

#### **6.3.1.4. Pressure to Conform**

The interviews show that, even if individuals did not want to eat wild meat, they may have limited control over their consumption of it. Given the importance of food in social discourse, refusal of a meal sends powerful negative messages, and almost certainly offends the host and damages the relationship<sup>29</sup>. This leads some interviewees to emphasise the importance of halting the supply of wild meat rather than focusing on altering consumption behaviour; these interviewees referring to a need to reduce consumption at all is most probably influenced by the presence of a Western interviewer, but it is nevertheless interesting to note where they place this responsibility (see also Chapter 8):

Businessman and wild meat consumer aged 50:

*Int: Why do you think wild meat is popular for business deals?*

*WM39: I never want to do this. But wild meat is something special and delicious, so I invite people to try. I'm aware that eating wild meat is not good, but it is not easy to choose any other food. The government should do something to prevent the wildlife hunting first and stop restaurants from serving wild meat dishes. Then it may stop people from eating the dishes [...] I wish nobody would invite me to eat wild meat and this can be my contribution to conserving wild animals. When no restaurants sell wild meat, we don't have to go for wild meat.*

Male economics student aged 25 and non-consumer:

*Int: You are studying finance; in the future do you think you will have the opportunity to eat wild meat?*

*CN11: When we are at a party we cannot have total control over the types of dishes that people order. The important thing is the government should do something about the supply of wild meat to the restaurant so that businessmen cannot choose dishes of wild meat, because when we eat we tend to try something that we did not eat before.*

Those with the upper hand may even specifically request be taken to certain restaurants or to eat certain types of foods:

Male driver for director of a securities company aged 36:

*Int: Is it normal to eat wild meat dishes with your business partners?*

*WM26: Yes [...] Each person has his own taste. So when our partners want some kinds of dishes they like, we need to take them there. We need to do what they ask.*

*Int: So you have to do what your partners require?*

*WM26: Yes. For example, when we came back from Hai Phong, we had to go to Le Mat [to eat snake meat].*

---

<sup>29</sup> Demonstrating the potential consequences of not fully participating in social events, on first arriving in Vietnam I recall reading an article in an English print of a Vietnamese newspaper about two government officers being made to write self-criticisms after leaving a work celebration at a karaoke bar early to spend time with their families.

Demonstrating the pressure to serve wild meat further, a Vietnamese acquaintance who required information for her work as a financial journalist approached a relevant government ministry official. He agreed to give her the information she needed over a meal at a restaurant of his choice. The official personally chose and booked a restaurant famed for its wild meat dishes and ordered three soft-shell turtles, each of which were slaughtered at the table and their fresh blood added to rice wine, while my acquaintance's company picked up the bill.

### **6.3.1.5. Shifting Values**

The rapid economic changes Vietnam has undergone in the last two decades are likely to have meant substantial shifts in prestige commodities. For example, during the subsidised period (1975-1986) all foods in Vietnam, as well as other commodities, were highly rationed. Therefore simply having enough food to eat or any meat at all - often by receiving greater ration privileges<sup>30</sup> - was a sign of status:

Male professor aged 51<sup>31</sup>:

*Int: In China as incomes increase overall, the proportion of household expenditure on food increases also. Do you think this is the same in Vietnam?*

*CN38: In the past the economy couldn't provide enough for the people and a compliment was 'you are looking fat'. Now there is a backlash. In a poor economy, having a lot of food to eat or meat is a sign of wealth.*

Thanks to economic reform, food is now in plentiful supply in Hanoi; supermarkets compete with street vendors and restaurants and cafes can be found on nearly every street. Because domestic meat is available "everywhere" it no longer shows anything "special", perhaps leading to a shift towards more rare and expensive foods to express wealth and status:

Army officer and wild meat consumer aged 49:

*Int: Why do they choose such expensive meat?*

*WM15: Eating wildlife specialities seems to be a popular 'movement'. People think that eating precious dishes is something fashionable, showing something luxurious. If they do 'bia hoi'<sup>32</sup> or drink coffee, this shows nothing special.*

Male retired skilled worker and wild meat consumer aged 55:

*WM40: [Eating wild meat] is a new trend.*

*Int: But you've eaten for 25 years...*

*WM40: But I began to eat wild meat in a village, not in a restaurant in a city like today [...]. Because farmed meat is available everywhere, and people want to eat something special.*

---

<sup>30</sup> A recent exhibition at Hanoi's ethnography museum showed how high-ranking officials were able to receive from four to ten times the amounts of some food rations of ordinary people (pers obs.).

<sup>31</sup> Interviewed in English.

<sup>32</sup> *Bia hoi* refers to freshly brewed beer, the popular outlets that serve it, and is also used as a verb.

### 6.3.2. Medicinal Values

A surprisingly small number of interviewees made specific reference to any medicinal or ‘strengthening’ properties of wild meat. Unsurprisingly most of those who did were either older men or talking about older men:

Male retired government official aged 71:

*Int: Have you ever been to a national park?*

*WM10: I've been to some national parks like Ba Vi, and a park in Quang Binh province. I've never been to Cuc Phuong. Regarding wild animals, I think it is important to conserve them. Many Vietnamese people want to try wild meat, as it is delicious and tonic. For example, the meat of tigers and small Indian civets is very good.*

Retired male wild consumer aged 58:

*Int: Is the wild meat more expensive?*

*WM18: Yes, it is. When I try snake meat, I can distinguish the better snake meat: if the gall bladder of a wild snake is full, its meat is better. People think snake gall bladder is good for health like bear gall [...] I think snakes are good for me.*

Female, aged 19, talking about her father<sup>33</sup>:

*Int: Just your father's generation, or young people too?*

*CN09: I think the younger generation doesn't like wild meat very much, but the elder, I don't know why but [my father's] generation, people like to eat wild animals; the elders, they like it. They are quite old and they think it's good for their health.*

This does not mean that younger interviewees do not think wild meat has medicinal value but that these values perhaps are irrelevant while they are young or that younger people are less likely to voice these beliefs (see also Chapter 5). However, given the relatively small number of interviewees who described any medicinal properties of wild meat and the ambiguity of most of these references in contrast to the more detailed references for other wild animal-derived products (see below), it is unlikely that medicinal values are driving wild meat consumption. In contrast, bear bile is widely considered valuable and effective – again, unsurprisingly, by older interviewees in particular - and a medicine that people “need”:

Retired female aged 73:

*Int: Have you ever used a medicine from wild animal?*

*WM33: Yes. I've used bear bile. (Showing us her leg) I fell down and my leg hurt. So I mixed some bear bile with alcohol to use on the skin to relieve pain.*

*Int: Is the bile you use from a farmed bear or from a wild bear?*

*WM33: It is wild [...] My brother in law knows well about bear bile. He went on business and bought some bile from an ethnic person who lives near the forest. So he gave me some when I had the accident. It is really effective [...].*

*Int: Some people think extracting bile from bears is cruel, so it should be prohibited. But it is also a valuable medicine. So what do you think?*

*WM33: I don't know what to say but I think bear bile is a good medicine that people need.*

---

<sup>33</sup> Interviewed in English.

Retired female aged 70 thinks most demand for wild animals is from China:

*Int: The demand in Vietnam, what is that for?*

*CN22: They cater for people's needs. For example, bile from bear, bones from tigers, horns from deers. For other things, I don't know.*

*Int: Do you think to protect the animals the government should ban the use of animals in this way?*

*CN22: I don't think the government should ban because, for example, bear bile is very valuable; it's an effective medicine. We should not ban people from using, but should ban people from hunting animals.*

Generally considered a common household medicine, bear bile is used for an extensive array of ailments from arthritis, sprains, sore throats and coughs, to toothache and bruising. The bile is drunk diluted in alcohol or applied directly to the skin. Python fat is consistently reported as a balm for burns while tiger glue is considered good for bones as well as generally strength-giving. Rhino horn, though possessed by very few (Chapter 1) is also considered versatile, and is thought to have sobering properties:

Female café-owner and wild meat consumer aged 47, talking about rhino horn:

*Int: What happens to that?*

*WM03: [...] People saw the horn into pieces. Then these pieces are ground into a kind of horn liquid that looks like milk. It is said that rhino horn cures every disease.*

Businessman and wild meat consumer aged 50:

*WM39: In 1998, I had an accident and one of my legs was broken. I took some tiger glue, and I recovered soon. So I think the glue made from bones from wild tigers is very good. [...] Would you like to try some wine with tiger glue?*

*Int: No, thank you. (Laughing) I don't have a broken leg!*

*WM39: Many people want to find medicine from wild animals. I have witnessed some drivers being drunk. But after taking some ground rhino horn as a kind of powder they became very sober.*

In contrast to wild meat, interviewees regularly make reference to the 'strength-giving' properties of wild animal-derived medicines. Some medicines are taken to restore strength and preserve health, prevent disease and promote longevity. For example, while carrying out the questionnaire survey we called in to the house of an elderly man who, after inquiring as to whether he could answer some questions for our research about wild animals, immediately responded by saying he needed tiger glue to increase his failing energy. Older men in particular report regularly drinking bear bile in alcohol to increase strength and maintain general good health:

Retired skilled worker aged 55:

*Int: Have you ever tried some medicine from wild animals?*

*WM40: Yes. I use bear bile and try wine soaked with bear legs [...] I bought some wine in which bear legs had been soaked [...] It is really good. Before going to bed, I have a cup of the wine. When I get up, I feel I am stronger.*

Male skilled worker aged 36:

*Int: What about getting vaccine from monkeys to vaccinate humans?*

*CN31: We should do careful research and identify our purposes. We have to answer a question – is the vaccine really necessary for our life? [...] We should use vaccine from monkeys, for example, to cure rabies. But for a rich person who is 70 years old, we should not allow him to use bear bile so that he can live 20 more years!*

Nevertheless, such medicines can also be seen as “precious” and something to serve or display to guests:

Male professor aged 51<sup>34</sup>:

*CN38: [...] Traditional medicine has a practice of putting the snake into strong alcohol. We put the animals there so that the essentials of the animal will come out and dilute into the alcohol and people drink the alcohol. This alcohol gives you strength and can cure some diseases. For example, that's the way they use a kind of medicine made from tiger bones, they sort of cook the tiger bones with some other bones into a kind of medicine which is a kind of hardened liquid and that again is put into alcohol and that will be diluted and mixed with the alcohol.*

*Int: And it gives you some of the energy from the animal?*

*CN38 (nods): Energy.*

*Int: Do they add the live animal to the alcohol or do they kill the animal first?*

*CN38: They kill the animal and they remove the intestines and then they put it in. And for other animals they don't remove the skin. For example I have some birds in wine. I know in northern Vietnam there is a kind of bird that is good for people with broken bones [...] we put the whole bird into the alcohol for a year, and they believe that the alcohol will be good for your bones or your bruises.*

*Int: What about an animal that has venom, is that harmful?*

*CN38: They say that the venom that helps you cure the disease; it is not the meat, not the flesh, it is the venom.*

*Int: I visited a friend's house and her father had a king cobra in a vat in a very conspicuous position.*

*CN38: People just want to show they have that kind of medicine.*

Retired male skilled worker and consumer aged 57:

*WM04: It is alcohol soaked with real bile from a forest bear. It looks like wine. So we can call it wine. It is good for our health.*

*Wife of WM04: It is precious!*

*Int: It is so hot. I cannot drink.*

*WM04: This kind of wine can cure sore throat. It is effective in curing some diseases or problems with internal organs.*

*Int: Is that the taste of the wine or the bile?*

*WM04: It is the taste of black bear gall. It is strong. Three days ago, I had some guests, so I added some more bear bile to the wine. Drink some, please. If you have any cancer or protuberance, the bile can heal [...] I do not suffer from any diseases; I have drunk wine and beer for 30 years. I drink wine soaked with bear gall every day (showing dried bear gall).*

### **6.3.2.1. Tradition**

The few interviewees interviewed in English - perhaps also due to a greater awareness of Western medicine and their perceptions of Western attitudes towards traditional medicine - emphasised that wild animal-derived medicines

---

<sup>34</sup> Interviewed in English.

such as bear bile and tiger glue are considered traditional and Vietnamese, tried and tested by ancestors over hundreds of years<sup>35</sup>:

Male professor and consumer aged 51<sup>36</sup>:

*Int: Have you ever used a medicine from a rhino?*

*CN38: No this is only fairy tale or hearsay. If you say this is good for that or this and (pauses) I have no idea.*

*Int: You don't believe...*

*CN38 (interrupting): I believe, I believe because it is part of a traditional medicine in Vietnam and in fact they use that [...].*

Female professional and consumer aged 33<sup>48</sup>:

*WM27: Many people are hunting now to get tiger glue.*

*Int: Is that useful?*

*WM27: It has been passed from very long, long time ago from our great, great, great grandparents and people all think it's very good but I haven't tried so I have no idea [...] it's difficult to make people understand that they should not eat it but it's much more difficult to get people to stop taking it as medicine because over a very long time its value has been proved a very precious medicine, its medicinal value has been proved, so you can probably stop people from eating it but I don't think you can ever stop people taking it because it's a valuable medicine.*

However, a few interviewees think tiger glue is not an essential traditional medicine, having only recently become popular as a result of rising wealth:

Retired male official aged 57:

*Int: If the tigers in Binh Duong aren't used to make medicine, how will the demand for tiger glue in Vietnam be met?*

*CN36: About 100 years ago, Vietnamese people did not use tiger glue.*

*Int: Why is it popular now?*

*CN36: Many people have more money; maybe 1000 USD.*

Retired sailor aged 45:

*Int: if we don't farm tigers to make tiger glue, how will we meet demand for tiger glue in Vietnam?*

*CN37: There is a demand for tiger glue everywhere, but if there was no tiger glue, it would be fine. Many people have never used tiger glue.*

### **6.3.3. Avoiding Wild Meat and Wild Animal-Derived Medicinal Products**

Very few interviewees said that they would not want to try wild meat given the opportunity. The most common reason given by both questionnaire respondents and interviewees for not having yet - or not having recently - tried wild meat was lack of money. Views that wild meat was unhealthy, dirty or dangerous were rare, and tended to arise from personal experience (see also Chapter 8):

---

<sup>35</sup> In an article entitled "A glimpse of the traditional medicines of animal origin" under a sub-heading "a scientific approach" Nguyen (2006: 158-9) states: "explanations offered by traditional medicine are not always convincing, but these drugs have survived over the centuries, even for thousands of years; their effectiveness has been proved".

<sup>36</sup> Interviewed in English.

Female engineer aged 52 lives in a rural area in central Vietnam:

*Int: Why haven't you eaten [wild meat] recently?*

*CN30 Because I have not returned to my village recently, and also I don't have any need for it. In the past it was cheap and also tasted better. [...] Now when people hunt wild pigs, they dig a hole to preserve each hunted pig with chemicals. Only after a while, they collect all the pigs to sell. Therefore, eating wild pig is dangerous.*

Male skilled worker aged 36:

*Int: I've spoken to many people who ate wild meat in Tam Dao, did your friends not?*

*CN31: I don't like eating wild meat. Ten years ago I went to Perfume Pagoda with my friends. We were served with a dish of bamboo rat [...] I had never eaten it before but it did not smell good to me. [...] From then on, whenever going on a picnic, we bring our own food. I worked in a wild meat restaurant before, and I knew that customers are not often served with fresh meat. Even though some soft shell turtles are killed at the customers' table, the restaurant usually serves them with dead ones preserved for a long time in fridges.*

Moreover, no concern was expressed about the transmission of zoonotic diseases, even when prompted:

Male retired clerk aged 53:

*Int: Does it worry you when you eat meat from animals from the forest?*

*WM13: It is necessary to be careful, but the meat is cooked, so I don't worry about it.*

Male professional aged 25 eats wild meats with colleagues<sup>37</sup>:

*WM28: I think, in my own opinion, I think in the future wild food will become cheaper, but it's not easy for everyone to go to restaurants to buy and try, in some very few cases they want to try and do something unusual. But even when I have a lot of money, I do not like; many people do not like. Many people think it brings diseases or something, they think it's dirty and are afraid that the way the restaurant cooks it is not good.*

*Int: Does anyone worry about SARS or H5N1?*

*WM28 (Laughing): Wild animals do not have these diseases!*

But despite this general absence of concern, one interviewee did note:

Male mechanic and wild meat consumer aged 37:

*Int: Do you think eating wild meat is a new trend?*

*WM26: Yes, a new trend. People get fed up with other kinds of food so they turn to something exotic. If wild meat was affected by H5N1, then no one would eat it.*

A few younger interviewees convey a sense that wild animals, or at least endangered wild animals, should not be consumed. Nevertheless, some of these individuals have eaten wild meat with their main role models – their parents – and are to some extent saying what they think is the ‘correct’ answer, or at least seem unsure of why they think this:

---

<sup>37</sup> Interviewed in English. Note that although the interviewee considers wild meat potentially “dirty” he still eats it; however he goes on to explain that this is under a certain amount of pressure in the context of his work (see also Section 6.3.1.3).

Female student aged 19, eats wilds meat on family birthdays<sup>38</sup>:

*Int: And if it were your birthday would you like to do the same?*

*CN09: No [...] I think it's not necessary to go expensive restaurant like that and I don't want to taste the meat of strange animals like that because I think it's just like normal dishes, and sometimes, just sometimes (laughs nervously) I feel that it's not very good to have this kind of dishes.*

Moreover, only a few – particularly younger and typically with some knowledge of English – interviewees appeared unconvinced by the efficacy of traditional medicines such as bear bile:

Male professional and wild meat consumer aged 25 with higher degree<sup>16</sup>:

*Int: Do you use medicine from wild animals, like bear bile?*

*WM28: I don't like to use medicine from wild animals [...] I think it's risky. I'm not sure if it's good or bad for my health. Many rich people in Hanoi they try to increase their energy so they eat many animals, like the bird bìm bịp [Greater Coucal]<sup>39</sup>, tiger cao and they put snakes in rice wine, this is very popular in Hanoi. But I don't believe it's any good.*

Male professional aged 30:

*Int: Have you ever used bear bile?*

*WM29b: I think people should not maintain their habit of using bear bile; there would be less hunting of bears.*

*Int: What will people do if they need bear bile?*

*WM29b: They can use other kinds of painkillers because other countries do not use bear bile. I play sports, in my team when someone is injured, they are given a kind of gel, I don't remember the name.*

*Int: But maybe Western medicine is not as good?*

*WM29b: I don't think so: if traditional medicine was that good, then all the Chinese and Korean sports teams would be much stronger!*

Male skilled worker aged 36:

*Int: If you don't support farming for commercial purposes, how will Vietnamese people access medicine like bear bile or tiger glue?*

*CN31: [...] Maybe, bear bile and tiger glue are good medicine, but there are many Western medicines which are much better, why don't people use them? [...] Other countries such as America or England, people do not use it but they are still strong. Why do Vietnamese people use it?*

Only one interviewee – a pharmacy student - mentioned western medicines having more side effects than traditional medicines. Despite the habit of some of my Vietnamese friends of making highly personal comments, which would generally be considered offensive in the West, it is possible that interviewees did not wish to criticise western medicines in front of a Westerner who was a stranger to them. Despite the general absence of concern surrounding the quality of wild meat, there are however widespread concerns regarding the quality of farmed bear bile that

---

<sup>38</sup> Interviewed in English.

<sup>39</sup> A whole Coucal (*Centropus sp.*) steeped in alcohol costs 221USD in Hanoi for a twenty litre bottle (Nguyen & Nguyen 2008).



are affecting consumption behaviour; these are presented and discussed in the following chapter.

## **6.4. Discussion**

### **6.4.1. Symbolic Values**

The results support the hypothesis that wild meat is a food through which Hanoian consumers communicate prestige. In Chinese society, eating prestige foods has also been identified as a means of indicating and reinforcing social status (Anderson 1988) and advertising wealth (Manderson 1986). Regarding wild meat specifically, other researchers have also reported that consumers host wild meat meals as a symbol of wealth and social standing in Vietnam (SFNC 2003) and in China (Wu et al. 2001 in Guo 2007; CWCA/PKU unpublished in Guo 2007 in Guo 2007); Guo (2007) also reports the ability of rare wild meat to demonstrate urban Chinese consumers' extensive social connections in addition to their wealth and high status. Donovan (2004) also notes affluent Chinese consumers, whose conspicuous consumption often involves unusual meats, particularly favouring wild animals believed to be rare.

Although the consumption of wild animals to communicate prestige is most widely reported in East and Southeast Asian society, such behaviour is not limited to, although perhaps more common amongst (see Section 2.6.2.), consumers in this area. For example, in urban Ghana, bigger animals are reported to be in particular demand for important feasts (Mendelson et al. 2003), while in Gabon Schenk et al. (2006: 443) found only weak preferences for wild meat based on taste tests, leading the authors to suggest that price or other values such familiarity, tradition or prestige are shaping demand for wild meat. Wild meat is also considered superior in urban India where it can be much more expensive than domestic meats (Hilaluddin & Ghose 2005). In fact, Bennett (2002) suggests a substantial portion of wild meat exchanged in major urban centres in Asia, Africa and the Americas is a 'luxury' trade.

It is recognised that consuming rare wild products can demonstrate status because access to them may entail perceived traits such as money, power and skill (Hall et

al. 2008). Wild meat and other wild animal products, are particularly obvious natural symbols given their historical restriction to elite groups (Jelliffe 1967; Schafer 1968) and because they demonstrate power over the exploitation of natural resources and, correspondingly, of human resources (Fiddes 1992). As such, as in many other societies, the tiger is revered in Vietnam as the 'king of the forest' and displaying a tiger skin can denote prestige (Nguyen & Nguyen 2008: 44). Similarly, in Indonesia numerous people keep endangered bird species as status symbols, valued according to their rarity and grade of legal protection (Shepherd et al. 2004); wealthy European trophy hunters are willing to pay extortionate fees to kill rare species in order to gain social prestige from their peers and demonstrate affluence, and Asian businessmen will pay USD250 for a plate of Napoleon Wrasse (*Cheilinus undulates*) lips to display their prosperity (Courchamp et al. 2006). But placing such importance on rarity is also known to drive disproportionately high exploitation of rare wildlife (Courchamp et al. 2006), and rarity being the most important value associated with wild meat by central Hanoians implies consumers will meet escalating costs of finding the last of a species. In fact, wild species may be desirable amongst central Hanoians precisely because their consumption is costly in terms of the environment rather than in spite of this cost (e.g. Fiddes 1997).

The results also suggest wild meat is perceived to be delicious, not due to its physical qualities, but as a consequence of its relative rarity and expense and its subsequent associations with powerful, wealthy and successful people. Demonstrating this, most French consumers given two caviar samples at luxurious parties expressed a preference for the one they believed to be the rarest despite both samples actually being identical (Gault et al. 2008). Therefore, despite Zhang et al. (2008: 1503) reporting that half of the Chinese consumers responding to their survey - choosing from pre-defined, closed options - reported eating wild meat because it is "delicious" and a quarter because it is "rare", it is likely that rarity in fact contributes to the more commonly expressed perception that wild meat is "delicious".

As in China (Anderson 1988; Simoons 1991; Farquhar 2002; Lo & Barrett 2005), certain medicinal foods and remedies are preferred gifts for those in senior occupational positions in Hanoi also. Robertson (2004) also reports Vietnamese companies buying bone glue in bulk for use as gifts. In addition to their medicinal value, rare and expensive wild animal medicinal and ornamental products are also particularly symbolic and a medium through which prestige is conveyed and useful political and economic alliances are built and maintained. SFNC (2003) also report ornamental wild animal products being used to symbolise wealth and prosperity. For this reason, those in positions of authority are often the recipients of such gifts, the value of such gifts reflecting their power and influence although often out of reach of their own personal income (Davis 2000a).

As a food used to demonstrate prestige, wild meat plays significant roles in social discourse amongst Hanoian consumers, primarily as a means of 'showing off' wealth and status. Rather than a deliberate drive to conspicuously advertise status, consumers may be being driven by an instinctive inclination to meet a certain standard of decency in terms of the volume and grade of goods consumed (Veblen 1934), or to match personal consumption to that of peers with comparable means (Douglas & Isherwood 1979). This pressure may be felt particularly acutely in Hanoi, where residents are reported to be especially status-conscious (Fforde 2003; Matthaes 2006). Even recreational meals amongst friends - the most common context of wild meat consumption reported by surveyed central Hanoians (Chapter 4) - may be subject to expectations of reciprocity and of meeting a certain standard in terms of the foods consumed.

For example, following up an interview with a woman who spent a significant proportion of her income on wild meat meals and yet lived in one small room with her young baby, husband and sister-in-law's family, the interpreter explained how many Hanoians would rather buy the most expensive motorbike and eat at the best restaurants to maintain their social image even if it meant foregoing basic comforts back home (pers. comm. Nguyen Danh Chien). Similarly, in China, hosting feasts confers such social prestige that some will endure years of debt in order to afford to do so (Yang 1994). Indeed, amongst urban Chinese, both Zhang et al. (2008) and

Guo (2007) observe an element of social pressure from others to eat wild meat; as a guest, refusing wild meat is disrespectful and potentially insulting while, simultaneously, hosts are under pressure to show hospitality and to demonstrate wealth and social standing (Guo 2007).

Moreover, those in collective, Confucian societies with interdependent self-concepts are more inclined to conform to social norms and be concerned about losing face within the groups they identify with (see Chapter 2). So even though Vietnamese society is reported to be becoming increasingly individualistic (Nguyen 2004), refusing wild meat on either environmental grounds or due to other personal preferences is likely be seen as putting oneself above collective goals, socially damaging not only to the individual but also the groups they represent, and likely to entail a loss of face.

To a lesser extent, Hanoians also consume wild meat over business or to nurture advantageous relationships with 'friends' or business contacts (Chapter 4). In contemporary China, familiar language of exchange and reciprocity, and the sharing of food especially, is frequently a way of developing useful social networks (Stafford 2000). So as a medium demonstrating wealth and success, it is perhaps unsurprising that wild meat often chosen for business events; it is able to prove business proficiency and show esteem to valued guests, but is also sufficiently prestigious to leave one's guests indebted and obliged to reciprocate. This mirrors the 'entrepreneurial' exchanges used to obtain social or economic advantage that can in turn be converted into useful 'symbolic capital' (van der Veen 2003; Bourdieu 1984; see Chapter 2). This finding supports the argument that those in high-status positions are more likely to be offered wild meat than those in more lowly and less influential positions (Chapter 5).

At entrepreneurial exchanges hosts are under pressure to serve prestige foods such as wild meat because the quality of food served needs to be equal in measure to the nature of the reciprocal action required. For this reason, individuals may be obliged to serve others a sufficiently rare and precious meal such as wild meat, not only to raise their own prestige, but also in order to gain economic and social

advantage to a sufficient level to oblige their guest to reciprocate accordingly; this may not be entirely voluntary and may even be demanded directly or, at the very minimum through tacit coercion (e.g. Stafford 2000).

Because eating wild meat is strongly associated with successful, wealthy and high status individuals, it is unsurprising that most interviewees identify lack of finance, rather than personal choice, preventing them from eating wild meat. Guo (2007: 58) observes the richest and highest status consumers in Guangzhou having more opportunities to eat wild meat and suggests others then consider eating wild meat because they aspire to pursue a similar quality of life. Likewise, with regards to demand for African bushmeat, Rose (2001) notes that, as long as elites consume, or are believed to consume, wild meat, lower status groups will aspire to emulate them whenever they can afford to. It is also likely that lower status Hanoians wish to emulate the consumption of those they perceive as successful (e.g. Veblen, 1934), even if they are unable to do so with the equivalent distinction (Bourdieu 1984)<sup>40</sup>.

Today a greater proportion of the Hanoian population has disposable income. This means more people are able to afford wild meat, even if less regularly than, or of a more common or a more widely farmed species, than wealthier and/or higher status consumers. This is perhaps also why eating wild meat is now widely considered a “trend” (Chapter 4), and why an overall rise in the consumption of wild meat has recently been observed (Compton 2000; TRAFFIC/WCS 2004; World Bank 2005). The results also suggest that, as the proportion of urban residents with disposable incomes continues to grow, demand for wild meat will also rise. A wider proportion of the population being able to access these products may subsequently emphasise further the value of rarity amongst consumers seeking to demonstrate their superiority through consumption.

---

<sup>40</sup> Veblen (1934) first used the term conspicuous consumption in documenting his observations of social emulation and class-differentiation in *The Leisure Class*. Veblen's theory of conspicuous consumption is generally accepted as based on the premise that those who advertise wealth are given preferential treatment by social contacts (Bagwell & Bernheim 1996). Bourdieu (1984) has more recently incorporated the study of lifestyles with social-class reproduction: as well as a “trickle-down” effect of class preferences (e.g. Veblen, 1934), Bourdieu (1984) allows for a “trickle-up” effect enabling the upper classes to “outflank the middle classes” whose lack of cultural capital hinders their ability to embrace popular tastes in the same way (Trigg 2001: 106). Bourdieu (1984) uses the adoption of peasant dishes by those with high cultural capital as an example of this effect.

Given the popularity of wild meat amongst Vietnamese and Chinese consumers and the prestige associated with it, it may also be worth monitoring demand amongst growing Vietnamese and Chinese expatriate populations conducting business in other areas of high biodiversity. In Vietnam, for example, Chinese and Russian tourists have been implicated in expanding demand for wild meat (TRAFFIC/WCS 2004).

#### **6.4.2. Medicinal Values**

The results suggest perceived medicinal properties are not driving demand for wild meat amongst central Hanoians. This reflects the observation by Anderson (1997) that, while rare animals are partly considered *pu* in China due to their strangeness and cost, conspicuous consumption is a key element of their use. Likewise, Guo (2007) concludes that medicinal values are not an important driver of wild meat consumption in Guangzhou. However this is not the case for common non-wild meat products, such as bear bile, which are instead primarily valued for their medicinal efficacy. This explains why larger proportions of Hanoian retirees report consumption of wild animal-derived medicines than do wild meat, and why age is positively correlated with consumption of medicinal products only (Chapter 5). Nevertheless, the symbolic values of rare wild animal-derived medicines such as tiger *cao*, rhino horn and an entire bear gall in rice wine are also important in addition to their perceived medicinal value.

The versatility of bear bile has been recorded by other researchers. As well as cancer, toothache and hepatitis, Nguyen and Reeves (2005) found that Hanoians used bear bile for arthritis; bruising, sprains and muscle complaints and stomach or liver problems. Tiger glue is documented as being used to treat joint-related problems such as rheumatism and to convey strength (Compton & Le 1998). Moreover, Shen's influential *Materia Medica* (1597 in Read 1931) records a variety of uses of rhino horn including alleviating fevers, vomiting and hallucinations. Rhino horn being considered by Vietnamese as able to alleviate symptoms of drunkenness is an effect also recognised by others (pers. comm. ENV). The results also correspond with general observations that tonics and medicines that restore

strength and help maintain harmony in order to keep illness at bay are important for many Vietnamese (Craig 2002).

In a study of attitudes towards animal welfare, Zu et al. (2005: 84) noted that more highly educated Chinese students are more aware of Western criticisms of Chinese culture and able to counter criticisms with foreign examples; they also tended to be more patriotic and sensitive about China's image, often interpreting specific criticisms as attacks on Chinese culture as a whole. Similarly, informants interviewed in English for this research were more likely to 'counterattack' with foreign examples than those interviewed in Vietnamese and emphasise the 'traditional' values of wild animal-derived medicines. This is most likely as a result of being able to access both English media and spend more time with individuals whose first language is English, and hence being more aware of foreign criticisms of Vietnamese culture including the use of wild animals in traditional medicine. This suggests that campaigns attacking anything perceived to be 'Vietnamese' and/or 'traditional' culture might result in antagonistic responses, particularly if from foreign sources and especially amongst the more highly educated.

#### ***6.4.3. Why Not Consume Wild Animal Products?***

The absence of concern regarding wild animal-borne disease amongst Hanoians is extremely surprising given the ongoing toll of H5N1 Avian Influenza on Vietnam and despite a more recent second outbreak of SARS in neighboring China (Cyranoski 2004). Moreover, it is surprising that concerns about the use of post-harvest chemicals to preserve domestic meat and seafood (e.g. Figuié et al, 2004; Chapter 7) do not widely extend to wild meat. Zhang et al. (2008) found that over a third of Chinese respondents who did not report wild meat consumption considered it detrimental to health and capable of transmitting disease. Yet Guo (2007) reports, despite a reduction in wild meat consumption shortly after the SARS epidemic, many Chinese consumers now think that wild meat is safe as long as it is prepared correctly. Xu et al. (2007) also report wild meat consumption regaining popularity again in southern China following a reduction associated with the SARS epidemic. A previous survey of Hanoi respondents also found little evidence of concerns about disease influencing wild animal consumption

(Venkataraman 2007). Continued avoidance of domestic chicken meat by some Hanoians due to concerns about H5N1 transmission (pers. obs.) suggests that this lack of concern arises from a lack of awareness of the potential for wild animals to carry H5N1. Finally, few interviewees avoid wild meat because of concerns about wildlife decline or due to a humanistic attitude towards wild animals, reflecting general disassociation between consumption behaviour and the endangerment of wild species.



## **7. Wildlife Farming: A Conservation Tool?**

### **7.1. Introduction**

#### **7.1.1. Wildlife Farming in Vietnam**

Numerous illegal commercial breeding farms are developing throughout Vietnam (TRAFFIC/WCS 2004). To enable Vietnamese farmers to compete better in a global market, the government is actively encouraging farmers to switch to more lucrative produce such as wild pigs, pythons and crocodiles (Anon. 2006; VNS 2007b; 2007a). Captive-bred species traded and consumed in Vietnam include the Indian cobra (*Naja atra*), monocled cobra (*Naja kaouthia*), king cobra (*Ophiophagus hannah*), Burmese python (*Python molorus*), Tockay gecko (*Gecko gecko*); Siamese crocodile (*Crocodylus siamensis*), sika deer (*Cervus nippon*), sambar deer (*Cervus unicolor*) and rhesus macaque (*Macaca mulatta*) (Nguyen & Nguyen 2008). The soft shell turtle *Pelodiscus sinensis* is also farmed; single farms have been observed to have over 40,000 individuals (pers. comm. McCormack, T.). The volume of captive-bred animals does not meet current demand and a significant volume of these species also continue to be sourced, illegally, from the wild (TRAFFIC/WCS 2004; Nguyen & Nguyen 2008). See also Box 1.1 (p. 32) and Box 1.2 (p. 33) for details of bear and tiger farming in the region.

#### **7.1.2. Satisfying Consumer Demand For Wild Products In Vietnam**

For wildlife farming to be a successful conservation tool, its products need to satisfy consumer demand for wild-caught animals. This requires consumer acceptance of farmed surrogates and relative stability in the size of demand for them. If preferences for wild-caught products are strong or demand for wild products grows, then demand for, and illegal trade in, wild-caught animals will persist. Initial discussions with the Hanoi public indicate that consumers may not be content with consuming farmed wild products (Anon. 2006). It is also thought that recent expansion in farming soft shell turtles has amplified demand for soft-shell turtles in Hanoi (pers. comm. Robertson S.) while preferences for wild-caught specimens means some consumers continue to seek *P. sinensis* despite it being widely farmed are also being reported (pers. comm. McCormack T.). Ongoing seizures of illegally traded soft-shell turtles are testament to persistent demand for wild specimens.

In contrast, the bile of farmed bears has proved an acceptable product to many consumers (Chapter 5; Nguyen and Reeves, 2005); although admittedly, in Hanoi, bile from wild bears still costs just over double of that from captive bears (Nguyen & Nguyen 2008). Humans have also long been intervening in the management of wild animals to provide medicines; for example, musk deer are thought to have been farmed in China for their medicinal velvet since 12-14<sup>th</sup> centuries BC (Chardonnet et al. 2002). Indeed, recent investment in farming of tigers and seahorses (pers. obs.) suggests that breeders believe that farmed substitutes are acceptable to a certain consumer market. Moreover, traditional medical practitioners support the substitution of traditional medicines from endangered species with farmed alternatives (Meng & Zhai 2000 in Nowell & Xu 2007; Nguyen 2006). However, no research has yet asked consumers directly what they think of potential farmed substitutes or of those, i.e. bear bile, already available. This chapter aims to fill this gap.

## ***7.2. Methods***

Data presented in the chapter are qualitative. They are sourced primarily from SSIs with wild meat consumers (n=39) and also making use, though to a lesser extent, of data obtained from SSIs with the central Hanoi public (n=39). Quotes reflect, unless otherwise specified, the main themes relevant to this chapter emerging from the interviews. For details of sampling method, interviewee characteristics and the contents of interviews see Chapter 3.

## ***7.3. Results***

### ***7.3.1. Wild Versus Farmed***

Meat and medicines derived from wild animals are widely considered superior to those derived from captive and/or farmed wild animals. Because wild animals live in the “natural” environment their meat is considered superior and more “delicious”. In contrast, because their growth may be artificially accelerated with artificial feeds, farmed animals are thought to produce lower quality meat:

Retired male government official and wild meat consumer aged 71:

*Int: Do you think there is any difference between the meat from a wild animal and the meat of the same animal raised in captivity?*

*WM10: I think the wild meat is better. The diet of wild animals is natural, so their meat is better and there is little fat. For example, wild pork is certainly better than farmed pork. An issue is that while farming animals, people use some kinds of substance to increase the weight of the animals quickly, so the meat from these animals is not good. So, meat of wild animals is more delicious.*

Female engineer from a rural part of central Vietnam aged 52:

*Int: In the past, people hunted animals to eat, but now people hunt to sell. Why do you think wild meat has become so valuable?*

*CN30: They are valuable because they live in nature, without eating any chemicals. So they taste better and may be better for health, so people like them. Farm animals are fed with artificial food, so they don't taste as good. Ordinary food may contain some chemicals. Therefore, people like to eat wild meat instead, then the prices increase. I heard that bile from wild bears is many times more expensive than the farm ones.*

This perceived difference between farmed and wild meat is often likened to that between free-range and caged chickens:

Female unskilled worker and wild meat consumer aged 54:

*Int: I see some restaurants that serve both wild meat and farmed wild meat. Customers can choose the dishes, and the wild dishes are more expensive?*

*WM32: Now, simply, we say caged chickens and roaming chickens are different: roaming chickens are always better in the quality of meat than caged chickens who just eat weighted grain<sup>41</sup>; chickens that eat weighted bran cannot be as good as roaming chickens. They eat weighted grain food so their meat is not good [...] Wild animals eat flowers, fruits, and etc; therefore, their meat is sweeter and has more flavour. Animals raised with weighted bran are not good; the quality of meat is low. I can give you a simple example: pigs and chickens. Pigs and chickens fed with weighted bran are not good [...] Pigs fed with weighted grain to grow faster don't taste good. Their meat is doughy, not good. Chickens who pick up rice, worms, crickets, etc., their meat tastes delicious. See, now people in Hanoi call them 'roaming' chickens.*

Male professional and wild meat consumer aged 51:

*Int: Do you think there is any difference between the meat from a farmed deer and one from the wild?*

*CN38: It's better; you can smell it, you can taste it, it's better quality. It is like a free-range chicken and a battery chicken; free-range chicken is much better.*

Likewise, wild animals are thought to yield superior quality medicinal products. Again this is because, unlike farmed animals, wild animals eat natural foods, are free to move around, and also because they have to fight for survival. However, rather than stress the use of artificial chemicals and feeds contaminating farmed

---

<sup>41</sup> By weighted grain the interviewee means manufactured animal feed designed to make animals gain weight quickly.

equivalents, interviewees think medicines from wild-caught animals are better because the natural environment means they are “strong” and “healthy”<sup>42</sup>:

Retired male aged 75:

*CN04: [...] If the government wants better conservation, they should invest much more [...]. A tiger is kept in a 12m<sup>2</sup> cage. In real life [...] they should run around in an area of hundreds of kilometres. Keeping a tiger in a cage limits their movement. In relation to food, in their natural environment, a tiger would eat a good variety of food, but in captivity, they are fed with some pieces of beef. There are differences in the quality of antler from wild deer and deer in captivity because those living in the forest can eat many different kinds of leaves. But in captivity, they only have limited food. How can they grow? [...] When they are kept in captivity [...] they cannot fully develop. They can't be as strong and healthy as their counterparts in the natural environment.*

Retired male wild meat consumer aged 57:

*WM04: Tiger bones are good. Unfortunately, there are many fake bones today. There are few tigers left in the forest.*

*Int: There are the tigers in Binh Duong [see Box 8.1, p. 181].*

*WM04: If the tigers in Binh Duong were cooked for tiger glue, the glue would not be good [...] Any farmed animals are not strong as wild animals. Wild animals themselves have to struggle to survive, and have to adapt to harsh conditions. If they are not strong enough, they cannot survive.*

Retired female farmer aged 72:

*Int: If the government proposes more farms for wild animals like the one in Binh Duong, do you think it's a good idea?*

*CN22: [...] I heard that bear bile in the wild is better, wild bears are better. Farm bears are not that good. Tigers are similar to bears. Tigers in the forest can eat natural food. The food in the wild is different compared with the food on a farm [...] The quality of honey from wild bee is also better than that from farm bee.*

Though the majority express the superiority of wild meat over farmed meat in terms of quality resulting from the natural environment, rarity also contributes to the perception that products from wild animals, like those who consume them (Chapter 5; Chapter 6), are superior.

Businessman and wild meat consumer aged 50:

*Int: What animals do you try in Hanoi?*

*WM39: I live in Hanoi, but I have little [wild meat] here. I have a little soft-shell turtle and some kind of pork that looks like wild pork, but is not wild pork; it is from ethnic people. They raise young pigs and release the pigs into the forest. When the pigs are big enough, they catch them for sale.*

*Int: So is the meat of these pigs [...] similar to the meat of wild pigs?*

*WM39: It is different; the meat of the wild pigs is better, tastier [...] Maybe, the quality of the meat is better. It tastes better when you try it.*

*Int: Why is it better?*

*WM39: I think the meat from wild pigs is better because it is scarcer.*

---

<sup>42</sup> *Mạnh khỏe* or *khỏe mạnh* is a compound word meaning "strong and healthy" (pers. comm. Ho Gia Anh Le). Healthy individuals are said to be 'strong' (*khỏe*) while words for illness are associated with weakness; healthy and strong may therefore be considered synonymous (Craig 2002).

Female businesswoman and wild meat consumer aged 40:

*Int: You have tried different dishes: is there any difference between the meat of farmed wild animals and wild animals?*

*WM19: Yes, there is, but only little difference. When the meat is rare people think it tastes better.*

Male retired office clerk and wild animal product consumer aged 53:

*Int: And you try [the bile] straight away?*

*WM13: Yes, I do. A cylinder of fresh bile like that is about 1 million VND. The prices of bear bile depend on how often they extract the bile. The more frequently the bile is extracted, the cheaper it is. The most expensive bile is the bile extracted for the first time [...] I choose the best bile. I use some for arthritis. Some bear farmers have my phone number, so they sometimes call me to come and buy good bile [...]. The purpose of farming bears is to extract more bile, as much as possible. But you can only get the bile of a forest bear once when you shoot it dead. So the wild bile is rare and valuable.*

This supports the finding that rarity is also an important symbolic value of wild animal-derived products (Chapter 6); this is also a property that farmed wild animals, however 'naturally' raised, cannot imitate.

### **7.3.2. Preferences in Practice**

Unsurprisingly, given the choice, most consumers state they would or already do pay more for meat from a wild-caught animal over and above the meat from an animal of the same species raised on a farm. This is because, as well as being of better quality and more delicious, it is also more impressive - referring to the importance of wild meat's symbolic values in social discourse (Chapter 5):

Male professional and wild meat consumer aged 26:

*Int: The government is promoting farming of wild animals to supply restaurants. Do you think this is a good idea?*

*CN15: I think it's a good idea but [...] meat from farmed animals is not as good as that from the wild. People [...] prefer wild meat from the wild because that's more delicious [...] If I have decided to go to a wild meat restaurant, I'd definitely choose the wild.*

Female professional and wild meat consumer aged 33<sup>43</sup>:

*WM27: Of course the wild [civet] always costs more [than a farmed one] and people always think it's better food, better taste [...] most of the time people consider cost and it depends whether they think they can afford the higher one, the more expensive one. When I ate the snake in Gia Lam they had farmed and wild snakes.*

*Int: And you chose which one?*

*WM27: I didn't choose! The host: he said let's choose the wild one today because I want to make you happy, or something like that [...] It just depend on the one who hosts the party, whether they want to impress the people with something new, something different.*

Businessman and wild meat consumer aged 39:

*Int: Do you think other consumers your age would be happy to eat farmed wild meat?*

*WM11: I'm not sure. It depends on the availability and occasions [...] Normally I would choose the wild one. I often want to make my friends or business partners happy with what they try.*

---

<sup>43</sup> Interviewed in English.

Moreover, if not responsible for the bill, guests are more likely to choose the more expensive, i.e. wild-caught meat:

Male skilled worker and wild meat consumer aged 37:

*Int: If cheaper farmed wild meat is available do you choose it?*

*WM26: It depends: if I am invited then I will try the wild meat, but if I pay, then I will choose the one that is good quality but at a reasonable price. For example, today, we are drinking beer for fun. Maybe, tomorrow, if I have to do some business, I may go to eat a speciality.*

Although wild-caught products are clearly favoured, without being present at these occasions it is impossible to know whether consumers are putting stated preferences into practice. Moreover, only just over a third of consumers - typically those at the wealthier and more experienced end of the spectrum - claimed they can actually distinguish between wild-caught and farmed wild meat. Furthermore, these interviewees often refer to “real” and “fake” meat suggesting that they are not really comparing meat of wild-caught animals with the meat of farmed wild animals but distinguishing ‘fake’ (i.e. domestic) from ‘real’ meat from wild animals, whether farmed or wild-caught:

Male professional and wild meat consumer aged 45, managed a resort in Tam Dao:

*Int: Are the animals transported to Tam Dao alive or they are transported as meat?*

*WM05: The animals are transported as meat.*

*Int: How do you know it is the right meat?*

*WM05: It is necessary to distinguish. If you don't know what is the right meat, you may waste a lot of money. You should know where is the meat, and how it looks and you can decide to try. If you've tried wild meat and you are aware of how it tastes, you'll know what is the right meat.*

Businessman and wild meat consumer aged 25, family income >14m:

*WM17: We ate common barking deer and pangolin [...] for over 5 million VND.*

*Int: This must have been a very good restaurant! Did you see the animals first?*

*WM17: Yes, I did. I was careful to avoid being tricked. If you are not, the restaurant will mix real wild meat with fake meat. [...] Real wild meat is tastier and more delicious. I can distinguish them.*

Additionally, while it may be feasible for those with sufficient experience to distinguish between live wild-caught and farmed wild animals based on behaviour and/or wounds sustained through being hunted, and despite the care taken to ensure they are served with the meat from the live wild animals they have selected (Chapter 4), consumers rarely report taking time to determine whether the animals they order are wild-caught:

Male skilled worker and wild meat consumer aged 37:

*Int: Is the meat from the farmed civet the same price as the meat from the wild civet?*

*WM37: They weigh all animals. They don't assess this animal to see whether it comes from the mountains or the farm [...]. [The restaurant] broke the farmed civets' legs and said the civets were trapped. So I don't know.*

Male professional and wild meat consumer aged 31:

*Int: When you go to a restaurant to eat wild meat, is the meat you eat wild or farmed?*

*WM29: I don't really know whether it is farmed or hunted meat. I just know that I buy an animal and ask the restaurant to kill and cook right there for us [...] When we ask them, they just say that their animals are hunted but not farmed. We just pay attention to the animal we order and its price.*

Most also admit that distinguishing between real and fake tiger glue and bear bile, let alone between wild-caught and farmed products, is very difficult:

Retired male printer aged 75, reported using tiger glue for back pain:

*Int: Is it effective?*

*CN26: No, it's not. So I stop using it [...] People believe that bear bile and tiger glue are good medicine, so they will try to buy. Bear bile and tiger glue are expensive but it's difficult to tell whether they are real and of good quality or not.*

Retired male consumer aged 57:

*Int: What do you think about the bile from a bear raised in captivity?*

*WM04: There is a difference between the bile from a wild bear and a bear raised in captivity. I can distinguish the bile by tasting the bile with some wine [...] My experience helps [...] I know how the wild bile tastes; I can tell the wild one when I look at the bile soaked with wine. Normal people cannot do this like me [...] It's difficult to distinguish fake tiger bones from real bones, because there's technology to produce fake bones.*

### **7.3.3. The Market for Farmed Wild Products**

Despite widespread preferences for wild-caught products, some interviewees suggest there will be demand for farmed wild products because, though not as good as genuinely wild products, they are cheaper:

Male skilled worker aged 21, lowest family income quartile:

*WM01: The meat from the forest [...] is certainly more delicious. The meat of animals from the wild is natural, so it is better than that from farmed animals, because the diet for these animals is from the wild, too.*

*Int: Why do you think the natural meat is more delicious?*

*WM01: It is normal. For example, wild pork is more delicious than farmed pork for sure.*

*Int: Do you pay more for meat from the forest?*

*WM01: What I said is in case I had a choice. If I have to choose what meat, I'll choose wild meat. Nevertheless, wild meat is so expensive that I cannot afford to buy some.*

Female service worker aged 48, income unknown:

*Int: If everyone wants to eat wild animals, who will eat the farmed wild animals?*

*CN23: (Laughing) Farmed animals are not as good, but they are cheap. Not everyone can afford expensive meat.*

Indeed, despite believing wild products superior, a few consumers at the lowest end of the income range appear to be less concerned about their wild meat being farmed, while farmed bear bile appears relatively widely accepted by even wealthy consumers:

Retired male skilled worker aged 50, lowest family income group:

*Int: When you try the meat how do you know if it is wild or raised on a farm?*

*WM40: We don't care whether it is wild or farmed. We just order some dishes.*

Male government officer aged 51, highest income quartile:

*Int: You said you tried some bear bile. Was it from a farmed bear or wild bear?*

*WM14: It was from a farmed one. I've just bought some more. Before extracting bile from a bear, people anaesthetize it. Bile from a farmed bear is not good.*

*Int: Can you find bile from a wild bear?*

*WM14: It is difficult [...] Though [farmed bile] is not as good as the wild bile, it is acceptable. I drink a lot of bear bile, but I don't know whether it is really good for my health or not. It is said that bear bile is good.*

A handful of interviewees think there is a market for farmed wild meat simply because demand exceeds supply (see also Chapter 8):

Male skilled worker and wild meat consumer aged 30, owns a tea farm:

*Int: You intend to set up a wildlife farm. Do you think they will want to buy your meat if, as you say, everyone thinks wild meat is better?*

*CN28: Wild meat is not abundant; cannot meet the demand. So people will still buy farmed [wild] meat.*

But for other consumers farmed substitutes appear to only be acceptable in the absence of wild meat:

Female and wild meat consumer aged 52:

*Int: Should Vietnam farm more wild animals to supply wild meat restaurants?*

*WM36: If this can be carried out, it will be very good, and prices will be cheaper [...] If there are no wild animals available I will probably accept eating farmed ones.*

Businessman and wild meat consumer aged 50:

*Int: So if the farmed meat isn't as tasty as wild meat, do you think this would satisfy the demands for wildlife meat and for medicine?*

*WM39: If there is no good quality meat [...] people must accept lower quality products. [...] I think wild animals are becoming extinct.*

Moreover, interviewees believe those who can afford to will pay more to eat “natural” wild-caught meat:

Retired state official and wild meat consumer aged 71, highest personal income quartile:

*Int: Do you think people will be happy to eat the farmed wild animals available?*

*WM10: I think a lot of people will choose the farmed meat, as it is cheaper. But rich people like something natural like wild meat.*



Businessman and wild meat consumer aged 56, highest family income quartile:  
*Int: So if you have a choice between some farmed deer meat and the meat from a wild deer, which one would you choose?*  
*WM34: I think Vietnamese people would choose the less expensive one [...]. For those who are rich, money is not a problem; they would choose something that they like to try. They probably want to try the wild meat.*

And, crucially, farmed products are not rare and expensive. Indeed, if widely farmed, some wild species may eventually no longer be considered wild but be viewed as “ordinary” every day products:

Male professional aged 30, income unknown:  
*Int: Do you think wild meat consumers will accept farmed wild meat instead?*  
*CN29a: Maybe 50/50. Because if it were cheap, anyone could eat; the rich would not have to show off then, or they may not eat as much as they might not think inexpensive meat is as good for health as the expensive one.*

Female professional and wild meat consumer aged 33, highest income quartile<sup>44</sup>:  
*Int: So you think if wild meat were cheaper it would be less popular?*  
*WM27: (Laughing) Wild meat can never be cheap, if it's rare it's expensive, right? Or it is farmed everywhere and then it's not popular, right? [...] I think soft-shell turtle they don't consider a rare or wild animal now because they can raise it.*

Male businessman and wild meat consumer aged 25, highest family income quartile:  
*Interviewer: Would you pay more for wild deer when farmed deer is available?*  
*WM17: I would choose what is more delicious. But I would eat the farmed as an ordinary food.*

#### **7.3.4. Bear Bile Farming: A Case Study**

Interviewees describe an initial boom in bear farming, with the high value of bile encouraging more and more people to farm bears. However, now bear farming has become relatively common, a considerable drop in value is reported. This decline appears to be fuelled by two factors. Firstly, wider availability reducing the symbolic values of bear bile as a rare and precious commodity:

Female student aged 19<sup>43</sup>:  
*Int: Did you ever try the medicine from an animal?*  
*CN09: Yes, bear bile, to relieve my pain [...] I don't like wine but my father, I don't know why, but he really likes these kinds of strange animals, he has bear's legs in a big bottle of wine to drink. [...] And talking about the bear I think now they are really living in bad conditions.[...] because in the past it is strange so people, many people wanted to have it to give to other people as a present, as a precious present, but now it is so common, so popular, that it's not a precious present anymore and now they change to, I think they are changing to something more unusual and now, because in the past it is strange, it is expensive, so people bring bears to their houses to raise, to sell the bear's bile but now not many people want to buy it so now the bears are living in bad conditions because the owners don't have money to buy the food or to care about them, because they don't have money, because they can't sell bear's bile anymore.*

---

<sup>44</sup> Interviewed in English.

Secondly, concerns regarding the quality and effectiveness of bile from captive bears have contributed to the apparent decline in the value of farmed bear bile. These concerns arise from the perception that bile is extracted too frequently from captive bears:

Retired male aged 57:

*WM04: If the tigers in Binh Duong were cooked for tiger glue, the glue would not be good.*

*Int: Why not?*

*Khanh: [...] It can be said that farming bears is rampant now. In the past one cubic centimetre of bear bile cost over 150,000 VND. It costs only 10,000/cc. But no one wants to buy, because it is ineffective.*

Male student aged 20:

*Int: Many think bear bile is a valuable medicine, What do you think?*

*CN16: I think extracting bear bile [...] damages the bear's health. Due to too much extraction, the quality of the bile is not good, therefore, bear bile price has dropped. Some bear farmers now do not have enough money to feed the bears. They are left hungry and may die.*

However, since bear bile is now widely believed to be an effective and necessary household medicine (Chapter 6), rather than these concerns discouraging bear bile use they are instead encouraging consumers to seek whole bear galls and bile from wild bears; buying a whole gall bladder is one way consumers believe they can avoid being sold bile from an over-exploited bear. This form of demand has obvious implications for bears:

Female professional and wild meat consumer aged 33:

*Int: What about medicines, do you use bear bile or python fat?*

*WM27: Actually older people care more about that. My grandparents they keep talking about bear bile and tiger glue, and they tell me they try to buy some wild bear bile to mix with alcohol and just use it.*

*Int: Could they find some wild bile?*

*WM27: They said they try but they don't want to buy bile from live bears, they want the whole gall bladder. But actually I don't agree with that idea at all, I said in order to give one gall bladder you have to kill the whole bear!*

Retired female and wild meat consumer aged 60:

*Int: I was told people no longer wish to give bear bile as a gift to their boss...*

*WM22: Bear bile is cheap and not as good as before, because people extract the bile very often. If you want to have good bear bile, you should buy dried bear gall bladder that can be cut into pieces. It is as expensive as gold. An ounce of the gall costs an ounce of gold. It is very expensive, but really good. It can cure many diseases. [...] Hunters shoot the bear in the forest, so they have to slaughter the bear to get the whole gall bladder.*

Towards the end of the data collection period, a television advert aiming to reduce demand for bear bile showed distressed captive bears in cramped conditions. Following this broadcast, comments of some respondents suggest, in some cases at least, rather than discouraging bear bile use it may have actually compounded

fears about the poor quality of farmed bile, inadvertently encouraging demand for whole gall bladders and/or bile from wild bears<sup>45</sup>. For example, after describing the bears in the advert “screaming”, one young male shop assistant surmised “bile from farmed bears is bad for you, so you need to use wild bile instead”.

Likewise, due to concerns about fake tiger glue, a few interviewees and Vietnamese acquaintances told me of people clubbing together to buy a tiger carcass and making their own bone glue to ensure having the genuine article; I was also offered a whole tiger in a traditional medical pharmacy from a “farm” in southern Vietnam “from 150 million Dong for 120 kilograms”:

Businessman and wild meat consumer aged 50:

*Int: A Vietnamese ambassador recently imported a rhino horn from South Africa, and he was caught, but do you think it is difficult to prevent those with power exploiting endangered species?*

*WM39: Sure. One of my cousins, the District Committee Chairman, invited me to share a tiger for glue, but I did not have enough: 4,000 USD.*

*Int: Where did he get the tiger?*

*WM39: I don't know. It is a secret. He has power to get the tiger [...] I refused to share it: I might get into trouble.*

Given all of the above, it not surprising that a handful of interviewees predict that farming wild animals for meat and medicine will mirror the boom and bust of bear farms (see also Chapter 8):

Male student aged 25:

*CN11: I think that farming is a not a good idea: farmed animals are different from wild animals. For example, free-range chickens are different from chickens in captivity. So when people eat, they don't want to eat farm animals. [...] For some time, people will eat them, but after a while, when they realise the difference between farmed animals and wild ones, they will have less demand and the price will drop. After the second time eating wild meat, they will like to try something else, so it's not possible to farm.*

---

<sup>45</sup> This also emphasises the importance of designing public awareness campaigns based on a thorough understanding of the motivations of consumers and the current markets for wild products. Animal welfare concerns are limited in Vietnam while awareness of endangered species – including bears – is also lacking (Chapter 8). In the meantime, bear bile is a popular medicine (Chapter 4) considered effective and necessary (Chapter 5). Campaigns highlighting the poor welfare of farmed bears are therefore likely to confirm fears about the quality of farmed bear bile – and hence encourage consumers to seek wild bile – rather than, or as well as, reduce overall demand for the product.

## **7.4. Discussion**

### **7.4.1. Acceptability of Farmed Wild Substitutes**

The results strongly suggest farmed wild products will not satisfy demand for wild animals in central Hanoi. This corresponds to documented preferences amongst some Vietnamese and Chinese consumers for wild specimens of the now widely farmed soft shell turtle species, *Pelodiscus sinensis* (Shi & Parham 2000; pers. comm. McCormack T.). Almost half the respondents in a survey of Chinese consumers also reported a preference for real wild meat (Zhang et al. 2008) while Guo (2007: 58) found “value of wildness” was important with 59% believing that a wild-caught animal is superior to an animal of the same species bred in captivity. Restaurateurs in Vietnam also considered wild-caught meat tastier than farmed wild meat because of the diverse diet eaten by, and absence of chemicals found in, wild animals (SFNC 2003).

Preferences for wild meat have also been documented elsewhere. For example, in Libreville wild meat is over one and a half times more expensive than the most popular cut of beef (Steel 1994 in Bowen-Jones et al. 2002) and in local markets in Nigeria, wild meat was more expensive than all domestic alternatives besides the finest imported steak (Martin 1983 in Bowen-Jones et al. 2002). Moreover in Malawi, Mozambique and Zambia, significant demand for wild meat, and preferences for wild meat over domestic alternatives, is particularly evident in urban areas where wild meat is considered superior (Barnett 2002). Similarly, residents of Indian cities and towns consider wild meat a high-class commodity and are willing to pay a premium for it (Hilaluddin & Ghose 2005).

In contrast, Barnett (2002) finds demand for bush meat in the study countries in Eastern and Southern Africa, where wild meat is cheaper than domestic alternatives, is primarily driven by economic considerations. Other researchers in both Africa (e.g. Brashares et al. 2004; East et al. 2005; Wilkie et al. 2005) and the Neotropics (e.g. Apaza et al. 2002) also report wild meat primarily being exploited because it is the cheapest option. Additionally, remote households in northeast India, which are unable to access affordable alternatives, depend chiefly on wild meat for subsistence (Hilaluddin & Ghose 2005). In Eastern and southern Africa,

Barnett (2002), predicts rural demand for wild animals will persist until availability reduces to the extent that wild meat becomes as expensive as domestic meat and, in this scenario, these consumers are likely to choose favoured domestic meats.

As wildlife populations have declined and growing urban demand has made wild species more valuable, the switch from subsistence for basic nutrition to an urban luxury commodity appears to have already occurred in many parts of Southeast Asia. But domestic alternatives have not necessarily replaced wild animal protein amongst those who previously relied on wild meat for subsistence. For example, Hendrie (2000) reports that subsistence use of soft shell turtles in Vietnam has decreased as a result of rising market value in response to growing domestic and international markets, and Stuart et al. (2000) also find that most soft-shell turtles harvested in Laos are now exported to Vietnam and China despite a long history of local use. In Cambodia animal protein consumption has decreased as wildlife is exchanged and sold instead of being consumed directly, and has not been replaced by alternative forms of protein (Piseth 2001; Nooren 2004). Given the indications of preferences for wild meat emerging amongst certain African urban populations, a similar pattern may be seen in parts of Africa as its urban population grows. A growing Chinese expatriate population in Africa may contribute to this trend in the future.

As the examples given regarding “roaming” chickens clearly illustrate, wild-caught meat being considered ‘healthier’ mirrors preferences emerging in the West for free-range and organic meat, and an even newer vogue for ‘healthy’ wild game (Hoffman & Wiklund 2006; The Times 2006). Hoffman et al (2003) found that 80% of tourists, mainly from Germany, visiting South Africa considered game meat as having health benefits, including being less fatty. But, in contrast to Hanoian wild meat consumers, consumers in South Africa expected game meat to taste inferior (Hoffman et al. 2005), while many tourists visiting South Africa also considered taste to be a negative attribute of game meat (Hoffman et al. 2003 in Hoffman & Wiklund 2006).

Perceptions that wild meat is healthier are not unfounded. Research has shown that meat from certain free ranging wild animals including wild boar and deer species contains more protein and elements and less fat than domestic meat equivalents (e.g. Zomborsky et al. 1996). Moreover, the desirable range of fatty acids found in venison and other ruminants has been shown to be negatively affected by intensive farming practices and the use of grain-based feeds (Hoffman & Wiklund 2006). Increasing use of intensive feeding practices, castration to reduce fighting, vaccination programmes has led to concerns amongst commercial breeders that European and US consumers' perceptions of game meat as natural and pure will be damaged (Hoffman & Wiklund 2006).

The Vietnamese are fastidious regarding the freshness and quality of their food (pers. obs.) and concerns about food contamination are also prevalent (Figuie 2004). Indeed, many interviewees identify a lack of exercise and use of 'artificial' feeds, resulting in more fat and residual chemicals in the meat of farmed animals, as directly contrary to the more 'natural' meat of wild-caught animals. Chinese respondents also viewed wild animals as pure and untainted (Tong 2007) while Starkey (2004 in Kumpel 2006: 16) suggests preferences for wild meat in Libreville are partly explained by perceptions that it is organic and healthy, in direct contrast to the contaminated, intensively farmed domestic meats. Tourists, mainly Belgians and Germans, visiting South Africa also noted a benefit of wild meat being that it was not associated with BSE (Hoffman et al. 2003 in Hoffman & Wiklund 2006). It is therefore likely that, as in the West, rising concerns about the use of chemical growth promoters and increasingly intensive domestic meat production in general – coupled with a lack of concern and/or awareness about the presence of chemicals and disease in wild animals (Chapter 6) - are to some extent shaping preferences for 'pure' wild products in Vietnam.

Favouring 'natural' and 'traditional' (see also Chapter 4) meat and medicine might also be interpreted as a reaction to the recent intensification of production as well as urban living and industrialisation (e.g. Fiddes 1997). This may also explain the preferences for wild meat over domestic meat being reported in a number of African cities (Bowen-Jones et al. 2002), and demand for wild meat amongst

African communities in New York and Paris (Milius 2005). Wilkie and Carpenter (1999) have already suggested that urban Africans may view wild meat as a luxury commodity representing cultural heritage.

The findings - particularly regarding wild animal derived medicines - also reflect traditional Chinese medical philosophy in which wild animals are thought to yield the most medically potent products because they eat naturally occurring foods and survive harsher conditions; they therefore possess more, or stronger, vital energy than farmed animals (Cotterel 1986; Anderson 1988). Strength-giving products are also the closest equivalent traditional Chinese medicine offers to aphrodisiacs (Anderson 1988); so as well as being generally restorative, 'strong' wild-caught products - unlike farmed alternatives - may also be considered able to enhance sexual potency.

It is impossible to determine whether consumers can distinguish between wild-caught and farmed meat of the same wild species without conducting a controlled taste test (e.g. Schenck et al. 2006) and/or observing consumption first-hand. The results suggest that most consumers cannot distinguish between farmed wild and wild-caught or, in some cases, between real and fake, products. Zhang et al. (2008) also report that over a third of respondents in China said they did not know whether the meat they ate came from a wild-caught or a captive wild animal.

However, since relatively few species are widely farmed, it is likely that there has as yet been little call for consumers to develop the skills to distinguish between wild and farmed wild meat, i.e. if consumers can still reliably assume that most live animals they purchase are wild, the ability to determine the origin of most wild meat purchases has as yet been unnecessary. In contrast, consumers of products that have been farmed for longer and/or more widely, and of products that are considered easily faked, appear to be developing strategies to obtain genuine or better quality products. For example, consumers of bear bile who are concerned about the frequency with which farmed bile is extracted are now seeking whole bear galls to ensure they are buying high quality bile. And those wealthy enough are buying tiger carcasses in order to make their own genuine tiger glue; tiger

parts are traded surprisingly openly in Hanoi and can be obtained if ordered in advance at a sufficiently high price (Nguyen & Nguyen 2008). Moreover, Zhang et al. (2008) note that frequent wild meat consumers are most concerned about the origin of the wild animals they consume.

#### **7.4.2. Market Stability**

Rather than satisfying current demand for wild meat, results suggest that farmed wild meat will instead be providing an additional, inferior product serving a new, larger and ever-increasing market. Greater availability of affordable farmed wild meat will appeal to a wider audience for whom wild meat is currently unaffordable, mainly as a result of financial constraints but also perhaps due to lack of their ability to exercise distinction (cf. Bourdieu 1984), new and inexperienced consumers entering this market are, at least initially, more likely to accept farmed wild meat than more experienced consumers.

In contrast, consumers who are currently able to access expensive wild meat dishes are more likely to respond to the mass consumption of farmed wild species by viewing them as an ordinary 'every day' product and/or snubbing these species altogether. This slight towards 'common' farmed species would not simply reflect snobbish behaviour (cf. Leibenstein 1950)<sup>46</sup>. Rather, to the extent that they have become considered common, consuming and inviting others to consume such species fails to send the same sought-after signals as accessing, and inviting others to access, rare and precious wild-caught meat (Chapter 5). For example, during the 1990s, larger volumes of lower-quality Russian furs accompanied by a reduction of demand in the West caused prices to fall; as such, furs shifted from being a luxury

---

<sup>46</sup> Leibenstein (1950) described "snob" and "bandwagon" effects with regard to the consumption of prestige goods: "snobs" prefer unique products and reject them when consumed by the "general mass" (Mason 1981). In contrast, the "bandwagon effect" describes the "desire of people to [...] consume, and behave like their fellows, the desire to join the crowd" (Leibenstein 1950) "Even though snobs and followers buy luxury products for apparently opposite reasons, their basic motivation is really the same: whether through differentiation or group affiliation, they want to enhance their self-concept" (Dubois & Dubesque 1993 in Vigneron & Johnson 1999).



commodity consumed by elites to become an ordinary product affordable to a wider middle class consumer market (Dronova & Shestakov 2005).

Wildlife farming making wild meat more widely accessible is therefore likely to encourage existing consumers to become more concerned with the origin of wild meat species, and to seek genuinely wild products either by learning to discern between farmed wild and wild-caught animals or shifting their focus onto species that are not being farmed. In fact, a preference for wild specimens of the now widely farmed Chinese soft shell turtle *Pelodiscus sinensis* is already reported to have developed amongst experienced consumers in China (Shi & Parham 2000). Wild *P. sinensis* are also reported to fetch higher prices in Vietnam because they are considered to have better meat (pers. comm. T. McCormack). Despite some species of birds popular as pets amongst Indonesian consumers being bred in captivity, dealers report consumers sometimes preferring wild-caught birds (Shepherd 2006).

A resurgence in demand for wild bile in spite of - or because of - greater availability of farmed bile mirrors findings of Robinson et al. (2006) in China and Vietnam. This also reflects an effect documented by Meacham (1997) whereby availability of legal goods leads to their more widespread use and, where farmed alternatives are viewed as inferior, eventually arousing demand for genuinely wild goods where there was none before. In the case of bear bile, both a decline in symbolic values as a result of widespread farming, followed by a decline in consumer confidence in the quality of farmed bear bile amongst a new, larger market of consumers (Chapter 4) who now view it as an health-related “need” (Chapter 5) has, due to embedded preferences for wild-caught products, led to increased demand for wild bile where limited demand previously existed. Given these preferences, it is likely that a similar pattern will be seen for other wild animal products that become widely farmed.

## **8. Wildlife-Related Knowledge, Attitudes and Consumption**

### ***8.1. Introduction***

#### ***8.1.1. Environmental Knowledge, Attitudes and Behaviour***

Raising awareness is considered a key solution in solving many environmental problems in Asia including demand for wildlife (Chapman & Sharma 2001: 125; Shiping et al. 2006; Le 2007). This is based on the theory that knowledge shapes attitudes and, in turn, influences behaviour (Ajzen & Fischbein 1980). Having inspired myriad awareness raising campaigns promoting healthier behaviour, increasing knowledge and awareness has now also become considered central to cultivating pro-environmental action (Chapter 1). But although important, knowledge is just one component within a range of situational factors, environmental values and psychological values that are believed to determine environmental behaviour (Barr et al. 2003). The relationship between knowledge, attitudes and behaviour is extremely complex, mitigated by a range of varying social, political and cultural forces (Chapter 1). This chapter explores the factors that influence wildlife-related knowledge, and the sources and scope of this knowledge amongst the central Hanoi population. It also investigates the relationship between wildlife-related knowledge and awareness and wild animal consumption behaviour. In addition, dominant attitudes towards wild animals and their conservation are examined with a consideration of methodological issues in researching attitudes and knowledge.

#### ***8.1.2. Environmental Knowledge and Awareness***

Because of the role knowledge is thought to play in determining environmental behaviour, environmental knowledge has been the focus of considerable research. For example, in the USA knowledge about acid rain was shown to be greater amongst men and positively associated with education, age and exposure to television news (Arcury et al. 1987); Egyptian men were shown to perceive themselves to have greater awareness of environmental issues than Egyptian women, and were also more concerned about the environment and demonstrated more positive attitudes towards green purchases (Mostafa 2006); in Sumatra knowledge about local wildlife is reported to be greater amongst men and also positively correlated to educational attainment and length of residence (Nyhus et

al. 2003); in Hong Kong male students were shown to demonstrate higher environmental knowledge, which was also positively related to age and access to television news (Chan 1999); and amongst German and Russian adolescents environmental awareness was found to be higher in women (Szagun & Pavlov 1995); experience of nature is also reported important in forming environmental knowledge amongst Germans (Bogeholz 2006). These studies measured environmental knowledge using a series of true and false and/or multiple choice questions (e.g. Kellert 1991a; Chan 1999), open-ended questions later coded (e.g. Arbuthnot 1977) or asked respondents to quantitatively assess their own level of knowledge (e.g. Mostafa 2006).

No studies have measured wildlife-related knowledge amongst Vietnamese respondents, although television and newspapers, and the internet for younger respondents, have been identified as primary sources of information about wildlife for Hanoians (Venkataraman 2007). In 1999, a study found less than 2% of space was devoted environmental issues and natural resource use in the Vietnamese press, and that this coverage was often ambiguous and inaccurate and lacking in analysis and opinion (Hue 1999), but Anon. (2004) report a 400% increase of wildlife-related newspaper articles between 2002 and 2003. Environmental knowledge is reported to be lacking amongst primary school teachers, and environmental education poorly considered and a low priority (Nguyen 2001). Although the environmental concerns of Hanoians are reported to reflect media coverage, they are also informed by personal experience and observation (Pham & Rambo 2003).

### ***8.1.2. Vietnamese Attitudes Towards Wild Animals***

Given that attitudes are thought to influence behaviour, understanding attitudes and trying to cultivate pro-environmental attitudes has recently become central to efforts to curb demand for wild animal products (e.g. Lee et al. 1998; Kang & Phipps 2003; Yang et al. 2007). The traditional Vietnamese worldview is that people should live in harmony with nature (Cuc 1999) but make use of natural resources for survival (Jamieson 1991). In a study of environmental consciousness, Pham and Rambo (2003) found that contemporary Hanoian views towards nature

were largely anthropocentric and utilitarian. Despite the important role of nature in traditional arts, nature was ascribed limited aesthetic value, and there was also little evidence of bio-centric views whereby other species are seen as having an intrinsic right to co-exist with humans (Pham & Rambo 2003). In China, the natural world is also generally considered to exist for the benefit of people (Harris 2006; Harris 2008). According to Harris (2006) this reflects traditional Chinese philosophy, particularly Confucianism, which is an anthropocentric model although it is occasionally put forward as a blueprint for environmentalism.

## ***8.2. Methods***

### ***8.2.1. Questionnaire Survey***

Nine different attitude orientations towards wild animals and their conservation were measured using nine scales. Each scale comprised a series of five interrelated items designed to measure a single attitude orientation. The items for each scale were mixed and for each item respondents were asked to select one option from a Likert scale of one to five from 'strongly agree' to 'strongly disagree' (Appendix A). Attitude orientations were based on the typology and subsequent scales developed by Kellert and Clark (1980; Table 3.1) and applied in Japan, Germany and the U.S.A (Kellert 1991b; 1993a) and adapted for use in Botswana (Mordi 1987 in Bowman 2001). To measure wildlife-related knowledge and awareness, respondents were asked to self-complete a series of twenty true/false and eight multiple-choice questions (Appendix A). Please see Chapter 3 for more details of these methods and the development of the measures.

Respondents were also asked a series of questions recording the frequency of respondent interaction with wild animals over the last twelve months. These questions were based on a pilot questionnaire with the central Hanoi public (n=33) that included open questions about interactions with, and experience of, wild animals. The pilot survey also investigated media access amongst central Hanoians. Following the pilot, a question on hours spent listening to the radio was replaced by recording the number of days upon which the respondent listened to radio news, and newspaper and magazines were combined since respondents rarely distinguished between them. For each medium accessed in the last seven

days, respondents were asked to describe any wildlife-related articles, programmes, adverts or news items seen/heard/read/discussed; whether or not respondents were able to recall any information was recorded as well as details of the description they gave.

### ***8.2.2. Statistical Analysis***

Wildlife-related knowledge and awareness scores were attained for 93.3% of respondents (n=854). Independent t-tests, Spearman's rank and one-way ANOVAs were used to identify significant differences between, or correlations with, scores according to respondent characteristics, media access and participation in wildlife-related activities including wild animal consumption. Multiple linear regression was then used to investigate the predictive value of different variables on scores when all other variables are held constant. Variables significantly related to knowledge and awareness score were entered in one block using the forced entry method; those that did not improve the ability of the model to explain variation in scores were subsequently removed. Additional variables were then added in further blocks. For multivariate analysis, education, family income and personal income were treated as categorical data using dummy variables.

### **8.2.5. Semi-Structured Interviews**

Qualitative data presented in this chapter are drawn from SSIs with the central Hanoi public (n=39) and, to a lesser degree, from those with wild meat consumers (n=39). Because they widely featured in the Vietnamese media and debated amongst the public at the time of the research, the tigers being bred by a private entrepreneur in Binh Duong province (Box 8.1) became a central theme of the interviews used to explore wider values and awareness. The interview quotes presented indicate the primary themes of the interviews unless noted otherwise.

### **Box 8.1. Tiger Farming and The Controversy of the Private Tiger Breeder in Binh Duong**

On 13<sup>th</sup> March 2007 the Vietnamese News Agency (VNA) reported up to 37 tigers being kept illegally in Binh Duong province (VNA 2007c). The same article quoted a letter from the government stating “the act of illegally breeding tigers by organisations and individuals [...] breaches the State’s regulations on managing, protecting and developing rare, endangered forest animals, which needs to be strictly dealt with”. The Ministry of Agriculture and Rural development (MARD) is said to have advised the Prime Minister to confiscate the tigers and give them to “authorised organisations” (VNA 2007c).

A week later, a letter to the Prime Minister from the breeder - Mr Tan, the Director of a beer company - appealing to allow him to keep the tigers was published (VNA 2007e). Mr Tan claims he had applied to the relevant authorities after purchasing six baby tigers in poor health in 2000. He also stated that “Decree 32 dated June 30, 2006 of the Prime Minister stipulates that the State encourages, supports and protects the legal rights and interests of organisations, families and individuals in managing, protecting and developing rare and endangered plants and animals”. He then appealed to be able to keep the tigers to “breed and preserve” and set up a “wildlife preservation zone” (VNA 2007e).

On 26<sup>th</sup> March 2007, details of a letter sent to the Prime Minister and signed by several international conservation NGOs were published. The NGOs argued there was no evidence to support Mr Tan’s claim of breeding the tigers for the purposes of conservation and pointed out that as yet there is no case of captive-bred tigers successfully adapting to a wild environment. They also emphasise the opportunity for the government to make a clear stand to show they will not tolerate captive breeding and trading in tigers.

The public were reported to support Mr Tan on the basis that since alternative rescue centres were unable to breed tigers as successfully it is better to allow the current breeder to “increase the number of tigers in Vietnam” (VNA 2007d). Mr Tan subsequently reported he expected to have bred 364 tigers by 2012 (VNA 2007a). “Thus”, reported VNA (2007b), “the opinion of some international organisations is contrary to Vietnamese public opinion. On March 22, Minister of [MARD] visited Binh Duong and “praised the number-one tiger breeder of Vietnam” (VNA 2007b), stating that anyone who breeds tigers to rescue and preserve them must be respected. Mr Tan now has permission to continue breeding tigers.

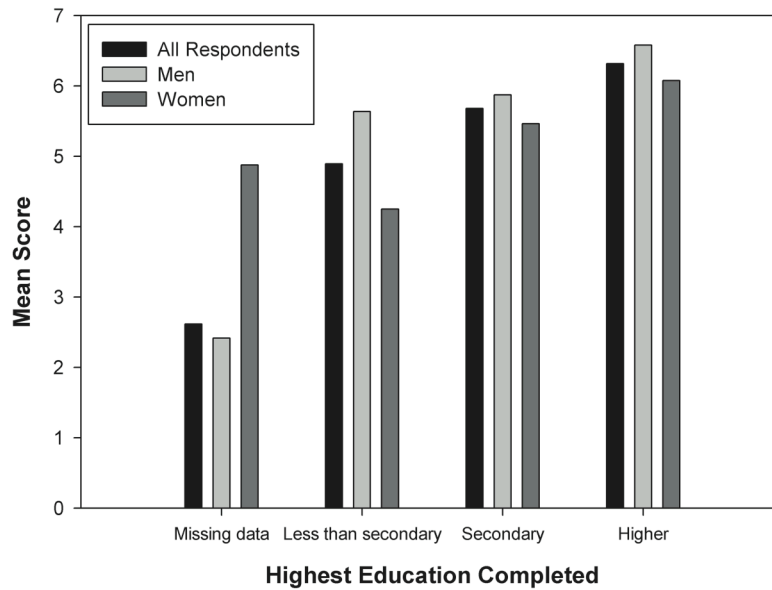
The majority of tiger farms in neighbouring China are widely considered to be for commercial gain rather than for conservation (Green et al. In Press in Nowell and Xu 2007). Private ownership of tigers is also growing in China, backed by the government (Nowell & Xu 2007).

## **8.3. Results**

### **8.3.1. Wildlife-Related Knowledge and Awareness Score**

There are significant increases in mean score ( $F[2,838]=28.05$ ,  $p<.01$ ,  $\omega=.24$ ) between each education group (Figure 8.1). This effect is largest amongst women ( $F[2,410]=24.42$ ,  $p<.01$ ,  $\omega=.32$ ) but also exists amongst men ( $F[2,421]=7.69$ ,  $p<.01$ ,  $\omega=.17$ ); however, amongst male respondents, a significant difference in mean score is found only between those with and without higher education. Responses are rarely omitted at random, and one might expect respondents for whom education data are missing to have completed a relatively low level of schooling. Surprisingly women for whom education are missing achieve a high mean score (Figure 8.1), but data are missing for just twelve respondents including only four women.

**Figure 8.1** Mean score achieved according to highest education completed and sex (n=854):



On average, men achieved significantly ( $t[834]=-4.82, p<.01$ ) higher scores ( $M=5.97, SE=0.11$ ) than women ( $M=5.27, SE=1.00$ ); the size of this effect is  $r=.16$ . Age ( $r=.12, p<.01$ ) is significantly positively correlated with score, but this effect is only significant amongst men ( $r=.18, p<.01$ ) when data for each sex are analysed independently. The average score achieved by those in the lowest personal income quartile ( $M=5.05$ ) is significantly lower ( $F[3,755]=6.29, p<.01, \omega=.14$ ) than for those in all other quartiles ( $M=5.70, 5.833, 5.90$ ); analysing score for men and women separately, this effect is only significant amongst women ( $F[3,369]=5.59, p<.01, \omega=.20$ ). Family income, occupation and birthplace have no significant influence on scores.

With regards to media access, both the number of hours respondents reported watching the television news ( $r=.26, p<.01$ ), or days on which they reported reading a newspaper ( $r=.15, p<.01$ ), during the last seven days have significant positive relationships with score. Time spent on the Internet, listening to radio news or specifically discussing wildlife-related issues did not influence scores significantly.

Those who reported reading about wildlife in the last twelve months achieved significantly ( $t(831)=-2.49, p<.05$ ) higher scores ( $M=5.88, SE=0.12$ ) than those who did not ( $M=5.51, SE 0.09$ ); however the effect is relatively small ( $r=.08$ ). In

contrast, respondents who reported eating wild meat in the last year attained significantly ( $t(849)=-2.85$ ,  $p<.01$ ) lower mean scores ( $M=5.22$ ) than non-consumers ( $M=5.72$ ); this effect is also small ( $r=.10$ ). Participants who reported taking a photograph of wild animal ( $t(849)=-2.47$ ,  $p<.05$ ) in the last twelve months also achieved significantly lower mean scores ( $M=5.18$ ,  $SE=0.22$ ) than those who did not ( $M= 5.66$ ,  $SE 0.08$ ); again, the effect is slight ( $r=.08$ ). Whether or not respondents reported undertaking other wildlife-related activities, including visiting a zoo, visiting a nature reserve, hunting, fishing or consuming a wild animal product other than wild meat, did not significantly impact scores.

Although there are no significant differences in education between men and women, there are significant differences in the education accomplished between age quartiles ( $\chi^2[6]=66.80$ ,  $p<.01$ ). Likewise, there are significant differences between income groups in terms of education level achieved ( $\chi^2[6]=66.50$ ,  $p<.01$ ). These examples suggest the relationships between these variables may in fact be more complex, i.e. if the effects of education were controlled, age and/or income may become less or more important in terms of their influence on score, and vice versa. For these reasons, I also present the results of multivariate analysis below.

#### ***8.3.1.1. Multivariate Analysis***

Education had by far the largest effect on wildlife-related knowledge and awareness score (Table 8.1): respondents who had completed secondary or higher education scored significantly higher ( $p<.01$ ), and the non-response education group scored significantly lower ( $p<.05$ ), than those who had not completed secondary education; it is likely that those who failed to respond completed a relatively low-level of education (Table 8.1). Compared to education, sex and wild meat consumption have much smaller but similarly sized impacts on score: men scored significantly higher than women ( $p<.01$ ) and respondents who reported wild meat



**Table 8.1** Linear regression showing the role of respondent characteristics on wildlife-related knowledge and awareness score (n=854):

Predictor variables	Step 1			Step 2			Step 3			
	B (SE)	$\beta$	Sig.	B (SE)	$\beta$	Sig.	B (SE)	$\beta$	Sig.	
(Constant)	3.67 (0.26)		.00	3.31 (0.27)		.00	3.48 (0.27)		.00	
Age (years)	0.02 (0.01)	0.14	.00**	0.13 (0.01)	0.09	.01*	0.01 (0.01)	0.09	.01*	
Sex (Reference category: women)	0.65 (0.14)	0.15	.00**	0.57 (0.14)	0.13	.00**	0.62 (0.14)	0.15	.00**	
Education (Reference category: secondary education not completed)	Non-responses	-1.31 (0.73)	-0.60	.07	-1.62 (0.72)	-0.07	.03*	-1.68 (0.72)	-0.76	.02*
	Secondary education completed	0.93 (0.18)	0.22	.00**	0.81 (0.18)	0.19	.00**	0.83 (0.17)	0.19	.00**
	Higher education completed	1.59 (0.19)	0.34	.00**	1.41 (0.19)	0.30	.00**	1.44 (0.19)	0.31	.00**
TV News (days watched in last 7)					0.19	.00**	0.15 (0.03)	0.18	.00**	
Wild Meat (Reference category: no consumption in last 12 months)							-0.64 (0.16)	-0.13	.00**	

Model:  $R^2 = .12$  for Step 1;  $\Delta R^2 = .03$  for Step 2;  $\Delta R^2 = .02$  for Step 3 ( $F = 23.49$ ,  $p < .01$ ). \*\*  $p < .01$ , \*  $p < .05$

consumption in the last twelve months scored significantly lower ( $p < .01$ ) than those who did not (Table 8.1; Table 5.2). The latter result suggests increasing wildlife-related knowledge may play a role in reducing wild meat consumption. In contrast, reporting consumption of a wild animal product other than wild meat did not contribute to predicting score and was therefore excluded from the model.

Finally, the number of days respondents reported watching the television news during the previous week ( $p < .01$ ), and respondent age ( $p < .01$ ), were both positively associated with score; however, the effect of these predictors on score is relatively small. Despite earlier analyses suggesting personal income being important, at least amongst women, this variable did not contribute to the model's ability to predict score and was therefore excluded. Similarly, wildlife activities including photographing wild animals and reading a wildlife-related book did not contribute to the final model.

### ***8.3.2. Knowledge of Native Biodiversity***

Despite these quantitative findings, qualitative results show only limited variation in knowledge and awareness of native biodiversity and species status according to age or education. Most interviewees were only able to identify very few, if any, wild animal species found in Vietnam or those that are endangered. Those interviewees who did display superior knowledge about native biodiversity, species status and also conservation tended to be male, but men were not consistently more knowledgeable. Species identified were typically large and charismatic such as bears, tigers, elephants, rhinos, monkeys, deer and the redheaded crane. Only a handful of interviewees referred to Vietnam's Red Book of Endangered Species. Although few interviewees were aware of specific species, many do perceive the number of wild animals in Vietnam to be generally declining, potentially endangering some species. Approximately half of the interviewees - men and women of a variety of ages but most with secondary education or above - also consider Vietnam to have a relatively rich diversity of wild fauna, while a small number also made reference to endemic species:

Female service worker aged 48, secondary education completed:

*Int: How significant do you think wildlife in Vietnam is?*

*CN23: Generally speaking, from what I know I think wildlife in Vietnam is diverse. We have some rare species that other countries do not have. [...] For example, langurs and red-headed cranes that only Vietnam has.*

Female undergraduate student aged 19:

*Int: Vietnam is still a developing country and needs investment in many other aspects. Do you think we should invest in wildlife conservation?*

*CN03: I think yes because Vietnam has many rare and precious species. I think we should conserve those animals because rare species are declining in numbers. According to some recent news on TV, there are only a few animals like that; they are almost extinct.*

However, the remainder - again many with secondary education or above - think rare species are found elsewhere; widely accessed foreign television programmes - which interviewees suggest are biased towards African and Amazonian wildlife - contribute to this view:

Retired female state official with secondary education aged 58:

*Int: Can you tell me or describe any rare species that live in Vietnam?*

*CN35: Tigers, elephants, bears, monkeys. Actually, Vietnam does not have many rare species such as lions or rhinos. Maybe we have but we have not found them yet.*

Retired male skilled worker aged 75, primary education completed:

*Int: Can you describe any rare and precious animals in Vietnam?*

*CN26: Maybe there are more rare and special animals in other countries than in Vietnam. I have seen many exotic species on TV.*

Male skilled worker aged 26, secondary education who goes hunting in Vietnam:

*Int: Can you tell me if wildlife in Vietnam is significant in terms of global biodiversity?*

*CN15: I don't know. I watch programmes on the Discovery Channel and know that other countries have many exotic species. I have not been to many places in Vietnam so I don't know.*

Interestingly, a reasonable proportion of interviewees - including those who were relatively knowledgeable about wild animals in Vietnam - expressed the belief that Vietnamese species are interchangeable with other regions of the world. This leads to the understanding that species can be replaced from elsewhere if they become extirpated in Vietnam:

Female undergraduate student aged 18:

*Int: So do you think Vietnam should make more protected areas like this?*

*CN07: Vietnam should have areas like that, but animals in Vietnam are not new or exotic.*

*Almost all animals we have also exist in other places. Therefore, if we have protected areas, we should import animals from other countries. I don't know but I think in each country there is one specific species. Some countries may have three or four but I think Africa has the most interesting species.*

Retired male aged 75, wild meat consumer and ex-hunter, knowledgeable about wild animals and thinks they should be better managed, education unknown:

*Int: Can you name any animals that are specific to Vietnam?*

*CN04: Specific to Vietnam? I think we have elephants, tigers, deer. Recently one-horn rhinos have been found in Phu Yen. There are also wild buffalos, some kinds of birds, and wild chickens. Generally speaking, Vietnam has some species that also inhabit the Amazon forest.*

Male farmer aged 30, primary education, wild meat consumer:

*Int: You said Vietnam should conserve wild animals, for what purposes should we conserve?*

*CN28: Some rare species are hunted, so we have to protect them from extinction [...] If rare species are extinct, there will be some effects. We have to import animals from other countries.*

If central Hanoians were better aware of the unique biodiversity found in Vietnam and the fact it cannot be replaced by species found elsewhere, it is possible they might be more concerned about protecting what they have.

### **8.3.3. Sources of Wildlife-Related Knowledge and Awareness**

Despite large proportions of respondents reporting watching television (96.4%) and television news (86.6%), and reading newspapers (67.5%), only exposure to television news was significantly associated with score (Table 8.1). Nevertheless, while 29.3% of those who reported watching television were able to recall specific details of wildlife-related television items viewed from the last week, less than 10% of those who reported accessing other types of media, including television news, were able to do so; Table 8.2 summarises the information recalled for the most accessed media. This suggests television is an important potential source of wildlife-related awareness despite apparently not contributing to demonstrable wildlife-related knowledge.

**Table 8.2.** Summary of descriptions of wild-related information recalled from the last week according to most frequently accessed media

Television	The main sources of information about wild animals on television are 'Animal Planet' shown on VTV2 and other foreign wildlife programmes on the 'Discovery Channel': respondents report watching the lives of large charismatic animals such as tigers, lions, leopards, bears, elephants, dolphins, monkeys, polar bears and birds such as cranes, and were also sometimes able to describe specific animal behaviours such as mating, rearing young and hunting.
Television News	Descriptions of wild animal related information on television news were dominated by stories about farming wild animals – particularly tigers and bears – and the confiscation of illegally traded species. To a lesser extent coverage included, in order of frequency reported, bans on hunting of wild animals; the conservation status of different species; damage inflicted by wild animals; crop damage by elephants; discovery of new species.
Newspaper	Reports of wild animal-related information accessed in newspapers were dominated by reports of the confiscation of illegally traded wild species, followed by captive breeding of tigers; adverts for bear bile; stories about conservation and/or species status.

Qualitative data suggest this is because, although programmes about wild animals are widely accessed and enjoyed, they tend to focus on non-native wildlife and be broadcast in English; neither dubbed nor subtitled in Vietnamese, their educational value is limited. That newspapers provide limited wildlife-related knowledge and awareness is also demonstrated by qualitative data:

Male unskilled worker aged 49, passionate and knowledgeable about wildlife:

*Int: What stories do you see in newspapers about wild animals?*

*CN01: The media seldom covers this [...], if you read through all the newspapers available you can see many stories about socioeconomic news, but I hardly see any news about wild animals. There is little information dissemination. I usually have to watch the news on the Discovery Channel and foreign programmes. I just watch them but do not really understand; I don't know any foreign language.*

Retired male aged 75, wild meat consumer and ex-hunter, knowledgeable about wild animals, education unknown:

*Int: Do you see any stories about wild animal in newspapers?*

*CN04: I read lots of newspapers, but for wild animals I often watch VTV2, the programmes about wild animals in Africa [...]. They are about wild animals' life such as zebra, lions, hippopotamus [...]. Or in the Amazon forest, there are many stories about wild animals. About our country: I saw some [wild animals] when I was a soldier.*

The wildlife activity that by far the most respondents participated in was visiting a zoo: 52.1% reported visiting a zoo in the last twelve months. But the lack of association between this activity and knowledge score is predictable given the absence of information provided at the zoo (pers. obs.). It is also unsurprising that visiting national parks - which 16.1% of respondents reported doing in the last year - had no significant impact on scores. Qualitative data show that experiences of national parks typically comprise day trips involving a meal at the destination but rarely walking into the reserve or visiting education centres where available, and almost never observing wild animals other than in the context of hunting or eating wild meat.

However, qualitative data suggest firsthand experience of environmental problems influences knowledge, awareness and outlook more than either formal education or mass media. When asked about environmental problems in general, interviewees typically focus on problems they personally encounter, and for Hanoians this is pollution:

Retired male aged 60, secondary education, born in Hanoi:

*Int: What environmental problems does Vietnam have at the moment?*

*CN14: Air pollution, it's difficult to breath. It's so dusty here, and there is lots of exhaust fumes from motorbikes. It's very polluted now.*

*Int: What about rural areas?*

*CN14: Industrial zones have caused some pollution in the rural area. Before, there was a lot of space, such as lakes and ponds to regulate the air. But now, due to [price of/demand for] land increase, people have sold lakes and ponds to build houses.*

*Int: Are there any problems with forests and wetlands?*

*CN14: Your question is beyond my knowledge because I have never been there. I don't want to re-tell the things I have read in the newspaper because you yourself can do that [talks at length about not being able to trust what is reported in newspapers]. For lakes and ponds, that's something I can see with my own eyes. For example, in Hanoi, in Thanh Nhan area, there were many ponds and lakes before. Now, people have drained the ponds and lakes. For clearing forests, I have not seen with my own eyes; I cannot tell.*

Female undergraduate student aged 22, born in Hanoi:

*Int: What environmental problems are there in Vietnam?*

*CN12: Water pollution and rubbish. People throw rubbish irresponsibly [...] generally speaking places are becoming more polluted because most companies have factories there. In the city, people may have good knowledge and awareness of the environment, but people in the other places may not pay enough attention to the way factories discharge rubbish. So I think these places are becoming more polluted.*

In contrast, those with personal experience of rural areas tended to demonstrate better awareness of wider conservation-related issues, and to consider conservation a greater priority:

Retired male skilled worker and ex-hunter aged 47, education unknown:

*Int: What about Vietnamese hunters?*

*WM04: The people who live near the forest are very poor. They have to go hunting to earn their living. [...] In Vietnam even small birds are caught for meat. Vietnam is rich in natural resources such as forest products, but local people have to live in bad conditions. In some areas, people are destroying wetlands and swamps, which serve as habitat for wild animals. They farm shrimps and do whatever they like. Another example to show that people have low awareness of protecting nature and wildlife is that there was a plan to build Ho Chin Minh trail through Cuc Phuong forest, dividing the forest into two parts. If there were no international assistance in terms of planning, the forest would be destroyed.*

Male service worker aged 24, primary education, born in Lao Cai province and worked for a timber company in Laos:

*Int: Can you tell me about wild animals in Vietnam, maybe, unique to Vietnam or Laos?*

*WM09: In southern Laos there are very big black bears, and sun bears in northern Laos. There are some smaller bears in areas along the Vietnam-Laos border [...] They are in danger of extinction both in Vietnam and Laos. There are more wild animals in Laos than in Vietnam. Whenever people hear about the appearance of any animals, they come to shoot [...] Even very young animals are hunted. I hear that young bears of about five kilos are caught and put in alcohol jars. One jaw of a young bear may cost 90m VND. These bears are caught in the border.*

Female professional aged 52, university degree, lives in rural Ha Tinh Province:

*Int: The economy in Vietnam is growing very quickly. Do you think the government is doing a good job in balancing environmental concerns with development?*

*CN30: Not very good. Because people still destroy the forest. We do not reforest as much as we should. For example in some forests near the coastline, people have logged 20-year-old trees to get titanium for exports. They may get some economic gain from selling titanium, but the long-*

*term environmental damage is disastrous [...] if we develop too quickly without taking care of the environment, the environmental damage may have adverse effects on people. [...] Some people in the South have destroyed mangroves to make shrimp and catfish farms. The consequence of that is salination of land makes it impossible for them to grow more crops or farm more shrimp [...] The economic gain from this project was little but the damage was huge.*

#### **8.3.4. Wildlife-Related Knowledge and Wild Animal Consumption**

Respondents who reported wild meat consumption in the last twelve months scored significantly lower on the wildlife-related knowledge measure than those who did not (Table 8.1). In contrast, consumption of wild animal products other than wild meat was not correlated with scores at all. This suggests increasing wildlife-related knowledge and awareness may play a role in reducing wild meat consumption, but not in the consumption of other wild animal products. This is perhaps because the dominant wild animal product reported consumed besides wild meat is bear bile, and bear bile is widely considered a necessary medicinal product (Chapter 6). In contrast, wild meat may be seen, at least by some, as a luxury rather than as essential for human life. As such, individuals might be more susceptible to awareness raising campaigns aiming to reduce demand for wild meat than to campaigns aiming to reduce demand for wild animal-derived medicines.

Having said that, qualitative data clearly show that many consumers continue to eat wild meat despite awareness of hunting and trade-driven wildlife decline, wildlife-trade related legislation, and wildlife consumption being generally discouraged; since rarity is an important driver of consumption of wild animal products (Chapter 6), it is of course possible that consumers choose to eat wild meat *because* they are aware that it is rare rather than *despite* it.

Consumers typically also disassociate personal consumption behaviour from hunting-driven wildlife decline:

Businessman and wild meat consumer aged 56, secondary education:

*Int: You have not gone to eat wild meat much in the past year.*

*CN25: Rarely.*

*Int: Why so?*

*CN25: I only went because my friends kept inviting me. I don't really want to go because I don't think wild meat is very delicious, and [...] from what I have seen on TV, I am aware that Vietnam suffers a great loss if our animals are killed.*

*Int: Do your friends not share the same view with you?*

*CN25: Some people share the same view, but some people still continue eating wild meat. Not many people care. Most of them still want to eat, therefore, restaurants are doing good business. Wild meat restaurants are crowded. Not many people have good awareness.*

*Int: Do you think eating wild meat is less impressive these days compared with in the past?*

*CN25: Yes, I think so because it was new in the past. [...] And also, there are some educational programmes on television and newspapers, so people have better awareness now. [...] The government has inspected and monitored many restaurants. Those that purely sell wild meat are banned [...] Actually, eating wild meat is prohibited. There are inspection groups who fine restaurants selling wild meat. There are many loopholes in our regulations.*

Male skilled worker and wild meat consumer aged 44, secondary education:

*Int: Do you think in order to conserve wild animals eating wild meat should be stopped?*

*CN20: If we can do that effectively, wild animals can be conserved. Now we are talking about conserving wild animals; many laws are saying protect and conserve wild animals, but how come we still see wild meat in restaurants? The government bans hunting [...] but wild meat is still available in restaurants. So there are still things our government has not done effectively yet.*

*Int: When you go to Hai Phong [this weekend], will you try some wild meat dishes?*

*CN20: If there are some.*

Most interviewees blame “people” and human actions for endangering wildlife; specifically, most consider deforestation and hunting to be the main threats:

Male service worker aged 39:

*Int: In your opinion what are the main threats to animals in Vietnam?*

*CN05: There are two reasons. First, the loss of forests leads to the loss of habitat for animals; wild animals have to go somewhere else. Second is people’s hunting. These are the two reasons. [...] Because wild animals live in the forests, if there is a forest, they will stay. If forest is destroyed, then they will go. That’s simple.*

Female housewife aged 60, primary education:

*Int: Do you know why these species are threatened?*

*CN06: I think because of deforestation and hunting. Consequently, rare species are in danger of extinction. I think so because people think for themselves first; they want to hunt animals to sell. Besides, there’s a lot of deforestation in many places.*

But although most interviewees were also aware that hunters mainly sell, rather than subsist on, their catches in order to supply restaurants in Vietnam and China, they very rarely directly make the link between consumption of wild animal products and hunting. Instead, lack of education and/or awareness, particularly amongst ethnic minority groups, is often blamed for both deforestation and hunting. Given shifting cultivation practiced by ethnic minority groups is widely considered a threat to natural resources, and these groups are generally viewed in a negative light by the Viet majority, it is unsurprising that they are commonly cited scapegoats for wildlife decline:



Female undergraduate student aged 22:

*Int: You said more and more animals in Vietnam are endangered, what are the causes?*

*CN03: People's low awareness, they don't know the animals are endangered, they only think about their own benefits. If people know animals are endangered, they may know that if animals die out, they won't have anything to hunt. The most important thing here is people's awareness [...]. Both you and I know - urban people. For rural people [...], people in mountainous areas: they don't know much about the importance. If they were more aware, they would hunt less [...] As for deforestation, [...], people from mountainous areas, in the Central Highlands, are not fully aware; they have destroyed the forest for wood for a long time.*

Male skilled worker aged 39, secondary education:

*Int: So when a country develops, do you think it's necessary for it to lose wildlife populations?*

*CN05: The problem is, I don't know the situation in other countries, but in Vietnam deforestation is not necessarily caused by economic development. The reason is some ethnic minority groups living in mountainous areas clear forests to make land to cultivate. After each season, they don't want to continue cultivating on the same piece of land, instead, they move to another area; starting clearing the forest, and so on. Their ways of farming cause deforestation. Some people also destroy the forests by illegal logging but people from ethnic minority groups destroy the forests the most. Deforestation is mainly caused by their farming methods, so we need to change their habits to put an end to deforestation.*

Corresponding to the perceived lack of awareness, raising awareness is identified as a primary tool for conserving wildlife. Interviewees, including consumers, think once fully informed of the 'importance' of wild species, those responsible for harvesting them will protect wild species instead:

Male service worker and wild meat consumer aged 24, primary education:

*Int: Do you think that there's anything that can be done to protect them?*

*WM09: First, it is necessary to enhance people's awareness. In some areas, local people even catch very young animals. They only think how to earn their living, and they think that wild animals can bring them a lot of money. They don't care about the national value of these animals or do anything to protect wildlife. In my opinion, we should begin with educating young children like school pupils about the needs to protect wildlife is one of the most important tasks.*

Retired male state officer aged 71, university degree, reported eating tiger in the last year:

*Int: How do you think that could be changed?*

*WM10: First, we should educate people about the importance of protecting wild animals or enhance their awareness of the importance; we should carry out advocacy activities.*

Relatively few acknowledge the role of poverty in dependence on hunting wild animals or that local people may be able to manage natural resources most sustainably, at least prior to recently inflated urban demand for wild meat. Interviewees also very rarely identify actions targeting wildlife consumption, again apparently decoupling personal consumption behaviour from threats to wild species:

Male skilled worker and wild meat consumer aged 37, college education:

*Int: What do you think should be done to conserve wildlife?*

*WM26: The best way to protect them is not to hunt them [...] if we see someone intending to hunt an animal, we should persuade them to stop [...] There should be stricter regulation on hunting to protect wild animals. Because at the moment, when there is a demand for wild meat, and people can still get away with hunting, then animals will keep being killed.*

Retired male state officer aged 71, university degree, reported eating tiger in the last year:

*Int: How do you think that could be changed?*

*WM10: [...] The law enforcement should be stronger; police and forest rangers need to do a better job, stopping people from hunting. [...] wildlife farmers should have permits. The wildlife farming should be well monitored and managed. [...] I think [protecting wildlife] is difficult: many people still want tiger glue though there are few tigers left.*

Even non-consumers rarely identify consumers or restaurants as targets for interventions; in fact, only two interviewees, who were also the most passionate and well-informed supporters of wildlife conservation, do so. But even then, while one limits punishment to government officials who consume wild meat, perhaps simply because he perceives them to be the predominant consumers of wild meat (see Chapter 5), the second still identifies ethnic minority groups as the primary target groups for intervention and also thinks, while restaurants should be punished for serving wild animals, eating wild meat is the consumers' prerogative (note also his reference to the social pressures to eat wild meat to show wealth):

Male skilled worker aged 36:

*Int: If you don't support farming for commercial purposes, how will Vietnamese people access medicine like bear bile or tiger glue?*

*CN31: [...] In order to discourage people from using wild animals, we should have strict regulations and we also need to disseminate to people about the wildlife [...] I think we must have strict regulations, to heavily fine or punish those officials who eat wild meat.*

Male unskilled worker aged 49:

*Int: is there anything to be done to reduce trade in wild animals, to reduce the need for these rescue centres?*

*CN01: The government needs to disseminate widely to its citizens, especially people from the mountainous areas who are the most important targets. Secondly, they need to set up monitor and inspection groups to inspect wildlife restaurants to heavily fine them if they violate [...] heavy financial penalty with have a deterring effect [...].*

*Int;/ What do you think about people who pay a lot of money to eat wild animals?*

*CN01: Frankly speaking, there is nothing I can do about that. They pay their own money to eat but we can say nothing. That's their own freedom. No one can forbid that, right? [...] I think that if they loved animals they wouldn't eat [but] in a society there are different people. We condemn those who eat wild animals, but those people just say we don't eat because we don't have money. That's life. But I think we should not eat rare and precious species.*

Even when prompted to make the link between supply and demand, consumers and non-consumers both often play down the impact of consumption behaviour:

Retired male aged 60, secondary education:

*Int: You say those who hunt are poor, but what about those buying the wild animals they hunt?*  
*CN14: To eat only, then that's not too damaging. What is most damaging is trafficking of animals to other countries. If you go to a wild meat restaurant you may see many people, but not too many.[...] I think trafficking to other countries, especially China, is the most damaging to wildlife. I can see that many species have declined in number.*

Male shop owner aged 44, consumer of bear bile:

*CN25: I think when there is a government policy to prohibit [wild meat] then it will help. If there is a fine or a punishment then it will work.*  
*Int: You have already benefited from bear bile, what about prohibiting that?*  
*CN25: It's difficult to prohibit consumers. It may be better to target producers and hunters. Once bear bile has become a product, in a bottle, for example, then a bear is already dead.*

### **8.3.5. Conservation Management**

Interviewees have a generally negative perspective of conservation management and the government institutions involved. Issues repeatedly raised include poor enforcement of the law; a lack of resources and finance to fund conservation - typically focusing on under-resourced enforcement agencies and centres for animals confiscated from trade than, for example, setting aside habitat for conservation; and hypocrisy and corruption amongst government agencies:

Retired male aged 75, education unknown, wild meat consumer, knowledgeable about wild animals, education unknown:

*Int: Do you know any conservation actions that are going on in Vietnam now?*  
*CN04: To be honest, I think people have talked about conservation, but in reality there is still animal hunting. For example, on the way to Luong Son, Hoa Binh there are 10 or more wild meat restaurants. The media has reported about wildlife conservation but all the high-ranking officials in some districts are presented wild animals as gifts or invited to wild meat restaurants, so how can conservation happen? Or for example, 60 turtles were brought to Soc Son<sup>47</sup> last year, but two weeks later most of them died. [...] People have been talking about conservation, but when I went to Soc Son I didn't see any conservation.*

Retired male aged 45, secondary education:

*Int: How do you think the government can manage the environment?*  
*CN37: Clearing forests is not allowed in Vietnam but some officials are bribed to turn a blind eye to deforestation. Those who clear the forests are often relatives of officials. If officials were less corrupt, then we would be able to protect our forests more. A layman who steals a needle may be sentenced, but an official can get away after stealing a bicycle.*

Retired male state officer aged 71, university degree, reported eating tiger in the last year:

*Int: You mentioned earlier that Vietnam should conserve animals by farming. Do you think Vietnam should focus on farming animals to protect them or conserving them in the wild?*  
*WM10: [...] Vietnam is not really conserving animals, because you can see wild animals and wild meat publicly sold in many places. If you have money, you can buy wild meat such as pangolin and cobra. Functional agencies are not doing a good job. So, hunting and trading wild animals is easy, and you can make a good profit.*

---

<sup>47</sup> Soc Son is a state-run 'rescue centre' for wild animals confiscated from illegal trade.

Male skilled worker aged 36:

*Int: Do you support the farming of wild species to supply wild meat restaurants?*

*CN35: [...] In our country there is poor management [...] We have some regulations banning animals trafficking but we don't know what to do with confiscated animals. There is a lot of corruption among forest protection department staff and police, as well as traffickers.*

This is an unsurprising response, reflecting many of the current challenges being encountered with wildlife conservation in Vietnam (Chapter 1). But it is likely that these circumstances are to some extent contributing to poor translation of wildlife-related knowledge and awareness into more environmental behaviour at an individual level. Reducing personal consumption behaviour, for example, seems rather futile when those in power are consuming wildlife, and when wider wildlife conservation efforts are undermined by lack of enforcement, corruption and poor survival rates of confiscated wild animals.

### **8.3.6. Environmental Concern**

Unsurprisingly, most interviewees are primarily concerned about environmental problems they can see and which affect their daily lives. Besides environmental problems immediately impacting on their health and wellbeing, very few interviewees consider the environment a priority and most think environmental problems should be invested in once economy is more developed:

Female undergraduate English student aged 19 and born in Hanoi; last week her class had been asked to prepare and give presentations on environmental problems in Vietnam<sup>48</sup>:

*CN09: We thought about the causes and effects of market [pollution caused by street markets] and then tried to suggest some solutions [...].*

*Int: So did any of your classmates give a presentation on wild animals or about conservation?*

*CN09: Wild animals..? No [...] it's not that we don't care [about wild animals], it's just that the things we see everyday is not wild animals, endangered, the things we see is pollution. Pollution is around, the noise pollution, the air pollution, especially the rivers, the water pollution [...]*

*Int: Do you read about wild animals in magazines or newspapers?*

*CN09: Yeah I have read some Vietnamese newspapers and some foreign newspapers, but actually I haven't really cared much about this [...] I think there are more stories about animals in danger of extinction in foreign newspapers because newspapers are written to serve the tastes or needs of people in specific areas, so when Vietnamese people don't care much about animals in danger of extinction, why would reporters write something about it?*

Male undergraduate student aged 26 born in Hanoi:

*Int: Do you think Vietnam should invest in conservation?*

*CN08: Actually, in Vietnam people see many other things that are directly related to their lives that need investing in. I think the government should invest in those things. It's not best, but for the time being we don't have enough resources for conservation. I think the government wants to ensure the quality of people's lives first, for example things like transportation or education [...] I think in the future when our country has developed economically [...] we can invest more in*

---

<sup>48</sup> Interviewed in English.

*conservation. At the moment there are many other more urgent things to take care of, for example healthcare. We must take care of people's health first.*

Rarely encountering wild animals, other than in the context of wild meat restaurants, television programmes or newspaper reports, most central Hanoians interviewed had rarely given wild animal conservation much thought. So although, predictably, most interviewees were generally supportive of wildlife conservation in theory, exploring attitudes towards wild animals and their conservation was difficult within this group, clearly demonstrating that it is not an issue that greatly concerns most people in central Hanoi. Indeed, as shown above, interviewees from rural areas are both more knowledgeable, and more concerned, about wildlife decline than those born in Hanoi.

### ***8.3.7. Attitudes Towards Wild Animals***

#### ***8.3.7.1. Measuring Attitudes***

Despite careful preparation and design (Chapter 3), none of the attitude scales proved sufficiently reliable in final analyses (Table 8.3). Comments recorded alongside certain items also suggested the scales were not consistently measuring the underlying constructs they were designed to measure, bringing the validity of the scales into question. The scales are therefore not used in further quantitative analysis. This section will instead use some of the results - primarily comments of questionnaire respondents recorded alongside attitude scale items - to investigate the failure of the scales and the suitability of this method to researching attitudes.

Respondent comments demonstrate that certain items were interpreted in a variety of ways by different respondents, and therefore that these items were not consistently measuring the same underlying attitude orientation for each respondent or as the remaining four items comprising the scale. For example, it became apparent that, in addition to the intended attitude orientation of animal welfare ("disagree: it's savage!"), the statement "I enjoy watching cock fighting" was also measuring attitudes towards gambling ("I disagree: a waste of time and money!") and traditional heritage ("I agree: it is traditional").

**Table 8.3.** Results of Reliability Analyses (n=915)

Scale	Cronbach Alpha <sup>49</sup>
Aesthetic	0.639
Dominionistic	0.468
Ecologistic	0.539
Moralistic	0.471
Naturalistic	0.471
Utilitarian-Consumption	0.419
Utilitarian-Habitat	0.376
Wild Meat Consumption	0.569
Wildlife Conservation	0.234

The comments also reveal that respondents were aware of the complexity of the issues raised by individual items, and in these cases asking them to assign a simple agree or disagree response seemed unfair. For example, asked whether they think the Vietnamese government should invest in wildlife conservation (in order to measure attitudes towards wildlife conservation, agree being considered a positive response), some respondents agreed with this in theory but were so concerned about any investment going to waste due to corruption that they decided to disagree. Other respondents agreed but would then append “depending on the economy” making it unclear whether they valued economic growth or the environment more. In fact is it fair to ask anyone to make this distinction? While economic growth often requires exploitation of natural resources, proper management of natural resources requires funding, and economic development could also be viewed as reducing some of the immediate pressures on natural resources. In addition, a simple agree/disagree response does not increase understanding of the values behind such decisions, and is therefore limited in its ability to inform attempts to influence attitudes to promote environmental behaviour.

Furthermore, there was evidence that attitudes were not static but were constantly being reformed. For example, one statement asked respondents to choose between conserving the habitat of a rare species and hydroelectricity. This became suddenly pertinent to everyday life when, half way through the data

---

<sup>49</sup> Scales should ideally have a Cronbach Alpha of 0.7 or above to be considered reliable.

collection period, large areas of Hanoi experienced scheduled power cuts due to water shortages. Having suddenly shifted from a hypothetical problem to an everyday reality, attitudes became overwhelmingly in favour of more hydroelectricity. Not only did this reduce reliability of the overall scale but it also suggests attitudes expressed by earlier respondents did not necessarily reflect their true attitudes or intentions, and indeed suggests that people do not have 'true attitudes' but rather that choices are almost always dependent on context.

### 8.3.7.2. Utilitarian Attitudes

Qualitative data demonstrate a dominant utilitarian attitude towards wild animals amongst the central Hanoi public. Almost all interviewees support farming wild animals to provide meat and medicine; a handful of non-wild meat consumers support wildlife farming only for medicinal goods, viewing the latter as essential, but wild meat as non-essential. Indicating a lack of awareness and understanding of the expertise and resources required to raise many wild species, most believe these farms should be commercial ventures run by ordinary farmers. Overwhelming support for wildlife farming is primarily driven by a belief that wildlife farming can promote economic development and alleviate poverty. Interviewees' focus on economic growth reflects that of the government: Vietnam's media are dominated by economics-related news and the economic benefits of farming wild animals are often featured. Many of those who support wildlife farming for economic growth are also those consumers who state active preferences for wild-caught products (Chapter 7):

Male skilled worker and wild meat consumer aged 30:

*Int: Do you think Vietnam should farm more animals like with bears and tigers?*

*CN28: For economically valuable species like snakes or soft shell turtles, we should farm to have more money. For example, the crocodile farming model in Hải Dương province can work in places where food supply is abundant and cheap, so people can make a lot of profit. [...] Some species should be farmed because they are lucrative, which can lift farmers out of poverty.*

Female unskilled worker aged 41:

*Int: Why did the government not want to allow [tiger farming in Binh Duong]?*

*CN27: Because they were afraid of the damage. [...] But I think if the government allows people to farm rare species that can contribute to economic development. People can farm tigers to make bone glue, for example.*

Many interviewees also support wildlife farming because it can help to meet a 'need' for wild animal products and 'demands' for wild meat (see also Section

6.3.2). Wild animal-derived medicines being ‘necessary’ is a sentiment expressed particularly, but not exclusively, by older interviewees; this is most likely because older interviewees currently perceive themselves as having most need of such medicines (see also Chapter 5). Likewise, wild meat consumers in particular argue the view that wild animals should be farmed to supply wild meat:

Retired female skilled worker aged 72, uses bear bile:

*Int: Should we increase [the number of animals by farming]?*

*CN22: [...] Bears are used for bile, tigers are used for their bone. [...] As the country develops, we may need more products from animals like bear bile or tiger bone glue, because these products are good [...] for health. There are only a limited number of tigers in the wild but people need their bones; tiger bones are rare, so if we can, we should open more farms.*

Female student aged 22, has yet to use a wild animal-derived medicine or eat wild meat:

*Int: Who do you think eats wild meat?*

*CN02: I think those who have money because only those who have lots of money and want to try something exotic. And maybe, there are animals that can offer good medicine to cure diseases. I think [...] why don't we create a source of supply, I mean, why don't we farm animals to provide the supply?*

Male skilled worker aged 58, wild meat consumer:

*Int: Why do they spend money on that?*

*WM02: Because they have normal food every day, so they want to eat wildlife meat as speciality for a change. They are bored with eating the same food every day [...] If everyone demands wild specialities, there will be no wild animals left in nature. When there are no wild animals, it is indispensable to farm animals to meet the demands.*

Male aged professional aged 24, wild meat consumer:

*Int: What do you think about farming wild animals for meat?*

*WM33: I think it is a good proposal because people's needs for wild meat are increasing. However I don't think we should abuse the increasing needs for these kinds of meat to hunt and kill more wild animals, which badly impact the environment. Wild animals need to be conserved.*

The final interviewee quoted above believes ‘increasing needs’ for wild meat need to be met, but that the opportunity created by this demand should not be used to exploit animals from the wild. Though the latter is probably said for the benefit of the interviewees, it is interesting that, despite his desire to say the ‘right’ thing, he still views it necessary or “indispensable” to meet these demands, rather than, for example, suggesting this demand should be mitigated.

In addition to contributing to economic growth and meeting growing demand for wild animal products, many also think wildlife farming can conserve wild species, mainly through reducing hunting. Again this includes consumers who prefer wild-caught products. This contradiction may arise because one or other of the



statements is what the interviewee believes they should do rather than what they would actually do or, as already demonstrated, because consumers uncouple personal consumption from wildlife decline. It is also possible that consumers are evading information in order to form the most satisfying conclusions, rather than the most rational:

Male government officer and wild meat consumer aged 51:

*WM14: Wild meat is certainly delicious, more delicious. It is because farmed animals are fed with processed food.*

*Int: Now some wild animals are being farmed, for example porcupine, soft shell turtle. What do you think about that farming more wild animals to supply restaurants?*

*WM14: If the farming is allowed, it'll be a good idea: it meets demands for wild meat and may help with conservation. It should be encouraged.*

Male skilled worker and consumer aged 35:

*Int: The government plans to farm animals like civet to supply meat to restaurants. What do you think about that idea?*

*WM31: I think the idea is good, because people don't have to go hunting [...].*

*Int: So if you went to restaurants where there is farmed wild meat and wild meat, which would you choose?*

*WM31: I would choose the wild one, even though it was more expensive [...] wild meat is certainly more delicious than farmed meat.*

Only a few supporters identify any potential difficulties involved in farming wild animals or detrimental impacts this could have for wild populations. Moreover, very few interviewees – both consumers and non-consumers - think wild animals should not be farmed at all, and only one supporter of wildlife farming stipulated “rare and endangered” species should not be farmed. Mostly these interviewees do not support wildlife farming because farmed products are considered inferior (see Chapter 7) and an even smaller number because they fear management is too poor so farming will facilitate illegal trade in wild-caught animals and/or will not serve to conserve wild species.

Some interviewees also demonstrate a utilitarian attitude towards the conservation of wild animal species. For example, although it is not surprising that most interviewees say it is important to protect wild species, it is interesting to note that many support this belief in conservation on the basis that these animals provide services to humans:

Male skilled worker aged 44, secondary education, wild meat consumer:

*Int: Do you think wild animals such as tigers and crocodiles should be protected in zoos or in the wild?*

*CN20: I think there should be a program which can preserve the animals, because there is a need now in the market for bear galls and tiger glue.*

Retired female government official aged 58, secondary education, wild meat consumer:

*Int: Do you think Vietnam should invest in wildlife conservation?*

*CN35: Yes, of course. That's very necessary. Rare species are necessary for people's lives. They need to be protected. Animals and forests should go hand in hand, everyone understands that.*

Retired male professional aged 64, university degree:

*Int: Do you think Vietnam should focus on conserving economically valuable species?*

*CN33: No [...] we should conserve all endangered species [...] to maintain their genes, because I think some have value to science [...]. At the moment we may not know about their values, but the next generation might find out.*

Many interviewees, typically those with at least secondary education but of a variety of ages and both sexes, believe “ecological balance” and “harmony” is essential to avoid far-reaching detrimental environmental impacts.

Female undergraduate student aged 22:

*Int: Do you think we should conserve?*

*CN02 (laughing): Of course, we should! I don't really understand the concept of ecological balance but I think we should conserve to have ecological balance [...] If all the animals died, that means their environment is destroyed, and then it would affect the whole Earth.*

Retired male state officer aged 71, university degree, wild meat consumer:

*Int: Vietnam is short of electricity, so do you think that there should be more hydroelectric dams even if this means damaging the habitat of some wild species?*

*WM10: If you want to implement a project that destroys the wild, you should stop. If you go on carrying it out, you'll make a big mistake. I mean we should keep the eco-balance. You see that natural disasters floods and droughts are due to destructive activities by humans.*

This is generally because ecological balance is believed necessary to support and maintain human life:

Male professor, higher education, aged 51, wild meat consumer<sup>50</sup>:

*Int: What do you think is the purpose or purposes of conserving forest?*

*CN38: Because whether it is animals or forest, they are part of the world in which we are living and I believe we can't do without them; I believe the forest and the animals are there just to maintain our own lives so [...] we have to protect them, we have to conserve because in doing that we are protecting our own lives: we are conserving our own lives.*

Female undergraduate student aged 22:

*Int: Can you tell me what you think wildlife conservation is about? What its goals are?*

*CN12: I think it makes the environment cleaner and fresher. I think in the past our country was cleaner than now. Now people have exploited the nature too much. [...] I think when the environment is destroyed, people's lives will be affected. [...] The forest has the function of a green lung which provides oxygen for people. If the forest is destroyed, then we won't have enough oxygen. Also, there will be floods.*

---

<sup>50</sup> Interviewed in English.

Interviewees also generally view wild animals an integral to these balanced ecosystems, meaning that many believe that maintaining ecological harmony also requires maintaining wild animal populations:

Male undergraduate student aged 25:

*Int: Do you think the Vietnamese government should invest in protecting the habitat of wild animals, like wetland and forest?*

*CN11: The environment consists of many things so we should not focus on just one part, we should grow trees together with protecting animals [...]. They all make an ecosystem and make a fresh environment [...] I think protecting animals is an integral part of protecting the environment. Animals are part of the ecosystem.*

Besides consumptive use and the need for ecological balance to avoid harmful environmental consequences, other reasons for conservation were rarely expressed. This interviewee, who was also relatively well informed about wildlife-related issues, was an interesting exception:

Male shop owner aged 44, university degree:

*Int: Why do you think Vietnam should invest in wildlife conservation?*

*CN25: I think spiritual value is becoming more important than material value. It's important to conserve rare species because once they are extinct, we can never get them back. Apart from the value of ecological balance, I think what is more important is spiritual value.*

### **8.3.7.3. Concepts of Conservation**

Breeding or “increasing the number” of wild animals is considered an important tool in conserving wild species. Almost all interviewees, including one of those most passionate and knowledgeable about wildlife conservation and who does not support farming wild animals for meat, admire the private tiger breeder in Binh Duong because he has successfully increased the number of tigers:

Male service worker aged 36, knowledgeable and passionate about wildlife conservation and does not support wildlife farming for wild meat:

*Int: Why do you support the owner of the tigers in Binh Duong?*

*CN31: [Because in the beginning they had only a few tigers and they have invested in looking after the tigers and helping them to reproduce. They have not killed any tigers. If we confiscate the tigers and take them to the forest, about 90% of animals die after being confiscated. If the government decides to confiscate the tigers then I have a question: why did they allow the owner to breed the tigers in the first place? And now that they have increased the number to thirty to forty tigers the government wants to confiscate them! The owner has managed to reproduce the tigers in captivity; in Vietnam I know only two zoos which have been able to do so - Thu Le and Thao Cam Vien.*

Increasing the number of a wild species in captivity, regardless of the potential for reintroduction into the wild, being considered a conservation success is also demonstrated by the media coverage outlined in Box 8.1 (p. 178). This contrasts with the reasoning of foreign NGOs who emphasised the inability of captive-bred tigers to contribute to conservation of tigers in the wild. The latter is not necessarily an influential argument with regards to the Vietnamese public given many view captive breeding as conservation.

Overwhelming support for the tiger breeder also results from what could simply be considered a pragmatic approach to protecting wild species, arising from the widespread, and relatively accurate, perceptions that wild animals are not currently being effectively protected in the wild; a perceived lack of expertise and facilities within government institutions for breeding tigers, and of trust in the government not to use the tigers for personal benefit. Public support is also likely to have been influenced by the government-led media, which stated the public supported continued private breeding of the tigers; it is unclear whether the media reported genuine public support or whether this statement in the media itself stimulated this support (pers. comm. Ha Thang Long). A widespread belief that captive breeding is the safest solution for rare and endangered tigers also reflects a lack of awareness of the ability for captive-bred individuals to survive in the wild. And despite captive breeding being viewed by many as an end in itself, support for captive breeding does not arise in the absence of a desire to see tigers continue to survive in the wild; appreciation for wild species living in their natural habitat is evident at least amongst older male interviewees:

Retired male aged 64, university degree:

*Int: Do you think the government should allow other people to breed rare and precious animals such as tigers?*

*CN33: [...] The government does not have enough financial resources to breed wild animals in a natural environment. The best way is to free animals to the forests but that's not a good idea due to rampant animal hunting [...] If the government keeps the tigers in places like Soc Son or Hanoi zoo, the conditions there are even worse than in Binh Duong. I think the best solution is to allow those who meet certain requirements to breed animals under state management and monitoring.*

Retired male aged 60, secondary education:

*Int: Have you read about the tigers in Binh Duong? What do you think?*

*CN14: I cannot tell whether is right or wrong but I think some officials were very unreasonable. It was as if they wanted to steal the tigers to make bone glue. If they had them, the tigers would*

*die sooner or later. At the beginning, if the media had not covered the story, then the officials from ministry of agriculture and rural development would have confiscated the tigers.*

*Int: Does this mean you support the tiger farmer?*

*CN14: Of course, I do. I would work for him if I had a chance!*

*Int: Do you think anything else can be done to conserve the tigers?*

*CN14: I think we should have stricter regulations to preserve our forests so that the animals can live in their own habitat [...].*

Male service worker and wild meat consumer aged 24, primary education:

*Int: Do you think we should leave endangered animals like tigers in secure areas like in a zoo or in Binh Duong?*

*WM09: We should allow the farming in Binh Duong, because people's awareness is still low [...]. But it is not enough to protect wild animals because they are adapted to the wild and cannot be healthy in captivity. Additionally, there should be specific or larger areas where forest rangers take responsibility. In short, wild animals should have their home in the wild.*

While naturalistic attitudes - defined as a “primary focus and interest and affection for wildlife and the outdoors” (Kellert 1993: 300) - could not be said to dominate, some interviewees do value wild animals living independently of people in their natural habitat. Again, these tend to be older men who are knowledgeable and passionate about wildlife management, either because they enjoy the outdoors or they “love” animals:

Retired male aged 75, wild meat consumer and recreational hunter, knowledgeable about wild animals and thinks they should be better managed, education unknown:

*Int: Do you prefer to see animals in the zoo or in their natural environment?*

*CN04: It's better to see animals in their natural environment. For example, watching lions hunting for food, when they run after a zebra. Watching the struggle between lions and zebras is really interesting. [...] In their natural environment we can see animals' flexibility and activeness. In captivity, animals can only sit or stand in one place. How can it be compared to living in their natural environment?*

Male unskilled worker aged 47, education unknown, passionate about conservation and “loves” animals:

*Int: Some people are suggesting that they should farm more wild animals, more different species so that it satisfies demand for wild meat without taking the wild populations, what do you think?*

*CN01: In my opinion, animals need to have freedom. Wild animals are used to living in their free natural environment. [...] In order to farm them we take their freedom away from them. Their nature, instincts such as hunting for food disappear, their survival instincts also disappear [...] In order to farm them, we take their freedom. Their nature, their instincts disappear. [...] We need to make sure that animals have enough space to live in [...]. It's better to invest in conservation centres [than farms].*

Male skilled worker aged 39, secondary education:

*Int: Do you think we should keep animals like crocodiles and tigers in a zoo or designated area or leave them in the natural environment?*

*CN05: [...] If we farm wild animals they will gradually lose their instincts [...] We cannot take tigers to Soc Son because there is no place for them to live. They need their natural habitat, which is the forest. They can only live in primitive forest, in a large area. We need to return them to their natural environment.*

In contrast, for many interviewees, and particularly young women, conservation appears to mean ‘developing’ and ‘caring’ for wild animals in spacious and well-resourced ‘conservation centres’ requiring human intervention and control:

Unemployed female aged 18, secondary education:

*Int: What do you think wildlife conservation means?*

*CN07: It means not hunting but breeding, understanding them more [...] it means giving them space to live. [...] We should open a park for everyone to visit; by so doing we can cover some expenses of feeding the animals and at the same time people can learn more about animals.*

Female undergraduate student aged 19, eats wild meat with her wealthy family<sup>51</sup>:

*Int: What do you think about the tigers in Binh Duong?*

*CN09: I think the Prime Minister made a good decision when he allowed the owners to keep the tigers and continue raising them and caring about them. I think they will be living in better, much better conditions than living in the Vietnamese zoo or in a small forest.*

This approach to conservation is also evident at ‘ecotourism’ centres where wild animals are often presented as being better off in captivity where they can be looked after. For example, one centre that breeds crocodiles documents the decline of crocodiles in the wild in Vietnam for visitors, presenting the switch from wild to captive populations as a desired refinement of nature (pers. comm. Robertson S.).

## **8.4. Discussion**

### ***8.4.1. Wildlife-Related Knowledge and Awareness***

Education had the largest impact on wild animal-related knowledge score. Yet qualitative results suggest first-hand experience has a greater influence on knowledge and awareness, and in shaping pro-conservation attitudes, than formal education. Those with higher completed education may have performed better simply because they are more literate, better able to access printed media and more familiar with tests; they are also perhaps more likely to demonstrate ‘scientific’ wildlife-related knowledge and therefore to perform better on a scale based on western scientific concepts considered useful in forming pro-environmental attitudes by a Western researcher. Those with lesser schooling may possess significant wildlife-related knowledge and awareness, but not of a kind not captured by such a measure; see Section 8.4.4.1 for a discussion of the cross-cultural relevance of measures embedded in western values and concepts. The

---

<sup>51</sup> Interviewed in English.

higher scores of those with higher education should therefore not be assumed to purely reflect superior wildlife-related knowledge or awareness.

In both quantitative and qualitative results, men demonstrated higher levels of wild animal-related knowledge and awareness than women, mirroring findings by other researchers measuring environmental knowledge in various societies (e.g. Arcury et al. 1987; Chan 1999; Nyhus et al. 2003; Mostafa 2006). More generally, gendered knowledge might result from it being more acceptable for boys and men to take an interest in, and be more knowledgeable about, wild animals and wild animal-related activities (e.g. Kellert & Berry 1987). For example, Nyhus et al. (2003) suggest men demonstrated better wildlife-related knowledge in Sumatra because they are more likely than women to enter the forest to fish, hunt or collect other non timber forest products. Indeed, central Hanoians consider eating and knowing about wild meat a primarily male domain (Chapter 5) and forest rangers in Vietnam are predominantly male (pers. obs.). Nevertheless, institutions such as ENV employ many young women suggesting, today at least, it is acceptable for young women to be interested in environmental sciences and to study these subjects at university. This gender gap in knowledge may therefore close in the future. Experiences of forested areas during wartime, particularly amongst older men, and perhaps also in hunting roles for those born in rural areas, may also explain the positive relationship between knowledge score and age, but this may also simply reflect knowledge accrued over time.

Central Hanoians demonstrate limited ability to identify native species and/or endangered species in Vietnam. A previous study of Hanoi residents (Venkataraman 2007) also found respondents were unclear about which specific species are endangered, but demonstrated good awareness of wildlife-related legislation. Zhang et al. (2008: 1508) also report residents of Southwest Chinese cities being aware of threats to Chinese wildlife and of wildlife-related legislation, but being unclear about which species are protected specifically. This perhaps reflects the tendency for environmental concerns to be geographically specific and focused on personal experiences and observations which has also been documented by other researchers in, for example, Vietnam (Pham & Rambo 2003),

Hong Kong (Chan 1999) and Australia (Connell et al. 1999). First-hand experience of nature has also been shown to be important in forming environmental knowledge amongst Germans (Bogeholz 2006).

It is therefore perhaps unsurprising that those born in urban areas are only able to identify a limited range of native and/or endangered species. Increasingly urban, the world's population is more and more disconnected from nature leading to ignorance amongst urban populations. For example, many urban high school students in the USA were unable to identify local species and inaccurately classed common species as extinct or having never been present in the area (Adams et al. 1987 in Miller 2005). As such, Miller (2005) reasons, opportunities for meaningful interactions with the natural world are needed to engender wider public support for conservation. Rose (2001) also believes that urbanisation has led to a shift away from identifying with nature and towards identifying with human society, resulting in a loss of environmental sensitivity. Interaction with wild animals and participation in outdoor activities, particularly amongst younger generations born in Hanoi, could therefore be important in forming environmental knowledge and pro-environmental attitudes amongst the central Hanoi population, as with other urban groups.

Other researchers have also found that mass media messages are related to environmental knowledge in Vietnam (Huan et al. 1999; Pham & Rambo 2003) and, specifically, that television news positively influences environmental knowledge amongst students in Hong Kong (Chan 1999). Television, mainly foreign shows such as 'Animal Planet', has also previously been identified as a primary source of information about wildlife for Hanoians (Venkataraman 2007) and for Chinese urban residents (Zhang et al. 2008). Television, and wildlife documentaries in particular, have also been shown to be a valuable source of knowledge about threats to species and habitats for Australians (Smith & Broad 2008). The impact of such shows on wild animal-related knowledge amongst central Hanoians could be greatly enhanced by subtitles and/or dubbing in Vietnamese. Though widely accessed, newspaper coverage is largely limited to wildlife crime and wildlife farming and past research has also shown



environmental news in printed media to be poor and limited in scope (Hue 1999). Given that printed media are widely accessed by central Hanoians, these could be more effectively used to raise knowledge and awareness of wildlife conservation.

#### ***8.4.2. Wild Animal-Related Knowledge, Awareness and Consumption***

Quantitative data suggest wild animal-related knowledge and awareness plays a role in mitigating consumption of wild meat. This is unsurprising since knowledge is widely theorised to influence attitudes and in turn behaviour, and because health-related knowledge and attitude-based interventions have been shown to play an important role in reducing other risky behaviour such as unprotected sex (Coleman 2002). However many such information campaigns have often only had modest and short-term impacts on issues such as teenage pregnancies (Coleman 2002). This is perhaps because knowledge is just one of a range of situational, environmental and psychological factors thought to influence behaviour (Barr et al. 2003). This may also explain why qualitative data show that knowledge and awareness does not consistently reduce consumption behaviour amongst central Hanoians and why awareness raising campaigns so far appear to have had limited and short-term effects on wildlife consumption behaviour in Southeast Asia (TRAFFIC 2008).

One psychological variable that can affect the impact of knowledge on behaviour is social pressure (Barr et al 2003). As already demonstrated in Chapter 6, central Hanoians are under considerable pressure to both serve and eat wild meat when offered; refusing to do so could entail a loss of face and damage relationships. Vietnamese individuals have interdependent self-concepts meaning that they integrate other group members into their identity and that, as such, they are not only representing themselves but also the groups with whom they are associated (Wong & Ahuvia 1998). And although disengaging environmental problems from personal actions is not restricted to hierarchical, collective societies (e.g. Connell et al. 1999), the collective nature of Vietnamese society is likely to compound social pressure to conform and, if necessary, behave in a non-environmental way despite being fully informed of the impacts of such actions.

Additionally, research suggests that members of collective East Asian cultures typically demonstrate an external locus of control, believing that the future is a matter of chance or fate and cannot be influenced by individual actions (see Cherry 2006). In contrast, Westerners believe in an internal locus of control, i.e. their individual ability to change outcomes; many Western-led conservation interventions, including awareness raising campaigns, are based on this principle. Bowman (2001) observes many West Africans also have an external locus of control, and therefore that being asked to participate in conservation may be concurrently unintelligible, impractical and alien to these individuals. Fatalistic outlooks, and also a reliance on technology to solve future problems (pers obs.), may also be responsible for poor conversion of knowledge into action in Vietnam.

The failure of state officials to heed their own environmental propaganda and government corruption contributing to environmental problems is also thought to contribute to a lack of pro-environmental initiatives at an individual level in China (Harris 2006; Wong 2005). In Vietnam also, it is possible that the widespread perception that government officials are the main consumers of wild meat and other rare wild animal products hinders individual actions. For example, Kaplan (2000) identifies a feeling of helplessness as crucial in explaining a general lack of follow through in terms of environmentally responsible human behaviour. Barr et al. (2003) also identify a belief in the effectiveness of individual action as one of a range of psychological variables important in determining the translation of knowledge into action.

The decoupling of consumption behaviour and wildlife decline by central Hanoians may also reflect conscious decisions by consumers to avoid certain forms of information, or to interpret it in such a way that suits their behaviour. This reflects findings of research into the impact of health awareness campaigns. For example, women, including those with heart disease, reduce their own perceived risk of this disease playing down the potential impacts of their own behaviours and adding greater credence to the importance of others, including emphasising the perception in popular culture that it is a 'man's disease' (Ruston & Clayton 2002). Similarly, in Switzerland researchers found respondents created a succession of

psychological barriers rationalising not altering their behaviour to reduce climate change, often emphasising doubts about the significance of individual actions and shifting the responsibility onto others (Stoll-Kleeman et al. 2001). Likewise, central Hanoians are accentuating a popular belief of ethnic minority people being responsible for damaging natural resources while simultaneously dissociating the impacts of their own behaviour from wildlife decline, hence concluding it is ethnic groups rather than consumers that need to change their behaviour. Pham and Rambo (2003) also found that around half their Hanoian interviewees blamed deforestation on ethnic minorities, with only a few acknowledging other drivers of deforestation or the relative poverty of minority groups as playing a role.

Moreover, unlike the prediction of traditional models, individuals do not necessarily make rational decisions based on the information available or behave in such a way that maximizes benefits and minimises costs. For example, awareness of the risks of HIV transmission and pregnancy does not necessarily reduce risky sexual behaviour, possibly because individuals value the promise of immediate pleasure compared to the less desirable hypothetical, potential consequences, or because individuals may feel unable to assert themselves by insisting on condom use (Hovell et al. 1994). Similarly, despite being aware of the threats demand-driven wildlife trade has for wild species in Southeast Asia, consumers of wild animal-derived products may choose the benefits of immediate enjoyment and social advancement over deferred and hypothetical negative consequences, or they may feel unable to refuse to consume. But, unlike HIV, consumption of wild animal products does not have direct impacts on the individual participating in the risky behaviour, and individuals are perhaps therefore even less likely to be deterred from consumption behaviour than from participating in unprotected sex. Also, unlike risks to human health with obvious victims and personal costs, environmental risks are potentially much harder to understand and convey (McDaniels et al. 1996).

Choosing the behaviour most personally and immediately beneficial at the expense of the environment is not unusual. For example, Harris (2006) observes Chinese generally place comfort and convenience before the environment, particularly if it

comes at some personal cost; Canadian respondents were found to judge behaviour in terms of net personal benefit rather than the potential for environmental cost (McDaniels et al. 1996); and Stoll-Kleeman et al. (2001) discuss the propensity of their Swiss respondents to consider personal costs incurred more significant than the benefits to others with regards to reducing carbon emissions.

The above perhaps at least partly explains why this, and a previous study of Hanoi residents (Venkataraman 2007) found that, despite most respondents identifying hunting and trade as threatening wild species, relatively few associate wild meat with contributing to extinction risk. Likewise in China, Zhang et al. (2008) found that consumption of wild animal products was not influenced by knowledge of protected species. Additionally, it is possible that consumers do not believe - perhaps having not personally observed a decline in wild animals or believe advances in science and technology may prevent it. Moreover, since awareness of native biodiversity is low, and considered by some relatively insignificant and/or replaceable, this suggests central Hanoians may underestimate the true potential for hunting-driven extinctions of Vietnamese species.

Rather than reducing consumption behaviour, many interviewees think increasing education and awareness is a primary tool in improving conservation, or rather that when those who destroy forests and hunt wild animals 'understand' the importance of these natural resources, they will stop this behaviour. Zhang et al. (2008) also report Chinese respondents believing raising public awareness as one of the most important conservation actions needed. These findings perhaps reflect a phenomenon Harris (2008: 68) calls Confucian optimism: rather than shifting attitudes towards valuing wildlife as a good in itself, mantras such as "protecting wildlife is protecting mankind itself" in fact deny any conflict between nature and the needs of developed China. This, argues Harris (2008), reflects the notion underpinned by Confucianism that absolute, hierarchical and prudent leadership leads to harmony, i.e. that provided adequate information and understanding, everyone will reach agreement and conflicts of ideas, values and ambitions will simply fade away.

### ***8.4.3. Attitudes Towards Wild Animals, Their Use and Conservation***

#### ***8.4.3.1. Evaluation of Methods***

During the pilot study respondents were asked to self-complete the attitude scales while during the main data collection period, the attitude scales were read to the respondents by one of three different RAs. How those collecting the data are perceived by those being interviewed can seriously influence the quality of data (Bernard 2002). It is therefore likely that each RA influenced the respondents in different ways, and that both interviewer bias and response bias were exaggerated further by their reading of the items and their recording of responses, as opposed to the respondent completing them independently. Scales may also have suffered from comprising five, as opposed to, for example, Mordi's (1991) ten, items. Nevertheless, increasing item numbers would have made the scales even more time-consuming and repetitive.

Respondent comments and SSI data clearly illustrate how valuable qualitative methods are when investigating something as complex as attitudes, either alongside valid quantitative methods or as the main method of data collection. Exploring the contradictions of interviewees, i.e. between what they say and what they do, further emphasises the difficulties of drawing conclusions from structured attitude surveys alone. With structured attitude surveys there is also a danger that the validity of resulting numerical data is presumed a given and inherent bias ignored in analysis (Hammersley & Gomm 1997). Indeed, numerous published surveys exploring attitudes to wild animals in Africa did not employ reliability analysis at all, suggesting a significant proportion of attitude survey research may be invalid (Browne-Nunez & Jonker 2008).

Bowman (2001: 79) defines cultures as “maps of meaning through which people understand the world and interpret the things around them”. Yet although attitudes have been widely studied in Africa and Asia, the potential for cross-cultural transposition of theory, concepts and measures developed in the West, potentially incomprehensible and irrelevant in different settings, has not been extensively examined (Browne-Nunez & Jonker 2008). So despite animal welfare issues and the economic value of biodiversity being at the forefront of campaigns

to promote environmental behaviour in Western society, these approaches will not necessarily have the same effect in other cultures with different worldviews. For example, many African hunters embed their respect and restraint with regards to nature in a fundamental emotional and spiritual empathy with nature, distinct from measured benefits or a moral concern for the welfare of other living things (Bowman 2001). Never having previously considered suffering as an experience shared by animals, most had therefore not even considered the idea that animals might feel pain (Bowman 2001). Likewise, there was no strong indication of the presence of a moralistic attitude towards wildlife amongst central Hanoian interviewees, contrasting with a strong moralistic orientation reported amongst North Americans, but mirroring a lesser moralistic orientation amongst Japanese respondents (Kellert 1991a). There are also variations in value systems within cultures. Rose (2001), for example, notes urbanites around the world view wildlife as a resource to be used to fulfil personal objectives while forest dwelling people tend to consider themselves an element of nature. Forest dwellers, villagers and urbanites are all also therefore likely to respond differently to campaigns to develop support for conservation.

The 'maps' Vietnamese use to read the world are impossible to appreciate fully as an outsider, and in hindsight the relevance of adapting a single set of attitude orientations and scales across Japanese, German and American respondents (e.g. Kellert 1993a) to Hanoian respondents is questionable. Rather than a universal code of values and beliefs typical to all peoples, many argue there are profound differences not only in the traditions of different cultures, but also in their modes of thinking deeply embedded in how the world around them is perceived (Macklin 1999 in Bowman 2001). Applying Western values to non-Western populations is therefore unlikely to succeed, and is perhaps also an inappropriate starting point for research investigating wildlife values.

#### ***8.4.4.2. Dominant Attitude Orientations***

Widespread consumption of wild animal products (Chapter 4) accompanied by support for the commercial and consumptive use demonstrates a strong utilitarian attitude towards wild animals, corresponding to findings of others in Vietnam

(Pham & Rambo 2003). Pham and Rambo (2003) also observe that, arising from the largely anthropocentric and utilitarian views of Hanoians in which human welfare is viewed as depending on the natural environment, there is a widespread perception of a need to maintain ecological balance. So although on the surface appearing relatively 'ecologistic', the desire for ecological balance is also chiefly borne from concern for human welfare and survival. Donovan (2004) notes that such a philosophical belief in harmony with nature does not necessarily translate into attaining harmony in real life. Nevertheless, the belief that balanced ecosystems are required to support human life, and that wild animal species are integral to ecosystems, could potentially form the basis of pro-conservation attitudes and actions.

In China, dominant value orientations towards wild animals are also often described as utilitarian (Haitao et al. 2007; Zinn & Shen 2007; Harris 2008) and dominionistic (Wong 2005; Harris 2008; Table 3.1). Chinese language, popular stories, scientific writing, government slogans and arguments in defence of the use of bear bile all, argues Harris (2008), exhibit a utilitarian attitude towards wild animals and their conservation. Zhang et al. (2008) report that higher income and more highly educated individuals, who also eat wild meat more often, have the most utilitarian attitudes towards wild animals. Although this contrasts with the typically dominant naturalistic and ecologistic attitudes reported in the West (Kellert 1980; Table 3.1), globally utilitarian attitudes are the norm rather than the exception (Harris 2008). Bowman (2001), for example, reports West Africans generally viewing wild animals as gifts from God for use as required.

Moreover, within every society, a variety of attitudes towards wild animals exist. For example, Rose (2001) notes that those working in business, medicine and economics are more likely to have utilitarian attitudes towards wildlife, while ecologists, theologians and anthropologists are more likely to respect or revere wildlife; biologists, zoologists and psychologists more typically take a middle ground. Utilitarian attitudes towards wild species are also not necessarily incompatible with conservation; they simply reflect an alternative argument for