## **Review of the Judgement from Justice Zinn**

By Dr. Steven Pelech

May 21, 2025

This critique considers the Decision provided by Honourable Mr. Justice Zinn on May 13, 2025-05-19 with respect to the case of Universal Ostrich Farms Inc. vs Canadian Food Inspection Agency

Federal Court of Canada

Date:20250513

Dockets: T-294-25, T-432-25

Citation: 2025 FC 878

In considering the arguments used to justify Justice Zinn's decision to uphold the culling of the ostrich herd with the order provided by the Canadian Food Inspection Agency (CFIA) in early January, 20205, the following points should first be considered when reviewing his decision.

- 1. The judge made his decision primarily based on what was known after the initial testing of the two dead birds at the Universal Ostrich Farms (UOF) at the end of December 2024. What the CFAI actually knew, before they issued the culling order, was using a PCR test designed to test for influenza hemagglutinin H5 and H7 genetic material, that they had a positive result. At the thermal cycle number of this test, which exceeded 36 cycle, the test has a greater than 90% false positive rate. The CFAI did not know specifically at the time that the virus detected was H5N1 or even necessarily a highly pathogenic avian influenza virus. It should be noted that to qualify as highly pathogenic, lethality has to be 75% or high in an infected chicken herd. However, to issue a cull order, the standard CFAI policy is that if a poultry flock is even suspected of having an H5N1 infection, and even a single bird tests positive for H5 or H7, then the entire flock to which that bird has been exposed must be exterminated.
- 2. Later, when genomic sequencing by the National Microbiology Laboratory in Winnipeg was performed on the swab samples taken from the two dead ostriches, and this information was not disclosed to the UOF until the latter half of March, it turned out that the influenza virus recovered from these birds was a combination of high and low pathogenicity virus. It would not be expected to be as highly pathogenic.

- 3. The fact that none of the birds on the UOF that were resident prior to 2021 died from the recent avian influenza outbreak indicated that they must have had priority immunity. The 69 birds that died out of the remaining birds that came to the farm after 2020 corresponds to a lethality rate of around 31%, which was much lower than expected rates that have been recorded up to 60% in ostriches that have not been subjected to culling, for example in South Africa.
- 4. Independent testing by Kinexus Bioinformatics Corporation of egg yolks from 18/18 birds recovered in the summer of 2024, prior to the December, 2024, outbreak, already showed the presence of antibodies against both the H5 and N1 proteins, confirming that the birds already had a degree of natural existing immunity. The CFIA cull order blocked any test or treatment of the UOF herd after its issuance. The CFAI argued in court that it was irrelevant if the UOF ostriches had subsequently developed natural immunity with respect to their decision to cull the birds.
- 5. Since the death of the last UOF ostrich from infection on January 15, 2025, there have been no deaths from infectious disease, and all of the birds have been healthy. This is only possible if the birds have developed robust natural immunity that is fully protective. These birds are highly unlikely to have the H5N1 virus if they have antibodies, and they certainly are at no risk of transmitted the virus to each other, to wild birds or to humans that come in contact with the birds.
- 6. The decision of the CFAI to cull all birds in a flock or herd upon evidence of a single PCR confirmed case of H5 or H7 positivity is an internal decision of the CFAI. This is not a requirement of the World Organization for Animal Health, which allows for regaining of disease-free status after one year if no other outbreaks occur in a zone. Canada is divided into zones with respect to the commercial poultry. The UOF is in its own zone, and allowing the disease to "burn-out" at the UOF zone does not affect the disease-free status of the other zones in BC and Canada.
- 7. The CFAI, according to its own rules, has discretion with respect on how to handle an outbreak of H5N1 in unusual cases, which is certainly a situation with the UOF ostriches. It is plainly evident that the ostriches on the farm were not being used for human consumption but for research purposes. In fact, the ostriches were being used to develop diagnostic and therapeutic products, which by the CFAI's own policies would mean that these birds do not

qualify as "poultry" and would not technically be subject-able to the culling order. Moreover, the UOF ostriches were being used to develop antibody products to help reduce the risk of infectious diseases like COVID-19, such as masks and filters that capture the SARS-CoV-2 virus.

- 8. Also according to CFAI policy, the agency is not required to pay fair compensation for the value of animals that are culled when they issue an order. Justice Zinn ruled that the compensation cannot exceed \$3000 per bird. Therefore, the true value of these birds will not be offered in compensation. . Due to the potential commercial value of the antibodies against influenza H5N1 and SARS-CoV-2 in the eggs from this flock, the value of each egg laying bird exceeds this number in the order of 10-fold. Note that unlike chickens which can be purchase for a few dollars about 90 days after being chicks, ostriches take more than a year to even become reproductive, but can remain fertile for 55 years, and produce typically 30 of the largest bird eggs available on the planet in a season. It takes a few years before an ostrich is comfortable with a human handler, so it takes years to re-establish an ostrich herd
- 9. The UOF herd represent a substantial percentage of the entire ostrich population in Canada, likely greater than 15%. Culling these birds will not only reduce the genetic diversity of this species in Canada, but further damage the industry in Canada that has wider implications for biomedical applications. Killing these ostriches further endangers food security in BC and Canada, since it reduces diversity in commercial animals, and makes the province and country more vulnerable to future infections with new pathogenic viruses that might be even more deadly in the other more commonly used birds in commercial operations.
- 10. The CFAI has been preoccupied with the notion that genetic mutation of the H5N1 may allow it to develop greater infectivity and pathogenicity in humans, and result in the next human virus pandemic. However, the H5N1 strain has been known for almost 70 years, and it has yet to pose a serious threat for human disease. There is no scientific evidence that the H5N1 virus, when it has rarely infected a human host, that has been able to spread to and cause disease in another human.
- 11. The decision from the Regional District of Central Kootenay to delay acceptance of the carcasses of the culled ostriches is a little confusing, although the insistence that each bird is tested could buy valuable time. It is unclear whether if the birds test H5N1-positive that they will be accepted or rejected from the landfill. If the birds test positive, then the sense I got was that the birds were deemed a biohazard and would be rejected. However, if the birds are

negative, then the question arises why should the CFIA be killing them in the first place. Part of this decision by the district is based on the notion that influenza virus may remain replication-competent for years in water and soil, which is a concern raised by Justice Zinn, based on the material submitted by the CFIA. This misleading idea was rebutted by both Dr. Bridle and Dr. Pelech.

- 12. According to the CFIA, there has been about 531 outbreaks of H5N1 HPAI in commercial poultry flocks in Canada in the last four years, and with one exception, the exposed birds were all subjected to the stamping out policy, resulting in the deaths of over 14.5 million commercial birds. It is notable that these outbreaks are seasonal in the late fall and early winter, and the frequency of these outbreaks was unchanged by the practice of culling of the infected flocks in 2024 compared to 2023. During the court hearing, CFAI disclosed that there were about a hundred of such instances of genetic reassortments of H5N1 influenza genes in the past few years, which indicates a rate of about 19% assuming that the virus was fully sequenced in each outbreak. Such reassortments of influenza genes are generally very rare. This requires coinfection of the same host, and the same cells in the host with two different strains at the same time, and the repackaging of these genes in the same new virus particles. This supports the notion that a substantial portion of the H5N1 influenza that is now in wild migratory birds is no longer highly pathogenic avian influenza, but hybrids of lower pathogenicity.
- 13. The culling of the UOF herd represents a high loss to the scientific community to understand the effectiveness of natural immunity post-infection with H5N1 virus in birds. This is over and above the value of these ostriches for the antibodies that they have produced against H5N1 influenza and SARS-CoV-2, which is what these birds were originally being used for. Their antibodies could be used for diagnostic test to identify new outbreaks of infections with these viruses as well as therapeutic antibodies for treatment of influenza and COVID-19.

By applying the stamping out policy at the earliest signs of an H5 or H7 influenza infection, we presently have no idea on how lethal the currently circulating strains of influenza are in wild birds to the domestic flocks. Normally, pandemics subside when less lethal and more infectious strains of viruses emerge from mutation and dominate and replace highly pathogenic versions. It is likely that such a phenomenon is already happening with H5N1 clade 2.3.4.4b, which was responsible for HPAI cases earlier in the recent pandemic in commercial livestock.

## **Specific Comments to Justice Zinn's Decision**

I will comment of specific problematic statements offered by Justice Zinn by the paragraph numbers that precede them.

- [2] "To do so, the Agency complies with the internationally recognized and applied "Stamping-Out Policy" approach recommended by the World Organisation for Animal Health [WOAH] that requires rapid culling of affected avian populations." Actually, this is not a requirement but a recommendation. Burnout of the infection is permissible according to WOAH guidelines, but evidence of no further infections for one year is necessary to qualify for disease-free status.
- [6] "Courts must also respect the demonstrated scientific and technical expertise of administrative agencies. In administrative law, courts generally stay out of scientific debates and focus on whether the decision-makers used their expertise to make reasonable and procedurally fair decisions." Justice Zinn has maintained that the court cannot judge the scientific merits that underlie the actions of the CFIA, and has taken judicial notice on the basis that because a government body has made scientific-based assertions, these must be true. This was frequently done in the Canadian courts in response to mandatory COVID-19 vaccination-related cases, and it has been demonstrated that the assertions of the health-related agencies that COVID-19 genetic vaccines are safe and effective are controversial and in dispute even today. Justice Zinn relies on statements provided by the CFIA to support the claim that the actions of the CFIA are "reasonable." He ignores expert reports from independent, qualified experts that challenge these statements. He accepts argument from CFIA experts that are employees of the agency, and while technically are considered acceptable experts, are not independent and are conflicted.
- [8] "Therefore, this Court cannot consider "new" evidence, such as the current health status of the ostriches, recent test results, or updated scientific developments that become available only after January 10, 2025, the date of the Agency's last decision." Justice Zinn has argued that in this case, only what was known at the time that the decision to cull the birds and denial of the exemption request is relevant in judging the merits of the case. He is not concerned about whether the infection of ostriches with H5N1 virus poses a threat to safety now or before, but whether the CFIA reasonably believed that it did, even if the agency experts agreed that they do not pose a threat at the time of the court hearing. I believe that a strong case can be made that at the time of the cull order, a mere 41 minutes after confirmation of a positive PCR test that only monitored whether the virus genetic material recovered from two dead ostriches featured the hemagglutinin H5 protein, that the agency did not know the pathogenic potential and full identity of the virus that infected the flock. The CFIA decision was largely based on a PCR test

that was used at 36 or greater thermal cycles, which is associated with a greater than 90% false positive rate. They did not really know that the genetic material corresponded to the highly pathogenic H5N1 clade 2.3.4.4b strain, which has been primarily responsible for HPAI in BC in the last few years. They did not even know whether the influenza strain was an H5N1 member, since they did not test which of the neuraminidase (N) genes it had. For example, it could have been H5N2, which is also known to infect chickens, ducks, turkeys, falcons, and ostriches, and which usually causes a much milder form of influenza.

[13] In this paragraph, Justice Zinn conveys the impression that the UOF has a diversified business portfolio, including raising birds for slaughter and processing limited amounts of meat, and while he acknowledges that the focus in recent years has been extracting antibodies from ostrich eggs, someone unfamiliar with the company's operations would believe that these other activities were still ongoing, which they were not at the time of the December 2024 influenza outbreak.

[16] "The ability of avian influenza to persist in the environment contributes to its transmission. It can persist outside of hosts in feces, grass, and soil. It can remain viable for months or even years in fresh water at low temperatures, creating long-lasting sources of infection or reinfection." This false statement was challenged by both Dr. Bridle and Dr. Pelech. The study by Ramey et al. (2022) cited by the HPAI was based on filtered water with a 0.22 micron cut-off. The influenza virus is about 0.14 microns in size and can pass through the filter, but larger viruses, bacteria, fungi and larger organisms would be excluded. The water was kept cold, and maintained in a protective environment in the dark. This is hardly representative of natural conditions where microbial action and UV radiation from sunlight that would mutate the influenza virus RNA would effectively inactive the virus in short order. There is no evidence that influenza virus can persist for even days in a natural environment. Moreover, this a respiratory virus and is usually transmitted in an aerosol form, not from drinking water (in which it may be diluted and delivered to the gut of the animal) or a solid surface as a fomite. In fact, some studies to examine whether H5N1 was infectious from soil contamination has failed to demonstrate such transmissibility [https://pmc.ncbi.nlm.nih.gov/articles/PMC3437732/; https://wwwnc.cdc.gov/eid/article/18/9/12-0402 article].

[17] "For instance, approximately half of the more than 900 reported cases of human H5N1 infection worldwide since 1997 have resulted in death." This estimate provided by the HPIA is based on historical data usually from Asia. Of the 964 human cases of H5N1 influenza since 2003, six countries (Cambodia, China, Egypt, Indonesia, Thailand, and Vietnam) account for 842 reports (87%) and 446/466 deaths (92%). Of the 11 deaths since 2020, 6 of these were in Cambodia. Since 2003, there have been only 5 reported human H5N1 cases and 1 death (prior

to 2015) in Canada. The low incidence of H5N1 influences cases in human from any animal source for more than 20 years indicates how rare serious illness arises from this virus, especially in North America and Europe. Only 2 people with comorbidities out of about 70 that acquired H5N1died in the last four years in the US and Canada. Consequently, Justice Zinn dramatically overstated the lethality rate of H5N1 in humans based on the information provided by the HPIA.

[19] "Depending on the sequence of amino acids at the cleavage site, the virus may either spread systematically throughout the host's body and damage multiple organs, or stay limited to the lungs, kidneys, or gastrointestinal tract and cause less serious consequences." This statement is incorrect. The cleavage site is relevant to the ability of the virus to infect a cell, not for it spreading throughout different parts of the body.

[20] "To analyze the cleavage site, the part of the hemagglutinin gene containing the cleavage site is amplified and then sequenced to see whether it has the amino acid pattern linked to high or low pathogenicity avian influenza [LPAI]." This statement is false. Justice Zinn has misinterpreted the information provided by the CFIA. The PCR test allows amplification of a segment of gene, but it does not provide sequence information about the intervening part between the two primer sequences used for the amplification process. Furthermore, high pathogenicity is not only linked to the structures of the H5 or N1 genes and their protein products. The other 8 genes are also important for pathogenicity.

[25] "The Applicant has developed what it considers a uniquely large strain of ostriches through selective breeding since the 1990s." "Large" would not be the appropriate terminology here. I think the judge may have meant "largely unique."

[42] "By mid-January 2025, the spread of illness had reportedly plateaued, although some ostriches remained ill or continued to die." By January 16<sup>th</sup>, 2025, there were no more deaths of UOF ostriches from H5N1. When an infectious illness plateaus, this means the rate of recovery exceeds the rate of new infections. Consequently, by mid-January, the rate of deaths was effectively zero and had plateaued weeks for this.

[47] "The amended Order reaffirmed that ostriches fall under the classification of "poultry" for HPAI control purposes and reiterated that all listed animals and items remained subject to destruction." The CFAI guidelines stipulation that animals used for diagnostic and therapeutic purposes fall outside of the classification as "poultry" so the CFAI ignored their own guidelines. This point was raised in the court hearing, but Justice Zinn chose to ignore this fact, which calls in question the validity of the cull order.

[53] "The attached Response Letter explained that ostriches are "poultry" under its existing policy and the WOAH definitions, that selective disposal of birds would conflict with Canada's Stamping-Out obligations, and that the evidence did not satisfy the distinct epidemiological unit exemption threshold and the criteria for the "rare and valuable genetics" exemption." As stated above for para. 47, ostriches used for medical purposes may lie outside of the definition of "poultry."

[78] "Where a policy decision ordering blanket disposal of affected animals and things is made in good faith, reviewing courts should confine their reasonableness analysis to whether the destruction advances the objectives of the Act and whether there is some evidence to support the underlying suspicion." It would appear that the case is being constructed by Justice Zinn that the application of the stamping out policy has reasonably prevented the spread of HPAI amongst domestic poultry, even though it has resulted in the destruction of 14.5 million domestic fowl in Canada in the last few years. This is the purpose of the Act. However, it is difficult to actually ascertain the net benefit of the stamping out policy, especially as the H5N1 influenza infection is rampant in wild birds and other animals. How many commercial birds would have actually died had nature taken its course and natural immunity developed within these domestic poultry operations? We don't really know the answer to this question. We have no evidence to support the notion that the stamping out policy has really been effective, since influenza outbreaks in domestic poultry operations have continued to occur at a similar annual rate. Some commercial operations have had to cull their flocks four times.

[79] Justice Zinn concluded that it is not the role of the judiciary to review government policy, but this is the job of "decision-makers tasked by Parliament with those responsibilities." Consequently, he feels that he cannot rule on the merit of the stamping out policy and its effectiveness.

[82] Justice Zinn noted "Subsection 48(2) offers an alternative to destruction, allowing treatment instead, but only where the Minister is satisfied that treatment will "eliminate or prevent the spread" of the disease or toxic substance." It would seem that the issue is whether the infected population of birds or animals has the potential to be effectively treated to thus prevent the further spread of disease infection. Ultimately, through natural immunity, specific treatment was not even required to allow eradication of influenza within the UOF ostriches. Thus, it would appear the Minister has the discretion to cancel the cull order issued by the CFIA.

[85] Compensation for destruction of an animal with the CFIA policy does not require a fair market value as implied by Justice Zinn in this paragraph. According the CFAI website [https://inspection.canada.ca/en/animal-health/terrestrial-animals/diseases/compensation]:

"The Compensation for Destroyed Animals and Things Regulations (CDATR) are the regulations that set the parameters and eligibility for compensation that may be provided to owners (such as a producer or farmer) who have been ordered to destroy their animals or things. The objective of the CDATR is to encourage the early reporting of animal disease, and the cooperation of owners in eradication efforts. It is not meant to provide the full replacement value of an animal or thing ordered destroyed, nor replace existing insurance schemes.

The CFIA bases compensation amounts for animals ordered destroyed on their market value at the time of the order for destruction, up to a maximum amount as stipulated in the CDATR."

[90] "As the case law recognizes, the adoption and application of general policies are both permissible and desirable, provided such policies are not applied blindly and the decision-maker remains attentive to specific circumstances: Carpenter Fishing at para 29." The question is whether the special situation with the UOF ostriches is appropriate with general blanket policies developed for commercial chicken, duck and geese operations where the animals are bred for human consumption.

[94] "The 2022 ERP sets out a flexible set of guidelines informed by past decisions, and is intended to: 1) cover situations not addressed by an existing policy; 2) allow deviation from or modification of an existing policy; 3) clarify existing policy; or 4) provide a range of adaptable policy options in varying decision-making contexts." Justice Zinn appears to acknowledge that the CFIA has the flexibility to deviate from their existing policy should they decide to based on new data.

[99 and 100] "If the Policy is not adopted or observed, this extended trade restriction period can devastate not just individual farming operations but potentially a significant portion of Canada's agricultural export sector." Justice Zinn does not make a distinction between "countries" and "zones" with respect to disease-free status requirements for international trade. The UOF is in an isolated zone where the outbreak of influenza does not affect the ability of other zone in BC and Canada to trade internationally in products from commercial live-stock operations.

[104] "First, depopulation requires humanely destroying all birds in the identified epidemiological unit using CFIA-approved methods." Justice Zinn does not acknowledge that "humane" destruction of ostriches would be very difficult to achieve.

[104] "Third, premises must undergo primary cleaning and disinfection or, where infeasible, an extended 120-day fallow period at temperatures below 4°C for natural viral inactivation." It is peculiar and inconsistent that the CFIA has argued that low temperatures may permit survival of influenza virus, whereas low temperatures are actually required to destroy the virus in premises where cleaning and disinfecting is not feasible in this policy. Justice Zinn did not pick up this inconsistency.

[124] "I do not need to rule on the admissibility or weight of the challenged portions of the parties' expert reports, as the issues in this judicial review do not require weighing the scientific or technical insights they offer to properly conduct the reasonableness analysis." Justice Zinn essentially contends that he does not need to consider the science underlying the stamping out policy as he does not require it in order to provide a ruling. However, it is hard to accept this argument if the stamping out policy itself is unreasonable and poorly supported by the prevailing science.

[137] "In short, the parties' expert reports, however scientifically accurate, provide opinions on scientific truth, the weighing of which lies with the specialized administrative bodies, which are better positioned to assess the comparative prudence, efficacy, or proportionality of animal disease-control measures of general applicability. These are questions of policy merit and have no role in the reasonableness analysis of administrative decisions. For that reason, I decline to rule on the admissibility of the expert reports and afford them no weight in my reasons."

Ultimately, the judge completely ignored the validity of the science underlying the stamping out policy and its specific applicability to the special circumstances related to the UOF.

[142] "I am of the view that the Applicant's evidentiary challenge here must fail, if not for the fact that it did not observe case management procedures, than for the fact that, contrary to what the Applicant's counsel claims, Dr. Furness' affidavit does not obviously contain the type of statement that veers into expert evidence on virology and immunology." On the one hand, Justice Zinn has argued that he can ignore, and perhaps did not really read in depth the expert reports submitted by the Applicant, even though these provided a basic understanding of immunology and virology. On the other hand, Justice Zinn states that he did not recognize any statements from Dr. Furness that veers into expert evidence on these subjects, even though he repeats some of these very statements earlier in his decision.

[158] "The jurisprudence has made clear that the Act does not demand instantaneous or perfect eradication of specific pathogens. Rather, Parliament expects regulatory measures that can significantly mitigate disease spread, limit viral amplification, and reduce mutation and cross-species transmission risks. It is through this lens of mitigation and risk reduction, not absolute eradication, that this Court must assess the Applicant's challenges regarding the Policy's

consistency with the Act's purpose and, by extension, its reasonableness." Thus, it is considered by Justice Zinn that it is reasonable to expect that the stamping out policy applied to contained domestic birds has significant impact on the spread of influenza, when millions of infected wild birds that migrate across countries with no controls on their spread of the virus in these populations. Complete eradication of H5N1 is clearly recognized as unachievable. If the objective of the CFIA is to prevent the spread of H5N1 in commercial flocks in order to reduce morbidity and mortality, the question is whether the wholesale slaughter of healthy birds cause less deaths than if the virus runs its course. There is no clear answer to this question, because the CFAI has never explored this option (i.e., lettings an infection burnout in a unit).

[161] "According to the Applicant, this approach disregards emerging scientific research regarding subclinical or silent infection in ratites, the polyphyletic group that includes ostriches, and neglects the CFIA's own data showing brief viral shedding periods among these birds." The CFIA did not have any data from studies of their own with respect to ostriches infected with H5N1 and shedding. The CFIA forbid the UOF to determine if their ostriches actually shed the virus after the culling order.

[162] Justice Zinn states that it is not within his role to determine "whether the CFIA's chosen balance of virology, trade protection, public-health precaution and animal-health logistics is the best or the most up-to-date, or whether the Applicant's proposed policy changes are the better or more up to-date ones." However, if these policies are in fact deficient and based on controversial statements of science, then can they be viewed as reasonable?

[165] "The record, particularly as developed during cross-examination of CFIA officials by the Applicant's counsel, clearly demonstrates that the CFIA has continually refined and updated the Stamping-Out Policy since

its initial formulation." While Justice Zinn suggested that there has been refinement and updating of the Stamp-out Policy, in fact it has not changed significantly since 2013, which predates the H5N1 HPAI. He does not provide any examples, nor did the CFIA witnesses in their cross-examinations. Moreover, these policies were developed for chickens, ducks and geese, which were primarily for human consumption, short-lived and cheap to replace. They did not consider ostriches, which are completely different in their physiology, economics and opportunities.

[175] "The Applicant's counsel assumes that CFIA's Stamping-Out Policy is operationalized by adopting relevant portions of the Terrestrial Code, leading to their conclusion that the Code's definitional distinctions between (a) "highly pathogenic" and "emerging" influenza and (b) "poultry" and "non-poultry" are what guide the CFIA in its implementation of the Stamping-Out Policy." Justice Zinn pointed out that the Stamp-out policy was developed by the CFIA with guidance by the WOAH Terrestrial Code, but it was not bound to it. This is interesting, because

adherence to WOAH Terrestrial Code is one of the reasons why the Stamping-out Policy was implemented in the first place, to allow it achieve disease-free status in 28 days rather than a year. Incidentally, not that long ago, disease-free status after imposition of stamping-out took 90 days in accordance with WOAH recommendations. So with the emergence of the more deadly H5N1 clade 2.3.4.4b variant, the period required for disease-free status after stamping-out was actually shortened by two-thirds.

[178] "Accordingly, even if the ostriches were "non-poultry" or the virus could be characterized as an "emerging disease" pursuant to the Terrestrial Code, a confirmation of H5-positive RRT-PCR result would still unambiguously guide the CFIA to initiate the same response." Justice Zinn noted in the CFIA's 2022 ERP, the detection of an H5-positive result justifies the immediate culling of an infected bird and all other birds in the same flock. However, in view of the high rate of false-positives with the PCR test and the existence of many other much less pathogenic H5 variants with and without the N1-specific neuramidase, this alone leads one to question the wisdom of this approach.

[181] "The Respondent submits that, at the initial notice stage of this multi-step administrative process, the duty of procedural fairness is minimal, if it exists at all. In its view, the Notice to Dispose constitutes a mechanical implementation of a standing emergency policy, involving little to no discretionary judgment and therefore attracting a very low fairness threshold. On the Transparency Policy, the Respondent argues it is aspirational and non-binding. Even so, it maintains that real-time disclosure of evolving emergency-response data and documents during an active investigation is neither practical nor required." This explains why the CFIA did not feel compelled to provide any indication that it has performed full sequencing of the genome of the influenza virus that was recovered from the two dead UOF ostriches, and concealed this information from the OUF and its legal representatives for over two months.

[183] "The Stamping-Out Policy contemplates an immediate follow-up opportunity to apply for an exemption, which the CFIA promptly extended to the Applicant. The existence of this subsequent participatory opportunity within the broader process supports the conclusion that a lower level of fairness is owed at this initial stage." The problem here is that the eligibility for exemption has a very high barrier that is exclusively limited to unique and rare genetics of the birds, and completely ignores the cost of replacement of the flock to its levels prior to culling, the actual commercial purpose of the flock (in this case for research purposes and development of health-related produced, including diagnosis and treatment of many different diseases, including infectious diseases like COVID-19), and the threat to spreading HPAI to birds, humans and other animals.

[186] "Weighing these factors cumulatively, I determine that the overall procedural fairness owed to the Applicant is minimal." Justice Zinn acknowledged that with the CFIA policy and mandate, they are not required to provide a high level of procedural fairness. However, shouldn't the judge have questioned whether this practice by the CFIA is just and fair in the first place under the circumstance where H5N1 is essentially endemic in the wild environment and does not represent an emergency, but rather an ongoing problem for several years?

[191] "Yet, a reading of the 2022 ERP shows that the "case response trigger" stage functions in a mechanical manner: once an accredited laboratory confirms a positive H5 RRT-PCR result on a premises that is not the provincial index case, the issuance of a Notice to Dispose proceeds almost automatically." Justice Zinn noted that WOAH policies were irrelevant, because the 2022 ERP is the operative guide. This is even though the 2022 ERP is formulated with the guidance of the WOAH policies with respect to stamping-out. Thus, a rather loose criterion of H5-positive with a highly inaccurate test, not suggested by the WOAH, but adopted by the CFAI and with serious issues, is automatically enforced with no other considerations. Note that the WOAH Terrestrial Guideless are silent with respect to using a PCR test for confirmation of HPAI.

[203] "Sound commonsense reasoning must be sufficiently supported by the evidence and appropriately responsive to the context in which the decision is made. It cannot rest on pure speculation or assumption, especially in decision-making contexts that are not at all common in an ordinary person's lived experience." However, Justice Zinn chose to ignore expert opinions submitted by the Applicants that actually provided evidence in support of sound commonsense reasoning.

[204] "It presupposes that the "wait-and-see" strategies proposed by the Applicant are inherently the more rational or common choices when facing a rapidly spreading disease with unknown attributes that was actively killing the Applicant's ostriches." So the judge advocates under these circumstances, all of the ostriches should be killed by the CFIA. This does not make sense considering the isolation of the ostriches from other commercial fowl operations and the wide-spread dissemination already in the wild bird flocks.

[204] "I am not convinced that reasonable individuals without specialized training in virology, epidemiology, or public health would instinctively view a "wait-and-see" approach as the commonsense response to such a pathogen." However, this is exactly what the experts provided by the Applicant advocated, and a lot of other non-experts that are against the culling of the UOF ostrich herd are calling for.

[239] "Their decision was driven by two key factors: the Applicant's poor biosecurity conditions and practices, and the lack of sufficient documentation to support the Applicant's claims regarding the genetic rarity and value of its ostriches." The CFIA and Justice Zinn note the poor biosecurity conditions and practices on the UOF site. However, they do not appear to acknowledge that the raising and maintenance of a healthy ostrich herd requires large open spaces. This simply would not be compatible with the biosecurity requirements that would satisfy the CFIA, which would otherwise create inhumane living conditions for a large animal like an ostrich. Adoption of the biosecurity practices advocated by the CFIA would lead to the demise of the entire ostrich industry in Canada.

[242] "With the above observations, I am satisfied that the CFIA's decision to deny the exemption was not unreasonable simply because it was rendered without examining the contents of Dr. French's rapid literature review." Justice Zinn argued that Dr. French's report ultimately supported the original decision to cull the UOF ostrich herd, and he does not recognize a procedural issue. Apart from the fact that Dr. French's report had serious issues in several of the statements and conclusions of her report, the fact remains that a final decision to kill the ostriches should have considered the results of her report. It was very possible that her report may have challenged the actions that the CFIA had undertaken with the issuing of the cull order. One would not know at the time the cull order was given. The question arises then why was Dr. French's report requested in the first place? There remains the possibility that it was produced as an afterthought to justify the cull order and consequently may have been produced with a clear bias, especially from a person that was conflicted as an employee of the CFIA.

[250] "The Committee first assessed whether any subgroup of the Applicant's flock qualified as a distinct epidemiological unit. Based on substantial evidence of inadequate biosecurity at the Applicant's facility, it reasonably concluded that none did. Since demonstrating distinct epidemiological status is a threshold requirement for all exemption categories, that finding alone was sufficient to justify denying the application." Justice Zinn suggested that the UOF facility did not have adequate biosecurity to enable it to even be considered for an exemption. With this standard, it could be argued, I suppose, that any farm facility that allows their animals to roam in open spaces has inadequate biosecurity and thus would be culled if there was any evidence of H5N1 influenza virus infection in the flock or herd. This has huge implications for farms in general.