

NAQS AGENCY COORDINATOR REPORT 2022-23 year

RECOMMENDATION

1. That the SWFSPP Steering Committee **NOTE**
 - a. The NAQS 2022/23 activity report

BACKGROUND

1. This report provides a summary of screwworm fly surveillance conducted by the Northern Australia Quarantine Strategy (NAQS) for the period July 2022 – June 2023.
2. Old World screwworm fly (SWF; *Chrysomya bezziana*) is included on the NAQS target list for animal pests and diseases. It remains an important focus for the NAQS animal health surveillance strategy due to the presence of the fly in South-East Asia and Papua New Guinea (Spradbery *et al.* 1989), identified pathways into northern Australia, and the high impact an incursion could pose on Australian livestock, native wildlife and international trade.
3. The NAQS surveillance strategy for the early detection of SWF includes the following components as previously reported:
 - a. Targeted adult fly trapping in the Northern Peninsula Area (NPA), Queensland
 - b. Monitoring of live animals for myiasis through various surveillance activities across northern Australia
 - c. Community engagement to encourage submission of maggots from live animals and humans.

DISCUSSION

4. ADULT FLY TRAPPING

5. During 2022-23 traps were planned to be set quarterly at 15 sites in NPA. Trapping events only occurred up to December 2022, yet no trapping occurred in the first half of 2023. This was due to a loss of operational capacity in the NPA region.
6. Follow up meetings and deliberations have identified solutions and trapping will recommence on a quarterly basis from September 2023 onwards.
7. For the latter half of 2022 a total of 230,969 adult flies were trapped, of which none were identified by morphology or PCR to be SWF. Maps and details are reported in **Attachment A**.

8. TARGETED MYIASIS INSPECTIONS

During 2022-23 a total of XX surveillance activities were conducted by NAQS that involved inspection of a total of 1560 animals for myiasis. No maggots were found

during any of these inspections. Details of location, month, type of activity and species examined are reported in **Attachment B**.

9. DESCRIBE AND ASSESS PASSIVE SURVEILLANCE

Passive surveillance forms a key part of NAQS' early detection strategy, whereby educating a broad range of stakeholders about the risks and signs of various exotic pests and diseases results in a strong network for reporting any unusual animal health events observed across the vast remote northern coastline. Key NAQS passive surveillance activities for screwworm fly include:

- NAQS' Biosecurity Top Watch! program
- Distribution of maggot kits to a range of stakeholders, including private vets, pastoralists, indigenous ranger groups, remote health clinics, medical centers, and regional hospitals.
- Syndromic surveillance in Indigenous communities, conducted by Indigenous ranger groups.

In 2022-23, no NAQS' maggot collection kits were submitted to NAQS. Other kits may have been used but since the process has been streamlined to send maggot submissions direct to the relevant jurisdiction labs, NAQS' has lost sight of submissions.

10. FINANCIAL IMPLICATIONS

SWF is a NAQS target pest and as such surveillance activities are funded through core NAQS program budget and considered an in-kind contribution to the SWFSPP.

11. CONSULTATION/COMMUNICATION

Nil or nothing to report for 22-23 year

12. NEXT STEPS/ACTIONS

Maggot kits being distributed by NAQS are those supplied by AHA but NAQS-branded, and direct users to submit samples to their respective government lab. We ask that if these labs receive any maggot submissions from a NAQS kit that NAQS is notified; this will allow us to feedback to the submitter and replenish kits.

As per Attachment B, wound inspection is part of NAQS BAU with animal surveillance work, yet only the sentinel herd data is recorded. There is discussion to consider the NAQS feral and domestic surveillance data into AusPestCheck, however this is not the current priority with the transition. Additionally, it should be flagged that another set of data could be incorporated, the number of companion animals that are inspected by the Torres Strait Biosecurity officers as part of the Biosecurity Permit process of moving animals into the mainland.

Attachment A: Details of NAQS adult SWF trapping 2022-23

Attachment B: Details of NAQS targeted myiasis 2022-23

FEEDBACK

Q1 My organisations needs and expectations of the SWFSPP are being met.

Strongly agree **Agree** Undecided Disagree Strongly disagree

Comments:

Q2 The outputs of the SWFSPP such as the brochure, poster and annual report in the Animal Health in Australia report are credible and robust.

Strongly agree **Agree** Undecided Disagree Strongly disagree

Comments:

Q3 The SWFSPP satisfies the surveillance data and reporting needs of my organisation (e.g. contributes to and/or supports policy development and decision making).

Strongly agree **Agree** Undecided Disagree Strongly disagree

Comments:

Q4 Animal Health Australia is managing the Screw Worm Fly Surveillance and Preparedness Program effectively/satisfactorily.

Strongly agree **Agree** Undecided Disagree Strongly disagree

Comments:

ATTACHMENT A: Details of NAQS adult SWF trapping 2022-23

Map showing location of SWF adult fly traps on Northern Peninsula Area of Cape York Peninsula.



Schedule of SWF trapping (plans) and number of trapping events conducted by NAQS, July 2022 – June 2023

Fly Trap Locations	Scheduled activity ¹			Actual activity				
	No. Traps	frequency (per year)	Total (per year)	July-Sept 2021	Oct-Dec 2021	Jan-March 2022	April-June 2022	Total
Bamaga	6	4	24	6	6	0	0	12
Injinoo	2	4	8	2	2	0	0	4
Umagico	4	4	16	4	4	0	0	8
Seisia	3	4	12	3	3	0	0	6
TOTAL	15	4	60	15	15	0	0	30
TOTAL flies collected				95,188	135,781	0	0	230,969

¹ Per Appendix C, SWFSPP Business Plan July 2019 – June 2020 Version 1.1 (May 2020)

ATTACHMENT B: Details of NAQS targeted myiasis 2021-22

Schedule of SWF targeted myiasis monitoring (plans) and number of myiasis inspections conducted on domestic animals by NAQS, July 2022 – June 2023

Monitoring location and site	Scheduled activity ²		Actual activity								
	Survey freq./y	Min. # animals inspected/survey	July-Sept 2021		Oct-Dec 2021		Jan-March 2022		April-June 2022		Total # animals
			# of surveys	# of animals	# of surveys	# of animals	# of surveys	# of animals	# of surveys	# of animals	
Torres Strait Islands	1	10-50 various domestic animals	0	0	0	0	1	28	0	0	28
Tennant Creek	1	Adhoc activity – 30 animals	0	0	0	0	1	31	0	0	31
Garrihiya sentinel herd (eastern Arnhem Land, NT)	12	10-15 cattle	3	30	3	30	2	20	3	30	110
Gunbalanya sentinel herd	12	10-15 cattle	3	58	3	37	2	20	2	19	134
Bertiehaugh sentinel herd (Weipa, Qld)	12	10-15 cattle Ceased operations Aug 2022	2	16	0	0	0	0	0	0	16
York Downs sentinel herd (Weipa, Qld)	12	10-15 cattle	4	54	3	49	3	38	3	37	178
Kalumburu sentinel herd (north-west Kimberley, WA)	1	20-30 cattle	0	0	1	52	0	0	0	0	52

² Per Appendix D, SWFSPP Business Plan July 2019 – June 2020 Version 1.1 (May 2020)

TOTALS	51		12	158	10	168	9	137	8	86	549
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Schedule of myiasis inspections conducted on feral animals by NAQS, July 2022 – June 2023

Activity	Jurisdiction	Location	Month	Species	Number examined
Feral animal survey	NT	Northern Arnhem Land	Jul-22	Feral pigs	97
Domestic animal disease investigation	QLD	NPA	Jul-22	Domestic pigs	2
Feral animal survey	NT	Northern Arnhem Land	Jul-22	Feral bovids	11
Feral animal general surveillance	QLD	Cairns	Aug-22	Feral pigs	1
Feral animal survey	QLD	Weipa	Sept-22	Feral pigs	70
Feral animal survey	QLD	Princess Charlotte Bay, Lakefield	Oct-22	Feral pigs	70
Feral animal survey	WA	Fitzroy Crossing	Oct-22	Feral pigs	66
Feral animal survey	NT	Eastern Arnhem Land	Nov-22	Feral pigs	41
Feral animal survey	NT	Eastern Arnhem Land	Nov-22	Feral bovids	5
Feral animal survey	QLD	Gulf of Carpentaria and Rutland Plains	Nov-22	Feral pigs	145
Feral animal survey	NT	Roper River to QLD border	Dec-22	Feral pigs	84
Feral animal general surveillance	QLD	Cairns	Mar-23	Feral pigs	3
Feral animal survey	NT/WA	Western NT to Eastern Kimberly	Apr-23	Feral pigs	40
Feral animal survey	NT/WA	Western NT to Eastern Kimberly	Apr-23	Feral pigs	2
				Feral bovids	19

Activity	Jurisdiction	Location	Month	Species	Number examined
Feral animal general surveillance	NT	Nitmiluk National Park (Katherine)	Apr-23	Feral pigs	1
Feral animal general surveillance	QLD	Cairns	Apr-23	Feral pigs	3
Feral animal survey	QLD	Far North Cape York	May-23	Feral pigs	48
Feral animal survey	WA	North Kimberly	May-23	Feral pigs	16
				Feral bovids	1
Feral animal general surveillance	QLD	Cairns	May-23	Feral pigs	4
Feral animal general surveillance	QLD	Cairns	Jun-23	Feral pigs	3
TOTAL NUMBER OF NAQS SURVEILLANCE ACTIVITIES WHERE ANIMALS WERE EXAMINED FOR MYIASIS			20	TOTAL NUMBER OF ANIMALS EXAMINED	733