

# **KANGAROO: FROM AUSTRALIAN ICON TO MEAT AND LUXURY LEATHER FOR THE EU**

An analysis of the Australia-EU trade in products  
derived from commercial kangaroo hunting

# EUROGROUP FOR ANIMALS

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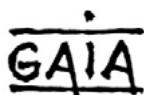
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# 1 INTRODUCTION



Although kangaroos and wallabies are Australia's national symbol, almost 90 million of them have been hunted for their skin or meat over the last 30 years.<sup>1</sup> All commercially-hunted kangaroos are wild animals, not farmed for meat production purposes, and the EU currently is Australia's main market for kangaroo exports, both for skins and hides and for meat products.

Kangaroo hunting gives cause for serious concerns related to animal welfare, conservation and food safety and hygiene. Kangaroos are shot at night, in remote areas far away from any scrutiny or enforcement, leading to non-lethal shots that can cause horrific injuries and a slow death if the animals escape. If females are killed, dependent joeys endure a cruel and violent death, or they are left in the field to suffer exposure, starvation, or predation. It has been

suggested that population estimates used to establish annual hunting quota are inflated, not taking into account the slow reproduction rate of kangaroos, environmental factors (such as drought, fires and loss of habitat) leading to a reduction in numbers, and the non-commercial hunt, which is not monitored at all. Lastly, the circumstances of the kangaroo hunt carry inherent risks of bacterial contamination of the meat, due to the butchering in the field and the long, exposed, unrefrigerated transport of the carcasses.

This report provides an overview of the reasons for these concerns and explains why Eurogroup for Animals believes it is high time that the EU introduces an import ban on all goods derived from the hunting of kangaroos.

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<sup>1</sup> <https://voiceless.org.au/hot-topics/kangaroos/#easy-footnote-2-1347>

# 2 STATISTICS

Kangaroos, together with wallabies and wallaroos belong to the family of *Macropodidae*. *Macropodidae* are marsupials found in Australia, New Guinea, and on some nearby islands. Most of these species are unique to Australia and have inhabited the region long before humans. Six species within the *Macropodidae* family are targeted by commercial hunting: the red kangaroo (*Macropus rufus*), the eastern grey kangaroo (*Macropus giganteus*), the western grey kangaroo (*Macropus fuliginosus*), the common wallaroo (*Macropus robustus*), the Tasmanian pademelon (*Thylogale billardierii*) and the Bennett's Wallaby (*Macropus rufogriseus*). 90% of the targeted animals are individuals from the first three species only.

The EU currently is Australia's main market for kangaroo exports, both for skins and hides and for meat products. According to Australian data, the main importers of kangaroo meat for pet food and human consumption in the EU are Belgium, Germany, the Netherlands and France. The main importers of kangaroo skins, hides and leather are Italy and Germany, and to a smaller extent Austria, Czech Republic, Greece, Slovakia, Spain, Portugal, the United Kingdom, the Netherlands, Sweden and Croatia.

## Australian kangaroo meat exports to Europe (2016)<sup>2</sup>

DESTINATION	Volume of meat [tonne]	Value [\$AUD]
Belgium (#1) <sup>3</sup>	632.4	4,301,295
Germany (#2)	497.2	2,663,528
The Netherlands (#4)	232	1,543,639
France (#5)	167.7	1,252,007
UK (#12)	26.5	167,025
<b>Total</b>	<b>1,556</b> (66% of total)	<b>9,927,494</b> (77% of total)

## Australian kangaroo hides and skins exports to the EU<sup>4</sup>

DESTINATION	Total number of skins (and furs) from 2012 to 2016	Value [\$AUD]
Italy (#2)	2,054,097	24,728,000
Germany (#4)	668,943	8,761,000
<b>Total</b>	<b>2,723,040</b> (36% of total)	<b>33,489,000</b> (53% of total)

## Australian kangaroo leather exports to the EU<sup>5</sup>

DESTINATION	Total number of leather goods from 2012 to 2016	Value [\$AUD]
Germany (#4)	125,729	2,000,000
Italy (#5)	91,885	2,552,200
<b>Total</b>	<b>217,614</b> (11% of total)	<b>4,552,200</b> (6% of total)

<sup>2</sup> Australian Bureau of Statistics <https://www.abs.gov.au> (2019.07) – 12 countries amounted for 99% of Australian kangaroo meat exports. Destinations outside the EU are Papua New Guinea, Vietnam, Korea, South Africa, USA, Canada and New Zealand.

<sup>3</sup> The numbers indicate the destinations' ranking among all Australian export destinations for kangaroo meat. Belgium is, for example, the export destination for the largest volumes of kangaroo meat.

<sup>4</sup> Australian Bureau of Statistics <https://www.abs.gov.au> (2019.07). Figures are only provided for the main destinations in the EU (Italy and Germany). There is no data for Austria, the Czech Republic, Greece, Slovakia, Spain, Portugal, the UK, the Netherlands, Sweden and Croatia.

<sup>5</sup> *Ibid.*

# 3

## NON-COMMERCIAL HUNTING



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As well as being killed by commercial shooters, kangaroos are also culled by farmers because they are considered to be a crop pest and said to compete with livestock for water and food resources (which are usually artificially installed for livestock support). However, studies have demonstrated that kangaroos access less than 5% of crops and mostly those that are close to forest edges.<sup>6</sup> While this could still be considered problematic from a farmer's perspective, crops that are located 400 metres away from a forest edge are not visited at all.<sup>7</sup>

Studies looking at resource competition between livestock and kangaroos could only identify some evidence of it in extreme times of droughts. Red kangaroos even avoid areas that are inhabited by sheep. Indeed, kangaroo distribution is primarily dependent on good quality habitat (for grazing and resting), rather than artificial water points (around which vegetation regeneration is often poor due to the impact of livestock).<sup>8</sup>

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<sup>6</sup> Dror Ben-Ami (2009) A Shot in the Dark – A Report on Kangaroo Harvesting. Available at: <https://bit.ly/2FIRzOd>

<sup>7</sup> *Ibid.*

<sup>8</sup> *Ibid.*

# 4

## WELFARE AND CONSERVATION CONCERNS RELATED TO KANGAROO HUNTING



An average of 1.6 million kangaroos were killed per year (2010-2018) for commercial purposes in Australia, making it one of the largest commercial hunts.<sup>9</sup>

When kangaroos are hunted for commercial purposes, accredited field processors must follow the 'National Code of Practice for the Humane Shooting of Kangaroos and Wallabies for Commercial Purposes' established by the Australian authorities. The Code, currently under review, sanctions cruelty but is virtually impossible to implement,<sup>10</sup> as the animals are hunted at night and in remote areas, where controls can rarely be enforced.

Each year, the government publishes a 'sustainable quota', indicating the number of kangaroos that can be killed.<sup>11</sup> On average, the government authorises the hunting of 6.3 million kangaroos (about 15% of the total population according to government statistics). On average, 27% of that 'sustainable quota' are used annually, based on government data.

Kangaroo hunting raises serious concerns on three different levels: the welfare of the animals due to the cruelty of the hunting process; the conservation of specific species; and sanitary shortcomings and impacts on public health.

<sup>9</sup> Australian Government Department of the Environment and Energy: Macropod quotas and harvest for commercial harvest areas in NSW, QLD, SA and WA. Available at: <https://bit.ly/2PhNu01>

<sup>10</sup> The code is available on <https://bit.ly/3IGMejV>

<sup>11</sup> *Ibid.*

## 4.1

### ANIMAL WELFARE

As many kangaroo species are nocturnal, the shooting takes place at night, in remote areas far away from any scrutiny or enforcement, when non-lethal shots are inevitable, often causing horrific injuries. Data obtained from processed carcasses indicates that between 4 and 40% of kangaroos that are commercially killed are not shot in the brain as required, but in the neck or in the body.<sup>12</sup> In 2015, this represented between 65,284 and 652,839 animals,<sup>13</sup> not counting the many that are hurt and escape only to die, suffering sometimes for weeks. Currently the kangaroos' heads are removed by the shooter before they reach the slaughterhouse, thereby eliminating any chance of identifying how the animal died.

Deaths of joeys (young kangaroos) are not recorded, but since nearly every female has one or two dependent young, they were estimated to amount to at least 110,000 in 2015, and around 8 million between 2000 and 2009,<sup>14</sup> which is most likely less than the actual number. In 2019, an estimated 100,000 to 200,000 dependent young were killed based on government records of females killed. A number of member companies in the Kangaroo Industries Association of Australia (KIAA) set a self-imposed ban on shooting female kangaroos in 2013. This is not a government ban and is therefore subject to change at any time. Government data show that in spite of the self-imposed ban some 10% of all commercially killed kangaroos in 2019 were still female.<sup>15</sup> In such cases, the National Code of Practice calls on shooters to “crush the skull and destroy the brain” of joeys that could be left in the female pouch. According to research, this is mostly done by swinging their heads against a vehicle.<sup>16</sup> In a recently published information document, KIAA confirms that joeys are killed by a “blunt trauma to the head”.<sup>17</sup> In addition, the

document admits that if they do not endure this cruel and violent death, most dependent at-foot joeys are left in the field to suffer exposure, starvation, or predation.<sup>18</sup>

Moreover, individuals, family groups, and populations are affected by the hunt. Large grey males live in strong family groups (also called mobs). They are often killed first as they stay to defend their mob against any attack. Similarly, when large females are killed, matrilineal lines and bonds are broken and young at-foot joeys are left without maternal care.<sup>19</sup> Deaths of females not only negatively impact offspring nutritionally dependent on the mother, but also young joeys that have yet to learn essential skills such as identifying food sources and assessing predation risk.

In addition, there are other social interactions and dependencies that are affected. Females can graze longer and need to be less vigilant if they associate frequently with the same individuals. Adult male grey kangaroos maintain harems and are important for group cohesion. The selective commercial killing of larger and older adults, as is the case in the kangaroo hunt, destabilises social structures and may have consequences for the fitness of the remaining individuals.<sup>20</sup>

## 4.2

### CONSERVATION

With 1.6 million kangaroos being killed annually for commercial purposes and many more unrecorded deaths, the sustainability of hunting kangaroos has been called into question. While the kangaroo is considered a pest in Australia, analyses of the level of populations have shown that there are flaws in the survey methods used by the government. These have continuously led to an inflation

<sup>12</sup> Ben-Ami, D et al. (2014). The welfare ethics of the commercial killing of free-ranging kangaroos: an evaluation of the benefits and costs of the industry. <http://bit.ly/2z03ulc> Explanation of methodologies: <http://bit.ly/2Byj4eX>

<sup>13</sup> Australian Government Kangaroo and wallaby population, quota and harvest statistics 2015 (2016 not available) <http://www.environment.gov.au/biodiversity/wildlife-trade/natives/wild-harvest>

<sup>14</sup> Ben-Ami, D et al. (2014). The welfare ethics of the commercial killing of free-ranging kangaroos: an evaluation of the benefits and costs of the industry. <http://bit.ly/2z03ulc> Explanation of methodologies: <http://bit.ly/2Byj4eX>

<sup>15</sup> <https://bit.ly/2GGgws>; <https://bit.ly/3iKAc7u>; <https://bit.ly/3dnQcer>; <https://bit.ly/3dvwu0F>

<sup>16</sup> McLeod, S. and Sharp, T. Improving the humaneness of commercial kangaroo harvesting 2014 Rural Industries Research and Development Corporation. <https://bit.ly/31WnjVV>

<sup>17</sup> KIAA Information Pack – Responding to negative campaigns, October 2019.

<sup>18</sup> *Ibid.*

<sup>19</sup> Ben-Ami, D. et al. An open letter to the public about the commercial killing of kangaroos. Available at: <https://kangaroothemovie.com/uploads/websites/1753/files/5bf63ad65d82e.pdf>

<sup>20</sup> *Ibid.*



of the population estimates, on which the shooting quotas are defined (15-20% of the population).<sup>21</sup>

One area of concern is the so-called 'correction factors'. In order to estimate the wild populations, aerial counting takes place. The numbers are then extrapolated, and a correction factor is applied to take into account bioregional factors (such as temperature which has been identified to influence how likely it is that kangaroos are detected during counts). Doubt has been voiced on these correction factors in relation to the methodology used to define them.<sup>22</sup> Furthermore, little easily accessible information is available on the variation in correction factors over the last few years. It is suggested that these have been uniformly going up, leading to highly inflated population estimates.<sup>23</sup>

Indeed, the population estimates over the years suggest unrealistic population growth that doesn't correspond to the reproduction rate of kangaroos, which has been calculated at 10%.<sup>24</sup> Kangaroos breed slowly, and females are only able to produce on average one offspring per year once they have reached puberty. In addition, young kangaroos stay dependent on their parents for a long period and often do not survive. In their lifetime, female grey kangaroos and red kangaroos will bring between 2 and 3.5 young to independence.<sup>25</sup>

With such a low growth rate, it is biologically impossible for the kangaroo population to increase as rapidly as government data suggests. The defined quota of 15-20%, however, is higher than the maximum wild population growth in optimal conditions of 10%. Fortunately, the shooting quota has not been fully used in the last years. About 4% of the whole population as estimated by the government is shot for commercial purposes on average every year. Populations affected by the hunting rely on

the movement of the animals from surrounding non-culled populations in national parks to replenish numbers. However, due to the recent extraordinary fires, more than half of the national parks in New South Wales (NSW), and the wildlife within, have been affected. Climate change predictions indicate continued warming and increased fires in Australia and suggest caution in relying on national parks as kangaroo population reservoirs.

In addition, the population estimate itself is inflated and other factors leading to reduced growth of the population are not considered. This includes for example times of drought, when populations can decline by up to 60%,<sup>26</sup> and juvenile mortality can be as high as 100%.<sup>27</sup> Furthermore, countless kangaroo deaths are unrecorded as they are shot illegally or by landowners for non-commercial purposes. It is thus not surprising that local and regional declines have already been observed throughout the country, such as in Western Australia in 2016<sup>28</sup> and in four regions in NSW and Queensland (QLD) in 2019.<sup>29</sup> Government survey data and commercial shooting statistics also illustrate declining populations and landscapes now significantly depleted of kangaroos.<sup>30</sup>

California banned imports of kangaroo parts already in 1971 due to serious concerns over the declining numbers of kangaroos. In 2007, the ban was replaced by a moratorium allowing the sale of kangaroo meat and leather. The moratorium expired at the beginning of 2016, effectively halting imports again in response to welfare and conservation concerns.<sup>31</sup>

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<sup>21</sup> Cairns, S. et al. A report to the New South Wales Department of Environment and Climate Change on the consultancy: 'Kangaroo Monitoring: Hunter and Central Tablelands Commercial Harvest Zones Design and Analysis of Helicopter Survey (2009); Cairns S & Bearup D A report to the NSW OEH on the consultancy: Design and analysis of helicopter Surveys of kangaroo populations in the Central tablelands North & Southmanagement zones (2012); See also transect locations in western NSW, Queensland, South Australia and Western Australia, and Mjadwesch, R. (2013) Letter to NSW Scientific Committee, <https://bit.ly/3obeZaw>

<sup>22</sup> Mjadwesch 2011, <https://www.kangaroosatrisk.net/3-counting-kangaroos.html>

<sup>23</sup> Ben-Ami, D. (2009). A Shot in the Dark - a report on kangaroo harvesting. Sydney, Australia, Animal Liberation NSW.

<sup>24</sup> Mjadwesch 2011, <https://www.kangaroosatrisk.net/3-counting-kangaroos.html>

<sup>25</sup> Bilton, A. & Croft, D. (2004). Lifetime Reproductive Success in a Population of Female Red Kangaroos *Macropus Rufus* in the Sheep Rangelands of Western New South Wales: Environmental Effects and Population Dynamics *Australian Mammalogy* 26: 45-60; Dawson, T. (2012). Kangaroos: Biology of the Largest Marsupials Cornell University Press. Ithaca, US Based on Table 6.1

<sup>26</sup> Robertson, G. (1986). The Mortality of Kangaroos in Drought 1986 *Australian Wildlife Research* 13(3) 349 – 354; Newsome AE, Stephens DR, Shipway AK (1967) Effect of a long drought on the abundance of Red Kangaroos in central Australia *CSIRO Wildlife Rescue* 12: 1-8 ; Caughley, G , Grigg, GG, Smith L. (1985). The effect of drought on kangaroo populations. *Journal of Wildlife Management* 49: 679-685.

<sup>27</sup> Shepherd, N. (1987). Condition and recruitment of kangaroos in Kangaroos: their ecology and management in the sheep rangelands of Australia (Eds: Caughley, G., Shepherd, N., Short, J.) Cambridge University Press, Cambridge; Newsome, A.E. (1971). The Ecology of Red Kangaroos. *Australian Zoologist*, 16(1), 1971, p38.

<sup>28</sup> <https://www.abc.net.au/news/rural/2016-05-03/wa-kangaroo-meat-shock/7379196>

<sup>29</sup> <https://ab.co/34MoJPP>; <https://bit.ly/2GGgws>; <https://bit.ly/3iKAc7u>; <https://bit.ly/3dnQcer>

<sup>30</sup> Kangaroomatters (2018). An open letter about kangaroos. Available at: <https://www.kangaroomatters.org>

<sup>31</sup> <https://bit.ly/2CVEgiS>

# 5

## PUBLIC HEALTH CONCERNS RELATED TO KANGAROO MEAT



In Australia, kangaroo meat is mostly used as pet food, only rarely is it intended for human consumption. In contrast with Europe, where 50% of kangaroo meat is exported, it is used both for pet food (often for animals with allergies) and for human consumption. In France, kangaroo meat has been offered in supermarkets as exotic and festive meat around Christmas time.<sup>32</sup> Germany is home to many companies selling kangaroo products in one form or another. While Italy is more relevant in terms of trade in skins and leather, kangaroo meat may be found at wholesale traders and restaurants.

Kangaroo meat for direct human consumption, however, leads to food safety and public health concerns. Such food safety concerns arise in particular in relation to the contamination with *Salmonella* and *E. coli* (and the routine treatment of meat with lactic or acetic acid to minimise the contamination), as well as to the use of lead bullets to hunt the animals.

### 5.1 SANITARY ISSUES

The circumstances of the kangaroo hunt carry inherent risks of bacterial contamination of the meat. Kangaroos are butchered in the field, without supervision and by shooters that are usually not trained for such purposes. Carcasses are then transported, sometimes all night long, in unrefrigerated open trucks exposed to dust, flies and often high temperatures. Shooters usually hunt for an entire night before reaching a refrigerated facility as they need to kill around 40 animals per night to be profitable.

In 2015, an investigation led by the New South Wales Food Authority established numerous violations of the hygiene and safety rules that aim to prevent cross-contamination of kangaroo meat. These breaches included chillers contaminated with old blood, dirty floors, walls and

<sup>32</sup> <https://bit.ly/2CScow3>

ceilings, carcasses hung from rusty hooks, lack of water and cleaning facilities, inadequate thermometers, and live animals, such as cattle, being allowed to roam around the chiller alongside dead animals.<sup>33</sup> These circumstances foster the growth of bacteria such as Salmonella and E. coli. As such meat is not fit for human consumption, kangaroo meat is routinely washed with lactic or acetic acid to reduce and hide the systemic contamination.<sup>34</sup>

Earlier tests on kangaroo meat for human consumption in Australia have shown high levels of Salmonella and E. coli (Holds et al. 2008).<sup>35</sup> Russia has on several occasions halted imports of kangaroo meat from Australia due to contamination with E. coli, with the last ban being put in place in 2014.<sup>36</sup> EU border controls on imported kangaroo meat have also flagged the meat as being contaminated with E. coli on 8 occasions since 2015, leading to the meat being withdrawn from the market and destroyed.<sup>37</sup> Field studies have shown kangaroos to harbour multiple Salmonella species and Toxoplasma gondii (Permaswan 2009).<sup>38</sup>

Eurogroup for Animals' members – *Deutscher Tierschutzbund* (Germany), *GAIA* (Belgium) and *Fondation Brigitte Bardot* (France) – and the Dutch Party for the Animals have thus run tests on kangaroo meat available in European supermarkets. Four countries – Belgium, Germany, the Netherlands and France – represent the bulk of EU kangaroo meat imports from Australia (98.3%).

Between 9 to 30 samples were obtained from at least two different suppliers (such as supermarkets or frozen food delivery services) in each country. The samples were then tested by independent laboratories in each country for the presence of Salmonella, E. coli, lactic acid and in some cases acetic acid.

No Salmonella contamination was found in any of the samples. Some E. coli was detected in several samples in Germany and the Netherlands. In comparison, lactic acid was detected in all samples from all countries. Lactic acid can occur naturally in decaying bodies, either of bacterial origin or because it is added to decontaminate the meat. Naturally occurring levels of lactic acid in beef can range from 1.4-5g/kg.<sup>39</sup> The high levels found in kangaroo meat, ranging from 5.5-9.5g/kg, are thus likely to stem from a routine treatment of the meat with lactic acid. One laboratory also remarked that it suspects an addition of lactic acid based on the findings. For an overview of the results, please consult the summary table below.

The concern is not so much the lactic acid itself, as it does occur naturally and is present in other food products (such as yogurt) in higher levels than in meat. The concern is the fact that the routine treatment with lactic acid substitutes good hygienic practices with varying efficacy in actually avoiding contamination. A scientific opinion issued by the European Food Safety Authority (EFSA) on the treatment of beef with lactic acid concludes that, although lactic

COUNTRY	Number of samples tested	Presence of Salmonella	Presence of E. coli [Cfu/g]	Presence of lactic acid	Average concentration of lactic acid [g/kg]
Belgium	9	No	< 10 in all but one (18cfu/g) <sup>42</sup>	Yes	9.5
France	13	No	< 10 in all samples	Yes	6.8
Germany	15	No	< 10 in 10 samples; Between 10 and 470cfu/g in 5 samples	Yes	5.5
Netherlands	30	No	< 10 in 17 samples; Between 10 and 710cfu/g in 13 samples	Yes	6.2

<sup>33</sup> <https://bit.ly/2qeqOE5>

<sup>34</sup> Kangaroomatters (2018). An open letter about kangaroos. Available at: <https://www.kangaroomatters.org>

<sup>35</sup> Holds et al. (2008). Microbial profiles of carcasses and minced meat from kangaroos processed in South Australia. *International Journal of Food Microbiology* 123:88–92; Ben-Ami et al. (in press). A survey of the microbial contamination of retail ready kangaroo meat in Australia.

<sup>36</sup> <https://www.abc.net.au/news/rural/2014-08-18/kangaroo-meat-ban/5677656>

<sup>37</sup> As per the Rapid Alert System for Food and Feed (RASFF). Available at: <https://webgate.ec.europa.eu/rasff-window/portal/>

<sup>38</sup> Parameswaran et al. (2009). Seroprevalence of *Toxoplasma gondii* in wild kangaroos using an ELISA. *Parasitol Int.*; 58(2): 161–165.

<sup>39</sup> EFSA (2011). Scientific Opinion on the evaluation of the safety and efficacy of lactic acid for the removal of microbial surface contamination of beef carcasses, cuts and trimmings. Available at: <https://www.efsa.europa.eu/en/efsajournal/pub/2317>

<sup>40</sup> < 10 means very little presence or not detectable.

acid reduces contaminants, studies show that it does so to a varying degree.<sup>41</sup> In addition, some evidence suggests that repeated exposure to lactic acid can reduce the susceptibility of microorganisms to the substance (thereby further decreasing its efficacy in reducing contamination). Hence, EFSA stresses *'that lactic acid treatment of beef should not be a substitute for good hygienic practices'*.<sup>42</sup> Importantly, it should be noted here that the treatment of fresh game meat with lactic acid is currently not authorised within the EU (only for farmed and non-fresh game meat).

## 5.2 KANGAROO MEAT TRADE AND ZOOSES

Other sanitary concerns relate to zoonotic pathogens as 75% of emerging human pathogens originate in wildlife. As shown above, there is good evidence that high levels of contamination in kangaroo meat for human consumption are being hidden from consumers. Numerous epidemics that cause large scale death have been observed in wild kangaroos,<sup>43</sup> although kangaroo meat is not tested for many human-harming pathogens it could harbour. One demonstrated example is *Toxoplasma gondii*, which is a recognised long-term risk to human health.<sup>44</sup> The answer to a question posed at the Senate Community Affairs Committee indicates that kangaroo meat is not tested for this pathogen in Australia<sup>45</sup> and, in 2009, a study established a moderate presence of the pathogen among the wild western kangaroo population.<sup>46</sup>

There is no difference in the level of risk of a human pandemic whether the wildlife meat comes from a live market or is slaughtered far away from any scrutiny and then sold in a supermarket. The Covid-19 crisis reminds us that this risk should not be underestimated for any kind of wildlife meat consumption, and particularly in cases where hygiene standards are low, as for kangaroo meat.

## 5.3 PET MEAT

Most kangaroo meat is utilised for pet food. The contamination risks related to the use of meat for human consumption are similar and worse in pet food, since the meat does not benefit from the same screening process. For example, a study exposed that strands of the Coxiella virus that occurs in humans were also found in kangaroo meat-based pet food for cats and dogs.<sup>47</sup> The study stated that “improved regulation and standards of the pet meat industry are URGENTLY needed to safeguard the health of pets and households”. In addition to the impact on household pets, there is also a risk of secondary transmission of pathogens to humans.

## 5.4 LEAD BULLETS

Another health concern related to the consumption of kangaroo meat – and game meat in general – is the use of lead bullets. The European Commission stated that “Lead and its compounds are toxic to people and wildlife and there are no safe levels for some of their adverse effects, such as neurotoxicity and nephrotoxicity”.<sup>48</sup> Following recommendations by the European Chemicals Agency (ECHA), the EU is moving towards banning the use of lead bullets. Several Member States have already banned hunting with lead bullets in their territory. According to ECHA, lead-based ammunition is *'the most significant unregulated source of lead deliberately emitted into the environment in the EU'*.<sup>49</sup> A report published by ECHA in 2018 establishes that there are serious implications for human health if game meat hunted with lead bullets is consumed too often. The risk cannot be reduced by simply cutting away the wounded tissue as lead fragments are microscopic particles and disperse widely. In France, the Agency for Food, Environmental and Occupational Health and Safety (Anses) advises not to eat that kind of

<sup>41</sup> EFSA (2011). Scientific Opinion on the evaluation of the safety and efficacy of lactic acid for the removal of microbial surface contamination of beef carcasses, cuts and trimmings. Available at: <https://www.efsa.europa.eu/en/efsajournal/pub/2317>

<sup>42</sup> *Ibid.*

<sup>43</sup> Dror Ben-Ami (2009). A Shot in the Dark - A Report on Kangaroo Harvesting. PP 10-13. Available at: <https://bit.ly/2FIRzOd>

<sup>44</sup> Q&A 290, Rural and Regional Affairs and Transport Committee, Answers to Questions on Notice, Supplementary Budget Estimates October 2012, Agriculture, fisheries and Forestry.; (Food Division, Dept Agriculture, Answer to Questions on Notice no 290, no.7, Senate Estimates Oct 2012).

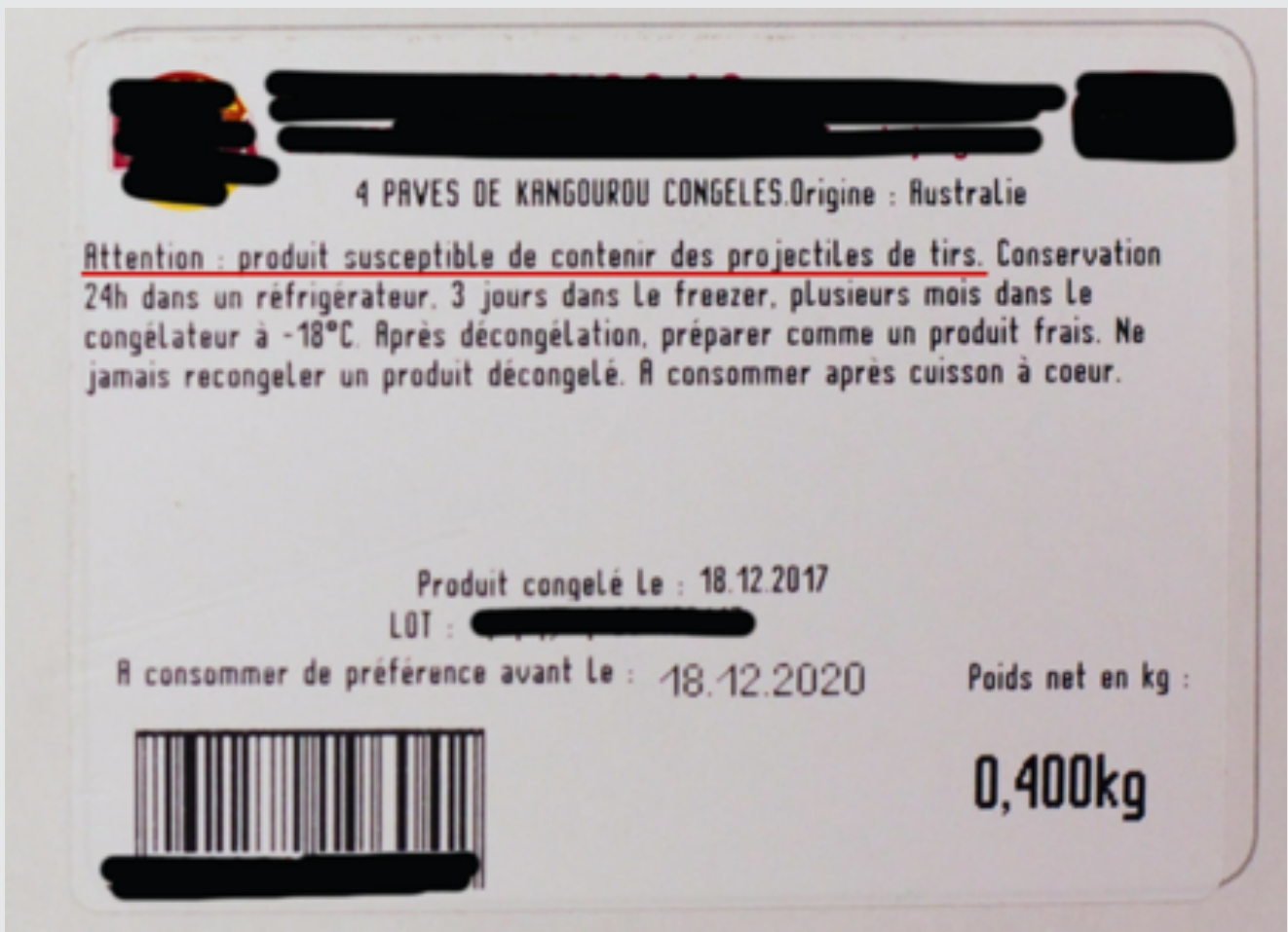
<sup>45</sup> <https://bit.ly/2QAoGkq>

<sup>46</sup> Parameswaran et al. (2009). Seroprevalence of *Toxoplasma gondii* in wild kangaroos using an ELISA. *Parasitol Int.*; 58(2): 161–165.

<sup>47</sup> Shapiro, A. J. et al. (2005). Molecular detection of *Coxiella burnetii* in raw meat intended for pet consumption. Sydney, University of Sydney, Faculty of Veterinary Science.

<sup>48</sup> [https://www.europarl.europa.eu/RegData/questions/reponses\\_qe/2019/003533/P9\\_RE\(2019\)003533\\_EN.pdf](https://www.europarl.europa.eu/RegData/questions/reponses_qe/2019/003533/P9_RE(2019)003533_EN.pdf)

<sup>49</sup> <https://bit.ly/200ELOZ>



**Figure 1:** Picture of a label for kangaroo meat bought in France in 2019. Underlined in red is the remark cautioning the consumer that the product may contain bullet fragments.

meat more than three times per year, and for children and pregnant women to avoid it entirely.

Lead-based bullets are universally used in Australia and are used for kangaroo shooting.<sup>50</sup> In fact, the meat's packaging of kangaroo meat sold in France includes a label informing consumers about the risk of the presence of bullet fragments in the meat (see Figure 1). The risk of poisoning is also high for scavenging wildlife, as some possibly contaminated parts of shot kangaroos remain in nature, and for environmental contamination.

<sup>50</sup> Hampton et al. (2018). Heads in the sand: public health and ecological risks of lead-based bullets for wildlife shooting. *Australian Wildlife Research* 45:287–306.

# 6

## SKINS, HIDES AND LEATHER FROM KANGAROO

Kangaroo skins are also commercially exploited. Between 2012 and 2016, Australia has exported over 7 million skins (including fur) to 29 different countries, and over 1.7 million leather goods to 28 different countries.<sup>51</sup> Skins and fur are shipped primarily to Italy, Turkey and Germany, while leather goods arrive primarily in Asian countries (Vietnam, Indonesia and Japan), but also in Germany and Italy in Europe.<sup>52</sup>

Kangaroo leather is said to be strong and light. It is thus used in high performance sporting equipment, such as gloves or shoes, mainly for soccer, motorbiking and cycling, often marketed as “K-leather”.<sup>53</sup> It is also used, but to a much smaller extent, by luxury companies. Italy is the leading importer of kangaroo hides, skins and leather within the EU.

According to some operators in the sector, kangaroo leather is considered lighter and stronger than other leathers. However, synthetic materials can offer important benefits. Compared to leather in general, synthetic leather is lighter (even though not as strong), less absorbent (a benefit, for example, for outdoor sports), does not stretch like animal leather (although this also means that it doesn't mould around the foot in the same way)<sup>54</sup> and tends to be cheaper. While synthetic material does not last as long as, for example, cow leather, kangaroo leather also wears out quickly due to its thinness. In addition, kangaroo leather is not waterproof, while synthetics can be.<sup>55</sup>

Eurogroup for Animals' Italian member organisation LAV investigated this issue among the materials already available on the market and alternatives to animal skin, especially kangaroo skin.

LAV asked the Italian company SISA S.p.A., a leader in the production of coated polyurethanes for over 50 years, to provide samples of a material that could be used for the production of motorcycle suits, and subjected it to specific physical-mechanical tests. The tests were conducted in the laboratories of the Centro Tessile Cotoniero e Abbigliamento S.p.A. – in short Centrocot – and Accredia certified.

The material chosen by LAV recorded the same tear and abrasion resistance performance required by the rigid parameters of the FIM in the World Championship Grand Prix Regulations 2019 for the approval of riders' suits and gloves (an ISO methodology specific for synthetic materials was applied for the measurement of tear resistance, even if not expressly acknowledged by the FIM).

For application on boots, on the other hand, the synthetic material chosen by LAV was found to comply with the FIM abrasion resistance parameters, but not with those defined for laceration.

It is therefore concluded that if LAV has succeeded in identifying a synthetic material on the market that satisfies almost all the minimum safety parameters provided by the FIM Regulation, motorcycle companies and manufacturers of motorcycle clothing have the opportunity to find or develop a specific alternative material to the leather (kangaroo or bovine) usually used for the production of suits, gloves and boots worn by riders in circuit competition.

<sup>51</sup> Australian Bureau of Statistics <https://www.abs.gov.au/> (2019.07); Ben-Ami, D., Boom, K., Boronyak, L., Croft, D., Ramp, D., Townend, C. (2011) The ends and means of the commercial kangaroo industry: an ecological, legal and comparative analysis. THINKK, University of Technology, Sydney.

<sup>52</sup> *Ibid.*

<sup>53</sup> <https://www.soccerpro.com/theinstep/the-low-down-on-synthetic-vs-leather/>

<sup>54</sup> <https://vocal.media/cleats/pros-and-cons-of-leather-vs-synthetic-soccer-cleats>

<sup>55</sup> <https://www.soccer.com/guide/leather-vs-leather>

# 7

## INDUSTRY REACTION

### 7.1

#### SUPERMARKETS' REACTION

Several Belgian, French and German supermarkets have already taken commitments to stop selling kangaroo meat. In Belgium, following a campaign led by GAIA (Global Action in the Interest of Animals)<sup>56</sup> which raised awareness about the cruel practices in kangaroo hunting, all supermarkets decided to stop the sale of kangaroo meat. GAIA's victory with retailers and distributors pushed Belgian Members of Parliament to put a legislative proposal to ban the import of kangaroo meat on the political agenda.<sup>57</sup>

In France, a similar campaign led by the Fondation Brigitte Bardot pressured Carrefour France into adopting the same commitments.<sup>58</sup>

In Germany, the campaign was led by the organisation Pro Wildlife. As a result, supermarkets chains Real, Kaufland, Lidl and V-Markt have decided to stop selling kangaroo meat. Also, pet food manufacturer BEWITAL announced the end of production and distribution of pet food containing kangaroo meat.

### 7.2

#### ITALIAN CLOTHING COMPANIES' REACTION

Similarly to supermarkets in France and Belgium, some Italian companies operating in the clothing and luxury sectors recently committed to stop using kangaroo skins or leathers following the campaign launched in October 2019 by our member organisation LAV. According to data collected by LAV, these sectors import to Italy the equivalent of more than 2.3 million dead kangaroos annually.<sup>59</sup> The LAV campaign quickly achieved results. A few weeks after its launch, Diadora announced its commitment to manufacturing kangaroo-free products by the end of 2020,<sup>60</sup> while Versace confirmed that it had banned the use of kangaroo leather starting from its 2019 collection.<sup>61</sup>

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<sup>56</sup> Global Action in the Interest of Animals, Press release, "Les supermarchés belges arrêtent la vente de viande de kangourou", 17 January 2020.

<sup>57</sup> 2020 Legislative proposal to impose a ban on the use of kangaroos for marketing, commercial production and manufacturing; <https://bit.ly/3iRQ0oM>

<sup>58</sup> Fondation Brigitte Bardot, Press release, "Victoire: Carrefour France s'engage à ne plus vendre de viande de kangourou suite à notre campagne!", 27 January 2020.

<sup>59</sup> LAV, Press release, 1 October 2019, <https://bit.ly/3jUHjvA>

<sup>60</sup> LAV, News, "A first victory for kangaroos: Diadora's pledge to go kangaroo free!", 31 October 2019, <https://www.lav.it/en//diadora-kangaroo-free>

<sup>61</sup> LAV, News, "Good news for Australia and its animals: Versace bans kangaroo leather!", 14 January 2020, <https://www.lav.it/en/news/australia-versace-kangaroos>

# 8

## CONCLUSIONS AND CALLS

The commercial kangaroo hunt raises serious animal welfare, conservation and public health concerns. Kangaroos are shot at night, leading to non-lethal shots that can cause horrific injuries and a slow death if the animals escape. Due to impaired vision at night, shooters frequently kill females; moreover, shooting females is not banned by law. Young joeys left in the female pouch are then killed through blunt trauma to the head, such as swinging their heads against vehicles.<sup>62</sup> At-foot joeys may be left in the field to suffer exposure to starvation and predation.<sup>63</sup> Such practices are not only inherently cruel but also affect the welfare of surviving kangaroos by disrupting matrilineal lines and social structures.

The sustainability of the hunt has also been called into question, as it has been suggested that population estimates are inflated, not taking into account the slow reproduction rate of kangaroos, environmental factors (such as drought, fires and loss of habitat) leading to a reduction in numbers, and the non-commercial hunt, which is not monitored at all.<sup>64</sup> Local and regional extinctions have been observed. In late 2019–early 2020, kangaroo populations were further decimated by the months-long devastating Australian bushfires; however, the Australian Government continues to authorise commercial killing of kangaroos without any updated assessment.

Lastly, the circumstances of the kangaroo hunt carry inherent risks of bacterial contamination of the meat, due to the butchering in the field and the long, exposed, unrefrigerated transport of the carcasses. Tests on kangaroo meat for human consumption in Australia have shown high levels of *Salmonella* and *E. coli*.<sup>65</sup> Further tests on kangaroo meat sold across Europe indicate the routine use of lactic acid or acetic acid to hide this contamination, despite the fact that the routine use of lactic acid is not authorised for fresh game meat in Europe. In addition,

lead bullets are used for the hunt, potentially leaving bullet fragments in the meat. Recommendations by the European Chemicals Agency (ECHA), however, have led the EU to move towards banning the use of lead bullets, over health and environmental concerns. An EU legislative proposal is presently under consideration.

In light of these concerns, Eurogroup for Animals believes it is high time that the EU not only takes immediate measures to tackle the sanitary threat, but also introduces an **import ban on all goods derived from the hunting of kangaroos**. If designed carefully, this import ban would be in line with the rules established under the World Trade Organisation (WTO). Even though kangaroos are not found elsewhere, this trade restriction would be applied to imports from all countries, in a non-discriminatory and non-arbitrary way. It would also need to be based on the concerns of European citizens regarding the cruelty of the hunting practice and animal welfare. The EC Seal case, a dispute settled by the WTO Appellate Body in 2014 on the EU Seal ban, demonstrated animal welfare concerns are part of “public morals”, on the basis of which trade can be restricted according to the exceptions listed in the General Agreement on Tariffs and Trade (GATT).

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<sup>62</sup> KIAA Information Pack - Responding to negative campaigns, October 2019.

<sup>63</sup> *Ibid.*

<sup>64</sup> Cairns, S. et al. (2009). A report to the New South Wales Department of Environment and Climate Change on the consultancy: ‘Kangaroo Monitoring: Hunter and Central Tablelands Commercial Harvest Zones Design and Analysis of Helicopter Survey; Cairns, S. & Bearup, D. (2012). A report to the NSW OEH on the consultancy: Design and analysis of helicopter Surveys of kangaroo populations in the Central tablelands North & South management zones; See also transect locations in western NSW, Queensland, South Australia and Western Australia, and Mjadwesch, R. (2013) Letter to NSW Scientific Committee, <https://bit.ly/3obeZaw>

<sup>65</sup> Holds et al. (2008). Microbial profiles of carcasses and minced meat from kangaroos processed in South Australia. *International Journal of Food Microbiology* 123:88–92; Ben-Ami et al. (in press). A survey of the microbial contamination of retail ready kangaroo meat in Australia.



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