

Animal Welfare Consciousness of Chinese College Students:

Findings and Analysis

ZU SHUXIAN, PETER J. LI, AND PEI-FENG SU

Abstract The moral character of China's single-child generation has been studied by Chinese researchers since the early 1990s. Recent acts of animal cruelty by college students turned this subject of academic inquiry into a topic of public debate. This study joins the inquiry by asking if the perceived unique traits of the single-child generation, i.e. self-centeredness, lack of compassion, and indifference to the feelings of others, are discernible in their attitudes toward animals. Specifically, the study investigates whether the college students are in favor of better treatment of animals, objects of unprecedented exploitation on the Chinese mainland. With the help of two surveys conducted in selected Chinese universities, this study concludes that the college students, a majority of whom belong to the single-child generation, are not morally compromised. A high percentage of the surveyed expressed empathy toward animals and opposed animal cruelty. This finding suggests that upbringing in families with better material conditions has not undercut the moral development of the students. Importantly, the study supports the view that China is philosophically ready for legislation on animal welfare despite the remaining ideological, cultural, and economic factors that discourage societal activism for animal protection.

Keywords college students, cultural change, animal welfare consciousness

Authors' affiliation Zu Shuxian is professor of epidemiology and social medicine at Anhui Medical University, Hefei, China. Peter J. Li is assistant professor of political science at the University of Houston-Downtown, Houston, Texas, USA. Pei-feng Su is an animal welfare consultant who has worked on animal welfare issues in various Asian countries.

In early 2002, an animal cruelty incident electrified the mainland Chinese media. A mysterious visitor, twice within one month, poured caustic soda and sulphuric acid on five captive bears at Beijing Zoo.¹ The bears sustained severe damage to their eyes, skins, mouths, and internal organs. Outpouring sympathy for the victims was coupled with condemnation from all directions

at the perpetrator. For months, the Chinese media gave extensive coverage of the incident. One Internet forum reportedly received more comments on the incident than on any other domestic or international event.² Why did such a seemingly random act of animal cruelty attract so much attention?

The focal point of the incident was Liu Haiyang, the bear attacker. On the one hand, the public was quick to note Liu's upbringing in a single-child family. Liu's behavior seemed to confirm the public's perceptions of China's 80 million single-child youngsters who are viewed as self-centered, uncaring, and indifferent to feelings of others.³ On the other hand, the public expressed shock that the cruel act was perpetrated by someone with all the trappings of a promising professional and political future. Liu was a science student at Beijing's prestigious Qinghua University, the alma mater of many contemporary Chinese leaders including President Hu Jintao, former Premier Zhu Rongji, and other ranking officials in the Party and government.⁴ The view that those who are cruel to animals are likely to be indifferent to the welfare of their fellow humans is gaining wider acceptance on the Chinese mainland. Are China's college students, particularly the science students, morally compromised in their judgments on issues related to animals?

The bear attack incident intensified the debate between supporters for animal protection and their opponents.⁵ To animal advocates, anticruelty or animal welfare legislation could not be put off any longer.⁶ China's legal experts formed a research group and submitted a proposal on anticruelty legislation to the National People's Congress.⁷ Similar proposals were also submitted by the people's deputies to the national legislature and Beijing Municipal People's Congress.⁸ Yet, animal welfare legislation has not yet appeared on the radar screen of China's legislative agenda. According to Professor Li Xiaoxi, a long-time animal advocate and deputy of Beijing's Haidian People's Congress, officials held that an anticruelty law was "too progressive" for China since the authorities believed that they would have great difficulty enforcing such a law in a developing country.⁹ While opponents fear that such a law could adversely impact the thriving factory farms often operated in poor conditions, officials are afraid that the law is not enforceable. Qiao Xinsheng, an outspoken opponent of animal welfare legislation, said more pointedly that the welfare standards to be included in an anticruelty law were Western in origin and contradicted Chinese traditional values.¹⁰

In October 2002, an international symposium on animal welfare was held in Hefei in China's Anhui Province. At the conference, the bear attack

incident and China's need for animal welfare legislation were hot issues. Acting on a proposal from the conference participants, we took on the project to survey China's college students and to determine their attitudes toward animals. Since today's college students are China's future political, economic, and opinion leaders, their attitudes toward animals and the changes in their attitudes over time will have a direct impact on the nation's animal welfare consciousness. More immediately, ascertaining the college students' attitude toward animals along with a comparative study of other surveys conducted in mainland China will reveal whether mainland Chinese society is philosophically ready for animal-related policy change.

Survey design and administration

This study of the college students' attitudes toward animals involved two separate surveys conducted in 2002 and 2003. For comparative purposes, we have included in our analysis the results of a 1998 survey of Beijing and Shanghai residents conducted by the International Fund for Animal Welfare (IFAW). Although the IFAW survey, the first of its kind in mainland China, has its limitations due to the fact that Beijing and Shanghai may not necessarily represent the entire nation, its reference value cannot be denied since the views of their residents could not differ greatly from those of the rest of the nation. One extraordinary accomplishment of the Chinese government over the last half century has been its ability to achieve a high level of uniformity in public opinion across the country through thought reforms, mass political campaigns, state media propaganda, and the educational system. Attitudes toward animals expressed by Shanghai and Beijing residents should mirror the general attitudes in the nation.

Objectives

First of all, this study aimed to determine whether China's college students growing up in a country 27 times richer than the one they were born into are in any way different from the rest of Chinese society in attitudes toward animals. Is upbringing under better material conditions or in single-child families creating a generation with compromised moral judgments? In their efforts to explain the many alleged "unique" traits of the single-child youngsters, Chinese researchers have focused on the role of the family, schools, and society at large in the socialization of China's youth. According to their

studies, families do play an important role in shaping the youth's values, views, and world outlook, but family influence wanes as youths get older.¹¹ They found that the single-child youngsters, many of whom are college students, are not different from the rest of the society in value judgment. One study even found overwhelming majority of the surveyed (84%) single-child youngsters to be sympathetic to others.¹² If society as a whole plays a more prominent role in the socialization, how much do the students resemble society in attitudes toward animals?

Second, shocking incidents involving college science majors have been a disturbing occurrence in recent years. A science major was caught intentionally spreading a computer virus in one case only to be overshadowed by another in which a two-month-old puppy was microwaved alive. People were asking: what was wrong with the science students? Li Yan of Qinghua University attributed these incidents to China's overemphasis on training technical talents while ignoring the need to develop students' moral character.¹³ One indicator of this lopsided emphasis on technical education is believed to be the neglect of education in humanities in China's science and engineering schools.¹⁴ Such neglect in the Chinese education system, some scholars worried, could result in the production of technical talents who are deficient in compassion, defiant of state laws, supercilious of morality, and unconscious of their social responsibility.¹⁵ Are the science majors different from their nonscience counterparts? Studies conducted by Chinese scholars have found that, despite their different modes of thinking and different approaches to problem-solving, science students have adopted the same values and outlook as the nonscience majors.¹⁶ Can similar results be expected in attitudes toward animals between the science and nonscience students?

Attitudinal change can be an important impetus to policy change. Our follow-up survey in 2003 was designed to gauge the impact of severe acute respiratory syndrome (SARS) on the attitudes of the college students. In an effort to fight the epidemic, scientists reportedly traced the source of the virus causing SARS to a number of wildlife species, such as civet cats, sold on the live animal markets in South China.¹⁷ The ensuing media exposures of the conditions of China's live animal markets and wildlife eating habits revealed that many of the wild animals and other animals on these markets were crammed in tiny cages without food or water for days. Some of the captured wild animals were even dying from illness, severe deprivation, or from gangrene caused by missing limbs or other bodily wounds. These animals are

not food, but huge health hazards. The follow-up survey was to determine whether SARS had impacted on the students' attitudes toward animals.

Questionnaires

The questionnaires for the 2002 and 2003 surveys are slightly different. While the 2003 survey adopted all the questions used in the 2002 survey, it contained three additional sets of questions. Both surveys included demographic questions (name [optional], gender, year in college, location of family residence, and field of study [science, engineering, medicine, agriculture, liberal arts and social sciences]). The main body of both surveys consisted of three sections for the 2002 survey and four sections for the 2003 survey. In section one, both surveys asked whether animals were sentient beings and whether they were capable of pain and suffering. These two questions were asked to determine whether the college students were empathetic with animals. As Tania Singer and her colleagues wrote in a recent edition of *Science*, the ability to empathize with others is a prerequisite for understanding, attachment, bonding, and love.¹⁸ In this section, we also asked whether the students were interested in animal-related literature and broadcast programs.

The next section in both surveys was designed to evaluate the respondents' reactions to a variety of situations in which animals were exploited for entertainment, as food, and for other purposes. First, we asked about the students' views on the relations between humans and animals. Next, we asked about the respondents' perception of zoos. The last question listed 10 acts such as skinning quails alive and using small live animals as shooting targets. We expected this question to indicate the level of students' empathy toward animals. The third section of both surveys touched on the students' attitudes toward animal protection activities. We asked if they philosophically supported, participated, or intended to participate in animal protection activities. We expected answers to these two questions to indicate whether the societal environment was in general favorable or unfavorable to animal-related activities by individuals and organizations.

In the 2003 survey, three sets of additional questions were added. We asked the respondents whether eating dog meat was morally the same as consuming meat of other animals. The second set of questions focused on wildlife farming. We asked specifically if the respondents had ever heard of bear farming, a practice for extracting bile from an open wound cut in the

bear's stomach. Additionally, we asked those who had heard of bear farming whether they considered it acceptable. Finally, we asked if the respondents had experienced attitudinal change as a result of the outbreak of SARS.

Participants

In both the 2002 and 2003 surveys, we resorted with good reason to what some call the "convenient samples of college students." A total of 1,300 students were drawn for both surveys. While the 2002 survey was conducted in 13 universities, the 2003 survey was repeated in 10 of them.

China's universities can be categorized into three groups. At the top of the tertiary education system are the national key universities under the State Education Commission (SEC). These include the highly selective comprehensive and science schools such as Beijing University and Hefei's China University of Science and Technology. Next to these top schools are the fairly selective national key universities run by the government's various functional ministries including the SEC. Beijing Foreign Studies University belongs to this category. Finally, most universities and colleges fall under the administration of provincial authorities such as Zhangjiakou Architectural College and Anhui University. The first two groups of schools admit students from different parts of the country where local diet, customs, and habits are not the same; provincial schools generally enroll students from their own provinces. As the following table shows, our samples were drawn from schools belonging to the different categories.

We took care to stratify our samples so that they represented both sexes, different years in school, different disciplines, and locations of family residence (rural and urban). We expected that the two survey results would mirror the attitudinal and behavioral orientation of the single-child generation since a majority of the college students are from this group. By including students from different academic disciplines, we could compare the attitudes of science students with those of their nonscience counterparts.

Some clarification about the actual samples drawn is necessary. First, the two samples consisted of more students from the science disciplines (science, engineering, agriculture, and medicine) whereas the liberal arts and social sciences (hereafter nonscience) majors together accounted for 26.6% and 22.5% for the 2002 and 2003 surveys, respectively. Like other socialist states, China attaches greater importance to education in natural sciences. Social science subjects that had their origins in the West such as psychology

Table 1 Universities where samples were drawn for the 2002 and 2003 surveys

Type of schools	Source of students	2002 survey (13 in total)	2003 survey (10 in total)
Highly selective comprehensive universities	Nationwide	Beijing University	Beijing University
	Nationwide	Fudan University (in Shanghai)	Fudan University (in Shanghai)
Highly selective technology and engineering universities	Nationwide	Qinghua University (in Beijing)	Qinghua University (in Beijing)
	Nationwide	China University of Science and Technology (in Hefei, Anhui Province)	China University of Science and Technology (in Hefei, Anhui Province)
Fairly selective schools run by the State Education Ministry	Nationwide	Beijing Foreign Studies University	
	Nationwide	East China Normal University (in Shanghai)	East China Normal University (in Shanghai)
Provincial-run universities	Regional	Anhui University; Anhui Medical University; Anhui Agriculture University; Anhui College of Chinese Traditional Medicine; Anhui Textile College (in Hefei, Anhui Province)	Anhui University; Anhui Medical University; Anhui College of Chinese Traditional Medicine (in Hefei, Anhui Province)
		Zhangjiakou Architectural College (in Zhangjiakou, Hebei Province)	Zhangjiakou Architectural College (in Zhangjiakou, Hebei Province)

Table 2 Background of the 2002/2003 samples; by gender

Gender	Number surveyed 2002/2003	2002/2003 %
Male	598/587	49.5/54.3
Female	540/421	44.7/38.9
No answer	70/73	5.8/6.8
Total	1208/1081	100.0

were denounced as pseudoscience. Mao Zedong even considered the elimination of all social science majors from China's colleges during the Cultural Revolution (1966–76).¹⁹ This ideological bias has continued in the post-Mao era. In 1998, for example, about 60% of those admitted to colleges were

Table 3 Background of the 2002/2003 samples; by subject of study

<i>Majors</i>	<i>Number surveyed 2002/2003</i>	<i>2002/2003 %</i>
Science	452/340	37.4/31.5
Technology/Engineering	261/281	21.6/26.0
Medicine	135/191	11.2/17.7
Agriculture	46/6	3.8/6
Liberal arts	149/101	12.3/9.3
Social sciences	173/143	14.3/13.2
No answer	56/19	4.6/1.8
Total	1208/1081	100.0

enrolled in science, engineering, medicine, and agriculture. Only 37.8% went to social sciences and liberal arts departments.²⁰

Second, a majority of the samples (68.3% in 2002 and 66.0% in 2003) was drawn from the freshmen and the sophomore classes. Ideally, the samples should be evenly distributed among the juniors and seniors as well. Yet, age, duration of college education, or educational accomplishments may not be positively correlated with a higher animal welfare consciousness.²¹ Some studies on animal attitudes even suggest that less education is an indicator of greater willingness to extend moral rights to animals.²² The 1998 IFAW survey in Beijing and Shanghai also confirmed that educational attainment did not naturally translate into enhanced animal protection awareness.²³ The educated are also the ones most exposed to foreign ideas including foreign criticism of aspects of the Chinese culture. Instead of accepting Western versions of animal welfare, they may more vehemently defend Chinese practices including acts of animal cruelty.²⁴ Our samples nevertheless reflected the sudden increase in college enrollment since 1998.

Third, compared with the 2002 survey, the 2003 poll had a significantly smaller percentage of female respondents (38.9%). In the 2002 survey, female respondents accounted for 44.7% of all the qualified participants. We do not know for sure what caused the drop in the female respondents in 2003. One likely factor could be the smaller return rate of the questionnaires (83.1% as opposed to 92.9% in 2002) and higher number of invalid questionnaires (6.8% compared with 5.8% in 2002). While 44.7% of female respondents in the 2002 survey might overrepresent the actual number of female college students, 38.9% of female respondents in 2003 mirrored the actual gender composition of China's universities where males outnumber females.

Table 4 Background of the 2002/2003 student samples

<i>Students</i>	<i>Number surveyed 2002/2003</i>	<i>2002/2003 %</i>
Freshmen	452/333	37.4/30.8
Sophomores	373/380	30.9/35.2
Juniors	132/232	10.9/21.5
Seniors	207/109	17.1/10.1
No answer	44/25	3.6/2.3
Total	1208/1081	100.0

Table 5 Background of the 2002/2003 samples; by location of family residence

<i>Residence</i>	<i>Number surveyed 2002/2003</i>	<i>2002/2003 %</i>
Rural	458/374	37.9/34.6
Urban	618/615	51.2/56.9
No answer	132/91	10.9/8.4
Total	1208/1081	100.0

Finally, the location of family residence of the samples (37.9% rural and 51.2% urban in 2002 and 34.6% rural and 56.9% urban in 2003) also mirrored the composition of China's college students, a majority of whom (60% to 70%) are from urban families. If we accept the findings of other Chinese scholars that society has played a bigger role in political socialization, we should expect our survey results to reflect the attitudes of both the urban and the rural residents toward animals.

Survey administration

The two surveys were conducted exactly one year apart. Both surveys were carried out by the environmental groups at each university. The survey objectives were explicitly stated to the respondents. For quality control, we issued a five-point instruction to survey administrators emphasizing the importance of randomness in sampling, consent participation, individual filling out of the questionnaire in the presence of the survey administrator, and exclusion of enthusiasts who might volunteer to take part in the survey and who could be advocates of or opponents to animal rights or animal welfare. Participants were required to answer each survey question truthfully. We also stipulated that no foreign students be included in the sample.

Findings and discussions

For both surveys, we drew 1,300 samples. A total of 1208 questionnaires were received for the 2002 survey, a return rate of 92.9% of the questionnaires issued. However only 1081 valid questionnaires, accounting for 83.1% of the total questionnaires distributed, were received for the 2003 survey.

Empathy for animals

In 1998, IFAW funded a survey of residents in Beijing and Shanghai on their attitudes toward animals. The results were surprisingly encouraging in that a majority of the respondents reacted in favor of better treatment of animals. In the words of Merritt Clifton, editor-in-chief of *Animal People*, the results strikingly resembled those conducted in the US some 10 to 15 years earlier.²⁵ In Beijing and Shanghai, 93.6% of the respondents believed that animals were capable of suffering and pain. Only 4.9% believed otherwise. And, as many as 93.7% agreed that animals had emotions of sadness and happiness.²⁶

Our surveys have shown similar attitudes among the college students with insignificant variations between males and females and between students from urban and rural households. In the 2002 survey, 97.8% of the respondents said that animals had the capacity for pain and suffering. And, 96.1% of the surveyed agreed that animals were capable of emotional expressions. This perception of animals as sentient beings was confirmed by our follow-up survey conducted in 2003 in which 98.2% and 96.4% of the respondents believed that animals could feel pain and had emotions. In terms of empathy for animals, China's college students do not stand as a separate group. As a matter of fact, our two surveys have shown that the college students scored higher in empathy for animals than the Beijing and Shanghai residents.

Interest in animal-related works and broadcast programs

Interest in animals or in literature and broadcast programs on animals do not necessarily correlate with high animal welfare consciousness. Yet, people with such interest tend to be more knowledgeable about animals and are more likely to empathize with them. Again, let's look at the IFAW survey as a frame of reference. Almost 79% of the Beijing and Shanghai respondents expressed interest in animal-related works and broadcast programs.²⁷ In comparison, only 70.1% and 70.4% of respondents in our 2002 and 2003

surveys said that they liked such works or programs. The students scored lower than the Shanghai and Beijing residents.

The difference in the level of interest between our samples and the IFAW respondents could be attributable to the fact that college students had less free time for recreational reading and television-watching. However, while 4.4% of the IFAW samples said they were not at all interested in reading about animals or watching broadcast programs on animals, only 3.4% of our samples in both 2002 and 2003 surveys felt the same. Also comparatively, 17.3% of the Beijing and Shanghai residents said that they were not particularly interested in animal-related literature and TV programs, but they did not mind reading such literature or watching such programs. The college students who shared the same view accounted for 26% in the 2003 survey. Therefore, in terms of accepting animal-related literature and programs, the college students do not differ significantly from the Beijing and Shanghai residents.

One question could be raised as to the relation between the level of interest in animal-related works and the increase of such works in recent years. Specifically, to what extent is the respondents' interest a result of the increased number of animal-related publications and broadcast productions? Readers and viewers are likely to read or watch more of such works without actively seeking to do so if such works increase in quantity.

Human-animal relations

Anyone who has ever been to South China's live animal markets would be shocked at the conditions assorted animals are subjected to. Annie Mather, media director of Animals Asia Foundation, gave a vivid description of her first impression of a wildlife market in Guangdong.

My reaction the first time I stepped into a live animal market was one of real horror. I know that animals "go to market" all over the world, in preparation to be sold and slaughtered ..., but what shocked me so much was that so many of the animals in the market in Guangzhou were really suffering and nobody seemed to care. For example, the animals were cooped up in tiny cages with no access to water or food, and worse, often with three legs, dying of gangrene, waiting sometimes for days or weeks in this condition until they were sold.²⁸

Annie Mather's observation is echoed by Manab Chakraborty, executive director of Hong Kong's Kadoorie Farm and Botanic Garden, who has for years monitored wildlife trade in South China. He wrote that in South China,

“wild animals are always poorly treated. Most found in markets are dehydrated, injured and sick. Some traders develop cruel ways of killing them as a ‘gimmick’ to attract customers seeking the new and exciting.”²⁹ While the live animal markets in South China can be “soulless hellholes” for varieties of animals whose value is dependent on their use value to the humans, how do the college students see animals? Do they also hold a utilitarian view? To our surprise, our surveys display a very low percentage (2.7% and 2.5%) of the respondents who saw animals’ existence for human use. In contrast, 92.4% and 93% of the college respondents in the two surveys believed that animals and their welfare deserved respect and equal consideration.

One recent development on the Chinese mainland is the sudden appearance of many wildlife parks and private zoos.³⁰ There have been reports exposing the poor conditions in many of these facilities.³¹ Yet, aggressive marketing by the zoo owners has portrayed these largely profit-seeking operations as educational and conservational institutions. How did the college students perceive the zoos? While 53.4% and 52.0% of the respondents in the 2002 and 2003 surveys viewed zoos as prisons for animals, a little more than a quarter of the respondents (25.7% in 2002 and 26.1% in 2003) saw zoos as the place for human-animal interaction. As Merritt Clifton pointed out to the authors, “this is the inverse of most US, and European findings” despite the fact that Chinese zoos are approximately 50 years behind the animal welfare standards stipulated by the American Zoo Association.³² But, why do more than a quarter of the college respondents view zoos uncritically?

We believe that there could be three possible explanations. First, most urban dwellers in mainland China have never even seen squirrels or wild rabbits, animals which one sees in one’s backyard or in public parks in the West. Except for their appearance on TV, in books, or in the live animal markets mostly in South China, zoos are the only place for urban Chinese to see wild animals. Second, the aggressive marketing of the many newly built wildlife parks and private zoos could have influenced many in the society. Third, public debates on controversial issues, such as the 1989 Tiananmen Massacre and AIDS epidemic in China’s Henan Province, have always been discouraged by the government who sees such a forum as potentially destabilizing. Animal welfare activists in China have long fought a hard battle to get their messages across.³³ Public debate on animal cruelty has been discouraged by the authorities for fear that such a debate would invite more foreign pressure to close profit-making and job-creating businesses charged with animal cruelty.³⁴

Wildlife eating

The outbreak of SARS brought international attention on the rampancy of wildlife eating in China.³⁵ Though this eating habit was traditionally limited to South China, it has in recent years spread to the rest of the country like prairie fire.³⁶ In one of the biggest live animal markets in Guangzhou, the annual sales value of wildlife amounted to RMB 800 million (about US\$100 million). On a normal market day before SARS, one could find almost anything creepy, crawly, feathery, and slippery for sale to the thousands of local restaurants dealing in exotic foods. Many wild animals on sale were either freshly caught in the wild with missing or bloody limbs or artificially bred on the thousands of wildlife breeding farms often operated in abject conditions. Among the thousands of live, dead, or dying animals were state-protected species such as spotted deer, pangolins, owls, and others.³⁷ Like its manufactured goods, Guangdong's taste for wild animals has spread to the rest of the country. Shanghai residents reportedly consume as many live snakes a year as those in Guangzhou. Northeast China has seen illegal poaching and slaughtering of the state-protected black bears for their paws, a rare delicacy in the local diet.³⁸ Wildlife eating has continued unabated in many parts of the country despite the SARS epidemic. Very recently, Russian customs authorities seized 800 bear paws bound for China.³⁹

How common is wildlife eating (wild animals including endangered species such as the Siberian tiger, black and brown bears, to pangolins, owls, and others such as wild rabbits, snakes, and frogs) among the general public? Contrary to the perceptions of outside observers, both the IFAW and our surveys have found that wildlife eating remains a culinary subculture. In Beijing and Shanghai, 37.8% of those surveyed said that they had eaten wild animals in the recent past.⁴⁰ The IFAW survey result could be interpreted as reflecting the general situation of wildlife eating not only in the two cities, but also in other major urban centers. Comparatively, only 24% of the surveyed college students in our 2003 survey had eaten wildlife in recent years. Admittedly, the lower percentage of college students who had eaten wildlife is perhaps attributable to the fact that they mostly dine at school canteens where wildlife is not commonly served.

Follow-up research is perhaps necessary to find out why a majority of those surveyed had never eaten wildlife. Was wildlife eating not part of their normal diet? Or did they consciously choose not to eat wildlife? A question could even be posed to those who have eaten wildlife about whether they can do without exotic tastes. With or without additional findings, the IFAW and

our surveys show that wildlife eating is not part of the mainstream of China's culinary culture.

Acts of animal cruelty

Cruelty to animals happens everywhere. Economic liberalization in post-Mao China has made widespread exploitation of different kinds of animals a byproduct of the national drive for wealth. To attract customers, some roadside food stalls reportedly resort to cruel practices in food preparations. For example, customers can order a particular cut of meat to be cut from a live donkey standing at the side of the cooking pan.⁴¹ Eating brains forcefully taken from a live monkey is no longer hearsay. At many wildlife parks, visitors can purchase live animals such as rabbits, chicken, pigs, and even cows to feed hungry tigers.⁴² Lion cubs were chained to poles and peacocks were forced to extend their wings for visitors to take pictures. Most shockingly, visitors can practice live ammunition shooting by firing at small live animals fastened on the target boards. Many wildlife parks and private zoos are operated in conditions where animals suffer from severe food and environmental deprivation.⁴³

In recent years, dog farms have emerged across the Chinese mainland. Dogs are raised in small cages. They are slaughtered, skinned, and disemboweled in full view of other dogs waiting for their turn. While the mainland Chinese media has increased its criticism of acts of animal cruelty, recent reports revealed that the Beijing Municipal Government was actively considering the introduction of Spanish-style bullfights into China.⁴⁴

How do the college students react to acts of animal cruelty? Are they morally indifferent? In our surveys, we asked the respondents to identify from a list of 10 acts those that they consider as cruel to animals. These acts include "raising meat dogs in small cages," "using animals in circus performance," "eating brains taken from live monkeys," "putting on a monkey show," "skinning quails alive," "force-watering pigs, fowls, and other livestock before slaughtering," "scaling fish alive," "caging wild birds," "shooting small animals as live targets," and "de-sexing pets."

We included "de-sexing pets" because it is widely perceived to be a cruel practice in China. Many Chinese mainlanders believe that taking away animals' reproductive capacity is cruel. Wang Meng's (writer and former Minister of Culture) widely circulated essay "*Mao hua*" (Talking about cats) and its message of allowing cats freedom to roam and breed could not but

have some impact on the perception of sterilizing pets as a cruel act.⁴⁵ Besides, China's veterinary medicine has long been confined to the care of farm animals. Veterinary care of household pets is a new phenomenon in China's major metropolitan centers. People may still associate the procedure of sterilization of cats with the simple and often crude roadside surgery for de-sexing roosters commonly practiced in China's rural areas. Despite the fact that China's cities are increasingly confronted with the growing stray population, few people except animal activists see the need to control the pet population.⁴⁶

Our surveys in 2002 and 2003 show that high percentages of the respondents identified shooting small animals as targets, eating brains taken from live monkeys, and skinning quails alive as particularly deplorable. As expected, over 40% of the respondents in both surveys saw sterilizing pets as cruel. Refer to the tables for a summary of the two survey results.

It is important to note that, though most respondents concurred that these were all cruel acts against animals, significant percentages of the respondents did not identify acts 1, 2, 4, 6, 7, and 8 as cruel. Yet, out of the 1082 respondents in the 2003 survey, a majority of them selected more than four acts as cruel. Only 2.3% of the respondents checked one act whereas those who checked five to 10 acts accounted for 71.4%.

Noticeably, we did not include testing on animals in the list. In addition to the fact that we could not include every single act of animal cruelty in the list, we excluded animal use in test labs due to one consideration. The list we offered in both surveys included the acts that had recently been condemned by the Chinese media. At least the media's position on many of these acts was crystal clear. It was our purpose to determine if the college students would react similarly. Regrettably, animal testing is the least talked about area of animal cruelty. As a result, we did not know the general public's position on animal testing and therefore did not have a reference point for comparison.

Animal protection activities

Are China's college students supportive of animal protection activities? Do they participate in such activities? Both the 2002 and 2003 surveys indicate that a high percentage of the respondents (95% and 93.7%, respectively) philosophically supported animal protection work. In contrast, those who did not express such support accounted for 0.8% and 1.4%. By comparison, 97.1%, 91.6%, and 94.0% of the Beijing and Shanghai respondents

answered affirmatively to three IFAW survey questions about whether they supported Chinese wildlife protection organizations, international environmental groups, and international animal welfare organizations.⁴⁷

But philosophical support tends to stop short of direct and personal participation. In the 2002 survey, 48.2% of the respondents said that they were willing to participate whereas those who were not willing or who had not seriously considered participating accounted for 51.4%. A slight improvement was seen in the 2003 survey where 51.0% said they intended to participate and 43.9% said that they were not willing or not yet prepared to participate. Both the IFAW survey and ours show that expression of support does not equate direct participation.

The gap between expression of support and actual participation seems to be a universal problem. According to Merritt Clifton, few nations offer as many easily accessible opportunities to help animals as the US. However, “while 31% of US residents enjoy watching wildlife, based on US Fish and Wildlife Service surveys, and approximately two-thirds of American households keep dogs or cats, only one US household in four donates to animal protection causes which receive less than 2% of all US charitable donations.”⁴⁸

In mainland China, participation in animal protection activities is discouraged by a combination of economic, ideological, and political factors. In today’s China, economic modernization is the government’s top priority. Many profit-making enterprises, such as the more than 270 bear farms, are involved in animal cruelty acts. Protesting against these enterprises conflicts with the local need for growth.⁴⁹ Ideologically, animal lovers have long been smeared as elements who “worship decadent Western bourgeois lifestyle”⁵⁰ and as “members of the 5th column of Western imperialism.” These elements allegedly love to use animal cruelty incidents to defame their own motherland.⁵¹ Is the Chinese government behind the attack on animal advocates? Not necessarily. Yet, the extremist antiforeign sentiment fostered by the ultra-leftist ideological indoctrination in the prereform era cannot but influence the value judgments of some of the opponents of animal welfare.

Politically, the Chinese government continues to suppress autonomous initiatives from the society. Animal protection activities, particularly protest activities against relevant government policies, are not received well by the authorities. Public questioning of government’s animal-related policies is resisted since it may create a precedent, make government liable to potential law suits, impact social stability, and ultimately shake the foundation of the one-party rule.⁵² These factors contribute to the maintenance of an environ-

ment that is not congenial to societal participation in autonomous activities for animal rights and welfare.

Dog eating

In the 2003 survey, we added a question on the moral difference between eating dogs and consuming beef, pork, and poultry. We intended to find out if the college students held different views compared with the residents of Beijing and Shanghai. And, if they did, what could the survey tell us?

Dog eating has always existed in China. It was traditionally limited to South and Northeast China. In recent years, dog eating has also become more common across the mainland with the revival of dog ownership. Some local authorities encourage their farmers to breed meat dogs as a source of income. While more people are keeping dogs as pets, dog eating has also attracted increasing criticism from within and outside China. How do the mainlanders perceive dog eating since it is banned in Taiwan and Hong Kong? Thirty-six percent of the IFAW survey respondents saw no moral difference between dog eating and consumption of other common meats. The IFAW study also showed that the higher the respondents' education (41.6% of college graduates, 40.7% of senior high graduates, 30.2% junior high graduates, 26.3% of elementary graduates, and 18.4% of illiterates), the less difference they saw between eating dog meat and consuming other animals.⁵³ How do we explain this finding?

One explanation addresses the political background of the recipients of China's education. The phenomenon of highly educated people seeing no moral difference between eating dogs and beef or pork "could reflect the extent to which educational opportunity in China had long been reserved for loyal Communists, whose views might tend to reflect the opinion of ... Mao Tsetung that dogs were parasites, better eaten than fed. Educated people born after Mao's 1976's death may develop a different perspective."⁵⁴ Our 2003 survey suggested that "a different perspective" on dog eating is yet to arise among the new educated elite. Forty-five percent of the 2003 survey college respondents saw dog eating as morally acceptable.

Merritt Clifton does not see the IFAW and our survey results as totally negative. He wrote in an e-mail to the authors that, "while here in the US, we are struggling to get people to begin to see eating a pig as being just as cruel as eating a dog, in China the breakthrough may come simultaneously on behalf of all animals: the person who stops eating dogs will stop eating pigs

and chickens too because they will all be seen as being moral equals.”⁵⁵ The question we pose to Clifton is: are the Chinese students really suggesting that eating other animal meat is morally wrong? Or, are they simply being defensive of dog eating by suggesting that Western beef eating is just as morally wrong?

We do not know exactly why 45% of our respondents believed so. But, a Qinghua University professor’s open rebuttal of Western criticism of China’s dog farms can perhaps explain the feelings of these students.⁵⁶ Highly educated people in China are knowledgeable about the outside world including outside criticisms of aspects of Chinese culture. Importantly, they are also more nationalistic and are more sensitive than the masses to China’s image in the world. Being knowledgeable, they can cite examples of foreign practices to counterattack foreign criticisms of Chinese practices. Being nationalistic, they have the tendency to equate foreign criticisms with a wholesale assault on the Chinese culture. Like educated South Koreans, educated Chinese detest their motherland being portrayed as a barbaric nation because of dog eating or other practices criticized by Westerners.

Admittedly, a high percentage of the educated mainland Chinese sees no moral difference between dog eating and consumption of other meats remains an open question. Are they trying to defend a culinary subculture in response to perceived hostile foreign criticism? Or, are they simply expressing frustration that the moral question of consumption of other animals is not equally discussed as Merritt Clifton suggested?

Awareness of wildlife breeding

In the 2003 survey, we added two questions on students’ awareness of wildlife breeding in China. The objective was to determine if the students were also aware of the cruelty associated with the wildlife farming activities. Wildlife farming in China involves many species with economic and alleged medicinal values. Among the most intensively farmed species are Asiatic bears, foxes, martens, civet cats, snakes, and frogs.⁵⁷ It is only in the last decade or so that conditions on the wildlife breeding farms have attracted the attention of domestic and international animal welfare groups. We specifically asked our respondents whether they had heard about bear farming, the farming operation that has aroused the most domestic and international criticism for its cruel practice of bear confinement in small iron cages for life and of bile extraction from an open wound cut in the stomach. For years,

bear farming had been praised glowingly in the mainland media as a “genius invention” allegedly good for developing Chinese traditional medicine, creating jobs, generating revenue, and conserving wild bears.⁵⁸ Not only did people not know about cruelty involved in bear farming, many people had never even heard of the farming operation.

According to the 1998 IFAW survey, only 30.2% of the Beijing and Shanghai residents had ever heard of it.⁵⁹ The China Bear Rescue Campaign launched by the Animals Asia Foundation (AAF) and the personal fight of AAF’s founder and CEO Jill Robinson on behalf of the farm bears have brought Chinese and international attention to the conditions of China’s bear farms. Our 2003 survey showed that 40% of the respondents said that they had read about bear farming. More importantly, over 87% of the IFAW respondents and 90% of our 2003 survey subjects saw it as a cruel practice. Students’ recognition of the intrinsic cruelty of bear farming contradicts the Chinese official claim that farm bear conditions have been improved and that bear farming is humane.

Science versus nonscience majors

Our surveys did not find science students to be different from their nonscience counterparts in animal attitude. While they scored lower, defined as views and attitudes unfavorable to animals, on some questions (raising meat dogs in small cages, support of animal protection activities, and bear farming as an acceptable practice), they scored higher on others (equal treatment of animals and intention to participate in animal protection activities). Interest of science students in readings and broadcast programs on animals was 7% higher than the nonscience majors (65%). In general, the difference in attitudes between the science and nonscience students was insignificant. See the following table for a snapshot of their responses on a selected number of questions.

Attitudinal change after SARS

Catastrophic events often lead to attitudinal change. Has the Chinese public changed their attitudes toward animals after the national SARS crisis? Months after the end of the epidemic, we could see a positive trend in societal attitudes toward wildlife eating and animal treatment in general. More people have realized that unbridled exploitation of wildlife and other animals has adverse effects threatening not only China’s wildlife resources but also

the welfare of humans. The government has for the first time called on the people to adopt a civilized dietary habit.⁶⁰ More than a thousand chefs across the country responded by publicly vowing not to prepare wildlife food. In Guangzhou where wildlife trade and eating had been most rampant, the government held public hearings for the first time on the fate of wildlife trade in the province.⁶¹

How has the SARS epidemic impacted on college students' attitudes toward animals? In response to our survey question, 13% said that their formerly unfavorable attitudes toward animals have been changed after SARS. Fifteen percent of the respondents said their support for the use and eating of wildlife remained unchanged. A total of 62.6% of the respondents opposed wildlife eating. Yet, if we compare the results of 2002 and 2003 surveys, we see noticeable differences in the students' attitudes. Table 6 and the following table highlight the changes in views and attitudes.

Concluding remarks

The two surveys on college students' animal welfare consciousness were the first ever conducted on the Chinese mainland. What have our survey results informed us in terms of the students' attitudes toward animals? As the two surveys have demonstrated, China's college students do not stand as a separate group with compromised moral judgments. This is confirmed by the

Table 6 Percentage of respondents who identified each act as cruel

No.	Choices	2002 Survey N=1208 MoE \pm 2.82* %	2003 Survey N=1081 MoE \pm 2.98* %
1	Raising meat dogs in small cages	29.8	32.4
2	Using animals in circus performance	38.2	43.8
3	Eating brains taken from live monkeys	88.5	90.4
4	Putting on a monkey show	56.5	62.9
5	Skinning quails alive	74.5	74.4
6	Force-watering pigs, cattle, fowls and other livestock before slaughtering	60.3	63.3
7	Scaling fish alive	57.3	59.3
8	Caging wild birds	51.6	53.6
9	Shooting small animals as live targets	90.2	89.2
10	De-sexing pets	41.9	44.4

*Based on total college student size of 19 million as of 2003

Table 7 Percentage of respondents who identified one or more cruel acts (2003 survey)

No. of selections made	No. of respondents	%
1	25	2.3
2	55	5.1
3	91	8.4
4	135	12.5
5	164	15.2
6	122	11.3
7	135	12.5
8	111	10.3
9	92	8.5
10	147	13.6
Total	1078	100

Table 8 Comparison of science and nonscience students' responses, 2003 survey (in %)

Questions	Science majors N=837	Nonscience majors N=244
Yes, animals have the capacity for suffering.	98	98
Yes, I like reading materials and TV programs about animals.	72	65
Yes, we should consider animal welfare and treat them equally.	94	93
Yes, zoos are the place where animals are imprisoned.	51	51
Yes, raising meat dog in cages is cruel.	31	33
Yes, I support animal protection activities.	92	95
Yes, I intend to participate in animal protection activities.	52	46

Table 9 Comparison of 2002 and 2003 survey results (in %)

Questions	2002 Survey	2003 Survey
Yes, animals are capable of suffering.	97.8	98.2
Yes, I like reading materials and broadcast programs on animals.	70.1	70.4
Yes, humans should treat animals equally.	48.6	55.6
Yes, animals exist for human use.	2.7	2.5%
Yes, it is cruel to raise meat dogs in small cages.	29.8	32.4
Yes, it is cruel to force animals to perform in circus.	38.2	43.9
Yes, it is cruel to eat brains taken from a live monkey.	88.9	90.7
Yes, it is cruel to stage a monkey show.	56.3	63.1
Yes, it is cruel to skin a quail alive.	74.5	74.7
Yes, it is cruel to force-water pigs, cows and other livestock before slaughtering.	60.3	63.5
Yes, it is cruel to scale a fish alive.	57.3	59.5
Yes, it is cruel to keep a bird in the cage.	51.6	53.8
Yes, I intend to participate in animal protection activities.	48.2	51.0

comparative analysis of our survey results with those of the IFAW survey of 1998. Since society plays an important socialization role, the attitudes of the college students toward animals are quite uniform regardless of their academic focus, family residence status, years in college, and difference in gender.

Our survey results also shed light on the various possible obstacles that have hindered the rise of animal welfare consciousness in society. These factors seemed to be lurking in the background that could also have conditioned the students' perspectives. The first of these factors is the nation's priority of economic development. On questions that seemed to suggest a choice between supporting economic growth and supporting animal protection, we see divisive opinions or a tendency to lean toward growth. Another factor is the state's preoccupation with social stability and the associated government revulsion against unofficial groupings and activities. The low percentage of students' participation in animal protection activities could be a rational response to the political constraints of the government's position on groups and activities without official sponsorship. Finally, nationalistic sentiment can bring forth defensive postures, causing resistance to external calls for a change of particular Chinese attitudes, behaviors, or policies. New research to study the connection between these factors and students' attitudes is necessary to get more insight into the thought process of the students.

Importantly, our survey results suggest that China is philosophically ready for breakthroughs in animal welfare policy making. A majority of the students surveyed expressed empathy for animals. Most of them believed that animals are sentient and have emotions. They deplored extreme cruelty against animals in the catering business, entertainment industry, wildlife farms, and slaughter houses. They stood for better treatment of animals. It is time for a drastic change in China's policy regarding animal protection. Instead of ignoring the rising societal animal welfare consciousness, China's legislative body should step up and consider anticruelty legislation.

Notes

The authors would like to thank the two anonymous reviewers whose comments have helped strengthen the article. They would also like to thank Professor John Linantud of the University of Houston-Downtown for his suggestions and comments on improving the style and organization of the article. Institutional and financial support of the World Society for the Protection of Animals (WSPA) and University of Houston-Downtown are gratefully acknowledged.

¹ Wang Jiaqin, Xiong Ying, and Zou Gui, "Qinghua xuesheng xiadushuo liusuan shaoshang wu gouxiong" (A Qinghua University student viciously attacked five bears using sulphuric acid), *Jinghua shibao* (Beijing times), 25 February 2002, 32.

² China Central Television, "San wei zhengxie weiyuan tan Qinghua xuesheng shang xiong shijian" (Three delegates to the National People's Political Consultative Conference discuss the bear attack incident), <<http://www.gdnet.com.cn/hottopic/2002/qinghua/0305-01.htm>>, accessed 20 January 2004.

³ Wang Ruiwen, "Zai canren xingwei de beihou" (Behind the cruel act), *Jingzhou wanbao jiaoyu zhoukan* (Jingzhou evening news education weekly), 7 April 2002, 1.

⁴ Four out of seven of the 16th Communist Party Politburo Standing Committee members were graduates of Beijing's Qinghua University. For background information of the 16th Political Bureau members, see Sina news special report <<http://news.sina.com.cn/z/newtop/index.shtml>>, accessed 7 March 2004.

⁵ Following the bear attack incident, a lively debate ensued among scholars in China on animal rights and animal welfare. See, for example, Qiu Renzong's "Dongwu qunyi he yi keneng?" (It is time to discuss the rights of animals), <<http://shc.jdjd.cn/article5/dongwu.htm>>, accessed 19 September 2003; and a response by Zhao Nanyuan of Qinghua University in his essay titled "Dongwu qunli lun de yaohai shi fan renlei" (The essence of the arguments for animal rights is antihumanity), <<http://shc.jdjd.cn/article021007/dongwuql.htm>>, accessed 1 March 2003.

⁶ Mang Ping, "Dongwu fuli kaoyan renlei daode" (Animal welfare: a test of human morality), *Zhongguo qingnian bao* (China youth daily), 13 November 2002, 9.

⁷ Interview with Prof. Song Wei, animal welfare law expert of China University of Science and Technology, 5 September 2003.

⁸ Li Xiaoxi, deputy of Beijing's Haidian District People's Congress and the first animal welfare activist who appealed to the national leaders to stop bear farming, drafted and submitted, with sponsorship of National People's Congress delegates "A Proposal on Animal Welfare Legislation" to the national legislature. Personal interview with deputy Li in Beijing, 8 January 2004.

⁹ Interview with Li Xiaoxi in Beijing, 8 January 2004.

¹⁰ Qiao Xincheng, "Dongwu fuli lifa buneng tuoli zhongguo guoqing" (Animal welfare legislation cannot be divorced from China's national conditions), <<http://www.people.com.cn/GB/guandian/1036/2515143.html>>, accessed 20 April 2004.

¹¹ See, for example, Feng Xiaotian, "Dusheng zhinu de shehui hua guocheng jiqi jieguo" (The process and result of socialization of China's single-child generation), *Zhongguo shehui kexue* (Journal of Chinese social sciences) 6 (2000), <http://www.usc.cuhk.edu.hk/wk_wzdetails.asp?id=1905>, accessed 20 January 2003; Zhu Yu and Zhang Yanping, "Shi 'xiao huangdi' haishi 'shehui dongliang?'" (Are they "little emperors" or "pillars of the state?"), *Zhongguo jiaoyu bao* (China education news), 10 March 2003, 4.

¹² Zhongguo dusheng zhinu renge fazhan ketizu (Research group for studying the character development of China's single-child youth), "Zhongguo chengshi dusheng zhinu renge fazhan xianzhuang ji jiaoyu yanjiu baogao" (Report on the status and character development of China's urban single-child youth), *Zhongguo jiaoyu yanjiu* (Journal of education studies), October 1998,

<http://www.sunyunxiao.net.cn/sunyunxiao/e_edu/e_a_report/e_a_report05>, accessed 23 January 2004.

¹³ Wang Ling, "Hushi renwen jiaoyu de eguo" (The consequence of the neglect of education in humanities), *Zhongguo xinwen wang* (China online news network), 26 February 2002, <<http://news.sina.com.cn/c/2002-02-26/1726486711.html>>, accessed 20 February 2004.

¹⁴ "Daxuesheng suzhi jiaoyu de xianzhuang yu chengyin" (On the current state and origin of quality education for the contemporary college students), <<http://www.scuec.edu.cn/hkb/info/ztjz4.htm>>, accessed 12 June 2004.

¹⁵ Liu Haoguang, "Zhi xuexi hao jiu xing ma? You liu hai yang shang xiong shijian shuo qi" (Academic accomplishments are not everything: what did Liu Haiyang's bear attack incident tell us?), *Zhongguo jiaoyu bao* (China education news), 2 March 2002, 2.

¹⁶ Qian Liqun, "Qiang hua zhiran kexue yu renwen kexue de fenli shi yizhong daotui" (It is retrogressive to keep the sciences and humanities disciplines separate in college education), *Zhongguo gaige bao* (China reform news), 2 June 1999, abstract obtainable at <http://www.gmw.com.cn/0_wzb/1999/19990613/GB/1653^WZ3-1314.htm>, accessed 10 January 2004; Liu Yiqing, "Zhiye jishu yuanxiao shishi renwen jiaoyu de celüe" (On the tactics of implementing humanities education in professional technical schools), *Zhiye yu jiaoyu* (Vocation and education) 5 (2000), <<http://www.tech.net.cn/research/segment/arm/1488.shtml>>, accessed 22 January 2004.

¹⁷ Jonathan Fowler, "WHO traces SARS to Civet Cats," a Yahoo News report, <http://story.news.yahoo.com/news?tmpl=story&u=/ap/20030523/ap_on_he_me/sarsvirus&cid=541&ncid=1624>, accessed 18 April 2004.

¹⁸ Tania Singer, Ben Seymour, John O'Doherty, Holger Kaube, Raymond J. Dolan, and Chris D. Frith, "Empathy for Pain Involves the Affective but Not Sensory Components of Pain," *Science*, no. 303 (2004):1157-62.

¹⁹ Wang Ziyong, "Jiaoyu dui zhongguo xiandaihua jingcheng de zhiyue" (The constraining effects of education on the process of China's modernization), *Zhongguo jiaoyu he keyan jisuanji wang* (China education and research network), 2003, <<http://www.edu.cn/20010829/209432.shtml>>, accessed 12 February 2004.

²⁰ Guojia tongji ju guomin jingji zonghe tongjishi (Department of Comprehensive Statistics, National Bureau of Statistics), *Xinzhongguo wushi nian tongji ziliao huibian* (Comprehensive statistical data and materials on 50 years of New China) (Beijing: China Statistical Press, 1999), 89-90.

²¹ Prior studies found that those who are young in age and with less education are actually more likely to support equal consideration of animal welfare. See, for example, Stephen R. Kellert, *The Value of Life: Biological Diversity and Human Society* (Washington: Island Press, 1996); Charles W. Peek, Nancy J. Bell, and Charlotte C. Dunham, "Gender, Gender Ideology, and Animal Rights and Advocacy," *Gender and Society* 10, no. 4 (1996): 464-78.

²² Corwin R. Kruse, "Gender, Views of Nature, and Support for Animal Rights," *Society and Animals* 7, no. 3 (1999): 179-98.

²³ International Fund for Animal Welfare (IFAW), *Public Opinion Survey on Animal Welfare* (Beijing: BMS & Associates, Inc., 1998).

²⁴ Personal communication with Merritt Clifton, chief editor of *Animal People*, 17 January 2004.

- ²⁵ Merritt Clifton, "Kindness: Where East Meets West," *Animal People*, March 2000, 8–9.
- ²⁶ IFAW, *Public Opinion Survey*, 1.
- ²⁷ Ibid.
- ²⁸ Personal communication with Annie Mather, Media Director of Animals Asia Foundation, 27 March 2004.
- ²⁹ Manab Chakraborty, "Wildlife Trade and Consumption Threaten Public Health," *South China Morning Post*, 5 June 2003.
- ³⁰ Li Bing, "Zhao Zhongxiang weiyuan: yesheng dongwu yuan buneng zai jian le" (Deputy Zhao Zhongxiang: there should be no more wildlife parks), *Xinhua she* (New China news agency), 7 March 2002, <<http://www.china.org.cn/chinese/lianghui/115618.htm>>, accessed 28 January 2004.
- ³¹ Zhang Wei and Hou Yuelin, "Dongwu shijie zhuchiren Zhao Zhongxiang: renlei shi yesheng dongwu de zhongjie zhe" (Humans are the terminators of wild animals: an interview with Zhao Zhongxiang, host of CCTV's Animal World program), *Liaosheng wanbao* (Liaosheng evening news), 28 May 2002, <<http://www.china.org.cn/chinese/TR-c/151177.htm>>, accessed 19 September 2003; see also AAF (Animals Asia Foundation), "Emergency Help: Starving Bears in Yulin Zoo, China, January 2003," *The Official Animals Asia Newsletter*, 2003, 22.
- ³² Personal communication with Merritt Clifton, 24 March 2004.
- ³³ Telephone interview with Li Xiaoxi, deputy of Beijing's Haidian District People's Congress, 20 November 2003.
- ³⁴ Telephone interview with Li Xiaoxi, 20 November 2003.
- ³⁵ "Wildlife Trade Faces Tough Curbs," *China Daily*, 28 May 2003, <<http://www.china.org.cn/english/environment/65596.htm>>, accessed 27 April 2004.
- ³⁶ Peter J. Li, "Animals in China: From 'Four Pests' to Two Signs of Hope," *Animal People*, October 2003, 8.
- ³⁷ Cindy Sui, "China Raids Wildlife Markets, Seizes Thousands of Animals in SARS Fight," *Agence France-Presse*, 28 May 2003.
- ³⁸ Zheng Yi, *China's Ecological Winter* (Hong Kong: The Mirror Books, 2001), 243.
- ³⁹ "Russia Seizes China-Bound Truck with 800 Bear Paws," *Reuters*, 23 March 2004, <http://www.enr.com/news/2004-03-23/s_14242.asp>, accessed 5 April 2004.
- ⁴⁰ IFAW, *Public Opinion Survey*, 6.
- ⁴¹ Telephone interview with Li Xiaoxi, deputy of Haidian District People's Congress of Beijing Municipality, 20 November 2003.
- ⁴² "Feeding Time at Zoo Terrifies Children," *South China Morning Post*, 8 May 2000, <http://www.wag.co.za/root_news/feeding_time_at_zoo.html>, accessed 7 April 2004.
- ⁴³ Ni Chingching, "Activists Claim Chinese Zoos Abuse Animals," an Associated Press report, printed in *Bradenton Herald*, 5 January 2003, <<http://www.bradenton.com/mld/bradenton/news/local/4876659.htm>>, accessed 16 April 2004).
- ⁴⁴ David Fang, "Is Beijing Ready for Spanish Bullfights?," *South China Morning Post*, 13 March 2004. Copy of the article provided by *Animal People*.
- ⁴⁵ Wang Meng, "Mao hua" (Talking about cats), <<http://www.nethao.com/book/2003new/da/w/wangmeng/wmwj/043.htm>>, accessed 3 March 2004.
- ⁴⁶ Telephone interview with Lu Di, director of Beijing Small Animals Association, 6 November 2003.

⁴⁷ IFAW, *Public Opinion Survey*, 4.

⁴⁸ Personal communication with Merritt Clifton, 24 March 2004.

⁴⁹ For example, bear farming in China's Sichuan Province involves the incarceration of more than 2,000 bears suffering from the cruel daily bile extraction from an open wound surgically created in their stomachs. Local forestry officials admitted that bear farming was cruel. Yet, bear farming is directly linked to many pharmaceutical companies in the province and therefore directly or indirectly contributes to the employment of some 10,000 people. Telephone interview with a provincial official in charge of wildlife conservation, 26 November 2003.

⁵⁰ Qin Gong, "You quan duo wei huan shuo kai qu" (On the peril of too many dogs), *People's Daily* (overseas edition), 3 August 1994, 3.

⁵¹ Zhao, "Dongwu qunli lun de yaohai shi fan renlei."

⁵² Randy Peerenboom, "SARS and Civil Society. Animal Cruelty: A Litmus Test for Mainland Political Reform?" *South China Morning Post*, 28 May 2003.

⁵³ IFAW, *Public Opinion Survey*, 39.

⁵⁴ Clifton, "Kindness."

⁵⁵ *Ibid.*

⁵⁶ Huang Chuan, "Gei guoji sheng bona quan zhengjiu zuzhi de fuxin" (A response to the international St. Bernard dog rescue group), <<http://www.xys.org/xys/ebooks/others/science/misc/dog.txt>>, accessed 20 September 2003.

⁵⁷ Ran Maoxiong and Zhou Houqiong, *Zhongguo yaoyong dongwu yangzhi yu kaifa* (The farming of wildlife animals for use in Chinese traditional medicine), (Guiyang: Guizhou Science and Technology Press, 2000).

⁵⁸ "Commercial Raising Saves Bears," *Beijing Review*, 7–13 March 1994, 34.

⁵⁹ IFAW, *Public Opinion Survey*, 42.

⁶⁰ Dong Jun, "Zhongguo yesheng dongwu baohu xuehui fachu bu lanshi yesheng dongwu de changyi" (China Wildlife Conservation Association calls for a stop to excessive wildlife eating), <<http://tech.enorth.com.cn/system/2004/01/17/000718990.shtml>>, accessed 27 January 2004.

⁶¹ "Proposed Ban on Eating Wild Animals Offers Public Food for Thought," *South China Morning Post*, 9 July 2003, <<http://china.scmp.com/chimain/ZZZFS977THD.html>>, accessed April 2004.

References

Animals Asia Foundation. "Emergency Help: Starving Bears in Yulin Zoo, China, January 2003." *The Official Animals Asia Newsletter*, 2003, 22.

Chakraborty, Manab. "Wildlife Trade and Consumption Threaten Public Health." *South China Morning Post*, 5 June 2003.

China Central Television. "San wei zhengxie weiyuan tan Qinghua xuesheng shang xiong shijian" (Three delegates to the National People's Political Consultative Conference discuss the Qinghua student's attack on the bears). <<http://www.gdnet.com.cn/hottopic/2002/qinghua/0305-01.htm>>, accessed 20 January 2004.

Clifton, Merritt. "Kindness: Where East Meets West." *Animal People*, March 2000, 8–9. "Commercial Raising Saves Bears." *Beijing Review*, 7–13 March 1994, 34.

- “Daxuesheng suzhi jiaoyu de xianzhuang yu chengyin”(On the current state and origin of quality education of the contemporary college students).
<<http://www.scuec.edu.cn/hkb/info/ztjz4.htm>>, accessed 12 June 2004.
- Dong, Jun. “Zhongguo yesheng dongwu baohu xuehui fachu bu lanshi yesheng dongwu de changyi” (China Wildlife Conservation Association calls for a stop to excessive wildlife eating).
<<http://tech.enorth.com.cn/system/2004/01/17/000718990.shtml>>, accessed 27 January 2004.
- Fang, David. “Is Beijing Ready for Spanish Bullfights?” *South China Morning Post*, 13 March 2004.
- “Feeding Time at Zoo Terrifies Children.” *South China Morning Post*, 8 May 2000.
<http://www.wag.co.za/root_news/feeding_time_at_zoo.html>, accessed 7 April 2004.
- Feng, Xiaotian. “Dusheng zhinu de shehui hua guocheng jiqi jieguo” (The process and result of socialization of China’s single-child generation). *Zhongguo shehui kexue* (Journal of Chinese social sciences) 6 (2000).
<http://www.usc.cuhk.edu.hk/wk_wzdetails.asp?id=1905>, accessed 20 January 2004.
- Fowler, Jonathan. “WHO Traces SARS to Civet Cats,” a Yahoo News report.
<http://story.news.yahoo.com/news?tmpl=story&u=/ap/20030523/ap_on_he_me/sarsvirus&cid=541&ncid=1624>, accessed 18 April 2004.
- Guojia tongji ju guomin jingji zonghe tongjishi (Department of Comprehensive Statistics, National Bureau of Statistics). *Xinzhongguo wushi nian tongji zhiliao huibian* (Comprehensive statistical data and materials on 50 years of New China). Beijing: China Statistical Press, 1999.
- Huang, Chuan. “Gei guoji sheng bona quan zhengjiu zuzhi de fuxin” (A response to the international St. Bernard dog rescue group).
<<http://www.xys.org/xys/ebooks/others/science/misc/dog.txt>>, accessed 20 September 2003.
- International Fund for Animal Welfare. *Public Opinion Survey on Animal Welfare*. Beijing: BMS & Associates, Inc., 1998.
- Kellert, Stephen R. *The Value of Life: Biological Diversity and Human Society*. Washington: Island Press, 1996.
- Kruse, Corwin R. “Gender, Views of Nature, and Support for Animal Rights.” *Society and Animals* 7, no. 3 (1999):179–98.
- Li, Bing. “Zhao Zhongxiang weiyuan: yesheng dongwu yuan buneng zai jian le” (Deputy Zhao Zhongxiang: there should be no more wildlife parks). *Xinhua she* (New China news agency), 7 March 2002.
<<http://www.china.org.cn/chinese/lianghui/115618.htm>>, accessed 28 January 2004.
- Li, Peter J. “Animals in China: From ‘Four Pests’ to Two Signs of Hope.” *Animal People*, October 2003, 8.
- Liu, Haoguang. “Zhi xuexi hao jiu xing ma? You liu hai yang shang xiong shijian shuo qi” (Academic accomplishments are not everything: what did Liu Haiyang’s bear attack incident tell us?). *Zhongguo jiaoyu bao* (China education news), 2 March 2002, 2.
- Liu, Yiqing. “Zhiye jishu yuanxiao shishi renwen jiaoyu de celue” (On the tactics of implementing humanities education in professional technical schools). *Zhiye yu jiaoyu*

- (Vocation and education) 5 (2000).
<<http://www.tech.net.cn/research/segment/arm/1488.shtml>>, accessed 22 January 2004.
- Mang, Ping. "Dongwu fuli kaoyan renlei daode" (Animal welfare is a test of human morality). *Hongguo qingnian bao* (China youth daily), 13 November 2002, 9.
- Ni, Chingching. "Activists Claim Chinese Zoos Abuse Animals." Associated Press report, reprinted in *Bradenton Herald*, 5 January 2003.
<<http://www.bradenton.com/mld/bradenton/news/local/4876659.htm>>, accessed 16 April 2004.
- Peek, Charles W., Nancy J. Bell, and Charlotte C. Dunham, "Gender, Gender Ideology, and Animal Rights and Advocacy." *Gender and Society* 10, no. 4 (1996): 464-78.
- Peerenboom, Randy. "SARS and Civil Society. Animal Cruelty: A Litmus Test for Mainland Political Reform?" *South China Morning Post*, 28 May 2003.
- "Proposed Ban on Eating Wild Animals Offers Public Food for Thought." *South China Morning Post*, 9 July 2003. <<http://china.scmp.com/chimain/ZZZFS977THD.html>>, accessed 16 April 2004.
- Qian, Liqun. "Qiang hua zhiran kexue yu renwen kexue de fenli shi yizhong daotui" (It is retrogressive to keep the sciences and humanities disciplines separate in college education). *Zhongguo gaige bao* (China reform news), 2 June 1999.
<http://www.gmw.com.cn/0_wzb/1999/19990613/GB/1653^WZ3-1314.htm>, accessed 10 January 2004.
- Qiao, Xinsheng. "Dongwu fuli buneng tuoli zhongguo guoqing" (Animal welfare legislation cannot be divorced from China's national conditions).
<<http://www.people.com.cn/GB/guandian/1036/2515143.htm>>, accessed 20 April 2004.
- Qin, Gong. "You quan duo wei huan shuo kai qu" (On the peril of too many dogs). *People's Daily* (overseas edition), 3 August 1994, 3.
- Qiu, Renzong. "Dongwu qunyi he yi keneng?" (It is time to discuss the rights of animals). <<http://shc.jjcd.cn/article5/dongwu.htm>>, accessed 19 September 2003
- Ran, Maoxiong, and Zhou Houqiong, *Zhongguo yaoyong dongwu yangzhi yu kaifa* (The farming of wildlife animals for use in Chinese traditional medicine). Guiyang: Guizhou Science and Technology Press, 2000.
- "Russia Seizes China-Bound Truck with 800 Bear Paws." *Reuters*, 23 March 2004.
<http://www.epn.com/news/2004-03-23/s_14242.asp>, accessed 5 April 2004.
- Singer, Tania, Ben Seymour, John O'Doherty, Holger Kaube, Raymond J. Dolan, and Chris D. Frith, "Empathy for Pain Involves the Affective but not Sensory Components of Pain." *Science*, no. 303 (2004): 1157-62.
- Sui, Cindy. "China Raids Wildlife Markets, Seizes Thousands of Animals in SARS Fight." *Agence France-Presse*, 28 May 2003.
- Wang, Jiaqin, Xiong Ying, and Zuo Gui. "Qinghua xuessheng xiadushou liusuan shapshang wu gouxiong" (A Qinghua University student viciously attacked five bears using sulphuric acid). *Jinghua shibao* (Beijing times), 25 February 2002, 32.
- Wang, Ling. "Hushi renwen jiaoyu de eguo" (The consequences of the neglect of education in humanities). *Zhongguo xinwen wang* (China online news network), 26 February 2002. <<http://news.sina.com.cn/c/2002-02-26/1726486711.html>>, accessed 20 February 2004.

- Wang, Meng. "Mao hua" (Talking about cats).
 <<http://www.nethao.com/book/2003new/da/w/wangmeng/wmwj/043.htm>>,
 accessed 3 March 2004.
- Wang, Ruiwen. "Zai canren xingwei de beihou" (Behind the cruel act). *Jingzhou wanbao jiaoyu zhoukan* (Jingzhou evening news education weekly), 7 April 2002, 1.
- Wang, Ziyong. "Jiaoyu dui zhongguo xiandaihua jingcheng de zhiyue" (The constraining effects of education on the process of China's modernization). *Zhongguo jiaoyu he keyan jisuanji wang* (China education and research network).
 <<http://www.edu.cn/20010829/209432.shtml>>, accessed 12 February 2004.
- "Wildlife Trade Faces Tough Curbs." *China Daily*, 28 May 2003.
 <<http://www.china.org.cn/english/environment/65596.htm>>, accessed 27 April 2004.
- Zhang, Wei, and Hou Yuelin. "Dongwu shijie zhuchiren Zhao Zhongxiang: renlei shi yesheng dongwu de zhongjie zhe" (Humans are the terminators of wild animals: an interview with Zhao Zhongxiang, host of CCTV's Animal World program). *Liaosheng wanbao* (Liaosheng evening news), 28 May 2002.
 <<http://www.china.org.cn/chinese/TR-c/151177.htm>>, accessed 19 September 2003.
- Zhao, Nanyuan. "Dongwu qunli lun de yaohai shi fan renlei" (The essence of the arguments for animal rights is antihumanity).
 <<http://shc.jdjd.cn/article021007/dongwuql.htm>>, accessed 1 March 2003.
- Zheng, Yi. *China's Ecological Winter*. Hong Kong: The Mirror Books, 2001.
- Zhongguo dusheng zhinu renge fazhan ketizu? Research group for studying the character development of China's single-child youth). "Zhongguo chengshi dusheng zhinu renge fazhan xianzhuang ji jiaoyu yanjiu baogao" (Report on the status and character development of China's urban single-child youth). *Zhongguo jiaoyu yanjiu* (Journal of education studies), October 1998.
 <http://www.sunyunxiao.net.cn/sunnyunxiao/e_edu/e_a_report/e_a_report05>,
 accessed 23 January 2004.
- Zhu, Yu, and Zhang Yanping. "Shi 'xiao huangdi' haishi 'shehui dongliang?'" (Are they 'little emperors' or future 'pillars of the state?'). *Zhongguo jiaoyu bao* (China education news), 10 March 2003, 4.

First Proof