

A photograph of a woman sitting in a metal cage filled with chickens. The woman is wearing a purple patterned jacket and dark pants. She is looking towards the camera. The cage is made of metal bars and is situated in a dimly lit, cluttered stall. A single light bulb hangs from the ceiling, casting a yellow glow. In the background, there are more cages and a wall with some papers. A rooster is perched on top of the cage. The overall scene suggests a crowded and unsanitary environment, likely a market stall for live animals.

**Animal Markets and
Zoonotic Disease in
China**

COUNTRY SUMMARY: CHINA

CULTURAL CONTEXT

China is the most populous country in the world with over 1.4 billion people. It is also now the largest meat-producing country in the world, expected to account for most of the total global increase in meat production between now and 2030. Traditionally, farm animals were raised on a household scale, but are now increasingly raised in intensive large-scale operations, a development supported by the state's agricultural modernization policies. China is rich in wildlife species and its imports and exports of wild animals are among the highest in the world. Commercial uses of wild animals in China include food and traditional medicine (both drivers of wildlife crime), as well as fur and other uses. The consumption of wild animals is both a subsistence and luxury market practice, and the range of species used and consumed is vast. Wildlife farming has grown rapidly in China; most producers raise animals for fur including species such as mink and raccoon dogs. The history of human attitudes towards animals in China is complex and ranges from empathy to utility.

ANIMAL MARKETS

China is the world's largest producer and consumer of pork, largest producer of eggs, the second-largest producer of chicken, and is among the largest beef producers. Captive wildlife breeding has been encouraged as a form of rural economic development since the 1980s and is now an important source of income for rural residents. China has historically hosted large numbers of live animal markets, including wildlife, livestock, or both. The species most commonly traded include pigs, cattle, sheep, chickens, and ducks, and common aquatic animals such as fish, shrimp, and crabs. Most wild animals sold in live markets are legally farmed. There is a strong preference among buyers for slaughtering animals on the spot or shortly after purchase, and less appetite for frozen products. There is a push to transition away from live poultry markets, in part because of the public health and disease risks they generate. The legal wildlife trade—wildlife trading, breeding, and processing—has grown rapidly since the 1980s and includes both a large domestic trade as well as substantial imports and exports. The illegal wildlife trade persists on a substantial scale.

DRIVERS OF ZOOBOTIC DISEASE RISKS

Vast amounts of livestock and wildlife produced and consumed make it uniquely vulnerable to zoonotic risks. Prevalence of live animal markets can amplify these risks, particularly where vendors sell wildlife, and where many species are held together in close confinement and close contact with humans. Risks vary across live markets depending on location, context, and species. The relationship between human population and farm animals is intimate, allowing disease spread from livestock to humans. Common

farming, trading, and consumption practices carry many zoonotic risks, particularly routine household-level relationships, unmonitored and not managed for disease. Retail and family farm practices are areas where the extensive regulatory system may not effectively mitigate risks. Because of the diversity of ways in which farm animals and their products are grown, harvested, and traded, there are huge regulatory costs associated with managing these risks. The wildlife trade, especially the illegal trade, lacks transparency and operates with very little monitoring.

RISK MITIGATION AND RELEVANT CHALLENGES

Challenges in managing zoonotic risk involve failures in quarantine, licensing loopholes, insufficient management of legal wildlife breeding, crimes involving illegal wildlife, and transportation. Improved inspection and transparency in the systems of livestock production are needed, alongside better disease monitoring at the household level for home production and slaughter. Improving the interface between legislation and enforcement is a central challenge for regulation of farm animals. Poaching, hunting, and smuggling of wildlife challenge decentralized administrative departments. In 2020, policymakers indicated an intent to ban certain forms of wildlife consumption and phase out live poultry markets to reduce zoonotic risk. It is not clear whether these reforms will be fully implemented alongside a push to industrialize food systems through intensive production and cold chain distribution.

AUTHORS

This report was written by Dr. Li-hong Gao (Zhongnan University of Economics and Law, China) and Dr. Da Su (Zhongnan University of Economics and Law, China) with additional research and editing by Dr. Caroline Merrifield (New York University, United States).

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INTRODUCTION

The occurrence of COVID-19 has raised public concern about the role of animals in public health worldwide. This paper considers current and future regulatory approaches to animals in China, and their implications for public health, through case study analysis of legal and illegal animal markets in the country.¹

In China, wild animals and domestic animals are conceptualized and regulated as distinct categories. Legal regulation of the sale and purchase of wild animals is the most comprehensive and systematic in China, and the Criminal Law establishes many crimes of illegal poaching and trading of wild animals. China has also established an extensive regulatory system for farmed animals that encompasses feeding, quarantine, transportation, and trading. The animals that most Chinese people have contact with in their daily lives are livestock such as cattle, sheep, pigs, chickens, and ducks; aquatic animals used for food; and companion animals like cats, dogs, and birds.

The conditions of livestock production in China have shifted substantially over the last three decades as consumer demand for animal products, including meat, milk, and eggs, has expanded dramatically.² China's livestock population nearly tripled between 1980 and 2010, growing from 142 to 441 million animals. China is now the largest meat-producing country in the world, and is expected to account for most of the total global increase in meat production between now and 2030.³ Where farm animals like pigs were previously raised on a household scale, they are now increasingly raised in intensive large-scale operations, a development supported by the state's agricultural modernization policies.⁴ At the same time, China is currently the world's largest importer of pork, accounting for roughly 40% of global import demand.⁵

With a total land area of 9.6 million square kilometers and a diverse natural environment, China is rich in wildlife species. According to the updated State List of Key Protected Wildlife, published in 2021, China is home to 980 species and 8 major categories of wildlife, including 686 species of terrestrial animals and 294 species of aquatic wildlife.⁶ As of 2016, 6,000 species of vertebrates alone were counted in China.⁷ Contact with wild animals is not common in much of urban China; and most urbanites may only ever encounter wild animals through the glass at zoos. In more rural, remote, and biodiverse regions of the country, such as Guangdong, Guangxi, and Yunnan Provinces, human contact with a variety of wild animal species is more common; and wild animals may be more likely to interact with domestic animal

1. As for the research methodology, the data for the cases is obtained from the Chinese Judgements Online Website. See China Judgements Online, accessed December 1, 2020: <https://wenshu.court.gov.cn/>. The data for the figures is obtained from our team's requests for information disclosure from relevant government departments, public letters, and online government publications. Special thanks are given to the undergraduate students of Zhongnan University of Economics and Law who provided very important help in the collecting the data for this paper: Xiao-fan Kang, Xiao-ying Fan, Meng-han Fu, Yu-ting Chen, and Yu-shi Cai.
2. See Bai, Zhaohai, et al., "China's Livestock Transition: Driving Forces, Impacts, and Consequences," *Science Advances*, vol 4., no. 7 (2018), DOI: 10.1126/sciadv.aar8534.
3. OECD-FAO Agricultural Outlook 2021-2030, "6. Meat." Online: <https://www.oecd-ilibrary.org/sites/cf68bf79-en/index.html?itemId=/content/component/cf68bf79-en>
4. Han, Mingxi, et al., "Boom and Bust in China's Pig Sector during 2018–2021: Recent Recovery from the ASF Shocks and Longer-Term Sustainability Considerations." *Sustainability* vol. 14, no. 11 (2022): 6784. DOI: <https://doi.org/10.3390/>
5. USDA FAS, "Livestock and Poultry: World Markets and Trade," July 12 (2023). Online: <https://www.fas.usda.gov/data/livestock-and-poultry-world-markets-and-trade>.
6. See State List of Key Protected Wildlife (2021): <https://www.pkulaw.com/CLI.4.352520>.
7. See the website of the China Biodiversity Conservation and Green Development Foundation, accessed March 14, 2021: <http://www.cbcdgf.org/NewsShow/4854/11310.html>.

populations.⁸ China's imports and exports of wild animals are among the highest in the world.⁹ This trend reflects the diversity of the country's wild animal species, as well as domestic demand for wild animals and their products.¹⁰

Companion animals, like dogs and cats, are not a focus of this report; to date, legislation and research related to pets are relatively limited. Indeed, the legal category of "companion animal" itself is comparatively new: for example, the Ministry of Agriculture announced in 2020 that dogs should be classified as pets, rather than livestock.¹¹ However, China's pet industry has been expanding rapidly. Data from the National Bureau of Statistics show that the compound growth rate of China's pet industry was 49.1 percent from 2010 to 2016.¹² According to a 2021 pet industry white paper, urban Chinese households own more than 58 million cats and 54 million dogs.¹³ Growing demand for companion animals has led to the emergence of unscrupulous breeding practices, which have garnered attention from animal rights groups.¹⁴ While urban pet ownership is not a critical area of concern for zoonotic disease emergence, the Covid-19 pandemic has raised new questions about animal-human relations in cities, both among pet owners and the general public.¹⁵

There are three major pieces of legislation in China concerned with the management of terrestrial animals. The Animal Husbandry Law, promulgated in 2005 and most recently revised in 2022, is primarily designed as economic legislation regulating animal agriculture. The Wildlife Protection Law, adopted in 1988 and most recently revised in 2022, is intended to conserve and protect China's diverse wild animal species. Under China's constitution, the state owns all natural resources not otherwise claimed by a legally-recognized collective. This ownership extends to wild animals, and forms the legal basis for state wildlife conservation measures and other regulations. In this legal regime, animal species are broadly defined as either wild or domestic (livestock), with the scope and meaning of one definition carrying implications for the other.¹⁶ "Wildlife" is defined as such under a legal regime of protection and conservation, which only specifies some of China's many wild species. Other species with wild breeding populations are primarily regulated as "livestock." Species that are not explicitly listed as protected wildlife or livestock exist in a relatively ambiguous legal space. In the past, the state has encouraged farming of wild animals as a conservation and rural development measure, although the policy environment may now be changing. A third major piece of legislation, the Animal Epidemic Prevention Law, was revised in 2021. This law, which was promulgated in 1997, includes provisions for the classification and

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8. Li, Hongying, et al., "Human-Animal Interactions and Bat Coronavirus Spillover Potential among Rural Residents in Southern China," *Biosafety and Health* vol. 1, no. 2 (2019): 84-90.
 9. Jiao, Yunbo, and Lee, Tien Ming, "The Global Magnitude and Implications of Legal and Illegal Wildlife Trade in China," *Oryx*, vol. 56, no. 3 (2022): 404-411.
 10. You, Mingqing, "Changes of China's Regulatory Regime on Commercial Artificial Breeding of Terrestrial Wildlife in Time of COVID-19 Outbreak and Impacts on the Future," *Biological Conservation* vol. 250 (2020): 108756. DOI: 10.1016/j.biocon.2020.108756.
 11. Reuters Staff, "China Reclassifies Dogs as Pets, Not Livestock, in Post-Virus Regulatory Push," Reuters, April 9 (2020). Online: <https://www.reuters.com/article/us-health-coronavirus-china-dogs/china-reclassifies-dogs-as-pets-not-livestock-in-post-virus-regulatory-push-idUSKCN21R1VI>
 12. This statistic was cited in a China Daily report from 2018. See Wang, Yiqing, "Dogs and Cats Have a 'Pet Economy' of Their Own," China Daily, October 6 (2018). Online: <https://www.chinadaily.com.cn/a/201810/06/WS5bb86859a310eff303280d78.html>
 13. For a summary of the paper's findings, see <https://www.gongshengyun.cn/yunying/article-36076-1.html>.
 14. C.f. Wang, Junlin, "China's Pet Industry is Booming. So Are Its Horrific Breeding Mills," Sixth Tone, August 31 (2022). Online: <https://www.sixthtone.com/news/1011091/chinas-pet-industry-is-booming-so-are-its-horrific-breeding-mills>.
 15. Yin, Duo, et al., "Public Perception of Urban Companion Animals During the Covid-19 Outbreak in China," *Health and Place* vol. 65 (2020): 102399. DOI: <https://doi.org/10.1016/j.healthplace.2020.102399>.
 16. For an overview of how this binary approach works in practice, see Jiang, Yifan, "Experts Question China's Proposed Wildlife Utilization Whitelist," China Dialogue, May 20 (2020). Online: <https://chinadialogue.net/en/nature/experts-question-chinas-proposed-wildlife-utilisation-whitelist/>

management of animal diseases, particularly those that pose serious risks to animal agriculture and human health. The law has taken on new salience and urgency in the context of the COVID-19 pandemic.

On February 24th, 2020, in response to the Covid-19 pandemic, the Standing Committee of the National People's Congress announced a Decision – a form of temporary or supplemental legislation – to completely ban trade in and consumption of terrestrial wildlife nation-wide “to safeguard the health and safety of the masses.”¹⁷ The Decision strictly prohibited the consumption of all wild animals for food, though it permitted the continued use of wild animals in medicine, for fur, and for scientific purposes. A prohibition on the consumption of all state-protected wildlife for food has been included in the most recent version of the Wildlife Protection Law. Consuming wild-caught wildlife had previously been allowed under earlier versions of the Wildlife Protection Law, with prohibitions for certain protected categories. The emergence and spread of SARS CoV-2 in humans has been linked to markets for live wild animals, with researchers hypothesizing that a widely-traded species like civets, raccoon dogs, or pangolins may have served as an intermediary host between humans and bats.¹⁸ The current regulatory approach, forged in the aftermath of the COVID-19 pandemic, proceeds under the following premises: that the scope of the legal wildlife trade should be very limited; that the main zoonotic risks in China are generated by the practices of the illegal wildlife trade; and that these practices do not have the requisite disease prevention and treatment measures and equipment due to their criminal characteristics. With this in mind, we emphasize wild animal markets and relevant regulations throughout this report.

The pandemic has catalyzed policy attention to epidemic emergence and prevention more broadly in China, prompting changes in regulation that affect markets for both domestic and wild animals. A key example is the 2021 revised Animal Epidemic Prevention Law.¹⁹ This law applies to animals defined as livestock, as well as legally farmed or captured wildlife. In contrast with the previous version of the law, which was last amended in 2015, the 2021 version clearly prioritizes “prevention and control of zoonotic infectious diseases” (Article 1) through a series of more specific and stringent measures to mitigate public health risks.²⁰ The newly revised Animal Epidemic Prevention Law aims to respond to the pandemic by refining routine animal disease prevention and control measures and streamlining the farm animal legal system itself.

The main challenge for ongoing epidemic prevention work in China will be to continuously strengthen the implementation of new and existing laws. China's size and its diverse regional terrains and climates present practical difficulties for regulation, which must be managed across China's layered administrative divisions. In China's legal system, administrative enforcement of national laws is mostly carried out by local government agencies. These local agencies are further subject to local laws and

17. See the website of the NPC, accessed December 1, 2020: <http://www.npc.gov.cn/npc/c30834/202002/c56b129850aa42acb584cf01ebb68ea4.shtml>. The Decision functioned as a transitional legislation in the special context of the pandemic to ban the illegal wildlife trade and eating wild animals in a comprehensive manner. The main elements of the Decision were as follows: 1. to increase penalties for existing legal provisions related to animal hunting, trading, transportation, and consumption; 2. to impose a comprehensive ban on the consumption of nationally protected wildlife; 3. to impose a total ban on hunting, trading, and transporting for consumption of terrestrial wildlife that grows and breeds naturally in the wild. All wild animals, whether grown in the wild or in captivity, were included in the ban on food use.

18. Holmes, Edward C., et al., “The Origins of SARS-CoV-2: A Critical Review,” *Cell* vol. 184 (2021): 4848-4856. Lam, Tommy Tsam Yuk, et al., “Identifying SARS-CoV-2 Related Coronaviruses in Malayan Pangolins,” *Nature* vol. 583 (2020): 282–285. Lytras, Spyros, et al., “The Animal Origin of SARS-CoV-2,” *Science* vol. 373, no. 6558 (2021): 968-970.

19. The law was first adopted in 1997. See the Animal Epidemic Prevention Law (2021): <https://www.pkulaw.com/CLI.1.351830>

20. For example, Article 3 previously defined “animal epidemic prevention” as the prevention, control, extermination and quarantine of animals and animal products; it now specifies “harmless treatment of diseased and dead animals and animal products.” In Article 8, the control of animal diseases is included in the legal responsibilities of grassroots government organizations, like rural villagers' committees and urban residents' committees. And, in Article 15, a new animal disease risk assessment regime is added, as well as a series of risk prevention and control measures such as setting up monitoring stations. There is also a review regime of animal disease prevention conditions.

administrative procedures, which must be consonant with national laws.²¹ This nested structure can make it difficult to coordinate regulatory efforts throughout such a large country, with such heterogeneous local conditions.²²

An additional challenge to China's endeavors to prevent and contain zoonotic disease emergence lies in the content of major animal regulations. Although new and updated laws introduced in the wake of the Covid-19 pandemic are strict and extensive, they, like existing laws, are primarily concerned with the control of genetic resources, epidemic management, sanitation, and so on, rather than with the treatment of individual animals or animal welfare more generally. We believe that further policy attention to the welfare of both wild and domestic animals can contribute to high-level state goals of containing and preventing animal disease epidemics and outbreaks of zoonotic disease among humans.

In the following sections, we present some basic background information about animals in China, and markets for domestic and wild animals and their products. We then turn to China's regulatory system for domestic and wild animals, and outline relevant pieces of legislation in more detail. In the remainder of the report, we use criminal cases involving animals to illuminate areas of risk for public health in the animal trade. We consider key regulatory challenges, and possible countermeasures.

The history of human attitudes toward animals in China is richly complex, ranging from the empathetic to the instrumental.²³ Yet animals and humans have historically occupied a common moral world in China²⁴: traditional Chinese culture advocates that the moral order of human beings should include animals as well.²⁵ In this spirit, we conclude this report with recommendations to further improve China's management of animal markets by explicitly incorporating welfare standards into animal law and policy.

BACKGROUND: ANIMALS IN CHINA

Animal agriculture has a long and well-documented history in China.²⁶ Traditionally, domestic animals featured in regional patterns of integrated, intensive small-scale agriculture. In many of these regional farming systems, animal manure was an important input for soil fertility, while animal proteins were a minor component of regular diets for most ordinary people. For example, a typical farm household might raise one or two pigs per year on agricultural and household wastes, slaughter them around the time of the Spring Festival, and then use the meat and fat sparingly throughout the coming year.

Following a wave of economic reforms ("Reform and Opening") introduced in 1978, Chinese

21. For more, see Han, Su Lin, "Administrative Enforcement in China," Paul Tsai China Center at Yale Law School, December (2017). Online: <https://law.yale.edu/china-center/resources/administrative-enforcement-china>.

22. For example, new measures in the Animal Epidemic Prevention Law still appear to permit local management of disease outbreaks, which has been noted in some cases discussed below as a potential failure point.

23. In ancient China, concepts of animal protection included those of Mencius, who famously said, "A gentleman does not tolerate the death of a beast when he sees it alive; he does not tolerate eating its flesh when he has heard its cries. Therefore the gentleman stays away from the slaughterhouse and the kitchen." This sentiment is both empathetic and instrumental; the "gentleman" may have been far from the kitchen, but someone was surely killing and cooking the animals he ate. Mengzi, Liang Hui Wang I. Online: <https://ctext.org/mengzi/liang-hui-wang-i>

24. The Tang and Song legal codes both contain animal protection provisions. The Tang Code, for example, contains a special chapter on animal protection for livestock such as cattle and horses.

25. Cao, Deborah, *Animals in China: Law and Society*, New York, NY: Palgrave Macmillan (2015), pp 9.

26. Anderson, E.N., *The Food of China*, New Haven: Yale University Press (1988).

income levels rose and demand for animal proteins increased substantially. At the same time, new rural policies prompted farmers to invest in non-grain-crop production “sidelines” like livestock husbandry. Overall meat production in the country increased roughly 600% between 1978 and 2006, growing from 7.8% of world total meat production to 29% of the total.²⁷ Shifting diets coincided with shifting formations of land and labor in the countryside, as rural people sought work in cities and fewer people were employed in primary production. Since the early reform period, and particularly since the 1990s, the state has promoted agricultural modernization in the countryside, emphasizing vertical integration, land consolidation, specialization, and professional management. These policies have encouraged the development of large-scale animal agribusinesses over recent decades. While initial growth in livestock farming occurred in grain-producing regions, areas of intensive production are increasingly concentrating near prosperous population centers.²⁸ Although many rural households still engage in small-scale animal husbandry, intensive farms have much greater stocks of animals, and these animals make up a majority of the total slaughtered for sale.²⁹

Pork has long been the most frequently consumed meat in China, and China is the world’s largest producer and consumer of pork.³⁰ China has been the world’s largest egg producing country since the mid-1980s, and is currently the second-largest chicken producing country, behind the United States.³¹ Eggs in particular are a mainstay of ordinary diets. Mutton, which traditionally features in regional diets in the north and west, is also consumed nationwide, although to a lesser degree than pork and chicken. Until recent decades, beef was more rarely eaten, due to both ecological and cultural factors; now, China is one of the world’s largest beef producers, and is second only to the United States in beef consumption³². Dairy has not historically been a significant part of most regional cuisines in China, but the country has seen a massive increase in demand for dairy since the 1980s³³. This increase can be attributed to rising incomes, as well as the influence of nutritional science and state agricultural and nutritional policies. Maintaining the population’s access to animal products for food, and supporting animal agriculture, are important goals of the state’s food and agriculture policy.³⁴ Indeed, pork is one of the core food items managed and stocked by the State Strategic Reserves Administration.³⁵ This focus on food security in regard to animal products is apparent in the Animal Husbandry Law’s focus on safeguarding poultry and livestock “genetic resources,” discussed below.

In China, wildlife – that is, animal species not defined as “livestock” under the terms of the

27. Li, Peter J., “Exponential Growth, Animal Welfare, Environmental and Food Safety Impact: The Case of China’s Livestock Production,” *Journal of Agricultural and Environmental Ethics* vol. 22 (2009): 217–240.

28. Bai, Zhaohai, et al., “Relocate 10 Billion Livestock to Reduce Harmful Nitrogen Pollution Exposure for 90% of China’s Population.” *Nature Food* vol. 3 (2022): 152–160.

29. USDA FAS, “People’s Republic of China: Livestock and Products Semi-Annual,” 4 March (2022). Online: https://apps.fas.usda.gov/newgainapi/api/Report/DownloadReportByFileName?fileName=Livestock%20and%20Products%20Semi-Annual_Beijing_China%20-%20People%27s%20Republic%20of_CH2022-0026

30. Consumption and production trends have shown the effects of the African Swine Flu outbreak beginning in summer 2018, as well as Covid-19 pandemic restrictions. See Han, Mingxi, et al., “Boom and Bust in China’s Pig Sector during 2018–2021: Recent Recovery from the ASF Shocks and Longer-Term Sustainability Considerations,” *Sustainability* vol. 14, no 11 (2022): 6784. DOI: <https://doi.org/10.3390/>

31. Yang, Ning, “Egg Production in China: Current Status and Outlook,” *Frontiers in Agricultural Science* vol. 8, no. 1 (2021): 25–34.

32. Li, Xiang Zi, et al., “Current Situation and Future Prospects for Beef Production in China - A Review,” *Asian-Australasian Journal of Animal Sciences* vol. 31, no. 7 (2018): 984-991.

33. Fuller, Frank, et al., “Got Milk? The Rapid Rise of China’s Dairy Sector and its Future Prospects,” *Food Policy* vol. 31 (2006): 201-215.

34. Wakabayashi, Daisuke, and Fu, Claire, “China’s Bid to Improve Food Production? Giant Towers of Pigs,” *New York Times*, February 8 (2023). Online: <https://www.nytimes.com/2023/02/08/business/china-pork-farms.html>

35. Wang, Yiwei, and Zhong, Raymond, “Swine Fever? Trade War? China Turns to Strategic Pork Reserve,” *New York Times*, October 7 (2019). Online: <https://www.nytimes.com/2019/10/07/business/china-strategic-pork-reserve.html>

Animal Husbandry Law – is considered a natural resource. The state claims ownership of natural resources; consequently, wildlife is owned by the state.³⁶ In this way, wild animals have been folded into a broader natural resource paradigm of stewardship for utilization. The Wildlife Protection Law (2022), first promulgated in 1988, introduced differentiated, graded protection for particular wildlife species. “Key national protected status,” Class I and Class II, is reserved for rare and endangered wildlife. The law further specifies the designation of species that “have important ecological, scientific, or social value,” also known as “three haves” species.³⁷ The Wildlife Protection Law calls for ministries under the State Council – the Forestry and Grassland Administration and the Ministry of Agriculture and Rural Affairs – to jointly determine and formulate concrete lists of animal species that will receive these special state protections. A list of key protected species was published in 1989, but was not updated substantially until 2021, when over 500 species and classes of animals were added. (An earlier revision of the law that came into force in 2017 included a requirement that the list be updated every five years.) Similarly, a list of “three haves” species was released in 2000; this list was substantially updated and expanded in July 2023.³⁸

The consumption of wild animals is both a subsistence and luxury market practice throughout China, and the number of species used and consumed is vast. The 2020 Decision to ban terrestrial wildlife consumption, and the consumption ban in the revised Wildlife Protection Law (2022), intervene in a cultural context in which wild animals are deeply enmeshed in culinary and medicinal practices.

Animal products have a long record of use in Chinese medicine.³⁹ The earliest extant Chinese pharmacopeia, *The Divine Farmer’s Classic of the Materia Medica* (25-220 CE), lists 67 species of animals as sources of medicinal ingredients; the classic Ming-era *Compendium of Materia Medica* (1596), by physician Li Shizhen, mentions 461 species of animals as medicinal ingredients.⁴⁰ Animal materials are used in the contemporary practice of traditional Chinese medicine (TCM), as well; indeed, modern medical manuals reference many more animal ingredients than ancient ones.⁴¹ An earlier study found that, among the 62 species of animals listed for permitted medical use in the official Pharmacopoeia of the People’s Republic of China issued in 2000, 9 were state key protected animals, and 15 were also protected by CITES.⁴² Some commonly-used species listed in the 2020 edition of the Pharmacopoeia include the Chinese moccasin, Reeve’s turtle, the musk deer, the saiga antelope, and four types of

36. See Article 3 of the Wildlife Protection Law (2022). See also Article 2 of the Environmental Protection Law (2015).

37. See Article 10 of the Wildlife Protection Law (2022). This language has changed over time; in earlier versions of the law, “three haves” meant economic, social, and scientific value. The shift to “ecological value” is in line with an increasing policy emphasis on ecological protection and “ecological civilization.”

38. Chinese scientists have long urged policymakers to expand the scope of these lists and clarify their terms. C.f. Jiang, Zhigang, “中国重点保护物种名录、标准与管理” [China’s Key Protected Species Lists, Their Criteria and Management], 《生物多样性》 [Biodiversity Science] vol. 27, no. 6 (2019): 698-703. For a short report on the release of the updated “three haves” list, see Xinhua, “China Adds 700 Species to Terrestrial Wildlife Protection List,” China Daily, July 5 (2023). Online: <https://www.chinadaily.com.cn/a/202307/05/WS64a52f46a310bf8a75d6d6a2.html>.

39. Castiglioni, Arturo, *The History of World Medicine*, Beijing: Commercial Press, (1986), pp 27-28.

40. Animal medicine includes not only live animals and animal organs, but also nails, skin, feces and urine. This phenomenon is related to the use of plants, animals and minerals as medicine in the Middle Ages by intuition and experience. See Zu, Shuxian, “关于传统动物药及其疗效问题” [About Traditional Animal Medicines and Their Therapeutic Effects], 《安徽医药》 [Anhui Medical and Pharmaceutical Journal] no. 3 (2002): 1-6.

41. See Chee, Liz P.Y., *Mao’s Bestiary: Medicinal Animals and Modern China*, Durham: Duke University Press (2021). Among other works, Chee cites 《中国药用动物志》 [Chinese Medicinal Animals], vol. 1 (1979), Tianjin: Tianjin Science and Technology Press (edited by the Chinese Medicinal Animals Editorial Group); and Li, Junde, et al., eds., 《中国药用动物志》 [Chinese Medicinal Animals], 2nd ed., vols. 1–3, (2013), Fujian: Fujian Science and Technology Press.

42. See Deng, Hai-Feng, and Chen, Xin-Ping, “CITES框架下濒危野生动物药用资源的保护与可持续利用” [The Conservation and Sustainable Use of Medicinal Resources of Endangered Wildlife under the CITES Framework], 《清华法治论衡》 [Tsinghua Forum of Rule of Law], no.00 (2016): 293-310.

seahorses.⁴³ Pangolins, one of the most frequently trafficked medicinal animals, were added to the CITES critically endangered list 2016; this species was notably removed from the 2020 edition of the Chinese pharmacopeia following the outbreak of Covid-19.⁴⁴

The use of animals in TCM therapies has been the subject of debate in recent years as domestic and international concerns about wildlife conservation and biodiversity have gained recognition, and as practitioners negotiate the efficacy and ethics of animal ingredients. One of the most prominent examples of a contested medicinal ingredient is bear bile, which has drawn attention from Chinese and international animal welfare groups. Bear bile is extracted from living bears through a syringe or catheter inserted directly into their gall bladders, causing severe suffering in these captive animals.⁴⁵ Chinese farms are the main source of bear bile for Japanese and Korean markets.⁴⁶ However, a prominent case with the pharmaceutical company Guizhen Tang indicates that Chinese society has become aware of the cruelty involved in sourcing such ingredients. In 2011, Guizhen Tang, which farms black bears, produces and sells bear bile products, and conducts related research and development, made its first bid to list on Hong Kong's alternative stock market, the Growth Enterprise Market.⁴⁷ The company eventually withdrew its application due to strong opposition from animal protection NGOs. The company attempted further Initial Public Offerings (IPOs) in 2012 and 2015, and failed both times amidst public outcry.⁴⁸ This high-profile case demonstrates that, for the Chinese public, “[a] bear’s pain is enough of a measuring factor to be compared with the company’s freedom to operate, [and] the growth of the herbal business.”⁴⁹ While domestic demand for animal ingredients in traditional medicine remains strong, research suggests that consumers are willing to accept substitutes for well-known animal ingredients when they know more information about conservation and species protection.⁵⁰

In Chinese culture, food and medicine operate on a spectrum: diet is understood as the first line of defense against illness, a means to keep the body in balance. Some ingredients with traditional medical applications also have culinary uses; at the same time, edible medical ingredients may be included in ordinary dishes to boost their efficacy in supporting good health. Wild animals are thus consumed not only in medicines, but also as therapeutic foods. Some frequently-consumed animals include various species of turtles and snakes, civet cats, and pangolins.⁵¹ Demand and preferences for wild animals used in food vary by region and across income and educational levels, with greater

43. Cheung, Hubert, et al., “Understanding Traditional Chinese Medicine to Strengthen Conservation Outcomes,” *People and Nature* vol. 3, no. 1 (2021): 115-128. DOI: <https://doi.org/10.1002/pan3.10166>.

44. Zhang, Fuhua, et al., “The Past, Present and Future of the Pangolin in Mainland China,” *Global Ecology and Conservation* vol. 33 (2022). DOI: <https://doi.org/10.1016/j.gecco.2021.e01995>.

45. Feng, Yibin, et al., “Bear Bile: Dilemma of Traditional Medicinal Use and Animal Protection,” *Journal of Ethnobiology and Ethnomedicine*, vol. 5, no. 2 (2009). DOI: <https://doi.org/10.1186/1746-4269-5-2>.

46. Zu, Shuxian, “关于传统动物药及其疗效问题” [About Traditional Animal Medicines and Their Therapeutic Effects], 《安徽医药》 [Anhui Medical and Pharmaceutical Journal] no. 3 (2002): 1-6

47. Zhang, Ke. “Bear Battle in China,” *China Dialogue*, February 23 (2012). Online: <https://chinadialogue.net/en/food/4779-bear-battle-in-china/>

48. Liu, Qin. “Can Traditional Chinese Medicine End Cruelty to China’s Bears?” *China Dialogue*, April 21 (2016). Online: <https://chinadialogue.net/en/business/8841-can-traditional-chinese-medicine-end-cruelty-to-china-s-bears/>

49. Gao, Li-Hong, “论我国动物保护的法律责任——以归真堂上市之争为切入点” [On the Legal Boundaries of Animal Protection in China – Taking the Battle over the Listing of Guizhen Tang as an Entry Point], 《清华法治论衡》 [Tsinghua Forum of Rule of Law], no.00 (2016): 21-36.

50. Liu, Zhao, et al., “Perception, Price and Preference: Consumption and Protection of Wild Animals Used in Traditional Medicine.” *PLoS ONE* vol. 11, no. 3 (2016): e0145901. DOI: <https://doi.org/10.1371/journal.pone.0145901>

51. Parham, Walter, “South China’s Taste for Wildlife,” *China Dialogue*, July 30 (2007). Online: <https://chinadialogue.net/en/nature/1191-south-china-s-taste-for-wildlife/>

consumption in southern areas like Guangdong, and among more affluent and well-educated people.⁵² In addition to the use of animals for medicine, the consumption of wildlife in food is a major driver of wildlife crime. Indeed, some studies suggest that, due to economic incentives, longstanding local subsistence hunting practices have been reoriented to the larger illegal wildlife trade.⁵³

As of 2016, about 24% of the captive-bred wildlife industry's revenue was from animals used for food, while the majority, 74%, was from the sale of fur and skin.⁵⁴ Under the revised Wildlife Protection Law (2022), wildlife breeding is still broadly permitted for animals raised for fur, for research purposes, for use in zoos and exhibitions, and for medicinal ingredients. Captive wildlife breeding has existed in China since the 1950s, and has been encouraged as a form of rural economic development since the 1980s. In the early 2000s, the state issued a series of policies supporting wildlife farming as a conservation measure, with the goal of reducing pressure on free-living populations.⁵⁵ As a result, captive wildlife breeding has become an important source of income for rural residents across the country. A major challenge arising from the 2020 wildlife consumption ban was organizing compensation for affected wildlife farmers.⁵⁶

MARKETS FOR ANIMALS

China has a large market for farm animals. A comparison of several large Chinese cities with populations over 10 million shows 2019 import and export figures on pigs ranging from 200-350 million (imports) and from 150-500 million (exports); cattle from 20-60 million (imports) and from 20-40 million (exports); sheep from 180-210 million (imports) and at around 250 million (exports); and poultry at numbers well into the billions.⁵⁷

Chinese cities have historically hosted markets where live animals, including fish and poultry, are traded. However, on July 3, 2020, China's State Administration for Market Regulation announced that it will gradually abolish the trade in live poultry in markets across the country as a public health measure.⁵⁸ This means that, in the future, poultry products will instead be transported and traded through the cold chain. As early as 2006, China's State Council issued a document calling for the phasing out of the sale and slaughter of live farm animals in major cities and replacing them with fixed-point slaughter.⁵⁹ These practices have not yet been strictly banned by law because of the strong Chinese dietary preference for fresh animal products: animals and their products slaughtered on the spot or after purchase. People are

52. Zhang, Li, et al., "Wildlife Trade, Consumption and Conservation Awareness in Southwest China," *Biodiversity and Conservation* vol. 17 (2008): 1493-1516.

53. Liang, Wei, et al., "Extreme Levels of Hunting of Birds in a Remote Village of Hainan Island, China," *Bird Conservation International* vol. 23, no. 1 (2013): 45-52.

54. Chinese Academy of Engineering, Consultative Research Program [中国工程院咨询研究项目], *Strategic Research Report on the Sustainable Development of China's Wildlife Industry* [中国野生动物养殖产业可持续发展战略研究报告], published July (2017), pp 103.

55. Jiao, Yunbo, and Lee, Tien Ming, "China's Conservation Strategy Must Reconcile its Contemporary Wildlife Use and Trade Practices," *Frontiers in Ecology and Evolution* vol. 14 (2021). DOI: <https://doi.org/10.3389/fevo.2021.675400>.

56. Zhang, Phoebe, "Chinese Farmers Offered Compensation to Quit Wild Animal Trade over Coronavirus Fears," *South China Morning Post*, May 18 (2020). Online: <https://www.scmp.com/news/china/society/article/3084918/chinese-farmers-offered-compensation-quit-wild-animal-trade-over>.

57. The cities in the table are large cities with a population of 10 million or more, and the data were obtained in the same way as mentioned above. Specific city names are replaced by letter designations.

58. China Economic Net, "State Administration for Market Regulation: Gradually Eliminate the Sale of Live Poultry [国家市场监督管理总局: 逐步取消活禽市场交易]," July 3 (2020). Online: <https://baijiahao.baidu.com/s?id=1671191149940743091&wfr=spider&for=pc>

59. See the General Office of the State Council on the rectification and standardization of the order of the live poultry business market to strengthen the prevention and control of highly pathogenic avian influenza (2006). Available at: <https://www.pkulaw.com/CLI.2.81756>

less willing to buy these products if they are kept frozen.

In China, the markets for farm animals and their products are divided into agricultural wholesale markets (农贸市场) and live poultry and seafood markets. Recent research suggests that these markets remain the major source of fresh food transacted in Chinese cities.⁶⁰ Agricultural wholesale markets mainly involve trade in fresh produce; meat, including pork and mutton; fish; and other seafood. Poultry and seafood markets mainly sell legally farmed domestic livestock, like chickens and ducks, or legally farmed and caught aquatic animals like fish, shrimp, and crabs. Neither type of market is a wildlife trading market: animals legally farmed for non-food uses, such as fur harvesting, cannot be traded in such markets. Chinese cities have historically hosted neighborhood fresh produce markets (菜市场) where live animals, largely poultry and fish, have been sold. These markets may also sell a variety of meat from other animal species, such as pork and mutton, and are a key source of fresh produce for many urban residents.⁶¹ There is very little – if any – wildlife trade in these produce markets. Outside of cities, there are rural and periurban livestock markets, as well as permanent and periodic produce markets for rural and periurban residents.

China is the foremost aquaculture producer worldwide.⁶² According to the Statistical Bulletin on National Economic and Social Development, China's total aquatic products production in 2020 was 65.45 million tons, an increase of 1.0% over the previous year. The output of farmed aquatic products was 52.15 million tons, an increase of 3.0%. The output of wild-caught aquatic products was 13.3 million tons, a decrease of 5.0%.⁶³ 80% of aquatic products on the market in China are farmed domestically.⁶⁴ The Ministry of Agriculture and Rural Affairs 14th Five Year Plan for Fishery Development, published in early 2022, promotes an ongoing conservation-minded shift from wild-caught to farmed fish, echoing earlier trends in wildlife policy.⁶⁵

For wild-caught aquatic products, the fisher or harvester sells animals to a wholesaler, who then resells them to other wholesalers and to processors, after which the aquatic products are transported to marketplaces or supermarkets for sale. Farmed aquatic products are generally produced on “production bases,” an arrangement in which a group of producers pool land for use in a particular economic venture.⁶⁶ Five species of carp are the most commonly farmed aquatic animals, and they may be raised in ponds, lakes, reservoirs, or flooded fields.⁶⁷ There are two supply chain systems for aquatic products. One is the larger-scale supply chain logistics system, which comprises large seafood processing

60. An agricultural wholesale market industry report from 2021 estimates that about 77% of urban food is transacted through wholesale markets. See China Agricultural Wholesale Association [全国城市农贸中心联合会], “Agricultural Wholesale Market Report: Wholesale Markets are Still Consumers' Main Channel for Purchasing Fresh Produce,” January 19 (2022). Online: https://mp.weixin.qq.com/s?__biz=MzIwN-DA5MzgyOA==&mid=2653763490&idx=1&sn=1af967278631165c2ec13042168b11fc&chksm=8d1cf749ba6b7e5f97d9dfd1d32eb72727c8d-bc59fd22f6916843a6a005472b9825f5664ddec&scene=27

61. Zhang, Qian Forrest, and Pan, Zi, “The Transformation of Urban Vegetable Retail in China: Wet Markets, Supermarkets and Informal Markets in Shanghai,” *Journal of Contemporary Asia* vol. 43 no. 3 (2013): 497-518.

62. Zhao, Kangshun, et al., “Aquaculture Impacts on China's Marine Wild Fisheries Over the Past 30 Years,” *Frontiers in Marine Science*, 26 July (2021). DOI: <https://doi.org/10.3389/fmars.2021.710124>

63. See the National Bureau of Statistics website, accessed March 14, 2021, http://www.stats.gov.cn/tjsj/zxfb/202102/t20210227_1814154.html

64. Estimate from the Ministry of Agriculture and Rural Affairs (2021). Online: http://english.moa.gov.cn/news_522/202109/t20210922_300718.html.

65. Zhang, Chun, “China's Five-Year Plan for Fishing Focuses on Aquaculture,” *China Dialogue*, March 24 (2022). Online: <https://chinadialogueocean.net/en/fisheries/chinas-five-year-plan-for-fishing-focuses-on-aquaculture/>

66. Depending on the circumstances, a group of producers may decide to pool their land and manage it jointly through a corporate structure; or, more typically, they may cede use-rights to their land to an outside agribusiness. In the latter arrangement, the agribusiness may offer waged employment to the previous holders of local land-use rights. See Lohmar, Bryan, et al. “China's Ongoing Agricultural Modernization: Challenges Remain After 30 Years of Reform,” USDA ERS, *Economic Information Bulletin* no. 51 (2009).

67. USDA ERS, “China: 2021 China's Fishery Report,” December 27 (2021). Online: <https://www.fas.usda.gov/data/china-2021-chinas-fishery-report>

enterprises that have uniform product packages and distribution. The other is composed of smaller-scale harvesters, farmers, and retailers who transport a more diverse range of aquatic products, including live aquatic animals. As of 2018, there were more than 9,000 aquaculture enterprises in China, and the production volume of aquatic products has reached 6,458 tons.⁶⁸

The legal wildlife industry in China comprises wildlife trading, breeding, processing, and tourism.⁶⁹ This industry has grown rapidly since the 1980s. During this period, the state was promoting entrepreneurship and industrial innovation. The wildlife breeding industry became an important, officially-sanctioned means for addressing employment and economic transformation.⁷⁰ *The Opinions of the State Forestry Administration on Promoting the Sustainable Development of Wildlife*, issued in 2004, established a major shift in China's wildlife utilization policy to support the vigorous development of the captive wildlife industry.⁷¹ Behind this law was another purpose: to reduce the pressure on endangered wildlife by shifting human demand for wildlife to captive-bred animals, thus providing some protection for wild breeding populations.⁷²

The wildlife trade in China includes markets created by this wildlife breeding regime, as well as legal wildlife imports and exports. Wildlife tourism includes zoos, forest parks, and other wildlife exhibition industries. The wildlife processing industry produces items such as fur, skin, feathers, and materials for medicines. According to a 2017 report from the Chinese Academy of Engineering, China's legal wildlife industry is well developed: in 2016, the industry had an output value of \$133 billion, and employed 14.09 million full- and part-time workers. The report's abstract sketches the composition of the industry as follows:

The fur animal industry employs 7.6 million people and the output value of the fur industry is estimated at 389.483 billion yuan; the medicinal animal industry employs 210,800 people and the output value is 5.027 billion yuan; the food animal industry employs 6,263,400 people and the output value is 125.054 billion yuan; the ornamental and pet industry employs nearly 13,700 people and the value of output was RMB 652 million. The experimental primate industry directly employs 2,000 people and has an output value of 400 million yuan.⁷³

China also has a market for wild animals legally imported from abroad. In 2019, China's first category of live animal exports amounted to \$16,772.29 million and imports to \$41,949.93 million.⁷⁴ To

68. As noted by Crona et al., "China is the leading aquaculture producer in the world, accounting for 58% of global production in 2018." See Crona, Beatrice, et al., "China at a Crossroads: An Analysis of China's Changing Seafood Production and Consumption," *One Earth* 3, July 24 (2020): 32-44, pp 33.

69. See Website of China Biodiversity Conservation and Green Development Foundation, accessed March 14, 2021. Available at: <http://www.cbcdgdf.org/NewsShow/4854/11310.html>.

70. The three periods are roughly as follows: The first period was from the 1980s to the mid-1990s, when the wildlife breeding industry was just taking shape; the second period was from the mid-1990s to the beginning of the 21st century, when the wildlife breeding industry gradually developed in China; and the third period is from the beginning of the 21st century to the present, when the wildlife breeding industry has become a large-scale industry. See Liang, Zhiping, "立法、监管与国家治理——基于制度个案的观察与思忖" [Legislation, Regulation, and National Governance – Observations and Reflections Based on Institutional Cases], *《东南法学》* [Southeast Law Review] vol. 2 (2020): 1-18.

71. See the Opinions of the State Forestry Administration on Promoting the Sustainable Development of Wildlife (2004). Available at: <http://www.pkulaw.cn/CLI.4.56096>.

72. See the website of the China Biodiversity Conservation and Green Development Foundation, accessed March 14, 2021. Available at: <http://www.cbcdgdf.org/NewsShow/4854/11310.html>.

73. Chinese Academy of Engineering, Consultative Research Program [中国工程院咨询研究项目], Strategic Research Report on the Sustainable Development of China's Wildlife Industry [中国野生动物养殖产业可持续发展战略研究报告], published July (2017).

74. The first category of live animal excludes aquatic invertebrates but includes aquatic mammals such as dolphins. See the National Bureau of Statistics website, accessed November 28, 2020. Available at: <https://data.stats.gov.cn/easyquery.htm?cn=C01>.

date, public debate on legal wildlife markets has focused on the implementation of humane and welfare principles for the use of animals. More formal animal welfare principles might yet be introduced through wildlife market regulation.⁷⁵

Another category of wildlife market is the illegal wildlife market, which by definition involves crimes such as illegal hunting and transportation. Much less information is available about the operation of illegal markets for wildlife; however, some basic information can be gleaned from criminal cases pertaining to wild animals. Illegal wildlife trading occurs both through the internet and in person. In the course of a sweeping multi-departmental law enforcement operation coordinated by the Forestry and Grassland Administration between February and May 2022, officials identified nearly 12,000 cases of wildlife or wild plant crimes, including 270 cases, involving 13,000 individual items, related to illegal smuggling or transaction of threatened terrestrial wildlife species and their products, such as elephant ivory, rhino horn, saiga horn, pangolin, tiger, and leopard.⁷⁶ According to our review of 600 cases involving sixteen types of wildlife crime in criminal case adjudication documents from a roughly two-month period in late 2020, illegal hunting remains by far the most common crime (234 cases), followed by the illegal purchase, transport, or sale of rare and endangered wild animals and their manufactured products (150). The third most common crime was the only other one with over 15 instances from the list: the illegal hunting of, specifically, rare and endangered wild animals.⁷⁷

These cases involve a variety of wildlife species under different levels of state protection; but a few species are particularly common.⁷⁸ Pangolins⁷⁹ and turtledoves, which are often found on Chinese dinner tables illegally, account for these cases, with five turtledoves and five pangolins each involved in the last 60 out of 600 cases. At the time of the case, the pangolin was a Class II protected animal in the conservation classification regime, which was upgraded to Class I in June 2020.⁸⁰ In addition, Class I protected animals include yellow sheep and Asian elephants, while Class II protected animals involve 10 species, mainly birds.⁸¹ A large number of “three haves” animals are involved in these cases, as well.⁸² The turtledove was the most frequently involved species, appearing in 5 of the 60 cases.

As the map below indicates, there are two patterns of wildlife-related crimes. One is concentrated in areas with a dense distribution of wildlife and a well-preserved natural environment, such as Yunnan, Sichuan, and Jilin. In these areas, illegal hunting is correlated with the size of the local wildlife population.

75. For example, Article 27 of the Regulations on the Administration of Laboratory Animals (2017) states that “Personnel working with laboratory animals must treat them with care and must not tease or abuse them.”

76. See Liu, Qingwei, “2022 ‘Operation Refreshing Breeze’ Yields Outstanding Results,” National Forestry and Grassland Administration website, August 3 (2022). Online: <http://www.forestry.gov.cn/main/586/20220803/085416587796583.html> [in Chinese]. For more on the scope of the illegal wildlife trade, see Fei, Yi-Ling, et al., “基于大数据探究野生动物的发案规律” [Research on the Tendency of Wildlife Crime Based on Big Data], 《野生动物学报》 [Chinese Journal of Wildlife], no. 4 (2020): 1136-1141.

77. The 600 cases are wildlife-related crime-related adjudication documents published from August 10, 2020 to September 30, 2020. See China Judgements Online, accessed December 1, 2020, <https://wenshu.court.gov.cn/>. According to the Amendment to the Criminal Law of the People's Republic of China (XI) adopted on December 26, 2020, the crime of illegally hunting and killing precious and endangered wild animals and the crime of illegally purchasing, transporting or selling rare and endangered wild animals and their products were abolished and changed to the crime of “the crime of endangering precious and endangered wild animals.”

78. Fei, Yi-Ling, et al., “基于大数据探究野生动物的发案规律” [Research on the Tendency of Wildlife Crime Based on Big Data], 《野生动物学报》 [Chinese Journal of Wildlife], no. 4 (2020): 1136-1141.

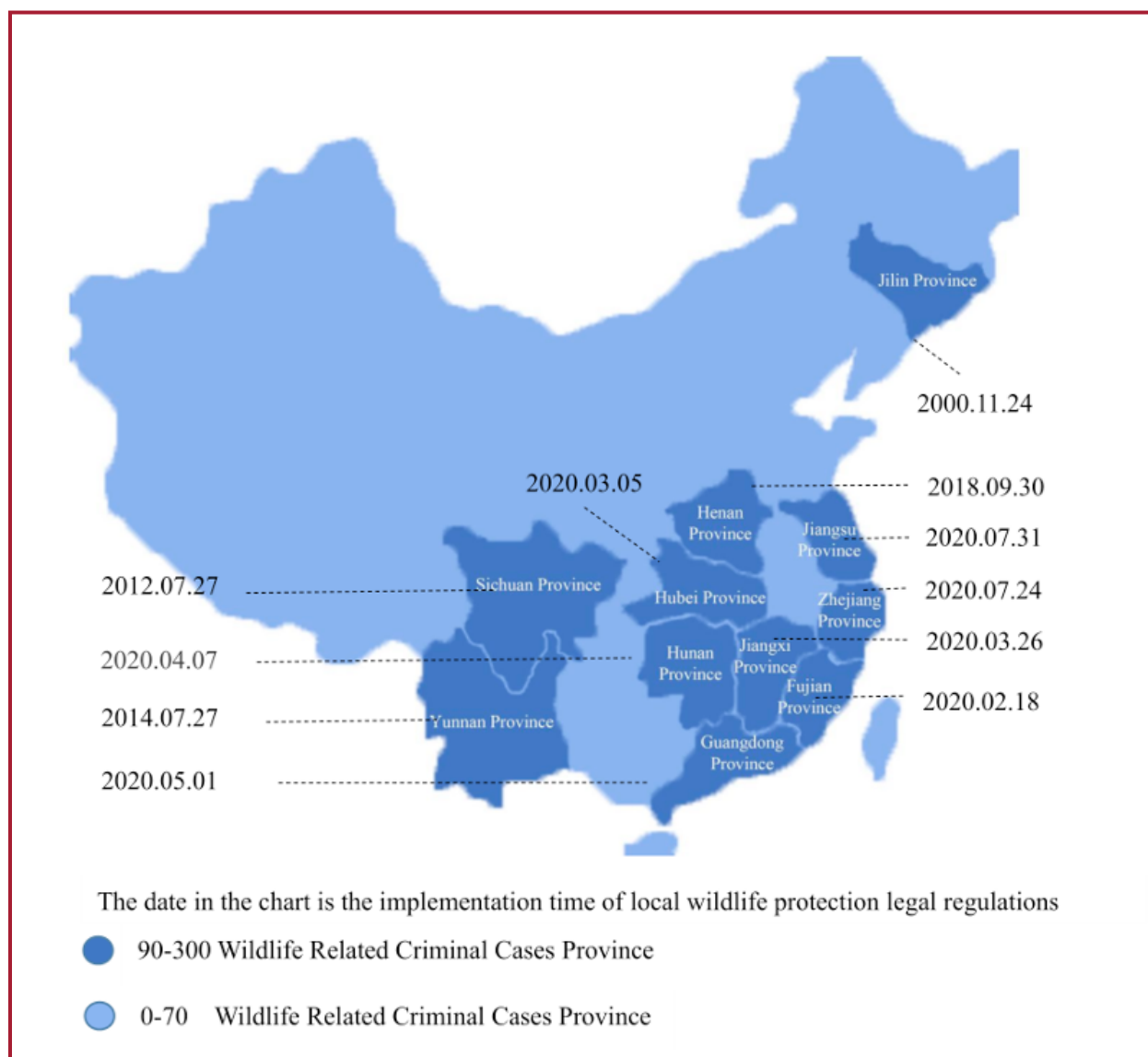
79. Zhang, Fuhua, et al., “Reducing Pangolin Demand by Understanding Motivations for Human Consumption in Guangdong, China,” *Frontiers in Ecology and Evolution* (2020). DOI: <https://doi.org/10.3389/fevo.2020.574161>

80. According to the Wildlife Protection Law grading and classification regime for wildlife protection at the time, Class I protection included about 90 species of pandas, snow leopards, golden snub-nosed monkeys, etc., while Class II included more than 90 species of animals. See Article 10 of the Wildlife Protection Law (2018).

81. In these 60 cases, the Class II protected animals were mainly birds and poultry, including common buzzards, several types of pheasants, and gray hornbills.

82. See Article 10 of the Wildlife Protection Law (2022).

The other pattern is concentrated in densely populated areas, such as cities along the Yangtze River and southeast coastal cities, which have a high demand for wildlife products. While the Wildlife Protection Law and other measures have attempted to regulate illegal hunting, trade, and transportation, the market is vast and repeatedly escapes concrete implementation and enforcement. The main risks and pressures pertain to hunting and the regulation of animals and their products. In the authors' research on all criminal cases related to wildlife illegality in the year 2020, the following geographies emerged:



There are well-developed methods and channels for handling animals and products obtained illegally from hunting. There are two primary supply chains: one for the products of illegal hunting, and the other for products of illegal breeding. Compared with illegal hunting, illegal breeding is more covert and more difficult to eradicate.⁸³ Illegal breeders can circumvent regulation in a variety of ways, such as using legal breeding licenses to conceal illegal breeding practices.

Animal “markets” encompass both supply chains and physical sites of exchange. Zoonotic risks

83. For example, in (2020) Chongqing Administrative Court 0102, No.207, the illegally farmed animal is frogs.

to humans arise from trading and transporting animals and animal products from place to place; additional risks are associated with physical marketplaces for animals and animal products. These risks vary by location, context, and animal species. Regulations on the spatial organization of market sites are designed to strictly manage animal locations and interactions, thereby minimizing the risks of zoonotic disease transmission between different animals in the market. In practice, some marketplaces may present other conditions. Under the current regulatory system, different species of animals should be kept in strictly separate groups in breeding areas. Before entering the marketplace, they must undergo quarantine and slaughter quarantine, and transport vehicles must be equipped with sterilization licenses before the relevant animals and their products can enter the market. In many rural areas, there are temporary animal trading markets, which are formed at a certain point of time by different sellers and buyers and disappear after the transaction is completed in a simple stall. Many of these markets do not in fact have a dedicated trading site but may be set up on the roadside or in front of a building. The epidemic prevention measures in such markets are lacking, and there are no strict zoonotic disease interception measures between humans and animals, or between animals.

The relationship between the Chinese population and farm animals is extremely close, and this relationship is reflected in both frequent consumption and frequent interaction. Many commonplace farming, trading, and consumption practices carry zoonotic risks that are not necessarily associated with the geographic and spatial sense of a market. For example, there were reports from Xi'an in the fall of 2020 of several toddlers developing brucellosis from drinking unpasteurized sheep milk, and of an additional infant who was infected because their caregivers kept sheep at home.⁸⁴ Relationships between humans and farm animals in China, particularly routine household-level relationships, are not fully monitored and managed for zoonotic diseases. These retail and family farm practices are areas where China's extensive regulatory system may not effectively mitigate risks. Because of the diversity of ways in which farm animals and their products are grown, harvested, and traded, there are huge regulatory costs associated with managing these risks.

REGULATORY BACKGROUND AND APPROACH

There is a variety of animal-related legislation in China. Beyond the three major pieces of legislation highlighted above – the Animal Husbandry Law (2022), the Wildlife Protection Law (2022), and the Animal Epidemic Prevention Law (2021)⁸⁵ – broader legislation, such as the Criminal Law of the People's Republic of China (2020) and the Constitution of the People's Republic of China (2018), also includes animal-related content. The brief sample list below gives a sense of the intended range and scope of these laws. Recent analysis of Chinese animal law has noted that “[t]he substantive boundary of animal protection in China is to protect animals other than wild animals as property, and the boundary of protection is locked in the safety of property, and the law is not concerned with the subjective feelings of animals.”⁸⁶ China's animal-related legislation in this regard covers a wide range of parts, including

84. See Xi'an Evening News, “Xi'an Sees Five Pediatric Cases of Brucellosis in One Week,” *The Paper*, September 9 (2019). Online: https://www.thepaper.cn/newsDetail_forward_9093113 [in Chinese]

85. Chinese national laws and regulations database: <https://flk.npc.gov.cn/>.

86. Gao, Li-Hong, “论我国动物保护的法律责任——以归真堂上市之争为切入点” [On the Legal Boundaries of Animal Protection in China – Taking the Battle over the Listing of Guizhen Tang as an Entry Point], 《清华法治论衡》 [Tsinghua Forum of Rule of Law], no.00 (2016): 21-36.

animal breeding, quarantine, slaughter, etc., with the obvious institutional purpose of “regulations on drugs, feed, slaughter, quarantine, etc., to increase the safety of animals as food.”⁸⁷ In other words, in current legislation related to animals, clear priority is given to issues of property, sanitation, and epidemic management, rather than animal welfare *per se*. Below, we briefly note a range of animal-related regulations; although individual laws may address a number of issues, we classify them here according to primary topic. Dates in parentheses indicate the most recent revision.

Aquatic Wildlife Regulation: Fisheries Law of the People’s Republic of China (2013); Aquatic Resources Reproduction and Protection Regulations (1979)

Terrestrial Wildlife Conservation: Regulation of the Peoples’ Republic of China on the Protection of Terrestrial Wild Animals (2016); Management Measures for Forest and Wildlife Type Nature Reserves (1985); Regulations on the Implementation of the Forestry Law of the People’s Republic of China (2018); Regulations on Grassland Fire Prevention (2008)

Animal Epidemic Prevention: Animal Epidemic Prevention Law of the People’s Republic of China (2021); Regulation on Handling Major Animal Epidemic Emergencies (2017); Regulations on Domestic Communications Health Quarantine (1998); Detailed Rules for the Implementation of the Frontier Health and Quarantine Law of the People’s Republic of China (2019); Regulations on the Administration of Slaughtering of Pigs (2016)

Laboratory Animal Management: Regulation on the Administration of Laboratory Animals (2017); Regulation on the Bio-safety Management of Pathogenic Microbe Labs (2018)

Regulations of animals and their products: Regulation on the Supervision and Administration of the Quality and Safety of Dairy Products (2008); Regulation of the People’s Republic of China on the Administration of the Import and Export of Goods (2001)

Animal Breeding: Animal Husbandry Law of the People’s Republic of China (2022); Regulation on the Prevention and Control of Pollution from Large-scale Breeding of Livestock and Poultry (2013); Regulation on Veterinary Drug Administration (2020); Regulation on Pesticide Administration (2017); Regulation on the Administration of Feeds and Feed Additives (2017)

Animal entry and exit control: Detailed Rules for the Implementation of the Frontier Health and Quarantine Law of the People’s Republic of China (2019); Regulation of the People’s Republic of China on the Administration of the Import and Export of Endangered Wild Fauna and Flora (2019); Regulations for the Implementation of the Law of the People’s Republic of China on the Entry and Exit Animal and Plant Quarantine (1996); Frontier Health and Quarantine Law of the People’s Republic of China (2018)

87. Gao, Li-Hong, “论我国动物保护的法律责任——以归真堂上市之争为切入点” [On the Legal Boundaries of Animal Protection in China – Taking the Battle over the Listing of Guizhen Tang as an Entry Point], 《清华法治论衡》 [Tsinghua Forum of Rule of Law], no.00 (2016): 21-36.

Animal-related governance in China includes laws, administrative regulations, and local regulations. Local regulations are generally introduced and amended according to national laws, and local legislative or regulatory innovations follow the overall legislative framework of national laws. Different legal regimes have different regulatory responsibilities, which will be discussed in detail below. On a macro level, the National Forestry and Grassland Administration, under the State Council's Ministry of Natural Resources, takes charge of national terrestrial wildlife management; and the Animal Husbandry and Veterinary Service Administrative Department, under the State Council's Ministry of Agriculture and Rural Affairs, is responsible for animal epidemic prevention and animal husbandry-related supervision. The Ministry of Science and Technology, which is directly under the State Council, is in charge of laboratory animal-related regulation.

Currently, these departments are managed in a segmented model, which means that the management scope of each department is delineated in advance. When there are cross-departmental matters to discuss, a joint meeting is initiated between different departments. For example, once the Standing Committee of the National People's Congress announced the ban on the consumption of terrestrial wildlife for food in 2020, a working group was set up by the National Forestry and Grassland Administration to take primary responsibility for the compensation of the wildlife farmers whose businesses were shut down. This matter also involves the definition of the scope of livestock and poultry: some species with wild breeding populations are regulated as "livestock" for commercial purposes, as discussed below. The Forestry and Grassland Administration will need to work with the Ministry of Agriculture and Rural Affairs to define the specific scope of both terms and compensation.⁸⁸

FARM ANIMAL LEGISLATION

China regulates farm animals under its Animal Husbandry Law (2022), which stipulates the basic concepts, principles, scope, and regimes of the animal agriculture industry. Article 1 of its general provisions states its intention thusly: "[T]o regulate animal husbandry production and operation activities; to ensure the supply and safety and quality of livestock and poultry products; to protect and rationally use livestock and poultry genetic resources; to develop and promote improved livestock breeds; to invigorate the livestock breeding industry; to safeguard the legitimate rights and interests of livestock producers and operators; to guard against public health risks; and to promote the high-quality development of animal husbandry."⁸⁹

Livestock and Poultry Genetic Resources Protection

Article 2 of the Animal Husbandry Law stipulates that the category of "livestock and poultry" – domestic animals – is defined as those species listed in the Catalog of Livestock and Poultry Genetic Resources⁹⁰ The Catalog of Livestock and Poultry Genetic Resources is fundamental to the overall development of China's farm animal industry and specifies legal access to domestic species for

88. See the website of the NPC, Bulletin of the Standing Committee of the National People's Congress, 2021 (3), accessed June 20, 2021, pp 627. Available at: <http://www.npc.gov.cn/wxzlhgb/index.shtml>.

89. See Article 1 of the Animal Husbandry Law (2022). Available at: <https://npcobserver.com/legislation/animal-husbandry-law/>

90. See Article 2 of the Animal Husbandry Law (2022).

commercial breeding and farming. The catalog is developed by the National Committee on Livestock and Poultry Genetic Resources, under the Ministry for Agriculture and Rural Affairs. The first official Catalog of Livestock and Poultry Genetic Resources was published in May 2020. It lists 33 species of livestock and poultry, including 17 traditional and 16 special livestock and poultry, and more than 800 specific species overall. “Traditional” livestock and poultry are species that have been domesticated by humans for thousands of years, such as pigs, cattle, sheep, horses, donkeys, and chickens. “Special” species of livestock and poultry include foreign-introduced species (such as alpaca, turkey, etc.); non-edible species mainly used for fur processing (such as mink, silver fox, etc.); and certain traditional Chinese species (such as plum deer, reindeer, etc.).⁹¹ Notably, species identified herein as “livestock” are exempted from regulations—like the 2020 consumption ban—pertaining to “wildlife,” even when they have corresponding wild breeding populations.

According to Article 17 of the Animal Husbandry Law (2022), livestock and poultry genetic resources are owned by the state. The law establishes a regime for the protection of these resources based on the published Catalog of Livestock and Poultry Genetic Resources. That protection regime includes the Animal Husbandry and Veterinary Service Administrative Department within the Ministry of Agriculture and Rural Affairs, which advises provincial husbandry and veterinary offices. Those local authorities are also involved in developing protection and monitoring programs for newly developed livestock and poultry breeds. Additional areas of oversight include genetic resources surveys and reports, resource conservation planning and protection, safety control measures for species introduced from abroad, and establishing resource conservation sites, protected areas, and gene banks.⁹²

LIVESTOCK PRODUCTION AND OPERATION LICENSING

China’s Animal Husbandry Law establishes a livestock and poultry production and operation license regime that regulates the industry under the auspices of the National Committee on Livestock and Poultry Genetic Resources. It specifies permitted production practices, and includes parameters for identifying and introducing new and foreign breeds. Some portions of the law directly address the prevention of epidemic conditions, and articulate values of ecological protection for the industry. For the sale of livestock and poultry, the following licenses must be provided: livestock and poultry licenses of compliance, quarantine licenses, and livestock genealogy.⁹³ These licenses are intended to ensure the traceability of livestock and poultry animals.⁹⁴ Licenses may not be transferred, leased, fabricated, or modified.⁹⁵

91. See the website of the Ministry of Agriculture and Rural Affairs, accessed June 18, 2021. Available at: http://www.moa.gov.cn/govpublic/nybzzj1/202005/t20200529_6345518.htm. Another accompanying document – the Registry of Breeds of Livestock and Poultry Genetic Resources – was released at the same time, and a revised version was issued in 2021. This document contains supplementary and clarifying information about the animal species and breeds listed in the Catalog.

92. Details about breeding and livestock genetic resources are addressed in Articles 10-18 of the Animal Husbandry Law (2022).

93. See Articles 30, 31, and 33 of the Animal Husbandry Law (2022).

94. See Article 72 of the Animal Husbandry Law (2022).

95. See Article 27 and Article 82 of the Animal Husbandry Law (2022).

ANIMAL QUARANTINE

The Animal Epidemic Prevention Law, most recently revised in 2021, details quarantine requirements for breeding, slaughter, trafficking, and transportation of livestock and poultry, and other farmed or wild-caught animals within China's borders.⁹⁶ The law's first article states its purpose as follows: "To strengthen management of animal epidemic prevention activities; to prevent, control, purify, and eliminate animal epidemic diseases; to further the development of the animal agriculture industry; to prevent and control zoonotic infectious diseases; and to ensure public health and safety, and human health." The Measures for the Administration of Animal Quarantine (2022) detail specific quarantine processes. These Measures are issued by the Ministry of Agriculture and Rural Affairs as directives for carrying out the agency's responsibilities under the Animal Epidemic Prevention Law. Coordination with the Forestry and Grassland Administration is specified for outbreaks involving wild animals. The fundamental guiding principle of these measures is adherence to process regulation, risk control, regionalization, and traceable management.⁹⁷

The Measures specify procedures for origin quarantine (Chapter 3) and slaughter quarantine (Chapter 4). Origin quarantine is conducted where the animal is raised or captured to ensure that it is free of disease before it is transported or brought into market circulation.⁹⁸ Animals introduced across administrative regions must also undergo 30 days' isolation and quarantine.⁹⁹ Slaughter quarantine refers to oversight and testing of animals before, during, and after the slaughter process. Slaughter quarantine is designed to detect problem animals in a timely manner and carry out harmless treatment. The Measures call for the involvement of official veterinary personnel throughout the slaughter process.

WILDLIFE LEGISLATION SYSTEM

The Wildlife Protection Law, revised in 2022¹⁰⁰, governs "rare and endangered" terrestrial and aquatic wildlife, as well as terrestrial wildlife deemed to "have important ecological, scientific, or social value," a designation also referred to as "three haves" status. Article 3 of the law holds that wildlife resources belong to the state, and that the state upholds the rights of groups and individuals to carry out legal scientific research, artificial breeding, and other conservation activities related to wildlife. In comparison with earlier versions, the revised law places greater emphasis on the "harmonious coexistence between humans and nature," and on protections for important ecological systems and animal habitats.

96. Chapter V of the Animal Epidemic Prevention Law (2021) provides for the quarantine of animals and animal products. For example, Article 49 stipulates that actors slaughtering, selling, and transporting animals or their products must first declare quarantine and obtain quarantine licenses and quarantine marks when carrying out their activities. Article 50 states that captive wild animals must also be quarantined. Article 52 provides for quarantine requirements for different means of transport and requires the cleaning and disinfection of the means of delivery. Text available here: <https://npcobserver.com/legislation/animal-epidemic-prevention-law/>

97. See the Measures for the Administration of Animal Quarantine (2022). Text available here: https://www.gov.cn/gongbao/content/2022/content_5725277.htm

98. See Article 14 and 16 of The Measures for the Administration of Animal Quarantine (2022).

99. See Article 17 of The Measures for the Administration of Animal Quarantine (2022).

100. For a detailed discussion of recent legal changes, see Gao, Li-Hong, and Su, Da, "Proposed Amendments to the Wildlife Protection Law of the People's Republic of China," *dA. Derecho Animal (Forum of Animal Law Studies)*, no.4 (2020): 214-226. DOI: <https://doi.org/10.5565/rev/da.539>.

Wildlife Protection List

Article 10 of the Wildlife Protection Law outlines a system of differentiated protection for rare and endangered wildlife. Protected wildlife species are divided into two groups, Class I and Class II, which are defined through a State List of Key Protected Wildlife. This list is to be determined by relevant agencies under the Forestry and Grassland Administration, which oversees terrestrial wildlife, and the Fisheries Administration, which oversees aquatic wildlife. Article 10 also introduces a lower-priority national protected status, the “three haves” designation, with its own separate list. The wildlife protection lists are at the core of China’s legal system for wildlife regulation, and they define the legal scope of animal protection in the country. Regulatory measures and requirements are closely tied to the wildlife protection list regime — trading an animal with a higher protection level results in a more severe criminal penalty, for example.

The first State List of Key Protected Wildlife was published in 1989, following the introduction of the Wildlife Protection Law the previous year. Despite minor additions in 1993, 2003, and 2019, the list was not systematically updated until 2021. This long delay produced gaps in legal protection for many wild species, although amendments to the Wildlife Protection Law now require both lists — of key protected species and “three haves” species — to be updated every five years.¹⁰¹ In addition to national protections, the law provides for additional local key wildlife protections. These may be established by provincial, autonomous region, or municipal governments in coordination with departments under the State Council.

The outbreak of COVID-19 presented an opportunity to update the State List of Key Protected Wildlife. First, in June 2020, the protection level of the pangolin was adjusted upwards. Then, in February 2021, the publication of a new list was announced. The new list dramatically expanded the scope of protection, adding 517 new species to bring the total number to 988. These additions comprise 43 Class I species and 474 Class II species. The protections are now more reflective of the needs for certain species, for example upgrading the status of animals such as the pangolin and 65 different porpoise species from Class II to Class I. Other species whose populations had recovered to appropriate levels have been downgraded.¹⁰² Following the 2020 revisions, listed wild animals cannot be raised in captivity without the corresponding license, and their consumption for food is absolutely prohibited.

Wildlife Breeding

China’s regulations for wildlife breeding are relatively comprehensive, with the most detailed regulations governing laboratory animals.¹⁰³ Article 25 of the Wildlife Protection Law addresses breeding of state key protected species, and permits research institutions to breed for species protection.¹⁰⁴ Article 25 further states that artificial breeding of “three haves” species may be undertaken as long as the relevant wildlife protection departments at the county level or above are notified, and emphasizes that the use of “artificially bred filial populations” is preferred for all wild animal breeding operations. If a breeder

101. See Article 10 of the Wildlife Protection Law (2022). Text available here: https://www.pkulaw.com/en_law/53181cd1be67b8f3bdfb.html

102. See the website of China’s Central Government, accessed March 14, 2021. Available at: http://www.gov.cn/xinwen/2021-02/09/content_5586227.htm.

103. Gao, Li-Hong, “The Laboratory Animal Legal System of China,” *dA. Derecho Animal (Forum of Animal Law Studies)*, no. 2 (2020): 30-39. DOI: <https://doi.org/10.5565/rev/da.500>.

104. See Article 25 of the Wildlife Protection Law (2022).

needs to obtain animal genetic stock from the wild, they must apply to the relevant departments for a special hunting license.¹⁰⁵ Article 26 clarifies the purpose of breeding – to benefit wild animal populations – and introduces principles of humane treatment and non-abuse for captive wild animals.¹⁰⁶

The wildlife breeding regime is vertically regulated by the relevant wildlife protection departments under the State Council,¹⁰⁷ which establish a list of protected wildlife species that are approved for artificial breeding as a means of conservation. Article 29 of the Wildlife Protection Law outlines this artificial breeding regime as follows:

For wildlife under national key protection or terrestrial wildlife with important ecological, scientific, or social value, where artificial breeding technologies are mature and stable, after scientific hearings and assessments on the merits, the wildlife shall be put on the directory of wildlife for artificial breeding, which is to be formulated by the wildlife protection departments under the State Council and adjusted at appropriate times...When adjusting the directory of wildlife under national key protection and terrestrial animals with important ecological, scientific, or social value...[captive] populations of wildlife for which artificial breeding technologies are mature and stable...may be de-listed from the directory on the basis of wild population protection conditions, and differential management measures may be employed for wild and artificial populations...After scientific debate and assessment, artificially bred populations of terrestrial animals that meet the requirements of article 12 of the Animal Husbandry Law of the PRC may be included in the directory of livestock and poultry genetic resources.¹⁰⁸

Crucially, Articles 28 and 29 of the law specify that special “markers” and other documentation of legal origin should accompany protected wild animals and their products when they are transported or transacted. These provisions include captive bred protected wildlife and their products. Legal wildlife breeding also involves a licensing regime, which is regulated by the Measures for the Administration of the Domestication and Breeding License of Wild Animals under Special State Protection (2015).¹⁰⁹

The market for legal wildlife breeding in China is huge. According to available statistics, in 2016, there were 7,958 legal commercial wildlife breeding and domestication units in China, with an annual output value of 55 billion yuan.¹¹⁰ The law explicitly allows for the breeding of wild animals for scientific research and human welfare; but a key problem arises when wildlife breeding is encouraged on a large scale, while the welfare requirements of wild animals are not clearly specified in the law. This is the

105. See Articles 21 and 25 of the Wildlife Protection Law (2022).

106. See Article 26 of the Wildlife Protection Law (2022). The specific content is “The artificial breeding of wildlife shall be beneficial to the protection of the species and its scientific research...it shall be ensured that there is necessary movement space and conditions of living, breeding, health and sanitation for wildlife in accordance to their behaviors, ensure the concerned party has sites, facilities, and technologies suitable to the breeding purpose, types and development scale, and comply with relevant technical standards and disease prevention requirements, and must not mistreat wildlife.” English translation from China Law Translate, text available here: <https://www.chinalawtranslate.com/en/wildlifeprotectionlaw2022/#:~:text=Article%201%3A%20This%20Law%20is,a%20harmonious%20coexistence%20with%20nature>.

107. These include the Forestry and Grassland Administration (under the Ministry of Natural Resources) and the Fisheries Administration (under the Ministry of Agriculture and Rural Affairs).

108. English language text from China Law Translate: <https://www.chinalawtranslate.com/en/wildlifeprotectionlaw2022/#:~:text=Article%201%3A%20This%20Law%20is,a%20harmonious%20coexistence%20with%20nature>.

109. See Measures for the Administration of the Domestication and Breeding License of Wild Animals under Special State Protection (2015): [https://www.pkulaw.com/CL1.4.247871\(EN\)](https://www.pkulaw.com/CL1.4.247871(EN))

110. Liang, Zhijian, et al., “多学科视角下的野生动物消费需求 and 消费行为研究进展” [Understanding and Changing Wildlife Consumption Behavior from a Multidisciplinary Perspective], 《生物多样性》 [Biodiversity Science], vol. 28, no. 05 (2020): 606-620.

fundamental point of conflict in the Guizhen Tang bear bile case mentioned above. The reality is that, if a company like Guizhen Tang were to use live bears to extract bile, China's current laws would not be able to outlaw or prohibit this cruel practice. The revised Wildlife Protection Law permits the purchase and sale of wild animals and their products for scientific research, artificial breeding, public display and exhibition, cultural relics protection, and other special cases, as long as the actors obtain approval from the relevant wildlife protection departments at the provincial, autonomous region, or municipal level.¹¹¹ There are no enforceable laws to protect animals' welfare status in the context of these legal wildlife industry activities.¹¹²

Wildlife Hunting

The Wildlife Protection Law (2022) further regulates legal wildlife hunting. Article 21 states that the hunting or killing of wildlife with key national protected status is prohibited, except for scientific research, population control, epidemic disease monitoring, and other special circumstances. In the case of Class I key protected wildlife, a special hunting license must be obtained from the relevant authorities under the State Council. For Class II protected wildlife, a special license must be obtained from the relevant provincial, autonomous region, or municipal government. Hunting of terrestrial wildlife with the “three-haves” classification, and local key protected wildlife, is strictly regulated both locally and nationally. Article 22 states that a hunting permit or license must be obtained at the county level in order to hunt “three haves” or other locally protected species. In short, legal hunting involves compliance not only with national regulations, but also with the special provisions of local regulations.

There are several additional parameters for legal hunting, including gun and hunting license requirements; published prohibitions on certain hunting methods and tools; approval protocols for capture relating to scientific research, artificial breeding, public display, heritage conservation, and other special circumstances; and coordination with other relevant departments to regulate terrestrial wildlife populations for the protection of human health, ecological safety, and ecological balance. Hunting licensing specifies animal type and quantity, as well as the location, tools, methods, and duration of hunting activities. Hunting is intended to be organized further by professional organizations and training programs (Article 23). Finally, there is additional regulation of hunting as it relates to the protection of agriculture, forestry and grassland, urban greening, health and epidemic prevention, and other departments and communities. This may include mass extermination and in-field capture.

Article 24 of the Wildlife Protection Law regulates methods, prohibiting hunting by poison, explosives, electric shock, or electronic trapping, etc. Fire, smoke, night-lit hunting, nest destruction, etc. are also prohibited. One notable exception is for scientific research purposes, for which the use of netting is permitted. Hunting is generally prohibited in nature reserve areas and no-hunting/fishing areas, as well

111. See Article 28 of the Wildlife Protection Law (2022).

112. China's current animal-related legislation strictly regulates matters such as quarantine and epidemic prevention for such animals, and the lack of legal regulation exists mainly in terms of specific provisions for the welfare of animals. For example, as noted in Article 7 of the Animal Epidemic Prevention Law of the People's Republic of China (2021): “Entities and individuals engaged in such activities as the breeding, slaughtering, trading, isolation and transport of animals as well as the manufacturing, trading, processing and storage of animal products shall, in accordance with this Law and the provisions issued by the department of agriculture and rural affairs of the State Council, effectively conduct the work on animal epidemic prevention such as immunization, disinfection, detection, isolation, decontamination, elimination and innocuous treatment, and assume relevant responsibilities for animal epidemic prevention.” Available at: <http://en.pkulaw.cn/display.aspx?cgid=acc2b25986934930bdfb&lib=law>.

as during no-hunting/fishing periods.¹¹³

Commercial hunting is likewise regulated by the Wildlife Protection Law, which allows wildlife that does not fall into protected categories to be hunted with a license, subject to the management of hunting quotas. In practice, quotas are difficult to supervise. Following the 2020 decision to ban terrestrial wildlife consumption, the revised Wildlife Protection Law bans all hunting of key protected species and “three haves” species for food.

Wildlife and Wildlife Products

Regulation of wildlife and wildlife products governs transportation, transaction, filming and display, transport and delivery, quarantine measures, and import/export procedures. Under the current Wildlife Protection Law (2022), the regulation of wild animals and their products mainly focuses on state key protected wildlife, including the prohibition of their transaction, transportation, and use without requisite permissions; the special marking regime, described below; and the prohibition of consuming state key protected wildlife and their products as food.

As mentioned above, the marking regime for key protected wildlife and their products is outlined in Article 28 of the Wildlife Protection Law. Animals with key national protected status may be used for scientific research, artificial breeding, display and exhibition, cultural relics protection, and other special circumstances with approval from the relevant provincial, autonomous region, or municipal government. When this approval has been obtained, the authorities will issue a “special marker” that must accompany the animal or product. The function of the mark is mainly to ensure the traceability of the animal or product.¹¹⁴ For example, rhinoceros and tiger products are marked with a special logo. The owner can make a gift of them or leave them as an inheritance, but may not sell, buy, or use this object for other commercial purposes. If the owner wants to change the storage site of these products or destroy them, they must report to the regulatory authorities in advance and implement the above activities under their supervision. This process requires the preservation of relevant records. Anyone obtaining, transacting, or transporting animals or animal products without a special mark will be subject to administrative penalties, and may face additional criminal penalties.¹¹⁵ Species with “three haves” status are not as strictly controlled as those with state key protected status; but the sale or use of these animals or their products likewise requires documentation of legal origin.

If an animal is not among species receiving special protection (state key protected status, “three haves” status, or local protection), then there is no strict prohibition of use.¹¹⁶ Therefore, expanding the scope of the wildlife protection lists is critical to the effectiveness of the wildlife protection system. In the latest revision of the state key protected wildlife list, 43 species that were not originally designated key protected wildlife were directly included in the scope of the Grade 1 protected animals.¹¹⁷ In theory, such revisions to the lists can help bring more species, and their habitats, within the scope of explicit

113. See Article 20 of the Wildlife Protection Law (2022).

114. See Article 28 of the Wildlife Protection Law (2022).

115. See the State Council’s “Notice on the Strict Control of Commercial Use of Rhinoceros and Tiger and Their Products” (2018). Online: <http://www.pkulaw.cn/CLI.2.324968>

116. Any use must also theoretically follow the requirements of the Animal Epidemic Prevention Law for the control of animal diseases.

117. See the website of the State Forestry and Grassland Administration, accessed June 18, 2021. Available at: <http://www.forestry.gov.cn/main/3957/20210208/151235854307446.html>

protections.

The most important expansion of the legislation is the proposed establishment of a joint enforcement, investigation, and inspection system, primarily for wildlife violations. This aims to unify administrative departments dealing with the intricacies of wildlife-related crimes. However, whether difficulties will be encountered in the concrete implementation and whether different departments can cooperate properly according to the law, which still needs further improvement and refinement, remains to be seen. In a promising development following the 2020 Decision banning wildlife consumption, various cities launched new joint enforcement activities related to wildlife.¹¹⁸

Wildlife Consumption Ban

Article 31 of the revised Wildlife Protection Law bans the consumption of key protected wildlife species and “three haves” wildlife species for food. It is illegal to hunt, trade, or transport such wildlife – or their products – for food consumption purposes. In a departure from previous versions of the law, Article 6 exhorts members of the public to “strengthen their awareness of ecological protections and the preservation of public safety, prevent the spread of wildlife-borne infectious diseases, reject the illegal consumption of wildlife, and foster a scientific, healthy, and civilized lifestyle.”¹¹⁹

Wildlife Shelter and Rescue

China has established a wildlife shelter rescue regime to manage those animals recovered in the course of law enforcement. The Measures for the Sheltering and Rescue of Wild Animals regulate the care, treatment, and quarantine requirements for animals that cannot be re-released immediately or at all as a result of injury, due to potential ecosystem disruption caused by their release, and other issues.¹²⁰ It also details treatment and housing conditions for these animals upon recovery.¹²¹

FARM ANIMAL MARKET REGULATORY CHALLENGES

Failure of the Animal Quarantine Regime

Quarantine procedures are a critical legal tool for protecting animal and human health. While animal quarantine legislation is extensive, challenges lie in routine enforcement. A common category of case involves negligence by collusion between quarantine officers and those applying for quarantine. For example, in the case of (2017) Jilin Crime Court 0283, No.473, the suspect, as a quarantine officer, directly issued a license without observing 29 cattle that should have been quarantined. The defendant, Ren Guangming, subsequently transported these 29 cattle to other provinces, where thirteen cattle later

118. The standardization of wildlife trade relies mainly on law enforcement. After the implementation of the 2020 Decision, 202 individual operators were suspended and rectified in the enforcement activities launched in Nanyang City; in addition, some trading practices will be hidden in other categories of markets, such as herbal markets, antique markets, and flower and bird markets, and Xi'an has made 8 administrative penalties in the above markets since 2019; while Chengdu City has closed and sealed 339 wildlife sites, shutting down more than 2,780 wildlife legal operation and utilization units, shutting down more than 30 flower and bird markets and wildlife exhibition parks.

119. English text from China Law Translate: <https://www.chinalawtranslate.com/en/wildlife-protection-law-2022/#:~:text=Article%201%3A%20This%20Law%20is,a%20harmonious%20coexistence%20with%20nature.>

120. See “Measures for the Sheltering and Rescue of Wild Animals” (2017). Available at: https://www.pkulaw.com/en_law/d9ec129201493331bdfb.html.

121. See also the following cases relating to recovered wildlife care: (2018) Yunnan Crime Court 25, No.92, (2017) Yunnan Crime Court 3103, No.223, (2018) Yunnan Crime Court 0181, No.70.

tested positive for clenbuterol. In addition, the case presents that the quarantine officer was negligent in his duties more than once.¹²² Such cases demonstrate that, even if the law regulates the whole process from origin quarantine, to slaughter quarantine, to harmless treatment, and enacts traceability measures, there is still potential for regulatory evasion.

Origin quarantine is the first line of defense against animal diseases and zoonoses. These quarantine procedures are mainly carried out by personnel with veterinary qualifications. Slaughter quarantine procedures, the second line of defense, are mainly carried out by animal health supervision agencies. Although the relevant procuratorate, or state organ for legal oversight, can file a lawsuit against the inactive administrative department or officers, after-the-fact corrective measures disciplining administrative negligence may come long after the public was already exposed to health safety and epidemic risks. Moreover, suspects in negligence cases often avoid criminal punishment.

Loopholes in Harmless Treatment

In 2013, China experienced a shocking incident of dead pigs of unknown origin floating in the Huangpu River, which flows through central Shanghai.¹²³ Under the government's emergency organization, 10,395 dead pigs were recovered in ten days in Shanghai and 5,528 in its neighboring city of Jiaxing.¹²⁴ Researchers found that, among a group of 213 affected pig farmers, 95.77% had carried out compulsory immunization measures on their animals, while only 16.9% of them had received financial subsidies for the harmless treatment of dead pigs.¹²⁵

A major challenge in achieving harmless treatment of dead and diseased farm animals is appropriately supervising and compensating farming households. According to the Measures for Administration of Harmless Treatment of Sick Hogs of Designated Hog Slaughtering House (2008) and the Opinions of the General Office of the State Council on the Establishment of Harmless Treatment Mechanism for Diseased and Dead Animals and Poultry (2014), farmers should receive financial subsidies for the harmless treatment of diseased and dead farm animals.¹²⁶ However, available data show that, in reality, these objectives are not fully implemented. The rate of harmless treatment in designated slaughtering plants is generally high. However, while ordinary pig farmers may send dead and diseased animals to harmless disposal sites, they may also attempt to dispose of dead animals on their own,

122. Such cases are not uncommon, as in the case of (2014) Tianjin Crime Court No. 110, in which the quarantine officer accepted a kickback fee of ¥10 per pig and issued licenses without quarantine, resulting in many problematic pigs being slaughtered and brought to the market. All of these pigs were acquired from outside the country. In the case of (2015) Ning Crime Court No. 6, after receiving a kickback fee of ¥10 a head from the pig vendor, five quarantine officers, in order to make the number registered in the License of Conformity of Animal Origin Quarantine the same as the actual number of pigs admitted for slaughter, had the veterinarian at the veterinary station forge the License of Conformity of Origin Quarantine for a second time and gave ¥2 per pig as a kickback. Furthermore, the supervisory department be the point of failure, such as in the case of (2015) Fengcheng Crime Court No.392, in which the supervisory department of the Animal Husbandry and Fisheries Bureau, in the case of repeated reports of a company slaughtering sick and dead pigs, did not supervise and let the company continue to slaughter and sell those pigs. This particular example was eventually exposed by news media and the bureau was prosecuted by the prosecutor's court.

123. See Zhang, Dongping, "Media Suspect That Officials Have Not Actively Disclosed Details of the Huangpu River Dead Pig Incident," People's Daily, March 12 (2013). Online: <http://politics.people.com.cn/n/2013/0312/c70731-20754936.html>. [in Chinese]

124. The authors' search in the PKULAW Database on "harmless treatment" returned a total of two administrative regulations and 41 departmental regulations for the harmless treatment of animals. See also Shen, Jingwen, "15 Thousand Dead Hogs Have Been Recovered From the Water in Shanghai and Zhejiang; Pigs That Have Not Yet Died from Disease are Being Distributed for Consumption," People's Daily, March 22 (2013). Online: <http://shipin.people.com.cn/n/2013/0322/c215731-20879053.html>. [in Chinese]

125. Li, Yanling, et al., "“黄浦江漂浮死猪”事件应急处置实证研究” [An Empirical Study on the Emergency Disposal of 'Dead Pigs Floating in the Huangpu River], 《中国应急管理》 [China Emergency Management], vol. 02 (2014): 15-21.

126. See "Measures for Administration of Harmless Treatment of Sick Hogs of Designated Hog Slaughtering House" (2008): <https://www.pkulaw.com/CLI.4.106429>; "Opinions of the General Office of the State Council on the Establishment of Harmless Treatment Mechanism for Diseased and Dead Animals and Poultry" (2014): <https://www.pkulaw.com/CLI.2.237547>.

through illegal selling or discarding of carcasses. Because of the large number and wide distribution of these hog farmers, it is difficult to ensure full legal supervision of harmless disposal. Funds for subsidies may be lacking, further contributing to noncompliance.

LEGAL WILDLIFE MARKET REGULATORY CHALLENGES

Under the terms of China's Wildlife Protection Law, a legal wildlife market is allowed to operate, but stakeholders must follow regulations pertaining to special markers, hunting licenses, import and export licenses, quarantine licenses, and so on. In many cases, these regulations can work effectively to govern the wildlife trade. In Xi'an, for example, there is a clear record of legally registered wildlife breeding enterprises and the types and quantities of animals they raise.¹²⁷ In Chengdu, of the 898 agricultural wholesale markets, only 6 allow wildlife trading; and all of them are properly licensed to operate.¹²⁸ The wild animals traded here are mainly legally farmed bamboo rats, hares, etc. Below, we use details from our analysis of court cases involving wildlife to identify specific challenges to this regulatory system.

Licensing Regime Challenges

Although the law has clearly defined the requirements for various licenses related to wildlife, many operators conduct unlicensed hunting activities after acquiring certain legal business qualifications. Even if a business license is applied for, proof of the legal origin of the wild animals in question is still required.¹²⁹ Proof of legal origin generally includes: domestication and breeding license, hunting license, fishing license, and/or transportation license. For example, in the case of *(2019) Hainan Administrative Court 72, No. 37*, the defendant company was a shipping company belonging to the legal operation, but was found to have used the vessel to transport giant clam shells and clam shells without holding the license for transporting aquatic wildlife products with state key protected status, and was eventually fined. The licensing issue also impacts animal performance contexts, as in the case of *(2020) Sichuan Administrative Court 01, No.375*, in which an animal performance group that had obtained the domestication and breeding license lent its Asian elephant but did not apply for the relevant administrative license for animal performance again. This behavior is an additional illegal method used

127. According to the results of our public information request, there were 88 wildlife farming enterprises in Xi'an during the period 2018-2020. There were 6 species involved, including civets, porcupines, blue peacocks, badgers and geese, totalling 9,814 animals. By September 30, following the latest legal documents banning wild animals, these 20 enterprises had been closed and compensated.

128. Based on the results of our research and requests for information as of November 24, 2020.

129. In the case of *(2019) Hunan Criminal Court 1322, No. 90*, the hotel in question was convicted of illegal business operation after failing to provide the legal source of the black-browed muntjacs and king muntjacs it sold, despite having legally applied for the Business License for Industry and Commerce and the Hunan Wildlife and Products Business License. According to the available evidence, one of the defendant hotels then acquired 16,928.8 pounds of wild snakes of unknown origin between 2016-2017. There is also an issue with fraudulent and/or malicious reporting. For example, in the case of *(2020) Zhejiang Civil Court 02, No. 2101*, Wu, a professional counterfeiter, was refunded immediately after purchasing deer whip slices that he believed were food products requiring special wildlife labeling the seller had not provided. The seller was required to pay ten times the amount of compensation in accordance with Article 148(2) of the Food Safety Law of the People's Republic of China: "In addition to claiming damages, a consumer may require a producer of food failing to meet the food safety standards or a trader knowingly dealing in such food to pay an indemnity of ten times the price paid or three times the loss; or if the amount of the additional compensation is less than 1,000, it shall be 1,000 yuan, except for a defect in the labels or instructions of the food which neither impairs food safety nor misleads consumers." The court of first instance ruled in favor of the professional counterfeiter. However, the court of appeal found that Wu was a professional counterfeiter who was trading in illegal and endangered wildlife while conducting dozens of professional counterfeiting lawsuits. Furthermore, deer whip slices are not meat or meat products, and do not require mandatory quarantine. Ultimately, the court of second instance reversed the judgment of the court of first instance. Even the phenomenon of such malicious litigation has become a norm. *(2020) Guangdong Civil Court 0306, No. 30276* is a similar case.

by many legal operators to seek financial gain. Much illegal wildlife trading also has this veneer of legality, as exemplified by the case of *(2020) Zhejiang Criminal Court 0122, No. 330*, in which the defendant legally established a Chinese herbal medicine company, but the actual activity was to go to different rural areas and illegally acquire wildlife and its products from farmers and hunters without obtaining the related licenses. The animal species in question were mainly yellow muntjac.

Management of Legal Wildlife Breeding

A significant challenge in China's legal system for wildlife protection is that the main regulatory focus is on managing access to animals for various uses. Under those provisions, activities like scientific research, artificial breeding,¹³⁰ and animal performance are mainly under ex ante supervision. In other words, daily supervision and management rely on self-regulation by the actors involved. This orientation can limit the effectiveness of the overall wildlife regulatory system.

ILLEGAL WILDLIFE TRADE AND CRIMES INVOLVING WILDLIFE

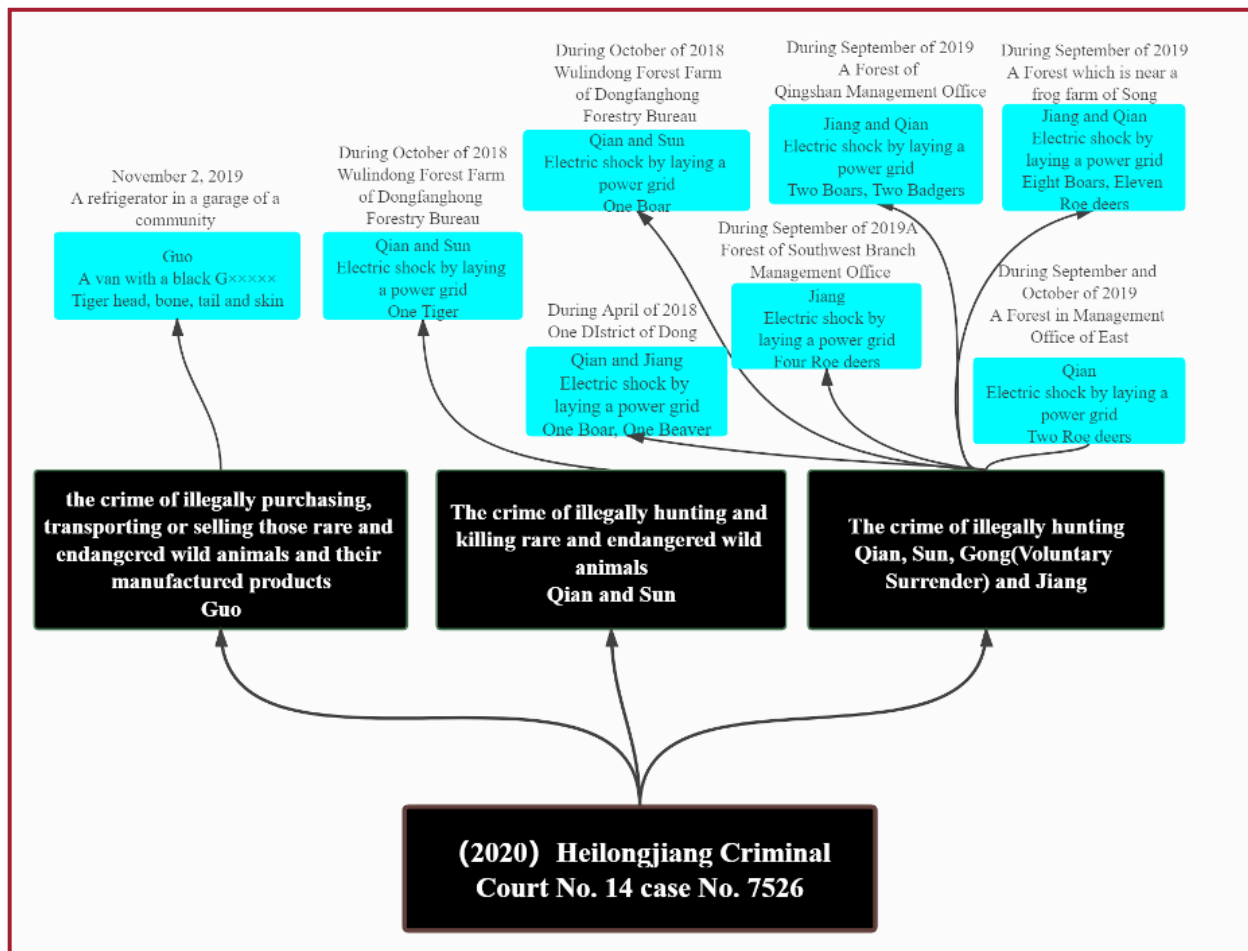
Illegal Hunting

China's regulations on wildlife offenses are relatively detailed. Some offenses may even encompass multiple crimes, such that, in one illegal wildlife act, multiple charges may be involved.¹³¹ The most significant charge is the crime of illegally hunting and killing rare and endangered wild animals. In northeast and southwest China, where wild animal populations are both dense and large, illegal hunting shows characteristics of organized crime. To take one example, the chart below details the charges, specific locations, methods, and objects in Heilongjiang Criminal Court 7526, No.14 (2020). In this case, there were five offenders, and their hunting method was to set up electric fences to shock tigers, wild boars, roe deer, and other animals:

130. Disposal of dead or culled animals is also difficult to supervise in the wildlife breeding industry. A representative case is (2018) Sichuan Criminal Court 0704, No. 83. The basic facts of the case are: the wildlife breeding company was registered in 2003, and its legal business animal breeding scope was black bear and plum deer. Since its establishment, the company legally purchased 14 adult breeding bears and bred them artificially for 4 generations. In 2016, the company decided to eliminate black bears that were not of breeding value due to business decisions, then subsequently sold 4 culled bears for RMB 30,000 and slaughtered and bagged them on site. The defendants raised one defense, namely, "Are domesticated and bred black bears 'precious and endangered wild animals' under Article 341 of the Criminal Law?" The answer is that a bear is listed on the State List of Key Protected Wildlife and is a "precious and endangered wild animal" regardless of whether it is grown in the wild or bred in captivity. Regarding the normal culling process for captive-bred black bears: The Ministry of Forestry's Interim Regulations on the Technical Management of Black Bear Breeding and Utilization stipulate that "the culling of bears that have lost their breeding value (sale, slaughter, release, transfer and exchange, etc.), must be applied for by the local wildlife administrative department and approved by the provincial forestry administrative department before being processed as required." In the case, the judicial practitioners considered the sale of the bear as a relatively small social hazard because the bear was "bred in captivity for more than four generations," which could be taken into account in sentencing. See Art 341 of the Criminal Law (2018): "Those who illegally hunt and kill rare and endangered wild animals which are under the state key protection plan or illegally purchase, transport or sell those rare and endangered wild animals and their manufactured products are to be sentenced to not more than five years of fixed-term imprisonment or limited incarceration, and may in addition be sentenced to a fine. In serious cases, those law offenders are to be sentenced to not less than five years and not more than 10 years of fixed-term imprisonment, and may in addition be sentenced to a fine. In especially serious cases, those law offenders are to be sentenced to more than 10 years of fixed-term imprisonment, and in addition be sentenced to a fine and confiscation of their properties." See also the website of State Forestry and Grassland Administration Government: <https://www.forestry.gov.cn/main/5925/20200414/090421813919101.html>

131. The Criminal Law for wildlife crime has been more detailed, the main crimes involved are 15: the crime of illegally hunting, the crime of illegally purchasing, transporting or selling rare and endangered wild animals and their manufactured products, the crime of illegally hunting and killing rare and endangered wild animals, the crime of illegally fishing, the crime of disguising and concealing the proceeds of crime and the proceeds of crime, the crime of illegally owning or unlawfully possessing, guns and ammunition, the crime of stealthily or arbitrarily felling trees or woods, the crime of illegal business, the crime of fire, the crime of smuggling of valuable animals and valuable animal products, the crime of theft, the crime of illegal manufacturing, trading, transporting, mailing, and storing of firearms, ammunition, and explosives, the crime of harboring and concealing the crime of unlawfully occupying land used for agriculture, the crime of putting dangerous substances. Among the 600 cases we collected, there was even the crime of illegally raising funds. See Criminal Law of the People's Republic of China (2017): [https://www.pkulaw.com/CLL1.1.256346\(EN\)](https://www.pkulaw.com/CLL1.1.256346(EN)).

Wildlife Crime Case Detail: (2020) Heilongjiang Criminal Court 7526, No.14



China's physical and geographical environment is complex, and the species targeted by illegal hunting vary in different spatial and geographical areas, but in general, birds and mammals are the main targets. Depending on the species of animals targeted, there are also obvious differences in the criminal links presented. Based upon the 600 cases reviewed, we have outlined several crime types relating to specific animal species. (See Appendix, Figures III-V.) Cases of illegal bird hunting involve a variety of tools and methods such as sticking nets, steel balls and air guns, electronic traps, slingshots, chicken traps, hunting dogs, and more, with equipment generally available online or in local markets. Hunting often took place near the offender's home or workplace, and also in nature reserves and other forested areas. Hunting sometimes took place at night with the use of lighting devices. Killed or captured birds were used for home consumption, captive breeding, or ornamental purposes, or were sold. Illegal hunting of mammal species like pangolin, muntjac, wild boar, and hare, also involved dogs, nets and traps, baits, hunting harnesses, and spear guns, and likewise took place near offenders' homes. Killed or captured animals were generally used for home consumption or sale. The cases of illegal amphibian hunting we reviewed primarily involved frogs. Offenders used battery fishing machines along rivers, again primarily near their homes. Captured amphibians were generally sold.

Illegal hunting tools are diverse, reflecting the diversity of hunted species and the proliferation of channels for accessing hunting equipment.¹³² In most cases, perpetrators hunt illegally near their homes, and have lived in proximity to the target species for a long time. While they are familiar with the habits and distribution of these wild animals, some offenders are unaware that the animals they hunt fall under the protection of state law. For example, in the case of (2020) Hubei Criminal Court 0804, No.124, The defendant set up two sticky nets for killing birds to protect the mulberry orchard he operated. After the local department took down the carcasses of the wild birds, they were identified as the Bago and the Bulbul. It was concluded that the defendant used prohibited tools and methods in an area and at a time when hunting was prohibited, and he was convicted of the crime of illegal hunting. It should be noted that, in this illegal hunting process, the risk of animal diseases and exposure is often directly ignored by the offender.¹³³

Illegal Market Transportation

Due to the vast size of China's territory, the requirement for inspection and quarantine of animals transported between different regions is well established. Inspection, quarantine, and disinfection are required for transported animals at highway entrances and exits.¹³⁴ As a result, many animal transportation crimes occur within the same province, mainly in the geographic space across municipal and county administrative regions. A representative example is (2020) Hunan Crime Court 0726, No. 160, where the crime took place in Guangdong Province, China, and the offender transported eight pangolins in his own car for illegal sellers and received payment for the goods. The pangolins transported were all live and shipped in net bags. The transport routes in this case as follows:

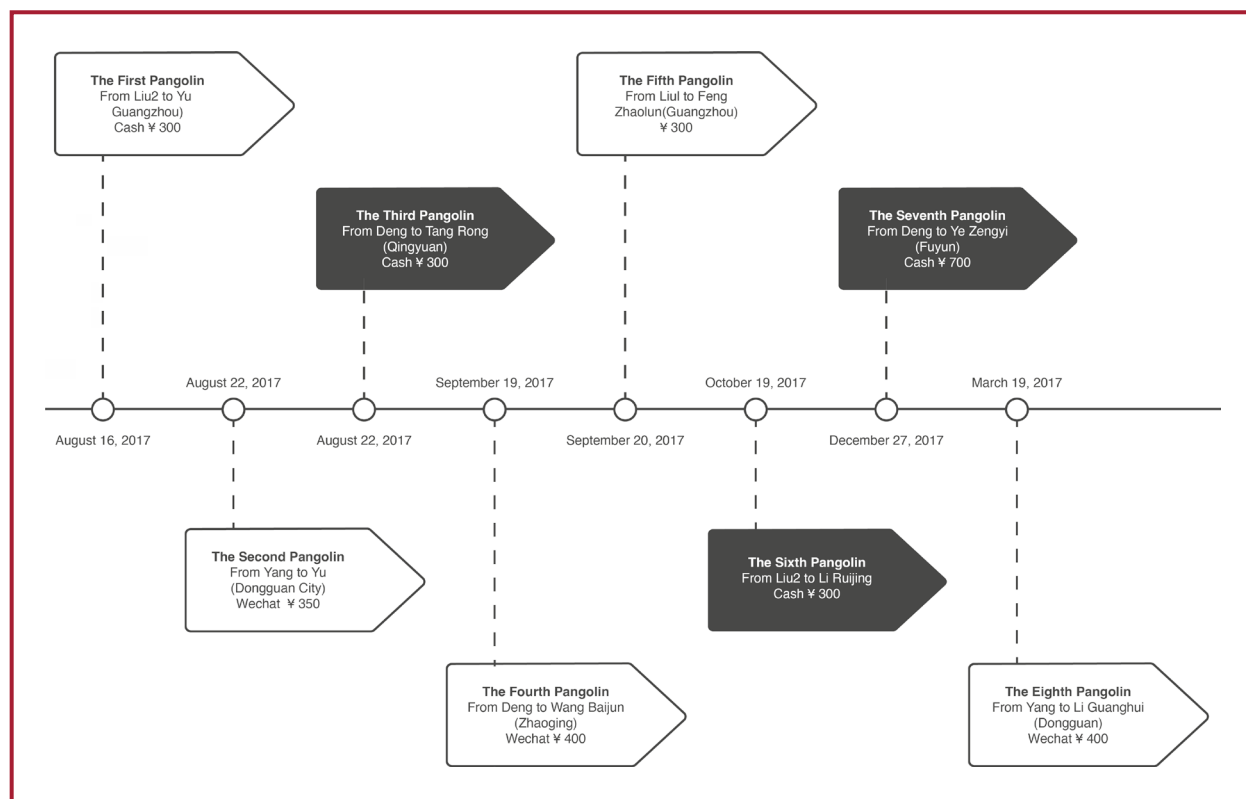


132. Most illegal hunting and trapping equipment is still homemade or purchased in person, but the frequency of online purchases is also increasing. Of the last 60 cases before September 30, 2020, there were 3 cases of online purchases of hunting and trapping equipment.

133. Of the 600 cases that we collected and combed through, there were no cases in which the perpetrators had taken steps to ensure harmless treatment or engage in disinfection measures for animals involved at the time of the crime.

134. Article 15 of the Animal Epidemic Prevention Law, for example, establishes a regime for monitoring the occurrence and prevalence of animal diseases. The quarantine regime for animals and animal products is detailed in Chapter V of the Law. See the Animal Epidemic Prevention Law (2021): http://en.npc.gov.cn.cdurl.cn/2021-01/22/c_909962.htm.

In the criminal chain of illegal hunting, trafficking, and transporting of wild animals, stakeholder role specialization is common. For example, illegal transporters are typically not illegal hunters or purchasers. Most of them are in fact specialized in transporting, and the hunter or illegal wildlife seller has a fixed transport business relationship with them or is introduced to them for earning transportation fees. In this case, the defendant, Dengfu Hua, is not a hunter or seller, only a carrier. The payment for the pangolin was ¥47,105, and Hua was paid ¥3,150 for transporting them. In the case of wildlife crime, illegal hunters are still at the core of the profit chain. The overall criminal flow of this case is detailed in the chart below:



Wild animals and their products are also illegally transported by courier and mail, and transacted through a growing online market.¹³⁵ Between 2009 and 2019, the provinces with the highest number of online illegal wildlife trade cases were Jiangsu, Shanghai, and Henan, which have comparatively small populations of desirable animals for the wildlife trade.¹³⁶ In 2021, Jiangsu's annual delivery business volume reached 8.6 billion pieces.¹³⁷ Amidst such a large volume of delivery and courier transactions, illegal online trading and mailing of wildlife and wildlife products is relatively easy to conceal.

Although the law has strict regulations on the sale of wildlife and wildlife products, in many areas there are itinerant, stall-type temporary sales activities. For example, in case *(2020)Yunnan Crime Court 0926, No.229*, the defendant sold elephant skins, monkey feet, and pangolin scales directly

135. A representative case is (2019) Guilin Crime Court 1481, No. 144, in which criminals sent rhino horns mixed with cookies in a metal box through a familiar specialty store.

136. Shao, Dan, "网络非法交易野生动物犯罪的情报搜集研究" [Study on Intelligence-Gathering of Illegal Wildlife Trafficking on the Internet], unpublished master's thesis, People's Public Security University of China, (2020), pp 18.

137. Jiao, Huidian, "Jiangsu Delivery Industry Annual Business Volume 8.6 Billion Pieces; Has Increased 23.4% Over the Previous Year," Xinhua Daily, January 17 (2022). Online: <https://baijiahao.baidu.com/s?id=1722199925971593527&wfr=spider&for=pc> [in Chinese]

in a local street market by concealing the products under Chinese herbs. In addition to face-to-face transactions, as noted above, orders are placed online and mailed.¹³⁸ Besides the purchase of wildlife for display, eating, and breeding, there is also the illegal use of wild animals for medicinal purposes.¹³⁹ In the southwestern provinces, many illegal cross-border and transnational purchases of animals and animal products have been made, mainly in Vietnam and Myanmar. These cases have involved contacts by phone and internet and transportation by mail and car, and have involved animal products such as ivory, rhino horn, and tiger bone. The pangolin, which has suffered a sharp decline in numbers due to illegal consumption in China, was the subject of a survey that indicated that restaurants in major cities in Guangxi and Yunnan served mainly Malay pangolin, according to DNA tracing, indicating that the supply chain for that illegal consumption originates in Southeast Asia.¹⁴⁰ Illegal wildlife consumption is not solely a domestic regulatory dilemma; the supply chain of illegal trade has become an international issue.¹⁴¹

PROSPECTIVE REFORM: IMPROVING CHINA'S ANIMAL TRADE AND ITS LEGAL REGULATION

Building upon new legal provisions developed in the wake of COVID-19, further reform of the animal trade market and its regulation should address the following:

Improved Inspection and Information Transparency Procedures for Livestock

A central challenge for the legal regulation of farm animals in China has been improving coordination between legislation and enforcement. Although the relevant laws establish detailed regulations for all kinds of livestock and other animals, there are many illegal channels for avoiding compliance with health and safety measures. The current regulatory framework of licenses, qualifications, and annual inspection models has proven susceptible to regulatory evasion, with the potential for huge remediation costs as a consequence. To remedy this problem, the farm animal supervision system should establish a regular inspection and information disclosure regime. First, existing systems that rely on self-monitoring should be replaced by more rigorous forms of daily inspection and sampling. Inspection personnel roles should be filled by experts with appropriate professional and technical training. Second, video recording technology should be employed to monitor origin quarantine, slaughter quarantine, and the harmless treatment of animals. The public should be

138. In the case (2020) Tianjin Crime Court 0104, No.623, The defendant contacted the seller through “Baidu Post Bar,” an online social networking software, and confirmed the order and transaction through “Xianyu,” a second-hand goods trading app. In the “410” wildlife trafficking case solved by the Yunnan Provincial Forest Public Security Bureau in 2018, the suspects established contact with buyers by posting video messages on a short video platform. See Wang, Yan, “Yunnan Police Cracked the Case of a Large Illegal Wildlife Trading Network,” *Xinhua*, June 20 (2016). Online: <https://www.chinacourt.org/article/detail/2016/06/id/1915744.shtml>. [in Chinese]

139. For a recent case, see (2020) Hunan Crime Court 10, No. 483, in which the offender purchased one pangolin in 2019, one king cobra in 2017, and one leopard cat and one snake carving each for making wine. This case involved animals under Class II state protection, as well as terrestrial wild animals of significant ecological, scientific, or social value. In (2020) Yunnan Crime Court 0924, No.229, the defendant argued that he bought wildlife products for medicinal purposes.

140. Yin, Feng, et al., “云南及边境地区野生动物及其制品非法贸易调查” [A Survey on Illegal Wildlife and Products Trade in Yunnan Province and Neighboring Border Area] 《北京师范大学学报(自然科学版)》 [Journal of Beijing Normal University (Natural Science)], vol. 04 (2015): 388-392.

141. Since the COVID-19 outbreak, combating the illegal wildlife trade has been a main focus of legal revisions. In addition to the Decision to ban terrestrial wildlife consumption, and updates to the Wildlife Protection Law, the Supreme People’s Court, the Supreme People’s Procuratorate, the Ministry of Public Security, and the Ministry of Justice jointly issued the “Guiding Opinions on Punishing the Illegal Trade of Wild Animals” on December 24, 2020. The Guiding Opinions introduced some supporting measures for wildlife crime law enforcement, such as guidelines for the identification of joint crimes, determining the value of wildlife and its products, and assessing the validity of evidence. Overall, the Guiding Opinions aim to strengthen the punishment of illegal wildlife trading crimes. See Notice by the Supreme People’s Court, the Supreme People’s Procuratorate, the Ministry of Public Security, and the Ministry of Justice of Issuing the Guiding Opinions on Punishing the Illegal Trade of Wild Animals (2020): <https://www.pkulaw.com/CLI.4.349320>.

permitted to access these recordings, as well. This would ensure that regulatory authorities can promptly investigate potential issues.

In the wake of the COVID-19 pandemic, some routine practices in the farm animal trade have been updated and improved to protect human and animal health. For example, the new norm is daily cleaning and disinfection of physical marketplaces and means of transport for animals and their products. Such norms should be further codified and promoted through explicit legal regulations.

Institutional Coordination in Wildlife Protection

The 2020 Decision to ban terrestrial wildlife consumption called for implementing coordinated operations by administrative departments and enforcement agencies with jurisdiction over wildlife issues. This innovative joint enforcement, investigation, and inspection approach has been highlighted in the revised Wildlife Protection Law (2022). However, laudatory efforts at institutional collaboration are confronted by a complex wildlife trade characterized by poaching, hunting, smuggling, trading, and other challenging regulatory conditions. Decentralized administrative departments will not be able to effectively engage with the problems presented by the wildlife trade. In light of the new legal emphasis on joint operations and coordinate management, we believe that a unified process of legal regulation and law enforcement should be created and implemented. In this vein, it is essential to strengthen routine law enforcement activity related to wildlife. Rather than focusing primarily on regulating access to animals for particular uses, new legal provisions should instead prioritize day-to-day monitoring and law enforcement mechanisms, as well as openness and transparency of information.

In the near term, to overcome a series of problems such as the complexity of wildlife cases, and the high difficulty and cost of law enforcement, legislators should establish regular joint departmental meetings. According to the National People's Congress Bulletin, since January 31, 2021, nine departments, including the National Forestry and Grassland Administration, the Ministry of Agriculture and Rural Affairs, the Central Political and Legal Affairs Commission, and the Ministry of Public Security, have jointly launched a special law enforcement campaign to combat the illegal wildlife trade. Through this campaign, a system for cross-regional coordination of law enforcement and supervision activities has been established. Initiatives like these should prove conducive to supporting and improving wildlife law enforcement work in the future.¹⁴²

Public Interest Litigation for Wildlife

China officially began implementing a public interest litigation regime in 2017, and the Civil Procedure Law of the People's Republic of China and the Administrative Procedure Law of the People's Republic of China stipulate its basic institutional content. Its main purpose is to safeguard the public interests of society.¹⁴³ Public interest litigation can be divided into civil public interest litigation and administrative public interest litigation. As a kind of state-owned natural resource, wild animals are

142. See the website of the NPC, Bulletin of the Standing Committee of the National People's Congress, 2021 (3), accessed June 20, 2021, pp 630. Available at: <http://www.npc.gov.cn/wxzlhgb/index.shtml>.

143. See the Civil Procedure Law of the People's Republic of China (2017): [https://www.pkulaw.com/CLI.1.297379\(EN\)](https://www.pkulaw.com/CLI.1.297379(EN)) and the Administrative Procedure Law of the People's Republic of China (2017): [https://www.pkulaw.com/CLI.1.297380\(EN\)](https://www.pkulaw.com/CLI.1.297380(EN)).

included in the scope of public interest litigation and can be regulated by the procuratorate – state organs for legal supervision, which can undertake prosecutory activities – to initiate litigation. Wildlife public interest litigation can be divided into two main categories. In the first, the procuratorate can urge the relevant wildlife departments to fulfill their duties and strengthen law enforcement, mainly through administrative public interest litigation. In the second, the procuratorate can undertake criminal-incident civil public interest litigation, mainly applied to crimes of illegal wildlife hunting and killing.

Against the background of the COVID-19 pandemic, the state has identified breeding, trading, and consuming wild animals as crucial areas of risk for zoonotic disease emergence. Wildlife public interest litigation is an effective tool for responding to this regulatory focus, and for targeting the central economic impetus of wildlife crime. Such public interest litigation would both sanction the application of criminal law in cases of wildlife crime, and bring incidental civil public interest lawsuits in which damage to ecologies and wildlife populations caused by illegal acquisition, sale, and hunting of protected wildlife can be assessed by experts. The magnitude of these damages would then be converted into economic terms to determine compensation required from the criminal suspect. Compensation payments could be used for wildlife protection and environmental restoration. Public interest litigation based on ecological interests thus aims to recover a larger amount of compensation by significantly increasing the economic penalties of wildlife crime. An expert team would assess the infringement on wildlife species and damage to the ecological environment to then issue its value appraisal.¹⁴⁴

Public interest litigation can also promote institutional coordination. For example, in the case of Yangzhong City People's Procuratorate in Jiangsu Province, the Procuratorate invited staff from the Wildlife Protection Station, the Bureau of Natural Resources and Planning, and the Bureau of Agriculture and Rural Development to work together on the case, establishing a regular information exchange mechanism with the Market Supervision Bureau. This is precisely the type of joint enforcement, investigation, and inspection activity called for in the 2020 Decision and the revised Wildlife Protection Law. According to the announcement of the Supreme Procuratorate, from January to September 2020, 15,154 people were prosecuted for crimes against wildlife, up 66.2% compared to 2019. In the same time period, 1,826 wildlife-related public interest lawsuits were filed.¹⁴⁵

Establishment of Animal Welfare Principles

Animal welfare practices can mitigate zoonotic risk, particularly with regard to stress and suffering as it affects immune systems or, in the case of dense or unsanitary caging, as pertains to basic hygiene and animal contact opportunities that can lead to zoonotic spread. China's current laws and

144. It should be emphasized that the illegal acquisition and sale of wild animals is considered to be an infringement of public ecological interests, just as direct hunting and killing of wild animals is. In a case of 21 people illegally acquiring and selling precious and endangered wild animals and products between April and June 2018, the defendants illegally acquired and sold 11 pangolins and products of precious and endangered wild animals under national protection. The court ultimately requested that the defendants be ordered to bear a total of ¥880,000 in resource compensation fees. In another case, People's Procuratorate of Longquan City, Zhejiang Province v. WANG and others for illegally hunting, killing, acquiring and selling precious and endangered wild animals criminal incidental civil public interest litigation, the perpetrators were punished for illegal hunting, killing, acquiring and selling of wild animals. In Hunan Xiangyin County People's Procuratorate v. HU and others for illegal hunting and killing of precious and endangered wildlife, the case introduced the presence of an expert deputy director and an alternative restoration regime; in the case of Fucheng District People's Procuratorate in Mianyang City, Sichuan Province, the People's Procuratorate urged the standardization of express delivery inspection. In an administrative public interest litigation case in Mianyang, Sichuan, in 2019, the procuratorate prosecuted the illegal hunting of wild animals whose products were sent by express mail; the Administrative Public Interest Litigation Case of Yingtan City People's Procuratorate of Jiangxi Province to Supervise and Regulate the Illegal Acquisition and Transportation of Wild Animals was a public interest litigation case against illegal transportation. For details on these relevant cases, see the online publication of the Supreme People's Procuratorate, accessed November 28, 2020: https://www.spp.gov.cn/spp/xwfbh/wsfbt/202002/t20200228_455360.shtml#1.

145. See the Jiangsu Procuratorate Network, accessed November 28, 2020: http://www.jsjc.gov.cn/shzs/fzcc/202012/t20201203_1139666.shtml.

regulations regarding farm animals do not make the welfare of farm animals a concern. However, in 2017, China's first voluntary industry standard¹⁴⁶ for farm animal welfare passed review.¹⁴⁷

China has a vast number of pigs in stock and slaughter – an estimated 700 million head in 2023¹⁴⁸ – and pigs are a species of major concern for zoonotic disease. The Farm Animal Welfare Requirements for Pigs, the industry standard, outlines detailed requirements for feeding space, feeding conditions, and feeding methods for pigs. These requirements enable pigs to survive in a comfortable environment. They also outline a series of sanitation and harmless disposal measures.¹⁴⁹ In terms of daily management, the regulations also detail a series of measures that can prevent zoonotic diseases and public health risks while respecting animal welfare. These include: setting up special treatment pens for the isolation and treatment of sick and injured pigs, which should be inspected twice a day; ensuring that sick and injured pigs cannot be mixed in transport; and ensuring that slaughter equipment is regularly disinfected and cleaned, and inspected once a day.¹⁵⁰ Unfortunately, most of these demanding standards are not legally binding, while legally binding national standards are less attuned to animal welfare or only offer vague suggestions. The revised Animal Husbandry Law and Animal Epidemic Prevention Law reflect a generalized concern for farm animal welfare, and may help to establish basic principles for the innovation of specific animal welfare regulations in the future.

CONCLUSION

Chinese society's concern for animal issues has always been based on an anthropocentric ideology. The status of animals in China is and has long been that of an object for exploitation by humans.¹⁵¹ The outbreak of zoonotic diseases like SARS CoV-2 presents an opportunity to promote and update wildlife and other animal-related legislation.¹⁵² Given the significant economic toll of such public health events, animal-related legislation should shift from a post-event remediation and post-emergency model to one oriented towards prevention and robust day-to-day regulatory enforcement. The legal system governing markets for animals is tested by rampant illegal hunting, loopholes in quarantine and other health and safety procedures, and the sheer diversity of animal species involved. The continuous refinement of the law is necessary to improve the regulation of the animal trade and prevent public health risks – while also protecting animals.

146. According to the Standardization Association's Standards Management Measures, each industry organization can design and implement its own unified standards for self-regulation and industry self-regulation. See the website of China Association for Standardization, accessed December 1, 2020: <http://www.china-cas.org/zxdtxhtz/421.jhtml>.

147. Wu, Pei, "China's First Farm Animal Welfare Industry Standard Passes Review," *Farmers' Daily*, November 8 (2017), available online through China Quality News Network: http://www.cqn.com.cn/zj/content/2017-11/08/content_5080937.htm [in Chinese].

148. USDA FAS, "China: Livestock and Products Semi-Annual," March 6 (2023). Online: <https://www.fas.usda.gov/data/china-livestock-and-products-semi-annual-8>.

149. For example, an electronic feeding system should be adopted in pig farms, a head and shoulder isolation fence should be set up in the feeding room of each pig, feeding equipment should be kept clean, etc. See the standardization CAS235-2014(C), accessed December 1, 2020: <http://www.csres.com/detail/288844.html>.

150. See the standardization CAS235-2014(C): <http://www.csres.com/detail/288844.html>.

151. Liang, Zhiping, "法治意识形态反思基于人与动物关系的视角" [Reflection on the Ideology of the Rule of Law From the Perspective of Relationship Between Humans and Animals], 《中外法学》 [Peking University Chinese and Comparative Law/ Peking University Law Journal], no.6 (2020): 1426-1447.

152. China's wildlife protection legislation has gone through successive stages of establishing wildlife as a state-owned natural resource for conservation and utilization; then identifying commercial breeding and utilization as a main goal; and finally shifting to public health as the core principle for protection. While the opportunity to amend the law in the second stage was SARS in 2003, COVID-19 has provided an opportunity to shift legislation firmly into the third stage. See Zhou, Ke, and Sun, Sijia, "野生动物利用法律制度的嬗变与破局" [Adaptation and Disruption of the Legal Regime for Wildlife Use], 《法学评论》 [Law Review], no.6 (2020): 135-145.

FIGURES

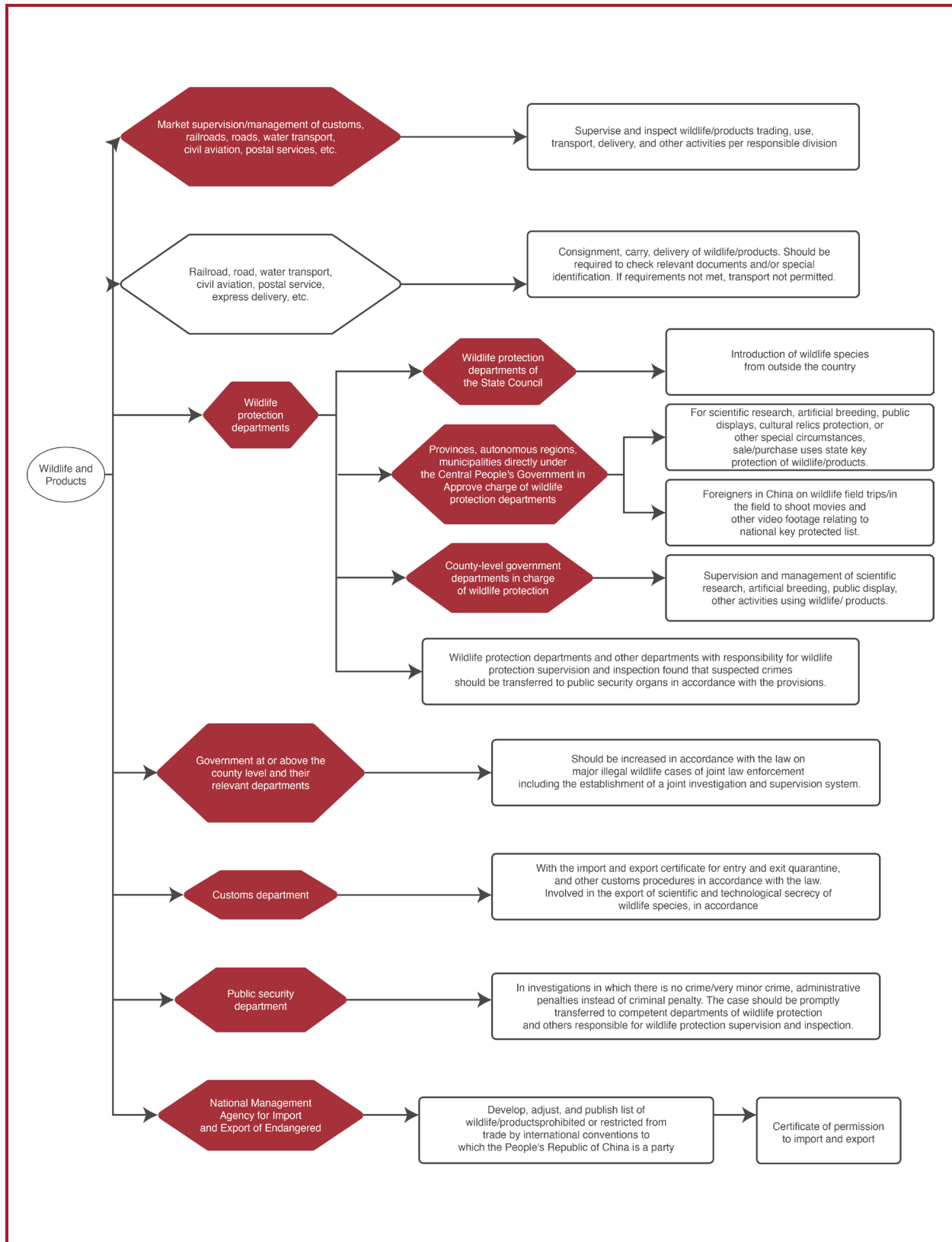


Figure I. Regulation of Markets for Wildlife and Wildlife Products

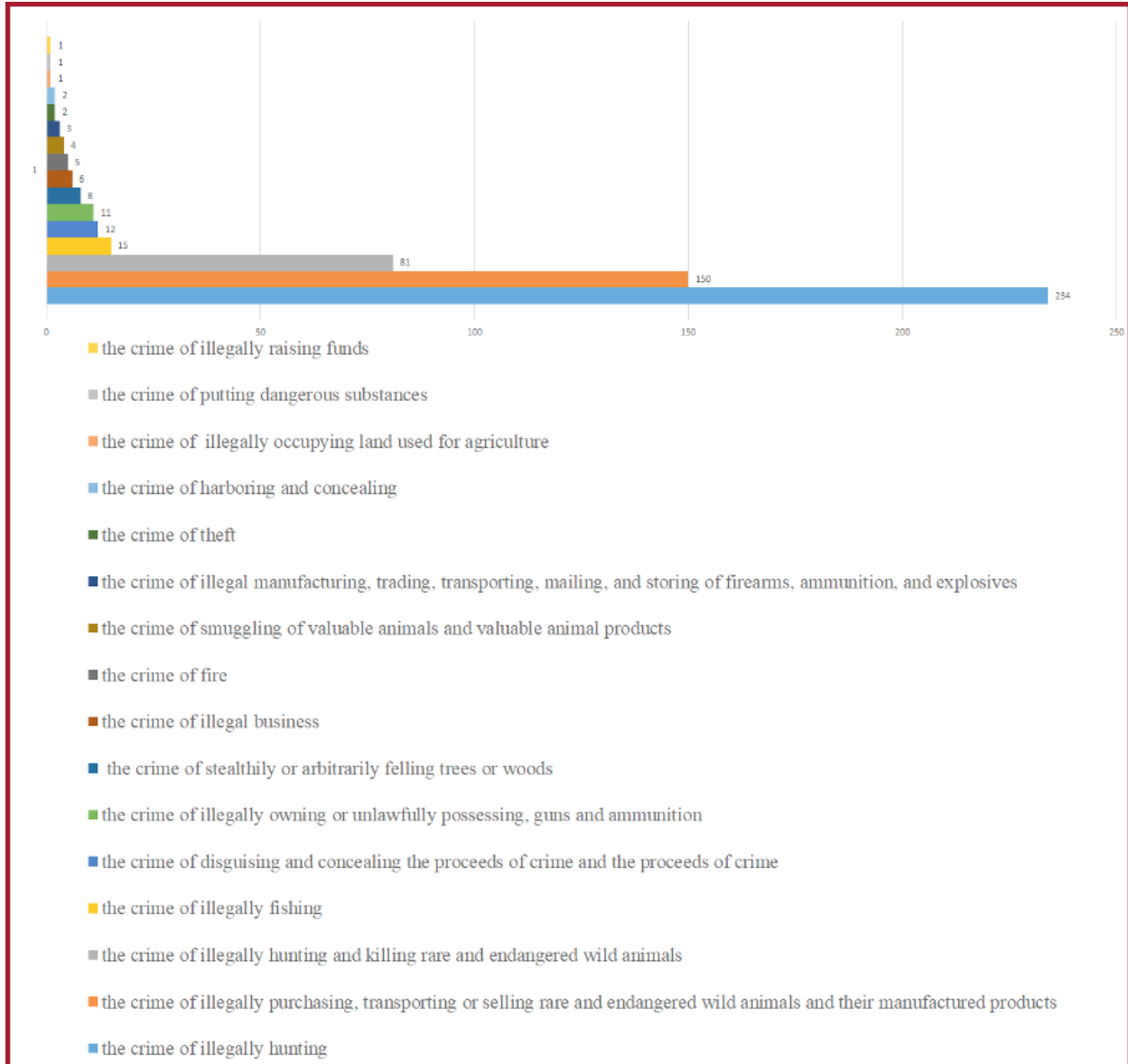


Figure II. Wildlife-Related Crimes Statistical Table

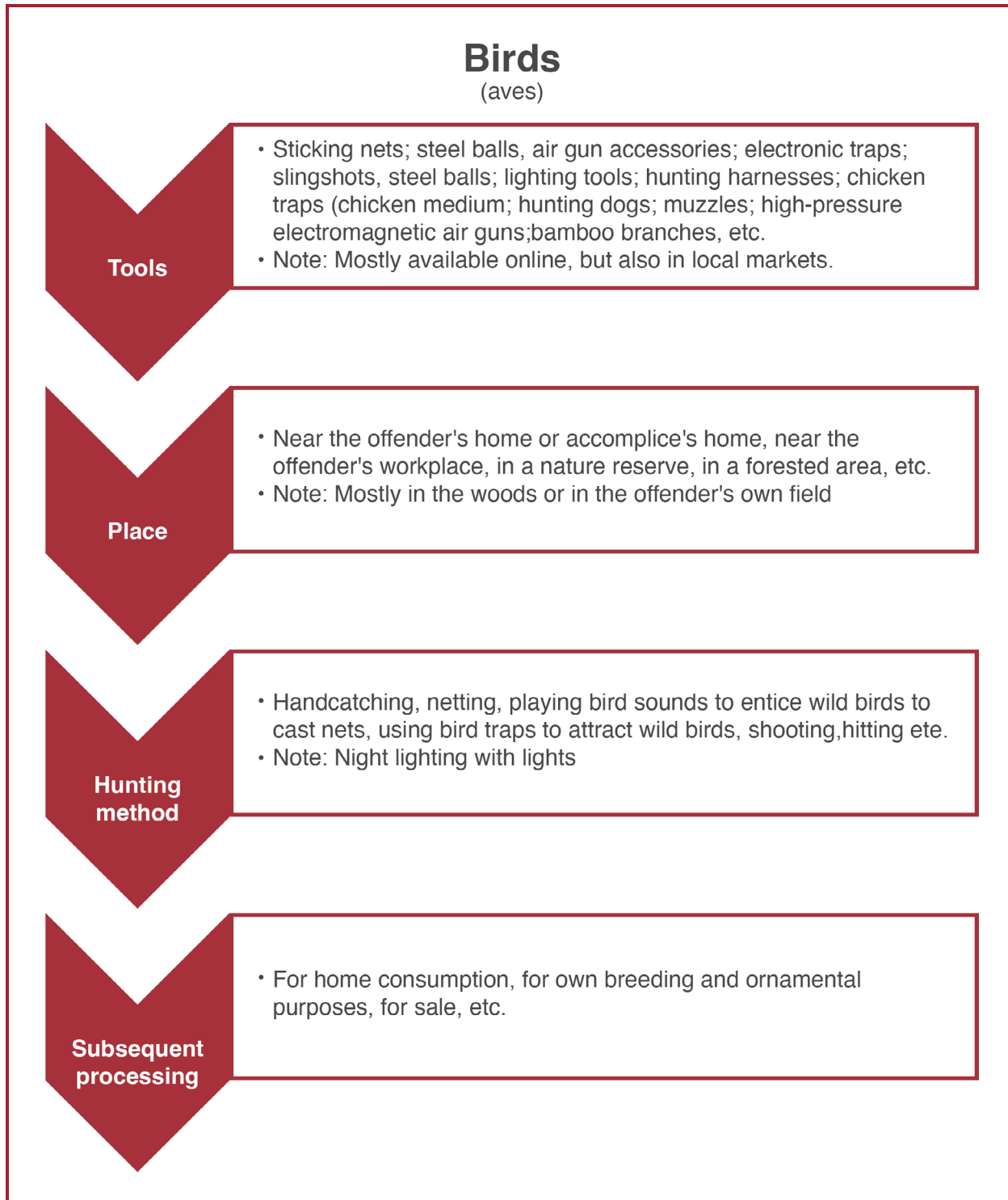


Figure III. Illegal Hunting of Birds

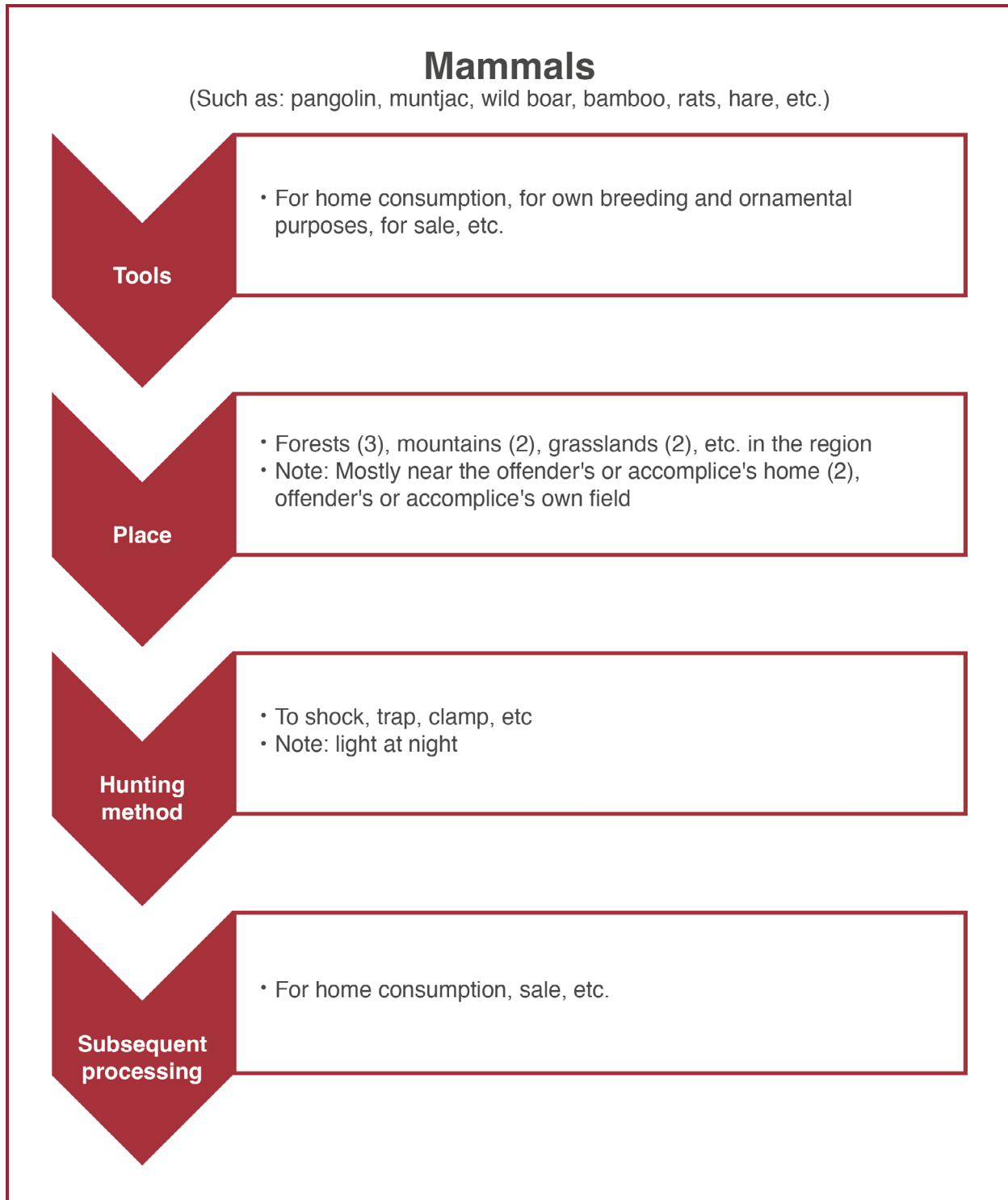


Figure IV. Illegal Hunting of Mammals

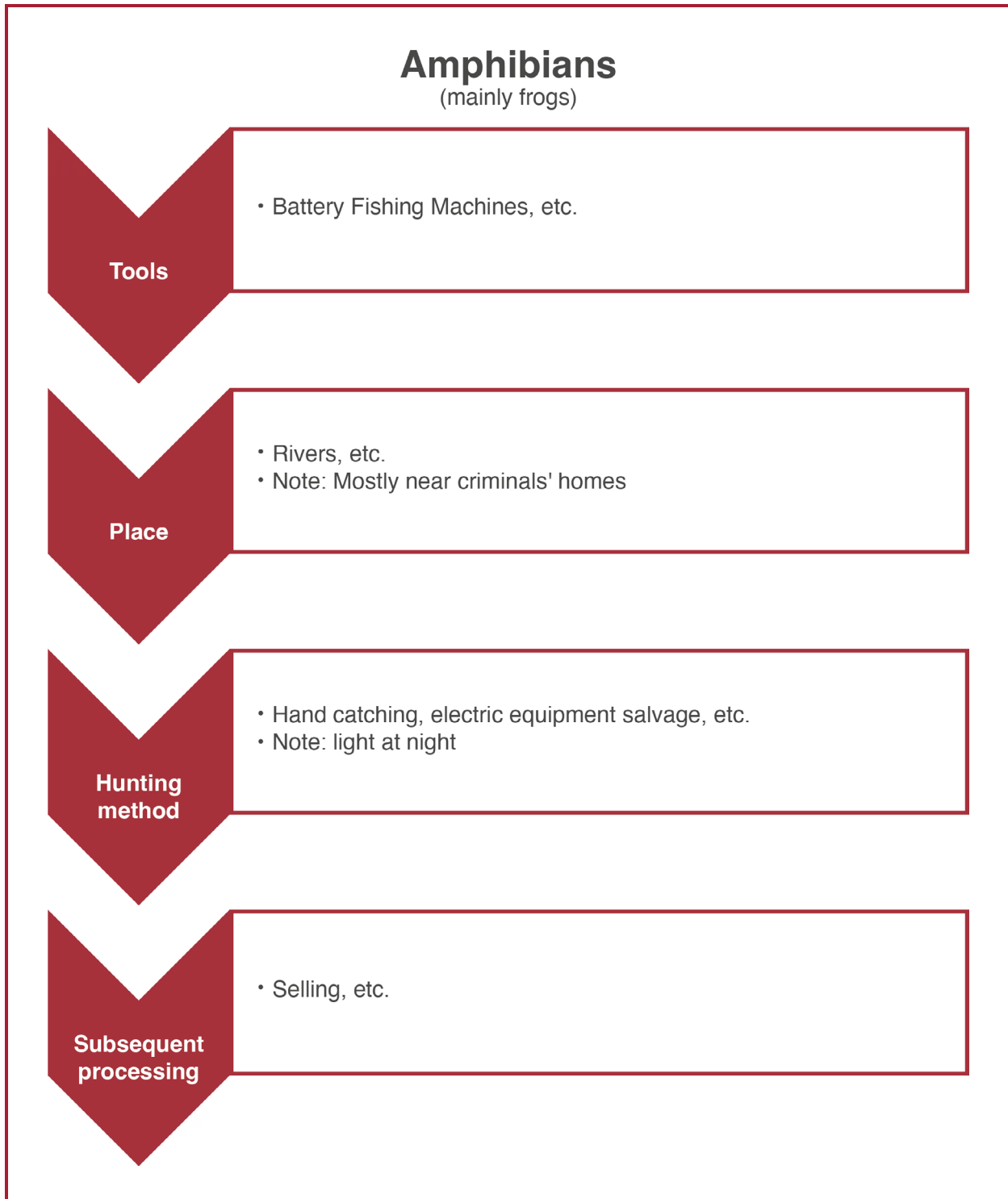


Figure V. Illegal Hunting of Amphibians