



Bearing all down under: The role of Australasian countries in the illegal bear trade

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1 **Bearing all down under: The role of Australasian countries in the illegal bear**
2 **trade**

3

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11

12 **Abstract.** Illegal wildlife trade (IWT) is a leading concern for conservation and biosecurity
13 agencies globally, and involves multiple source, transit, and destination countries smuggling
14 species on a transnational scale. The contribution of non-range countries for driving demand
15 in IWT is often overlooked. Here we report on 781 seizures of bear parts and derivatives in
16 Australia and New Zealand from 33 countries over the last decade. The majority of seizures
17 were medicinal (gall bladder and bile) products, but also included a range of body parts,
18 hunting trophies, and meat. Australia and New Zealand have no native bear species, and yet
19 are frequently involved in wildlife seizures, and illegal bear trade continues to be an
20 enforcement issue. Conservation research in non-range countries needs to be conducted to
21 determine the demand and threats from IWT, and to increase collaborative strategies to
22 counter transnational smuggling.

23

24 **Key Words:** Biosecurity seizures, CITES, traditional medicine, trophy hunting, wildlife trade

25

26 Introduction

27 The illegal wildlife trade (IWT) is a leading cause of global biodiversity loss, and often involves
28 multiple actors across different source, transit and destination countries; impacting species
29 on a transnational scale (Phelps et al. 2016; van Uhm 2016; Gore et al. 2019). The insatiable
30 demand for wildlife as pets, food, traditional medicines, luxury goods, and trophies and
31 ornaments is driving the decline and extinction of an increasingly long list of species (Berec et
32 al. 2018; Scheffers et al. 2019). Once a species is targeted by trade demands can very quickly
33 diminish wild populations (Lindenmayer and Scheele 2017; Auliya et al. 2016). Bears (Family:
34 Ursidae) are among the many large-bodied mammals heavily exploited and threatened by
35 global wildlife trade (Foley et al. 2011; Burgess et al. 2014). There are eight extant species of
36 bears – American black bear *Ursus americanus*, Asiatic black bear *Ursus thibetanus*, brown
37 bear *Ursus arctos*, giant panda *Ailuropoda melanoleuca*, sloth bear *Melursus ursinus*,
38 spectacled bear *Tremarctos ornatus*, sun bear *Helarctos malayanus* and the polar bear *Ursus*
39 *maritimus*. Six of the eight bear species are listed on CITES Appendix I (the exceptions being
40 the American black bear, polar bear and certain populations of the brown bear, which are all
41 listed in Appendix II), explicitly prohibiting the international commercial trade in wild animals
42 and their parts, as market demands are considered a significant threat to the conservation
43 status of their remaining populations.

44

45 Bears are harvested for their gall bladder and bile, coveted in traditional Asian medicines
46 (Foley et al. 2011). Their meat and paws are considered delicacies by some, and their body
47 parts (e.g., skins, skulls, claws, teeth) are prized as trophies (Mills and Servheen 1994;
48 Shepherd and Nijman 2007; Gomez et al. 2020). Live bears are captured for the pet trade, to
49 stock facilities for extracting bear bile (otherwise known as bear farms), and for wildlife
50 exhibitions and performances, including bear baiting activities (D’Cruze et al. 2011;
51 Livingstone et al. 2018).

52

53 The exploitation of bears has been well documented across Asia (Foley et al. 2011; Nijman et
54 al. 2017; Nijman et al. 2017; Crudge et al. 2018; Livingston et al. 2018; Gomez and Shepherd
55 2019), where IWT is considered one of the leading cause of population declines (Mills and
56 Servheen 1994; Burgess et al. 2014). Yet, outside the Asian region international smuggling of
57 bears is less well documented or understood. Europe is one of the biggest importers of bear

58 trophies, which is likely leading to unsustainable levels of harvest in some places. A recent
59 analysis of seizures in the Czech Republic revealed the international smuggling of bear parts
60 and derivatives into the country involved countries and territories from as far away as Canada
61 and Viet Nam, to neighbouring Slovakia (Shepherd et al. 2020). Illegal trophy hunting of
62 native bears occurs within Europe and North America, alongside legally permitted hunting,
63 but its extent, as well as any downstream transnational trade dynamics, remains largely
64 unknown (Gaius 2018; Braden, 2014).

65

66 Here, we examined the seizure of bear parts and derivatives in Australia and New Zealand,
67 neither of which have native bear species, but which have been reported to contribute, along
68 the supply chain, to the international smuggling of wildlife (Su 2020; Williams 2020). We
69 collated biosecurity and conservation enforcement agency records of CITES seizures from
70 Australia and New Zealand. Wildlife seizures never provide the full picture of IWT, because
71 the detection of illicit goods is highly variable and never absolute (Clarke et al. 2018).
72 However, New Zealand and Australia are both island nations with some of the most renowned
73 biosecurity and border surveillance systems in the world (Brenton-Rule et al. 2016; Lane et
74 al. 2019), and we believe that this dataset is the most complete available, for these two
75 countries. Considering this, we analyse the dynamics (source, type, and quantity) of bear
76 seizures in both countries to gain a deeper understanding of the IWT, and to raise awareness
77 among enforcement agencies for mitigating the international smuggling of bear parts and
78 derivatives, and reducing the global threat to bears from illegal exploitation.

79

80 **Materials and Methods**

81 *Seizure data*

82 Bear seizures from Australia and New Zealand were collated from CITES reporting and
83 conservation enforcement agency databases: Department of Agriculture Water and
84 Environment (Australia; 2009-2018); and in New Zealand (2007-2018) from the Department
85 of Conservation, and the Ministry for Primary Industries. Databases were searched for all
86 relevant records using the case insensitive terms: bear, *Ursus*, *Melursus*, *Helarctos*,
87 *Tremarctos*, *Ailuropoda*, and *Ursidae*. Records were then manually checked for spurious
88 entries (e.g., “Brown teddy bear and white stuffing containing 1 shingleback lizard”; “1 x bear
89 statue carved from whale bone”) and obvious duplicates. All of the bear seizure records were

90 for 'Personal Use'. Over 90% of the seizure records were missing a smuggling method or mode
91 of transport (Australia 91.6%; New Zealand 96.6%). However, for both countries there were
92 records of bear parts and derivatives being sent unaccompanied (by mail and cargo) and
93 concealed on passengers among personal luggage. For Australia only (i.e., not available from
94 the New Zealand database), the seizure reason was provided as 'not accompanied by a valid
95 permit' and the outcome was reported as either: (1) forfeited/disposed; or (2) released back
96 to the traveller for either 'Pre-CITES' or 'Other' reasons.

97

98 Variables of interest included: (i) the species seized; (ii) the year of the seizure; (iii) the port
99 of entry (for Australia only); (iv) the origin of the incident, listed as both the country of export,
100 and the country of last departure; (v) the commodity, grouped into the following categories
101 (a) Flesh/Meat, (b) Medicine, (c) Skin/Fur, (d) Trophy/Head/Body, (e) Claws/Teeth; and (vi)
102 the amount (or volume) of commodities seized, where provided. Analyses were conducted
103 between commodity types across seizures.

104

105 *Analysis*

106 Trends in the number of seizures, through time, were analysed using negative binomial
107 regressions, to account for over-dispersion. Logistic regressions were used to test for the
108 proportional change in the seizures through time, and between exporting regions; including
109 the seizure outcome, for Australia only. All data visualisation and analyses were conducted in
110 the R software environment version 4.0.3 for graphical and statistical computing (R Core
111 Team 2020). Contingency-type frequency tests were used to visualise and assess the
112 independence of categorical variables (using the R package 'vcd': Zeileis et al. (2007), Meyer
113 et al. (2020)). The homogeneity of the categorical frequencies was evaluated with Wald Chi-
114 square tests for independence ($\alpha < 0.05$).

115

116 **Results**

117 *Australian Seizures*

118 From 2009 to 2018, there were 369 seizures of bear parts and derivatives in Australia. The
119 number of bear seizures declined through time (2009-2018) from a maximum of 74 in 2011
120 to a minimum of 12 in 2018 (negative binomial regression; estimate = -0.18, std err = 0.03, z-
121 value = -5.19, $P < 0.001$) (**Fig. 1**). However, the percentage of bear seizures (average = 3%

122 across all seizures of CITES specimens reported by Australian authorities) increased through
123 time (logistic regression; estimate = 0.05, std err = 0.020, z-value = 2.50, P = 0.0125).

124

125 The most common and abundant seized commodity was traditional medicines (63.7% of
126 seizures) (**Table 1**), which were manufactured into various products including pills, powders,
127 ointments, creams, wine, etc. The proportion of bear seizures that were medicines, did not
128 decline significantly through time from 2009 to 2018 (logistic regression; estimate = -0.05, std
129 err = 0.045, z-value = -1.23, P = 0.219; **Fig. 1**). The next most frequent seizures were of trophies
130 and body parts (31.7%), which encompassed claws, teeth, skins, skulls and taxidermy of whole
131 animals and heads. Lastly, canned and packaged bear meat were also seized (n = 17 seizures).
132 No meat seizures were returned to travellers, and the proportion of seizures forfeited from
133 travellers was significantly greater for medicines and teeth/claws than for trophies and other
134 body parts (skins, rugs, heads) (**Fig. 2**).

135

136 Three-quarters of seizures were not identified to species (75.9%). The species most regularly
137 identified (84.3% of the 89 identified seizures) were the American black bear and brown bear,
138 and these were predominantly for trophies. Seizures of sun bear (n = 3), polar bear (n = 2),
139 and Asiatic black bear (n = 9) were reported. In a very small number of cases medicines seized
140 were apparently identified to species; i.e., Asiatic black bear (n = 9) and sun bear (n = 2). Most
141 seizures (93%) were identified to an Australian destination (Port Authority), and seizures were
142 reported from all eight mainland Australian States and Territories (including Tasmania), with
143 Queensland reporting the highest number (approximately two-thirds; 65.3%) of seizures with
144 a declared destination.

145

146 Thirty countries/territories (**Appendix 1**) were identified in the smuggling of bear products to
147 Australia. However, five countries/territories (i.e., China, United States, Canada, Hong Kong,
148 and Japan) accounted for approximately two-thirds (65%) of all seizures, and China alone was
149 accountable for 37.7% of reported origins. Approximately 28% of seizures had a different
150 declared point of origin from the country of last export (i.e., departure). For the seven
151 countries/territories of last export, involved in more than ten (10) seizures, the proportion of
152 matches between origin and export differed from 0.0 (New Zealand; i.e., all seizures arriving

153 in Australia from NZ had a different country of origin) to 0.947 (China and Canada; i.e., the
154 majority of seizures originated from the same country) (**Fig. 3**).

155

156 The majority of seizures from China ($n = 96$) were of medicinal products (96.9%), while two-
157 thirds (67.4%) of all trophy seizures (head, bodies, skins, rugs) originated from North America
158 (Canada, United States) (**Fig. 4**). Countries with a significantly greater proportion of seizures
159 were: (i) United States for claws/teeth and skin/rug; (ii) Japan for flesh/meat; (iii) Canada for
160 trophy/head/body; and (iv) China for medicine (**Fig. 4**). Finland was the most frequently
161 reported country of origin for canned bear meat ($n = 7$ incidents).

162

163 *New Zealand Seizures*

164 From 2007 to 2018, there were 412 seizures of bear parts and derivatives in New Zealand.
165 The number of bear seizures varied through time from a maximum of 52 in 2009 to a
166 minimum of 13 in 2018, although no trend was evident (negative binomial regression;
167 estimate = -0.06, std err = 0.03, z-value = -1.68, $P = 0.093$) (**Fig. 1**). The proportion of bear
168 seizures (average = 0.67% across all seizures of CITES personal-use wild-caught specimens
169 reported by New Zealand authorities) significantly decreased through time (logistic
170 regression; estimate = -0.058, std err = 0.020, z-value = -2.87, $P = 0.004$).

171

172 The most common and abundant seized commodity was traditional medicines (82% of
173 seizures); described as medicine, derivatives, extract, powder or gall/gall bladder. The
174 proportion of bear seizures that were medicines declined significantly through time, across
175 the years 2007-2018 (logistic regression; estimate = -0.15, std err = 0.038, z-value = -3.88, $P =$
176 0.0001; **Fig. 1**). The next most frequent seizure were of body parts and trophies (14.7%;
177 bones, claws, hair, paws, skins, skulls, teeth) (**Table 2**). One third (28.4%) of seizures were
178 unidentified to species. The species most frequently identified was the Asiatic black bear ($n =$
179 201) followed by American black bear ($n = 38$) and brown bear ($n = 37$), sun bear ($n = 16$), and
180 polar bear ($n = 3$).

181

182 Twenty-one countries were involved in the smuggling of bear products to New Zealand
183 (**Appendix 1**), with only 2% of seizures (9 out of 412) unassigned to a country of last export.
184 However, China alone was accountable for 71.2% of all seizures, and North America (United

185 States and Canada) responsible for a further c. 10% of seizures. The next largest country of
186 origin was Viet Nam with 2.7% (11 out of 412) seizures. Whereas seizures from China were
187 mostly medicinal products (99%), the United States and Canada were almost exclusively
188 involved in seizures of body parts (claws/teeth; skin/fur; trophy/head/body).

189

190 **Discussion**

191 The illegal and unsustainable commercial use of wildlife is a significant driver of species
192 decline globally (Rosen and Smith 2010). The widespread trade of bears is an example of the
193 far-reaching consequences commercial use can have on particular taxa. Australia and New
194 Zealand have no native bear species, and yet both countries were involved in seizures from a
195 broad range of countries/territories, and of many different commodities – from medicines,
196 through meat, body parts, and trophies. Thirty-three source and transit countries/territories
197 (from Asia, Europe, Americas, Middle-East, and Africa; **Appendix 1**) were involved in the
198 seizures of bear parts and their derivatives, highlighting the extent to which bear trade spans
199 the globe, in violation of CITES regulations and national laws.

200

201 The seizure of bear parts and derivatives consisted primarily of medicinal products (73%) and
202 hunting trophies (23%); . In Australia, the frequency of seizures has increased on average,
203 compared with all other CITES seizures, indicating a persisting market demand for bear
204 trophies and medicines. This is despite the fact that the raw number of seizures has declined
205 through time. The opposite seems to be true for NZ, where seizures involving bears have
206 declined relative to other CITES seizures during the period analysed.

207

208 *Traditional medicine trade*

209 There was a predominant demand for bear derivatives and medicines (particularly bear bile)
210 in Australia (64%) and New Zealand (82%), which as a proportion of the total trade in bear
211 parts declined significantly through time in New Zealand, but not Australia. It would be
212 interesting to determine if this had anything to do with operational surveillance and/or
213 enforcement differences between the two countries. A multi-varied range of bear bile
214 products were confiscated; encompassing powders, haemorrhoid ointments, pills and
215 tablets, liquids and extracts, balls in various sizes and colours (e.g., described as brown, black
216 and white), eye drops, flakes, balm, wine and tea. In one case, eight bottles of bear embryo

217 suspended in honey exported from Turkey was seized in Australia. The harvesting of bears for
218 use in traditional medicine has been in practice for thousands of years (Feng et al. 2009),
219 however, commercialisation of the traditional medicine industry has become one of the
220 leading threats to bears; particularly in Asia (Kemf et al. 1999; Foley et al. 2011). We note that
221 it is difficult to determine which species of Asian bear is used in the manufacturing of bear
222 bile medicines without further forensic testing of products (Peppin et al. 2008; Byard 2016),
223 although the vast majority of bears kept in bear bile extraction facilities are Asiatic black bears
224 (Foley et al. 2011; Willcox et al. 2016). Bears are not only killed for their gall bladders, but live
225 bears are captured to replenish bear farms. For Asian bear species, this demand has nearly
226 depleted wild populations in Cambodia, China, Lao PDR, Myanmar and Viet Nam (Scotson
227 2012; Scotson et al. 2017; Garshelis and Steinmetz 2020).

228

229 China reportedly has the largest number of and biggest bear farms in Asia; estimated to be
230 holding over 20,000 captive bears on 68 licensed farms, and a further 2,000 bears on illegal
231 farms (World Animal Protection 2020). Despite a ban on the international trade of bears, the
232 illegal import and export of bear bile products continues to persist globally (Burgess et al.
233 2014, Nijman et al. 2017, Shepherd et al. 2020). While countries in Asia are under pressure to
234 phase out bear bile farming, sectors within China are still promoting the use on a commercial
235 scale (Fobar, 2020). China's 'Belt and Road Initiative', includes specific goals to expand its
236 traditional medicine market (Hinsley et al. 2020), which is likely to stimulate demand further
237 and heighten existing threats to species consumed. Across the rest of Asia, trade driven
238 demand, in combination with loss of suitable habitat and conflict with humans, is causing bear
239 populations to decline (Kemf et al. 1999; Scotson et al. 2017; Garshelis and Steinmetz 2020).

240

241 *Trophy trade*

242 Canada and the US were the greatest source of seized bear body parts and trophies. In both
243 countries trophy hunting of bears is legal, but is accompanied by poaching. In March 2020, 10
244 people (3 Canadian nationals and 7 US nationals) were convicted for illegally killing black
245 bears in Canada, falsifying records and illegally transporting hides to the US for taxidermy (CR
246 Shepherd pers. comm.). According to the International Fund for Animal Welfare (IFAW),
247 between 2004 and 2014, 1.7 million hunting trophies were recorded in international trade
248 (IFAW 2016), with Australia ranked 16th in the trade of hunting trophies; with the American

249 black bear and brown bear the top two species imported. Considering the industry is driven
250 by commercial utilisation of wildlife, greater scrutiny is needed to assess the impacts of illegal
251 offtake and smuggling.

252

253 *Meat trade*

254 To a much lesser extent, there was a boutique demand for canned/tinned bear meat,
255 originating mostly from Finland and Japan. To our knowledge, very little is known of the
256 international trade (legal or illegal) of bear meat, and further investigation into this trade
257 would help shed light on the dynamics of the trade, including levels of trade, species involved,
258 and demand communities.

259

260 **Conclusion and Recommendations**

261 Illegal trade in bear parts and derivatives extends beyond bear range countries, and beyond
262 well-known consumer countries, such as China, which have been the focus of attention in the
263 past (Foley et al. 2011; Burgess et al. 2014; Shepherd et al. 2020). Demand for traditional
264 medicines containing bear parts, and for body parts of bears coveted as trophies, clearly exists
265 in Australia and New Zealand. Seizures provide an insight into the smuggling and demand for
266 wildlife, but do not provide a comprehensive picture of the scale of the trade nor the volumes
267 involved.

268

269 Agencies tackling wildlife crime in both NZ and Australia are under-resourced and rely heavily
270 on biosecurity enforcement to detect wildlife smuggling. We believe that it is likely that the
271 level of successful bear smuggling (i.e., not seized by border quarantine agencies) will be
272 much higher in other countries with less established biosecurity enforcement. While the large
273 number of seizures reveals that enforcement is important, it does not address how to reduce
274 the demand, nor how to continue to lower smuggling efforts. Further research into the
275 demand for bear parts and derivatives, in non-range countries, will help to understand the
276 extent of the IWT, and to develop effective strategies (including education and behaviour
277 change) to counter the demand. However, as bear parts and derivatives are entering Australia
278 and New Zealand from a wide range of international sources, and transit countries, there is
279 also a need for increased international collaboration to tackle this transnational crime.

280

281 Given that seizures provide an incomplete picture of the IWT, we make the following
282 recommendations. Firstly, we have identified that the illegal bear trade to Australia and New
283 Zealand exists, encompassing a range of countries/territories across Asia, Europe, Americas,
284 Middle-East, and Africa, and continues to be an enforcement issue. Research in other non-
285 range countries should be conducted to help determine the global demand for bear parts and
286 derivatives, and to identify whether a commercial market exists to supply the personal
287 consumption practices. Secondly, relevant agencies in the source countries, identified for the
288 bear trade to Australia and New Zealand, should be encouraged to increase efforts to detect
289 illegal bear parts and derivatives being transported out of their jurisdictions. Thirdly, using
290 existing cooperative platforms, such as CITES and the Interpol Wildlife Crime Working Group,
291 countries involved in the smuggling of bear parts and derivatives should increase
292 collaborative strategies to counter IWT. For example, Australian seizures originating from
293 New Zealand constituted almost 5% of incidents (17 out of 369). Finally, Australian and New
294 Zealand authorities can be made aware of the source countries, which have been identified
295 here as participating in bear trade, and deploy appropriate evidence-based surveillance effort
296 to complement existing biosecurity and enforcement activities.

297

298 **Conflicts of Interest**

299 The authors declare no conflicts of interest.

300

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305

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315

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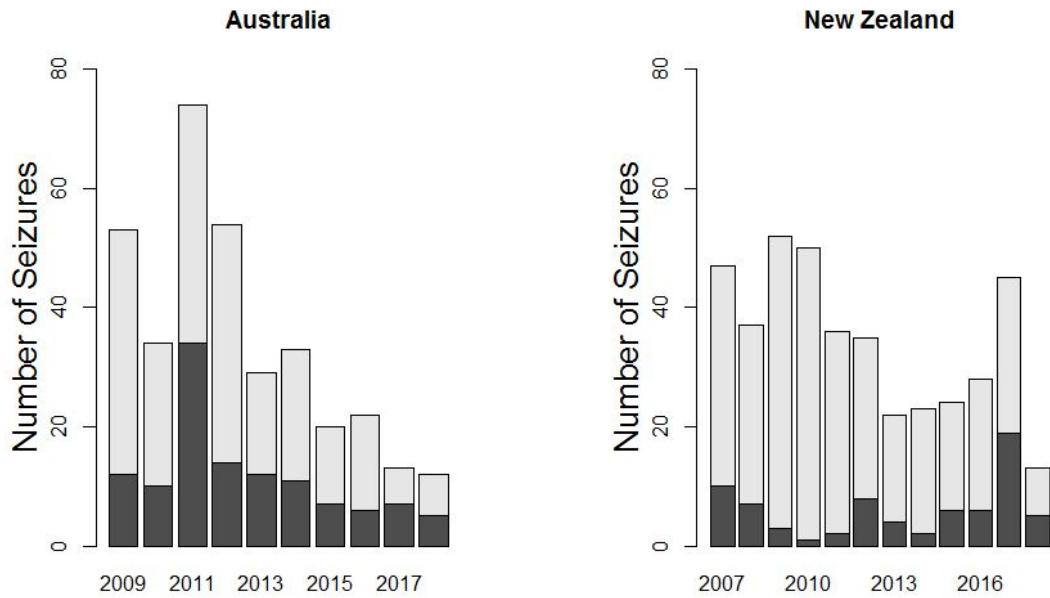
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422 FIGURES AND TABLES

423

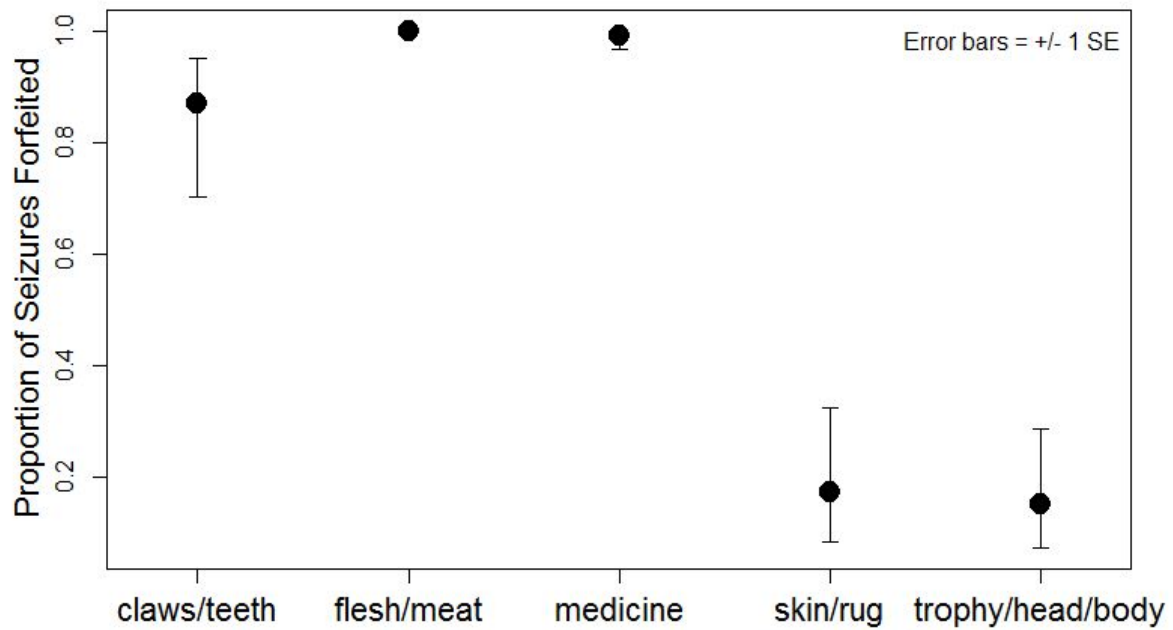
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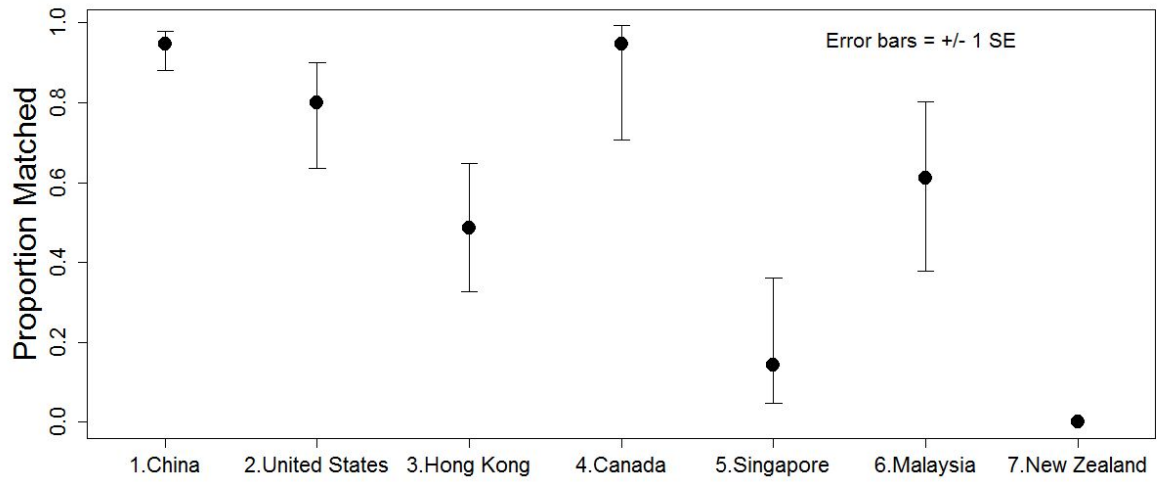
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426 **Fig. 1.** The annual number of seizures of bear parts and derivatives in Australia (2009-2018; n
 427 = 369) and New Zealand (2007 to 2018; n = 412), summed across all bear species; with
 428 medicinal derivatives (light bars) and all other body part types (dark bars) distinguished.

429



430
431 **Fig. 2.** The differences in the proportion of Australian seizures forfeited by enforcement
432 authorities across different seizure types. The majority of trophy seizures (83.7%), including
433 skins and rugs, were legally permitted for import into Australia, and were returned to
434 travellers.

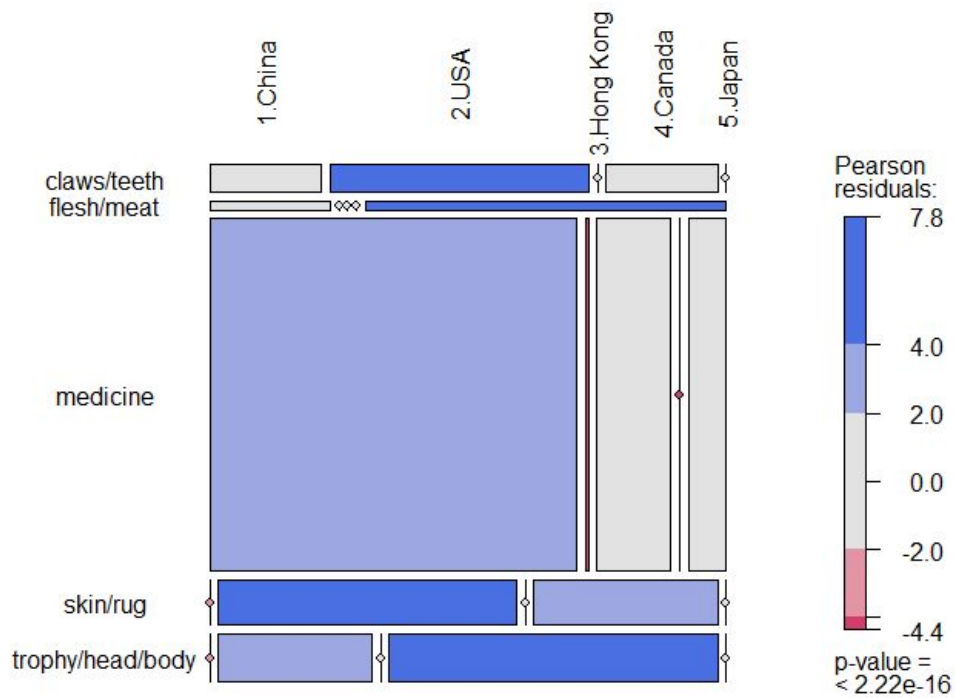


435

436 **Fig. 3.** The differences in the proportion of matching countries/territories between the
437 declared point of origin and the country of last export for the top seven countries/territories
438 of last export, i.e., those that were involved in more than ten (10) seizures.

439

440



441

442

443 **Fig. 4.** Matrix plot of the proportional representation between the five commodity types and
 444 the top five countries most involved in Australian seizures. Higher Pearson residuals indicate
 445 the observed frequency is significantly greater (blue) or lesser (red) than expected under
 446 independence.

447 **Table 1. Types and quantities of bear parts and derivatives seized in Australia from 2009 to**
 448 **2018 (n = 369)**

449 Quantity is the reported minimum amount, as it doesn't include information from seizures
 450 with missing or unknown information.

Commodity	Reported Quantity	No. of Seizures
Meat (cans/tins)	24	17 (4.6%)
Medicines		235 (63.7%)
<i>derivatives*</i>	3185 + 3.224kg	
<i>wine</i>	200ml	
Trophies		117 (31.7%)
<i>claws</i>	69	
<i>body (whole)</i>	12	
<i>heads</i>	4	
<i>skins</i>		
- <i>skins</i>	25	
- <i>skins (head, teeth, claws attached)</i>	17	
- <i>rugs</i>	1	
- <i>rifle sling</i>	1	
- <i>hat</i>	2	
- <i>masks</i>		
<i>skulls</i>	21	
<i>teeth</i>	65	

451 * *manufactured medicinal products were of different brands and forms (i.e., pills, powder,*
 452 *liquid, cream, ointments, tea, etc), size, and packaging (i.e., bottles, boxes, tubes, vials,*
 453 *packets, etc), which contained varying quantities of bear products, largely bile.*

454 **Table 3. Bear commodities seized in New Zealand from 2007 to 2018 (n = 412)**

455 Quantity is the reported minimum amount, as it doesn't include information from seizures
 456 with missing or unknown information.

Commodity	Reported Quantity	No. of Seizures
Meat (kg)		11 (2.7%)
<i>kg</i>	1.95	
<i>cans/tins</i>	5	
Medicines		339 (82.3%)
<i>derivatives</i>	10,181 + 1.31kg + 862ml	
<i>bones</i>	2	
<i>gall bladder</i>	21 + 56g + 23ml	
Trophies		62 (15%)
<i>body (whole)</i>	2	
<i>claws</i>	86	
<i>hair (rug?)</i>	1 + 145g	
<i>paws</i>	1	
<i>skins</i>		
- <i>whole</i>	10	
- <i>piece</i>	5	
<i>skulls</i>	6	
<i>teeth</i>	7	
<i>trophy</i>	3	

457

458

APPENDICES AND SUPPLEMENTARY MATERIAL

Appendix 1. Country-level (n = 33) seizure dataset by commodity for Australia and New Zealand. Australian seizure records include both ‘country of origin’ (outside brackets) and ‘country of last export’ (inside brackets). New Zealand seizures are only reported from ‘country of last export’

Country	Australia					New Zealand				
	claws/ teeth	flesh/ meat	medicine	skin/fur/ rug	trophy/head/ body	claws/ teeth	flesh/ meat	medicine	skin/fur/ rug	trophy/head/ body
Australia								6	1	
Brunei			1 (3)					1		
Cambodia	1									
Canada	3 (1)			8 (9)	15 (12)	13	1	1	4	2
China	3 (2)	1 (1)	125 (92)	(1)		2		285		
Estonia		(1)								
Fiji			(1)							
Finland		7 (2)					2			
Germany				(1)						
Hong Kong		(1)	25 (35)	(1)				10		
Indonesia	1 (1)				3 (3)			1		
Italy					1 (1)					
Japan		3 (3)	13 (8)				2	3		
Lao PDR								1		
Malaysia	3 (4)		10 (15)					2		

Mexico	1 (1)									
Myanmar	1									
Namibia			1							
New Zealand			(12)	(4)	(1)					
Norway							2			
Papua New Guinea		(1)								
Peru						1				
Philippines			2 (3)							
Puerto Rico			1							
Republic of Korea			2 (2)						6	
Russian Federation	1 (1)	1	2		2 (1)	4	3		1	
Singapore	(3)	(2)	5 (16)						2	
South Africa										1
Taiwan			12 (8)						1	
Thailand	(1)		2 (2)						1	
Turkey			1 (1)							
United Arab Emirates	(1)	(1)			(1)					
United Kingdom	1			2 (1)	2 (1)				2	
United States	7 (10)		1 (4)	13 (17)	7 (20)	12	1	2	7	7

Viet Nam

1

9 (8)



11

Do Not Distribute