This study analyses the illegal trade in protected fauna and flora species from the perspective of green criminology. In the criminological part, the author diagnoses the causes of these phenomena (etiology), characterizes symptomatic forms of pathologies occurring in this area (phenomenology) and suggests methods for counteracting and combating undesirable phenomena (prevention). Additionally, statistical data concerning the examined phenomenon in Poland are presented. The relations between CITES crimes and other criminological categories are examined. In the legal part, the author refers to regulations of international law, the European Union law and Polish criminal law. The paper also presents principles concerning liability for CITES crimes in Polish criminal law.

INTRODUCTION

Natural heritage, next to cultural heritage, is an element of national heritage for individual states (on the local scale) and human heritage (on the global scale). Its protection and preservation for future generations has attracted the interest of researchers representing multiple academic fields, including criminologists.

In the general view of criminal offences, crimes involving trafficking protected species of fauna and flora are less significant and less harmful for the society than other forms of organized cross-border crimes, such as narcotics, human or arms trafficking. This paper attempts to demonstrate that the so-called CITES crimes, contrary to popular belief, pose an increasing serious criminal threat, bringing significant profits for criminals. Additionally, it presents a general description of the illegal market of protected flora and fauna species in Poland, from the green criminology perspective.

The author of the study sets the following research aims: diagnosing the cause of the illegal trade in protected wildlife species (etiology), describing symptomatic forms of pathologies in this area (phenomenology), formulating methods for efficient prevention and combating undesirable phenomena (counteracting) as well as presenting principles concerning legal liability for smuggling CITES species in the Polish law.
A complex analysis of the subject matter requires the application of various research methods. The author used a dogmatic analysis of international law regulations, European Union law and Polish criminal law, an analysis of criminal statistics and critical analysis of the literature.

Criminology, as science dealing with the issues of crime, delinquency, perpetrators, crime victims and crime control, is an appropriate tool for examining the problem of illegal market of protected wildlife species. In particular, this is an area investigated by experts in so-called “green criminology”.

GENESIS, DEVELOPMENT AND SUBJECTS OF INTEREST IN GREEN CRIMINOLOGY

Eco-criminology/green criminology is one of pioneering unconventional multidisciplinary branches of criminology. The term was used for the first time in the 1990s by M.J. Lynch (Lynch, 1990). A broader interest in this subject matter arose after a publication devoted to green criminology in a special issue of the “Theoretical Criminology” journal in 1998 (South & Beirne, 1998). Other English terms with a similar meaning in the literature include: eco-global criminology (White, 2009, White, 2011, Ellefsen, Larsen, & Sollund, 2012), green-cultural criminology (Brisman & South, 2013) and conservation criminology (Gibbs, Gore, McGarell, & Rivers, 2010).

A controversial topic is whether green criminology should be described as a new paradigm/discipline within criminology. Opponents of this view emphasize that green criminology has not yet developed concise, uniform theoretical foundations. However, this research area, unquestionably drawing on the previous achievements in criminology (e.g. radical criminology, economic analysis of crime, crime opportunity theories) is creatively developing and enhancing this branch of studies. Green criminologists also emphasize that it is more important to solve practical criminological problems than to build theoretical justifications proving the academic independence of green criminology (Pływaczewski, 2013).

Experts in this research area have been studying ecological damage, crimes against the natural environment and environmental protection law. Over the last 20 years, green criminologists have carried out research covering an increasingly broader spectrum. The major areas include the following issues: deforestation, global warming, soil, water and air pollution, poaching, illegal trade in endangered species, cruelty to animals, illegal trade in waste, food fraud, genetically modified food, biodiversity loss, consequences of natural disasters and ecological wars.

Working groups gathering green criminologists have been established at the American Society of Criminology and European Society of Criminology. At present, this green criminological trend is represented in criminology e.g. by M.J Lynch, R. White, R. Walters, A. Brisman, N. South, T. Benton, R. Sollund, T. Spapens, D. van Uhm, T. Wyatt, J. Maher, G. Pink, D. Siegel and G. Meško.

In Poland, the first publications concerning green criminology emerged at the end of the first decade of the twenty-first century. An unquestionable pioneer in green criminological research in Polish criminology is W. Pływaczewski. Under his supervision, a team of criminologists of the Chair of Criminology and Criminal Policy of the Faculty of Law and Administration of the University of Warmia and Mazury in Olsztyn have been conducting research into general issues of crimes against natural heritage. The research group specialises, first of all, in crimes against the environment, and its achievements in this field have led it to be described (with some degree of caution and modesty), the Olsztyn School of Eco-criminology.
TRADE IN PROTECTED WILDLIFE SPECIES UNDER THE WASHINGTON CONVENTION AND EUROPEAN UNION AND POLISH LAW

A key act in international law regulating this subject matter is the Convention on International Trade in Endangered Species of Wild Fauna and Flora. It was adopted on 3 March 1973 in Washington, and is commonly referred to as the Washington Convention, or the CITES Convention. Currently, 183 countries from all over the world are party to the convention.

The aim of the Washington Convention is the protection of wild animals and plants against excessive exploitation caused by international trade. Three appendices to the Convention list different groups of species: Appendix I – species threatened with extinction, Appendix II – species which may become threatened with extinction in the future as a result of unsustainable trade in those species, and Appendix III – species reported by the parties to the Convention as currently requiring protection. At present, Appendix I lists 1,045 taxa, Appendix II - 34,608 taxa, and Appendix III lists 217 taxa. According to the provisions of the Convention, the trade in species listed in Appendices can only be conducted based on an export permit, a model of which is attached as Appendix IV to the Convention. Any trade in CITES species without a permit or violating the provisions of the permit is prohibited by the Convention. Pursuant to Art. 8 of the Convention, its parties are obliged to take relevant measures aimed at prohibiting trade in specimens of animals and plants that violates the provisions of the Convention. According to the Convention, such measures include penal sanctions for trading in or keeping such species and confiscation or sending back such specimens to the export state.

The European Union ratified the Washington Convention on 9 April 1995, and it became effective for the EU on 8 July 1995. Provisions of the Convention were implemented into European law by Council Regulation (EC) No. 338/97 of 9 December 1996 on the protection of species of wild fauna and flora by regulating trade therein. In practice, EU law regulations are even more restrictive than the regulations provided in the CITES convention.

Poland ratified the Washington Convention on 12 December 1989, and it became effective on 12 March 1990. Provisions of the Convention were implemented in Polish law through the Nature Conservation Act of 16 April 2004. Under its Art. 126, this act penalizes the cross-border transport of species covered by the protection without a permit or in violation of permits, and Art. 128a penalizes any trade in protected species. Both deeds are punishable by terms of imprisonment from 3 months to 5 years. Additionally, under Art. 129, the court can order the confiscation of plants and animals being the object of the crime.

CITES CRIMES AND OTHER CRIMINOLOGICAL CATEGORIES OF OFFENCES

With reference to criminal behaviours related to the species protected by the Washington Convention, the term of so-called “CITES crimes” was formulated. Criminal behaviours related to operations in the illegal market of protected wildlife species belong to a broader criminological category of crimes against the environment.

The classification applied in Poland for the purpose of illustrating the structure of criminal activity follows the methods of presenting criminal statistics, with a division into criminal (common) offences and economic crimes. Crimes related to smuggling, including the smuggling of protected wildlife species, are classified as economic crimes. However, CITES
crimes can be committed by perpetrators described as both “white collar” and “blue collar” criminals.

The smuggling of CITES species as a cross-border crime demonstrates close relationships with organized crime. Although individual specimens of wild fauna and flora are smuggled by individual perpetrators (most often tourists unaware of the illegality of this practice), mass-scale smuggling requires the cooperation of trafficking gangs with a global network of links. Therefore, CITES crimes fit into the concept of “globalization of crime”. For participation in an organized criminal group, Art 258 of the Polish Penal Code provides for a penalty of imprisonment from 3 months to 5 years.

In recent research, criminologists have emphasized the so-called “virtualization of crime”. This phenomenon involves the use of modern technology tools, particularly the Internet, by criminals. An increasing number of crimes are being committed in the so-called illegal e-commerce markets. In view of the modus operandi of the perpetrators, crimes of this type are classified as a form of cybercrime. Traditionally, trade in wild flora and fauna species was conducted in animal markets or in pet shops. Currently, most transactions take place through online auction services, such as Allegro, eBay, Amazon, AliExpress or other Chinese-speaking auction websites. Trading activity also takes place on closed or open social media forums, chats and thematic websites intended for animal or plant collectors. The above-mentioned e-commerce tools make it possible for traders to advertise, communicate with clients and carry out transactions concerning wild animals and plants. Illegal CITES species’ markets are also possible through auction websites operating on the Darknet, such as Silk Road. The anonymity of transaction participants is additionally facilitated through the use of cryptocurrencies, such as bitcoin (Pływaczewski & Duda, 2019b). On one hand, the Internet can facilitate illegal activity, but on the other, it also provides the authorities with the possibilities to monitor and respond to criminal activities related to trade in wild fauna and flora. Proof of the significance of the problem of illegal internet trade in CITES species is the establishment in 2009 of the “Working group on e-commerce of specimens of CITES-listed species” at the Regular Committee of the Washington Convention. A study carried out by the International Fund for Animal Welfare indicated that the United States is responsible for 70% of illegal online trade in CITES-protected species (Todd & Place, 2010).

Criminologists have also recorded cases of illegal trade in CITES-listed species providing a source of income used later to finance other serious criminal acts, such as terrorism, rebel groups and wars. A good example was the Liberian dictator, Charles Taylor, who sold exotic timber in exchange for weapons (Blundell, 2007), or the operation of “shifta” hit squads in Kenya and Tanzania, who engage in the illegal acquisition and sale of ivory for the same purpose (Pływaczewski, 2011b, Pływaczewski, 2011c).

ETIOLOGY OF CITES CRIMES

A criminological analysis of smuggling CITES-listed specimens should begin with a presentation of etiological factors determining this pathology. The literature of the subject indicates that the cause of the natural heritage smuggling is due to: the limited resources of wild fauna and flora species, higher prices in western countries than in eastern countries, increased cross-border traffic, relative inefficiency of customs control, the smugglers’ feeling of impunity, relative ease
of hiding the smuggled CITES-listed species, the focus of the customs authorities on preventing the smuggling of high-excite goods (alcohol, cigarettes, fuel), lack of awareness of customs services as to the scale of the threat and the lack of social awareness of the illegality of the trade in CITES-listed species (Pływaczewski, 2016, Pływaczewski, Nowak, & Porwisz, 2017).

Discussion of criminological theories explaining the reasons of crimes related to smuggling exceeds the limits of this study, but the concepts that should be mentioned here include: routine activity theory (M. Felson), social learning theory (A. Bandura), differential association theory (E. Sutherland), anomie theory (R. Merton), subcultural theory (A. Cohen), neutralization theory (G. Sykes & D. Matza), theory of economic conflicts (J. Reiman) and the economic theory of crime (G. Becker) (Tibbets, 2019).

CITES crimes, as one of the manifestations of economic crimes, are characterized by the specific motivation of perpetrators, which is the desire for profit. The crimes of this category generate high profits with a relatively low risk of punishment. Additionally, penalties for smuggling CITES-listed species are much lower than penalties for other types of smuggling. For comparison, in the Polish criminal law, drug trafficking carries a prison sentence of up to 15 years, arms trafficking is penalized by up to 10 years of prison and human trafficking - up to 15 years of prison. The smuggling of wildlife species is therefore a profitable and less risky activity for the perpetrators.

**PHENOMENOLOGY OF CITES CRIMES**

In the area of smuggling crime phenomenology, the attention is primarily put on a very broad spectrum of smuggled objects, which include live animals, dead animals (bush meat), stuffed animals (taxidermy) and goods made from animal skin and bones (clothes, shoes).

Endangered fauna species are purchased by laboratories (e.g. buying monkeys, frogs and leeches), private collectors (e.g. buying snakes, parrots, spiders, turtles or tropical fish), zoological gardens (e.g. buying predatory birds, tigers), restaurant owners (e.g. buying shark fins and bush meat), manufacturers of natural medicine preparations (buying, among others, rhinoceros horns or elephant tusks).

As regards smuggled endangered flora species, they most frequently include: orchids, sundews, cacti and rare timber, e.g. ebony, mahogany or cedar (Wu, 2007). It must be also emphasized that the demand for smuggled CITES-listed species generates huge destruction in the natural environment and causes the extinction of endangered species.

A particularly interesting issue is the *modus operandi* of CITES-listed species smugglers. It is very highly differentiated and generally limited only by the creativity of the smugglers. In retail volumes, small specimens of plants and animals are hidden in hand luggage or in the clothes of passengers at airports. Larger specimens or higher amounts are transported in containers together with legal goods or using specially prepared double bottoms in trucks and cars crossing road border crossings. The largest specimens and the highest amounts are transported by sea in freight containers (e.g. ivory). At present, increasingly more often protected fauna and flora species are smuggled through postal and courier shipment, so crimes are increasingly frequently being detected in warehouses inside the country and not at the borders. It should be emphasized that, in Poland, cases of trafficking CITES-listed species over the so-called “green border” do not occur in practice.
Smugglers transport plants and animals without permits, transport species other than those declared in transport documents, transport a higher amount of species than declared in transport documents, declare a false country of origin, and even change the appearance of animals, e.g. by painting them (Chackiewicz, 2013).

In analysing the destination of trafficking in CITES-listed species, it should be noted that Poland is mainly a so-called transit country, and less often the final destination country. This results mainly from the relatively low purchasing capabilities of Polish society. The countries of origin, also referred to as source countries, are the countries of South and Central America, Africa, Asia and Eastern Europe (former Soviet republics). Destination countries, also referred to as market countries, are located in North America, Western Europe and in the Far East. One of the main smuggling routes runs through Poland, from eastern to western Europe.

The most frequently revealed cases of CITES-listed species smuggling at Polish borders include: black caviar, medical leeches, eels, parrots, turtles, snakes, corals, ivory, products of traditional Asian medicine (TAM/TCM), e.g. ginseng roots, musk, bear bile, powdered seahorses (Pływaczewski & Duda, 2019a). In Poland, the number of detected CITES-listed specimen trafficking cases a year amount to, on average, from 100 to 250 (Tusiński, 2016). This is only 0.025% of the total number of crimes detected in Poland. Of course, this is only the figure showing detected crimes, while the number of non-revealed crimes (dark figure) is difficult to estimate.

At the margin of the main discussion, some interesting and atypical cases of smuggling can be mentioned as a curiosity. One example is the smuggling of mammoth tusks by Russians, obtained during an illegal search in Siberia and sold further on as ivory. Legal qualification of the smuggling was a problem in this case, since mammoths, as extinct animals, are not subject to protection under the Washington Convention. Eventually, the mammoth tusks were defined as cultural objects.

Illegal transfer of raw amber is another typical form of smuggling at the Polish-Russian border. This particularly concerns the Kaliningrad District, where 90% of the total resources of this raw material are located. It is extracted by the Kaliningrad Amber Combine in the town of Jantarnyj (Янтарный), and according to the Russian law, the transport of raw amber across the board is illegal. At the same time, the Polish city of Gdańsk, situated 160 km from Kaliningrad, is the largest amber jewellery manufacturing centre in the world. Therefore, it is obvious that there is an illegal amber market in this region of Europe.

COUNTERACTING CITES CRIMES

CITES crimes are combated on three planes – legislative (penalisation of CITES crimes), institutional (operation of law enforcement authorities and services), and social (increasing legal awareness).

Under Polish criminal law, the provisions of the Washington Convention were implemented in the above-discussed provisions of the Natural Conservation Act. It is prohibited in Poland to transport abroad or to trade in CITES-listed species without a permit or in violation of the permit conditions. Additionally, the Penal Code provides for higher penalties for participation in an organized criminal group, for making crime a regular source of income and for recidivism.
There is no specialist service in Poland responsible for preventing the smuggling of CITES-listed species. These tasks are assigned to the Customs Service, the Border Guard and the Police. Designated officers, referred to as “CITES coordinators” operate within the police and customs structures. They have an appropriate educational background, are prepared and competent and are involved, first of all, in the training of other officers in CITES-related issues.

A significant question is also cross-border and international cooperation of law enforcement authorities (Interpol, Europol). This is a consequence of the fact that the illegal market of CITES species is controlled by international smuggling gangs. As criminologists observe, routes used for trafficking CITES-listed species are also used by organised crime groups to check the possibility of using a given smuggling route for future drug trafficking (Pływaczewski, 2010).

In view of crime virtualization, law enforcement authorities should pay particular attention to international auction websites, where the trade in smuggled specimens is carried on. One of the most important elements in counteracting the illegal online trade in CITES-listed species is, therefore, the cooperation of law enforcement authorities with owners and administrators of auction portals (Pływaczewski, 2017).

As regards social policy, it is necessary to increase legal awareness of the society as regards the penalties for purchasing and transporting CITES-listed species across borders. Media campaigns have been organized to make citizens aware that specific species of animals or plants are protected by law and keeping them is illegal. With this aim in view, exhibitions of CITES-listed specimens confiscated by officers are often placed at air border crossings. The intention is to show tourists that exotic plants or animals are not the best holiday souvenirs (Pływaczewski, 2011a).

CONCLUSIONS

To summarize, it should be emphasized that CITES crimes are an element of crime against global natural heritage. Examination of the causes, manifestations and methods to counteract this pathology is one of the research interest areas investigated by green criminologists. In Poland, this subject matter is explored, first of all, by the researchers at the Olsztyn School of Eco-Criminology. Fauna and flora species threatened with extinction are protected by international legal regulations (the Washington Convention), the European Union regulations (Council Regulation No. 338/97) and Polish law (Natural Conservation Act). CITES crimes are considered a separate criminological category, as part of a broader category of crimes against the environment. Consequently, those crimes are sometimes wrongly classified as so-called victimless crimes. Transnational crime against natural heritage is conservatively estimated at about 90% of crimes. The detection of such crimes is also low, as they remain outside the main focus of law enforcement authorities. Additionally, criminologists also note the phenomenon of the so-called “virtualization of crime” as the trade in smuggled goods is mostly conducted not through the traditional distribution channels, but through auction portals, both on the Internet and the Darknet. With the emergence of an illegal online market, a shift has been observed from traditional common crime to cybercrime and economic crime. In relation to the above, CITES offenders should be considered as being both white collar criminals (typically involving economic crimes) as well as blue collar criminals (responsible for common crimes). CITES crimes show close links with economic crimes, organized crimes and cybercrimes, and even with financing terrorism and armed conflicts. The fact that criminal networks engaged in CITES crimes operate globally confirms
the “crime globalisation” concept. Criminologists estimate that, at present, the illegal market in wildlife species brings profits only slightly lower than drugs, firearms or human trafficking. Thus, contrary to popular belief, the discussed category of crime poses a significant threat to both global and national security.

REFERENCES


• Tusiński, R. (2016). Statystyki, statystyki, statystyki... i jeszcze trochę statystyk. _Wiadomości Celné, 8_, 5-6.

