Appendix 'Wildlife health perceptions and monitoring in protected areas'

Diego Montecino-Latorre Mathieu Pruvot Sarah H Olson

Results of non-local responses

Section 1: Perceptions regarding wildlife health importance in conservation and potential consequences of pathogen transmission among wildlife, domestic animals, and people.

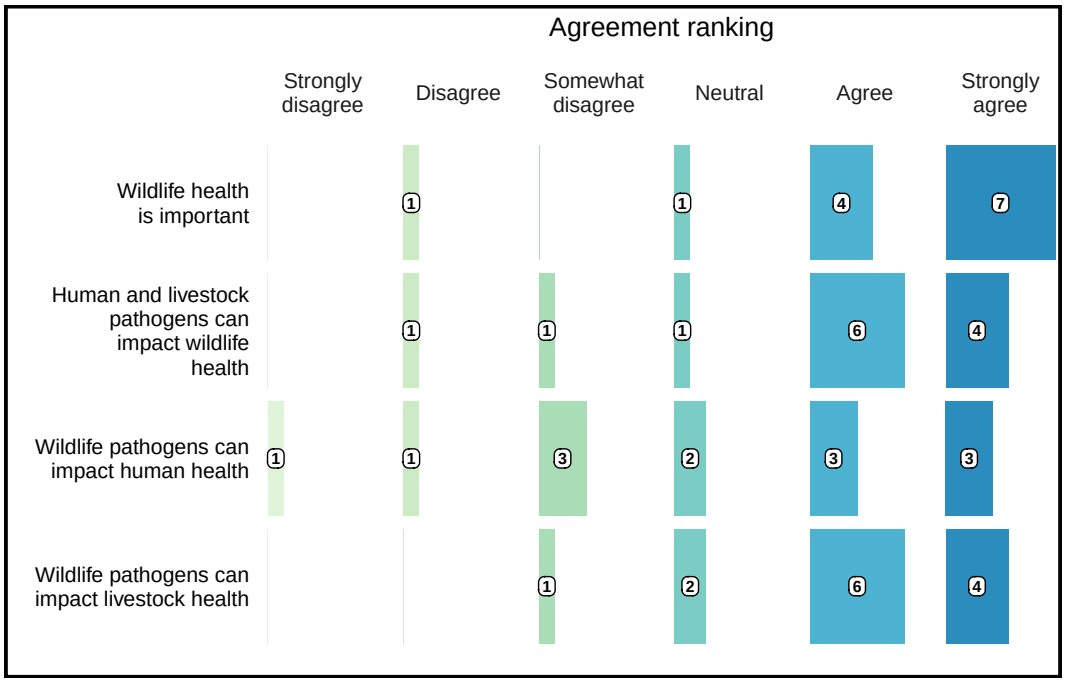

Figure 1: Distribution of the level of agreement among protected area data managers with statements 'wildlife health is important to achieve the conservation goals of protected area(s) where I work in' (row 1), 'human or livestock pathogens can affect wildlife populations inhabiting the protected area(s) where I work in' (row 2), 'pathogens carried by wildlife inhabiting the protected area(s) where I work in can affect human health' (row 3), and 'pathogens carried by wildlife inhabiting the protected area(s) where I work in can affect livestock health' (row 4).

Section 2: Overall frequency of encounters with dead, sick, or injured wildlife in protected areas and their documentation when found during patrols

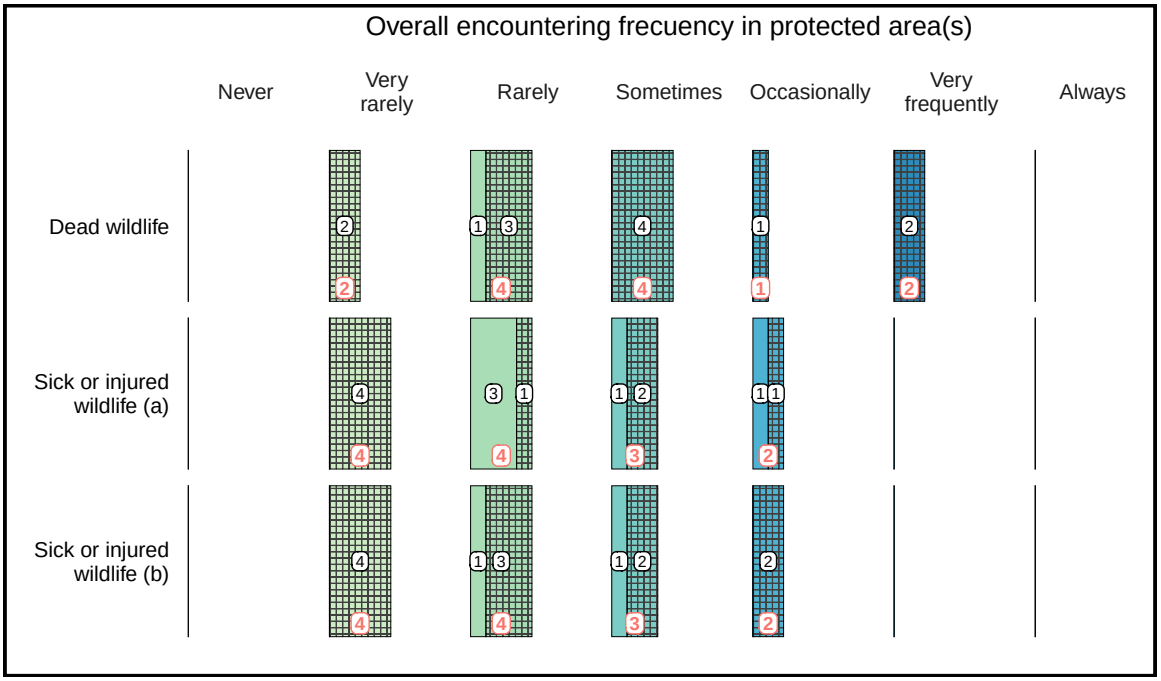

Figure 2: Distribution of protected area data manager responses regarding the encounter of dead and sick or injured wildlife in the protected area(s) where they work. Red numbers indicate the total number of responses per encountering frequency. The dashed area of the polygons represent the responses indicating that dead, sick, and injured wildlife found during ranger patrols are recorded (rows 1 – 3, respectively). Black numbers indicate the total number of responses reporting recording and non-recording of dead, sick, and injured wildlife found during patrols per encountering frequency.

Figure 3: Distribution of methods of documentation to register either sick, injured, or dead wildlife found during ranger patrols reported by protected area data managers.

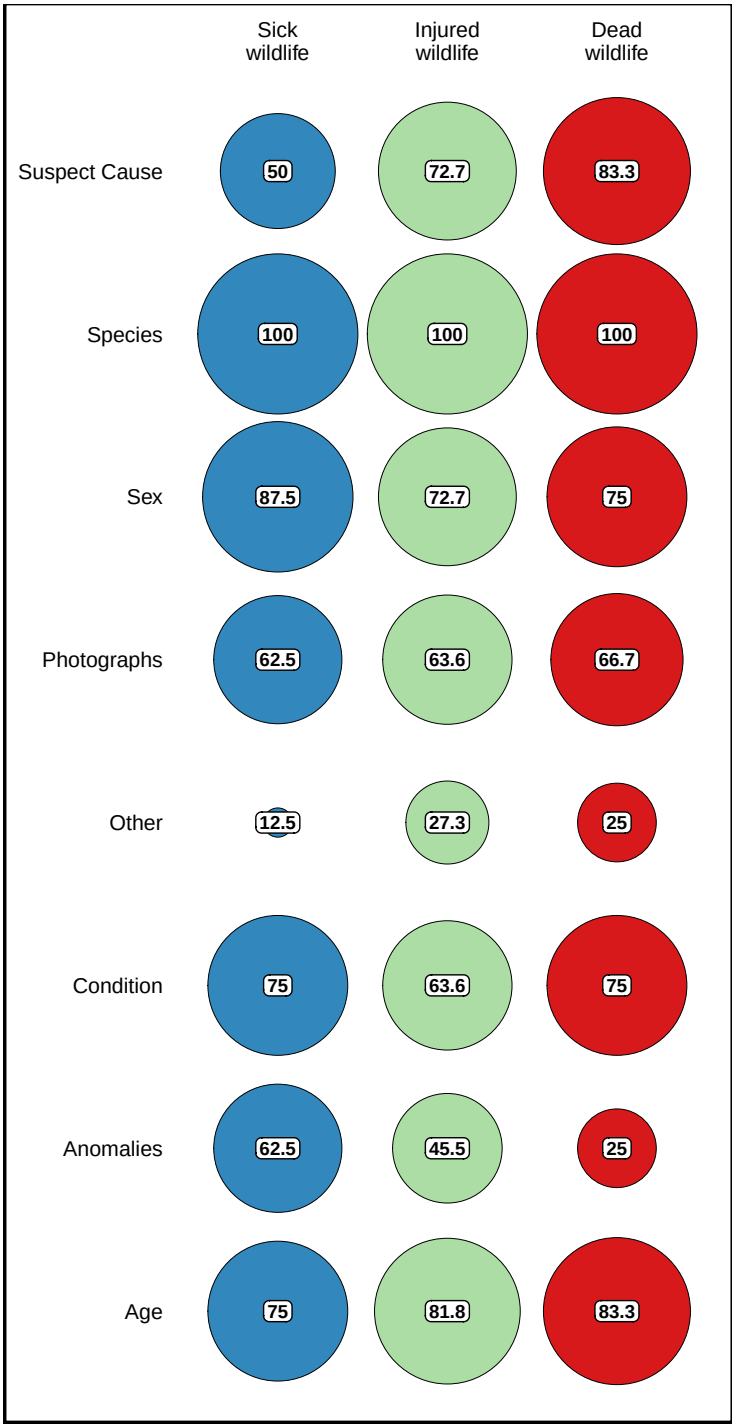

Figure 4: The percentage of protected area data manager responses indicating the documentation of sick, injured, and dead wildlife found during patrols that record specific data items for each wildlife health status. The size of the circles is proportional to the percentages observed.

Section 3: Presence of domestic animals in protected areas, the documentation of their health status, and the perceived threats of domestic animals to conservation goals

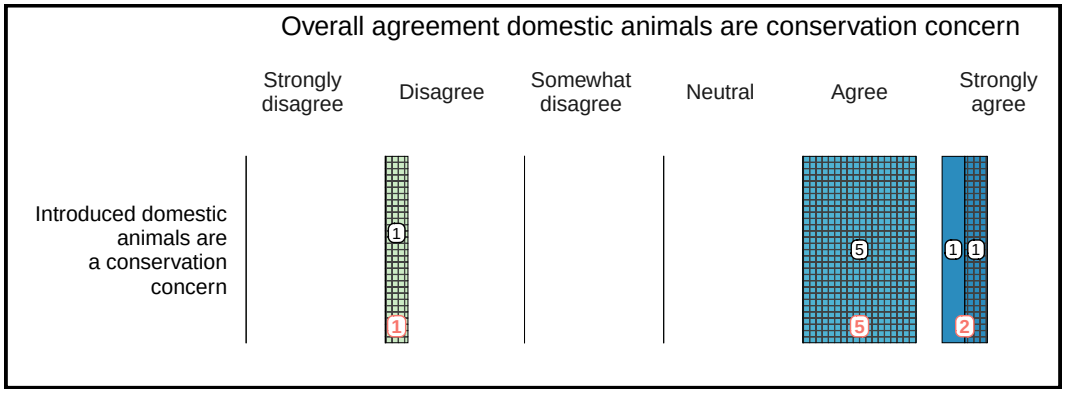

Figure 5: Distribution of the level of agreement among protected area data managers with the statement 'introduced domestic animals (e.g., dogs, cats, cattle, pigs, cats) are a concern for the conservation goals of the protected areas where I work'. Red numbers indicate the total number of responses per agreement. The dashed area of the polygons represent the responses indicating that domestic animals found during ranger patrols are recorded. Black numbers indicate the total number of responses reporting documentation and non-documentation of domestic animals found during patrols.

Section 4: Health data storage practices in protected areas

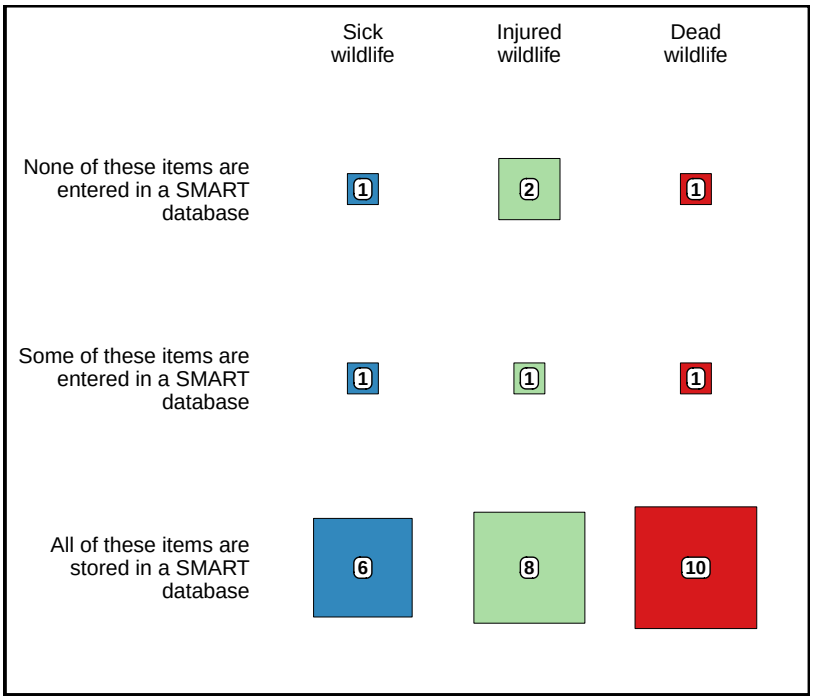

Figure 6: Distribution of protected area data managers reporting the documentation of either sick, injured, or dead wildlife found during ranger patrols across data storage practices with respect to the use of SMART.

Section 5: Current state of SMART deployment in protected areas

Ten protected area data managers reported that SMART was fully rolled-out, and 3 partially rolled-out. The most common SMART Desktop version by the time of the survey was SMART 6, reported by 5 data managers. SMART 7 was already available for 5 data managers by the time of the survey. Older SMART versions were reported once. Finally, 9 data managers reported SMART Connect availability and 1 mentioned plans to set it up.

Comparing the results of non-local and local responses from the same country

Section 1: Perceptions regarding wildlife health importance in conservation and potential consequences of pathogen transmission among wildlife, domestic animals, and people in local surveys and non-local surveys containing protected areas in local responses

Table 1: Non-local and local responses for section 1 in country 1

Response category	Wildlife health is important	Human and livestock pathogens can impact wildlife health	Wildlife pathogens can impact human health	Wildlife pathogens can impact livestock health
Global	Agree	Agree	Agree	Neutral
Local	Strongly agree	Agree	Agree	Agree
Local	Strongly agree	Strongly agree	Strongly agree	Strongly agree
Local	Strongly agree	Agree	Strongly agree	Agree
Local	Strongly agree	Agree	Agree	Agree

Table 2: Non-local and local responses for section 1 in country 2

Response category	Wildlife health is important	Human and livestock pathogens can impact wildlife health	Wildlife pathogens can impact human health	Wildlife pathogens can impact livestock health
Global	Neutral	Agree	Agree	Somewhat Disagree
Local	Strongly agree	Strongly agree	Strongly agree	Strongly agree

Table 3: Non-local and local responses for section 1 in country 3

Response category	Wildlife health is important	Human and livestock pathogens can impact wildlife health	Wildlife pathogens can impact human health	Wildlife pathogens can impact livestock health
Global	Strongly agree	Strongly agree	Strongly agree	Strongly agree
Global	Disagree	Strongly agree	Neutral	Strongly disagree
Local	Agree	Neutral	Neutral	Neutral
Local	Agree	Agree	Agree	Agree
Local	Agree	Agree	Somewhat Disagree	Somewhat Disagree
Local	Agree	Strongly agree	Neutral	Strongly agree
Local	Strongly agree	Strongly agree	Strongly agree	Strongly agree
Local	Strongly agree	Strongly agree	Agree	Agree
Local	Agree	Agree	Somewhat Disagree	Agree
Local	Strongly agree	Disagree	Strongly disagree	Strongly agree
Local	Strongly agree	Strongly agree	Disagree	Agree
Local	Agree	Strongly agree	Neutral	Agree
Local	Agree	Disagree	Neutral	Agree
Local	Agree	Strongly agree	Strongly disagree	Strongly disagree
Local	Strongly agree	Strongly agree	Disagree	Disagree
Local	Agree	Agree	Agree	Agree
Local	Agree	Strongly agree	Neutral	Strongly agree
Local	Strongly agree	Agree	Neutral	Neutral
Local	Strongly agree	Strongly agree	Strongly agree	Strongly agree
Local	Agree	Neutral	Neutral	Agree
Local	Strongly agree	Strongly agree	Strongly agree	Strongly agree
Local	Strongly agree	Agree	Agree	Strongly agree
Local	Agree	Agree	Strongly agree	Agree
Local	Strongly agree	Strongly agree	Strongly disagree	Strongly disagree
Local	Strongly agree	Agree	Neutral	Neutral
Local	Strongly agree	Neutral	Somewhat Disagree	Somewhat Disagree

Table 4: Non-local and local responses for section 1 in country 4

Response category	Wildlife health is important	Human and livestock pathogens can impact wildlife health	Wildlife pathogens can impact human health	Wildlife pathogens can impact livestock health
Global	Strongly agree	Strongly agree	Agree	Strongly agree
Local	Strongly agree	Strongly agree	Strongly agree	Strongly agree
Local	Strongly agree	Strongly agree	Neutral	Strongly agree

Section 2: Overall frequency of encounters with dead, sick, or injured wildlife in protected areas and their documentation when found during patrols in local surveys and non-local surveys containing protected areas in local responses

Table 5: Non-local and local responses for section 2 in country 1

Response category	Dead wildlife encounter frequency	Dead wildlife found in patrols is recorded	Sick or injured wildlife encounter frequency	Sick wildlife found in patrols is recorded	Injured wildlife found in patrols is recorded
Global	Sometimes	Yes	Sometimes	No	No
Local	Very frequently	Yes	Sometimes	Yes	Yes
Local	Very rarely	Yes	Very rarely	Yes	Yes
Local	Sometimes	Yes	Sometimes	Yes	Yes
Local	Sometimes	Yes	Sometimes	Yes	Yes

Table 6: Non-local and local responses for section 2 in country 2

Response category	Dead wildlife encounter frequency	Dead wildlife found in patrols is recorded	Sick or injured wildlife encounter frequency	Sick wildlife found in patrols is recorded	Injured wildlife found in patrols is recorded
Global	Rarely	No	Rarely	No	No
Local	Rarely	Yes	Occasionally	No	No

Table 7: Non-local and local responses for section 2 in country 3

Response category	Dead wildlife encounter frequency	Dead wildlife found in patrols is recorded	Sick or injured wildlife encounter frequency	Sick wildlife found in patrols is recorded	Injured wildlife found in patrols is recorded
Global	Occasionally	Yes	Very rarely	Yes	Yes
Global	Sometimes	Yes	Very rarely	Yes	Yes
Local	Very rarely	No	Very rarely	No	No
Local	Sometimes	Yes	Rarely	No	Yes
Local	Occasionally	Yes	Occasionally	Yes	No
Local	Very rarely	Yes	Very rarely	No	Yes
Local	Always	No	Never	No	No
Local	Sometimes	No	Rarely	No	No
Local	Sometimes	No	Occasionally	No	No
Local	Never	No	Never	No	No
Local	Very rarely	No	Very rarely	No	No
Local	Very rarely	Yes	Very rarely	Yes	Yes
Local	Very rarely	No	Sometimes	No	No
Local	Very rarely	Yes	Very rarely	No	No
Local	Occasionally	Yes	Very rarely	No	No
Local	Very rarely	No	Very rarely	Yes	No
Local	Very rarely	Yes	Very rarely	No	No
Local	Rarely	No	Rarely	Yes	Yes
Local	Very frequently	Yes	Very frequently	No	Yes
Local	Occasionally	Yes	Sometimes	Yes	Yes
Local	Very frequently	Yes	Very frequently	Yes	Yes
Local	Sometimes	Yes	Rarely	No	No
Local	Rarely	Yes	Never	No	No
Local	Occasionally	Yes	Very rarely	No	Yes
Local	Very rarely	No	Very rarely	No	No
Local	Very rarely	No	Very rarely	No	No

Table 8: Non-local and local responses for section 2 in country 4

Response category	Dead wildlife encounter frequency	Dead wildlife found in patrols is recorded	Sick or injured wildlife encounter frequency	Sick wildlife found in patrols is recorded	Injured wildlife found in patrols is recorded
Global	Very frequently	Yes	Sometimes	Yes	Yes
Local	Always	Yes	Occasionally	Yes	Yes
Local	Occasionally	Yes	Rarely	No	No

Section 3: Presence of domestic animals in protected areas, the documentation of their health status, and the perceived threats of domestic animals to conservation goals in local surveys and non-local surveys containing protected areas in local responses

Table 9: Non-local and local responses for section 3 in country 1

Response category	Introduced domestic animals are a conservation concern	Domestic animals found in the protected area	Domestic animals are recorded	Domestic animals health status is recorded
Global	Agree	Yes	Yes	No
Local	Strongly agree	Yes	No	
Local	Agree	Yes	Yes	No
Local	Agree	Yes	No	
Local	Strongly agree	Yes	No	

Table 10: Non-local and local responses for section 3 in country 2

Response category	Introduced domestic animals are a conservation concern	Domestic animals found in the protected area	Domestic animals are recorded	Domestic animals health status is recorded
Global	Agree	Yes	Yes	No
Local	Agree	Yes	Yes	No

Table 11: Non-local and local responses for section 3 in country 3

Response category	Introduced domestic animals are a conservation concern	Domestic animals found in the protected area	Domestic animals are recorded	Domestic animals health status is recorded
Global	Strongly agree	Yes	Yes	No
Global	Strongly agree	Yes	No	
Local	Neutral	Yes	Yes	Yes
Local	Strongly agree	No		
Local	Neutral	Yes	Yes	No
Local	Somewhat Disagree	No		
Local	Strongly agree	Yes	Yes	No
Local	Agree	No		
Local	Agree	Yes	Yes	No
Local	Strongly disagree	No		
Local	Strongly agree	Yes	Yes	No
Local	Strongly agree	Yes	Yes	Yes
Local	Disagree	Yes	No	
Local	Agree	Yes	No	
Local	Strongly agree	No		
Local	Strongly agree	No		
Local	Strongly agree	No		
Local	Agree	Yes	Yes	No
Local	Neutral	Yes	Yes	No
Local	Neutral	No		
Local	Strongly agree	Yes	No	
Local	Agree	Yes	Yes	Yes
Local	Neutral	Yes	Yes	No
Local	Strongly agree	Yes	No	
Local	Agree	Yes	No	
Local	Agree	No		

Table 12: Non-local and local responses for section 3 in country 4

Response category	Introduced domestic animals are a conservation concern	Domestic animals found in the protected area	Domestic animals are recorded	Domestic animals health status is recorded
Global	Neutral	No		
Local	Somewhat Disagree	No		
Local	Neutral	No		

Section 4: Health data storage practices in local surveys and non-local surveys containing protected areas in local responses

Table 13: Non-local and local responses for section 4 in country 1

Response category	Dead wildlife found in patrols are recorded	Dead willdife data in SMART	Sick wildlife found in patrols are recorded	Sick willdife data in SMART	Injured wildlife found in patrols is recorded	Injured willdife data in SMART
Global	Yes	Some	No		No	
Local	Yes	Some	Yes	Some	Yes	Some
Local	Yes	Some	Yes	Some	Yes	Some
Local	Yes	Some	Yes	Some	Yes	Some
Local	Yes	Some	Yes	Some	Yes	Some

Table 14: Non-local and local responses for section 4 in country 2

Response category	Dead wildlife found in patrols are recorded	Dead willdife data in SMART	Sick wildlife found in patrols are recorded	Sick willdife data in SMART	Injured wildlife found in patrols is recorded	Injured willdife data in SMART
Global	No		No		No	
Local	Yes	Some	No		No	

Table 15: Non-local and local responses for section 4 in country 3

Response category	Dead wildlife found in patrols are recorded	Dead willdife data in SMART	Sick wildlife found in patrols are recorded	Sick willdife data in SMART	Injured wildlife found in patrols is recorded	Injured willdife data in SMART
Global	Yes	Some	Yes	Some	Yes	Some
Global	Yes	Some	Yes	Some	Yes	Some
Local	No		No		No	
Local	Yes	Some	No		Yes	Some
Local	Yes	Some	Yes	Some	No	
Local	Yes	Some	No		Yes	Some
Local	No		No		No	
Local	No		No		No	
Local	No		No		No	
Local	No		No		No	
Local	No		No		No	
Local	Yes	Some	Yes	Some	Yes	Some
Local	No		No		No	
Local	Yes	Some	No		No	
Local	Yes	Some	No		No	
Local	No		Yes	None	No	
Local	Yes	None	No		No	
Local	No		Yes	Some	Yes	Some
Local	Yes	None	No		Yes	None
Local	Yes	Some	Yes	Some	Yes	Some
Local	Yes	Some	Yes	Some	Yes	Some
Local	Yes	None	No		No	
Local	Yes	Some	No		No	
Local	Yes	Some	No		Yes	Some
Local	No		No		No	
Local	No		No		No	

Table 16: Non-local and local responses for section 4 in country 4

Response category	Dead wildlife found in patrols are recorded	Dead willdife data in SMART	Sick wildlife found in patrols are recorded	Sick willdife data in SMART	Injured wildlife found in patrols is recorded	Injured willdife data in SMART
Global	Yes	Some	Yes	Some	Yes	Some
Local	Yes	Some	Yes	Some	Yes	Some
Local	Yes	Some	No		No	