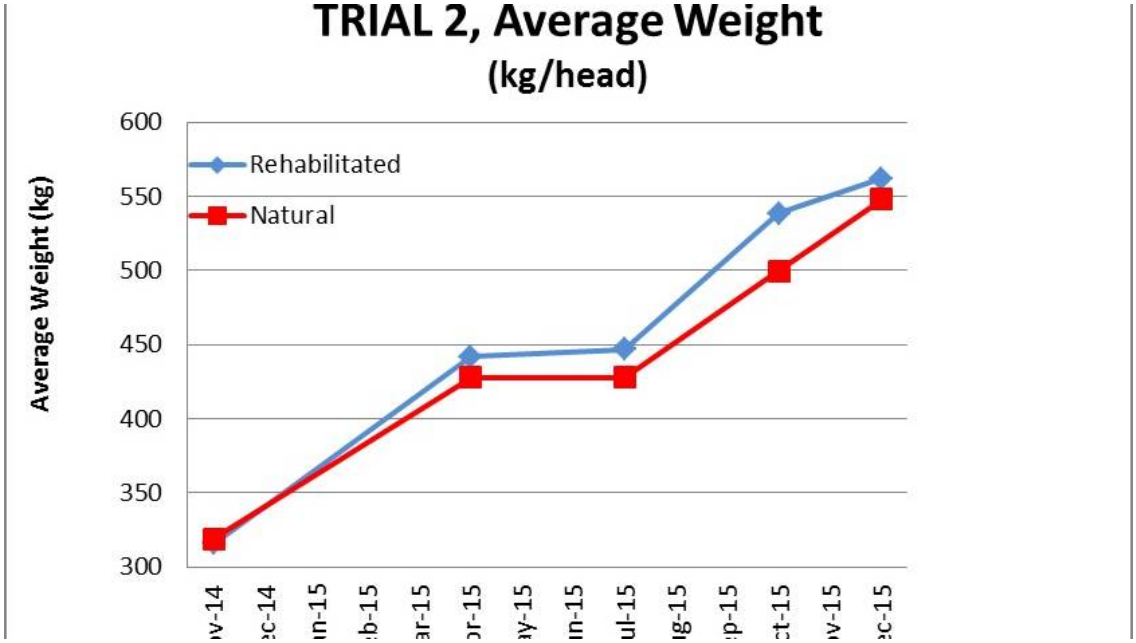
Trial 2: 17 kg per head heavier.

Trial 3: 54 kg per head heavier.

Cattle grazing rehabilitated pastures had greater fat coverage and received a premium c/kg at sale over the cattle grazing the natural pasture allowing greater returns to be made from the rehabilitated pastures, said Mr Nelson.

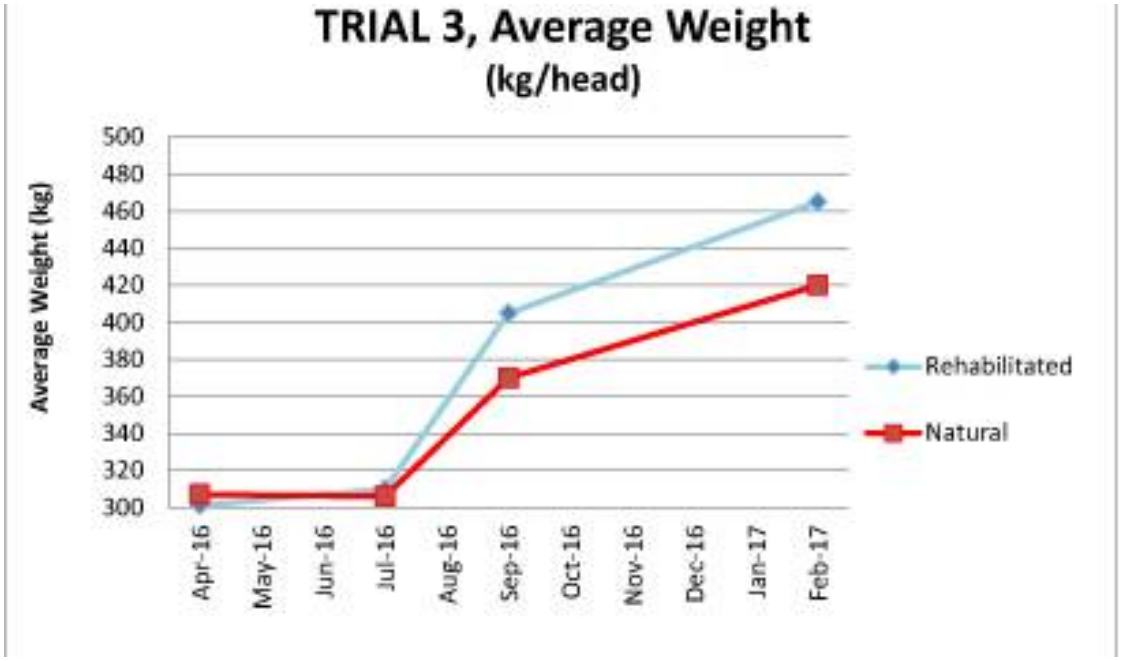


"The Liddell grazing trial aims to determine whether rehabilitated mine land can support cattle grazing on a sustainable basis, and on a scale at least equivalent to its pre-mining capacity," Glencore's Land & Property Manager, Nigel Charnock, said.



"We will be using the information from the trial across our other open cut mine sites.

"We'll also be sharing with others in the industry to inform management of pastures in rehabilitation areas and ultimately help demonstrate the success of this type of rehabilitation."



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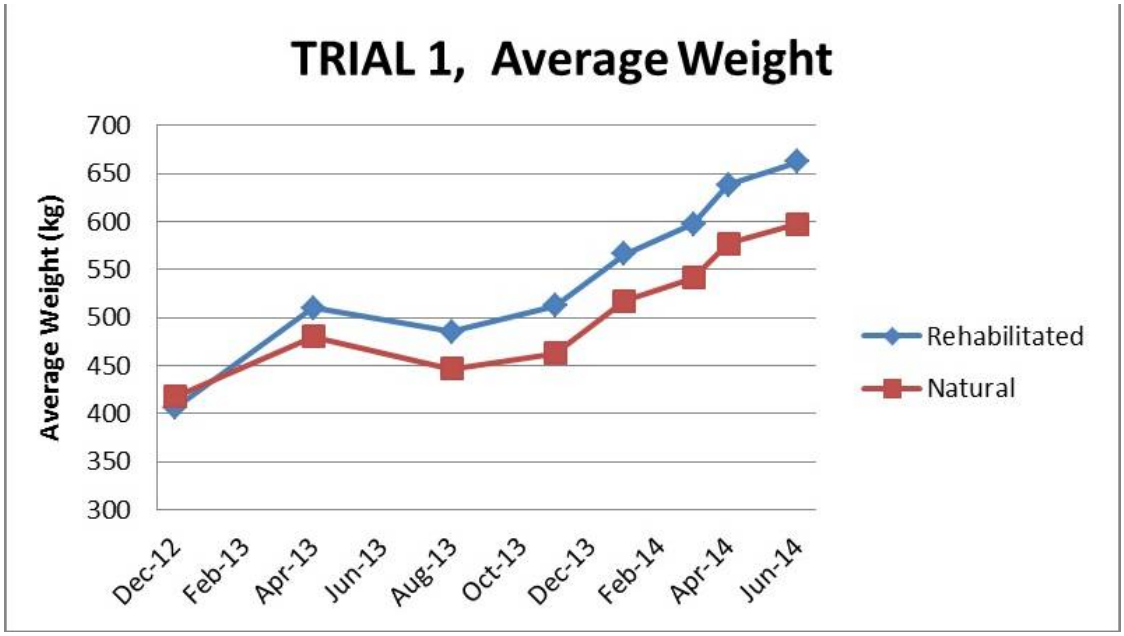

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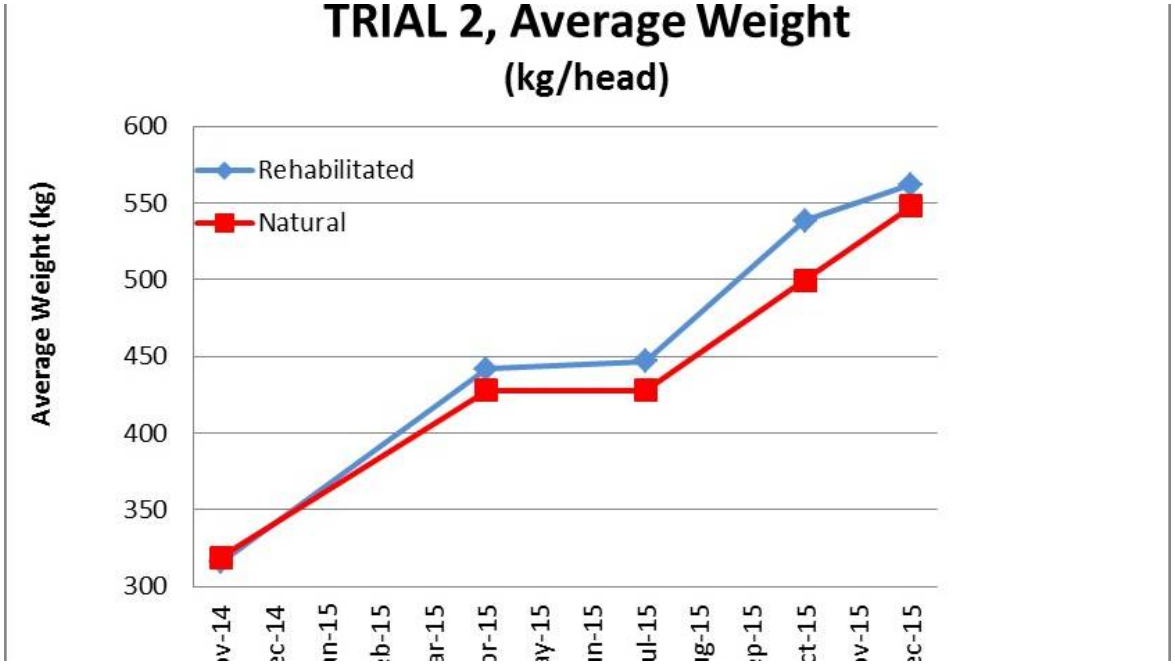

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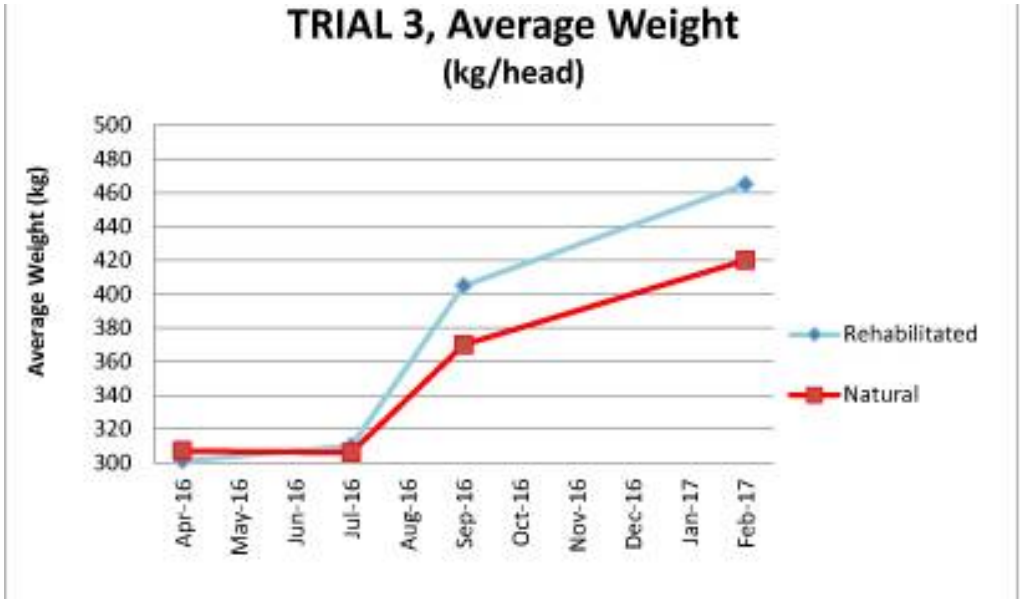
TRIAL 3, Average Weight
(kg/head)
Average Weight (kg)
500
480
460
440
420
400
380
360
340
320
300
Apr-16
May-16
Jun-16
Jul-16
Aug-16
Sep-16
Oct-16
Nov-16
Dec-16
Jan-17
Feb-17
Rehabilitated
Natural