

Lazing in the shade grows steaks

March 29 2012

New research confirms that cattle lying under trees and chewing cud aren't bludging - they're putting on condition by letting their digestive system do the work.

In the world's first comprehensive time budget for pasture-based beef production, NSW Department of Primary Industries (DPI) researchers found that [cattle](#) spent 18 to 44 per cent of their time resting and ruminating.

Trangie-based NSW DPI livestock behaviour researcher, Bob Kilgour, said the two-year study of six local beef herds revealed that 95 per cent of their time was spent grazing, walking and resting while they ruminated.

"Cattle are ruminants and it's their rumen, the largest part of their four-chamber stomach, which is doing all the work, converting energy into beef production," Mr. Kilgour said.

"Resting cattle have filled their rumens with feed and while they rest the micro-organisms in the rumen go into action, helping digest feed to put on weight and grow more meat."

The research paper demonstrates that present-day cattle are following normal ruminant behaviour which has developed over millions of years.

Mr. Kilgour said that cattle start grazing at sunrise to fill their rumen, which can be as large as 80 litres in a mature animal.

“They don’t spend much time chewing feed before they swallow – which is probably a survival mechanism cattle developed before domestication, when they were avoiding becoming prey,” he said.

“The idea was to eat without getting eaten, so cattle eat as much food as possible and then hide - [trees](#) play an important on-farm role as they provide shelter.

“Once back in the shade with a full rumen, bacteria and protozoa break down the fibrous pasture - cattle burp the feed back as cud and chew it.

“Cud-chewing grinds the plant material into smaller and smaller fragments and coats it with more micro-organisms to further aid the digestion process.

“Cattle may graze briefly during the day but their next big [feed](#) is just before sunset, when cattle sense they are running out of light.

“Then it’s off to camp with the herd to ruminate on their evening meal.”

Provided by State of New South Wales

Citation: Lazing in the shade grows steaks (2012, March 29) retrieved 16 June 2024 from <https://phys.org/news/2012-03-lazing-steaks.html>

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