



Layer Housing Transition in Canada

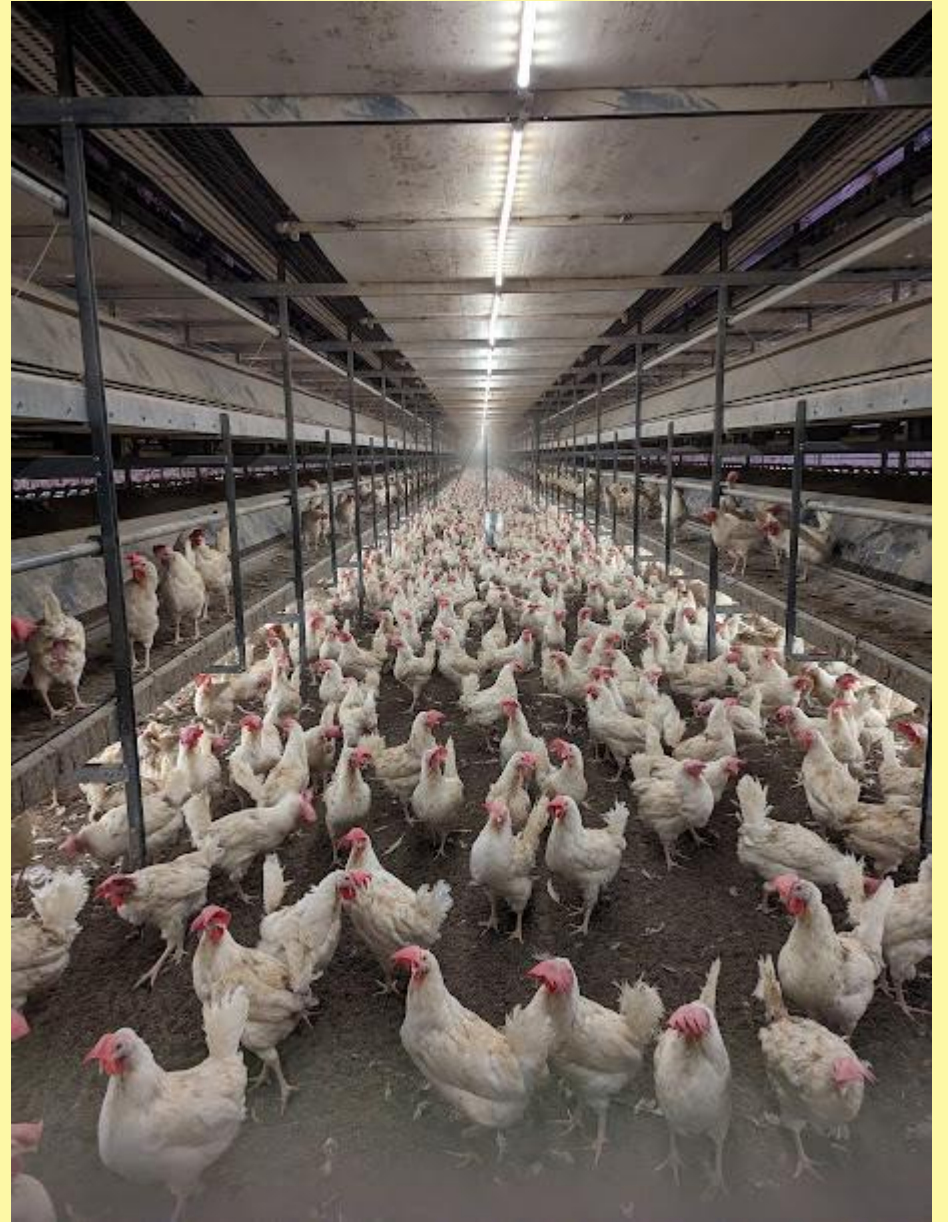
Mike Petrik, DVM, MSc

For PSIW

Oct 5/23

Laying Hen Housing Transition

- World-wide trends
 - US
 - Pressure to change was external (ballot initiatives)
 - Resulted in legislation that required cage-free housing
 - 28% cage free in 2020
 - 70% by 2027 (Projected)



Laying Hen Transition

Table 1. Layers (million) and housing (%) in the main egg producing countries of the EU in 2021

Country	Total number of layers Million	Enriched cages %	Aviary %	Free range %	Organic %
Germany	58,1	5,5	58,8	22,1	13,6
Poland	51,2	76,2	13,6	5	1
France*	48,3	54,1	11,7	23	11,2
Spain	47,1	73,3	16,1	9,1	1,6
Italy	40,5	35,6	54,5	4,9	4,9
Netherlands*	33,5	7,8	60,9	22,8	8,6
Portugal	10,2	75	19,5	4,7	0,8
Belgium	10,8	36,2	42,8	13,5	7,4
EU total 2021	376	44,9	35,6	12,8	6,6
EU total 2020	372,4	48	33,9	11,9	6,2
EU total 2019	365,9	49,5	32,4	11,8	6,3

* Data 2019

Conventional

0%
4.2%
0%
0%
0%
0%
0%
0%

Laying Hen Housing Transition

- What we did right
 - Industry took the initiative and led the change via Code of Practice
 - Egg Farmers of EVERYWHERE worked with retailers to implement the EQA agreement so that code compliant farms are considered welfare friendly
 - Transitioning as well (or better) than planned
 - Shows commitment to the program, and reduces pressure from external groups

Laying Hen Housing Transition

- What will the future bring?
 - Anyone who says they know, doesn't understand the question
 - Much less buzz now about welfare alone
 - Talk is all about "Sustainability"
 - Balance between environment, social, welfare

Laying Hen Housing Transition

- Regardless, furnished cages will be around until I retire ...
 - (ignore the last slide)
 - **2017 code of practice**
 - **Fully in effect in 2036**
- Code will be re-opened in 2027
 - **Even if the committee decides Furnished Cages are unacceptable, it will be 2050 before they are phased out**



Pullet Housing

Pullet Housing

- So far, there has been little change to pullet housing requirements
 - 44 in² per bird
 - Also 9in² of litter space per bird in non-cage systems
- Discussion at the EFC level to possibly increase the space requirement to 75-90in² per bird in non-cage systems
- Will be discussed at the code review in 2024
 - Expect a phase-in period if the change is made



Laying Hen Transition

- **Canadian Veterinary Medical Association**
 - The official representation of veterinarians in Canada
 - Just released a position statement on laying hen housing
 - Good representation from the poultry vets
 - “The CVMA holds that primary consideration should be given to the welfare of the birds when housing systems for laying hens are adopted. To provide good health and welfare for laying hens, the CVMA supports the evaluation and implementation of both enriched/furnished cage systems and non-cage colony systems that are compatible with good standards of animal welfare.”

EFC Estimates on Transition

End of year	Conventional housing	Enriched colony housing	Free run, free range and organic systems
2016	82%	8%	10%
2018	71%	14%	14%
2020	59%	25%	16%
2022	50%	32%	18%
2024	38%	41%	21%
2026	26%	50%	24%
2028	14%	59%	28%
2030	2%	67%	31%
2032	0%	67%	33%
2034	0%	67%	33%
2036	0%	67%	33%

Projections beyond 2023 are estimates on best data available to EFC at this time. EFC does not guarantee the accuracy of these projections, and actual results may vary from

Egg Farmers of Ontario

As of today:

- **562 Layer barns**
- **274 Conventional (49%)**
- **174 Enriched Cage (31%)**
- **54 Free Run (10%)**
- **68 Aviary (12%)**

Recent Trends

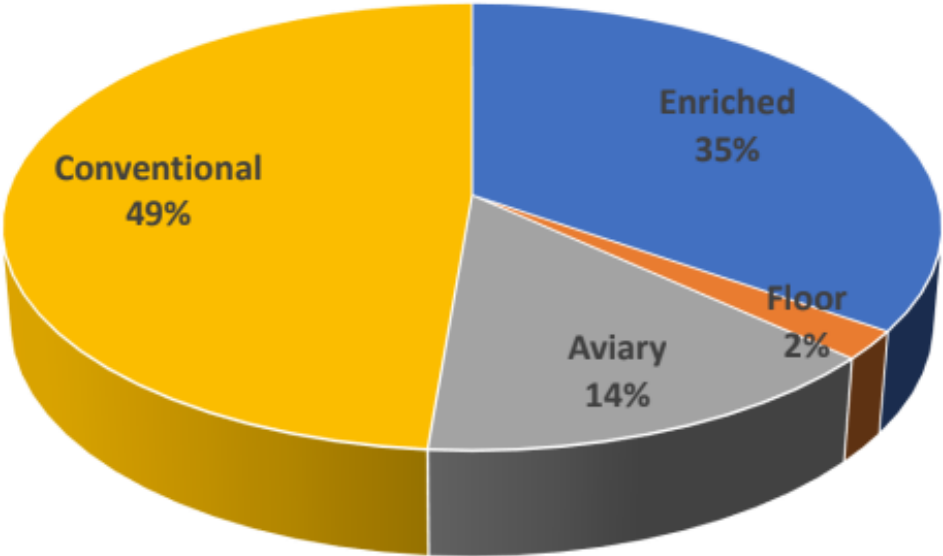
Barn Type vs Year Installed

2020			2021			2022			2023		
EN	FR	AV	EN	FR	AV	EN	FR	AV	EN	FR	AV
24	4	6	35	3	5	20	6	3	11	1	1

Egg Farmers of Manitoba



Layer Quota Housed August, 2023



Egg Farmers of Manitoba

# of Producers	Type of Housing	
49	Enriched	32%
7	Floor	4.6%
6	Aviary	3.9%
68	Conventional	44.7%
22	Mixed Housing	14.5%
152	Total Producers	

Quota Housed		
Quota Housed in Enriched	909,685	34.7%
Quota Housed on Floor	55,074	2.1%
Quota Housed in Aviary	380,580	14.5%
Quota Housed in Conventional	1,276,688	48.7%
Total Quota Housed	2,622,027	

Transition to Furnished Cages

- The transition is usually pretty smooth
 - Good flocks are GOOD flocks
 - Poor flocks are pretty good
- **Common problems**
 - **Increased shell problems**
 - **Perch Eggs**
 - **Overactivity**
 - **Increased infection pressure**

Perch Eggs

- Occur when birds “urge” to lay occurs in the dark
 - **A bit like wetting the bed**
 - **Usually in young flocks**
- Sometimes occurs when there is difficulty accessing the nest
 - **See this more often in solid sided nest areas**



Perch Eggs

- Often when lights on in layer barn is earlier than in the pullet barn
 - Can “jump” dawn an hour earlier
 - Occasionally will do it twice
 - Not more than that



Overactivity

- Furnished cages allow (encourage) more activity
 - Sometimes becomes excessive
 - Exacerbated if birds are aggressive
 - Shows early as “wear” on the birds or excessive feathers on the belt



Overactivity

- Block lighting has been effective to reduce activity and aggression
 - **Turn lights off for 2 hours, 5 hours after lights on**
 - Based on 15 hour daylength but works
 - **Need the longest light period AFTER lights are on**
 - Don't do sunset
 - Shift feeding to come on just after lights back on
 - **Prefer this to dimming the lights**
 - Still dim lights if the “nap” doesn't help



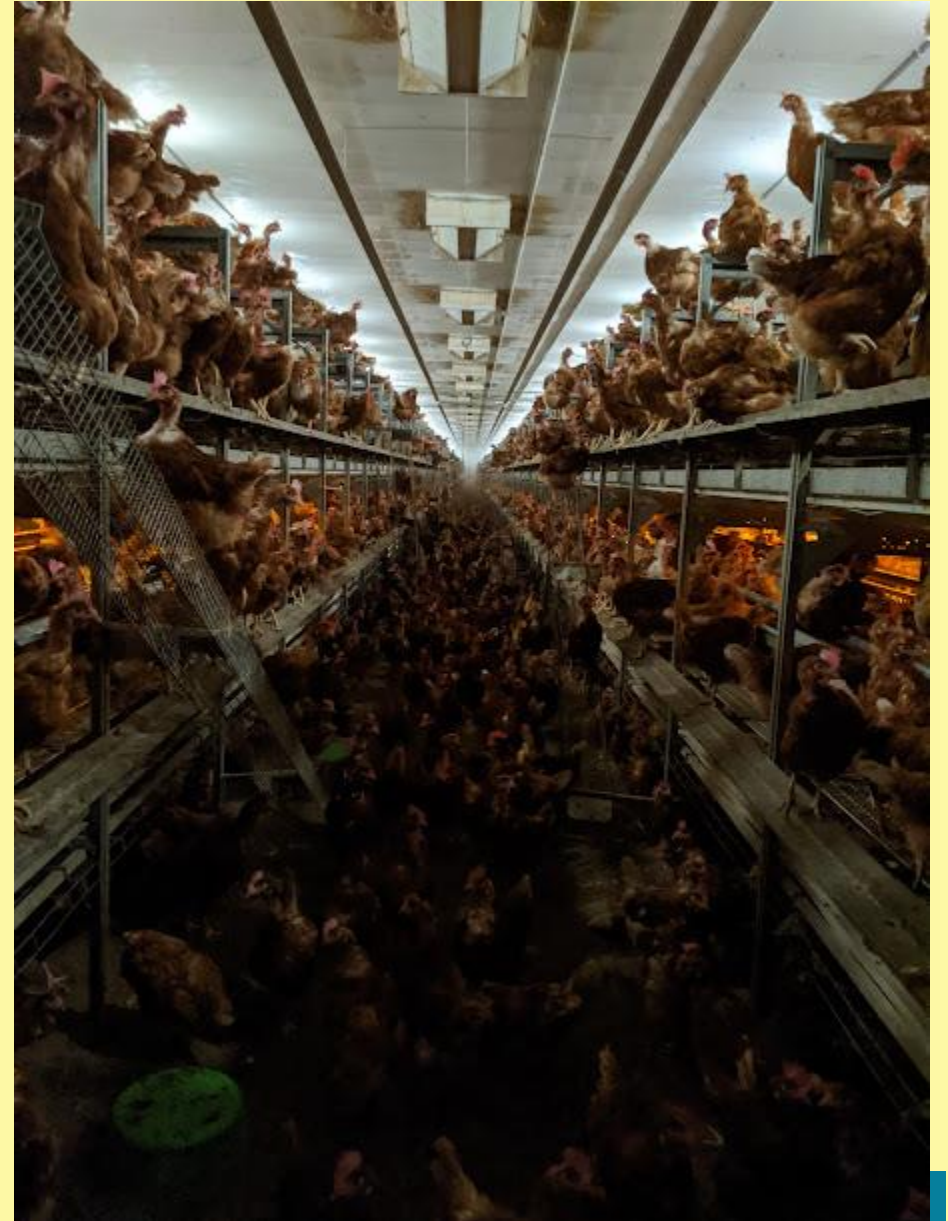
Increased Infection Pressure

- Especially E. coli
 - More access to manure to pick
 - More mild injuries that can get infected
 - Recommend all flocks destined for Furnished Cages be vaccinated against E. coli
 - 2 doses, as early as possible (easier to get good coverage)



Transition to Aviaries

- More variable results
 - Good aviary flocks are **GOOD FLOCKS**
 - Poor aviary flocks can be **VERY POOR**
 - Smothering
 - Aggression
 - E. coli and roundworms
 - Floor eggs



Smothering

- #1 reason that Egg Farmers lose sleep
 - **Many reasons**
 - Too dark, too light, boredom, overstimulation, almost any other stress
 - **Usually happens in certain areas of the barn**
 - Strategies to keep birds from these areas help
 - Also try to identify and remove stresses



Smothering

- Ways to encourage hens to spread out
 - **Music draws birds like a magnet**
 - Put speakers where you want birds to go more
 - Install 6-8 speakers in the barn and hook up the appropriate ones



Smothering

- Chickens dislike breezes
 - **Aiming fans down towards the ground where you DON'T want congregation works well**
- Physically block dangerous areas
 - **Shock wires in corners and at fences**
 - **Upside down buckets if there is a specific spot**



Aggression

- Aviaries work well as long as there is no competition
 - **Suboptimal amounts of ANYTHING can be the start of aggression**
 - Poor feed delivery
 - Water line issues
 - Perch space
 - Nest space
 - Air quality



Aggression

- The only way to successfully deal with aggression is to find the deficiency, and correct it
 - Often management
 - May be nutritional (low salt, low protein)
 - Dimming lights can help a bit
 - Video cameras, patience and thoughtfulness are invaluable tools



A stressed chicken is an angry chicken!

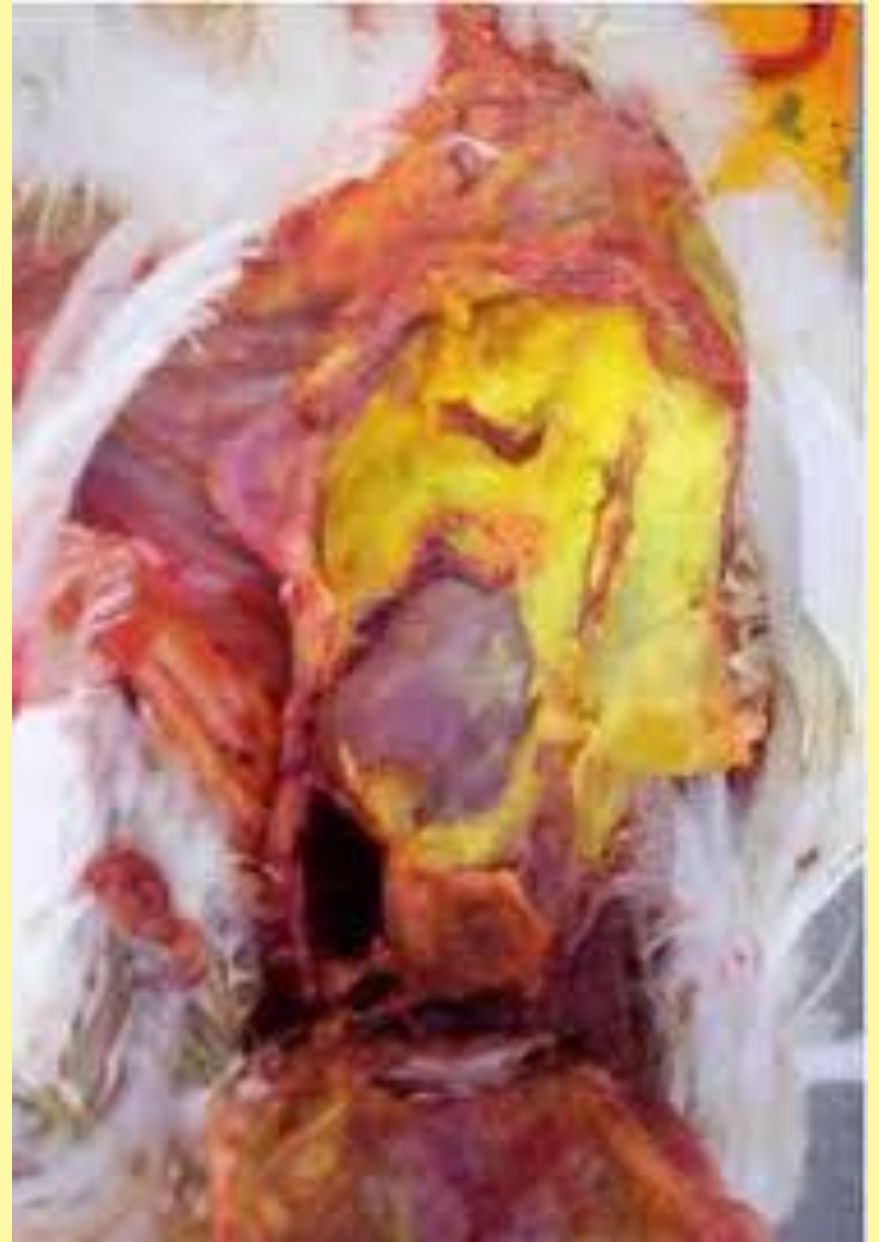
E. Coli

- Vaccinate all aviary flocks with E. coli vaccine
 - **2 doses, as young as possible**
- Find the source of infection and remove it
 - **Poor litter quality**
 - **High dust**
 - **Aggression and injuries**
 - **Poor water quality**



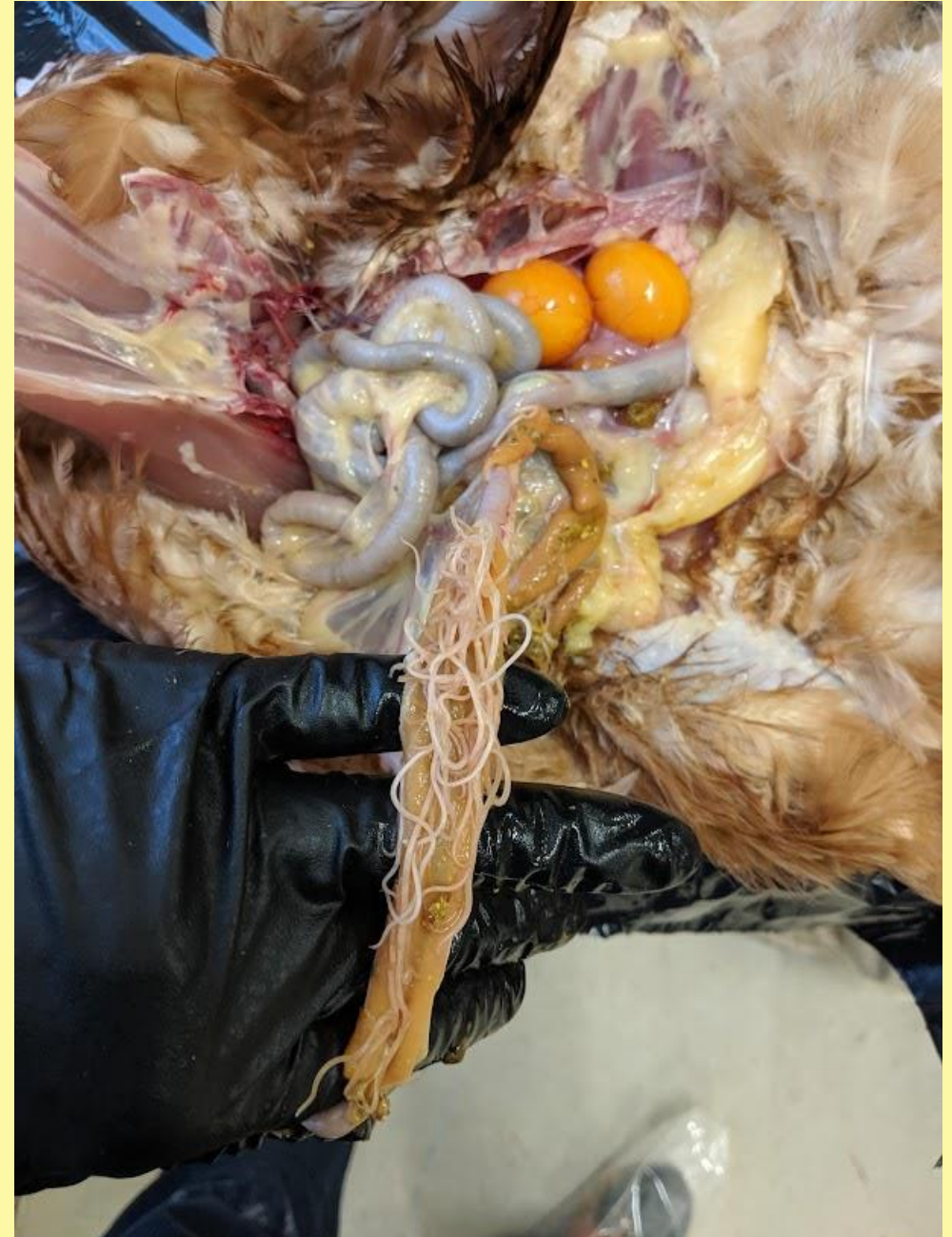
E. Coli

- Remember that E. coli is often an opportunistic pathogen
 - Make sure it is your primary problem
 - Cage layer fatigue
 - IB
 - Aggression
 - Internal layers
- Oxy- and Chlortetracyclines have a MRL in eggs of 0.4PPM
 - Below that, eggs can enter the food chain



Roundworms

- Roundworms
 - Ubiquitous
 - Extremely difficult to get out of a barn
 - Worm eggs are very sticky and impervious to most cleaners and disinfectants
 - Treatment with Panacur Aquasol is effective
 - Can only treat organic birds ONCE
 - Be strategic



Floor Eggs

- The first 2-3 weeks in the lay barn are crucial
 - Walk the barn constantly, pick up all eggs ASAP
 - Ensure birds are lifted up into system at lights out
 - Try to move birds into lay barn before they start laying
 - Have pullet and lay barn as similar as possible
 - Minimize corners, dark areas, deep litter



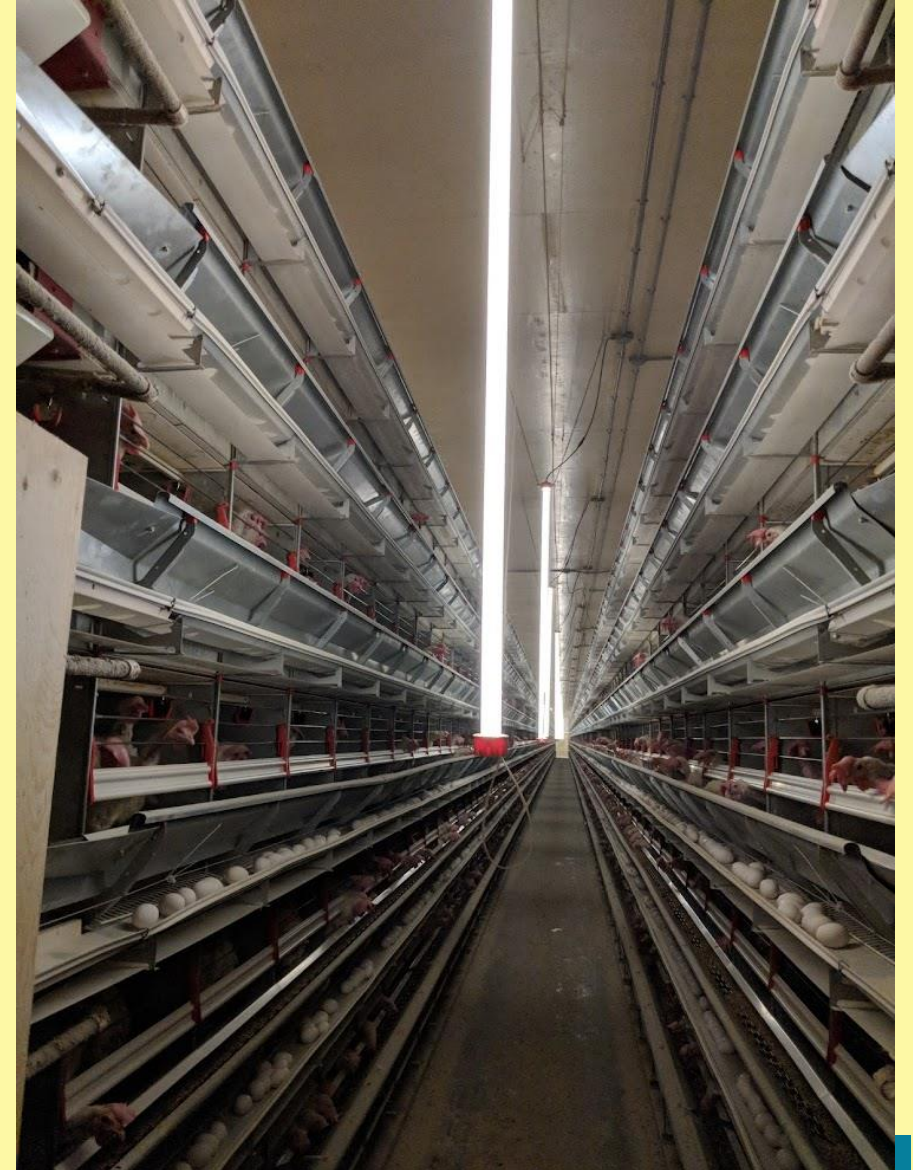
Conclusion

- Across Canada the transition to extensive housing is ahead of schedule
 - **This is good for building logistics going forward**
 - **Also looks very favourably on the industry and takes ammunition away from our critics**



Conclusion

- Transition of furnished cages is going well
 - **Essentially indistinguishable numbers from CC flocks**
 - **Management challenges with respect to shell quality and infection**
 - **Management strategies such as block lighting and E. coli vaccine help**



Conclusion

- Transition to aviaries
 - **Most aviary flocks do very well**
 - **Especially white birds**
 - **Much more management intensive and less forgiving of mistakes**
 - **Using airflow and sound to move birds can be very effective for smothering issues**
 - **Vaccines and diligence are also important**



Questions?

