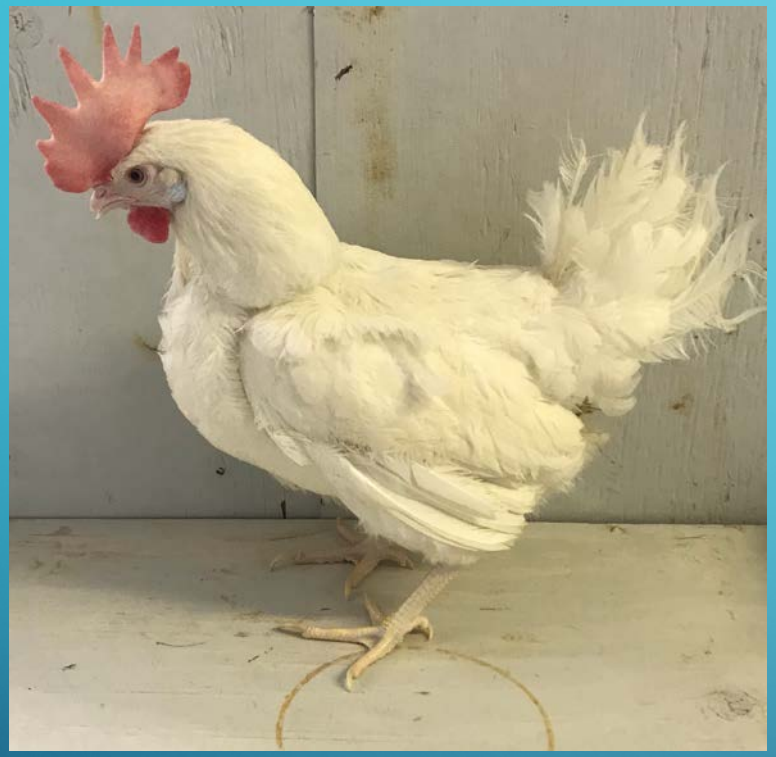
FALSE LAYERS UPDATE

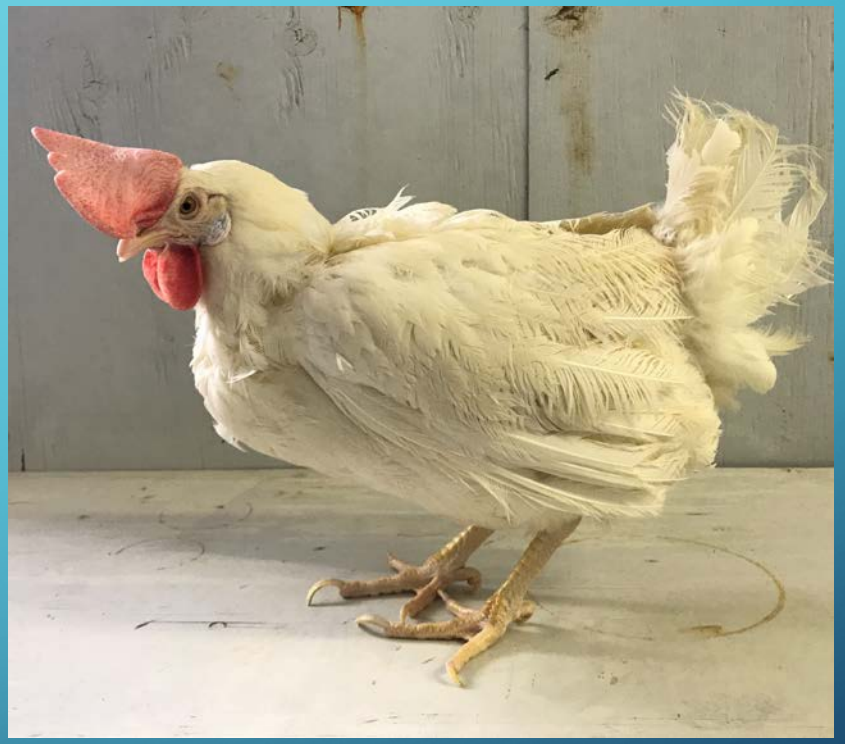
EGG & PULLET FARMERS WORKSHOP 2017

DAN VELDMAN

One of these hens is a false layer… which one?



False Layer



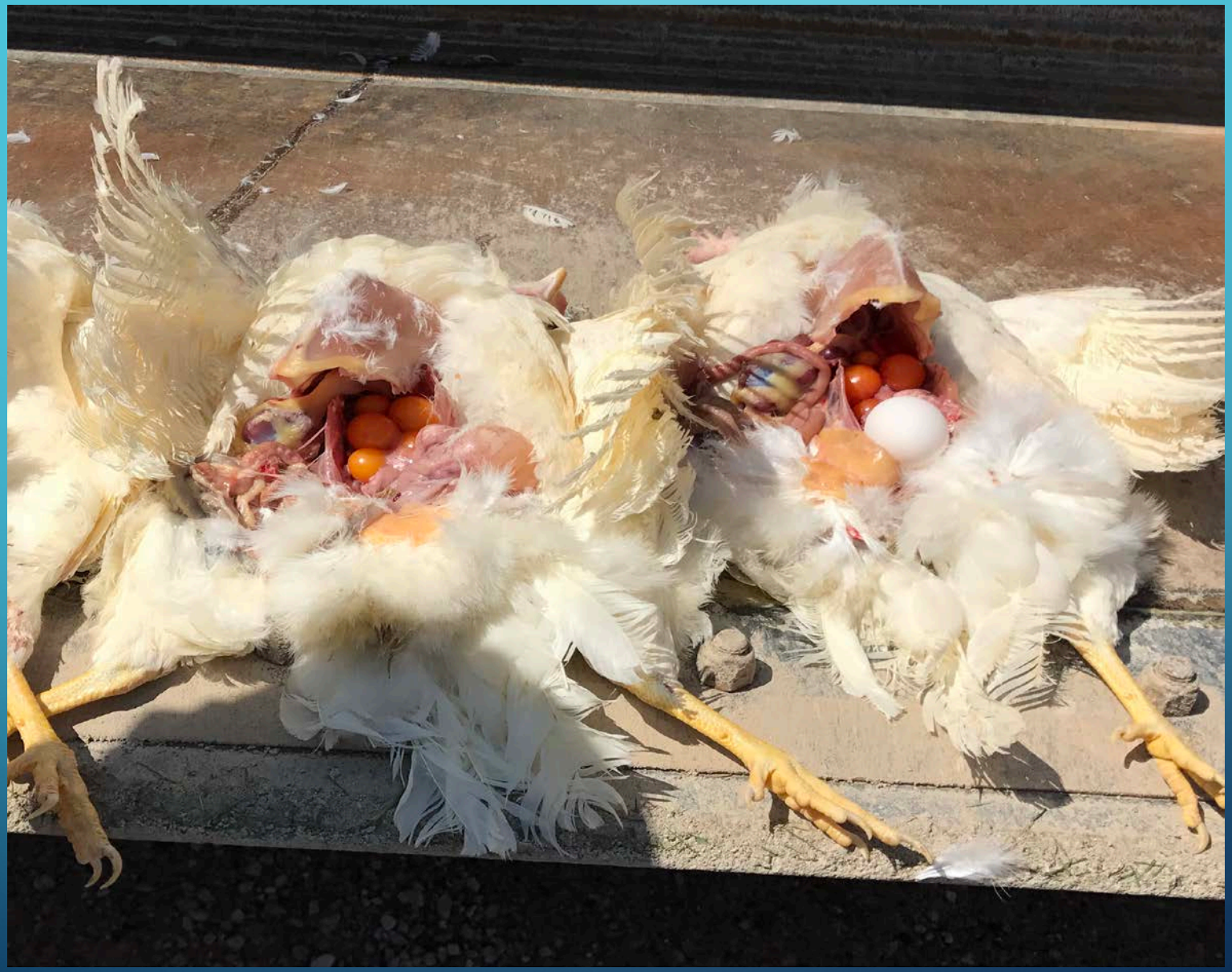
Layer

DEFINITION

- False Layer (Poultry) : a hen with the appearance and behavior of a laying hen that does not lay any eggs

- Birds look healthy, almost impossible to differentiate affected birds, eating good, bright combs, pelvic bones are spread, active ovaries but yolks are free in abdomen

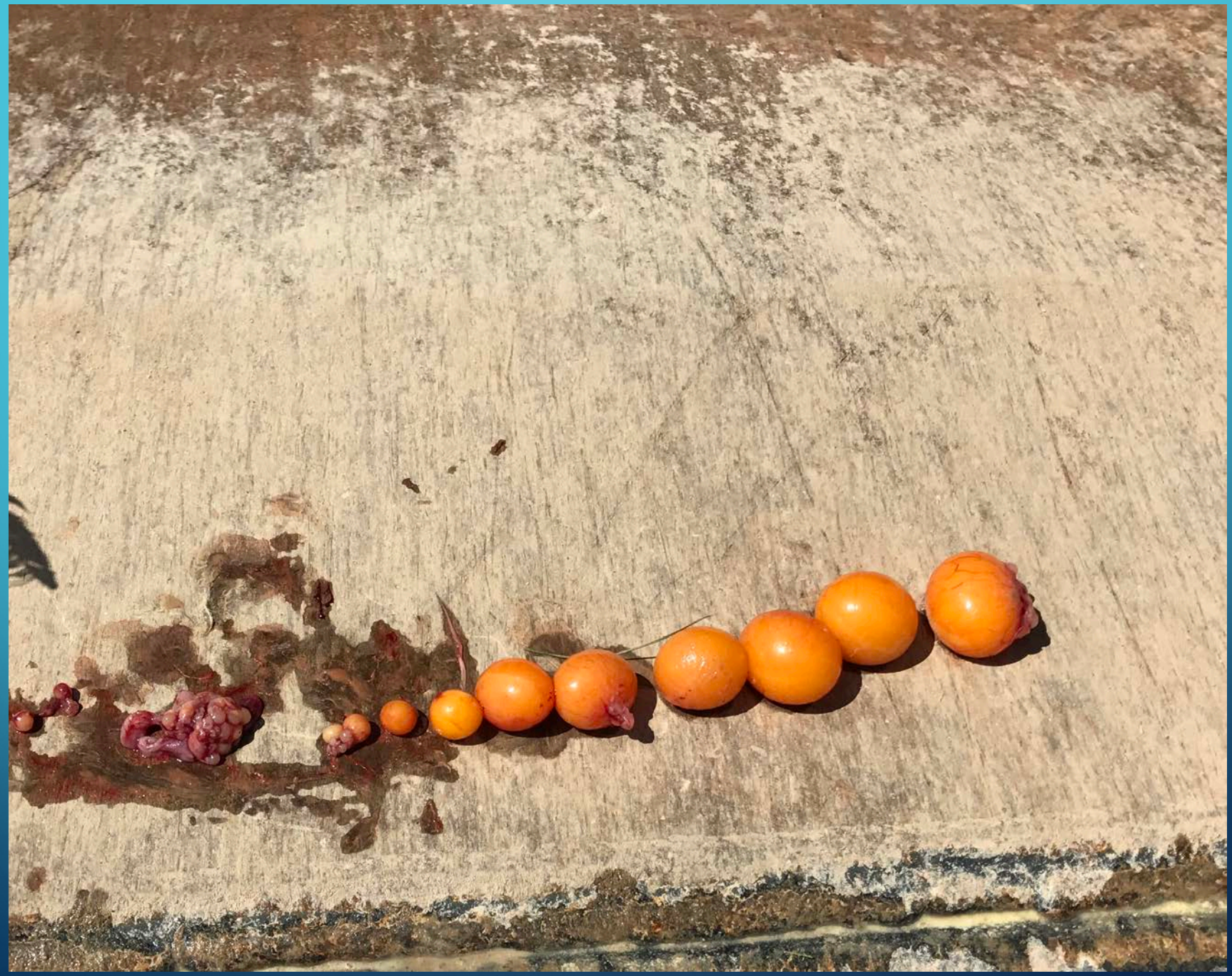
HTTPS://MEDICAL-DICTIONARY.THEFREEDICTIONARY.COM/FALSE+LAYER



HOW DOES THIS HAPPEN?

- Hens ovulate normally, but the yolk is dropped into the abdominal cavity and absorbed, rather than being collected by the damaged oviduct

HTTP://WWW.MERCKVETMANUAL.COM/POULTRY/DISORDERS-OF-THE-REPRODUCTIVE-SYSTEM/FALSE-LAYER-POULTRY



WHY DOES THIS HAPPEN?

- Incomplete development of the ovary and oviduct has been associated with **infectious bronchitis** virus infections at an early age **(1-2 weeks)**
- Blockage or degeneration of the ovary can be caused by severe stress, chronic infections, insufficient feed intake, inadequate feeder space, and feed refusal due to **mycotoxins** in the feed

HTTP://WWW.MERCKVETMANUAL.COM/POULTRY/DISORDERS-OF-THE-REPRODUCTIVE-SYSTEM/FALSE-LAYER-POULTRY

WHAT HAPPENED IN ONTARIO SPRING 2017?

- Several young layer flocks did not come into lay as expected and were laying at rates far below normal
- 7 pullet flocks confirmed as false layers; all breeds involved, both major hatcheries and several feed companies **** no common denominator between all of the affected pullet flocks
- At the time these 7 effected pullet flocks were at the 1-2 week age there was over 30 layer flocks reported and diagnosed with bronchitis late fall 2016 (not including broiler and broiler breeders who reported having severe bronchitis issues fall 2016 to spring 2017)
- Several tests were done on affected flocks (swab and tissue)
- 6 identified as Del Marva Variant strain, 373,000 birds, peak between 40-95% at 30 weeks
- 1 identified as California Variant strain, 27,000 birds, peak between 72-78% at 30 weeks

CONCLUSIONS

- Production problems are associated with bronchitis infection during the **early** grow period
- One pullet flock **positively** diagnosed with Dal Marva Variant at 7 days old

(in Nov 2016)

- Bronchitis infection early in life **(in the first ~14 days)** increases the chance of permanently damaged oviducts
  - Damage is strain dependent, depends on age of infection and tends to be less effective on brown strains
  - Some vets believe that bronchitis strains that attack the liver are more likely to cause false layers
  - False layer generally do not pose a health threat to other hens as the Bronchitis challenge happened a long time before the layer barn so hens no shedding
  - Just because a flock tests positive for Dal Marva or any other variant strain does not mean they will be False Layers, several positive flocks producing normally right now in Ontario

HOW DO WE PREVENT THIS FROM HAPPENING AGAIN?

- **Tighten up biosecurity** in pullet barns, especially during the first three weeks of age.
- **Use and administer vaccines properly,** consult your veterinarian and hatchery
- Work ongoing regarding 2 new potential vaccines

SOLUTION?

- There is no treatment
- Affected birds will not recover
- Infectious bronchitis surveillance program in place – EFO is randomly testing 40 pullet flocks a year at 2 weeks, 7-8 weeks and 13-17 weeks – data will be compiled and logged for future use in the event there is a recurrence of false layers
- Compensation program in place for severely affected producers
- Producers need to be mindful that not every flock will be a 338 eggs/hen housed flock

HAS THIS HAPPENED ANYWHERE ELSE?

- 4 cases in Quebec, 3 confirmed as Del Marva Strain of infectious bronchitis and 1 inconclusive
- 3 cases in Arizona
- 6 cases in Pennsylvania
- 2 cases in Wisconsin
- plus others that have not been reported

THANK YOU