Supplementary Materials: Qualitative Behavioural Assessment as a Method to Identify Potential Stressors During Commercial Sheep Transport

Teresa Collins ^{1, *}, Catherine A. Stockman ¹, Anne L. Barnes ¹, David W. Miller ¹, Sarah L. Wickham ¹ and Patricia A. Fleming ^{1*}

School of Veterinary & Life Sciences, Murdoch University, Murdoch, WA 6150, Australia; c.stockman@murdoch.edu.au (C.A.S.); a.barnes@murdoch.edu.au (A.L.B.); D.Miller@murdoch.edu.au (D.W.M.); sarahlwickham@outlook.com (S.L.W.); t.fleming@murdoch.edu.au (P.A.F.)

* Correspondence: t.collins@murdoch.edu.au;

Received: 3 October 2018; Accepted: 9 November 2018; Published: 15November 2018

Supplementary Materials S1: Section 1 of Questionnaire.

To keep your identity anonymous please create a unique code from the following

More than 2 years

9. Have you ever visited a farm which rears animals? \Box Y If yes, what animals did they farm (tick all that apply)	∕es □ No
 Sheep (wool) Sheep (meat) Beef cattle Dairy cattle Chickens (eggs) Chickens (meat) Pigs Other 	
10. Have you ever visited an abattoir? \Box Yes \square NIf yes, what type of animal was being slaughtered there	No
Sheep Cattle Pig Chicken	
Other	
11. Have you ever visited a livestock saleyard ?	″es □No
Sheep Cattle	
Other	
 12. How often do you see sheep being transported? Daily Once or twice a week Once a fortnight Once a month Once a year A few times a year Never 13. Currently, how often would you say you come into contact Daily Once or twice a week Once or twice a week Once a fortnight Once a fortnight Once a month Once a fortnight Once a fortnight Once a fortnight Once a fortnight Once a month Once a week Once a week A few times a year A few times a year Never How much time have you spent working with sheep in year Never A few occasions A few days A few weeks A month or more A year or more To you currently have any of the following as pets (tick at the following at the f	our lifetime? ll that applies):
\Box Dog(s) \Box Cat(s) \Box Bird(s) \Box Fish \Box Ho	orse(s)
Livestock Reptile(s) Rodent(s) Other	
16. How often do you eat the following:	
Poultry Lamb Beef Fish Eggs Dairy	
Never	

Occasionally (Less than once a week)						
Often (1–4 times a week)						
Always (> 5 times a week)						
17. What factors do you consider whe Poultry Lamb Beef Fish		g the fo Dairy	llowing	:		
Vegetarian						
Religion						
Dietary intolerance						
Dislike product						
Animal welfare concerns						
Food safety						
Cost						
Other						
18. Do you believe you purchasing a animal welfare?	animal	welfare	friendl	y produ	ucts can	positively influence
No Don't know			Yes			
Comments						
19. If you consume meat, dairy or eggs, are you personally responsible for the purchasing these products?☐ Yes ☐ No ☐ Not applicable						
Comments						
20. Do you believe animal welfare should be improved in Australia? No Not sure Yes						
Comments						
 21. What factors influence your assess Media Education Personal experience Family/social/peers Religion Not sure Other Comments 						
22. As a consumer, would you be will	ing to p	ay mor	e for pro	oducts c	oming f	rom facilities that are

enhancing welfare beyond current industry standards?

🗌 Yes 🗌 No

Comments

23. How do you rate the welfare of **sheep** in Australia? Poor Excellent

24. How do you rate the welfare of sheep during road transport in Australia? Poor Excellent 25. How do you rate the welfare of sheep during live export by sea? Excellent Poor 26. How do you rate the welfare of Australian exported sheep at their foreign destination? Excellent Poor Section 2 of Questionnaire: Your Unique Code is: ____ I can tell how a group of sheep are feeling by the way they behave 1. (please put a dash on the line at the appropriate place) Strongly agree Strongly disagree Comments 2. I believe animal welfare is important Strongly disagree Strongly agree Comments 3. I am influenced by the media in my perceptions of animal welfare Strongly disagree Strongly agree Comments Sheep show visible behavioural responses 4. Strongly disagree Strongly agree Comments It doesn't matter what a person's background is, they will be able to tell how sheep are 5. feeling Strongly disagree Strongly agree Comments 6. People who don't eat meat are better able to interpret how sheep are behaving Strongly disagree Strongly agree

Comments

 People who have pets are better able to interpret how sheep are behaving Strongly disagree Strongly agree

Comments

 People who have no preconceived ideas of sheep behaviour are better able to interpret how sheep are behaving Strongly disagree
 Strongly agree

Comments

Supplementary Materials S2: Vehicle driver questionnaire.

Driver Questionnaire

Drivers involved in multiple journeys are only asked to complete Part B once

Driver details					
Gender					
Age group	Less than 30	31 – 50	51 – 70		
Journey number that day					
Experience in driving (year)					
Total number of hours					
worked that day (at					
completion of trip)					

- 1. What do you believe should be the most important priorities for improvement of the livestock transport industry?
- 2. In terms of animal welfare during road transport, do you believe:
- a. Improvements are needed
- b. No improvements are needed
- 3. If answered (a), then what do you think are the most important animal welfare issues that need to be addressed during road transport?

4. Is the monitoring of sheep with respect to animal welfare during road transport adequate?

Yes No Don't know

- 5. If no, how do you believe the monitoring could be improved?
- 6. In your experience do you believe you are able to tell how a sheep is feeling (e.g. stressed, content, fatigued) by the way it behaves?

Yes No Don't know

7. If yes, do you think you are able to tell if a sheep's welfare is compromised by the way it behaves?

 \Box All the time \Box Some of the time \Box None of the time \Box Don't know

- 8. What specific behaviours would indicate to you that a sheep's welfare is compromised?
- 9. It doesn't matter what a person's background is, they will be able to tell how an animal is feeling by the way it behaves
- Yes No Don't know

Comments

Supplementary Materials S3: Transport event questionnaire.

Details of transport event

Journey Details					
Journey code		Date (0101):			
		Day journey	number for that driver (01):		
		Driver initia	ls (CS):		
		CODE:			
Date					
Time of departure					
Place of departure					
Odometer at departure					
Odometer at arrival					
Place of arrival					
Time of arrival					
Number and duration of stop	os				
Comments/reasons for stops					
Weather conditions					
		Vehicle d	letails		
Type of vehicle					
Year of manufacture					
Position of cameras			Diagram		
Time camera turned on					
Successful recording (circle)		Yes	No		
Use of dog (circle)		Loading	Unloading		
Placement of dog in front cra	te?				
Use of prodder		Loading	Unloading		
Cleanliness of vehicle (comment)					
Experimental animal details					
Breed					
Sex					
Age					

Average Weight					
Total stock on vehicle					
Number of stock in pen					
Approx size of pen					
Place of origin	Feedlot Station	Pasture managed	Other		
Curfew	Feed curfew (circle)	yes no			
	Time off feed before loading:				
	Water curfew (circle)	yes no			
	Time off water before loading:				
Cohort details	Are all experimental sh	eep from same location	yes	no	
	If no, detail:				
	Cohort number (in ord	er of loading) and approx r	number from	each :	