

SCREW-WORM FLY SURVEILLANCE AND PREPAREDNESS PROGRAM STEERING COMMITTEE ANNUAL MEETING RECORD OF MEETING – DRAFT

Wednesday 28th September 2022

In attendance:

- **AHA** – Mikhaila Nye (Chair), Emily Sears, Bronwyn Hendry, Paul Freeman
- **NAQS** – Lucy Coldwell (proxy), Cass Wittwer (virtual), Guy Weerasinghe (virtual), Tegan Fitzwater (virtual)
- **NT** – Elizabeth Stedman, Stacy Carnogoy
- **Qld** – Natalie Leo (proxy, in part), Geoff Brown (Reference Entomologist)
- **WA** – Graham Mackereth (virtual)
- **NSW** – Liz Bolin (NSW, on behalf of southern jurisdictions)
- **Industry representative** – Markus Rathsmann (Cattle Council, on behalf of affected industries)

Apologies:

- Jo Mollinger (Qld)

1. Program status and year in review

1.1 Progress on 2021 meeting actions – E Sears (AHA)

- E Sears spoke to the paper.
- Outstanding actions from the 2021 meeting include Action Item 11, 12, 13, 14, 17 (for progression/completion at today's meetings under various items). Action Item 19 is delayed.
- All other actions are complete.

Conclusion

Update on 2021 action items accepted as written.

Action/s

NIL

1.2 Program Report – E Sears (AHA)

- E Sears spoke to the paper and highlighted the objectives of the program.
- E Sears noted that the program was underspent for 2021-22 primarily due to the delay in the entomology workshop. Also noted that only four myiasis investigations for SWF were followed through to larval identification and reported into NAHIS for the 2021-22 year. The trend is currently declining.
- Discussion on the OWSWF agent-based spread model use and the currency of underpinning climate data. Discussion on scoping the cost of updating the climate data from the Bureau of Meteorology. General support from the committee to review the model, including the assumptions and climate data every 2-3 years.
- Discussion as to whether the software could operate in a cloud environment with a web-based interface and if UNE could be contracted to update the code if required.

- Discussion on whether US has done work on NWSWF that could be used, with it being noted that there is not a lot of published literature on NWSWF spread as the US tends to rely on the SIT facility. However, there may be unpublished 'grey' US literature available through professional contacts.

Conclusion/s

The committee accepted the Program Status Report as written and supported further work to scope the cost and required inputs to keep the agent-based modelling software current.

Action/s

1. AHA to review whether the OWSWF spread modelling software is fit for purpose, and to develop a plan for keeping it contemporary.
2. G Weerasinghe to check the 'grey' literature on NWSWF from the US through professional contacts and to share with AHA, if available.

2. Surveillance and risk awareness reports

2.1(a) Northern Territory Report – E Stedman (NT)

- E Stedman spoke to the paper provided.
- Committee noted that despite challenges within the NT, all trapping was completed.
- Targeted myasis inspections were greater than what has been reported.
- Discussion around horse investigation missing from NAHIS.

Conclusion/s

The SWFSPP Steering Committee noted the Northern Territory report on 2021-22 activities.

Action/s

3. AHA and NT to update NAHIS to include horse investigation.

2.1(b) Queensland Report – N Leo (on behalf of Qld coordinator)

- N Leo spoke to the paper provided.
- All trapping completed.
- Committee noted one cattle investigation is missing from NAHIS.

Conclusion/s

The SWFSPP Steering Committee noted the Queensland report on 2021-22 activities.

Action/s

4. AHA and Qld to update NAHIS to include cattle investigation.

2.1(c) WA Report – G Mackereth (WA)

- G Mackereth spoke to the paper provided.
- Noted trapping has stopped at Port Headland, however, is continuing at the other four WA locations. No longer have a 'hospital' pen at Broome Common, so less myiasis inspections.
- WA is seeking support to be able to share their *Calliphoridae* and *Chrysomya* data with the Atlas of Living Australia. WA is the only jurisdiction speciating trap catches. The committee provided in principle support, pending a review of fields to check for any potential sensitivities.

Conclusion/s

The SWFSPP Steering Committee noted the Western Australian report on 2021-22 activities.

Action/s

5. WA to provide AHA with a list of the data fields that are proposed to be uploaded into the Atlas of Living Australia for review and support by the Steering Committee.

2.1(d) NAQS Report – C Wittwer (on behalf of NAQS coordinator)

- C Wittwer spoke to the paper provided.
- NAQS has distributed awareness materials including AHA maggot collection kits that have been rebranded with NAQS logos and instructions. Jurisdictions were asked to inform NAQS when they are receiving submissions from these to ensure that positive feedback and a resupply of materials can be organised.
- There was discussion around risk of entry pathways from non-livestock vessels travelling to general export ports.

Conclusion/s

The SWFSPP Steering Committee noted the NAQS report on 2021-22 activities

Action/s

6. Jurisdictions to increase communication of samples from NAQS branded collection kits. NAQS to provide an update at the next meeting.
7. AHA and NAQS, with input from WHA, to update AHA's data systems so all the SWF data is captured and centralised.

2.2 PCR for SWF Identification – N Leo (on behalf of Qld coordinator)

- N Leo spoke to the paper provided.
- Discussion that the SWF program provide a letter of written support to help prioritise the validation of the multiplex real-time PCR, noting that it is in the national interest.

Conclusion/s

The SWFSPP Steering Committee noted the development of a multiplex real-time PCR for detection of OWSWF and NWSWF at the Biosecurity Sciences Laboratory in Queensland and ongoing work.

Action/s

8. AHA to draft a letter on behalf of the SC to the manager of BSL Louise Jackson on the value of this project, with the aim of having the validation of the PCR prioritised.

2.3 Any proposed changes to the monitoring plan for the year ahead – All

- The committee agreed that the monitoring plan for the year ahead would remain unchanged. Discussion that the broader review of the surveillance sensitivity and risk pathways would help to inform the monitoring plan in subsequent years.

Conclusion/s

The SWFSPP Steering Committee supported the continuation of the monitoring plan for the year ahead.

Action/s

NIL

2.4 International activities and developments – G Weerasinghe (Aus. Gov/NAQS)

- G Weerasinghe spoke to the paper provided.

Conclusion/s

The SWFSPP Steering Committee noted the update on international activities and developments.

Action/s

NIL

2.5 Industry report on priorities and recommendations for the program – M Rathsmann (CCA)

- M Rathsmann provided a verbal update.
- Discussion around the impact of SWF and cost to Australia, and if this value is contemporary.
- Raised that from an industry perspective, investment is essential, but are aware that the program operates on a small budget.
- Discussion on SWF surveillance within feral and wildlife species.
- Discussion of potential entry pathways for incursion.
- Discussion on biosecurity measures on returning vessels including fumigation practices.

Conclusion/s

The SWFSPP Steering Committee noted the verbal update provided from industry.

The committee noted the industry representative concerns on biosecurity risks associated with feral animals.

Action/s

- AHA to send a link to the AUSVETPLAN for Screw Worm Fly to M Rathsmann
- AHA to review the source of the \$500,000,000 figure about impact on industry of an incursion and share with the Committee
- AHA to undertake a review of potential entry pathways including non-livestock vessels.
- AHA to review archives around prior thinking on risk of entry and entry pathways and the establishment of an SIT facility.

3. Entomology expertise

3.1 Reference entomologist update – G Brown (Qld)

- G Brown provided a verbal update on the SWF entomology identification workshop from the previous day, which received great feedback from attendees.
- Discussion on the transport medium used for larvae samples, including the use of hand sanitiser as an alternative to ethanol. Hand sanitiser will still have the same IATA challenges with heat sealing as ethanol and will need to be sent via road transport.
- Postscript advice: AHA and G Brown have concluded that hand sanitiser and/or 80% ethanol (with heat treatment) are the most suitable methods for preserving larvae for transport, with glycerol (no heat treatment) as a second, but less desirable, option.*

Conclusion/s

The SWFSPP Steering Committee noted the update provided and the success of the recent entomology workshop.

Action/s

13. Committee to review reference specimen list in Business Plan and advise AHA of any gaps.
14. G Weerasinghe to liaise with US contacts with the aim of acquiring additional larvae and adult NWSWF samples.
15. AHA to do small print run of SWF Diagnostic identification manuals and provide to workshop attendees and relevant peak industry bodies.
16. AHA and G Brown to update the myiasis inspections and trapping work instructions in relation to transport medium.

4. SWF Risk Profile

4.1 Priorities for R&D – all

- C Wittwer spoke to the paper provided on the insectocutor trial in PNG.
- Delays noted due to logistical challenges, with the project now scheduled to commence in November 2022.
- Discussion on a source of power for the insectocutors. Approximately \$10,000 has been invested by the program in the project so far, with an estimated additional \$2,000 required for inverters and batteries. The committee supported the additional expenditure, noting the value of testing the efficacy of the insectocutors and bezzilure traps.
- G Brown noted the use of propylene glycol for insect transport as this will meet IATA requirements, but the need to rinse specimens upon arrival before identification. Also noted that samples to be frozen should be sealed in a ziplock bag with absorbent paper, and excess air removed to minimise desiccation and mould.

Conclusion/s

The SWFSPP Steering Committee noted the work and logistics undertaken to support the trial. The committee supported the additional expenditure (\$2000) for the electrical equipment needed for the project.

Action/s

17. C Wittwer to arrange next steps to support continuation of the trial.

4.2 Sensitivity of targeted myiasis inspection – P Freeman (AHA)

- P Freeman led a discussion on the paper provided.
- G Mackereth updated the committee on SWFSPP surveillance system sensitivity analysis data so far. WA has been quantifying sensitivity for surveillance for other diseases and has produced heat maps of FMD and LSD sensitivity in Kimberley region. Surveillance sensitivity analysis could be expanded to include SWF.
- The committee queried if myiasis inspections should be continued as per the current plan (noting the likely low sensitivity) given that combined with other surveillance measures under the program, the sensitivity is likely adequate.
- The committee agreed to review the surveillance measures on an annual basis.
- Brief discussion on innovative and emerging technologies such as drones and artificial intelligence for wound detection and the possible benefit these could have to the program.

- The committee discussed incursion through windborne pathways and queried if screw worm flies are likely enter Australia through this mechanism.
- Discussion on where to best target active surveillance activities, as currently active and passive activities tend to be undertaken in proximal geographic locations.
- It was suggested that active surveillance efforts focus on dehorning and castration activities, as this would be more sensitive. However, industry noted that dehorning, and castration for live export, are decreasing trends.
- Discussion about the resources required for insect trapping compared with the sensitivity of detecting a SWF in a trap.

Conclusion/s

The SWFSPP Steering Committee supported further work to evaluate the sensitivity of the program's surveillance activities.

Action/s

18. G Makereth to seek approval to further evaluate the sensitivity of the SWF surveillance system.
19. The Steering Committee to request relevant information on risk of windborne dispersion of SWF within the Ausvet report on risk of LSD incursion into Australia.

5. Program documentation

5.1 Adult fly trapping work instruction – E Sears (AHA)

- E Sears highlighted updates to the adult fly trapping work instruction arising from the prior meeting.
- The committee supported the updates to the wording around trap clearance, the inclusion of PCR sample pooling protocols within the body of the document and the updates to the storage and disposal to reflect the updates to the MSDS.
- The committee discussed the work instructions for myiasis, noting that there have been no updates made in recent years. The work instructions need to reflect current contacts, and the use of hand sanitiser to transport specimens.

Conclusion/s

The committee supported the updates to the trapping as marked with no additional updates proposed and noted the need for an update of the myiasis work instructions.

Action/s

20. AHA to finalise updates to the Fly Trapping Work Instruction and to circulate it to the Steering Committee and the participants of the entomology workshop.
21. AHA to update the Targeted Myiasis Inspection Work Instruction in relation to hand sanitiser, the inspection worksheet and kit (ethanol vs hand sanitiser) and to circulate it to the Steering Committee and the participants of the entomology workshop.

5.2 Business Plan and review of risk register – B Hendry (AHA)

- B Hendry spoke to the Business plan including the program risk register.
- Key areas of update have been to reflect the inclusion of the APVMA permit use as part of the program activities and the inclusion of the reference specimen collection details.

- Discussion on the need to reassess the technical risks and impacts of a delay in response while waiting for an SIT facility to be active. AHA will raise this with the Head of Program AUSVETPLAN.
- Agreed that the treatment for risk number 2 (inadequate preparedness) of the risk register needs to be updated to reflect current activities and the planned work to review the risk pathways and sensitivity.
- Identified that there is a lack of information in the business plan on data ownership and governance. Discussion that the data is owned by the relevant collecting and submitting agency and collected for the purpose of the program. Where there are requests to share data outside of the program these are to come to the committee for consideration of any potential sensitivities.
- The Committee reconfirmed their in-principle support to the earlier request from WA to share data to the Atlas of Living Australia, pending review of the fields that would be shared to check for any sensitivities.
- Agreed that the appendices detailing the entomology reference specimens and list of trained personnel be updated every three years in alignment with training activity.

Conclusion/s

The committee supported the updated Business Plan with the additional updates to the risk register and data governance to be included as discussed.

Action/s

22. AHA to review the program funding arrangements for entomology and diagnostics in consideration of the application of the PCR.
23. AHA to liaise with Head of Program AUSVETPLAN on risks with the delay in an SIT when mounting a response.
24. AHA to update the risk register proposed treatments to reflect current activities and work looking at the review of risk pathways.
25. AHA to add information around data ownership and requests for sharing information.

6. Awareness and communication materials

6.1 Awareness channels and opportunities – all

- The committee noted the recent updates to the brochure, poster and magnets this year. AHA has received some requests prior to the meeting and is planning to distribute these. Any additional request for materials including maggot collection kits should be sent to AHA. AHA is in the process of developing a new SWF video.
- Industry noted that Northern Australia producers typically bring their animals in May/June, and that communications should be targeted for this time.

Conclusion/s

The committee noted the updates to the communications materials.

Action/s

26. AHA to confirm required quantities of communications materials (kits, poster, brochure, magnet, manual) with jurisdictions and industry.
27. AHA to create a new SWF video and work with M Rathsmann on messaging to help to encourage reporting.
28. AHA to explore the development of other communications materials such as a glove-box

guide.

29. AHA to investigate opportunities to conduct social research on the awareness amongst veterinarians of the SWF program.

7. Other business
7.1 Location and dates of next meeting – M Nye (AHA)

- Discussion on potential date and location of the 2023 Annual Meeting.

Conclusion/s

The 2023 Annual Meeting will be held outside of the September school holidays, in Broome.

Action/s

- AHA to confirm the 2023 Annual Meeting date in Broome.

Meeting close: 3.55 PM.

SWFSPP STEERING COMMITTEE – ACTION REGISTER

28 September 2022 | Darwin

#	ACTION	WHO	BY	STATUS
1	Review whether the OWSWF spread modelling software is fit for purpose, and to develop a plan for keeping it contemporary.	AHA	September 2023	
2	Check the 'grey' literature on NWSWF from the US through professional contacts and to share with AHA, if available.	G Weerasinghe	February 2023	
3	Update NAHIS to include horse investigation.	AHA and NT	November 2022	
4	Update NAHIS to include cattle investigation.	AHA and Qld	November 2022	
5	Provide AHA with a list of the data fields that are proposed to be uploaded into the Atlas of Living Australia for review and support by the Steering Committee.	WA and AHA	November 2022	
6	Increased communication of samples from NAQS branded collection kits. NAQS to provide an update at the next meeting.	Jurisdictions and NAQS	September 2023	
7.	Update AHA's data systems so all the SWF data is captured and centralised.	AHA and NAQS, with input from WHA	June 2023	
8	Draft a letter on behalf of the SC to the manager of BSL Louise Jackson on the value of this project, with the aim of having the validation of the PCR prioritised.	AHA	December 2022	
9	Send a link to the AUSVETPLAN for Screw Worm Fly to M Rathsmann	AHA	October 2022	Complete
10	Review the source of the \$500,000,000 figure about impact on industry of an incursion and share with the Committee.	AHA	September 2023	
11	Undertake a review of potential entry pathways	AHA	September 2023	

	including non-livestock vessels.			
12	Review archives around prior thinking on risk of entry and entry pathways and the establishment of an SIT facility.	AHA	September 2023	
13	Review reference specimen list in Business Plan and advise AHA of any gaps.	Committee	December 2022	
14	Liaise with US contacts with the aim of acquiring additional larvae and adult NWSWF samples.	G Weerasinghe	February 2023	
15	Do small print run of SWF diagnostic identification manuals and provide to workshop attendees and relevant peak industry bodies.	AHA	November 2022	In progress
16	Update the myiasis inspections and trapping work instructions in relation to transport media.	AHA and G Brown	November 2022	In progress
17	Arrange next steps to support continuation of the trial.	C Wittwer	November 2022	
18	Seek approval to further evaluate the sensitivity of the SWF surveillance system.	G Makereth	December 2022	
19	Request relevant information on risk of windborne dispersion of SWF within the Ausvet report on risk of LSD incursion into Australia.	Committee	March 2023	
20	Finalise updates to the Fly Trapping Work Instruction and to circulate it to the Steering Committee and the participants of the entomology workshop.	AHA	November 2022	In progress
21	Update the Targeted Myiasis Inspection Work Instruction in relation to hand sanitiser, the inspection worksheet and kit (ethanol vs hand sanitiser) and to circulate it to the Steering Committee	AHA	November 2022	In progress

	and the participants of the entomology workshop.			
22	Review the program funding arrangements for entomology and diagnostics in consideration of the application of the PCR.	AHA	January 2023	
23	Liaise with Head of Program AUSVETPLAN on risks with the delay in an SIT when mounting a response.	AHA	December 2022	
24	Update the risk register proposed treatments to reflect current activities and work looking at the review of risk pathways.	AHA	October 2022	Complete.
25	Add information to Business Plan around data ownership and requests for sharing information.	AHA	November 2022	
26	Confirm required quantities of communications materials (kits, poster, brochure, magnet, manual) with jurisdictions and industry.	AHA	November 2022	In progress
27	Create a new SWF video and work with M Rathsmann on messaging to help to encourage reporting.	AHA	March 2023	
28	Explore the development of other communications materials such as a glove-box guide.	AHA	September 2023	
29	Investigate opportunities to conduct social research on awareness amongst veterinarians of the SWF program.	AHA	September 2023	

SWFSPP WORKSHOP – ACTION REGISTER

27 September 2022 | Darwin

#	ACTION	WHO	BY	STATUS
1	Share slide deck from the entomology workshop to participants.	AHA	November 2022	
2	Look at NWSWF specimen numbers at each lab and identify gaps.	AHA and lab staff	June 2023	
3	Check supply and availability of Lucitraps from Bugs4Bugs into the future.	AHA	December 2022	
4	Circulate resources including reference specimen list, trapping and myiasis instructions, SWF video link and spread model guide.	AHA	November 2022	
5	Print run of SWF Identification Manual to send to participants who requested a copy.	AHA	November 2022	In progress