

Supplementary Materials

Table S1. Interview questions used in this study.

SEMI-STRUCTURED INTERVIEW QUESTIONS	
1.	Do you feel that there is a need to manage for forest pests within your jurisdiction?
2.	How are pests managed in your jurisdiction?
3.	What is your agency's overall objective when it comes to pest management?
4.	If there is a misalignment between objectives and what is happening on the ground—what are the barriers? Do you see ways of overcoming these barriers?
5.	Do you find that bordering agencies tend to manage pest outbreaks differently? In terms of direct control, preventive management, etc.
6.	If an outbreak crosses into your jurisdiction from another jurisdiction, what does that mean? How do you respond? What about the other way around?
7.	Are there significant challenges posed by outbreaks that cross boundaries? If so, what are they?
8.	If your agency is experiencing challenges posed by outbreaks that cross boundaries, can you identify what potential solutions to these challenges might be?
9.	How do you define, “effective” when it comes to managing pest outbreaks? Does your agency assess for “effectiveness”?
10.	Do you feel that your agency's long-term plans are in line with your neighboring agencies' long-term plans? Has this issue been discussed?
11.	Do you find that increasing complexity (number of different land parcels in a management mosaic) in a landscape can increase barriers to effective pest management?
12.	Which forest pests have caused the most significant management issues for you in your region?

Table S2. Means and variance between survey respondent management objective subgroups.

Bold values indicate p value < 0.1 .

Question wording	<u>SINGLE USE</u>			<u>MULTI-USE</u>			<u>Mann-Whit. U Test</u>	
	N	MEAN	STD.DEV.	N	MEAN	STD.DEV.	W	P VALUE
Q1. Pest outbreaks that cross jurisdictional boundaries pose unique challenges to pest management	10	6.40	0.7	24	6.04	1.0	95.0	0.32
Q2. I see interagency collaboration as being a key tool in the present/future as we continue to deal with landscape-level issues such as pest outbreaks	10	6.80	0.63	24	6.40	0.65	77.0	0.06
Q3. I find it easy to work with personnel from neighboring agencies	10	4.80	1.14	24	5.63	1.06	170.0	0.08
Q4. A pest outbreak becomes more difficult to manage once it crosses a jurisdictional boundary	10	5.50	1.65	24	5.46	1.06	104.5	0.54
Q5. I know how my neighboring agencies are managing pest outbreaks	10	4.10	1.45	24	4.92	1.53	160.0	0.16
Q6. Increasing "complexity" (i.e. numbers of different parcels within a management-relevant landscape) in a landscape can increase barriers to effective pest management	10	6.30	0.82	24	5.75	1.51	96.5	0.35
Q7. On a scale of 1 to 10 with 1 being ineffective and 10 being very effective, how would you rate the effectiveness of forest pest management in your region?	10	6.30	1.34	24	6.00	1.98	103.5	0.52

Table S3. Means and variance between survey respondent PACE subgroups. Bold values indicate p value < 0.1.

Question wording	N	<u>ROMO PACE</u>		N	<u>CORI PACE</u>		<u>Mann-Whit. U Test</u>	
		MEAN	STD.DEV.		MEAN	STD. DEV.	W	P VALUE
Q1. Pest outbreaks that cross jurisdictional boundaries pose unique challenges to pest management	18	6.06	1.06	16	6.25	0.68	152.0	0.82
Q2. I see interagency collaboration as being a key tool in the present/future as we continue to deal with landscape-level issues such as pest outbreaks	18	6.56	0.73	16	6.50	0.62	142.0	0.80
Q3. I find it easy to work with personnel from neighboring agencies	18	5.67	1.03	16	5.06	1.18	94.0	0.11
Q4. A pest outbreak becomes more difficult to manage once it crosses a jurisdictional boundary	18	5.28	1.41	16	5.69	1.01	165.0	0.41
Q5. I know how my neighboring agencies are managing pest outbreaks	18	5.06	1.39	16	4.25	1.61	100.5	0.21
Q6. Increasing "complexity" (i.e. numbers of different parcels within a management-relevant landscape) in a landscape can increase barriers to effective pest management	18	6.00	1.28	16	5.81	1.47	131.5	0.49
Q7. On a scale of 1 to 10 with 1 being ineffective and 10 being very effective, how would you rate the effectiveness of forest pest management in your region?	18	5.78	1.59	16	6.44	2.00	170.5	0.35

Table S4. Means and variance between survey respondent age subgroups. Bold values indicate p value < 0.1.

Question wording	<u>AGE: 26-45</u>			<u>AGE: 46-65</u>			<u>Mann-Whit. U Test</u>	
	N	MEAN	STD.DEV.	N	MEAN	STD.DEV.	W	P VALUE
Q1. Pest outbreaks that cross jurisdictional boundaries pose unique challenges to pest management	14	6.29	0.73	20	6.05	0.86	155.0	0.57
Q2. I see interagency collaboration as being a key tool in the present/future as we continue to deal with landscape-level issues such as pest outbreaks	14	6.71	0.61	20	6.40	0.68	178.0	0.13
Q3. I find it easy to work with personnel from neighboring agencies	14	5.36	1.01	20	5.40	1.23	131.0	0.75
Q4. A pest outbreak becomes more difficult to manage once it crosses a jurisdictional boundary	14	5.43	1.60	20	5.50	1.24	149.5	0.74
Q5. I know how my neighboring agencies are managing pest outbreaks	14	4.36	1.65	20	5.50	1.45	111.0	0.37
Q6. Increasing "complexity" (i.e. numbers of different parcels within a management-relevant landscape) in a landscape can increase barriers to effective pest management	14	5.79	1.53	20	6.00	1.26	128.5	0.68
Q7. On a scale of 1 to 10 with 1 being ineffective and 10 being very effective, how would you rate the effectiveness of forest pest management in your region?	14	6.21	2.04	20	6.00	1.65	137.0	0.93

Table S5. Means and variance between survey respondent education subgroups. Bold values indicate p value < 0.1 .

Question wording	<u>ADVANCED DEGREE</u>			<u><ADVANCED DEGREE</u>			<u>Mann-Whit. U Test</u>	
	N	MEAN	STD.DEV.	N	MEAN	STD. DEV.	W	P VALUE
Q1. Pest outbreaks that cross jurisdictional boundaries pose unique challenges to pest management	16	6.50	0.63	18	5.83	0.99	204.0	0.03
Q2. I see interagency collaboration as being a key tool in the present/future as we continue to deal with landscape-level issues such as pest outbreaks	16	6.81	0.54	18	6.28	0.67	210.5	0.01
Q3. I find it easy to work with personnel from neighboring agencies	16	5.06	1.29	18	5.67	0.91	106.0	0.16
Q4. A pest outbreak becomes more difficult to manage once it crosses a jurisdictional boundary	16	5.75	1.18	18	5.22	1.26	180.5	0.19
Q5. I know how my neighboring agencies are managing pest outbreaks	16	4.19	1.52	18	5.11	1.45	88.5	0.05
Q6. Increasing "complexity" (i.e. numbers of different parcels within a management-relevant landscape) in a landscape can increase barriers to effective pest management	16	6.31	0.70	18	5.56	1.69	180.5	0.18
Q7. On a scale of 1 to 10 with 1 being ineffective and 10 being very effective, how would you rate the effectiveness of forest pest management in your region?	16	6.56	1.59	18	5.67	1.91	188.0	0.12

Table S6. Means and variance between survey respondent time with agency subgroups. Bold values indicate p value < 0.1 .

Question wording	TIME W/AGENCY: <10 YRS			TIME W/AGENCY: >10 YRS			Mann-Whit. U Test	
	N	MEAN	STD.DEV.	N	MEAN	STD. DEV.	W	P VALUE
Q1. Pest outbreaks that cross jurisdictional boundaries pose unique challenges to pest management	10	6.60	0.70	24	5.96	0.91	173.5	0.03
Q2. I see interagency collaboration as being a key tool in the present/future as we continue to deal with landscape-level issues such as pest outbreaks	10	6.80	0.63	24	6.42	0.65	163.5	0.06
Q3. I find it easy to work with personnel from neighboring agencies	10	4.90	1.60	24	5.58	0.82	94.5	0.29
Q4. A pest outbreak becomes more difficult to manage once it crosses a jurisdictional boundary	10	5.80	1.23	24	5.33	1.24	146.5	0.30
Q5. I know how my neighboring agencies are managing pest outbreaks	10	4.30	1.57	24	4.83	1.52	90.5	0.20
Q6. Increasing "complexity" (i.e. numbers of different parcels within a management-relevant landscape) in a landscape can increase barriers to effective pest management	10	6.30	0.67	24	5.75	1.54	140.5	0.41
Q7. On a scale of 1 to 10 with 1 being ineffective and 10 being very effective, how would you rate the effectiveness of forest pest management in your region?	10	6.50	1.78	24	5.92	1.82	142	0.39

Table S7. Means and variance between survey respondent discipline subgroups. Bold values indicate p value < 0.1.

Question wording	N	<u>ENTOMOLOGY</u>		N	<u>FORESTRY</u>		N	<u>ECOLOGY</u>		<u>KRUS. WALLIS TEST</u>		
		MEAN	STD.DEV.		MEAN	STD. DEV.		MEAN	STD. DEV.	CHI-SQUARE	DF	P VALUE
Q1. Pest outbreaks that cross jurisdictional boundaries pose unique challenges to pest management	5	6.40	0.55	22	6.00	0.97	7	6.42	0.79	1.59	2	0.45
Q2. I see interagency collaboration as being a key tool in the present/future as we continue to deal with landscape-level issues such as pest outbreaks	5	7.00	0	22	6.36	0.66	7	6.71	0.76	5.91	2	0.05
Q3. I find it easy to work with personnel from neighboring agencies	5	6.00	0	22	5.45	1.22	7	4.71	0.95	5.39	2	0.06
Q4. A pest outbreak becomes more difficult to manage once it crosses a jurisdictional boundary	5	5.60	1.14	22	5.32	1.25	7	5.86	1.34	1.40	2	0.49
Q5. I know how my neighboring agencies are managing pest outbreaks	5	4.60	1.14	22	4.91	1.66	7	4.00	1.29	2.86	2	0.24
Q6. Increasing "complexity" (i.e. numbers of different parcels within a management-relevant landscape) in a landscape can increase barriers to effective pest management	5	6.40	0.89	22	5.68	1.55	7	6.29	0.76	1.58	2	0.45
Q7. On a scale of 1 to 10 with 1 being ineffective and 10 being very effective, how would you rate the effectiveness of forest pest management in your region?	5	6.80	1.30	22	5.86	2.01	7	6.29	1.38	1.87	2	0.39