



LONG DISTANCE TRANSPORT AND WELFARE OF FARM ANIMALS

Edited by **M Appleby, V Cussen, L Garcés,
L Lambert, J Turner**. May 2008
480 pages Hardback 978 1 84593 403 3
£75.00 / US\$150.00 / €120.00

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**BEYOND
CRUELTY.
BEYOND
REASON.
LONG DISTANCE
TRANSPORT AND WELFARE
OF FARM ANIMALS.**

Coalition members include:



THE SCIENCE OF ANIMAL WELFARE

Scientists agree that transport is generally an exceptionally stressful episode in the life of an animal.¹ It involves changes to the animal's whole environment. It may be handled and mixed with unfamiliar animals, subjected to changes in temperature and air movement, possibly hurt or injured and restricted in space, feed and water.

The framework most widely used by scientists for expressing the complexity of animal welfare is the 'Five Freedoms' formulated by the UK Government's advisory scientific committee - the Farm Animal Welfare Council (FAWC).²

There is considerable scientific evidence that long distance transport causes many welfare problems for farm animals. As a result, it is common for welfare to be compromised in all the areas indicated by the Five Freedoms.

Tens of thousands of sheep routinely starve to death on ships from Australia, simply because they cannot recognise the concentrated feed pellets as food after a lifetime spent grazing grass.

Laying hens frequently suffer the pain and discomfort of broken bones when removed from battery cages and placed into transport crates.³

Pig behaviour has demonstrated the distress that the noise and vibration of transport causes. Scientists found that pigs trained to push a switch in a noisy, vibrating transport simulator all learned to turn the simulator off, and soon kept the apparatus switched off for about 75% of the time.⁴

Transportation is completely unnatural for animals. Forms of suffering caused by transport include hunger, thirst, discomfort, pain, frustration, fear, disease and distress. Suffering increases directly with the length of journey endured. The issue of whether live long distance transport of animals, only to be slaughtered at the journey's end, is justified at all when they could be slaughtered on the farm, or at one of the nearest abattoirs, deserves much more attention.

THE FIVE FREEDOMS OF ANIMAL WELFARE (FAWC)²

Animals should have:

- | | |
|--|---|
| Freedom from hunger and thirst | by ready access to fresh water and a diet to maintain full health and vigour |
| Freedom from discomfort | by providing an appropriate environment, including shelter and a comfortable resting area |
| Freedom from pain, injury and disease | by prevention or rapid diagnosis and treatment |
| Freedom to express normal behaviour | by providing sufficient space, proper facilities and company of the animal's own kind |
| Freedom from fear and distress | by ensuring conditions and treatment which avoid mental suffering |

A GLOBAL TRADE IN LIVE ANIMALS FOR SLAUGHTER

The long distance transport of live animals for slaughter is big business around the world, despite clear evidence of the welfare, food safety and meat quality problems it causes.

Over 60 billion farm animals are reared for food every year worldwide. Most are transported for slaughter, often over long distances within and between countries, on unnecessary journeys taking days, weeks or even months.

This massive movement of live animals means that at any given moment, more animals are travelling around the globe than people.

IT'S CRUEL

Year after year, millions of farm animals endure cramped, unsanitary conditions and experience stress and exhaustion from rough handling, hunger and thirst in extreme temperatures as they are transported live across the world. As a result, animals suffer horrific injury, disease is spread and many die before they reach their destination.

AND UNNECESSARY

We can stop the unnecessary long distance transport of live animals for slaughter. Already modern exports of fresh chilled and frozen meat are far greater than the live trade and increasing every year.

Governments can put legislation in place to make sure that animals are slaughtered, humanely and in accordance with cultural and religious requirements, as close to the point of production as possible. The chilled meat can then be transported and delivered in fresh condition.

HANDLE WITH CARE - A COALITION FOR CHANGE

The lack of political leadership in tackling this global cruelty has prompted a number of the world's leading international animal welfare organisations to come together to form a coalition called Handle with Care. Our vision is to stop the inhumane handling and transportation of live animals for slaughter.

Our task must be to free ourselves by widening our circle of compassion to embrace all living creatures.

ALBERT EINSTEIN



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CONTENTS

The science of animal welfare	Inside front cover	
A global trade in live animals for slaughter		1
Cruel - disasters at sea...		3
Unnecessary - 125 years of progress?		4
Reduced meat quality		6
Disease - a free ticket around the world		8
Disease - the human risks		10
Enforcement - costly and ineffective		12
By sea - cruelty cruises		14
By road - crushed on trucks		16
Highlighting the global trade in cruelty		18
Spotlight on Africa		20
Spotlight on North America		22
Spotlight on South America		24
Spotlight on Asia		26
Spotlight on Oceania		28
Spotlight on Europe		30
Spotlight on the Middle East		32
Conclusion and recommendations		34
References		36

CRUEL
DISASTERS AT SEA ...

On 28th January 1889, *The Liverpool Mercury* newspaper described fifty cattle killed on board a steamer which entered the UK's Mersey port after a four-day hurricane, saying “the manner in which these unfortunate beasts met their death is shocking to contemplate.”

Unfortunately, the disasters continue to occur today.

THE MV NAVENTES

In 2002, the MV Naventes loaded 1169 head of cattle at Darwin in Australia for export to Indonesia.

At the end of the journey, 99 cattle had died from trauma, feed deprivation or exposure caused by the ship's movement and weather conditions during the voyage.

THE MV BECRUX

Also in 2002, the maiden voyage of the MV Becrux involved transporting 63,413 sheep and 1,977 cattle from two ports in Australia (Portland and Fremantle) to four ports in the Middle East (Dammam, Fujairah, Doha and Muscat).

During the voyage, the ship encountered extreme weather conditions in the Arabian Gulf with very high temperatures (45°C) and humidity. The resulting overall deaths for the journey were some 1,437 sheep (over 1 in 50) and some 865 cattle (nearly half).

THE CORMO EXPRESS

In 2003, the Cormo Express left Fremantle (Western Australia) for Jeddah (Saudi Arabia) carrying 57,937 sheep.

Built in 1979 as a 'roll-on-roll-off' ferry, the Cormo Express had been converted to an 11-deck animal transporter in 1989. En route to Jeddah, 1.1% of the cargo (637 sheep) died.

On arrival in the heat of Jeddah on 21st August, the shipment was rejected by Saudi authorities who claimed 6% of the animals suffered from 'scabby mouth'. The ferry then roamed the region looking for a port to unload while political deadlock between countries ensued, until eventually being accepted by Eritrea on 24th October.

After almost 11 weeks at sea in extreme temperatures and humidity, one in ten, some 5,692 animals had died, mostly from heat stress and exhaustion while simply waiting in ports to be unloaded.

THE DM SPIRIDON

On 5th November 2007, the Lebanese livestock carrier DM Spiridon partially sank in the port of Cabello, Venezuela, while waiting to unload Brazilian cattle. 1,750 cows valued at \$1.2 million drowned as the ship took in water. Days later the decomposing remains of cattle contaminated beaches and coastline of the Triste Gulf.

Transport should
be avoided
wherever possible,
and journeys
should be as
short as possible.

EUROPEAN FOOD
SAFETY AUTHORITY

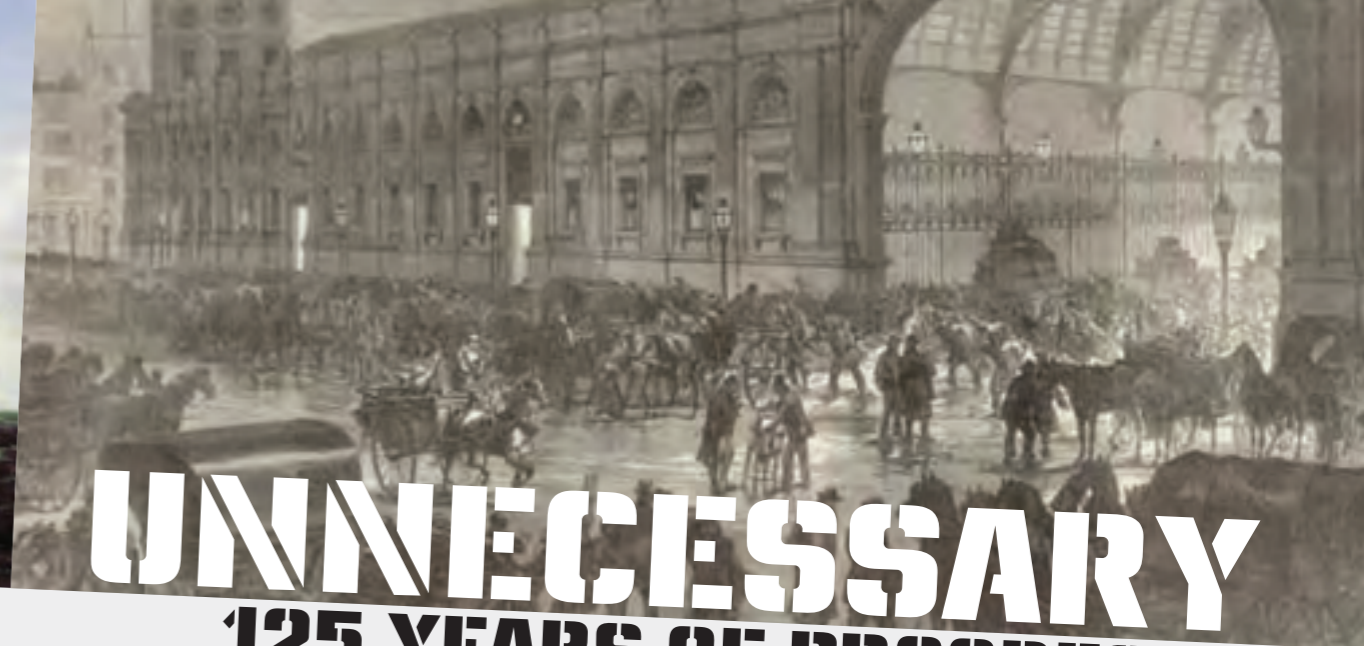




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The Dunedin in 1876, by Frederick Tudgay



UNNECESSARY 125 YEARS OF PROGRESS?

On 15th February 1882, the sailing ship Dunedin left New Zealand on a 98-day voyage to London. It was carrying for the first time 5,000 frozen sheep carcasses the 12,000 miles to Britain, in a bold venture for the newly-formed Bell-Coleman Mechanical Refrigeration Company.

When the meat export reached the Port of London people were amazed. The Times newspaper reported, "Today we have to record such a triumph over physical difficulties as would have been unimaginable very few years ago. New Zealand has sent into our London market five thousand dead sheep in as good condition as if they had been slaughtered in some suburban abattoir."

One of the New Zealand lamb packers had slipped a note in with one of the carcasses. It asked whoever in England should find the note, and eat the meat, to write back and say if they had enjoyed it. Sure enough, the note was found and the packer duly received a positive response.

However, over 125 years later, the cruel and unnecessary long distance transport of live animals for slaughter still exists.

Even just eight years later, in 1890, questions were already being asked about the necessity of live transport. The book *Cattle Ships* reported that when ships roll and pitch, "cattle are thrown together in a heap on the deck, slippery from dung and urine, and thrown from side to side in a confused mass until they die."

Cattle Ships was "the fifth chapter of Mr Plimsoll's second appeal for our seamen", but was published out of order "on account of its pressing urgency" because it "involves such cruelty to animals".

"The first thing it appeared to me to be necessary to ascertain," wrote Plimsoll, "was why cattle for food are imported alive at all, seeing that great quantities

of beef are imported in a refrigerated state from America, Australia and New Zealand."

The chief inspector at Smithfield's Meat Market told Plimsoll that the best beef to eat was that which came over as dead meat, because the beef which is brought over alive is injured on the journey, reducing the quality of the carcass.

Plimsoll's manifesto also complained that unscrupulous salesmen were passing off live imports as locally reared animals, and that the cruel live trade only continued because it made money. "There is no cruelty to the cattle, and no risk to the men, that will stop them if there is money in it," one seaman told Plimsoll.

"Prolonged torture" was Plimsoll's verdict on the way the animals were jammed tightly together in overcrowded, foul conditions, standing all the time sometimes for the sixteen days on board, mad and furious with terror and unrest. Infectious diseases spread rapidly. Disasters at sea, from fires to shipwreck, were common.

The Press, a New York newspaper, remarked that "a sea-sick man is one of the most pitiful things one can see, but his sufferings are nothing to those of the animals. They will look at one so pleadingly and helplessly that you almost feel like crying for them." *The Press* went on to wonder why someone did not think to have a law passed.

Samuel Plimsoll was first elected an English Member of Parliament for Derby in 1868, and unsuccessfully petitioned for a Bill in Parliament that absolutely prohibited the importation of live cattle for food.

Mankind has made tremendous advances in the last 125 years, but sadly the cruelty of live animal transport would be just as familiar to Plimsoll today as it was in 1890.



The stress on farm animals as they are transported to the abattoir is one of the most severe events they suffer during the process of meat production. There is a direct relationship between transport time and the possibility of increased biological cost during transportation⁵ which will produce carcass damage or low-quality meat.⁶

While an absence of an effect on meat quality does not guarantee the absence of suffering, the quantification of injuries, bruises, scratches, blemishes, broken bones, mortality, morbidity, the incidence of abnormal meat pH, and carcass and meat quality, all provide information about the welfare of the animals during handling, transport and lairage.^{5,7,8}

POULTRY

Poultry transport is the largest movement of commercial livestock in the world.⁹ More than 40 billion chickens were transported globally in the year 2000 alone, over six times the entire human population of the planet.

Birds are one of the most easily frightened farm animals. Most suffer physical injury during the capture, loading, transport and slaughter process. The incidence of broken bones in broilers has been estimated to be around 95%, with three or four breaks per carcass.¹⁰

Broken bones, haemorrhaging and bruising are the most common injuries.¹¹ It has been estimated that 6.7% of the carcasses are downgraded due to bruising or black spots.¹² All of these problems degrade the value of the meat.¹³

Transport stress, coupled with deprivation of food and water, can lead to weight loss, reduced carcass yield and changes in the post-mortem acidification of the meat.¹⁴ Heat stress during transport also constitutes a major threat to poultry welfare and carcass/meat quality.¹⁵ The distribution of dead chickens within the truck on arrival at the abattoir is closely associated with the thermal loads within the truck.^{16,17}

The most advisable decision is to slaughter animals as close to the farm as possible. Premiums could be developed for farmers to promote this recommendation and avoid long distance journeys.

PROF. GUSTAVO MARIA LEVRINO, UNIVERSITY OF ZARAGOZA, SPAIN



CATTLE

In cattle, the high individual value of the carcass means that even a low incidence of bruising, or abnormal colour of the meat, has a strong impact on the final income of the farmer.

The two main transport effects on cattle carcass/meat quality are bruising, and so called 'Dark, Firm and Dry' meat (DFD meat) where exhaustion during long journeys has depleted muscle glycogen.¹⁸ Both these problems are directly linked to transport time. Other effects of transport on meat quality include increased toughness and decreased palatability.¹⁹

The most common problem with cattle transport is overloading, which greatly increases the stress response and the risk of carcass damage from falls and bruising.^{20,21}

When bruising is severe, it decreases the amount of marketable meat. Even if bruising is not so severe, the meat is downgraded, producing a partial loss. Scientists found that 75% of cattle that passed through a UK market had some bruising.²²

PIGS

In pigs, long distance transport exhausts the animals due to excessively long feed withdrawal times, while the physical and psychological stress tends to produce DFD meat. Transport is also particularly stressful for pigs because they can suffer motion sickness.²³

The main problems associated with transport and meat quality are the Porcine Stress Syndrome (which results in live weight loss in 4-6% and mortality in 0.1-0.4%), injuries, bruises, skin damage, abnormal colour, DFD meat or 'Pale, Soft, Exudative' (PSE) meat, and contamination by Salmonella.⁵

Scientists in America have estimated that the cost of quality defects in pigs could be \$12.40 per animal due to bruises, PSE and DFD pork caused by transport and pre-slaughter handling.²⁴

Health is an important part of animal welfare. It is clear that the disease risk caused by the transport of live animals around the world needs to be taken seriously, and would be reduced by minimising the number of animals being transported.

Some of the diseases that may be spread are very infectious and economically damaging.

This was well documented in 1997 with classical swine fever in The Netherlands and in 2001 with foot and mouth disease in the United Kingdom.

REDUCED IMMUNE RESPONSE

An animal's immune system is its main defence mechanism against infection, and stress impairs immune function. During long distance transport, animals are exposed simultaneously to a variety of stressors in a relatively short period of time.²⁵

Such stressors include food and water deprivation, mixing of unacquainted individuals, handling by humans, exposure to a novel environment, noise and vibration, forced physical exercise and extremes of temperature and humidity.²⁶

All these factors activate a stress response in the animal through different physiological pathways. The stress response is known to be additive, so the higher the number of simultaneous stress factors, the bigger the response.

Disease can result from different factors in relation to transport, including: (1) tissue damage, (2) tissue malfunction, (3) increased susceptibility to infection and disease, (4) increased infectivity and (5) increased contact between animals.

A DISEASE DATING SERVICE

It is clear that transport increases the intensity and frequency of contacts between animals and this may result in diseases being spread.

Mixing of unacquainted animals is a common practice in transport and lairage, both to homogenise the weight of the animals and to increase profit. Mixing of unacquainted animals leads to an increase in agonistic activity in several species, such as cattle and pigs.²⁷ This may lead to stressed and injured animals, a combination that facilitates infections and decreases welfare.

The way animals are transported is also important. For example, if poultry crates are stacked one on top of the other during transport, faeces may pass from one crate to another, increasing the risk of diseases being spread. This is likely to be a problem in multi-tiered vehicles.

SHIPPING FEVER IN CATTLE

Stress related to transport can enhance the level and duration of pathogen shedding in sub-clinically infected animals and thereby increase their infectiousness. This effect is likely to be greater when mixed animals remain

All human diseases to emerge in the past 20 years have had an animal source.

THE LANCET,
THE WORLD'S
AUTHORITATIVE VOICE
IN GLOBAL MEDICINE



DISEASE A FREE 'TICKET' AROUND THE WORLD

together for a prolonged period of time, as it may happen, for example, in long distance transport by ship.

A clear example of this is shipping fever, a transport-related disease of cattle. It is caused by the interaction of the reduced capacity of the immune system caused by the stress response, and the increased contact between animals and pathogens caused by transport.²⁸

Transport has also been shown to increase pneumonia caused by bovine herpes virus-1 in calves,²⁹ pneumonia caused by pasteurellosis and mortality in calves and sheep,^{30,31} and salmonellosis in sheep³² and horses.³³

Other important diseases which may be transmitted by transporting animals include bovine viral diarrhoea, African swine fever, swine dysentery, swine vesicular disease, porcine reproductive and respiratory syndrome, post-weaning multi-system weaning syndrome, porcine dermatitis and nephropathy syndrome, enzootic pneumonia, bovine rhinotracheitis, rinderpest, glanders, sheep scab, Newcastle disease and Avian Influenza.³⁴

PORCINE STRESS SYNDROME

Tissue malfunctions are alterations in the animal's biological functions that lead to transport-related diseases. The most important is malign hyperthermia or Porcine Stress Syndrome (PSS), which is a serious welfare problem in pigs.

This involves a cascade of physiological changes that may cause death. Death rates are higher when conditions are hot and humid.³⁵ Scientists have found that the death rate also increases significantly by 50% with the length of the journey, from 0.08% for journeys shorter than 75 km to 0.12% for journeys over 150 km. About 70% of the deaths occur on the lorry and the rest occur during lairage.³⁶



DISEASE

THE HUMAN RISKS

In his landmark book *Bird Flu - a virus of our own hatching*, Dr Michael Greger MD clearly illustrates the human health dangers created by the live transport of animals and the factory farming industry which feeds this global trade.

When the World Health Organisation (WHO) was founded some 60 years ago, new diseases were considered rare. Scientists were declaring victory in the war against infectious diseases.

Today, the WHO reports new diseases emerging at a rate unprecedented in medical history, due in part to factory farming and environmental damage. Newly discovered viruses are coming from the animal world - so called zoonotic diseases - from Ebola to Bird Flu.

Eleven out of the top 12 most dangerous bioterrorism agents are zoonotic pathogens. Stopping the long distance transport of live animals could be a matter of national security, according to the watchdog arm of the American Congress.

Epidemic diseases tend to come from those animals that herd or flock together in large numbers. Tuberculosis is thought to have arisen from the domestication of goats and measles from the domestication of cows.

In recent years factory farming has fundamentally changed the way animals live, and never have so many new diseases appeared in so short a time.

The long distance transport of farm animals is ideally suited for spreading disease according to the UN's Food and Agriculture Organisation (FAO). Not only does it spread disease geographically, but the stress involved makes the animals both more infectious and more vulnerable to infection.

Some pathogens that would not normally lead to disease only become active during transport because of the stress induced immunosuppression the animals suffer.



And once an animal is infected, the stress of transport can lead to increased shedding of the pathogen. Scientists at Texas Tech University found that when you cram animals onto a truck for just 30 to 40 minutes, the levels of Salmonella in faeces jumps from 18% to 46%, and the number of animals covered with Salmonella on arrival at the slaughter plant jumps from 6% to 89%.

Microbiologists say the poor conditions in factory farms are ideal for breeding infectious diseases. They allow for rapid selection and amplification of pathogens, and for the disease to spread faster to greater numbers of animals.

In response, to keep animals alive in stressful conditions and enhance their growth, the use of antibiotics has become standard, raising the stakes further by building up antibiotic resistance in the new diseases. Ironically, the growth rate of healthy animals raised in hygienic conditions does not change if fed antibiotics.

Because of its extreme mutation rate, influenza is a perpetually emerging disease, and H5N1 - the deadly strain of Bird Flu - is the king of kings in the danger it poses.

Today throughout the world, factory farms ship millions of chickens huge distances every single day. The UN's Food and Agriculture Organisation blames the transport of live birds as the primary culprit in the rapid spread of Bird Flu through Asia, saying that a prevention measure would be to reduce the long distance trade. Trucking live poultry has also been implicated in the spread of the disease in Europe.

Highly pathogenic Bird Flu viruses are primarily the products of unsanitary factory farming. In 2005, the UN called on Governments to fight factory farming's role in providing the ideal conditions for the virus to spread and mutate into a more dangerous form.

USA: A CASE STUDY

In August 1998, a barking cough was heard on a giant North Carolina pig farm. Rapidly all the thousands of breeding sows on the factory farm fell ill. Within a year it had spread across the entire United States. Pigs had not started flying. The rapid disease spread was blamed on the long distance transport of live animals. The cost of these highly contagious disease outbreaks needs to be considered when calculating the true economic cost of the long distance transport of live animals.

ASIA: A CASE STUDY

In 1997, the Nipah virus - named after the village where the first human death occurred - erupted on one of the largest pig farms in Malaysia. The disease swept nationwide on a seven-month rampage because of long distance animal transport. The virus turned out to be one of the deadliest human pathogens, killing 40% of those infected, a toll that propelled it onto the US list of potential bioterrorism agents. "A hundred years ago the Nipah virus would have simply emerged and died out" said the Thai Minister of Public Health. "Instead it was transmitted to pigs and amplified. With modern agriculture, the pigs are transported long distances to slaughter. And the virus goes with them".



ENFORCEMENT COSTLY AND INEFFECTIVE

Many countries now have, to varying degrees, legislation in place to govern conditions for the transport of live animals. But legislation requires costly monitoring and enforcement to be effective.

These difficulties in assuring the welfare of animals while in transit make it more logical to slaughter them as close to the farm of origin as possible and export only meat. A meat-only trade would cost less to enforce and provide a welcome decrease in the resource pressures on already overextended authorities.

IMPROVING STANDARDS IS NO SOLUTION

A legislative approach to improve conditions is no solution because it is very difficult and costly to ensure adequate resources on the ground to achieve acceptable levels of enforcement and compliance.

For example, the European Union (EU) has more comprehensive legislation for animal welfare during transport than anywhere else in the world. But despite this, a large degree of variability in enforcement exists both within and between member states of the EU, leading to persistent areas of non-compliance with legislation and diminished animal welfare - especially for those animals transported on long distance journeys.

In 2004, the Food and Veterinary Office (FVO) of the European Commission released a summary report³⁷ on a series of missions, carried out in nine member states during 2003, that evaluated animal welfare during transport. The most common infringement found was a lack of "monitoring and enforcement" of adherence to the legal limits for journey times.

Other widespread infringements were identified, including stocking densities such that animals could not access drinkers and ventilation systems that were inadequate. Furthermore, because of high stocking densities, inspectors did not

As a result of lax enforcement, transporters who are tempted to disregard animal welfare probably tend to take a chance.

FOOD AND
VETERINARY OFFICE
(FVO) OF THE
EUROPEAN
COMMISSION



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have direct access to the animals on board, thereby reducing the possibility of identifying problems during transport.

As far as inspections themselves were concerned, the report highlighted systematic deficiencies in the structure and function of various competent authorities. Of the inspections that were carried out, few were inspections in transit. Roadside checks are difficult to orchestrate: they require cooperation between competent authorities and the police, as it is necessary to stop vehicles on the motorway.

In addition, vague terms or phrases within legislation can be open to different interpretation, and it is the attitude of the competent authorities, and the resources they have or are willing to commit to animal welfare, that will ultimately determine the quality of any enforcement.³⁸



BY SEA CRUELTY CRUISES

The value of the global live export trade by sea is estimated at over \$10 billion annually. Some of the animal welfare problems on ships, in particular high stocking density and heat stress are both poorly understood and also difficult to manipulate without having a major impact on industry profit.

Exporters are driven by financial objectives, so it is not surprising that current standards, which have evolved over more than 20 years of experience, are those that lead to maximum financial gain for the exporter, rather than optimum welfare of the stock.

The ships used are a variety of ages and size, and are usually converted vessels originally designed for other purposes, for example, car transporters. Typically, Australian livestock vessels will carry 60,000-100,000 sheep and perhaps 1,000 cattle on a voyage ranging from seven (to south-east Asia) to 23 days (to the Middle East).

A LONG JOURNEY

The export process involves much more than just the shipping of livestock: it begins with the mustering of the stock, often on remote properties, and it ends with the animals' slaughter in the country of destination.

In between, the stock will be handled at least a further five or six times, and the whole process is likely to last between one and two months. There are significant challenges to the welfare of livestock all along this chain, and the possibility of synergistic effects of multiple stressors cannot be ignored.

The most serious animal welfare concerns of stakeholders in the Australian live export industry are clinical diseases (as evidenced by mortality level, clinical disease incidence and animals in hospital pens on the ship), heat stress (respiration rate and wet bulb temperature, which includes temperature and humidity), stocking density and ammonia accumulation.³⁹

The Australian industry expects nearly 1% of all its transported sheep to routinely die on every ship. That's the same as 1,768 Australians dying on cruise liners in 2006 and the Government saying they won't act because the death toll is not high enough.

**SOFIA PARENTE,
WORLD SOCIETY FOR
THE PROTECTION OF
ANIMALS**



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A DEADLY JOURNEY

In the Australian live export industry, over three quarters of all sheep deaths occur on the ship itself, with for example approximately 60,000 animals reported to have died in 2003.⁴⁰

The biggest contributor to sheep death is persistent failure to eat (so-called 'inappetence'), due to the animals being moved from a pasture-based diet to concentrated pellets, which they simply do not recognise as food.

The main causes of cattle death are heat stroke, trauma and respiratory disease (shipping fever).⁴¹ The high temperature load generated by the livestock and the ships' engines, combined with a high ambient temperature, makes heat stress a common problem on export vessels.

Infectious conjunctivitis (pinkeye) is also a pernicious clinical disorder that occurs regularly on the ships. Whilst pinkeye is not fatal, there is no doubt that it significantly reduces the welfare of the livestock because of irritation, and it is also known to reduce productivity.

The animals' journey, standing in their own excreta, generates ammonia gas from the urea which can irritate the respiratory tract in animals and humans. The clinical symptoms of ammonia toxicosis are lacrimation (crying), coughing and sneezing, and nasal discharge that can be bloody.⁴²

Closed decks may have a constant, average to high ammonia level, while open decks normally have a lower average ammonia level, unless climatic conditions are conducive to higher levels, for example in the hot conditions of the Asian and Middle Eastern destination ports.



BY ROAD CRUSHED ON TRUCKS

The amount of space allowed for an animal during transport by truck is one of the most important factors affecting welfare. Animals are considerably disturbed by too much movement, or too high a stocking density.

Scientists Tarrant *et al.* (1992) studying cattle at high, average and low commercial stocking densities found that falls, bruising, cortisol and creatine kinase levels all increase with lack of space.²¹

Absolute minimum space allowances are determined by the physical dimensions of animals, but this is not sufficient for good welfare. When four-legged animals are standing on a surface subject to movement, such as a truck, they position their feet outside the normal area under their bodies in order to help them to balance.

Animals also need to take steps out of this normal area if subjected to accelerations in a particular direction. Hence they are much more active, using much more energy, than an animal that is not transported. As a result animals become more fatigued, more in need of water, more in need of food, and more affected by adverse conditions on a long journey than on a short journey.

HANDLING WITHOUT CARE

Animal welfare during road transport is highly dependent on the handling during loading and unloading, on the vehicle design, and on both the driving technique and the roads being traversed.

Some workers may hit animals and cause substantial pain and injury because they are trying to do the work very quickly, or because of a lack of knowledge about animals and their welfare. Training of staff can substantially alter attitudes to, and treatment of, animals.

Payment of handling and transport staff at a higher rate if the incidences of injury and poor meat quality are low improves welfare. Insurance against bad

We think the spreading pattern of Avian Flu is mechanical along the road, not along the flyway of the migratory birds.

DR RATTAPAN
PATTANARANGSAN,
MAHIDOL UNIVERSITY,
THAILAND



practice resulting in injury or poor meat quality should not be permitted. Also often just as effective as laws, are retailer codes of practice, since retail companies need to protect their reputation by enforcing adherence to their codes.⁴³

Farm animal selection for breeding has been directed especially towards maximising productivity. In some farm species there are consequences for welfare of such selection, and some of these effects may impact on welfare during handling and transport.^{44,45}

For all species, tying of animals on a moving vehicle can lead to major problems, as can extremes of temperature. For cattle and pigs, any mixing of animals can cause very poor welfare. Disease is another major cause of concern in transported animals and has significant consequences for trade in animals and animal products.

Despite all the differences between and within species, several general recommendations can be made. For example, even illumination and gently curved races without sharp corners facilitate the movement of the animals. Handling animals without the use of sticks or electric goads results in better welfare. Non-slip flooring and good drainage to prevent pooling of water are also important. As animals prefer to walk slightly uphill rather than downhill, floors should be flat or slope upwards. On the other hand however, ramps should not be too steep, i.e. not more than 20 degrees.⁵

HIGHLIGHTING THE GLOBAL TRADE IN CRUELTY



PIGS FROM CANADA TO HAWAII

One of the strangest, cruellest long distance journeys sees live pigs trucked and then shipped from the province of snowy Alberta in Canada to the heat of Hawaii, just to be slaughtered.

On the week-long journey, the pigs are illegally unloaded from the trucks straight into shipping containers without ever touching the ground. Official shipping documents reveal that pigs frequently die en route.

Arriving in Honolulu, gallons of waste manure, faeces and pig urine can be seen draining freely out of the containers onto the road to the slaughterhouse. Finally, the pork is falsely labelled as "Island Produced" or "Hawaiian fresh island pork".



CATTLE FROM BRAZIL TO LEBANON

Each week, thousands of cattle are exported live on a three-week journey that takes them from the port of Belem in Brazil, to Beirut in Lebanon, just to be slaughtered.

In the Amazon heat, cattle are crammed into trucks so they cannot move or lay down on a three or four day trip without food or water. Once at the port, they are brutally loaded onto the ship with electric prods.

Eight to ten per cent of the cattle die during the 17-day voyage to Beirut across the Atlantic and Mediterranean. The cattle then face rough unloading and a further stressful truck journey to slaughter, often in inhumane conditions which violate religious requirements, before the meat finally finds its way onto the street markets just to be falsely labelled as "Halal" anyway.



GOATS FROM NAMIBIA TO SOUTH AFRICA

Across Africa, the cruel trade in live transport could be replaced with a trade in chilled or frozen meat, from animals humanely slaughtered close to home.

Every week in southern Africa, as many as 15,000 goats are unnecessarily packed onto trucks to make the 2,000-kilometre journey from Namibia to the East Coast of South Africa, just to be slaughtered.

Overcrowded in poor conditions without food, water or rest, many goats suffer from dehydration and the infectious disease Pasturella. Some die en route and others are blinded by the dust.



HORSES FROM SPAIN TO ITALY

In the European Union, thousands of live farm animals are traded in and between Member States each year.

One little-known aspect of the trade sees tens of thousands of horses transported live over long distances to Italy from Spain and Eastern Europe, just to be slaughtered and falsely labelled as traditional Italian horse meat.

Horses are trucked through Spain, into France, and down into Italy for 36-46 hours without proper rest, food or water, in temperatures often exceeding 40 degrees centigrade.

Police checks have regularly revealed the suffering and cruelty involved as EU laws requiring horses to travel in individual stalls, with adequate rest, food and water, are routinely ignored.



CHICKENS SPREADING BIRD FLU IN THAILAND

Most countries in Asia do not have welfare legislation to protect animals during transport. Chickens, with their low individual value, often suffer the cruellest handling.

Every evening in Thailand, hundreds of thousands of poultry suffer on the truck journey into Bangkok. Factory farmed birds in a pitiful condition are crammed into filthy crates and baskets, as many as ten chickens roughly thrown into each crate, most suffering broken bones as a result. The smell of faeces is overpowering as the frightened birds constantly defaecate.

But it is not just animals who are suffering. This kind of intensive poultry production has helped the evolution of Avian Flu, and there is a strong link between the movement of live animals destined for domestic and export markets, and the potential spread of disease.



SHEEP FROM AUSTRALIA TO THE MIDDLE EAST

Every year, Australia exports over four million live sheep, over half a million cattle, and tens of thousands of goats to Asia and the Middle East, on gruelling road and sea journeys that can last months. Tens of thousands die on the way.

On a single ship, up to 100,000 Australian sheep, raised on large isolated farms, are kept in crowded poorly lit pens, with three sheep per square metre for the entire journey. Rarely are sick or injured animals euthanased, or even spotted in the densely crowded pens, their bodies only found at the journey's end.

Yet 80% of Australian abattoirs are already Halal-certified, and Middle Eastern supermarkets are selling these chilled meat imports.



SPOTLIGHT ON AFRICA

The main long distance transport routes in Southern Africa are from Namibia, via Botswana to South Africa (two to five days by road covering distances from 1,000 to 2,000 kilometres) and the export of animals by sea from ports in South Africa and Mozambique to Mauritius (seven to ten days by sea).

In West Africa, long distance transport can take several days, with routes from Niger and Mali to Togo, Benin, Ghana, and Nigeria the longest, taking on average three to six days to cover up to 2,000 kilometres. However, the number of days in transit depends on the number of stops at markets, and can in practice take much longer than six days.

In East Africa, one of the longest routes is in Southern Sudan where the journey can take three days from Rumbek to the Ugandan border. However, cattle often then travel through Uganda for another two to three days.

In North Africa, land transport can be seven to nine hours. The exception is for sheep imported from Australia. Sheep are shipped directly on vessels from Australia to the Suez port in Egypt and can take about three weeks. Egypt imports around 50,000-100,000 head of sheep annually.

In many countries in the region, bureaucracy and sometimes even corruption prolong already long trips, and increase exposure to heat and sun, as well as the amount of time spent without food, water, and rest.

A LACK OF ENFORCEMENT

In Africa, some countries have well-developed legislation that covers animal welfare and livestock transportation (e.g. South Africa and Kenya), some have fairly well-developed legislation (e.g. Uganda and Ghana) and others have a weak legislative framework.

Whatever the status of legislation, it is common that enforcement is very weak, compliance is very low, and knowledge of the legislation is lacking even among key stakeholders. In general, the political will to enforce animal welfare legislation is minimal.

Animals often break horns or legs trapped in large gaps on sub-standard trucks which are overloaded and offer no protection from extreme heat or chill. Species may be mixed together and smaller animals trampled or gored by horns when they fall.

**KAREN MENCZER,
SENIOR RESOURCES
ASSOCIATE,
THE CADMUS GROUP**



National protectionist legislation, such as the frozen meat import ban in Nigeria, is becoming less common however, and free-market systems are driving a growing trade in meat rather than live animals.

Health factors are also playing a significant role in determining whether live animal trade across borders is acceptable. And export to western countries, who are increasingly demanding humanely raised and slaughtered meat, is an incentive to improve animal handling.

WET AND DRY SEASON WORRIES

In Africa, different animal welfare concerns arise during the wet/rainy seasons and dry seasons.

In the dry season/drought periods, a lack of pasture and water, especially in the arid and semi-arid areas, makes these areas even more difficult to traverse. Animals trekked or trucked over long distances during this period suffer dehydration, heat exhaustion, hunger, and thirst. This is made worse by overcrowding in poorly ventilated and inappropriate transport vehicles.

Animals trucked during the rainy/wet seasons suffer wind-chill and injuries from slipping and falling in vehicles or suffer from vehicle accidents. The trucks often get stuck in the mud and animals remain on board for long periods, exposing them to stress and exhaustion. They are usually not unloaded due to lack of facilities, and usually not fed or given water.



Nearly all of the billions of farmed animals raised in North America are subjected to transportation at some point during their lives, both international trade between the United States, Canada and Mexico as well as inter-state and inter-provincial trade.

The lack of accurate record keeping at the state, province and country level means data on livestock movements in North America are highly fragmented and limited, causing concern for disease spread and public health. The Trust for America's Health says, "the U.S. is missing the chance to detect a zoonotic disease early, and control if not prevent its spread. This is troubling given that many bio-terror agents are zoonotic".⁴⁶

UNREGULATED FACTORY FARMING

Ultimately, the most effective way of addressing farm animal transport in North America is through legislation; the setting of travel time limits, rest periods and provisioning of food and water, etc. Evidence suggests that the transport of live animals could readily be replaced by trade in fresh or frozen meat throughout North America.

Currently the North American meat and livestock industries are characterised by vertical integration, which often results in long distance transport between the different stages of production such as rearing, fattening and slaughter.

This factory farming is driven by factors like the relatively low cost of transporting animals compared to the cost of transporting feed, and geographical differences in feed prices or grazing pasture availability, as well as regulatory differences between states or countries such as waste disposal, and labour costs.^{47,48}

Due to the large size of the three countries that make up North America's landmass, transport routes are widely dispersed and largely unregulated.

Canada, the United States, and Mexico have varying laws, codes, and regulations governing the transport of farmed animals. Canada has the most comprehensive national laws governing the transport of farmed animals, with

Investigators have documented dead and fallen animals in the United States arriving at auction with broken legs, infected eyes, foaming mouths, and bleeding cuts and sores.

MONICA
ENGBRETSON,
ANIMAL PROTECTION
INSTITUTE



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the United States and Mexico falling far behind. However, in all three countries the legislation is limited in both scope and enforcement.

Deprivation of food and water, overcrowding, the lack of opportunities for rest, and prolonged exposure to extreme heat or cold, are all commonly cited welfare concerns associated with long distance transport in North America. Poor and abusive handling of animals during loading and unloading also increases animal stress and suffering.

LIVE TRADE BETWEEN US AND CANADA

An unnecessary trade in live pigs and cattle for slaughter exists between Canada and the United States due to the lower costs of slaughter and processing in US plants. In addition beef from Canadian cattle slaughtered in the US may carry the 'USDA' (US Department of Agriculture) packaging label, something not allowed on packages of beef imported from Canada.

Canada has historically lacked enough packing capacity to slaughter all the animals raised there. But following the discovery of BSE (bovine spongiform encephalopathy) in a Canadian cow in May 2003, exports to the US of cattle over 30 months of age were halted, and slaughter capacity in Canada increased. The US border re-opened in November 2007, however, and as a result Canadian slaughter volume is again dropping.

As of September 2008 US retailers will be required to notify customers of the country of origin of beef, lamb and pork, under the US Country of Origin Labeling law (COOL) that passed the US Congress in 2002. To qualify for a 'US Country of Origin' designation the animal must have been born, raised and slaughtered in the United States.

Given that a majority of Americans say they check labels for country of origin, COOL is a promising development, with the potential to significantly decrease live trade between the two countries if Americans reject meat labeled as coming from animals raised in Canada.



SPOTLIGHT ON SOUTH AMERICA

Cattle are the main species produced in many South American countries, with Argentina and Brazil two of the world's most important beef exporters.

In Brazil, Colombia and Venezuela production is based mainly on *Bos indicus* cattle, whereas in Peru, Bolivia and Ecuador it is *Bos indicus* and *Bos taurus*, and in Argentina, Uruguay and Chile it is mainly *Bos taurus*, including criollo, dual purpose and British breeds such as Hereford and Aberdeen Angus.

Bos indicus cattle have been observed to be more easily stressed by handling than *Bos taurus*, hence making the handling during loading and transport more difficult.

The transport of farm animals in South America is generally of long duration in very bad conditions, regardless of the distance travelled, due to a combination of bad roads, bad weather conditions and the existence of several intermediate dealers.

A LACK OF ENFORCEMENT

There is legislation regarding the transport of animals for consumption in most countries, but it deals mainly with sanitary requirements and public health issues rather than the welfare of animals. The main problem seems to be that there is not much enforcement of the existing legislation and that compliance with regulations is commonly overlooked.

Usually, during road transport, cattle in South America do not have access to food and water inside the truck, and it is not common to unload the animals during the trip, even when travelling long distances.

Bad handling practices are commonplace when loading and unloading, with the use of inappropriate aids such as sticks or goads, and sometimes even practices that are proscribed by the OIE, such as pulling sheep by the fleece, twisting of tails, etc.

Overloaded trucks have been observed to be a regular problem in the region, as have long waiting times before the animals are unloaded in the stockyard in some countries, and long lairage times once at the slaughterhouses.

A lot of them [cattle] die during the trip [the 16-18 day sea voyage to Lebanon], approximately eight to ten percent.

**EXPORT OFFICIAL,
BELEM PORT, BRAZIL**



A SOLUTION IN CHILE

Although records on the downgrading of meat quality (bruising, pH, etc) can be found in export slaughterhouses, this information is usually private, and there is currently little published scientific evidence available on the consequences to meat quality of live transportation in South America.

However, in Chile, existing regulations make the transporters responsible for the animals during the journey and therefore, if bruising occurs, the transporters have to pay for any losses. This economic approach has been a positive influence on decisions about stocking densities and about how far animals are transported.

Because of the relationship between animal welfare, product quality and market demands from more developed importing countries, there seems to be a good opportunity to improve animal welfare during transport and slaughter in South America.





SPOTLIGHT ON ASIA

Meat consumption and live animal transport are increasing across Asia. Research shows that, in addition to long journeys, the animals are often subjected to long periods without food or water, rough handling and overcrowding.

Some very practical steps in Government and State planning could fundamentally reduce the distances which animals need to travel, and positively influence the welfare of farmed animals in Asia. These could include, for example, the provision of regional slaughterhouses, processing and refrigerated transport facilities which would boost local economies in more rural provinces.

FORCED WEIGHT IN CHINA

Due to its massive size, China is the world's biggest market for meat and dairy products, and its live transport industry overshadows that of any other country. Long distance live transport routes criss-cross the entire Chinese mainland.

Many of the general purpose transporters, and even some specialised livestock transporters, are known to handle animals very roughly during transport.

One of the worst practices that has come to light is the forced watering or force-feeding of slaughter animals with mud and stones in order to increase their slaughter weight.

Death from exhaustion, lack of space and water and exposure to severe weather conditions is common, and explains the continued existence, and human health hazard, of an illegal trade in dead animals at some of Guangzhou's slaughterhouses.

Although existing Chinese laws currently fall short of OIE transport standards, compliance with improved health and welfare codes is becoming an increasingly important Government policy issue for both domestic and export markets.

Countries across Asia are developing legislation to protect the welfare of animals, but much more is needed to bring laws up to OIE standards and to ensure enforcement.

**DR LISA COLLINS,
COMPASSION IN
WORLD FARMING**



CATTLE OUT OF INDIA

Most Indian states have banned cattle slaughter for religious and moral reasons, but this leads to many of these animals being cruelly transported to Kerala and West Bengal, or exported to Pakistan and Bangladesh instead.

Poor handling sees the animals loaded onto trucks by goading, or twisting or biting of tails. Once inside the trucks, many cattle are held with their pierced noses and tails tied to the top of the trucks. The animals are unable to move for the entire duration of the journey, which can often exceed 24 hours. Often, the animals receive neither water nor feed en route. Unloading at the slaughterhouse is performed by employing the same poor procedures as at loading.

The Animal Welfare Board of India, alongside a number of animal welfare organisations, have been gathering evidence of widespread abuse of cattle, buffaloes, sheep and goats used for meat and leather in various parts of the country. Their findings show high levels of overcrowding leading to severe injuries and fatalities, with animals gouged by horns or crushed.

Despite directives from the State Government, the evidence suggests little improvement has been made, and corruption, reported to occur at many levels in the sub-continent, contributes to the lack of enforcement of regulations governing live transport.



SPOTLIGHT ON OCEANIA

The transport of animals to slaughter in Australia and New Zealand is complex, with differences in geography, animals, distances travelled, slaughter destinations, animal welfare guidelines, regulations, and people's expectations.

There are two significant issues for animal welfare during transport in Australia.

Some livestock face long transportation by road for slaughter, sometimes extremely long. Of particular concern is the transport of livestock from remote areas. These animals are unused to human contact and handling, and may suffer more than usual from the stress of mustering and confinement for transport.

In New Zealand, codes of welfare have legal status, and failure to adhere to the minimum standards can be used to support a prosecution. In contrast, in Australia there are, as yet, no enforceable standards for the land transport of livestock for slaughter.

In addition, animals are also exported by sea from Australia for slaughter abroad, in a trade which shames many Australians otherwise proud of their country's leading animal welfare record in other areas.

New Zealand has virtually stopped all live exports for slaughter in recent years and the Government is now considering banning the trade completely.

SEA OF SHAME

The inherent mortality figures demonstrate that some animals are simply unable to tolerate the conditions of long distance transport by ship. The only humane response is the alternative of supplying chilled meat instead.

While public concern for animal welfare has grown in Australia, the Government has continuously supported the live export trade since its inception.

A report commissioned by the Australian meat processing industry concluded that the live export trade is also costing the country in terms of lost gross domestic product (GDP), lost household income, and lost Australian jobs.⁴⁹

We believe that the most humane situation is for animals to be slaughtered as close to the farm of origin as possible.

NEW ZEALAND VETERINARY ASSOCIATION

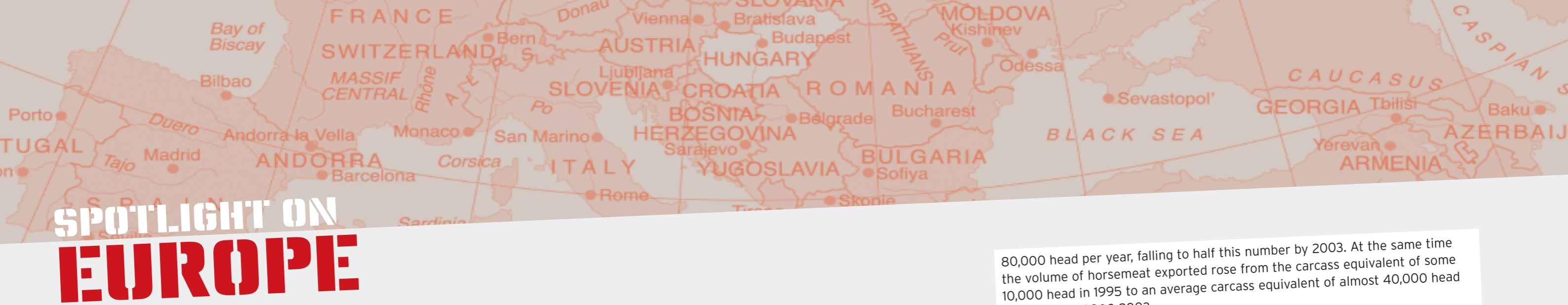


Furthermore, the report stated that profitability of the live export trade is supported by market distortions that are created by Government policies, and if it were not for these factors, the rising demand for meat in importing countries would have been met by exports of chilled and frozen meat.

Others also argue that growth in live exports has contributed to a decline in the meat-processing sector in some regions in Australia.⁵⁰

In addition to the inherent death rates recorded in sheep and cattle on every sea voyage, the ever present danger of specific accidents cannot be avoided.

There have been well documented disasters such as the maiden voyage of the MV Becrux where some 1,437 sheep and 865 cattle died from heat stress,^{51,52} and the tragedy of the Cormo Express carrying sheep to Saudi Arabia, where after almost 11 weeks stuck at sea in extreme temperatures and humidity due to political arguments, some 5,692 animals died (1 in 10), mostly from heat stress and exhaustion while waiting in ports simply to be unloaded.^{53,54}



Most live transport of animals in Europe is by road, but some sea journeys are still significant. Inconsistencies in enforcement of transport legislation within the EU cause the most serious welfare problems, with reported infringements including: overstocking; illegal route plans; inadequate road vehicles; and sick, injured and dead animals.

Even where legislation governing the welfare of transported animals is adhered to, many endure long journeys in cramped conditions and may also be exposed to regional variations in climate which can further compromise their welfare.

Transactions in live animals amount to 19.8% of the total cattle trade, 10.3% of the pig trade, 15.9% of the sheep trade, 13.3% of the poultry trade, but 46% of the total horse trade. Of particular concern are horses and pigs transported to Southern Italy, and sheep that are imported into Greece.

Europe's largest long distance trade is the export each year of around two million pigs from The Netherlands to Spain and Italy, enduring a journey of up to 1,800km.⁵⁵ Greece is also a major importer of sheep from Romania. In 2007, Greece was referred to the European Court of Justice for persistent non-compliance with legislation regulating animal welfare during transport.

EUROPE'S HORSE TRADE

While the number of horses being transported long distance for slaughter in Europe is lower than for other farm species, the welfare needs of horses are so specific, and reports of animals suffering so frequent, that this trade has long been criticised.

Historically, Eastern Europe, particularly Poland, with good pasturing for horses but no demand for horse meat, has supplied Italy where a strong demand for horse meat has provided an attractive market.

A 1998 Polish Audit Commission report highlighted welfare concerns over irregularities in the transport of horses and insufficient veterinary controls. Fortunately, in recent years there has been a significant shift away from live export and towards export of meat. In 1999, live exports averaged some

Animals should be slaughtered as near the point of production as possible... the long distance transport of animals for slaughter should be replaced, as much as possible, by a carcass only trade.

FEDERATION OF VETERINARIANS OF EUROPE



80,000 head per year, falling to half this number by 2003. At the same time the volume of horsemeat exported rose from the carcass equivalent of some 10,000 head in 1995 to an average carcass equivalent of almost 40,000 head in the period 2000-2003.

However, whilst these live imports from Eastern Europe have declined, welfare concerns have been growing over increasing imports of live horses from Spain to Italy. In 2005, this new trade route had grown to 10,136 horses, with the lack of enforcement of animal welfare regulations in Spain resulting in excessive livestock densities and journeys of over 30 hours without rest at a staging point, water or feed.

The incentive for the live horse trade would appear to be primarily related to the fact that if the meat is slaughtered in Italy it can be misleadingly marketed as being meat of Italian origin. Changes in legislation are needed to prevent consumers being misled by such labelling regarding the country of origin.

THE ECONOMICS OF CRUELTY

It is often said that the cost of transporting meat in refrigerated vehicles inhibits the conversion of the live slaughter trade into an entirely carcass trade.⁵⁵

However, research has shown that the transport of carcasses is cheaper than live transport when the regulations are followed.⁵⁵ Other studies have similarly found that transporting live animals is only cheaper when unacceptably cruel transport conditions are used.

Research into the economics of the live horse and horsemeat trade from Hungary to Italy also showed that transport costs were lower for carcasses, except when horses were transported under the sub-optimal conditions that were commonly in use at that time.⁵⁶

When the conditions of live animal transport were raised and enforced properly in accordance with EU rules, the economic balance changed abruptly and it became cheaper to transport meat rather than live horses.





SPOTLIGHT ON THE MIDDLE EAST

In the Middle East, both cultural and religious factors create demand for a huge number of live ruminants, especially sheep, although an historic dietary shift is now taking place with more eggs, chicken and meat being eaten by an affluent middle class.

Arid climatic conditions in most parts of the region mean that not enough animals are produced locally to be self-sufficient. Therefore, the Middle East imports millions of live ruminants from countries such as Australia, Brazil, China, parts of Europe, Djibouti, Eritrea, Ethiopia, Sudan, Somalia and Pakistan.

Saudi Arabia is by far the largest importer of live animals in the region and has regularly imported three to five million sheep and a million or so goats annually over the past decade. Lebanon imports cattle and sheep from other parts of the world, with cattle originally coming from the European Union until trade subsidies ended, and now in more recent years from Brazil.

All of Jordan's small ruminant imports come from Australia, with re-export of animals from Jordan to neighbouring countries. Kuwait's imports of live sheep from Australia have steadily increased over the past decade to exceed 1.5 million in 2001. Qatar imports livestock from a variety of sources, including 300,000 - 400,000 live sheep annually from Australia.

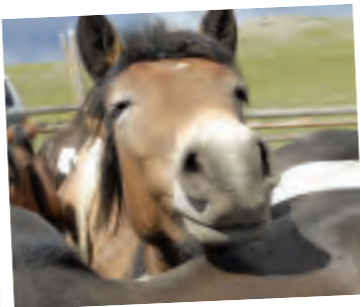
OIE GUIDELINES NOT YET IMPLEMENTED

Animal welfare issues are important as these animals endure a long sea journey, with long road transport both before and after, mostly in open trucks and vans without proper rest, food or water. In many Middle East countries it is common for the animals to be transported in overloaded open trucks, or crammed into the boot of cars, or even tied to the roof-rack.

All the countries of the Middle East are members of the OIE, but OIE Guidelines on Animal Welfare, especially with reference to land and sea transport, are not yet implemented. Specific laws on animal welfare do not exist in most of the countries of the region where inhumane transport and slaughter is of great concern.

A good deed done to an animal is as meritorious as a good deed done to a human being, while an act of cruelty to an animal is as bad as an act of cruelty to a human being.

PROPHET MOHAMMED



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Problems associated with the livestock trade in the Middle East were identified as far back as 1983,⁵⁷ and investigators have continued to gather graphic evidence of widespread animal abuse.

HUMANE HALAL

Current cultural preferences drive the traditional live wet market and fresh meat trade. The religious rituals of Kosher and Halal slaughter are meant to be strictly adhered to in Israel and all Arab countries.

Many Middle Eastern consumers put more trust in the likely religious observance of local slaughter, than in chilled imports from abroad, even when these are certified by the appropriate national Halal Meat Authority.

However, there is much evidence to show that often these religious practices are not complied with properly in some Middle Eastern slaughterhouses, especially in those countries which lack legislation to prosecute offenders who violate the religious edicts on animal welfare.

Ironically, many certified Halal chilled and frozen meat imports may guarantee consumers a much higher level of strict religious observance than their local fresh meat.

But the live wet market and fresh meat trade is beginning to decline as prosperity and hence consumer habits change, particularly when multi-national supermarket retailers become established.

Countries of the Middle East which are importing live sheep are already importing more and more frozen or chilled meat after ensuring that all religious rituals have been performed at the slaughterhouse in the exporting country, sometimes even by having their own supervising agency. For example, there are already many Australian abattoirs providing Halal certified exports to the Middle East, with the capacity to provide much more.

CONCLUSION AND RECOMMENDATIONS

Over 60 billion animals are reared for food each year worldwide. Most are transported, often over long distances, both within and between countries, just to be slaughtered at their destination.

This trade in live animals takes place against a background of increasing scientific awareness of the problems caused for animal welfare, food safety and meat quality.

Inherent death and injury rates recorded in ship and truck transportation highlight the cruelty.

But what we already know about poor welfare and long distance transport is not put into practice to prevent disease and injuries, such as bruising, that reduce meat quality. Where regulations do exist, their enforcement has proved ineffective and expensive.

As more information becomes available, it suggests there is probably no humane way to transport animals over long distances by sea or land, and the economic advantage of considering welfare becomes clearer.

For example, any short-term costs in slaughtering animals close to the farm where they are produced will be covered by the long-term benefits of avoiding disease spread and reduced meat quality. A meat-only trade costs far less to enforce than complex live transport legislation.

It has been over 125 years since the first frozen meat carcasses were sent around the world. Old-fashioned live transport has already been partly replaced by a growing meat trade, and 21st century chilled and frozen facilities are available.

The greatness of a nation and its moral progress can be judged by the way its animals are treated.

GANDHI



An increasing number of authorities, including intergovernmental organisations, are now giving due regard to such evidence. The Handle with Care Coalition of international animal welfare organisations urge Governments and other key stakeholders to take action:

- Governments should commit to a date by which they will ban the long distance transport of live animals for slaughter, and start working with stakeholders on converting to a meat-only export trade.
- In the meantime, Governments without higher standards should adopt and enforce OIE transport standards as the legal minimum.
- A system of premiums should be developed for farmers who do not transport their animals beyond one of the nearest available abattoirs.
- Payments to handlers should be introduced that reward careful handling which results in low incidences of injury and better meat quality.
- Transporters should be made responsible for the animals during the journey, so that they have to pay for the economic losses if deaths, injury and bruising occur in transit.
- Insurance schemes against bad practices, which result in deaths, injury and poor meat quality, should not be permitted for any stakeholder in the transportation chain.
- Retailers should ensure that a commitment to avoid products involving the long distance transport of live animals is included in the animal welfare codes of practice in their overall Corporate Social Responsibility policies.
- Labelling laws should ensure that consumers cannot be misled about the country of origin. Practices that identify only the country of slaughter must not be allowed.

**LONG DISTANCE
TRANSPORT FOR
SLAUGHTER IS CRUEL
AND UNNECESSARY.
IT IS TIME TO END IT
COMPLETELY.**

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Acknowledgements: With thanks to Victoria Cussen.

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