



# Cheeps & Chirps

..... *Points for Poultry Profitability*

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## AFRICAN SWINE FEVER AND THE POULTRY INDUSTRY

African Swine Fever (ASF) is a contagious viral disease impacting only pigs. The World Organization for Animal Health, considers ASF to be a trade limiting foreign animal disease of swine. As a result, countries with confirmed cases are subject to international trade restrictions. The main purpose is to reduce the risk of introduction of the disease through trade.

Thankfully, the United States has never had a case of ASF. The USDA/APHIS Veterinary Services and Customs and Border Protection have strict animal health and import requirements to prevent the entry of ASF into the United States.

The situation is different for China where the pig herd has experienced huge losses. The result has been a shift in meat consumption in China with an increase in poultry meat consumption as consumers either reject pork or unable to afford it.

At the end of 2019, China announced that it would end its long-standing ban on imports of U.S. poultry products. According to the USDA, the resumption of exports to China is expected to result in an additional US\$1 billion in revenues for American producers.

The United States is mainly a breast meat market, with excess dark meat production. Strong demand in China and other Asian countries affected by ASF, will help support the value of dark meat for North American producers.

China has also become Brazil's most important export destination for poultry meat. China is also the principal market for Brazil's pork exports.

Europe's exports are also expected to rise, but driven by continuing demand for dark meat in Africa and Asia.

## PLANT-BASED CHICKEN

First it was meatless Monday's, and now it is plant-based 'meat'. The 'impossible' and 'beyond' burger has been on the market for awhile now. Now food scientists have come up with plant-based food and eggs. Now we have 'Beyond fried chicken'.

While plant-based meats and eggs are new, many are predicting it to be a growing market. Plant-based meat, however, still represents only 1% of 'meat' sales in terms of dollars. The percentage is even less when expressed by volume.

The majority of plant-based chicken is soy proteins. But soy protein tastes like soy, not chicken. The long list of ingredients in plant-based chicken is to mimic the flavor of chicken. An example of the ingredients include those for MorningStar Farms

Buffalo wings. They include water, wheat flour, soy flour, vegetable oil (corn, canola and/or sunflower oil), soy protein isolate, wheat starch, wheat gluten, cornstarch, methylcellulose, potato starch, natural flavors, salt, yeast extract, dextrose, yeast, paprika, onion powder, sugar, garlic powder, hot sauce (cayenne peppers, vinegar, salt, garlic powder), spices, leavening (sodium acid pyrophosphate, sodium bicarbonate), vinegar, citric acid, yellow corn flower, paprika extract color, xanthan gum, turmeric extract color, annatto extract color, and barley malt extract.

Other manufacturers make plant-based chicken using mycoprotein, which is a protein and vitamin source that comes from fermented fungi. The mycoprotein

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## PLANT-BASED CHICKEN . . . *continued*

is steamed for an extended period of time. The heat and moisture will cause it to form a sturdy texture. It is then frozen, which improves the binding even further and is ready for sale afterwards. The fibers then need to be formed into the 3D conformation of chicken. While the wings are good for vegetarians, they do use other animal by-products including eggs and milk so the product is not technically vegan.

Mung beans are being used to produce plant-based eggs.

Whole Foods CEO and co-founder John Mackey, who is a vegan, has said he believes plant-based 'meats' are good for the planet but not our health. The popular meat alternatives are super highly processed. Beyond meat patties contain 22 ingredients including pea protein isolate, expeller-pressed canola oil, and refined coconut oil. Impossible burgers contain 21 ingredients such as soy protein concentrate, coconut oil and sunflower oil.

According to a survey reported on in Feedstuffs, one-third of surveyed consumers believed plant-based alternative meat products contained at least some real beef. It was an online survey of more than 1,800 consumers,

less than half of the respondents understood the term "plant-based beef" was intended to describe an entirely vegetarian or vegan food product. When shown a package of Beyond Meat's Beyond Burger plant-based patties (which features a cow icon) told researchers that they thought the patties contained at least a small amount of real meat.

About 44% of consumers believe plant-based products are lower in sodium, even though 220-620% higher in sodium than the same-size serving of real ground beef. An additional 34% of respondents believed that plant-based meats are less processed than real meat.



# SIDEWALL INSULATION MATERIALS

Sidewall insulation is important for many things including bird comfort as well as fuel usage. Getting the right sidewall insulation for your poultry house requires careful consideration. The right sidewall insulation can improve flock uniformity, reduce fuel costs, and improve the structural integrity and longevity of poultry houses.

There are three ways that heat is transferred. They include radiation, conduction, and convection. Radiation is mainly by means of infrared rays. Local heating systems like infrared lamps make use of this means of heat transport. All the energy on earth comes from the sun by way of radiation.

Conduction refers to heat transported through a material. Metals are very good conductors, Other materials, like dry air, are very good insulators.

Convection is heat transported by means of air. The heat from a warm room will be transported outside when the door is open and it is cold outside.

The three common sidewall insulation materials are fiber glass batts, blown cellulose and spray foam.

Blown cellulose is mainly for overhead applications such as the attics of dropped ceiling houses. When used in side walls, blown cellulose has a tendency to settle over time which leads to a loss of insulating value.

For a new poultry house, R-19 fiber glass batt is good when properly secured in place so that it won't move over time. The problem is that while fiber glass works well in new houses, it can be costly for some retrofit applications.

Closed-cell polyurethane spray foam has an insulating value of R-6 per inch and has been used in the poultry industry in both new or retrofit applications where fiberglass batts would be too expensive. An older poultry house can be spray-foam transformed into a well-insulated and tight building in a short period of time.

The major possible drawback to spray foam is that it is susceptible to mechanical damage and damage by darkling beetles.

A new option reflective insulation. The previous methods work by slowing conductive heat flow. Reflective insulation works a little differently in that it is designed to reduce radiant heat gain.

A poultry house near Owensboro, KY had Reflectix double-bubble reflective insulation installed and temperatures were monitored during an eight month period that included the summer and fall of 2007. They found modest differences between fiberglass insulated cavities containing reflective insulation. They observed improved air filtration. It was easier to control air flow and could flow air from the right place. The poultry house owner reported that the houses with bubble insulation were cooler in the summer. In addition, the darkling beetles destroyed the fiberglass insulation and pretty much turned it into powder but left the reflective insulation alone.





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## HAVE YOU JOINED THE KENTUCKY POULTRY FEDERATION?

The 2020 Kentucky Poultry Federation membership drive is underway. The KENTUCKY Poultry Federation is YOUR voice in Kentucky. The KPF needs YOUR support and commitment to this organization as we enter this new year.

Membership benefits include:

- \* Cheeps and Chirps—a KPF newsletter
- \* A lobbyist in Frankfort—A portion of your membership dues provide aggressive involvement in legislative action in regards to the security of the industry

- \* Subscription to the Poultry Times and The Farmer's Pride, as well as The Sunnyside, a KPF newsletter
- \* Environmental Awards—Each year up to three producers are awarded the Kentucky Family Farm Environmental Excellence Award
- \* Scholarship Fund –Each year four students receive \$2000 scholarships each

## What do you want to read about?

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