



## Grower Lunch Break Notes - September 2, 2020

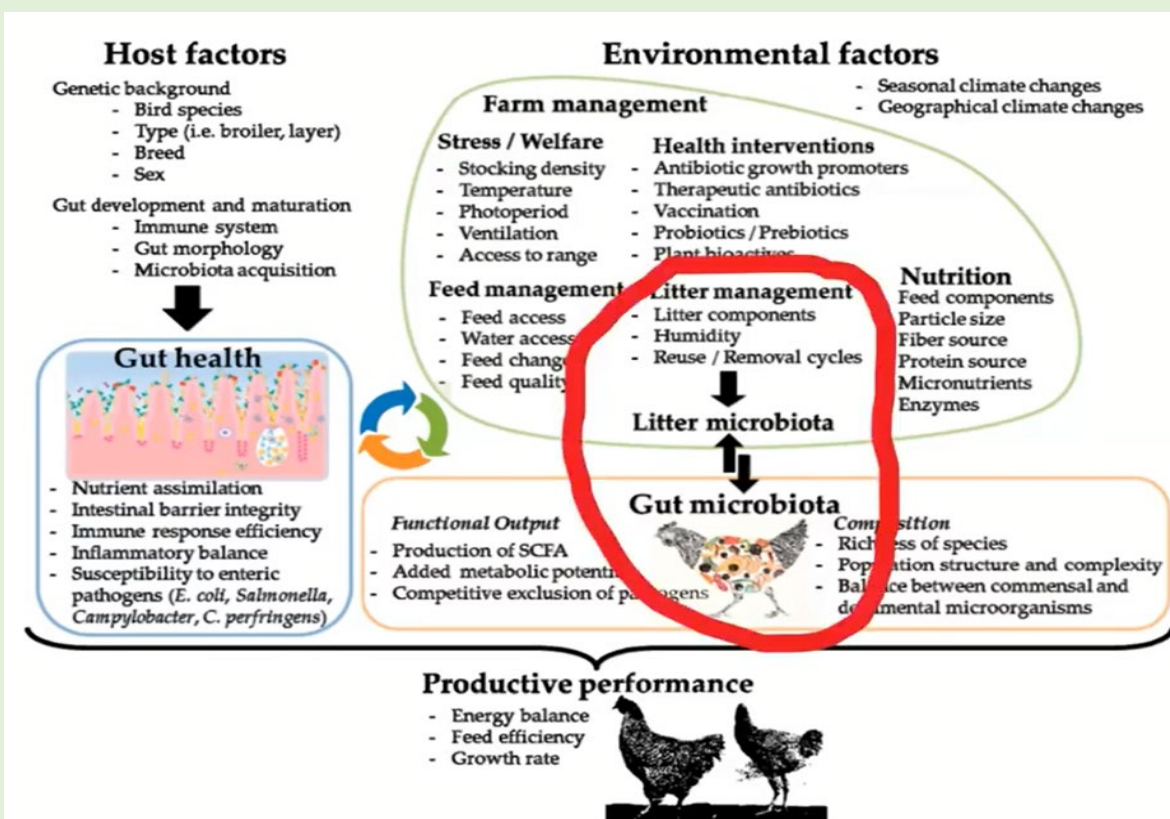
With Growers, and Extension Agents from UMD, UMES, UD, DPI, and others online, Jon Moyle introduced our speaker, **Brad Belo** of **Impact Poultry Products**, who talked to us about a poultry litter management tool, **IMPACT-P(NA)**, 'The Litter Vaccine'.

In business for over 20 years, they have been providing **waste degrading bacteria** for lots of different uses in agriculture, ie., aquaculture, poultry, dairy, and commercial, home, and marine plumbing, aimed at efficiently composting waste. For Poultry Growers the primary goal: healthier litter environment.

Natural bacteria to more efficiently compost waste. Talking about litter microbiome – microbes, bacteria, fungi that thrive in soil, guts, litter.

Growers work hard to manage every variable in their poultry houses and try to maximize the genetic potential of birds. To help with this, Brad says we need to look at the litter, which is a living ecosystem that is so critical to your birds.

- Microbiome – the community of bacteria, microbes, viruses, fungi that thrive in certain ecosystems – soils, litter.
  - “The ecological epicenter for poultry pathogens is the mixture of bedding material, chicken excrement and feathers that comprises the litter of a poultry house.”



The connection between the litter and gut microbiota are very closely connected. How do we manage this connective system? Brad recommends IMPACT-P(NA), The Litter Vaccine. A patented blend of beneficial bacteria and waste-degrading enzymes.

- It's composed of very specific bacteria that breaks down all kinds of animal waste, including natural bacteria of *Bacillus* including *subtilis* and *licheniformis*.
- This beneficial bacteria and enzyme blend will be offered at a huge number to overwhelm the bad bacteria (1 billion/sq. ft. in each poultry house)
- Apply to litter and it will self-activate, is triggered by the resource for bacteria growth, ie., the moisture, the dropping, and the heat produced by birds, this activates IMPACT-P(NA) and helps the good bacteria grow the entire 8-10 weeks you have your birds
- Overwhelm and Out-Compete Pathogens
  - IMPACT-P(NA) will provide a huge number of laboratory-grown, beneficial bacteria to overwhelm and out-compete pathogens that can cause disease outbreaks in your flock. Competitive Exclusion – dominate the ecosystem with beneficial bacteria
  - **Proven effective in:**
    - Halving disease-causing bacteria in litter and on the exterior of birds
    - Drastically slowing outbreaks of Necrotic Dermatitis without antibiotics
    - Reducing *Salmonella Enteritis* and *E. Coli* populations to levels unable to cause avian cellulitis. And reducing *Enterobacterium* populations in litter
- Lower Ammonia Levels
  - This blend of bacteria and enzymes efficiently composts poultry waste, resulting in lower ammonia levels and a healthier growing environment for your flock's entire grow out
  - Bacteria create more heat, which creates drier litter
  - Reduces ammonia levels in the entire house, less stress on birds, healthier growing environment; venting much less ammonia
- Continuously Dry, Compost, and Improve the Litter
  - Healthier, better quality litter means possibly more flocks on same built-up litter
  - 'Driest litter they have ever had'
  - One customer after a year's use went 3 or 4 extra flocks on the same litter
  - Expanding periods between litter change-outs, achieving cost savings
- Easy and Safe to Use
  - Application
    - Applied with or without birds present
    - Non-toxic
    - Non-corrosive
    - Seed or push broadcaster delivery
    - Cover the entire floor
    - Does not conflict with vaccines or insecticides
    - **Can be used within days of litter acidifiers**
  - Ingredients: bacteria and enzyme blend; wheat bran; sodium bicarbonate, sugar
    - Vast majority are dormant until delivered in the house

# IMPACT-P(NA)

## "The Litter Vaccine"



### Application Instructions

**Minimum Application Rate:** 1 pound per 1,000 sq. ft.  
 20-pound pail → 20,000 sq. ft (500 ft. x 40 ft. house)  
 25-pound pail → 25,000 sq. ft (500 ft. x 50 ft. house)

*When your goal is out-competing disease-causing pathogens ...  
 You can never have too many good bacteria in the litter!  
**More IMPACT-P(NA) is always better than less.***

**When to Apply:** Apply IMPACT-P(NA) to both fresh and built-up litter as early as possible at the beginning of each flock.

#### **If Using Litter Acidifiers for Ammonia Reduction**

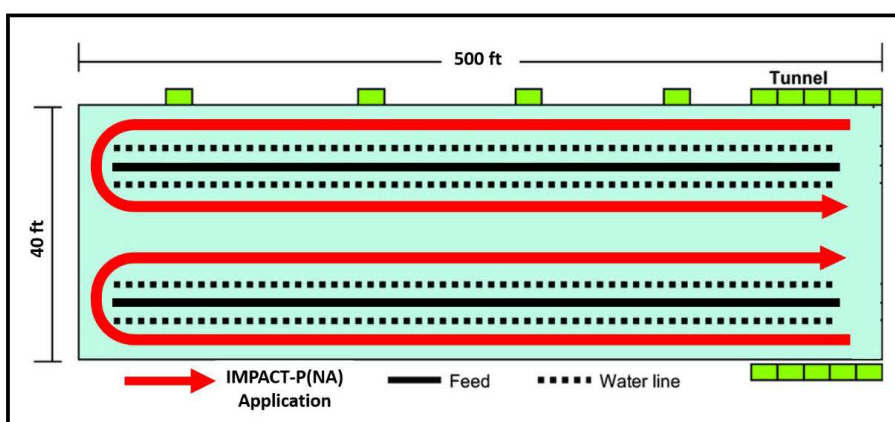
IMPACT-P(NA) should be spread 5-7 days after applying the acid product, but no later than the end of the brooding period. In non-brooding areas not treated with litter acidifiers, IMPACT-P(NA) can be spread any time.

\* **IMPACT-P(NA) is non-toxic and non-corrosive and is safely spread with the birds in the house.**

\* **IMPACT-P(NA) is not affected by insecticides.**

**How to Apply:** Use a walk behind or shoulder seed spreader (like those pictured on the right) to evenly apply IMPACT-P(NA) to the top of the litter. Walk a horseshoe up one side of the feed and water lines and down the other. Repeat this process for each set of feed and water lines.

Litter acidifiers temporarily reduce the pH of the litter and kill large numbers of active bacteria. Delaying the application of IMPACT-P(NA) helps to maximize the size of the beneficial bacteria populations that grow with you flock.



Need more info? Please contact us at 800-448-4723 or [info@impactpoultryproducts.com](mailto:info@impactpoultryproducts.com).

- Cost
  - Product has been used in southern states, VA, GA, NC, SC, and AL
  - Normally - \$190 for 20 pound bucket and \$225 for 25 pound bucket
  - **Offering Growers on Delmarva \$25 off per bucket on first order**
  - Overall, Brad feels **Impact-P(NA)** is worth the cost and shows the info below

Seems like it could be costly, but looking at the University of Georgia Extension Table below showing the cost of associated with poor litter conditions for a 20,000 bird flock, it may be costly not to use.

**Table 2. Estimated costs associated with poor litter conditions, for a flock of 20,000 birds.**

Factor and Cost	Rationale for Costs
Ammonia (\$430)	When litter conditions deteriorate, ammonia is always a problem. Research has shown that if ammonia levels are allowed to reach and remain at 50 ppm or above, feed conversion can be increased by 8 points and final body weight decreased by 0.25 lbs.
Disease (\$120)	Admittedly, this is difficult to estimate, but it is potentially the most costly. One serious disease outbreak can cause economic disaster. It is estimated that disease costs the U.S. broiler industry nearly \$500 million/year in mortality, morbidity and medication. A very conservative estimate would be that poor litter conditions are responsible for only 10 percent of these losses.
Parasites (\$140)	Anticoccidial drugs cost the U.S. poultry industry an estimated \$125 million/year. Anthelmintics (de-wormers) cost another \$35 million. Considering that initial parasitic loads in built-up litter may increase the likelihood of serious infections, and that wet litter promotes oocyst sporulation, the cost of poor litter conditions is considerable.
Condemns & Downgrades (260)	Several studies have reported that litter conditions significantly affect condemns and grade. Cleaning out has been shown to reduce condemns by as much as 50 percent. Breast blisters have been shown to be highly correlated with poor litter conditions.
Total (\$950)	Adding up these estimated losses, we find that poor litter conditions cost producers at least \$950 per 20,000 birds produced. Remember, this is a very conservative estimate; actual losses could likely be much greater.
* A brief explanation of how these cost figures were calculated is provided at the end of this publication	

**QUESTIONS and ANSWERS (Brad's further explanations can be watched on the recording):**

- How often do you need to apply?
  - Beginning of each flock
- Can it be used in a Small Flock situation?
  - Yes, but it may not be cost-effective
  - Jon Moyle mentioned that there are products out there for small flocks
- Is it considered organic certified?
  - Not yet. It goes on the litter and not into the birds, but it is not considered organic – they are working on this now for organic growers



- Does it change the composition of the litter for putting litter on fields?
  - It seems to have a minor improvement as a fertilizer but Brad was not sure of specifics. He will look into literature and forward. (We will share.)
- How many times do you apply before you see a change in the litter? Six flocks?
  - Brad will check original studies and get back to us.
- Are there studies of performance improvement of chickens?
  - It does show improvement of feed conversion and weight gain. Brad will send literature.
- Does your company need help in updating studies?
  - Brad would be willing to help work together with our Team

#### CONTACT FOR DISCOUNT OR MORE INFORMATION:

BRAD BELO  
800-448-4723

**We want to thank Brad for speaking with us!**

[Brad@ImpactPoultryProducts.com](mailto:Brad@ImpactPoultryProducts.com)

The Grower Lunch Break and Brad's talk can be watched here:

[https://drive.google.com/file/d/1xhB\\_5FG6sW3M01xYbZigj0EYDXKM6kpG/view?usp=drive\\_web](https://drive.google.com/file/d/1xhB_5FG6sW3M01xYbZigj0EYDXKM6kpG/view?usp=drive_web)  
[www.ImpactPoultryProducts.com](http://www.ImpactPoultryProducts.com)

## HAVE YOU FILLED OUT THE SURVEY??



Have you had a chance to fill out the 8-question, click-on-the-answer survey? We could use your help for future programming. If you have, THANK YOU! If you haven't yet, please do at: [https://ume.qualtrics.com/jfe/form/SV\\_byhrwSlx2g4lnA1](https://ume.qualtrics.com/jfe/form/SV_byhrwSlx2g4lnA1)

## JOIN US: GROWER LUNCH BREAKS

[September 16 – Safety on Poultry Farms \(Including Mask Types and When to Use\)](#)

[October 7 – MidAtlantic Farm Credit's Amber Rash speaks on the timely Topic: Financially Manage Longer Layouts](#)

Register at: <https://umd.zoom.us/meeting/register/tJ0kfuyhqjzpGNzp8wIhemiV6PeHRsJpxntO>

## CAUTION!

Georgie had a tractor fire that was caused by a bird's nest in back of the engine compartment, and cost her plenty! She wants to make everyone aware and remind them to **CHECK** tractor, combine and equipment for nests and debris before it happens to you.

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