An Ecological Approach to Disease Risk Management on Organic Poultry Farms

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Preliminary Surveillance of Organic Poultry Farms

- 14 Farms.
- 100 – 500+ birds/farm.
- Mixture of layer and broiler breeds.
- 100% farms positive for Campylobacter.
- 100% farms positive for at least 1 intestinal worm species.
- 90% farms positive for Eimeria.
- High variation in proportion of birds infected.
- High variation in infection intensity.
- Many birds co-infected.
Do we find the same parasites in poultry and wild birds that co-mingle?

Central Questions

- Do particular wild species exchange parasites/pathogens with outdoor poultry?
- What landscape features affect wild bird densities around poultry?
- Can we map risk factors for infectious diseases in outdoor poultry?
Do soil factors affect how long parasites survive in the environment?

Central Questions

- Do different soil types affect persistence of enteric parasites and pathogens?
- What are the time-periods for elimination of enteric parasites and pathogens in soil?
- Can we determine pasture rotation protocols to reduce enteric pathogens in the environment?
Poultry Health

- Weight Gain
- Egg Production
- Feed Conversion
- Mortality

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