## Challenges in managing invasive raccoons in Japan

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### Appendix S1. Questionnaire

## QUESTIONS

### Difficulties officers felt they faced

(Do you feel that following items are difficult?)

• Unknown regional status of raccoon (filtered question) please select items

# ANSWER TYPE

5-point scale (1 = very difficult, 5 = not at all difficult)

- (MA)
- 1. population
- 2. distribution
- 3. density
- 4. crop damage
- 5. property damage
- 7. native species
- 8. other

- Unknown ecological characters of raccoon
- Unknown procedure for control
- •Unknown effective methods of trapping
- Decrease in motivasion of captors
- •Decrease in motivasion of officers
- ·Lack of cooperation amang various group
- Budget shortfall
- Captors shortage
- Officers shortage
- Experts shortage
- · Problems related to residents
- · Problems related to prefecture
- · Problems related to municipality
- ·Unknown role of prefecture/municipality
- •No compensation for captors

What kind of relevant control information is difficult to obtain? N

- MA
- 1. collect information about invasion
- 2. plannning for control
- 3. consensus building effort
- 4. monitoring after trapping
- 5. technical development
- 6. revision of control

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QUESTIONS	ANSWER TYPE
Current situation with regards to non-native species management	
How many officers in charge of non-native species management?	FA
	O officers
How much is the expenses used for raccoon management in 2011?	FA
	O JPY
Are you getting expert cooperations?	SA
	1. yes 2. no
(filtered question) please select the type of cooperating organization	<ul> <li>(MA)</li> <li>1. municipality</li> <li>2. prefecture</li> <li>3. researcher</li> <li>4. NPO</li> <li>5. police</li> <li>6. public animal shelter</li> <li>7. Japan agricultural cooperatives</li> <li>8. museum</li> <li>9. zoo</li> <li>10. botanical garden</li> <li>11. university</li> <li>12. public research institution</li> <li>13. private research institution</li> <li>14. nature conservation organization</li> <li>15. hunting association</li> <li>16. own institution</li> <li>17. other</li> </ul>
What kind of information about raccoon invasion do you collect?	SA 1. damage
	<ol> <li>habitat and invasion</li> <li>both</li> <li>No collecting</li> </ol>

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QUESTIONS	ANSWER TYPE
oes invasion information share among departments?	SA
	1. yes
	2. no
	3. only one department
	4. other
What kind of management items do you implement?	МА
	1. collect information about invasion
	2. planning for control
	3. consensus building effort
	4. monitoring after trapping
	5. technical development
	6. revision of control
Do you set indice to assess raccoon control?	SA
	1. yes
	2. no
Do you think control was effective?	SA
	1. yes
	2. no
	3. neither agree nor disagree
	4. other
(filtered question) please select items you think	(MA)
	1. prevention of invasion
	and establishment
	2. population decrease
	3. decrease capture number
	by decreasing population
	4. low capturing efficiency
	by decreasing population
	5. reduce damages
	6. increasing native and/or
	protected species
	7. others

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QUESTIONS	ANSWER TYPE
(filtered question) please select quantitative indices you collect	<ul> <li>(MA)</li> <li>1. prevention of invasion and establishment</li> <li>2. population decrease</li> <li>3. decrease capture number by decreasing population</li> <li>4. low capturing efficiency by decreasing population</li> <li>5. reduce damages</li> <li>6. increasing native and/or protected species</li> <li>7. others</li> </ul>
What is the main object you control raccoon?	<ul><li>SA</li><li>1. prevent crop damage</li><li>2. prevent property damage</li><li>3. prevent damage to native ecosystems</li><li>4. other</li></ul>
When did you start raccoon management?	SA 1. since O 2. unknown