

Perceived impacts of the Covid-19 pandemic on protected area management and conservation outcomes in Mexico

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SUPPLEMENTARY MATERIAL 1 Narrative summary of survey.

Inputs

The survey recorded a range of impacts on protected area staff, such as changes in the total number of staff in 2020 compared to 2019 and the previous five years, and main reasons for those changes. Questions about financial capacity included changes to protected area operational budget in 2020 compared to 2019 and compared to the previous five years, expected budget changes, and the perceived sufficiency of the current budget. Additionally, managers were asked to estimate the degree to which changes in staff capacity and financial capacity were due to the pandemic on a 7-pt scale (1-not attributable to the Covid-19 pandemic to 7-fully attributable to the Covid-19 pandemic).

Mechanisms

The average annual number of tourist and non-tourist visitors over the past five years were collected for each protected area. For protected areas that receive visitors, the change in tourists and non-tourist visitors were measured in 2020 compared to 2019. Additionally, managers were asked to estimate the degree to which changes in either were due to the pandemic on a 7-pt scale (1-not attributable to the COVID-19 pandemic to 7-fully attributable to the COVID-19 pandemic).

Changes in three dimensions of monitoring were measured, including the frequency of monitoring, total area monitored, and the total number of staff responsible for monitoring. A similar question was also used to measure changes in community monitoring support and the level of support provided by PROFEPA, the government agency responsible for enforcement and sanctions. The degree to which changes in any of these factors were due to the pandemic were measured on a 7-pt scale.

Additionally, we recorded managers' perceptions of changes in the total amount of time spent on infrastructure maintenance in 2020, as well as changes in the capacity to continue active management, and necessary studies on natural resources.

Moderators

Moderators measured in the survey included perceived changes to advisory council operations, government programs, such as subsidy programs, and programs run by non-governmental organizations. The specific changes recorded include project delays, temporary freezes on project activities, and reduction in benefits. Additionally, the survey also recorded access to emergency funds in 2020 and the name of the supporting organization.

Outcomes

We measured the perceived change in 2020 in 8 different non-compliant activities, including human-caused fires, land clearing for agriculture, hunting, fishing, logging, mining, unapproved settlements and unapproved camping or use of trails, as well as the perceived level of threat from each activity for the 5 years prior. Finally, we measured perceived changes in ecosystem health in 2020 compared to 2019 on a 5-pt scale from much better to much worse. We recorded the degree to which changes in each activity and ecological improvements were due to the pandemic using a 7-pt scale.

Open-ended questions were included throughout the survey to allow the participant to expand on their responses or perceived changes.

SUPPLEMENTARY MATERIAL 2: Copy of full survey (translated from Spanish to English)

INPUTS		
<i>Staff Capacity</i>		
1. Did the average number of staff working at one time in the PA during 2020 increase or decrease compared to the average number of staff working at one time: - in 2019? - Between 2015-2019?	Multiple Choice – 2 part	A. Increase B. Decrease C. No change D. I don't know
a. If decrease (from 2019), how does the average number of staff working at one time in the PA during 2020 compared to the average number of staff working at one time in 2019. Please indicate the percent reduction from the 2019 on the bar below.	Scale	Scale from 0-100%
b. If decreased, to what degree was this change due to the COVID-19 pandemic?	Scale	7pt continuous scale: 1-Not at all due to COVID-19 7-Fully due to COVID-19
2. In what ways did COVID-19 impact your staff capacity in 2020? Select all that apply.	Select <u>all</u> that apply	A. Did not have an impact on management capacity B. Temporary job loss with pay C. Temporary job loss without pay D. Permanent job loss E. Hiring freeze / unable to contract for open positions F. Less availability of personnel (health or family related) G. Employees were sick with the COVID-19 virus H. Other (If "other", please list.)
a. If D, what percentage of staff have been permanently laid off due to budget restrictions as a result of COVID?	Multiple choice	A. No staff have lost their job B. <20% of staff have lost their job C. 20-40% of staff have lost their job D. 40-60% staff have lost their job E. 60-80% staff have lost their job F. >80% of staff have lost their job
b. If G, what percentage of staff members became sick with the COVID-19 virus (at work or outside of the work setting)?	Multiple choice	A. No staff became ill with COVID B. <20% of staff became ill C. 20-40% of staff became ill D. 40-60% of staff became ill E. 60-80% of staff became ill F. >80% of staff became ill
3. Are there any other specific events that influenced the total number of staff working at the PA in 2020?	Binary & Open choice	Yes/No If so, please explain.
<i>Financial Capacity</i>		
4. On average, how does the PA budget in 2020 compare to the budget: - in 2019? - in the past 5 years?	Multiple choice – 2 part	A. Substantial decrease B. Decrease C. No change / about the same D. Increase E. Substantial increase
a. If the budget decreased in the past year, please estimate the percent reduction	Scale	Scale from 0-100%

experienced in the PA budget from 2019 to 2020.		
b. If decreased, to what degree was this change due to the COVID-19 pandemic?	Scale	7pt continuous scale: 1-Not at all due to COVID-19 7-Fully due to COVID-19
c. Do you feel the 2020 budget was sufficient for basic management needs?	Scale	7 pt scale 1-not sufficient 7-totally sufficient
5. Did you access to any emergency funds in 2020 (e.g., Fondo Mexicano)	Binary	Yes/No
a. If yes, please list the organization or group that you received emergency funds from.	Open-ended	<i>(list organization)</i>
6. Has the PA experienced or anticipate experiencing any changes to their budget in 2021 compared to the budget in 2020? - Experienced in 2021 - Anticipate experiencing in 2021	Multiple choice – 2 part	A. Increase B. No change / about the same C. Decrease D. Not sure
a. If yes, to what degree is/was this change or expected change due to the COVID-19 pandemic?	Scale	7pt continuous scale: 1-Not due to COVID-19 7-Fully due to COVID-19
MECHANISMS		
<i>Visitation</i>		
7. In the five years prior to the COVID-19 pandemic, about how many tourists visited the PA each year? (If there is no tourism, write “00”.)	Open-ended	<i>(estimated number of tourists)</i>
a. On average, were there changes to the total number of tourists that visited the PA in 2020 compared to the total number in 2019?	Multiple choice	A. >75% increase in tourists B. 50-75% increase in tourists C. 25-50% increase in tourists D. <25% increase in tourists E. No changes F. <25% decrease in tourists G. 25-50% decrease in tourists H. 50-75% decrease in tourists I. >75% decrease in tourists
b. To what degree was this change due to the COVID-19 pandemic?	Scale	7pt continuous scale: 1-Not due to COVID-19 7-Fully due to COVID-19
8. In the five years prior to the COVID-19 pandemic, about how many individuals entered the PA each year for non-tourism purposes (e.g., researchers, local community members, etc.)?	Open-ended	<i>(estimated number of non-tourist visitors)</i>
a. On average, were there changes to the number of individuals that entered the PA for non-tourism purposes in 2020 compared to the total number in 2019?	Multiple choice	A. >75% increase in visitors B. 50-75% increase in visitors C. 25-50% increase in visitors D. <25% increase in visitors E. No changes F. <25% decrease in visitors G. 25-50% decrease in visitors H. 50-75% decrease in visitors I. >75% decrease in visitors
b. To what degree was this change due to the COVID-19 pandemic?	Scale	7pt continuous scale: 1-Not due to COVID-19

		7-Fully due to COVID-19 (<i>response not required</i>)
9. OPTIONAL: Are there any specific reasons that there was a change in the total number of individuals that entered the park (tourists and non-tourists) in 2020 other than the COVID-19 pandemic? If so, can you provide an example?	Open-ended	
<i>Management Capacity</i>		
10. On average, were there any changes in the time spent on infrastructure maintenance in the year 2020 compared to the time spent in 2019 due to the COVID-19 pandemic?	Multiple choice	A. Very significantly increase (75% or greater) B. Significantly increase (50-75%) C. Moderate increase (25-50%) D. Slightly increase (<25%) E. No change F. Slightly decreased (<25%) G. Moderate increase (25-50%) H. Significantly decreased (50-75%) I. Very significantly decreased (75% or greater)
11. On average, were there any changes in the staff's ability to continue active management processes for natural resources in 2020 compared to 2019 due to the COVID-19 pandemic?	Multiple choice	A. Very significantly increase (75% or greater) B. Significantly increase (50-75%) C. Moderate increase (25-50%) D. Slightly increase (<25%) E. No change F. Slightly decreased (<25%) G. Moderate increase (25-50%) H. Significantly decreased (50-75%) I. Very significantly decreased (75% or greater)
12. On average, were there any changes in the staffs ability to continue necessary studies on natural resources in 2020 compared to 2019 due to the COVID-19 pandemic?	Multiple choice	A. Very significantly increase (75% or greater) B. Significantly increase (50-75%) C. Moderate increase (25-50%) D. Slightly increase (<25%) E. No change F. Slightly decreased (<25%) G. Moderate increase (25-50%) H. Significantly decreased (50-75%) I. Very significantly decreased (75% or greater)
13. On average, how does the adequacy and availability of the management equipment in 2020 compare to that of 2019 due to the COVID-19 pandemic?	Select <u>all</u> that apply	A. Equipment is in better condition B. Equipment is more available C. No change D. Equipment is less available E. Equipment is in worse condition
14. Were changes in the following processes in 2020 due any other specific reasons besides COVID-19: - Time spent on infrastructure maintenance - Active management processes - Continuation of necessary studies on natural resources	Multiple choice – multiple part	A. Yes – increase B. No C. Yes - decrease

a. If yes, please explain what influenced this change.	Open-ended	
15. OPTIONAL: Were there any other activities or updates that the management staff was able to make progress or not make progress on due to COVID-19 changes? If so, please explain.	Open ended	<i>(response not required)</i>
<i>Monitoring</i>		
16. On average, have there been any changes in the frequency of monitoring and surveillance in 2020 compared to 2019 in the PA?	Multiple choice	A. Very significantly increase (60% or greater) B. Significantly increase (40-60%) C. Moderate increase (20-40%) D. Slightly increase (<20%) E. No change F. Slightly decreased (<20%) G. Moderate increase (20-40%) H. Significantly decreased (40-60%) I. Very significantly decreased (60% or greater)
a. To what degree was this change due to the COVID-19 pandemic?	Scale	7pt continuous scale: 1-Not due to COVID-19 7-Fully due to COVID-19
17. On average, have there been any changes in the total area of monitoring and surveillance in 2020 compared to 2019 in the PA?	Multiple choice	A. Very significantly increase (60% or greater) B. Significantly increase (40-60%) C. Moderate increase (20-40%) D. Slightly increase (<20%) E. No change F. Slightly decreased (<20%) G. Moderate increase (20-40%) H. Significantly decreased (40-60%) I. Very significantly decreased (60% or greater)
a. To what degree was this change due to the COVID-19 pandemic?	Scale	7pt continuous scale: 1-Not due to COVID-19 7-Fully due to COVID-19
18. On average, have there been any changes in the total number of staff responsible for monitoring and surveillance in 2020 compared to 2019 in the PA?	Multiple choice	A. Very significantly increase (60% or greater) B. Significantly increase (40-60%) C. Moderate increase (20-40%) D. Slightly increase (<20%) E. No change F. Slightly decreased (<20%) G. Moderate increase (20-40%) H. Significantly decreased (40-60%) I. Very significantly decreased (60% or greater)
a. To what degree was this change due to the COVID-19 pandemic?	Scale	7pt continuous scale: 1-Not due to COVID-19 7-Fully due to COVID-19
19. OPTIONAL: Would you like to provide an example(s) of non-pandemic related reasons that there were changes in the frequency, area or total number of personal responsible for monitoring in 2020?	Open-ended	<i>(response not required)</i>

20. Does the PA receive any community support for monitoring and surveillance?	Binary	Yes/No
a. If yes, on average have there been any changes in the total amount of support from community monitoring in 2020 compared to 2019?	Multiple choice	A. Very significantly increase (60% or greater) B. Significantly increase (40-60%) C. Moderate increase (20-40%) D. Slightly increase (<20%) E. No change F. Slightly decreased (<20%) G. Moderate increase (20-40%) H. Significantly decreased (40-60%) I. Very significantly decreased (60% or greater)
b. To what degree was this change due to the COVID-19 pandemic?	Scale	7pt continuous scale: 1-Not due to COVID-19 7-Fully due to COVID-19
c. OPTIONAL: Would you like to provide an example(s) of non-pandemic related reasons that there were changes in community support for monitoring and surveillance in 2020?	Open-ended	<i>(response not required)</i>
21. On average, have you experienced a change in the support and response provided by PROFEPA in 2020?		A. Very significantly increase (75% or greater) B. Significantly increase (50-75%) C. Moderate increase (25-50%) D. Slightly increase (<25%) E. No change F. Slightly decreased (<25%) G. Moderate increase (25-50%) H. Significantly decreased (50-75%) I. Very significantly decreased (75% or greater)
a. To what degree was this change due to the COVID-19 pandemic?	Scale	7pt continuous scale: 1-Not due to COVID-19 7-Fully due to COVID-19
b. OPTIONAL: Would you like to provide an example(s) of non-pandemic related reasons that there were changes in the support and response provided by PROFEPA in 2020?	Open-ended	<i>(response not required)</i>
22. Have you received support from other actors in response to reports of illegal activity (ex., National guard or other international communities) in 2020?	Binary	Yes/No If yes, please list examples.
<i>Community Engagement & Benefits</i>		
23. In 2019, did the PA provide environmental education programs?	Binary	Yes/No
a. If so, how did availability of programs change in 2020 due to the COVID-19 pandemic?	Multiple choice	A. Very significantly increase (75% or greater) B. Significantly increase (50-75%) C. Moderate increase (25-50%) D. Slightly increase (<25%) E. No change F. Slightly decreased (<25%) G. Moderate increase (25-50%)

		H. Significantly decreased (50-75%) I. Very significantly decreased (75% or greater) J. Completely stopped
24. In 2019, did the PA conduct activities that provided economic benefits to local communities?	Multiple choice	A. No B. Few economic benefits C. Many economic benefits
a. If so, were there any changes to the economic benefits that these activities provided in 2020 due to the COVID-19 pandemic?	Multiple choice	A. Very significantly increase (75% or greater) B. Significantly increase (50-75%) C. Moderate increase (25-50%) D. Slightly increase (<25%) E. No change F. Slightly decreased (<25%) G. Moderate increase (25-50%) H. Significantly decreased (50-75%) I. Very significantly decreased (75% or greater) J. Completely stopped
b. OPTIONAL: Would you like to add any additional comments on changes to environmental education programs or other economic benefits in 2020?	Open-ended	
MODERATORS		
25. Were there any changes in the following programs due to the COVID-19 pandemic... - Government subsidy programs - Other government programs - Non-governmental programs	Multiple choice – 3 part	A. Yes B. No C. Not applicable D. I don't know
a. If so, to what extent have government subsidy programs been affected by COVID-19... - In communities in the PA - In communities around the PA	Multiple choice – 2 part	A. Have currently paused all programs B. Subsidies were delayed C. Programs were trimmed D. Other (please list) E. Not sure / they are not any
b. If so, to what extent have other government programs been affected by COVID-19... - In communities in the PA - In communities around the PA	Multiple choice – 2 part	A. Have currently paused all programs B. Subsidies were delayed C. Programs were trimmed D. Other (please list) E. Not sure / they are not any
c. If so, to what extent have non-governmental sustainable development programs been affected by COVID-19... - In communities in the PA - In communities around the PA	Multiple choice – 2 part	A. Have currently paused all programs B. Subsidies were delayed C. Programs were trimmed D. Other (please list) E. Not sure / they are not any
26. OPTIONAL: Would you like to add any additional comments about changes to government subsidy programs, other government programs or non- government programs in the PA in 2020?	Open-ended	

27. Did the advisory council experience any changes to meetings due to COVID-19? If so, please elaborate.	Multiple choice	A. There is no advisory council B. Very significantly increase (75% or greater) C. Significantly increase (50-75%) D. Moderate increase (25-50%) E. Slightly increase (<25%) F. No change G. Slightly decreased (<25%) H. Moderate increase (25-50%) I. Significantly decreased (50-75%) J. Very significantly decreased (75% or greater)
a. Are there any other changes that the advisory council experienced that you would like to elaborate on?	Open ended	<i>(response not required)</i>
OUTCOMES		
<i>Fires</i>		
28. In the five years prior to 2020, how much of a threat were fires in the PA?	Scale	4pt scale: 1 - Not a threat 4 - A severe threat + (does not apply)
a. In 2020, were there any changes in the occurrence of human-caused fires compared to 2019?	Multiple choice	J. Very significantly increase (60% or greater) K. Significantly increase (40-60%) L. Moderate increase (20-40%) M. Slightly increase (<20%) N. No change O. Slightly decreased (<20%) P. Moderate increase (20-40%) Q. Significantly decreased (40-60%) R. Very significantly decreased (60% or greater)
b. In 2020, were there any changes in the occurrence of natural-caused fires compared to 2019?	Multiple choice	A. Very significantly increase (60% or greater) B. Significantly increase (40-60%) C. Moderate increase (20-40%) D. Slightly increase (<20%) E. No change F. Slightly decreased (<20%) G. Moderate increase (20-40%) H. Significantly decreased (40-60%) I. Very significantly decreased (60% or greater)
29. Generally speaking, how does the total area burned in 2020 compare to 2019?	Multiple choice	A. Very significantly increase (60% or greater) B. Significantly increase (40-60%) C. Moderate increase (20-40%) D. Slightly increase (<20%) E. No change F. Slightly decreased (<20%) G. Moderate increase (20-40%) H. Significantly decreased (40-60%) I. Very significantly decreased (60% or greater)

a. To what degree was this change in total area burned due to the COVID-19 pandemic?	Scale	7pt continuous scale: 1-Not due to COVID-19 7-Fully due to COVID-19
<i>Other Illegal Activities</i>		
30. In the five years prior to 2020, how much of a threat was illegal agricultural land clearing in the PA?	Scale	4pt scale: 1 - Not a threat 4 - A severe threat + (does not apply)
a. On average, how does the threat level for agricultural land clearing in the PA in 2020 compare to the threat level in 2019?	Multiple choice	A. Does not apply B. Very significantly increase (60% or greater) C. Significantly increase (40-60%) D. Moderate increase (20-40%) E. Slightly increase (<20%) F. No change G. Slightly decreased (<20%) H. Moderate increase (20-40%) I. Significantly decreased (40-60%) J. Very significantly decreased (60% or greater)
b. To what degree was this change due to the COVID-19 pandemic?	Scale	7pt continuous scale: 1-Not due to COVID-19 7-Fully due to COVID-19
31. In the five years prior to 2020, how much of a threat was illegal logging in the PA?	Scale	4pt scale: 1 - Not a threat 4 - A severe threat + (does not apply)
a. On average, how does the threat level for logging in the PA in 2020 compare to the threat level in 2019?	Multiple choice	A. Does not apply B. Very significantly increase (60% or greater) C. Significantly increase (40-60%) D. Moderate increase (20-40%) E. Slightly increase (<20%) F. No change G. Slightly decreased (<20%) H. Moderate increase (20-40%) I. Significantly decreased (40-60%) J. Very significantly decreased (60% or greater)
b. To what degree was this change due to the COVID-19 pandemic?	Scale	7pt continuous scale: 1-Not due to COVID-19 7-Fully due to COVID-19
32. In the five years prior to 2020, how much of a threat was illegal hunting in the PA?	Scale	4pt scale: 1 - Not a threat 4 - A severe threat + (does not apply)
a. On average, how does the threat level for illegal hunting in the PA in 2020 compare to the threat level in 2019?	Multiple choice	A. Does not apply B. Very significantly increase (60% or greater) C. Significantly increase (40-60%) D. Moderate increase (20-40%) E. Slightly increase (<20%) F. No change G. Slightly decreased (<20%) H. Moderate increase (20-40%)

		I. Significantly decreased (40-60%) J. Very significantly decreased (60% or greater)
b. To what degree was this change due to the COVID-19 pandemic?	Scale	7pt continuous scale: 1-Not due to COVID-19 7-Fully due to COVID-19
33. In the five years prior to 2020, how much of a threat was illegal fishing in the PA?	Scale	4pt scale: 1 - Not a threat 4 - A severe threat + (does not apply)
a. On average, how does the threat level for illegal fishing in the PA in 2020 compare to the threat level in 2019?	Multiple choice	A. Does not apply B. Very significantly increase (60% or greater) C. Significantly increase (40-60%) D. Moderate increase (20-40%) E. Slightly increase (<20%) F. No change G. Slightly decreased (<20%) H. Moderate increase (20-40%) I. Significantly decreased (40-60%) J. Very significantly decreased (60% or greater)
b. To what degree was this change due to the COVID-19 pandemic?	Scale	7pt continuous scale: 1-Not due to COVID-19 7-Fully due to COVID-19
34. In the five years prior to 2020, how much of a threat was illegal mining in the PA?	Scale	4pt scale: 1 - Not a threat 4 - A severe threat + (does not apply)
a. On average, how does the threat level for mining in the PA in 2020 compare to the threat level in 2019?	Multiple choice	A. Does not apply B. Very significantly increase (60% or greater) C. Significantly increase (40-60%) D. Moderate increase (20-40%) E. Slightly increase (<20%) F. No change G. Slightly decreased (<20%) H. Moderate increase (20-40%) I. Significantly decreased (40-60%) J. Very significantly decreased (60% or greater)
b. To what degree was this change due to the COVID-19 pandemic?	Scale	7pt continuous scale: 1-Not due to COVID-19 7-Fully due to COVID-19
35. In the five years prior to 2020, how much of a threat was illegal settlements in the PA?	Scale	4pt scale: 1 - Not a threat 4 - A severe threat + (does not apply)
a. On average, how does the threat level for illegal settlements in the PA in 2020 compare to the threat level in 2019?	Multiple choice	A. Does not apply B. Very significantly increase (60% or greater) C. Significantly increase (40-60%) D. Moderate increase (20-40%) E. Slightly increase (<20%) F. No change

		G. Slightly decreased (<20%) H. Moderate increase (20-40%) I. Significantly decreased (40-60%) J. Very significantly decreased (60% or greater)
b. To what degree was this change due to the COVID-19 pandemic?	Scale	7pt continuous scale: 1-Not due to COVID-19 7-Fully due to COVID-19
36. In the five years prior to 2020, how much of a threat was illegal camping and unpermitted use of trails in the PA?	Scale	4pt scale: 1 - Not a threat 4 - A severe threat + (does not apply)
a. On average, how does the threat level for illegal camping and unpermitted use of trails in the PA in 2020 compare to the threat level in 2019?	Multiple choice	A. Does not apply B. Very significantly increase (60% or greater) C. Significantly increase (40-60%) D. Moderate increase (20-40%) E. Slightly increase (<20%) F. No change G. Slightly decreased (<20%) H. Moderate increase (20-40%) I. Significantly decreased (40-60%) J. Very significantly decreased (60% or greater)
b. To what degree was this change due to the COVID-19 pandemic?	Scale	7pt continuous scale: 1-Not due to COVID-19 7-Fully due to COVID-19
37. For the activities that saw an increase in 2020, please list all groups responsible.	Select <u>all</u> that apply	A. Community members in the PA B. Community members next to the PA C. Domestic visitors D. International visitors E. Tourism companies F. Other enterprises G. Other (please list)
38. OPTIONAL: Were there any other specific reasons, excluding COVID-19, that resulted in changes in these illegal activities? If so, please explain.	Open-ended	<i>(no response required)</i>
39. OPTIONAL: Did you experience an increase in any illegal activities in 2020 that were not previously mentioned? If so, please list examples.	Open-ended	<i>(no response required)</i>
<i>Ecological Restoration</i>		
40. Has there been any changes in the health of any species being monitored in the PA in 2020 compared to 2019?	Multiple choice	A. Significantly improved B. Slightly improved C. No change D. Slightly worsened E. Significantly worsened F. Unknown G. Not applicable
a. If yes, to what degree was this change due to the COVID-19 pandemic?	Scale	7pt continuous scale: 1-Not due to COVID-19 7-Fully due to COVID-19

41. Has there been any changes in the general health of the ecosystem being monitored in the PA in 2020 compared to 2019?	Multiple choice	A. Significantly increased B. Slightly increased C. No change D. Slightly decreased E. Significantly decreased F. Unknown G. Not applicable
a. If yes, to what degree was this change due to the COVID-19 pandemic?	Scale	7pt continuous scale: 1-Not due to COVID-19 7-Fully due to COVID-19
<i>Other</i>		
42. OPTIONAL: Are there any other ecological changes or management changes that the PA experiences due to COVID-19 that you would like mention?	Open ended	<i>(no response required)</i>
43. OPTIONAL: Do anticipate any other ecological changes or management changes that the PA experiences due to COVID-19 in the year 2021 that you would like mention?	Open ended	<i>(no response required)</i>

SUPPLEMENTARY TABLE 1 Average observed forest loss across all survey respondents by direction of response. Forest loss data was gathered from Global Forest Watch.

Survey Response	Average Observed of Forest Loss Between 2019-2020
Decrease (5)	-0.056
Increase (20)	0.164
No change (20)	0.001

SUPPLEMENTARY TABLE 2 Average observed forest loss across protected areas with survey responses and protected areas with no response. Forest loss data was gathered from Global Forest Watch.

Survey	Avg. Forest Loss 2020	Avg. Forest Loss 2019	Avg. Change 2019-2020
Responded	0.167	0.113	0.054
No response	0.092	0.316	-0.224