DEPARTMENT OF CONSERVATION

OFFICIAL INFORMATION ACT REQUEST:

ENDANGERED SPECIES VACCINATION IN RESPONSE TO HPAI H5N1

J R BRUNING. AUGUST 18, 2026. REQUEST NO. OIAD-9589

Background and Reason for the Request

This request concerns an active vaccination programme involving critically endangered native species. As further booster doses may occur while this request is being considered, please provide information already held by the Department of Conservation (DOC) without awaiting further vaccination, monitoring or programme outcomes. This is particularly important for information supporting decisions that precede further intervention.

In July 2026, DOC announced that approximately 300 core breeding birds from five threatened native species would be vaccinated against avian influenza, following its 2024–2025 vaccine trial. In announcing the programme, DOC stated:

> *"Last year DOC completed a world-first research trial on five native bird species that showed vaccination is safe and effective in these birds and will help protect them from bird flu."*

However, the 2024-2025 trial used a completely different product than will be used in 2026.

The Ministry of Primary Industries *One Health approach for HPAI H5N1(August 2025)* expressly states that vaccination of threatened native birds may be undertaken "based on the vaccination trial conducted during 2024". The trial therefore directly informs the subsequent vaccination programme, making it important to establish precisely what the trial demonstrated concerning safety, immune response and expected protection against H5N1.

Neither the One Health document nor a related Cabinet paper *One Health Response Approach to Highly Pathogenic Avian Influenza (2024-10-17),* identifies the criteria or threshold for moving into a vaccination programme. A specific decision pathway could not be identified. DOC subsequently described the detection of H5N1 in migratory seabirds in Australia as a 'trigger to start vaccinating some of our most critically endangered birds as a safeguard' (July 2, 2026).

The detection of H5N1 in migratory seabirds in Australia may reasonably have heightened concern, but on its own it does not provide a rigorous basis for deciding to vaccinate threatened native birds. Such a decision requires consideration of the species-specific likelihood and consequences of infection, including expected morbidity and mortality, population-level risk, and the known and uncertain risks of vaccination, capture, handling and repeated boosting. Without those considerations, the trigger does not amount to a transparent risk-benefit assessment.

Pathogenicity describes the *capacity* of the virus to cause disease, while the severity and mortality produced by infection can differ substantially between species.

Therefore, even if H5N1 reaches New Zealand, its classification as highly pathogenic does not mean that it will necessarily cause high death rates in these threatened species. The HPAI classification does not predict how severely every species will be affected. Different bird species can respond very differently to the same virus. The relevant question is therefore how great the risk of serious disease and death actually is for each of the threatened species proposed for vaccination.

The risk problem therefore does not only concern the risk of death from avian influenza, including the extent to which assumptions about mortality rely upon a classification principally derived from pathogenicity in domestic chickens. There is also significant uncertainty about the risks of the vaccination programme itself.

The public is yet to see the actual numbers from the 2024–2025 trial showing that, more than a year later, the fate and outcome of all birds are accounted for, allowing the longer-term safety of the intervention to be assessed. Vaccination involves capture, handling and injection, potentially followed by repeated boosters, while free-living birds may be difficult to recapture and monitor over time. These risks and uncertainties must be weighed against the species-specific risk posed by the virus. To vaccinate threatened populations simply because a virus is classified as 'highly pathogenic', without first establishing the likely risk of serious disease, mortality or population decline in those particular species, would leave one side of that risk assessment largely unquantified.

The 300 core breeding birds will be injected with a different product, Avian Influenza Vaccine H5N2 Subtype Killed Virus (ACVM Registration Number A012218). The Delegate Decision identifies MPI as the applicant/registrant, while MPI is also the regulatory authority responsible for assessing and approving the product. The approved label states that "Full efficacy and potency data is pending".

DOC has stated that vaccination would begin with kākāpō, takahē, tchūriwat'/tūturuatu/shore plover, kakī/black stilt and kākāriki karaka/orange-fronted parakeet, and that approximately 300 core breeding birds from these species would be vaccinated. These birds are held in captivity or, in the case of kākāpō and takahē, on offshore islands.

https://www.doc.govt.nz/news/media-releases/2026-media-releases/doc-to-vaccinate-at-risk-birds-against-bird-flu

This represents a substantial progression from a small experimental trial to vaccination of important breeding populations of threatened species. The designation "high pathogenicity avian influenza" should not be conflated with a prediction of high mortality in every bird species. HPAI is a classification of the virus based on defined pathogenicity characteristics, historically centred on its effects in poultry; it does not establish the mortality rate that H5N1 clade 2.3.4.4b will cause in each of these threatened native species. Susceptibility, severity of disease and mortality can differ substantially between bird species. The relevant conservation question is therefore the species-specific risk of serious disease, death, population decline or extinction, rather than the HPAI designation alone.

An intervention in endangered core breeding animals requires that the science is right.

It is therefore important that the underlying evidence supporting DOC's conclusions concerning both safety and efficacy can be independently understood and evaluated.

The initial small experimental trial was undertaken using a completely different product from the proposed 2026 injection programme. In both cases, MPI was the registrant that also assessed the decision.

- DOC experimental trial: A009733, Poulvac Flufend i AI H5N3 RG.
- 2026 vaccination programme: A012218, Avian Influenza Vaccine H5N2 Subtype Killed Virus
- In both cases the Adjuvant was comprised of: White Oil; Arlacel-83, Tween-80
- In both cases: ADVERSE EFFECTS Vaccinate only healthy chickens (A012218: and ducks) and avoid stressing the birds at the time of vaccination.

Provision of the information requested

I am aware that information concerning this trial has previously been published across DOC webpages, reports, media releases and responses to Official Information Act requests. However, I have been unable to identify any single publicly available document or dataset that provides the complete information requested below, including the actual number of birds of each species vaccinated, the number remaining alive at successive time points, the denominators underlying the reported percentages, and the individual-level trial outcomes.

Although the Animal Ethics Committee applications identify proposed numbers of animals for the respective trials, these do not establish the actual number of birds enrolled, vaccinated, surviving, recaptured and tested at each subsequent time point. Please therefore provide the actual numbers, rather than the proposed numbers contained in the ethics applications or percentages subsequently reported.

https://www.doc.govt.nz/globalassets/documents/about-doc/oia/2025/january/oiad-4751-attachment-1.pdf

The trial report did not demonstrate protective efficacy against H5N1 through viral challenge. Rather, it measured immune responses following vaccination and used antibody responses as a proxy for expected protection. DOC expressly acknowledged that challenge trials were not undertaken and that “overall efficacy will not be known until natural challenge occurs following the arrival of the virus in Aotearoa New Zealand.”

https://www.doc.govt.nz/globalassets/documents/our-work/wildlife-health/h5-avian-influenza-vaccine-trial-report.pdf

Therefore, this request seeks the underlying safety and survival data from the trial, given that the trial directly informed the subsequent vaccination programme and DOC publicly concluded that vaccination was ‘safe and effective’.

DOC's *Avian Influenza vaccine safety and efficacy trial in threatened species* (22 July 2025) tested Poulvac Flufend i AI H5N3 RG in five threatened native bird species. The trial assessed safety and immune response following vaccination.

The contemporary disease threat identified by DOC was H5N1 highly pathogenic avian influenza (HPAI). However, the trial did not expose vaccinated birds to H5N1 to determine whether vaccination prevented infection, disease or mortality.

The trial therefore principally established safety under the conditions observed and immunogenicity, including the production and persistence of antibodies. Antibody titres were used as a proxy from which protection against H5N1 was inferred.

Accordingly, where the information requested below is held by DOC, please provide the information or records themselves in response to this request. Please do not respond solely by referring me to general webpages, reports, media releases or previous OIA releases that do not contain the specific information requested.

Where DOC considers that particular information requested below is already publicly available, please identify the specific document and page, table or section containing that information. If the cited material provides only part of the information requested, please provide the remaining information held by DOC.

Where the requested information is distributed across several existing records or datasets, I am content to receive those underlying records in their existing form. I am not asking DOC to create a new research report or analysis.

ELEVATED ANTIBODY RESPONSES AS PROXIES FOR EFFICACY

DOC identified H5N1 clade 2.3.4.4b as the contemporary disease threat, but the 2024–2025 trial used the older H5N3 Poulvac Flufend i AI H5N3 RG vaccine (A009733). The trial did not expose vaccinated birds to H5N1 to determine whether vaccination prevented infection, disease or mortality.

The trial therefore assessed safety under the conditions observed and immunogenicity, including the production and persistence of antibodies. Antibody responses were then used as a proxy for expected protection. This distinction is important. Sequence similarity, antibody production, antibody cross-reactivity and demonstrated protective efficacy are related, but they are not interchangeable.

An antibody response following vaccination does not, by itself, demonstrate that vaccination will prevent infection, disease, viral shedding or mortality following exposure to H5N1 clade 2.3.4.4b. This is particularly relevant because the Animal Ethics Committee documentation records advice from Zoetis that Poulvac Flufend should provide protection against the circulating HPAI strain based on 91% amino-acid homology, while also recording that a newer vaccine based on the circulating strain was then in development. (Page 4)

https://www.doc.govt.nz/globalassets/documents/about-doc/oia/2025/january/oiad-4751-attachment-1.pdf

The principal ELISA results for all five species are reported as the percentage of birds showing “elevated antibodies” at different time points. However, whether an antibody response exceeds a specified threshold and the magnitude of that response are not the same information. Reporting only that an individual bird crossed a threshold does not show how strong its response was, how

that response changed over time, or whether the antibody level observed has been demonstrated to correspond to protection against H5N1.

An elevated antibody response, a strong antibody response and an antibody response demonstrated to confer clinical protection are not equivalent findings. This is particularly important where antibody results are being used as a proxy for protection.

A separate haemagglutination inhibition (HI) test was used as a further step in the inference of H5N1 protection. Serum from takahē was tested against both the H5N3 vaccine type and an H5N1 "panzootic type". This tested whether antibodies produced following H5N3 vaccination could also recognise the H5N1 antigen. DOC interpreted the resulting titres using thresholds derived from chickens: 1:16 as indicating expected protection against mortality and 1:32 against morbidity.

The H5N1 HI testing therefore appears to provide an important evidential bridge between demonstrating an immune response to the H5N3 vaccine and inferring protection against H5N1. However, it remained a proxy for protection: the birds were not challenged with H5N1, and the protective thresholds applied were derived from chickens rather than validated in takahē.

H5N1-specific HI testing was undertaken only in the takahē cohort, while the other four threatened species were principally assessed using ELISA antibody responses. The report does not disclose how many takahē were actually tested at each HI sampling point, or whether the percentages reported at 2, 6 and 12 months were based on the same number of birds.

It is therefore not possible from the published report to independently evaluate the underlying results of what appears to be an important component of the evidence used to infer H5N1 protection.

It is highly relevant that these limitations are signalled, because DOC subsequently publicly described the trial as demonstrating that vaccination was "safe and effective" and stated that the vaccine would protect all five species from H5N1.

Accordingly, this request seeks the underlying individual-level antibody, survival and safety data, together with the evidence upon which DOC moved from observed immune responses to its public conclusion of protection against H5N1.

PART A. 2024-2025 VACCINATION PROGRAMME

Actual numbers of birds and survival over time

Please therefore provide the actual numbers of birds by species and survival over time, rather than the proposed numbers contained in the ethics applications or percentages subsequently reported. Long term data is central to assessing the efficacy and safety of such small, endangered populations.

This is to understand the demonstrated or reasonably estimated species-specific risk of severe disease, mortality and population-level harm from H5N1 clade 2.3.4.4b in each of these five threatened species, and how that risk might compare with the known and uncertain risks of the proposed repeated vaccination intervention.

I am requesting the existing underlying records and data, rather than newly calculated percentages. Where a dataset or spreadsheet already contains this information, provision of that dataset in its existing electronic format would satisfy the relevant parts of this request.

Absolute numbers are necessary to independently interpret the safety and immunogenicity findings. A percentage of surviving or sampled birds cannot establish the safety experience of the original cohort unless the number initially vaccinated, subsequent deaths, missed vaccinations, failures of recapture and number actually tested at each time point are also known.

This information is particularly important where experimental evidence obtained from very small cohorts of threatened species has subsequently been relied upon to support a substantially larger vaccination programme involving approximately 300 threatened native birds.

1. **For each species separately, please therefore provide:**

   1.1. number enrolled in the trial;

   1.2. number receiving the first vaccination;

   1.3. number alive 2 weeks after the first vaccination;

   1.4. number alive immediately before the second vaccination;

   1.5. number receiving the second vaccination;

   1.6. number alive 2 weeks after the second vaccination;

   1.7. number alive 3 months after the second vaccination;

   1.8. number alive 6 months after the second vaccination; and

   1.9. number alive 12 months after initial vaccination, where recorded.

   For every time point at which antibody results have been reported as a percentage, please also provide the numerator and denominator from which that percentage was calculated.

2. **Deaths, adverse events and loss to follow-up**

   2.1. For every trial bird that died, was withdrawn, could not be recaptured, missed a vaccination or was otherwise lost to follow-up, please provide:

   2.2. species and de-identified individual study identifier;

   2.3. date and dose of each vaccination received;

   2.4. date and nature of the adverse event, death, withdrawal or loss to follow-up;

   2.5. recorded cause of death, including necropsy findings where available;

   2.6. the investigators' assessment of whether vaccination, capture, handling, restraint, blood collection or other trial procedures caused or contributed to the event; and

   2.7. the basis upon which any causal relationship with vaccination or trial procedures was accepted or excluded.

3. **Antibody data**

In addition, the July 2025 report generally presents antibody results as percentages rather than reporting the underlying numbers of birds tested at each time point. Because birds died during the trial, some could not be recaptured, and not every bird received both vaccine doses or necessarily contributed a sample at every time point, percentages alone do not allow the reader to establish the denominator, attrition or survival of each experimental cohort.

These same issues arise in any subsequent vaccination programme, making the complete cohort outcomes for each species important for assessing the safety and success of the trial.

Please provide:

3.1. The individual quantitative ELISA results for every bird at every sampling point, rather than solely whether each result was classified as elevated or positive.

3.2. The manufacturer, test kit and methodology used for the ELISA testing, together with the threshold or cut-off used to classify an antibody result as "elevated" or positive.

3.3. Any records held by DOC identifying the scientific basis for the ELISA threshold used and its relationship, if any, to expected protection against H5N1.

4. **The haemagglutination inhibition (HI) test - takahē**

4.1. The report does not state how many individual takahē comprised the H5N1 HI testing cohort at each sampling point. Instead, the results are reported only as percentages exceeding specified HI titre thresholds.

4.2. Please provide the individual HI test results for each takahē at each sampling point, including the actual HI titre recorded for each bird and the number of takahē tested at each time point. Please include results against both the vaccine antigen and H5N1 antigen, rather than percentages exceeding specified titre thresholds.

4.3. Any scientific evidence relied upon to determine that HI thresholds derived from chickens could appropriately predict protection in takahē, and any evidence supporting extrapolation of those findings to the other four threatened species in which H5N1-specific HI testing was not undertaken.

5. **Criteria/threshold for vaccinating approximately 300 core breeding birds**

The **One Health document** does not state what level of species-specific risk of disease, mortality, population decline or extinction would justify proceeding to vaccination. The One Health approach for HPAI H5N1 appears to involve three steps in moving towards vaccination: HPAI H5N1 must present a sufficient disease threat; a threatened population must be considered sufficiently at risk to warrant additional protection; and vaccination must be considered a feasible intervention, informed by the 2024-2025 vaccination trial.

However, the document does not identify the criteria or threshold for moving between these steps, or provide a species-specific risk-benefit assessment showing why the Australian detections were sufficient to trigger vaccination

Such a document would reasonably be existed to exist on the public record.

For the period *1 January 2025 to 18 August 2026,* please provide the existing records which identify the criteria, thresholds or risk-benefit considerations relied upon by DOC in deciding that the risk from HPAI H5N1 was sufficient to commence vaccination of the identified threatened species.

This includes existing records addressing, where considered:

5.1. Species-specific susceptibility to H5N1;

5.2. Expected morbidity or mortality following infection;

5.3. Expected population-level consequences, including risk of population decline or extinction;

5.4. The risks and uncertainties associated with vaccination, capture, handling and subsequent booster vaccination;

5.5. The significance attributed to the detection of H5N1 in migratory seabirds in Australia; and

5.6. The criteria used to determine which species and populations should be prioritised for vaccination.

I am seeking existing records documenting these considerations. I am not asking DOC to undertake a new risk assessment or research these questions for the purpose of responding to this request.

6. Cost, funding and decision to proceed

For the period *1 January 2025 to 18 August 2026,* please provide the principal existing records documenting the decision to proceed with the 2026 vaccination programme involving approximately 300 core breeding birds, its proposed scale, and its funding.

The search may be confined to records held by the DOC staff directly responsible for the HPAI threatened-species vaccination programme, relevant science or veterinary staff involved in advising on the programme, and the senior manager or managers responsible for approving the programme, together with substantive records exchanged with MPI concerning these decisions.

I do not require routine administrative correspondence, meeting-arrangement emails, duplicates, or correspondence which does not materially address the scientific justification, decision to proceed, programme scale or funding.

Such information would reasonably be existed to exist on the public record.

Please provide:

6.1. The appropriation and programme from which the 2026 vaccination programme is funded, the total approved or estimated programme cost, and whether expenditure is being met from DOC's existing baseline or additional H5/H5N1 response funding. Please separately identify any programme costs met by MPI, including the cost of vaccine supplied by MPI.

6.2. The principal briefing, proposal, recommendation, decision paper or other record which sought or authorised the decision to proceed with vaccination of approximately 300 core breeding birds, including the scientific and conservation justification provided for that decision.

6.3. The principal record approving or authorising funding for the programme, identifying the amount approved, the source of funding, who authorised the expenditure, and any material conditions attached to that funding.

6.4. The principal records documenting when the proposed scale of approximately 300 core breeding birds was determined and, where the programme was divided into tranches or stages, the basis for deciding when vaccination should commence or be extended to subsequent tranches.

6.5. The principal records identifying the criteria or risk-benefit considerations used to determine where vaccination would "provide the greatest protection", including the respective roles of DOC and MPI and, where recorded, MPI's Chief Veterinary Officer in the decision to commence or extend the programme.

Where the information requested above is contained within a small number of existing briefings, decision papers, meeting records, emails or other documents, provision of those records in their existing form is sufficient. DOC is not being asked to reconstruct a chronology, undertake new research or prepare a new analysis.

(See: Bird flu work steps up – second case confirmed, July 17, 2026).