



The Drumstick

Vol 32 No 1 Winter 2014

Welcome to the Autumn/Winter 2014 edition of the Drumstick newsletter.

Some growers tell me that they have never seen so many changes in their industry in such a short amount of time as has been experienced in the last 12 months. From licencing by the NSW Food Authority, to processors adopting RSPCA accreditation, to the announcement of cage eggs being phased out by the end of 2018 in Woolworth's stores, to changes to water sanitation requirements, to the application for ACCC authorisation by NSW Farmers' Association for their members, the list seems to go on and on. Even the Drumstick has had a facelift and comes to you in a brand new format to make it more accessible to online readers.

So, in essence, 2014 is proving to be a significant period of change for both the poultry meat industry as well as the layer industry. Animal welfare continues to be a hot topic and is posing both challenges as well as opportunities for both industries.

This edition of the Drumstick explores some of these challenges and opportunities and highlights some new technologies and innovations, developed by the industry for the industry, to support the continued growth and public acceptance of the poultry industry in NSW as well as the rest of Australia.

Also included in this edition is a story about Eupoul, a new innovation developed by a local poultry grower to humanely euthanize spent hens, culls or any poultry in the event of a disease outbreak. This technology appears to be very promising and has the potential to revolutionise the way euthanasia is conducted on farms. I think you will find the article worth the read.

The Poultry Meat Industry Committee in NSW is currently in the advanced stages of seeking funding support for a training and skills package for growers in NSW. The intention of this training package is to support growers by providing them with access to the skills and tools they need to sustain and grow their businesses. The Drumstick will keep its readers informed about the progress of this initiative.

Post Script: I have just returned from PIX 2014 held in Queensland on 25 May to 28 May 2014. There were some excellent presentations at PIX this year and for those who were unfortunate not to be able to make it, I will give you a breakdown of the highlights and of some of the key presentations in the next edition of the Drumstick.

Thank you for your continued support of the Drumstick. As usual, if there is any topic of interest you want me to explore, please send an email and I will do my best to address it in the next edition.

Best wishes



Byron Stein, Editor, The Drumstick

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The Drumstick

The Drumstick is a free quarterly newsletter produced by NSW Department of Primary Industries, providing information and updates for the poultry industry.

Contributions

Letters and stories from growers and industry personnel are always welcome.

Advertising

1800 copies of The Drumstick are distributed each edition. We welcome advertisements and offer very competitive rates.

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The information contained in this publication is based on knowledge and understanding at the time of writing. However, because of advances in knowledge, users are reminded of the need to ensure that information upon which they rely is up to date and to check the currency of the information with appropriate advisers.

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or get in touch with one of our education advisors:

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Drumstick GuidePost

The Drumstick GuidePost contains links to useful websites, resources, contact details and other information for the poultry industry. The intention is to grow the GuidePost as new resources and information is gathered and discovered. If you know, or are aware of any useful websites or other resources pertinent to the industry, and which are not displayed below, please let the Editor know so that we can continue and develop this resource into a truly useful reference for everyone in the poultry industry.

Topic	Description	Reference or contact details
Research and Development		
RIRDC Chicken Meat Program	This site contains a large number of very useful project reports ranging from topics on nutrition, litter re-use, energy efficiency and much more.	https://rirdc.infoservices.com.au/collections/cme
Poultry CRC and Poultry Hub	The Poultry CRC conducts research and drives education and training to help Australia's poultry industries produce more from less, sustainably.	www.poultrycrc.com.au www.poultryhub.org
Poultry Research Foundation	The Foundation sponsors industry related research, assists in the training of scientific personnel and acts in an industrial liaison capacity.	http://sydney.edu.au/vetscience/foundations/prf/introduction.shtml
Peak Industry and Coordinating Bodies		
Australian Chicken Meat Federation	ACMF is the peak coordinating body for participants in the chicken meat industries in Australia.	www.chicken.org.au
Australian Chicken Growers Council	The Australian Chicken Growers Council (ACGC) Limited represents the interests of contract meat chicken growers at the national level.	www.acgc.org.au
Australian Egg Corporation Limited	The Australian Egg Corporation (AECL) is a producer owned company which integrates marketing, research and development and policy services for the benefit of all stakeholders.	www.aecl.org
NSW Farmers Contract Poultry Group	The Contract Poultry Group has 10 members representing all geographic growing areas of the state on a proportional basis.	www.nswfarmers.org.au/policy_committees/poultry_meat
Poultry industry news and technical articles		
WorldPoultry.net	Global poultry news, events, market analysis, technical articles and much more	www.worldpoultry.net
The Poultry Site	Updated daily, the web site delivers up-to-the-minute industry and product news, technical articles and information on a wealth of subjects including health & disease, nutrition, technology and much more.	www.thepoultrysite.com

The Poultry Digest	Poultry Digest is the only independent commercial publication delivering industry news to the layer (egg) and broiler chicken meat industries in Australia and New Zealand. We also publish information of other commercial poultry species like duck, turkey and quail.	http://poultrydigest.com
Biosecurity		
Australian Government Department of Agriculture, Fisheries and Forestry	The Australian Government Department of Agriculture, Fisheries and Forestry website has a wealth on information and resources on biosecurity for the poultry industry.	www.daff.gov.au/animal-plant-health/pests-diseases-weeds/biosecurity/animal_biosecurity/bird-owners/poultry_biosecurity_manual
Farmbiosecurity.com.au	Farm Biosecurity is a national education and engagement campaign which aims to help producers reduce the risk of diseases, pests and weeds.	www.farmbiosecurity.com.au/
NSW Department of Primary Industries – Biosecurity Section	Livestock producers and owners are in the best position to protect their own animals, and those of their neighbours and the wider livestock industries, by adopting good biosecurity practices.	www.dpi.nsw.gov.au/biosecurity/animal
Poultry housing, ventilation, husbandry and other technical information		
Auburn University	Poultry ventilation and housing tips. Based on American research and conditions.	www.aces.edu/poultryventilation/
University of Delaware Poultry Extension	Information on just about anything poultry. Based on American research and conditions.	http://sites.udel.edu/poultryextension
Avian Advice	Information on just about anything poultry. Based on American research and conditions.	www.avianadvice.uark.edu
poultryventilation.com.au (University of Georgia)	This site contains a wide variety of information related to poultry house environmental control and energy conservation:	www.poultryventilation.com
Animal Welfare		
Animal Welfare Science Centre	Our scientific research and teaching capacity in animal welfare science is considerable and we have made many important national and international contributions to animal welfare research, teaching and training.	www.animalwelfare.net.au
RSPCA Science Updates	Every quarter, the RSPCA Australia science team produces the Animal Welfare Science Update. The aim of the update is to raise awareness of recent developments in animal welfare science that relate to the work of the RSPCA.	www.rspca.org.au/resources/science-updates

Food Standards and Food Safety		
NSW Food Authority	The NSW Food Authority is the government organisation that helps ensure food in NSW is safe and correctly labelled. Their website has information on the new food safety standards for chicken meat.	www.foodauthority.nsw.gov.au/industry/industry-sector-requirements/meat/poultry
NSW Legislation, codes of practice, technical information, industry guidelines and best management practice documents and more		
NSW Department of Primary Industries	NSW DPI's role is to provide support to the poultry industry through the provision of an extension officer, research scientists, diagnostic laboratories, publications, poultry keeping courses and regulatory services. We also have extensive information on landuse planning and development for intensive livestock industries.	www.dpi.nsw.gov.au/agriculture/livestock/poultry www.dpi.nsw.gov.au/environment/land-use-planning/agriculture
NSW based poultry meat processing companies		
Baiada Poultry Pty Limited	Baiada Poultry Pty Limited is a privately owned Australian company which provides premium quality poultry products throughout Australia.	www.baiada.com.au
Cordina Farms	Is an Australian owned family company with 65 years experience in the Poultry business.	www.cordina.com.au
Inghams Enterprises	Commenced operations as a small farm in south-west Sydney more than 80 years ago. Since then it has grown into a multi-faceted company and one of the largest producers of chickens and turkey products in Australia.	www.inghams.com.au
Red Lea Chickens	Red Lea Chickens produces more than 100 product lines that are sold on to Wholesalers, Supermarkets, Butchers, Restaurants, Hotels and Clubs as well as 47 Retail Outlets of their own that sell direct to the public.	www.redlea.com.au
Pepe's Ducks	Pepe's Ducks is now the largest producer of ducks in Australia and New Zealand, producing over 70,000 ducks per week. The company consists of its own broiler farms, breeder farms and hatcheries.	www.pepesducks.com.au

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Want to top your grower pool? Attention to brooding can help get you there!

Adapted from “Adequate brooding for thriving birds” by Richard Jackson, St David’s Poultry Team, Lympstone, Exmouth UK, published in World Poultry, November 12, 2013.

The first week of a broiler chick’s life forms the basis of its health and productivity for its entire time on the farm. Creating good conditions and taking adequate measures will guarantee the chicks thrive and grow according to expectations.

A broiler’s life is a race from the moment the chicks are tipped until slaughter. But while all growers want their chicks to grow as fast as possible, it is equally, if not more important, to get them to start the race at the same time and to run at the same pace.

If a large percentage of chicks start to eat and drink even a few hours later than their flock mates, then the consequences can be disastrous, with severe unevenness, though this may not become apparent until the birds are 14-21 days old.

Having an uneven flock is a nightmare to manage, both in terms of ventilation and drinker heights. The more uneven the flock, the greater the proportion of birds that will be unhappy with management decisions. And the more stressed the birds are due to environmental conditions, the more susceptible they will be to enteritis and other such diseases.

Flock evenness

In order to ensure the flock is as even as possible there are a number of crucial steps, particularly in cold weather

1. Preheat the sheds three days before placement, so that when the chicks arrive the floor is 28–29°C and the bedding is 32°C across the shed. Remember that the majority of the chick’s body will be in contact with the floor, and failure to have adequate floor temperatures will mean the chicks are likely to huddle and will be slower to start.
2. Chicks at the centre of a huddled group will feed later than those on the edge, leading to unevenness. Furthermore, cold floors can lead to poor intestinal development, which will result in poor nutrient absorption and a bird that is more susceptible to gut health challenges. Equally important is to have even floor temperatures, as chicks that are in cooler areas of the shed will be slower to start and



will therefore be smaller throughout their lives, again leading to an uneven flock.

3. Many growers will have reservations about spending a lot of money on gas, but good pre-heating should be seen as an investment rather than a cost.
4. When unloading chicks, turn off blow heaters as they could cause overheating. Have plenty of help to enable chicks to be tipped as quickly as possible, and tip directly on to feed paper placed around the shed. Chick paper should have about 80g of good quality crumb per chick, and should cover approximately 80% of the floor area. However, don’t place the feed out too early or it will go stale.
5. Tap the drinker nipples to ensure that there is a bead of water on every one. These droplets will glimmer in the light, encouraging the chicks to drink. Additives such as electrolytes containing aniseed can be added to the drinking water to give it a pleasant taste.
6. Lighting levels should be a minimum of 20 lux at chick height over at least 80% of the floor. Use a lux meter to check this, as low light levels and uneven lighting can lead to chicks being slower to start.
7. Levels of carbon dioxide in the shed should not exceed 3,000 ppm. High levels of carbon dioxide (and low levels of oxygen) can lead to poor chick development. Vents should

therefore be cracked to allow carbon dioxide to escape, and levels checked using a meter.

8. Humidity in the shed should be between 60% and 70%. Chicks come out of a humid hatchery, and if they are transferred to a dry shed they will dehydrate very rapidly, leading to unevenness and poor growth.

These points are guidelines only. Every stockman should monitor their birds closely to ensure a good spread of chicks and flock activity. If the birds are poorly spread or inactive then growers must urgently ascertain the cause and correct it immediately. However, any changes should be subtle, so as not to overstress the birds.

Intestinal development

Apart from getting a good even start to a flock, it is important to consider the development of one of the bird's most important organs: the intestine.

Poorly developed intestines and those with relatively high levels of harmful bacteria will be less efficient at absorbing nutrients, leading to poor growth, feed conversion and gut health - as well as wet litter.

High-quality brooding and chick health is the foundation of good intestinal development, but it is also very important to consider where the potential bugs of the intestine will come from:

- The shed. No matter how carefully growers clean out after final pickup, there will always be bacteria (both good and bad) left over from the previous batch. Good disinfection will help reduce this problem. Use a suitable detergent at the correct dilution, and always allow surfaces to dry before applying disinfectant and fresh litter or stocking the shed.
- The bedding. Quality is important. Wood shavings are ideal, but due to availability issues many growers are using chopped straw and other products like recycled wood and sawdust. Always check there are no pieces of foreign material such as glass or metal in bedding and ensure that the bedding is dry before spreading.
- The breeder farm and hatchery. These sources are out of the control of broiler growers. But it is useful to find out if any particular breeder flocks are known to have chick quality issues. This will help influence the choice of starter medication, which has a major impact on intestinal bacteria. The use of antimicrobials should involve careful discussion with the serviceman to take into account the parent flocks, the hatchery and the farm history. If antimicrobials are given, they should be followed up with probiotics to fill the void created in the intestine.

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- Probiotics. The use of probiotics has seen a resurgence in popularity, as they can help establish a population of bacteria in the intestine, meaning there is less room for harmful bacteria to take hold. Furthermore, a gut populated with good bacteria will be stronger against challenges like coccidiosis later on. Probiotics can be sprayed on in the hatchery or introduced to the water. Over time, beneficial bacteria will build up in the shed, providing more protection to successive flocks.
- The drinker lines. One of the first things chicks will do after tipping is drink. It is very important that the drinking water is spotless, so drinker lines should be flushed and sanitised during cleanout, preferably with a chlorine dioxide or hydrogen peroxide-based sanitiser to remove biofilm in the drinker lines — a mucus-like substance made by bacteria to protect themselves.
- Water can be a huge source of bacteria and nutrient imbalances, and growers should test their water regularly, both at source and at the end of the drinker line. Adding activated chlorine to the drinking system continuously can help kill any bacteria present.

General farm biosecurity. It is very important to change foot-dips at least twice a week, and keep them covered from light and rain. Boots should be washed to remove muck prior to

dipping, and ideally growers should have separate boots for each shed, to reduce the transfer of disease.

Monitoring

To measure the success of early chick management, growers should check them regularly and monitor flock behaviour. Just 24 hours after placement, 95% of the chicks should have food and water in their crops. This can be identified by selecting 20 chicks each from the front, middle and back of the shed, and feeling their crop at the top of the breastbone – if full, it will feel like dough.

They should then be weighed at seven days old, by selecting at least 100 chicks per 20,000 placed and comparing them to the breed target for weight and consistency. While the above steps will not necessarily guarantee a good even flock, without them the chances of poor flock performance is greatly increased. A broiler's life is so short that, if they are behind after the first few days, they will never catch up.

Attention to detail at brooding will help give your birds the launch pad they need to perform at their genetic potential and to launch you to the top of the pool.



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Introducing EuPoul – a smart solution to the mass euthanasia of poultry

Mass euthanasia of poultry on farm; be they spent hens, broilers or turkeys is a challenging task at the best of times. Further, the ever increasing scrutiny of the poultry industry by consumers, retailers and animal rights groups means that euthanasia methods need to be as humane and acceptable as possible.

Coming up with a quicker, better and more humane method to euthanize his spent hens has been the passion of Kootingal free range egg farmer, Stuart Howe.

Stuart's answer to this challenge is his invention, called the EuPoul.

“There were several major reasons for coming up with a better solution to managing the spent hens on my farm”, said Stuart. “The primary motive was to come up with a more humane method of euthanasia. I wanted to reduce the stress and injury the birds sustain when being caught and removed from the sheds. I also wanted to reduce the stress associated with long journeys to the rendering plant. Finally, access to labour, labour cost and a diminishing market for spent hens were also challenges I was grappling with”.

“I wanted to come up with a solution that was better for the birds and better for my piece of mind, and my farm budget” said Stuart.

So what is EuPoul?

The EuPoul is a purpose-built inflatable module made from commercial grade PVC. The modules are designed in a range of shapes and sizes to cater for free range farms, cage production systems as well as barn systems. The typical module size is 5.5m x 3m, but sizes can be scaled up or down to suit individual production systems and farms.

Another way of explaining the EuPoul modules is to picture an upside down inflatable swimming pool, modified and engineered with doors, flaps and lids. See Figure 1. The modules are simply portable containment vessels in which birds are held and then euthanized using CO₂ or foam.

How was the system developed?

A team of people were pulled together to manage and develop the project. Amongst these was Greg McMahon, who holds a patent on hypoxic training modules used by athletes to train under low oxygen environments typical of high altitudes. A

vet was also engaged to provide advice and guidance on animal welfare and monitored the birds before, during and after euthanasia.

Figure 1



Figure 2



Figure 3



Stuart also sought the advice and assistance of Mr Bud Malone, a renowned poultry consultant associated with the University of Delaware in the United States. Mr Malone provided significant input into the project and has also raised significant interest in the technology in the United States.

How does it work?

For a free range egg farm:

1. A large funnel shaped module is placed over one of the pop holes leading to the outside range. This unit is then connected to one or several other lower square shaped units (see Figure 4) with the number depending on how many birds you need to deal with or how quickly you want to depopulate the shed.
2. The pop hole is opened allowing the birds to enter the modules and roam freely within them.
3. When the desired numbers of birds have entered the inflatable modules the pop hole door is closed. Each module can accommodate up to 2400 birds.
4. At dusk, when the birds have settled down and are huddled together the lids of the modules are closed.
5. The gas, typically CO₂, is then turned on, and within 90 seconds the birds are euthanized while they sleep.
6. For the remaining birds inside the shed, an additional 5.5 m x 3 m module is erected in a designated cull area within the shed. The birds are then slowly 'walked' into this area and are gently herded or placed into the module.
7. At nightfall, when the birds are huddled together and calm, the gas is turned on and the birds are euthanized.

How long does the operation take?

A two person team is able to catch, move and euthanize approximately 4,500 birds in 2.5 hours, equating to a catch and kill rate of 1,800 birds per hour

What happens to the carcasses?

Stuart has developed a conveyor system and end processing machine, which is very similar to a wood chipper, but has been modified to deal with bird carcasses. See Figure 5. The conveyor system moves the bird to the processing machine which minces the carcasses into small pieces. The processed birds can then be readily composted, or

transported to a fertiliser company, pet food or meat and bone meal plant.

Figure 4



Figure 5



Flexibility and portability

The system is highly flexible and adaptable allowing Stuart to strategically select the birds he wants to cull whilst leaving birds which are still productive. This means that he is able to maintain a level of production during the cull process which he hasn't been able to do in the past.

What about cage production systems?

Stuart and his team have recently adapted the EuPoul design to suit cage production systems. This system consists of multiple side wall panels that are strapped together and fit snugly over multi-tier cages. The system includes a series of panels and lids which are strapped and zipped together, creating an airtight seal. (See Figure 6.) The lids can be unzipped allowing plenty of air flow for the birds to breath before starting the culling process.

Free standing 30 kg CO₂ bottles are placed in several smaller purpose-built 1.5 metre square modules/chambers. As the CO₂ is released into the chambers, a pump sucks the floating air from the free standing chambers delivering it multiple feet into the air to the top of each section of cages

Other applications

I asked Stuart if he thought his system could be adapted to other poultry production systems, for example broilers or turkeys.

“Absolutely. I think both the broiler industry and even the government may be interested in this system in the event of an exotic disease outbreak. Because the system is portable and flexible, it can be quickly, easily and cheaply deployed to a farm which may need to euthanize birds because of an exotic disease outbreak”, said Stuart.

Where to from here?

Stuart and his team are currently seeking to partner with research organisations to do further testing of the technology under a range of conditions and to further validate the excellent results that have been obtained by tests conducted thus far.

Figure 6



More information

For anyone who wants further information about the EuPoul system, they can check out their website at www.eupoul.com



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Energy savings on farm – where will you get the biggest bang for your buck?

Adapted from “Optimising on-farm energy use – meat chicken production” by EJ McGahan, BR Warren, RJ Davis, F Phillips, T Naylor and presented at PIX 2014.

What’s this article about?

Saving money by making smart decisions about where to invest your dollars in energy efficiency

Making an investment in energy efficiency is an obvious way to reduce your farms operating costs. But before rushing out to buy new lighting equipment, solar panels, wind turbines or any other equipment it makes sense to first understand where you will get the most value from your investment. To do this, you need to figure out where your biggest energy costs are and where to make smart investment choices to give you the best possible bang for your buck.

FSA Consulting in Queensland together with Wollongong University have recently worked on a project to answer some of these questions. Their research was funded by the RIRDC chicken meat program.

“If you aren’t measuring it, you aren’t managing it” goes an old saying. This is what the project team set out to do — to figure out where growers are using the most energy and where the opportunities are to make savings. They also provided some useful tips that are relatively cheap to implement and will potentially lead to significant savings in energy use.

What did they do?

They monitored energy use at 4 sheds on 3 tunnel ventilated grow-out farms in southern Queensland during 2011–2012. Electricity, gas, diesel and petrol use were all monitored. For each farm, electricity use was measured separately for each component of the shed. This meant that they could figure how much electricity was being used by:

- fans
- mini vents
- heating and cooling pumps
- lights
- feeding augers
- other minor equipment

Gas, diesel and petrol usage was not metered individually for sheds and was apportioned to the studied sheds based on bird production.

They also measured fan efficiency, in other words, how much electricity was used by individual fans to move air and maintain varying levels of static pressure.

Measurements were converted to energy use per tonne of liveweight production so that comparisons could be made between farms and sheds with different stocking rates.

What did they find?

They found large variations in both electrical and total energy use between farms and even between sheds on the same farm. This tells us that there is an opportunity for improvement and cost savings if we can figure where the energy is going and if it is being used effectively, or being wasted.

Fans are by far the biggest energy user on a tunnel ventilated farm. Measurements showed that fans use between 68% and 88% of the total electrical energy used to run a shed. This means that improving fan performance represents the greatest opportunity for potential electrical savings. Lighting represents the next highest electrical energy use, but was still less than 10% of the total electrical energy use for three of the farms.

Annual energy use by each of the shed components on one of the farms is shown in Figure 1.

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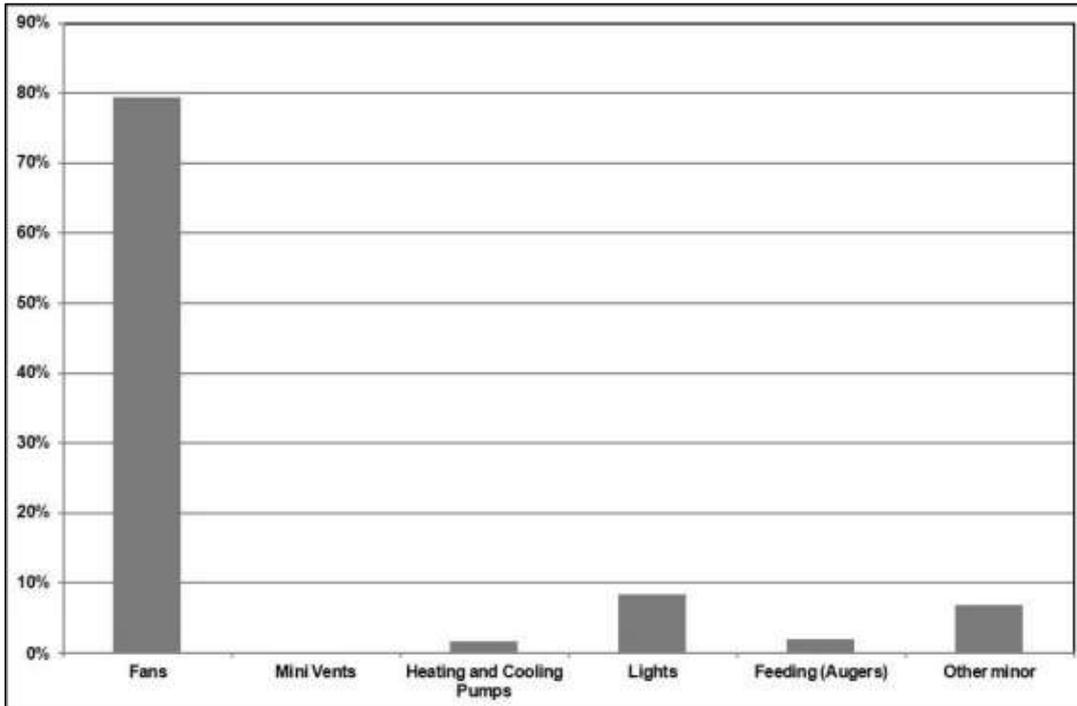
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Figure 1. Breakdown of annual electrical energy use for one of the study farms



Fan efficiency

Fan monitoring in one of the sheds showed that the air flow decreases with higher static pressure inside the shed. A higher static pressure makes the fans 'work' harder to achieve air flow. There was large variation between the efficiency of each fan in the tunnel ventilation system. For low static pressure (<5 Pa) the air flow ranged between 26,000 and 21,500 m³/hour. Under high static pressure (> 40 Pa) the air flow varied between 20,500 and 16,000 m³/hour.

These results highlight the importance of controlling the shed's static pressure and selecting high performing fans. The variation in fans performance is due to accumulated dirt and corrosion, differences in flow resistance from the shutters, and differences in motor and bearing wear over time. The inconsistent performance between the individual fans shows that improvements to performance are possible. General maintenance of the fans (motors, pulleys, belts, shutters etc.) will improve fan performance resulting in efficient cooling.

Figure 2. Total energy use (MJ/tonne live weight produced for three farms over a one-year time period

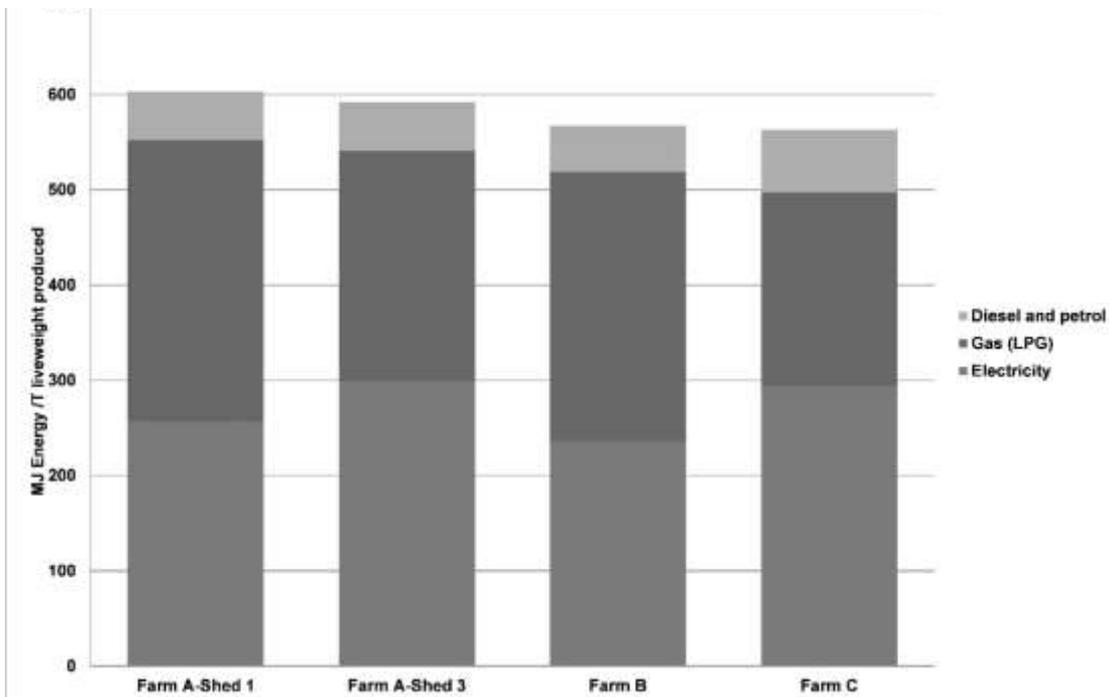


Figure 2 shows us that electricity and gas usage are the two biggest costs in terms of total energy consumption. This isn't news to most growers. However, what is useful to conclude from this graph is that there is quite a large variation in energy usage between farms, as well as between sheds on the same farm. This means that these farmers may have an opportunity to make some changes that will save them money in the long run.

What could these farmers do to be more energy efficient and save money?

1. Fans

Fans impact upon energy use in two ways, they require energy to operate, and the management of the fans impacts the efficiency of the heating energy used within the building.

Select quality and correctly designed fans that suit a specific shed. All manufactured fans should be rated by an independent lab to show air flow and efficiency as a function of static pressure. Fans should not be chosen on diameter alone. It's never wise to assume that two fans of equal size will have the same performance, as different motors, blade curvature and other attributes greatly affect performance. Fans should be selected based on air flow and efficiency ratings. Choose fans which are in the upper 25% of rated fan efficiencies.

University of Illinois BESS Laboratory "Agricultural Ventilation Fans Performance and Efficiencies"

test booklet is one of the leading sources for agricultural fan performance information. An electronic version of the test booklet can be found at www.bess.uiuc.edu

Installing discharge cones can increase fan efficiency by >15%. Ensuring there is no back pressure created from fans discharging air into blocked or tight spaces will also help improve performance. There should be sufficient distances between sheds to allow for unobstructed airflow.

General maintenance of fans will also ensure efficient performance and reduce fan operating costs. Methods for improving fan performance include:

- General maintenance of pulleys and belts. Loose belts cause inefficient fan performance while over-tight belts will cause excess wearing upon bearings.
- Regularly cleaning fan blades, motors and shutters.
- Replace burnt-out motors with energy efficient motors
- Investment in more capital (e.g. energy efficient fans and cowlings). This decision should be based on potential pay-back.
- Ensuring shed ventilation (fan performance) is meeting manufacturer requirements.



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- When constructing sheds, select energy efficient fans, pay attention to the fan's energy efficient rating (cfm/watt) and air flow ratio. Go to www.bess.uiuc.edu for more information.
- Reducing the fan speed with a variable frequency drive (VFD) unit reduces airflow rate and the energy consumption of the fan; operate in accordance with ventilation requirements.
- Data from the US shows for every 2 CFM/watt increase, power usage is reduced by approximately 10%.

2. Insulation

The value of good insulation should never be underestimated. Quality shed insulation is important for cooling and heating as it will prevent heat and cold air loss. During summer insulation reduces external heat load entering the shed, while in winter heat is maintained inside the shed. Poor insulation, either low quality (poor thermal retention) or damage (leakage) will cause undesirable air loss. Both walls and ceiling should be insulated with high quality materials with suitable U values (heat transfer coefficient). The insulation efficiency or minimum thermal resistance (R value) of insulation materials decreases when moist. Vapour barriers can be used to avoid humidity build-up. The condition of existing insulation should be checked for any signs of wear

and tear. For sheds with side-curtained walls, the curtains should be secured to prevent air loss when the shed is running under tunnel ventilation. Poultry sheds with insulated side walls are more energy efficient than open sides with curtains.

3. Cooling pads

Proper management of the cooling pads can also improve the ventilation systems energy efficiency. This involves regularly cleaning the cooling pads to ensure air flow is not restricted, minimising the load on the fans. During use, the cooling pumps should be running continuously to keep the pads wet and as clean as possible.

Auburn University have a great website with plenty of helpful information on maintaining your cooling pads to ensure maximum efficiency. Go to www.aces.edu/poultryventilation and click on the *Equipment* link on the left of the page.

4. Electronic equipment

Electronic devices are installed to control the ventilation system in poultry sheds. Timers, sensors and thermostats lose accuracy over time and because of dust and humidity. Sensors and controllers should be cleaned, tested and recalibrated regularly to ensure the shed maintains the conditions programmed into the system during the entire day. This allows the system to operate efficiently, **saving energy**

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Ian Judd on 0419 496 914

5. Lighting

There is great potential for energy savings from lighting due to the rapid development of technology. New lighting technology should be investigated as a viable option for replacing poor energy efficient, aging lighting infrastructure. Traditional incandescent bulbs are inefficient as they only convert 5% of energy into light; the remaining energy is given off as heat. Energy efficient options exist, such as compact fluorescent bulbs, and fluorescent tubes, cold cathode, high pressure sodium (HPS) or LED. These lighting types use far less energy and have a much longer lifetime.

For some excellent information on the different lighting options available, as well as calculations on energy saving and cost benefit, go to www.aces.edu/poultryventilation and click on the *Equipment* link on the left of the page.

6. Fuel and gas

With high costs of gas and fuel (petrol and diesel) chicken farms can reduce costs by using these energy sources more efficiently. For chicken farms that use gas for heating purposes, usage can be minimised by ensuring sheds are well **sealed** and **insulated**.

Fuel and diesel use should be recorded routinely so the farm is aware of consumption. Fuel and diesel use can be reduced by good management practices and by maintaining and using suitable equipment. Good management involves running pumps and motors when required and switching off once done. Regular servicing of equipment will ensure fuel use is maintained at manufacturer's

specifications. When selecting the type of motors for a particular job, the motor capacity should be chosen based on the specific requirement. Fuel will be wasted choosing a large, powerful motor for a job that requires less energy.

7. Peak energy loads – get a better deal

Peak electricity use periods can be monitored by installing electrical power meters on the power supply to each shed to monitor energy used per day or per batch. Another option in reducing electrical energy costs is to **negotiate with the supplier** for a reduced tariff if reliance on grid electricity can be reduced by running back-up generators several days a year during peak energy demand on the grid.

Conclusion

The work by FSA and the University of Wollongong has shown that large variations in energy use between farms, and even between sheds on the same farm means that there may be huge cost savings by improving the efficiency of energy use.

Fans are the big ticket item when it comes to electricity use and making improvements to fan efficiency is likely to give pay offs if you have inefficient fans.

If you are serious about saving money and being more efficient then you really must consider measuring how much, where and when you are using energy. The investment in good quality measuring equipment is likely to pay for itself pretty quickly because it will help you make smart decisions about where you are likely to get the best bang for your buck.



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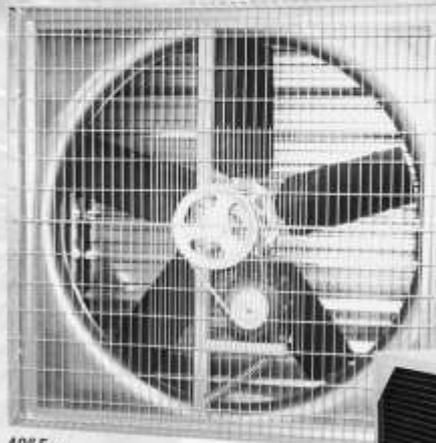


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*Byron Stein
Editor, Drumstick Magazine*

The chicken meat industry continues to grow rapidly to sustain Australia's love of chicken meat. One consequence of this growth is the increase in waste generation, particularly poultry manure and spent litter. So how does the poultry industry plan to proactively manage this waste?

This issue was raised by Tamworth Regional Council several months ago in response to the rapid growth of the chicken meat industry in the Tamworth region. Tamworth Regional Council together with Liverpool Plains Shire Council have approached NSW DPI, the chicken meat industry, EPA and several other stakeholders to help develop practical measures to assist the industry to responsibly manage its waste and to reduce environmental impacts associated with poultry litter in particular. This will also give the local community in Tamworth some degree of confidence that the chicken meat industry is doing everything it can to minimise its environmental footprint in the Tamworth and Liverpool Plains regions.

This is where Fertcare® comes in. Fertcare® was developed by the fertiliser industry to provide training and to assist industry participants understand the food safety and environmental risks involved in handling, transporting, storing and spreading fertilisers. In addition, the Fertcare® logos help farmers identify individuals and organisations who provide high quality, independently audited soil and plant nutrition advice and application services. The goal of Fertcare® is to promote consistent, coordinated action for the management of food safety and environmental risks, while supporting sustainable production.

NSW DPI, together with Tamworth Regional Council and industry representatives are currently working with Fertcare® to customise their training and accreditation material to include poultry litter.

The project is in its early phase but promises to provide growers with the tools and support they need to maximise poultry litter use while demonstrating that they are minimising environmental impacts at the same time. Poultry litter is a highly valuable resource which is rich in phosphorus, nitrogen, potassium and a range of other very useful trace minerals and is therefore an excellent fertiliser in its own right. Poultry is also rich in organic matter which helps build soil condition and the water holding potential of soils. However, used in the wrong place, or applied inappropriately, poultry litter has the potential to pollute both ground and surface water. To reduce this risk, the poultry industry is seeking to partner with Fertcare® to develop a training and accreditation package to support its growers and anyone else that stores, transports and spreads poultry manure in the Tamworth region. The training and accreditation program places a strong emphasis on identifying environmental hazards and reducing environmental impacts as well as food safety, whilst increasing soil fertility and productivity for crop and pasture production...a win:win outcome.

This promises to be a highly valuable partnership between the chicken meat industry, the fertiliser industry and state and local government to proactively support the growth of the chicken meat industry and to minimise its impacts on the environment and on local communities. It will also give consumers confidence that the chicken they eat is being grown and produced responsibly and sustainably, and that the industry is meeting nationally endorsed standards in food safety and environmental practice.

More news about this exciting project will feature in future editions of the Drumstick as the project progresses.

For anyone who wants to know more about the Fertcare® program, check out their website at www.fertcare.com.au



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Range management for disease control – guidelines to protect your free range flock from exotic disease

Adapted from “Range management for disease control, PIX May 2014” by Dr Margaret MacKenzie, Inghams Enterprises

An outbreak of avian influenza, Newcastle disease or any other number of diseases has the potential to devastate the poultry industry. According to Dr Margaret MacKenzie from Inghams, an outbreak of avian influenza in a clustered chicken meat farming region could potentially wipe out the industry in that state. This is a rather sobering message.

In recent years we have experienced a trend of increased outbreaks of avian influenza associated with free range poultry, turkeys, layers and ducks. To date, these have been relatively isolated occurrences, readily controlled and eradicated, but still of significant cost to both industry and government. Such a trend cannot be sustained.

A similar outbreak in a clustered intensive meat poultry production area would have severe economic, consumer and regulatory consequences for the entire poultry industry.

Figure 1



So what can free range growers do to manage this risk?

The good news is that an effective and **implemented biosecurity plan** for free range flocks will significantly reduce the risk of an exotic disease outbreak. There is a common misconception that free range farms are by nature poor biosecurity enterprises. In fact, most biosecurity principles can be effectively implemented to both closed shed as well as open free range systems.

However the unique and specific challenges posed by free range production must be addressed, to ensure the continued growth and viability of the industry.

These include shedding and personnel standards, vermin control, dead bird and waste disposal, feed management, water quality, exclusion of wild and domestic animals and equipment, vehicle and shed hygiene procedures.

Free range birds have access to an outdoor range and are potentially exposed to additional biosecurity risks and diseases, the most significant being wild birds, rodents, wild animals and airborne transmission of infectious agents.

As a result, diseases such as avian influenza, infectious laryngotracheitis, histomoniasis, helminths, coccidiosis and food safety pathogens such as *salmonella* and *campylobacter* may occur at a higher frequency in poorly-managed free range poultry farms.

All are controllable with effective range biosecurity.



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The most significant biosecurity risks in a free range operation are;

- Wild birds
- Rodents
- Wild animals
- Airborne infection

Twenty tips to protect your free-range farm from disease

Range management

1. Maintain the range in a clean and tidy condition.
2. Grass should be kept short, as long grass attracts wild birds and rodents onto the range, and favours the survival of viruses and bacteria.
3. Do not plant vegetation on the range which attracts wild birds. For example, avoid fruit bearing trees and shrubs. Consult a horticulturalist for assistance.
4. The best shade structures are sails and shadecloth as these tend to scare away wild birds when they flap in the wind.
5. Do not provide feed on the range as this attracts birds and rodents. Always clean up feed spills around silos immediately. Isolate silos from range areas.

6. No visitors should be allowed access to the range area.
7. Keep ranges free of surface water including pools, puddles, dams and waterways.
8. The range must be well-drained. Do not allow free-standing water to collect. Water for range irrigation must be treated to drinking water standard.
9. There must be secure fencing of the range to prevent access to domestic animals, including dogs and cats and wild animals such as foxes, wallabies and wombats etc. Many wild animals carry *salmonella* and *campylobacter*.
10. Secured rodent baiting stations should be placed at 10 metre intervals around the range perimeter fence and around the shed. Baits should be checked weekly and replaced every 2 to 4 weeks depending on vermin activity patterns. Make sure the baits you select are approved for outdoor use.

Airborne transmission

11. New free range farms should be sited away from other poultry enterprises, preferably in low density poultry farming areas
12. Strategic planting of trees and large shrubs can be used to filter and block airborne spread. Try to avoid trees which are attractive to wild birds

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Wild birds (particularly waterfowl)

Wild birds represent the most serious disease risk to the free range poultry industry.

Water attracts birds and animals to the range areas.

13. There should preferably be no dams, waterways, rivers or lakes in the vicinity of free range sheds
14. New farms should be located away from dams, rivers, lakes etc.
15. Remove or drain non-essential dams and other water sources

16. Install bird scaring systems, e.g. auditory, visual deterrents
17. Shade sails act as a deterrent to wild birds on the range
18. Waterfowl **MUST NOT** have access to your flock's drinking water, for example water storage tanks.

A risk assessment should be conducted to determine the level of risk a particular farm has to exposure to wild birds and other sources of disease. High risk farms are those that are:

- in or close to a cluster of intensive poultry growing farms
- in the vicinity of a dam, river, lake or other body of water. Generally farms within 3 km of a water body which is frequented by large numbers of waterfowl would be considered a higher risk.
- **If free range farms are in an area of intensive poultry population, and waterfowl are identified as having access to the range, the range should be netted.**

For new free range farms:

19. Site the farm away from intensive shedded poultry populations

20. New farms should preferably not be built in the vicinity of dams, lakes, rivers or other water-bodies. If waterfowl habitat is within one kilometre of the free range farm, the range should be netted.

In summary,

- Good biosecurity practices can be just as effective on free range farms as they are in intensive poultry farming systems
- You can protect your farm and your industry by adopting pretty simple yet effective strategies to prevent disease from entering your farm
- In addition to the 'National Biosecurity Manual for Chicken Growers' and the NSW biosecurity guidelines for free range poultry farms, free range farmers should adopt the 20 guidelines listed in this article to manage and prevent the additional biosecurity risks associated with free range systems.



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Windbreak walls and short stacks to control odour and dust – do they really work?

Adapted from 'Control of Odour and Dust from Chicken Sheds, Evaluation of Windbreak Walls' by Mark Dunlop and Geordie Galvin, RIRDC 2013

Windbreak walls have been used as a solution to controlling and reducing odour and dust from tunnel ventilated chicken sheds. They have been promoted as one of a few cost-effective ways to improve odour dispersion and to reduce odour impacts. But do they really work and are they really a potential solution to one of the biggest issues facing the poultry industry – reducing odour impacts? To answer this question the Rural Industries Research and Development Corporation (RIRDC) commissioned the Queensland Department of Agriculture, Fisheries and Forestry (QDAFF) to investigate windbreak walls and how effective they are in terms of reducing odour and dust impacts on surrounding neighbours.

What are windbreak walls?

Windbreak walls are simply barriers placed several metres from outlet ventilation fans. They can be constructed from a variety of materials including vegetation screens, tarpaulins, MDPE, hay bales, corrugated iron or wood. Their purpose is to enhance the dispersion of smelly air upwards into wind resulting in dilution and dispersion of the odour, and hopefully less complaints from neighbours. See figures 1 and 2.

Are windbreak walls effective in reducing odour?

Windbreak walls were introduced in 2000 as a way to improve dispersion of odours from tunnel ventilated livestock buildings. Reported windbreak wall performance was based on theory and a few smoke observations. Even at this early stage, it was identified that dispersal of odour by windbreak walls was unreliable and would probably decrease in calm, stable weather.

The aims of the study by QDAFF were to:

1. Identify the value of windbreak walls for improving dispersion of exhaust air from tunnel ventilated sheds;
2. Evaluate the use of windbreak walls as an odour reduction strategy for meat chicken sheds.

Figure 1. Windbreak wall

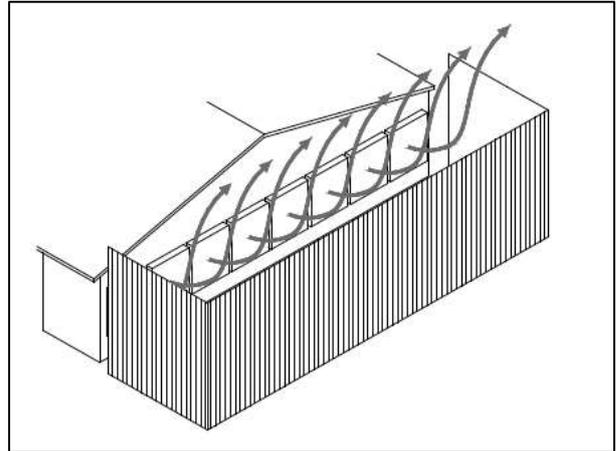
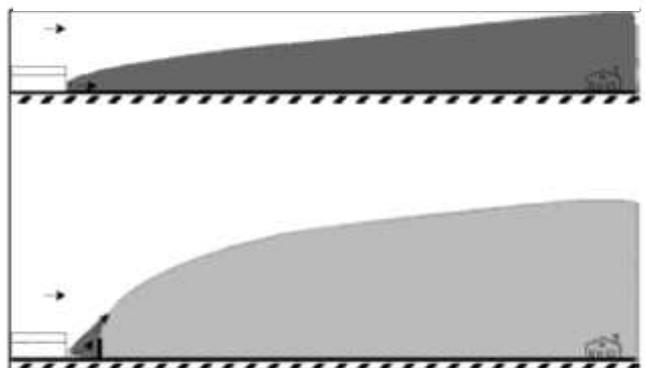


Figure 2. Odour dispersion plume from a windbreak wall (bottom image)



How was the study conducted?

The research team used a combination of tracer gas measurements, smoke observations and sophisticated computer modelling to test the effectiveness of windbreak walls. They conducted their tests on sheds with walls and nearby sheds without walls to see if they could find differences in the way air travelled and behaved.

After using the tracer gas method, they discovered that this was not providing them with good information. However the smoke observations and computer modelling proved to be far more effective

and these methods were then used to conduct their tests.

Note: Short stacks are upward facing funnels or pipes placed over the ventilation fans and are designed to direct the ventilated air upwards promoting dispersion and dilution of odour coming from the sheds. See figure 3.

What did they find?

In short, they found that windbreak walls are generally not effective in reducing downwind odour from tunnel ventilated sheds. Their tests showed that odour dispersion depended on conditions such as atmospheric stability, horizontal wind speed, the number of active fans and air temperature. Some of their tests showed that under some conditions, windbreak walls actually increased downwind odour. They found that some reduction in odour may be achieved close to the windbreak walls, within 150m, but that this very much depended on weather conditions. They also performed testing of short stacks but found that these did not perform much better than windbreaks.

Overall, after conducting tests under a range of weather conditions, the research found that neither windbreak walls nor short stacks were reliable in reducing odour from tunnel ventilated chicken meat sheds.

Do windbreak walls have any benefits?

For farmers who have installed windbreak walls to control odour, this report is obviously not good news. However the research team did note that windbreak walls could have some benefits unrelated to odour control. The benefits may include:

- blocking sunlight from entering the shed through open fan shutters
- altering dust deposition close to the exhaust fans
- reducing fan noise
- maintaining fan performance when strong opposing winds prevail.

These benefits may be sufficient to justify installation of windbreak walls at some poultry farms.

For a copy of the full research report, as well as many other useful publications and resources, go to the RIRDC website at www.rirdc.gov.au/research-programs/animal-industries/chicken-meat

Figure 3. Example of short stacks placed over ventilation fans on broiler sheds.



Industry News

Broiler Farmers Struggle with Rising Welfare Costs

The country's chicken producers say they are struggling to meet rising cost of new animal welfare standards, while new rules for free-range hens and last year's avian flu outbreak are making it hard for farmers to meet demand.

Queensland growers are currently negotiating the increased costs with chicken meat processors who sell to the retailers. Chicken meat producers say they are struggling to meet the cost of new animal welfare standards as the expense is not being passed on to consumers, reports 7 News.

Supermarket giant Coles has introduced an RSPCA-accredited production system, with retail rival Woolworths set to follow.

The president of the Queensland Chicken Growers Association, Jodie Redcliffe, says animal welfare was already a high priority for farmers.

She said: "In general, Australia is a very heavily regulated country and if we continue to put higher standards on things then someone has to pay. I hope the message gets out to consumers that it is worth something."

The issue has been discussed among producers at PIX this week on the Gold Coast.

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To comply with the RSPCA's accreditation system, growers are installing perches, improving lighting where necessary and providing enrichment items including toys and balls.

Ms Redcliffe says her property will meet the accreditation standards in the next few months.

"Our chickens are inside raised so they run around on sawdust, eat and drink and feed and peck and perch," she said.

Queensland growers are currently negotiating the increased costs with chicken meat processors who sell to the retailers.

"We already have a high welfare system and that will improve with the RSPCA accreditation but what we're concerned about is that consumers understand that a higher welfare system should be costing more in the supermarket," she told 7 News.

Source: *ThePoultrySite News Desk*,
<http://www.thepoultrysite.com/poultrynews/32378/welfare-costs-put-australian-poultry-farmers-under-pressure>

Avian Flu in 2013 and Free-range Standards Hit Egg Sector

Egg farmers in Australia are at a crossroads, reports ABC Rural. They have collectively spent A\$500 million changing their sheds and cages to meet the new model code of practice up till 2008 but increasing demand for free range has made

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the code out of date. At PIX on the Gold Coast this week, they have been asking 'What next and what cost?'

The destruction of 500,000 birds struck by avian influenza last October, at Young in New South Wales, brought about an egg shortage. That one farm produced 4.5 percent of the nation's eggs, and half were free-range.

Concern over diseases on free-range farms has slowed up the transition from caged hens, despite the increasing demand. Free-range has lifted from eight per cent market share in 2001 to 38 percent in 2012, according to ABC Rural.

Bede Burke, the chair of the NSW Farmers Egg Committee, says the outdoor range standard is 1,500 hens per hectare but they can be stocked tighter if the hens are rotated to different paddocks. He explained: "The free range definition is really vague and the discretion is left up to the producer. What we have seen is our supermarket duopoly come in and say they want it capped to 10,000 birds per hectare, which is the same as two birds on the average kitchen table, of one metre by two metres.

"There are some small bird farms with very low stocking densities, and they're not the ones who can fill the supermarket shelves. We need to work with both federal and state governments to get it going again," he told ABC Rural."

Mr Burke says the industry was working towards a free-range standard but it hit a brick wall with state governments.

Australians now eat 214 eggs each a year, up from 150 eggs 10 years ago.

Source: *ThePoultrySite News Desk*,
www.thepoultrysite.com/poultrynews/32378/welfare-costs-put-australian-poultry-farmers-under-pressure

Australian poultry giant sells off millions in property

The new owner of Australian poultry producer, Inghams is selling off real estate in a deal that could secure over \$600 million.

American private equity firm TPG, which bought Inghams last year for \$880 million, wants to sell properties in Australia and New Zealand and lease them back for the poultry business for 20 years. The firm intends to repay its debts, and reinvest in chicken breeding, meat processing and animal feed mills.

The company's major poultry processing plants are on the Brisbane River and at Hoxton Park, near Liverpool in western Sydney. Poultry commentator Peter Bedwell believes TPG could be preparing for a float of Inghams, if processing is separated from the more profitable livestock feed division.

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"In the year that it was sold, a profit of \$220 million was reported, and it's fair to speculate that a lot of that was as a result of the feed mills. In the year past, that figure has been reported as \$250 million." Bedwell says the US was the only country which could have been allowed to purchase Inghams outright, because of its \$1 billion limit on foreign investment in Australia. That's much larger than the \$244 million limit which triggers action from the Australian Review Board (FIRB).

"Inghams missed having a public float, so it could still do that, just at a time when Australia is allowing other countries in Asia to invest up to \$1 billion under Free Trade Agreements," Bedwell suggested.

Source: *World Poultry Website*,
www.worldpoultry.net/Broilers/Markets--Trade/2014/5/Australian-poultry-giant-sells-off-millions-in-property-1516866W/

Aviagen Australia fully invested in new facilities in Goulburn NSW

Aviagen Australia took a major step forward in 2008 when the purchase of Bartter Enterprises great grandparent and grandparent operations was made with the objective of becoming an integral part of the local market by producing parent stock directly for domestic customers.

The second phase of the long term investment in the Australian market commenced with the

announcement in August 2013 that Aviagen Australia was moving its operations to **Goulburn**. The company had broken ground on a recently acquired 850 acre block of land about 20 kilometres out of town for the construction of a new five farm facility designed to produce a growing supply of breeding stock for the future broiler industry in Australia. The company office will also be relocated and established in Goulburn over the coming months.

The project has now progressed following the construction of a new four kilometre road and a complete power supply into the property. Multiple poultry sheds have sprung up all the way along the road with Farm 5 housing the future great grandparent stock set for completion in March and for the immediate placement of birds ready to go into production. This will be followed later in the month by the three houses on Farm 2 and a further 3 houses on Farm 3 during April. The project will reach completion when all the sheds on Farm 1 at the entrance of the property and the two sheds on Farm 4 are standing and equipped for the initial intake of birds.

The new Braidwood Road farm is anticipated to be in full production in the fourth quarter this year and will supply in time roughly half of the Ross 308 parent stock volume required for the local market. The planning has been extensive with the completion of an environmental impact report

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designed to ensure zero effect on the environment through effective management of water runoff and also extensive separation of houses with the purchase of over four times the minimum area land normally required for a commercial operation. Setbacks are a minimum of at least 200 metres for the poultry sheds which consist of high quality design and components. Poured concrete floors, sandwich panel walls filled with fire retardant foam and smooth easy to clean surfaces, completely housed cables and a curved ceiling designed to optimise ventilation all contribute to the new, efficient production facility.

Aviagen has a history of investing in the rural communities not only through the acquisition of land and construction of production facilities, but also in hiring and training local people to fill good quality jobs in production, hatchery, technical service and administrative functions in the company. The farm alone is planning to increase staff by recruiting for 14 new jobs and by the end of 2015 another 15 jobs are likely when the new hatchery in Goulburn is expected to be finished.

"We are pleased with the progress on the production unit and the location, the lack of any poultry production facilities in the nearby area, a short 1 hour by road to the feed mill, 2 hours to Sydney and a strong interest in jobs from the local community all contribute to a desirable mix for running our day-to-day business," commented Peter Hanna, general manager Aviagen Australia.

Source: *World Poultry Website*,
<http://www.worldpoultry.net/Breeders/General/2014/3/Aviagen-Australia-fully-invested-in-new-facilities-1481236W/>

Australian broiler industry opens its doors to dispel myths

The Australian Chicken Meat Federation (ACMF) has hosted its first 'Hatchery to Home' tour of the year at Hazeldene's RSPCA-approved operations in Bendigo, Victoria. The tours form part of the ongoing education drive around industry practices and dispelling entrenched myths about the chicken meat industry.

Dr Andreas Dubs, Executive Director of the ACMF said: "Our tours are designed to give attendees such as journalists, nutritionists, bloggers and teachers, a first-hand experience of the processes involved in getting chicken from the hatchery to the plate and to speak with a range of experts from the industry. There are a lot of misconceptions out there that we address on the day."

The day-long tour began at the hatchery, to see the fertile eggs being incubated, their transfer at 18 days of incubation to the hatchers, the chicks being removed from the hatchers following

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hatching and dispatch of the day old chicks to the farm.

The tour then travelled a short distance to visit a chicken shed at the farm to see how the chickens are raised.

Dr Dubs continued, "Biosecurity is extremely important. The health and well-being of the day-old chicks and birds at the hatchery and farm depends on it.

"All attendees were required therefore to shower before entering the hatchery facility and at the farm and plant level need to wear protective clothing, disinfect shoes in a footbath and wash hands. Logistics of hosting such a tour takes careful planning, to ensure all biosecurity requirements are adhered too, but is we believe an important step in educating about industry practices."

Following a 'chicken- themed' lunch the tour continues onto the processing facilities. Senior Managers and the CEO will be on hand during the final part of the tour to answer any additional questions.

"The industry continues to proactively tell its story, and set the facts straight and the opportunity to host these tours and be transparent about what happens at every stage of the process is invaluable," concluded Dr Dubs.

Source: *ThePoultrySite News Desk*,
<http://www.thepoultrysite.com/poultrynews/32345/australian-broiler-industry-opens-its-doors-to-dispel-myths>

Red Flag issues



The Drumstick Marketplace

ACCC proposes to allow NSW chicken meat growers to collectively bargain

The Australian Competition and Consumer Commission proposes to grant authorisation to enable members of the NSW Farmers' Association, who grow chicken, turkey and duck meat, to collectively bargain with processors. Under the proposed arrangements, poultry growers will form common interest 'grower groups' to collectively bargain the terms and conditions of contracts with the relevant poultry processor.

Under existing New South Wales legislation, chicken and turkey growers can currently collectively bargain with processors. Authorisation would allow them to continue the arrangements if the NSW legislation is removed. Authorisation would allow duck growers not covered under legislation to begin collective bargaining.

"Collective bargaining will allow poultry growers to share transaction costs, such as employing expert advisors, which can improve their input into contracts. The arrangement may lead to more efficient contracts, which better reflect the circumstances of the growers and processor." The ACCC is proposing to grant authorisation for ten years', ACCC Deputy Chair Dr Michael Schaper said.

Authorisation provides immunity from court action for conduct that might otherwise raise concerns under the competition provisions of the *Competition and Consumer Act 2010*. Broadly, the ACCC may grant authorisation when it is satisfied that the public benefit from the conduct outweighs any public detriment.

Further information about the application for authorisation is available on the ACCC public register.

Source: ACCC website, <http://www.accc.gov.au/media-release/accc-proposes-to-allow-poultry-growers-to-collectively-bargain>

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In the next edition of the Drumstick

Some of the issues we will cover in the next edition of the Drumstick include:

1. **LED lighting for broiler sheds:** Better technology and falling prices make LED lighting a very attractive option to save money on electricity bills.

Early LED technology was expensive and struggled to handle the dusty conditions of poultry sheds. However the industry has rapidly adapted to these challenges and now offers a very competitive alternative to other lighting options. We will have a look at the changes in LED technology and consider some of the economics that make it a more attractive option.

2. **Unpacking PIX 2014.** Key topics, issues and trends which came out of PIX 2014.

There were some very interesting and in some cases challenging presentations at PIX this year. We will draw out some of the key presentations, topics and messages from PIX 2014.

3. **Direct poultry litter injection.** Getting more out of poultry manure nitrogen and reducing odour impacts.

Poultry manure can be a fantastic soil fertiliser. But how can we stop 30% or more of the nitrogen from disappearing into the air, and how can we minimise the odour from spreading litter? This article will explore direct injection into the soil as one technology that may be address these issues.

4. **Feed in crop.** Why the processors send you a nasty fine and what you can do about it?

Processors don't like receiving birds at the processing plant with feed in crop. So what can you do to prevent this from happening and what are your options?

5. **Solar power.** Is it a feasible option for the poultry industry?

With so much roof space available to them, why aren't more poultry farmers turning to solar power to reduce their electricity bills. In this story we will explore the economics of solar power.

6. **Your story here?** Send me an email about a pressing issue in your industry and I will do my best to report back on it, here in the Drumstick.



The Drumstick Newsletter is a newsletter from the Intensive Livestock Industry Development unit at NSW DPI.

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