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*A Natural Industry
A Natural Product*



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Training to start soon

Thanks to a shot in the arm of \$400,000 from Tony Burke via the RIRDC, the Kangaroo Harvester Skill Enhancement training program initiated by KIAA will soon be rolled out nationally in a highly refined program. A consortium of Regency, South Queensland and Oten institutes of technology have been awarded the tender to produce and deliver training material to all registered Harvesters this year.

The consortium is finalizing the training material which expands on that produced by KIAA under a smaller RIRDC project last year. Safefoods Qld are kindly and efficiently administering the expanded project, which is on course to deliver up to 68 half day training sessions across Qld, NSW and SA before Oct this year.

All Harvesters accredited in 2009 or 2010 in those states will be able to attend the training free of charge. Each state meat hygiene authority will make course attendance a requirement for re-accreditation in 2011. Pet meat only Harvesters in NSW will not be required to do the course in order to be re-accredited in 2011.

The course will help update Harvesters on the best methods of field dressing to minimise carcass contamination. It will touch on the importance of hygienic practices to the industry, and importantly, their personal income. Also covered are the new tagging requirements, and of course, the importance of animal welfare issues. Each Harvester will receive a manual of field harvesting kangaroos, a field dressing DVD and certificate of attendance.

This course is an important part of on-going industry improvements in product standards to ensure kangaroo meat remains competitive in the global market. The generous support of the RIRDC, Safefoods Qld and the NSW and SA governments in delivering this is much appreciated by industry.

Participants may register to attend workshops via the Southern Queensland Institute of TAFE's website <http://www.sqit.tafe.qld.gov.au>.

Kangaroo Meat Website

For the latest updates on what's happening with kangaroo meat see

<http://www.kangaroomeat.net.au/>

New Kangaroo Cookbook out soon

Roocepies – Australia's Best Kangaroo Recipes, is a collection of the best entries submitted by chefs in the recently 'best kangaroo recipe' competition funded RIRDC. Compiled by Mel Nathan the publication is due for release on 30 May. This 60 page book is filled with lots of glossy images of kangaroo dishes and celebrity chef profiles and of course great kangaroo meat recipes, submitted by leading Australian chefs.

Kangaroo Petition

Please remember to sign the petition in support of kangaroo products in the EU. The forces calling for a ban on sales of kangaroo products by the EU Parliament are getting active. It's vital that EU politicians are not led to believe that the general public support this call. Please get all your friends to sign the petition calling on EU Parliamentarians to recognize the ecological importance of the kangaroo harvest.

<http://www.thepetitionsite.com/94/support-the-kangaroo-harvest>

This petition now has 25% as many signatures as the 'anti' petition which has been running for much longer. It's important this momentum be maintained.

Quotas

Harvest quotas for 2010 and take numbers for 2009 are available on the federal government website at

<http://www.environment.gov.au/biodiversity/trade-use/wild-harvest/kangaroo/quota/2010.html>

KIAA AGM Report 2010

The KIAA AGM was held on 2 Feb at Packer Leather, who again kindly allowed us to use their facility. An entirely new Executive has been elected. Ray Borda is now President, Greg Bates Secretary and Raewyn Duncan Treasurer.

The meeting agreed to a change to the KIAA constitution to move it away from State based membership to a national membership. The Board will now comprise the Executive and 4 additional members, but must include at least one member from each of WA, SA, NSW and Qld. The Executive and the Board will all be elected by the full membership at the AGM.

Subscriptions remain unchanged at \$1500/company, with the major exporters agreeing to a voluntary additional subscription of \$4400 each. An invoice for subs is attached with this report.

This will be the last time most of us see Peter McInnes from RIRDC. Peter is retiring soon. Lindsay Packer presented him with a bottle of Grange Hermitage in appreciation for all he has done for our industry. Peter has been a delight to work with and a stalwart supporter of the kangaroo industry, he will be missed.

Several issues concerning the export meat sector were discussed. It's hoped this year will bring more cheer for this sector than last year.

Youth forum

KIAA in conjunction with NSW and Sydney Universities recently conducted a small focus group type event looking into creative ways to generate positive kangaroo industry press. A group of hip young things from within the uni's were quizzed on their internet social networking use and specifically what appeals to them on sites such as Facebook. They were then asked to brainstorm ideas to use social networking to help inform the world of just how much of a 'good thing' the kangaroo industry is environmentally speaking.

The exercise generated some great ideas, which KIAA will implement over the next few months.

Field Inspections

Those who oppose the kangaroo harvest continually claim it is not monitored. This, of course, is not the case as portrayed for example by the number of inspections carried out in NSW last year alone by the NSW Food Authority. Most of these were unannounced.

	No inspections
Field Harvesting Vehicle	1056
Pet Food Harvesting Vehicle	16
Field Depot	299
Total Inspections	1384

Kangatarians!

The latest movement for those who care about animal welfare is Kangatarians, people who eat no other red meat than kangaroo because of its environmental and animal welfare benefits. Join up at <http://www.facebook.com/home.php?#!/group.php?gid=117438280809>.

RSPCA conference discusses kangaroo management

At a recent RSPCA conference Dr Steve McLeod of the NSW Vertebrate Pest Research Unit presented a paper on issues to do with kangaroo management. Titled '*Is kangaroo management justified and humane?*', it addressed many of the concerns often raised in opposition to the kangaroo industry and examined them in a detached and scientifically credible fashion. One of the main concerns is animal welfare, below is part of what Dr McLeod had to say on the topic. The full paper can be seen at <http://www.rspca.org.au/assets/files/Science/SciSem2010/SciSem2010Proceedings.pdf>

Concern: Commercial harvesting is cruel

The degree to which shooting compromises animal welfare depends on; i) the time to death after being shot, ii) the likelihood of wounding, and iii) the chances of shooting a female with young, thereby leaving the young to potentially suffer prolonged poor welfare (Macdonald *et al.* 2000). Adult kangaroos and dependent young-at-foot must be killed by a shot from a high powered rifle that destroys the brain (Anon. 2008a, b). In skilled hands, this method of killing will lead to instantaneous insensibility quickly followed by death. A shot to the brain is considered to be one of the most humane methods of euthanasia (Gregory 2004, AVMA 2007). However, shooting should only be performed by highly skilled personnel trained in the use of firearms. Commercial kangaroo shooters are required to pass a competency test before they are permitted to shoot kangaroos (Anon. 2008a).

A review of compliance with the National Code of Practice for the Humane Shooting of Kangaroos and Wallabies for Commercial Purposes (2008) documented that the percentage of carcasses at processing plants with head shots varied between 93.5% and 97.3% depending on the State where the animals were shot and the use of the carcass (skin only, pet food or human consumption) (RSPCA Australia 2002). While some might argue that these rates are good, there is still room for improvement as not all animals are killed instantly. Injured kangaroos should be euthanased immediately by either a follow-up shot to the brain, or heart if a shot to the brain is not possible or a blow to the base of the skull (blunt trauma) with a hard and heavy instrument that effectively destroys the brain (Anon. 2008a, b).

Public Liability Insurance For Harvesters

Harvesters now have the opportunity of obtaining Public Liability Insurance at competitive prices with Pollard Insurance Brokers. Pollards can arrange a Public Liability cover of \$10,000,000 with premiums starting at an affordable \$578.60.

The policy has been especially designed to meet the needs of Harvesters, and covers you anywhere in Australia. The insurer will be Lloyds of London.

With landowners becoming increasingly reluctant to allow Harvesters onto their properties without proof of Public Liability Insurance, this form of insurance is a must for all harvesters.

Contact Rowan Lovell at Pollard Insurance Brokers on 1300 733981 for further information or for a quick quotation.

Critics of the euthanasia techniques used to kill pouch young claim that blunt trauma is an inhumane method of killing (e.g. Ben-Ami 2009). Blunt trauma is an aesthetically displeasing procedure. However, authorities on euthanasia suggest that blunt trauma, when done correctly, is an acceptable method of euthanasia.

A blow to the head can be a humane method of euthanasia for neonatal animals with thin craniums if a single sharp blow delivered to the central skull bones with sufficient force can produce immediate depression of the central nervous system and destruction of brain tissue. When properly performed, loss of consciousness is rapid. (AVMA 2007).

Done correctly, these methods of killing will lead to rapid loss of consciousness, quickly followed by death.

Kangatarians jump the divide

SMH February 9, 2010

Kangatarianism is on the rise for the eco-conscious, writes Tayissa Barone.

There's a new semi-vegetarian wave emerging in Australia: people who exclude all meat except kangaroo on environmental, ecological and humanitarian grounds. They call themselves kangatarians and are slowly growing in numbers. Samantha Vine, 32, classifies herself as a kangatarian, making the choice to only eat kangaroo meat after years of being a vegetarian.

She made the decision 10 years ago while studying ecology at the University of Sydney. Her lecturer was a kangaroo meat advocate and introduced her to eating a meat he claimed was better for the environment than bred livestock.



"It's not worth the pleasure of eating meat if it hasn't been treated well, I don't want to be part of that," Vine says. "To eat something that's killed humanely, that's better for the environment, is a positive."

The low level of greenhouse gas emissions produced by kangaroos, and the fact they require no additional feed, water or land cleared for them, make them an obvious choice for the ecologically conscious. A lecturer in natural resource management at the University of Sydney, Peter Ampt, believes many environmentally aware Australians are turning to kangaroo meat because they see it, essentially, as living a natural life. Ampt says it is the ultimate in free-range, organic meat.

"The animals dies instantly, without the knowledge of what's going to happen and there are no drugs used in its production," Ampt says.

Kangaroo is often described as the animal of choice for those who exclusively eat organic meat. A project officer at the University of Sydney, Sarah Doornbos, says she has made an educated decision to make a good percentage of the organic meat she eats kangaroo.

"In the Australian environment, I feel it's the thing to do," she says. "They are less destructive on the land than something like cattle."

The kanga banga, or kangaroo sausage, is becoming a favourite on barbecues according to the owner of Sam the Butcher, Sam Diasino. Diasino sold out of his signature sausages - spiced with cinnamon, cardamom, cloves and tomatoes - in the lead-up to Australia Day. "We've had a growth in types of meat

that have a bit of stigma attached to them, ones which people are curious about," he says. "Kangaroo is a very healthy meat and we place a huge healthy slant on the way we sell it."

Vine's kangatarian lifestyle choice has rubbed off on her friends, with many of them now eating kangaroo regularly. "Once I started I couldn't get enough," she says. "After being vegetarian for so long, after a certain amount of time I craved some meat."

She still has to explain to people what a kangatarian is but a rise in awareness of organic meats might soon make it a little easier.

QUEENSLAND KANGAROO INDUSTRY AND DEEDI TRIAL RFID TECHNOLOGY

The Project will engage Bar Code Data Systems (BCDS) to deliver two-month duration, field trial of 2000 Magellan Radio Frequency Identification Device (RFID) tags and associated hardware and software in cooperation with VIP Petfoods/Game Meat Processors of Wulkuraka Ipswich. The trial is designed to provide a practical field demonstration, testing and proving of the systems integrity, durability, and robustness, including ease of use and economic and labour efficiency savings attainable for the three sectors of the Kangaroo industry, i.e. Field Harvester, Field Depot Operator, and Transporter/Processor.

Each tag will have a tamper-evident, pre-programmed unique identification number and be capable of additional non alterable data entry at each critical entry point in the supply chain, e.g. tags will accept SFPQ accreditation and DERM licence numbers, time, date, GPS point location of evisceration and statutory ante mortem inspection declarations will be entered by the harvester. Other critical points of data entry are:

- delivery to the field depot and transporter
- delivery to primary inspection point at the processing plant
- AQIS inspection point, enabling possible payment over the hook via electronic bank transfer, instead of cash or cheque at the field depot door

A significant industry improvement will be daily updates of the harvest status directly to the regulators database, enabling near real time harvest management. Out-of-time carcasses will be able to be identified at the critical points before processing occurs.

It is expected that the successful demonstration will encourage the adoption of innovative RFID technology in the kangaroo industry. A successful trial has the potential to revolutionise the supply chain and lift the industry to red meat industry production standards very quickly.

Deliverables

The contractor will provide training and QA to participating harvesters, field depot operators and the processor; install and manage hardware and software for the trial, supervise methodology and use of the system and oversee the project. A completion report and recommendations will be produced by DEEDI and BCDS. Industry savings and efficiencies will be identified in the report. The trial will have a duration of two months and use 2000 tags.

Expected outcomes

The trial will demonstrate the technology is robust, efficient for field use and suitable for integration with the data systems used by industry and regulators. Importing countries will prefer RFID over current practices.

Is kangaroo really a more sustainable choice?

ECOS^c

Source: [ECOS Magazine](#) – ‘Australia’s most authoritative magazine on sustainability in the environment, industry and community.’

A recent report from the United Nations¹ concludes that raising animals for food generates more greenhouse gases (GHG) than all the cars and trucks in the world combined. Similarly, water consumption by livestock is highlighted as another key sustainability issue. Stock contribute to both water depletion and pollution. So, does this mean that you can’t eat meat to be an environmentalist? Well, perhaps not – if you’re partial to the flavour and idea of eating kangaroo, as increasing numbers of people are. A report commissioned by Greenpeace² suggests that eating more kangaroo can help cut Australia’s GHG emissions, while more recent research similarly indicates that removing large numbers of cattle and sheep and replacing them with kangaroos could contribute as much as 10 per cent to Australia’s emissions reduction target of 30 per cent by 2020.³

Better gasses

First of all, why are kangaroos better in terms of their GHG emissions? Cows and sheep have a specialised digestive system that houses methane-producing bacteria that ferment the vegetation they eat. Methane is a very potent greenhouse gas, hence scientists’ need to include agricultural stock’s significant contribution in climate impact calculations. Kangaroos, however, have a different set of microbes to help their digestion and as a result produce minimal amounts of methane. In addition, reducing livestock in favour of kangaroos could also significantly reduce emissions of nitrous oxide, which has 296 times the global warming potential of carbon dioxide, and is created from the initial production of livestock feed (as nitrogen-based fertilisers are added to the soil) and as a result of the storage and treatment of animal waste.

Traditional livestock also require large amounts of supplemental water; no small issue given that much of Australia is still facing severe drought, with things only predicted to get worse under climate change. Kangaroos on the other hand have evolved on the driest inhabited continent on Earth and can survive for relatively long periods without consuming much water at all.

Welfare and ethics?

A survey of consumer attitudes towards kangaroo meat published by the Rural Industries and Research and Development Corporation (RIDIC)⁴ suggests that concerns about welfare and ethics deter some consumers from choosing kangaroo. However, compared to eating unsustainable fish or factory farmed meat,

it could be argued that kangaroo is a more ethical choice. Kangaroos are not farmed, but are killed in their natural habitat by professional shooters who operate under specific conditions laid out in the Code of Practice.⁵ Kangaroos, therefore, do not face the unnatural conditions of some intensively farmed animals, such as veal calves and pigs, nor do they endure a stressful road trip to the slaughterhouse (reducing their total contribution to Australia's GHG emissions as a result of 'food miles'⁶). Shooters must aim for a 'sudden and painless death' via a direct shot to the brain; it is inevitable some animals will not be killed outright, and there is also the issue of dealing with pouch-young and young-at-foot when the mother has been shot; these scenarios are also covered in the Code of Practice.

Ray Borda, the Managing Director of Australia's largest supplier of kangaroo, Macro Meats, says, 'there is no way an illegally shot kangaroo could be sold through Macro Meats. All kangaroos come from licensed shooters with a government issued tag. We also run our own lab tests to ensure standards of animal welfare are met; high pH levels can indicate to us if an animal has been stressed prior to death.'

Is there enough supply?

But what about the sustainability of the kangaroos themselves? The RIDIC survey also indicates that the public are concerned that eating kangaroo could result in the decline of Australia's iconic species. However, the kangaroo experts are not worried: 'there is no evidence that any of the harvested species are declining in Australia. The long term data shows that numbers now are very similar to 20 years ago,' says Dr Euan Ritchie, a scientist at James Cook University, who recently conducted a large scale survey of macropods across northern Australia. Dr Ritchie adds 'I don't know of any kangaroo biologist who thinks populations [of harvested species] are in decline, or considers that the harvest is unsustainable at present.'

Currently four species are harvested on the mainland; the red kangaroo, eastern and western grey kangaroos and the common wallaroo. The quota (number of kangaroos allowed to be killed) is calculated by government scientists, reviewed annually and is dependent upon current population trends. Typically the quota is about 15–20 per cent of the total population.

However, Dr Ritchie's study does suggest that climate change will influence many of the factors that limit kangaroo populations, including water, climate and fire regimes. 'The annual census means that any population declines will be detected quickly, and this will be particularly important in the future as the climate changes,' he says.

Professor Gordon, from CSIRO Sustainable Ecosystems, agrees. 'We need to closely monitor the response of the population, especially given the variation in reproduction of kangaroos with changes in rainfall.'

Some conservation groups have also expressed concern that the demand for kangaroo meat is currently exceeding supply and will result in an unsustainable harvest. Given that there are hundreds of millions of sheep and cattle run in Australia, replacing even a portion of them would require a significant increase in kangaroo numbers.

Ray Borda disputes such claims, saying, ‘the annual quota is fixed and depends on kangaroo numbers. Regardless of whether the demand for meat goes up or down, when an area has reached its annual quota it is shut down.’

It has even been suggested that Australia could entirely replace its beef industry with kangaroo. Dr Ritchie agrees, saying, ‘it is a possibility; kangaroos produce less meat than cows but they breed faster and can reproduce in drought conditions which cattle can’t. Also, if we got rid of the livestock, there would be more resources to support a much higher number of kangaroos.’

A well managed partial stocking approach is more likely and Professor Gordon says, ‘with RMIT University in Melbourne, CSIRO is investigating the benefits of including kangaroo harvesting as part of traditional livestock enterprises in Queensland. From an ecological perspective there are certainly potential benefits, however, given Australia is one of the world’s largest beef exporters, any move in this direction would need further research to consider the impact on our traditional meat producing industries.’

More information:

¹ Food and Agriculture Organization of the United Nations (2006). [Livestock’s long shadow](#). United Nations, Rome.

² Diesendorf M (2007). [Paths to a low carbon future](#).

³ Wilson GR and Edwards MJ (2008). Native wildlife on rangelands to minimize methane and produce lower-emission meat: kangaroos versus livestock. *Conservation Letters* 1(3), 119–128. doi:10.1111/j.1755-263X.2008.00023.x.

⁴ Rural Industries Research and Development Corporation (2008). *Consumer attitudes to kangaroo meat products*. <http://www.rirdc.gov.au/reports/NAP/08-026.pdf>

⁵ See www.environment.gov.au/biodiversity/trade-use/wild-harvest/kangaroo/index.html

⁶ Food miles is a term which refers to the number of miles food produce travels from ‘plough to plate’, that is from the place of production to consumption.