

## **SOCIAL CONTROL OF SUPPLY OR DEMAND? COUNTERACTING THE ILLEGAL WILDLIFE TRADE IN WILD FAUNA AND FLORA IN POLAND<sup>1</sup>**

### **KONTROLA SPOŁECZNA POPYTU CZY PODAŻY? - CZYLI O PRZECIWDZIAŁANIE NIELEGALNEMU OBROTOWI DZIKĄ FAUNĄ I FLORĄ W POLSCE**

**Edyta Drzazga**

Uniwersytet Jagielloński  
Wydział Prawa i Administracji  
Katedra Kryminologii  
ORCID: 0000-0001-5842-4584  
e-mail: edyta.drzazga@uj.edu.pl

#### **ABSTRACT**

This article considers the problem of counteracting the illegal trade in wild fauna and flora in Poland, with special regard to the social control of supply and demand of wildlife. Both social control of the demand for wild fauna and flora and the control of the supply part of this phenomenon are burdened with certain drawbacks, by definition, integrated into both models. In order to effectively counteract illegal trade in wild fauna and flora, it is necessary to recognize the patterns of the phenomenon and to design a social and criminal policy in this area that will be an adequate response to both the supply of the phenomenon and its demand. The main aim of the project was therefore to present the results of qualitative research conducted with experts dealing with the phenomenon of illegal trade in wild fauna and flora in Poland.

#### **Keywords**

illegal wildlife trade, social control, supply, demand

#### **ABSTRAKT**

W artykule omówiono problem przeciwdziałania nielegalnemu handlowi dziką fauną i florą w Polsce ze szczególnym uwzględnieniem społecznej kontroli podaży i popytu na dzikie zwierzęta. Zarówno kontrola społeczna popytu na dziką faunę i florę, jak i kontrola podażowej części tego zjawiska są z definicji obciążone pewnymi wadami, zintegrowanymi z obydwojema modelami. Aby skutecznie przeciwdziałać nielegalnemu

1 The project was created as a result of the research project No. UMO-2015/19/D/HS5/00105 financed by the funds of the National Science Centre (NCN).

handlowi dziką fauną i florą konieczne jest rozpoznanie wzorów tego zjawiska i zaprojektowanie takiej polityki społecznej i kryminalnej w tym zakresie, która będzie adekwatną odpowiedzią zarówno na jego podaż, jak i popyt. Głównym celem projektu było zatem przedstawienie wyników badań jakościowych przeprowadzonych z ekspertami zajmującymi się zjawiskiem nielegalnego handlu dziką fauną i florą w Polsce.

**Słowa kluczowe**

nielegalny obrót dziką fauną i florą, kontrola społeczna, podaż, popyt

## 1. Introduction. Low risk, high profit

The condition of ecosystems on a global scale is deteriorating at a rate unprecedented in human history, and the rate of extinction of species of wild fauna and flora continues to increase. As a result of these changes, the foundations of natural sources, food security, health and quality of life are threatened worldwide.

In 2020, an IPBES report was prepared, presenting a picture of the relationship between economic development paths and their impact on nature, as well as it included an assessment of the changes that have occurred over the last five years.<sup>2</sup> According to the data collected, the average abundance of native species in most major terrestrial habitats has declined by at least 20%, mainly since 1900. More than 40% of amphibian species, almost 33% of reef-forming corals and over a third of all marine mammals are threatened with extinction. In addition, it has been shown that since the 16th century, at least 680 species of vertebrates have disappeared from the face of the Earth, and more than 9% of all domesticated mammalian species used for food and agriculture had died out by 2016. Another 1,000 species remain under threat. Additionally, the number of invasive alien species in each of the 21 countries surveyed has increased by approximately 70% since 1970.<sup>3</sup>

The authors of the report ranked the causes of this disturbing state of affairs via 5 groups of factors with the most far-reaching global effects. These are, in descending order, from the smallest scale of impact: (1) changes in the use of land and sea; (2) direct exploitation of plants and animals; (3) climate change; (4) pollution; and (5) invasive alien species.<sup>4</sup>

The problem of illegal trade in wildlife is associated with as many as two out of the 5 co-determinants. We are talking about the exploitation of animals and the introduction of invasive plant and animal species that supersede the native ones.<sup>5</sup>

The world is struggling with the increasing scale and extent of wildlife trafficking, which is threatening to undo decades of biodiversity conservation achievements. Wildlife crime is a big business that has grown in the wake of the globalization of international trade networks. Organized crime groups smuggle and trade wild animals and their parts as an alternative to traditional smuggling activities such as drugs and weapons. The incentive to engage in this practice is the high profit it provides and the low risks of the criminal activity being discovered, and thus suffering any negative consequences from it.<sup>6</sup> This is accompanied by widespread

2 S. Brondizio, J. Settele, S. Díaz, H.T. Ngo (eds.), *The IPBES' 2019 Global Assessment Report on Biodiversity and Ecosystem Services*, IPBES, Bonn 2019, <https://ipbes.net/global-assessment> [available: 20.09.2020].

3 Ibidem – chapter 2.2.

4 Ibidem – *Supplementary materials SM2.1*.

5 See e.g.: T. Wyatt, *Wildlife Trafficking. A Deconstruction of the Crime, the Victims and the Offenders*, Palgrave Macmillan, Basingstoke 2013, pp. 41-43; W. Pływaczewski, *Kryminologia wobec problemu gatunków inwazyjnych* [Criminology and the problem of invasive species], [in:] W. Pływaczewski, E. Zębek, J. Narodowska (eds.), *Odpowiedzialność za środowisko z perspektywy prawa, kryminologii i nauk przyrodniczych* [Responsibility for the environment from the perspective of law, criminology and natural sciences], Difin, Warszawa 2020, pp. 78-136.

6 See e.g.: *Illicit Trade: Converging Criminal Networks. OECD Reviews of Risk Management Policies*, OECD Publishing, OECD, Paris 2016; D. Cook, M. Roberts, J. Lowther, *The International Wildlife Trade and Organised Crime: a Review of the Evidence and the Role of the UK*, Godalming, Wolverhampton 2002, p. 6, [https://www.academia.edu/8178488/The\\_International\\_Wildlife\\_Trade\\_and\\_Organised\\_Crime\\_a\\_review\\_of\\_the\\_evidence\\_and\\_the\\_role\\_of\\_the\\_UK](https://www.academia.edu/8178488/The_International_Wildlife_Trade_and_Organised_Crime_a_review_of_the_evidence_and_the_role_of_the_UK) [available: 11.10.2020]; T. Wyatt, *Green Criminology & Wildlife Trafficking: The Illegal Fur and Falcon Trades in Russia Far East*, LAP Lambert Academic Publishing, Saarbruecken 2012, pp. 77-81; R. Walters, *Organized crime and the environment*, [in:] G. Bruinsma, D. Weisburd (eds.), *Encyclopedia of Criminology and Criminal Justice*, Springer, New York 2016, pp. 3368-3375.

corruption among officials, obsolete legal regulations, the low priority given to the issue by control agencies, the so-called green crimes and lenient sentences in cases. Experts point out the fact that rhinoceros horns, ivory and tiger parts continue to be openly sold at high prices among consumers, especially in Asia. It is related to the spread of traditional Asian medicine (hereinafter referred to as TAM there. Traditional Asian medicine is approx. 5000 years old and is an integral part of the culture and tradition passed from generation to generation.<sup>7</sup> In Vietnam, the widespread myth that a rhino horn can cure cancer has led to massive poaching in South Africa and made the price of a rhino horn compete with the price of gold.<sup>8</sup>

However, obtaining reliable data on the value of the illegal wildlife trade is almost impossible. Some examples of the illegal wildlife trade are well known and described, such as the poaching of elephants to obtain ivory and tigers to obtain their skins and bones.<sup>9</sup> But countless other species are also over-exploited, ranging from sea turtles to rare tree species. It should be noted here that not all trade in wildlife is illegal. Thousands of plant and animal species are harvested from their natural environment and then legally sold as food, pets, ornamental plants, souvenirs and medicines. A crisis comes as more and more wildlife is being exploited unsustainably – posing a direct threat to the survival of many species in the wild. However, in addition to significant and often irreversible impacts on biodiversity, wildlife trafficking can have profound impacts on health, economic development and society governance in both countries of origin and consumers.<sup>10</sup>

Therefore, in order to limit the overexploitation of many wild plants and animals for commercial purposes, various types of legal solutions have been introduced around the world. One of them is national species protection, which consists of prohibiting or restricting the acquisition of endangered species from nature. Countries with specimens of such fauna and flora are often unable to effectively protect their populations on their own. For this reason, national and international legal regulations have been introduced around transportation across borders. However, due to the low disclosure of smuggling cases, many countries have introduced additional legal provisions regulating the commercial use of plants and animals of protected species. In addition, many countries have banned the possession of specimens of illegal or undocumented origin. Moreover, failure to comply with is considered a broadly understood illegal trade in wildlife in endangered species.<sup>11</sup>

## 2. What works? That is, the types of responses to the problem of illegal trade in wild fauna and flora

It is possible to indicate at least two divisions of the response to illegal trade in wildlife, distinguished on the basis of the following criteria: 1) the degree of repression towards the perpetrators; 2) the main recipients of the reaction. In the first case, the actions taken are based on legal provisions and extend between two poles: criminalization and regulation. Criminalization is the rarest of prospects because most anthropocentric societies treat the environment as one of their available resources. The most far-reaching variation of this approach assumes the complete ban of the market of wild animals and plants that belong to the category of endangered species. In the long run, this decision would allow their population to recover. In practice, this model is based on various degrees of criminalization of individual acts that may constitute offenses or crimes. In contrast, the regulatory model allows wildlife trade under certain conditions. The regulation of the problem with the use of the administrative system, trade monitoring and setting limits is characteristic

7 T. Wyatt, *Wildlife Trafficking...*, op.cit., pp. 28-31.

8 *Rhino horn: our perspectives on trade*, <https://www.traffic.org/what-we-do/perspectives/trade-in-rhino-horn/> [available: 20.01.2021].

9 R.W.Y. Wong, *The organization of the illegal tiger parts trade in China*, „British Journal of Criminology” 2015, vol. 56, no 5, pp. 995-1013.

10 See e.g. T. Wyatt, *Wildlife Trafficking...*, op.cit., pp. 39-58.

11 E. Drzazga, *Kontrola społeczna nielegalnego obrotu dziką fauną i florą w Polsce* [Social control of illegal wildlife trade in Poland], [in:] Ł. Pilarz (ed.), *Prawo publiczne i prawo karne w XXI wieku. Wybrane zagadnienia* [Public law and criminal law in the 21st century. Selected issues], Wydawnictwo Tygiel, Lublin 2019, pp. 103-112.

for this model.<sup>12</sup> Moreover, this model is close in its nature to the principles underlying The Convention on International Trade in Endangered Species of Wild Fauna and Flora (hereinafter CITES),<sup>13</sup> which is the main international regulation covering the trade of wild fauna and flora. It is fundamentally based on the anthropocentric assumption and the related concern for ensuring the continuity of the exploitation of natural resources. Parties to the Convention undertake to issue appropriate regulations to protect endangered species listed in CITES. Therefore it depends on the individual country whether it will be implemented through criminalization or regulation, or otherwise.

The second division determines the models of reactions to the phenomenon that extend between the two ends of the continuum: supply control and demand control. The aforementioned responses to the wildlife trade have been focused – and mostly still are focused – on the supply side of the phenomenon.<sup>14</sup> However, in recent years, there has been an increased emphasis on the control of wildlife demand by influencing people to voluntarily change their consumer behavior.<sup>15</sup> This increased focus on consumers and demand has led to the launch of numerous campaigns designed to influence consumers of wildlife. These campaigns have been labeled in a variety of ways, from awareness raising and environmental education to human-centered design and social marketing.<sup>16</sup>

Both the social control of the demand for wild fauna and flora and the control of the supply part of this phenomenon are burdened with certain drawbacks, by definition, integrated into both models. First, the supply-side interventions on which traditional social control of the phenomenon is based have not proven to be effective enough. Despite measures taken against the illegal sourcing of wildlife, the threat of extinction for species such as elephants, rhinoceros, pangolins and other valuable taxa continues to progress, which is driven by demand not declining. Widespread formalized control activities that are based on normative changes, i.e. increasing the scope of criminalization or penalizing certain acts, do not prompt people to stop consuming wildlife or to change consumption patterns to more sustainable ones. In addition, discussions conducted by criminologists on the processes of criminalization of various acts and their unintended consequences provide important conclusions that should not be ignored when designing the social control of illegal trade in wild fauna and flora. In the context of, for example, drug crimes, it is indicated that drug prohibition aimed at discouraging people from using drugs also has opposite effects. This is due to a mechanism that Herbert Packer calls the ‘crime tariff’.<sup>17</sup> This phenomenon boils down to the fact that by criminalizing a good or service for which the demand is stable and will continue to exist in the future, the price increases significantly above the market price. This is due to the fact that suppliers of goods or services risk criminal liability, and they compensate for this risk through a high mark-up. As a result, activities related to the production and sale of drugs are becoming risky activities, but very lucrative from an economic point of view. No wonder then that organized crime groups are involved. Similar processes can be observed in the case of trade in wildlife, especially when the “subject” includes such rare species as rhinoceros, elephants or polar bears. The sheer uniqueness of the products obtained (horns, tusks, various parts of the body, e.g. scales, gallbladder, etc.) increases their market price, which is additionally raised due to the criminalization tax imposed by poachers, traders and other perpetrators seeking profit.

Thus, acting solely through coercive measures on the perpetrators of wildlife trafficking is not always a sufficient, appropriate and suitable response. This is especially true when such actions are introduced in

12 T. Wyatt, *Wildlife Trafficking...*, op.cit, pp. 106-111.

13 Konwencja o międzynarodowym handlu dzikimi zwierzętami i roślinami gatunków zagrożonych wyginięciem, sporządzona w Waszyngtonie dnia 3 marca 1973 r. [The Convention on International Trade in Endangered Species of Wild Fauna and Flora], Dz.U. 1991 No 27 item 112.

14 D. Verissimo, A.K.Y. Wan, *Characterizing efforts to reduce consumer demand for wildlife products*, „Conservation Biology” 2019, vol. 33, no 3, pp. 623-633.

15 S. Greenfield, D. Verissimo, *To what extent is social marketing used in demand reduction campaigns for illegal wildlife products? insights from elephant ivory and rhino horn*, „Social Marketing Quarterly” 2018, vol. 25, no 1, pp. 40-54.

16 A. Olmedo, V. Sharif, E. Milner-Gulland, *Evaluating the design of behaviour change interventions: A case study of rhino horn in Vietnam*, „Conservation Letters” 2017, vol. 11, no 1, pp. 1-9, <https://doi.org/10.1111/conl.12365>.

17 H. Packer, *The crime tariff*, „The American Scholar” 1964, vol. 33, no 4, pp. 551-557.

a hurry, in response to public pressure, or in response to a specific social problem, and are not preceded by an in-depth diagnosis of the problem and its causes. Then, measures taken in the field of destructive control not only fail to limit the scale of the phenomenon being combated, but may also lead to unintended undesirable effects.<sup>18</sup>

The failure of the coercive model has led environmentalists to seek ways to replace the system of prohibitions and orders with actions that will lead to voluntary changes in human behavior. Examples of such activities are interventions in the field of behavioral economics, environmental education and social marketing campaigns. This is because influencing demand requires understanding consumers' motivations and the key factors that drive it. However, it also points to possible shortcomings in actions aimed at voluntarily changing the behavior of potential consumers of wild fauna and flora.<sup>19</sup>

Firstly, success in this regard may be partial at best. The expectation of changing the behavior of the entire target group with one intervention is unrealistic. In addition, campaigns promoting alternative behavior around the target being combated are twice as effective as those aimed solely at reducing behavior.

Secondly, success can be costly, and interventions to reduce the demand for wild plants and animals or their derivatives have low budgets due to the low priority given to the phenomenon by governments.

Thirdly, success may depend on gaining direct benefits from abandoning the current behavior. Interventions to change human behavior often focus on positive exchange, where the adoption of the new behavior is encouraged, promoting its benefits and pointing to cost savings for the target group. However, in the case of the protection of wild fauna and flora, it is difficult to point to direct, immediate benefits of abandoning the exploitation of nature. It is easier to invoke the avoidance of the risk of spreading of zoonoses as a possible consequence of abandoning the consumption of wild animals. This means that interventions reducing demand must rely more on highlighting the costs of continuing wildlife-related consumer behavior.<sup>20</sup>

Fourthly, the success depends on cultural contexts. This finding is consistent with the principle known as the 'Lindy effect'.<sup>21</sup> According to this rule, older ideas and technologies are more likely to outlast their newer alternatives. This may help to explain why reducing the demand for wildlife is more difficult in countries where consumption of wildlife is strongly supported culturally. This brings us closer to answering the question of why demand for ivory – a traditional sculptor's material for thousands of years – remains high in China, despite huge efforts by governments and NGOs to counteract it. It can therefore be concluded that where illegal behavior is deeply rooted in culture, it may be more difficult to eliminate it. Therefore, expectations regarding the effectiveness of the implemented strategies should be adjusted or first focused on less difficult to control violations of the law.<sup>22</sup>

Fifthly, there is no guarantee that promoting an acceptable substitute for current behavior will be successful. It is generally believed that it is easier to modify existing behavior than to eliminate it entirely.<sup>23</sup> In order to protect wild fauna and flora from overexploitation, the promotion of culturally acceptable, farmed or synthetic substitutes has often been suggested. It can therefore be assumed that a user of traditional Chinese medicine may be more inclined to replace a herbal tonic with a bear bile tonic than to switch to Western medicine entirely. However, this strategy is not delivering the expected results for those wildlife consumers who value the possession, consumption or use of wild plants and animals because of their exotic nature and

18 E. Drzazga, *Nielegalny obrót dziką fauną w świetle zielonej kryminologii* [The illegal trade of wild fauna in the light of green criminology], [in:] B. Błońska, W. Gogłozka (eds.), *Sprawiedliwość dla zwierząt* [Animal Justice], INP PAN, Warszawa 2017, pp. 90-108, <http://e-bp.inp.pan.pl/xmlui/handle/123456789/48> [available: 14.03.2021].

19 L. Thomas-Walters, *Taking a more nuanced look at behavior change for demand reduction in the illegal wildlife trade*, „A Journal of the Society for Conservation Biology” 2020, vol. 2, no 9, pp. 1-10, <https://www.doi.org/10.1111/csp2.248>.

20 G. McDonald, M. Wilson, D. Verissimo, R. Twohey, M. Clemence, D. Apistar, G. Vianna, *Catalyzing sustainable fisheries management through behavior change interventions* Gavin, „Conservation Biology” 2020, vol. 34, no 5, pp. 1176-1189, <https://doi.org/10.1111/cobi.13475>.

21 N. Taleb, *Antifragile: Things that Gain from Disorder*, Random House, New York 2012, p. 514.

22 For instance decriminalization of possessing small amounts of derivatives of wildlife.

23 L. Thomas-Walters, *Taking a more...*, op.cit., p. 5.

high price.<sup>24</sup> Therefore, in order to identify and market suitable substitutes, it is essential to understand consumer motivation and consider the role of quality, price and availability of wild animals on the market.

In addition, special attention should be paid to the substitute that is being promoted to change behavior patterns. It may occur that an alternative product, e.g. a plant tonic indicated as an acceptable alternative to an animal tonic, is still made from endangered plant species.

As can be seen, social control of the illegal wildlife trade requires a holistic approach, taking into account both types of impacts – on demand and supply. At the same time, possible difficulties with the implementation of both types should be taken into account. The results of qualitative research are aimed at, i.a. exploration and an attempt to assess the state of Polish social control of illegal trade in wildlife, both on the supply and demand sides.

### 3. Methodology

As part of the research, 20 anonymous in-depth interviews were conducted with various experts dealing with the problem of illegal trade in wild fauna and flora in Poland. In order to obtain a wide range of expert opinions, the selection included: representatives of the customs and tax service, police officers who are CITES coordinators, representatives of the Department of Customs of the Ministry of Finance, the State Council for Environmental Protection, representatives of the National Society for Nature Conservation ‘Salamandra’ and WWF Poland. The interview scenario as a research tool was developed on the basis of phenomenon recognition based on analysis of existing data as well as dogmatic and legal analysis. Expert interviews were recorded on an electronic medium. Then, they were transcribed and analyzed using the qualitative data analysis software – MAXQDA.

### 4. Control of supply and demand regarding illegal wildlife trade in Poland in the opinion of experts

Social control of illegal trade in wild fauna and flora is mainly directed at the supply side of the phenomenon. Its scope is determined by legal regulations, which began with the Washington CITES Convention, Poland acceded to the Convention in 1989. CITES provisions came into force in 1991, while the first implementing provisions were issued in 1997. In the Act of 1997 on the protection of animals,<sup>25</sup> a ban on keeping, trading and transporting animals, their parts and derived products across the state border, subject to restrictions under international agreements without the required permit, was introduced.<sup>26</sup>

Currently, the Washington Convention has not been directly transposed into the Polish legal system. Council Regulation 338/97 and the implementing regulations of the European Commission should be applied. The legal act implementing the relevant regulations is the Act of April 16, 2004 on nature protection. In accordance with the applicable regulations, the Minister of Justice acts as the managing body of CITES, while the scientific body comprises the Polish Society for Nature Protection (PRO-P). Control over compliance with the provisions of the Washington Convention and the corresponding regulations is exercised by the Police (primarily responsible for controlling domestic trade) and the Customs and Tax Service (responsible for international trade). Both of the above institutions have CITES coordinators at voivodship levels. In 2006, the CITES Working Group was established in Poland as a platform for the exchange of information and cooperation of all the most important bodies, institutions and non-governmental organizations.

---

24 F. Courchamp, E. Angulo, P. Rivalan, R.J. Hall, L. Signoret, L. Bull, Y. Meinard, *Rarity value and species extinction: The anthropogenic Allee effect*, „PLOS Biology” 2006, vol. 4, no 12, pp. 2405-2410, <https://doi.org/10.1371/journal.pbio.0040415>.

25 Ustawa z dnia 21 sierpnia 1997 r. o ochronie zwierząt [Act on the protection of animals], [consolidated text] Dz.U. 2020 item. 638.

26 Ustawa o ochronie przyrody [The Nature Conservation Act], [consolidated text] Dz.U. 2020 item 55.



According to respondents, the legal regulations governing the transport and trade of wild fauna and flora specimens on the domestic market are overly restrictive and are considered to be the strictest in Europe. This leads to the following interesting mechanism. The act of transporting a small quantity of a CITES specimen without meeting the legal conditions is a criminal offense that carries the same statutory penalty as smuggling in bulk. This means that, according to the applicable law, two phenomena that are different in terms of criminology – its supply and demand – are equal in terms of the statutory penalty. Consequently, the bodies of the judiciary as broadly understood take the following decisions. In order to avoid initiating the procedure, which, in their opinion, is disproportionate to the gravity of the act, representatives of the customs and tax services often turn a blind eye to small smuggling. Such violations of the law are most often an incidental attempt to meet the demand for a small amount of, for example, the TAM medication. On the other hand, if a case is opened, judges usually dismiss them. Thus, in Poland there is a bottom-up correction of a flawed criminal policy in the scope of the legally regulated degree of repression, which is still not differentiated in relation to various categories of acts. The excessively repressive – in the opinion of the respondents – control of the demand of the phenomenon thus leads to a persistent lack of reaction in cases of ‘low weight’. This makes the entire control system leaky, including the supply side of the phenomenon. This state of affairs encourages a group of determined perpetrators to use the loopholes in the application of the law, which demonstrates that the priority given to the problem of illegal trade in wildlife is increasingly becoming lower. No wonder then that it is difficult to effectively counteract this phenomenon. This is despite the experts’ proposals to amend the aforementioned legal regulations, consisting of shifting minor cases to the category of offenses.

The respondents were even more skeptical about the state of control of trade in wildlife on the internal market, pointing to the far-reaching inconsistency of legal regulations, which prevent effectively counteracting the supply of the discussed phenomenon. According to experts, the Animal Protection Act is an example of an overly elaborate and illegible legal act that requires immediate amendment. The animal registration model introduced in the Animal Protection Act did not meet the expectations. The Act introduced the obligation for each holder of a CITES specimen to report it to the animal register kept by the official competent for the place of keeping the animal. This obligation applies to two groups of specimens: live amphibians, reptiles, birds and mammals belonging to the species listed in Annexes A and B to Council Regulation 338/97 and all live animals of species hazardous to human life and health.<sup>27</sup> The application should be accompanied by a copy of the document confirming the legality of the animal’s origin, but the act only provides examples of types of such documents, thus giving room for various abuses.

In the opinion of the respondents, the above system does not provide a real possibility of verifying the animal’s origin and thus revealing cases of illegal possession of a CITES specimen. This is because the district veterinarian only states that the animal was born in captivity. It is a technical activity during which the legality of the animal’s origin is not verified in any way. In addition, the obligation to register the animal rests with the final buyer of the specimen, for whom it is most difficult to prove the legal origin of the animal. On the other hand, persons placing a given specimen on the market are exempt from this obligation. This example also shows the inadequacy and interdependence of social control of demand and supply of the phenomenon. However, this time, poor social control of supply makes effective demand control impossible.

The above-mentioned relationships relate to the formalized part of the control of supply and demand of the phenomenon. Interviews with experts on informal methods of counteracting wildlife trafficking provide equally interesting conclusions. Respondents agreed that CITES crimes are assigned one of the lowest priorities. The knowledge of the phenomenology of the situation and related legal regulations among representatives of the judiciary was assessed as low. It is non-governmental organizations such as WWF Polska (World Wildlife Fund; hereinafter: WWF) or PTOP Salamandra that have undertaken actions to raise public awareness of the broadly understood negative consequences of wild nature exploitation: legal and social.

---

27 Council Regulation (EC) No 338/97 of 9 December 1996 on the protection of species of wild fauna and flora by regulating trade therein, OJ EU L 61, 3.03.1997, pp. 1-69.

Thus, the burden of social demand control in the form of attempts to change consumer behavior was on the NGOs. At the same time, most of these activities were informative and based on messages referring to the rationality of recipients who wanted to avoid the negative effects of violations of the law.

## 5. Summary

In order to effectively counteract illegal trade in wild fauna and flora, it is necessary to recognize the patterns of the phenomenon and to design a social and criminal policy in this area that will be an adequate response to both the supply of the phenomenon and its demand. It is impossible to ignore the interaction between the two types of controls. In Poland, this mechanism is particularly vivid in the situation when the measures provided by the law are inadequate, i.e. excessively repressive in the case of low weight offences. Paradoxically, this leads to unforeseen side effects, i.e. weaker control of the supply of the phenomenon. On the other hand, inadequate regulation of supply control in the case of trade in wildlife on the internal market – as in the model of animal registration described above – shifts the burden of responsibility onto their owners. At the same time, they rarely bear the consequences of their actions due to the low effectiveness of the application of the law and little interest from the judiciary in the control of the discussed phenomenon.

In addition, it is worth learning from the experiences of other branches of knowledge in the field of informal demand control for wildlife. It concerns the design of social campaigns promoting a change in the behavior of potential consumers that will take into account postulates developed on the basis of behavioral economics, environmental education and social marketing campaigns. Therefore, it seems necessary to involve the state in cooperation with non-governmental organizations. However, the implementation of both this and the other postulates raised above requires, above all, political will. Unfortunately, control of illegal trade in wild fauna and flora, as well as the prevention of other crimes against the natural environment, is invariably one of the lowest priorities in Poland.

## Bibliography

### Legal acts

Konwencja o międzynarodowym handlu dzikimi zwierzętami i roślinami gatunków zagrożonych wyginięciem, sporządzona w Waszyngtonie dnia 3 marca 1973 r. [The Convention on International Trade in Endangered Species of Wild Fauna and Flora], Dz.U. 1991 No 27 item 112.

Council Regulation (EC) No 338/97 of 9 December 1996 on the protection of species of wild fauna and flora by regulating trade therein, OJ EU L 61, 3.03.1997, pp. 1-69.

Ustawa z dnia 21 sierpnia 1997 r. o ochronie zwierząt [Act on the protection of animals], [consolidated text] Dz.U. 2020 item. 638.

Ustawa o ochronie przyrody z 16 kwietnia 2004 r. [The Nature Conservation Act], [consolidated text] Dz.U. 2020 item 55.

### Scientific publications

Brondizio S., Settele J., Díaz S., Ngo H.T. (eds.), *The IPBES' 2019 Global Assessment Report on Biodiversity and Ecosystem Services*, IPBES, Bonn 2019, <https://ipbes.net/global-assessment> [available: 20.09.2020].

Cook D., Roberts M., Lowther J., *The International Wildlife Trade and Organised Crime: a Review of the Evidence and the Role of the UK*, Godalming, Wolverhampton 2002, [https://www.academia.edu/8178488/The\\_International\\_Wildlife\\_Trade\\_and\\_Organised\\_Crime\\_a\\_review\\_of\\_the\\_evidence\\_and\\_the\\_role\\_of\\_the\\_UK](https://www.academia.edu/8178488/The_International_Wildlife_Trade_and_Organised_Crime_a_review_of_the_evidence_and_the_role_of_the_UK) [available: 11.10.2020].

Courchamp F., Angulo E., Rivalan P., Hall R.J., Signoret L., Bull L., Meinard Y., *Rarity value and species extinction: The anthropogenic Allee effect*, „PLOS Biology” 2006, vol. 4, no 12, pp. 2405-2410, <https://doi.org/10.1371/journal.pbio.0040415>.



- Drzazga E., *Kontrola społeczna nielegalnego obrotu dziką fauną i florą w Polsce* [Social control of illegal wildlife trade in Poland], [in:] E. Pilarz (ed.), *Prawo publiczne i prawo karne w XXI wieku. Wybrane zagadnienia* [Public law and criminal law in the 21st century. Selected issues], Wydawnictwo Tygiel, Lublin 2019, pp. 103-112.
- Drzazga E., *Nielegalny obrót dziką fauną w świetle zielonej kryminologii* [The illegal trade of wild fauna in the light of green criminology], [in:] B. Błońska, W. Gogłóża (eds.), *Sprawiedliwość dla zwierząt* [Animal Justice], INP PAN, Warszawa 2017, pp. 90-108, <http://e-bp.inp.pan.pl/xmlui/handle/123456789/48> [available: 14.03.2021].
- Greenfield S., Verissimo D., *To what extent is social marketing used in demand reduction campaigns for illegal wildlife products? insights from elephant ivory and rhino horn*, „Social Marketing Quarterly” 2018, vol. 25, no 1, pp. 40-54.
- Illicit Trade: Converging Criminal Networks. OECD Reviews of Risk Management Policies*, OECD Publishing, OECD, Paris 2016.
- McDonald G., Wilson M., Verissimo D., Twohey R., Clemence M., Apistar D., Vienna G., *Catalyzing sustainable fisheries management through behavior change interventions* Gavin, „Conservation Biology” 2020, vol. 34, no 5, pp. 1176-1189, <https://doi.org/10.1111/cobi.13475>.
- Olmedo A., Sharif V., Milner-Gulland E., *Evaluating the design of behaviour change interventions: A case study of rhino horn in Vietnam*, „Conservation Letters” 2017, vol. 11, no 1, pp. 1-9, <https://doi.org/10.1111/conl.12365>.
- Packer H., *The crime tariff*, „The American Scholar” 1964, vol. 33, no 4, pp. 551-557.
- Plywaczewski W., *Kryminologia wobec problemu gatunków inwazyjnych* [Criminology and the problem of invasive species], [in:] W. Plywaczewski, E. Zębek, J. Narodowska, *Odpowiedzialność za środowisko z perspektywy prawa, kryminologii i nauk przyrodniczych* [Responsibility for the environment from the perspective of law, criminology and natural sciences], Difin, Warszawa 2020, pp. 78-136.
- Taleb N., *Antifragile: Things that Gain from Disorder*, New York 2012.
- Thomas-Walters L., *Taking a more nuanced look at behavior change for demand reduction in the illegal wildlife trade*, „A Journal of the Society for Conservation Biology” 2020, vol. 2, no 9, pp. 1-10, <https://www.doi.org/10.1111/csp2.248>.
- Verissimo D., Wan A.K.Y., *Characterizing efforts to reduce consumer demand for wildlife products*, „Conservation Biology” 2019, vol. 33, no 3, pp. 623-633.
- Walters R., *Organized crime and the environment*, [in:] G. Bruinsma, D. Weisburd (eds.), *Encyclopedia of Criminology and Criminal Justice*, Springer, New York 2016, pp. 3368-3375.
- Wong R.W.Y., *The organization of the illegal tiger parts trade in China*, „British Journal of Criminology” 2015, vol. 56, no 5, pp. 995-1013.
- Wyatt T., *Green Criminology & Wildlife Trafficking: The Illegal Fur and Falcon Trades in Russia Far East*, LAP Lambert Academic Publishing, Saarbruecken 2012.
- Wyatt T., *Wildlife Trafficking. A Deconstruction of the Crime, the Victims and the Offenders*, Palgrave Macmillan, Basingstoke 2013.

## Online sources

- Rhino horn: our perspectives on trade*, <https://www.traffic.org/what-we-do/perspectives/trade-in-rhino-horn/> [available: 20.01.2021].