

FOR INFORMATION

SWFSPP Annual Meeting 2021

Agenda Item 2.1

last updated: 7 October 2021

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NAQS COORDINATOR REPORT 2020-21 year**RECOMMENDATION**

1. That the SWFSPP Steering Committee **NOTE** this summary of NAQS' activity in contribution to screwworm fly surveillance in 2020-21.

BACKGROUND

1. This report provides a summary of screwworm fly surveillance conducted by the Northern Australia Quarantine Strategy (NAQS) for the period July 2020 – June 2021.
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**

During 2020-21 traps were set quarterly at 15 sites in NPA, resulting in a total of 657,866 adult flies trapped, of which none were identified by morphology or PCR to be SWF. Maps and details are reported in **Attachment A**.

5. TARGETED MYIASIS INSPECTIONS

During 2020-21 a total of 67 surveillance activities were conducted by NAQS that involved inspection of a total of 1707 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**.

6. 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, remote health clinics, pastoralists Indigenous ranger groups, remote medical centres and pastoralists.
- Syndromic surveillance in Indigenous communities, conducted by Indigenous ranger groups.

In 2020-21, NAQS received 1 report of maggots or maggot submissions:

- Maggots collected from a human toe at Belyuen Health Centre, NT in August 2020 were identified as *Lucilia sericata*.

7. 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.

8. CONSULTATION/COMMUNICATION

The Torres Strait Northern Peninsula Area (TS-NPA) Biosecurity Working Group is in the process of developing a priority pest list for the TS-NPA region. The expert consultation phase, in which subject matter experts (SMEs) were consulted and ranked relative risks of a shortlist of candidate species, has now concluded. SWF did not rank in the final (top 25) priority pest list from this consultation. However, there was a lower level of confidence on the social amenity aspects of the consultation. Further consultation with Traditional Owners and other local community stakeholders is likely to be conducted to help address social amenity impacts more thoroughly and finalise the list. This consultation is likely to include the full list of candidate species, including SWF.

9. NEXT STEPS/ACTIONS

NAQS is in the process of updating all their maggot kits that they use to distribute to northern Australian stakeholders. This is pending discussion during this meeting about maggot kits, including preservatives for maggots and transport requirements (item 6.1). Going forward, maggot kits being distributed by NAQS will still be NAQS-branded, but will 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.

Attachment A: Details of NAQS adult SWF trapping 2020-21

Attachment B: Details of NAQS targeted myiasis 2020-21

FEEDBACK

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

Strongly agree	Agree	Undecided	Disagree	Strongly disagree
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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
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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 2020-21

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 2020 – June 2021

Fly Trap Locations	Scheduled activity ¹			Actual activity				
	No. Traps	frequency (per year)	Total (per year)	July-Sept 2020	Oct-Dec 2020	Jan-March 2021	April-June 2021	Total
Bamaga	6	4	24	6	6	6	6	24
Injinoo	2	4	8	2	2	2	2	8
Umagico	4	4	16	4	4	4	4	16
Seisia	3	4	12	3	3	3	3	12
TOTAL	15	4	60	15	15	15	15	60
TOTAL flies collected				203,446	259,652	33,846	160,922	657,866

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

ATTACHMENT B: Details of NAQS targeted myiasis 2020-21

Schedule of SWF targeted myiasis monitoring (plans) and number of myiasis inspections conducted on domestic animals by NAQS, July 2020 – June 2021

Monitoring location and site	Scheduled activity ²		Actual activity								
	Survey freq./y	Min. # animals inspected/survey	July-Sept 2020		Oct-Dec 2020		Jan-March 2021		April-June 2021		Total # animals
			# of surveys	# of animals	# of surveys	# of animals	# of surveys	# of animals	# of surveys	# of animals	
Garrihiya sentinel herd (eastern Arnhem Land, NT)	6	10-15 cattle	3	31	3	31	3	32	3	29	123
Gunbalanya sentinel herd	0	0	3	81	2	30	3	44	3	45	200
Torres Strait Islands	2	10-50 various domestic animals	1	7	0	0	1	39	0	0	46
Seisia sentinel herd (NPA, Qld) ³	12	10-15 cattle	2	16	0	0	0	0	0	0	16
Bertiehaugh sentinel herd (Weipa, Qld) ⁴	0	0	1	16	3	46	3	48	2	22	132
Merepah sentinel herd (Coen, Qld)	0	0	1	40	2	30	0	0	1	14	84

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

³ Herd at this site was discontinued in August 2020.

⁴ Replacement site for Seisia, commencing September 2020.

York Downs sentinel herd (Weipa, Qld)	0	0	3	54	3	50	3	42	3	42	188
Kalumburu sentinel herd (north-west Kimberley, WA)	2	20-30 cattle	0	0	1	49	0	0	1	54	103
TOTALS	22		14	245	14	236	13	205	13	206	892

Schedule of myiasis inspections conducted on feral animals by NAQS, July 2020 – June 2021

Activity	Jurisdiction	Location	Month	Species	Number examined
Disease investigation	WA	Broome	Aug-20	Little red flying fox	1
Feral animal survey	WA	Dampier Peninsula	Sep-20	Feral donkeys	11
Feral animal survey	WA	West Kimberley	Sep-20	Feral pigs	43
Feral animal survey	NT	Cobourg Peninsula	Nov-20	Feral pigs	55
				Feral banteng	9
				Feral buffalo	4
Feral animal survey	QLD	Lakefield National Park and Princess Charlotte Bay	Nov-20	Feral pigs	66
Feral animal survey	NT and WA	Pearce Point to WA border and north-east Kimberley region	Feb-21	Feral pigs	23
				Feral donkeys	8
Feral animal survey	NT	Arnhem Land - Cape Wilberforce to base of Cobourg Peninsula	Apr-21	Feral pigs	87
				Feral buffalo	19

Activity	Jurisdiction	Location	Month	Species	Number examined
				Feral goats	5
				Feral cattle	3
Feral animal survey	WA	South of Broome	Apr-21	Feral camels	5
Feral animal survey	NT	Wildman River National Park	May-21	Feral pigs	160
				Feral buffalo	1
Feral animal survey	QLD	Kowanyama and Rutland Plains Station	May-21	Feral pigs	88
Feral animal survey	NT	Tiwi Islands	Jun-21	Feral pigs	38
				Feral buffalo	20
Feral animal survey	QLD	Eastern Cape (Lockhart River to NPA) and western Cape (NPA to Skardon River)	Jun-21	Feral pigs	168
Post mortem training	NT	Garrihiya	Jun-21	Feral buffalo	1
TOTAL NUMBER OF SURVEILLANCE ACTIVITIES WHERE ANIMALS WERE EXAMINED			13	TOTAL NUMBER OF ANIMALS EXAMINED	815