

Praxeological principles of forensic veterinary examination: issues and optimization of ways to their solving

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This article purpose is a scientific survey of current state and ways to improve effectiveness of forensic veterinary activity through the use of a praxeological approach. Complex of methods (dialectical, system-structural, system-functional, formal logic (analysis, synthesis, deduction, induction, analogy), axiological, modeling) was used to achieve the goal. Praxeology concept is interpreted in forensic and veterinary aspect. Influence of praxeological properties on stimulating development of specific veterinary knowledge in the context of the formation of the concept of effective forensic veterinary activity has been clarified. Forensic expert praxeology was analyzed from a review of its efficiency and effectiveness of functioning of forensic veterinary mechanisms. Peculiarities of praxeological approach in the forensic and veterinary field are argued. Forensic veterinary practice is considered as one of the means of expert provision of legal proceedings. Attention is focused on the fact that the development and improvement of theory, methodology and praxeology of forensic veterinary examination is the basis for increasing judiciary efficiency. The newest praxeological construction of domestic forensic veterinary examination, an addition to Criminal Procedural Code of Ukraine (regarding obligation to appoint forensic veterinary examination to find out the nature and degree of severity of damage caused to the animal's health, as well

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as to establish the cause of its death) is proposed and Scientific and methodological recommendations on issues of preparation and assignment of forensic examinations and expert researches (expansion of the range of questions that are asked to the forensic veterinary expert during appointment of the relevant examination).

Keywords: forensic veterinary medicine; forensic veterinary examination; forensic veterinarian; forensic expert conclusion; forensic science institutions; effective activities; practical significance; praxeology; animals; injuries.

Research Problem Formulation

Forensic examination is a scientifically sound and reliable form of specific expertise application in legal proceedings. Forensic expert conclusion based on the analysis of factual data clarified by forensic expert, increases the evidence level ¹ and allows law enforcement agencies and

the court to substantiate and make objective procedural decisions ².

Forensic veterinary examination (hereinafter referred to as FVM) ³ is appointed during the pre-trial investigation and trial of cases of offenses against the life and health of animals (ill-treatment ⁴, illegal hunting ⁵ and/or aquatic mining ⁶, violation of veterinary rules ⁷ etc.).

- 1 Надіжко М. М. Використання спеціальних знань у судово-експертній діяльності: теоретико-правові аспекти. *Криміналістичний вісник*. 2020. № 1 (33). С. 25–36. DOI: 10.37025/1992-4437/2020-33-1-25 (date accessed: 08.07.2024).
- 2 Попович Є. М. Єдність науки та практики в судово-експертній діяльності. *Теорія та практика судової експертизи і криміналістики*. 2019. Вип. 19. С. 158–172. DOI: 10.32353/khrife.1.2019.012 (date accessed: 08.07.2024).
- 3 Ключев О. М. Удосконалення експертного забезпечення правосуддя: теоретичні, правові та організаційні аспекти. *Там само*. С. 102–117. DOI: 10.32353/khrife.1.2019.08 (date accessed: 08.07.2024).
- 4 Smith-Blackmore M., Bethard J. D. A multidisciplinary investigation of chronic animal abuse: Collaboration between veterinary forensics and forensic anthropology. *Journal of Forensic Sciences*. 2020. Vol. 66. Is. 1. Pp. 389–392. DOI: 10.1111/1556-4029.14576 (date accessed: 08.07.2024) ; Скрипка М., Панікар І., Запека І., Куралес О. Деякі аспекти патогенезу та патоморфології первинної складної травми хребта спинного мозку. *Agrarian Bulletin of the Black Sea Littoral*. 2022. Is. 104. Pp. 26–33. DOI: 10.37000/abbsl.2022.104.04 (date accessed: 08.07.2024).
- 5 Horbunova K. V. Criminal law signs of illegal hunting as an element of criminological characteristics. *Bulletin of Kharkiv National University of Internal Affairs*. 2022. Vol. 98. Is. 3. Pp. 152–159. DOI: 10.32631/v.2022.3.14 (date accessed: 08.07.2024).
- 6 Черевко К. О. Незаконне зайняття рибним, звіриним або іншим водним добувним промислом в розрізі українського законодавства. *Вісник Кримінологічної асоціації України*. 2020. № 2 (23). С. 61–68. URL: <https://dspace.univd.edu.ua/server/api/core/bitstreams/b1d68401-322b-41e0-b56f-1ea95d82352d/content> (date accessed: 08.07.2024).
- 7 Caceres P., Awada L., Weber-Vintzel L., Morales R., Meske M., Tizzani P. The World Animal Health Information System as a tool to support decision-making and research in animal health. *Revue Scientifique et Technique*. 2023. Vol. 42. Pp. 242–251. DOI: 10.20506/rst.42.3367 (date accessed: 09.07.2024).

Unfortunately, nowadays the meaning of praxeological approach to FVM as a basic concept has not been formulated, its significance in the methodology of this science has not been determined, which indicates relevance of the proposed research for practical forensic and law enforcement activities.

Analysis of Essential Researches and Publications

Praxeological aspects of jurisprudence in general and criminalistics and forensic science in particular were studied by the following domestic and foreign scientists: E. Simakova-Yefremian ⁸ (considered the interdependence of European integration procedures and specific expertise integra-

tion in Ukraine); B. Hamaliuk, V. Lampel and R. Tsymbalista ⁹ (outlined the institutional foundations of the formation of the system of forensic expert activity (hereinafter referred to as FEA) in Ukraine); A. Kovalenko ¹⁰ (revealed methodological significance of praxeological approach in criminalistics); T. Loza ¹¹ (suggested ways to solve the problems of FEA in Ukraine); E. Popovich ¹² (argued the unity of science and practice in FEA); G. Spitsyna and S. Belevtsova ¹³ (justified the newest paradigm of the theory and practice of forensic examination in Ukraine); I. Shynkarenko ¹⁴ and H. Spitsyna (analyzed the historical origins and prospects for the development of forensic examination); V. Shepitko and M. Shepitko ¹⁵ (examined the doctrine of criminology and forensic examination in Ukraine); O. Kliuiev and E. Simakova-

- 8 Сімакова-Єфремян Е. Б. До питання взаємозалежності європейських інтеграційних процесів і тенденцій інтеграції спеціальних знань в Україні. *Теорія та практика судової експертизи і криміналістики*. 2017. Вип. 17. С. 152–158. URL: http://nbuv.gov.ua/UJRN/Tpsek_2017_17_22 (date accessed: 15.07.2024).
- 9 Гамалюк Б. М., Лямпель В. І., Цимбаліста Р. Г. Інституційні засади формування системи судово-експертної діяльності в Україні. *Дніпровський науковий часопис публічного управління, психології, права*. 2023. № 2. С. 61–66. DOI: [10.51547/ppp.dp.ua/2023.2.9](https://doi.org/10.51547/ppp.dp.ua/2023.2.9) (date accessed: 15.07.2024).
- 10 Коваленко А. В. Сутність та методологічне значення праксеологічного підходу в криміналістиці. *Наукові записки НаУКМА. Юридичні науки*. 2020. Т. 5. С. 32–39. DOI: [10.18523/2617-2607.2020.5.32-39](https://doi.org/10.18523/2617-2607.2020.5.32-39) (date accessed: 15.07.2024).
- 11 Лоза Т. В. Проблеми організації судово-експертної діяльності в Україні та шляхи їх вирішення. *Аналітично-порівняльне правознавство*. 2023. № 6. С. 633–641. DOI: [10.24144/2788-6018.2023.06.112](https://doi.org/10.24144/2788-6018.2023.06.112) (date accessed: 15.07.2024).
- 12 Попович Є. М. Зазнач. твір. DOI: [10.32353/khrife.1.2019.012](https://doi.org/10.32353/khrife.1.2019.012) (date accessed: 08.07.2024).
- 13 Спіцина Г. О., Белевцова С. О. Щодо питання формування новітньої парадигми теорії та практики судової експертизи у Україні. *Актуальні питання судової експертизи і криміналістики* : зб. мат-лів міжнар. наук.-практ. конф., присвяч. 150-річ. з дня народж. Засл. проф. М. С. Бокаріуса (Харків, 18–19.04.2019). Харків, 2019. С. 63–65. <https://drive.google.com/file/d/1LiBduUEvfGdV2KsUTwMKLi6QvVVRzo3/view> (date accessed: 15.07.2024).
- 14 Шинкаренко І. Р., Спіцина Г. О. Історичні витоки та перспективи розвитку теорії та практики судової експертизи. *Актуальні питання судової експертизи та криміналістики* : зб. мат-лів міжнар. наук.-практ. конф., присвяч. 95-річ. створ. ХНДІСЕ ім. Засл. проф. М. С. Бокаріуса (Харків, 10–11.10.2018). Харків, 2018. С. 20–22.
- 15 Шепітько В., Шепітько М. Доктрина криміналістики та судової експертизи: формування, сучасний стан і розвиток в Україні. *Право України*. 2021. № 8. С. 12–27. DOI: [10.33498/louu-2021-08-012](https://doi.org/10.33498/louu-2021-08-012) (date accessed: 15.07.2024).

Yefremian¹⁶ (outlined doctrinal approaches to forensic examination in Ukraine); V. Bryzhko¹⁷ (characterized praxeology in the field of information law); U. Tsmots¹⁸ (argued legal praxeology as a factor in the effectiveness of legal practice); M. Shcherbakovskiy¹⁹ (explained the peculiarities of conducting and using forensic examinations in criminal proceedings).

Article Purpose

Investigate the current state of the FVM to ensure the effectiveness of justice, reveal the essence of the praxeological approach and outline its capabilities to promote the development of the theory, methodology and practice of FVM.

Research Methods

Theoretical and methodological basis of our scientific research is a set of interdependent methods: dialectical, system-structural, system-functional, axiological, formal logic (analysis, synthesis, deduction, induction, analogy, modeling, etc.).

Main Content Presentation

Praxeology (from Greek: πράξις — action and from Greek: λογία — teaching) studies ways to increase efficiency and usefulness of human activity in various fields. Therefore, the ***purpose of forensic praxeology*** (as

a general component) should be to *study the principles, regularities, conditions, rationality, efficiency, features of implementation, use and application of means, techniques and methods of forensic examination, and one of its directions is forensic veterinary practice, for which praxeology produces the most effective algorithm of actions*. In its turn, forensic veterinary practice forms the basis for developing new and improving existing research methods (methodological function) and criteria for evaluating classic and new research objects (evaluative function), and also applies them in practice (applicable function) and familiarizes uninformed with possibilities forensic examination to determine factual data and circumstances of commission of offenses (educational function).

Forensic veterinary practice can be characterized as a meaningful and consistent activity aimed at obtaining a certain result, which is :

- mechanism of self-realization of forensic experts, in particular, due to creative process (development of heuristic research methods);
- driver of FVM progress, as it identifies problems of expert practice and outlines ways to solve them and optimize already applied solutions;
- factor in formation of new directions and scientific schools in the FVM;
- educational center.

16 Ключев О., Сімакова-Єфремян Е. Доктринальні підходи до судової експертизи в Україні. *Право України*. 2021. № 8. С. 28—43. DOI: 10.33498/louu-2021-08-028 (date accessed: 15.07.2024).

17 Брижко В. М. Філософія права: праксеологія в сфері інформаційного права (ст. 28—34). *Інформація і право*. 2019. № 3(30). DOI: 10.37750/2616-6798.2019.3(30).194777 (date accessed: 08.07.2024).

18 Цмоць У. О. Правова праксеологія як чинник ефективності юридичної практики. *Науковий вісник Львівського державного університету внутрішніх справ. Серія юридична*. 2023. № 4. С. 155—164. DOI: 10.32782/2311-8040/2023-4-18 (date accessed: 08.07.2024).

19 Щербаківський М. Г. Проведення та використання судових експертиз у кримінальному провадженні : монографія. Харків, 2015. 560 с. URI: <http://dspace.univd.edu.ua/xmlui/handle/123456789/6020> (date accessed: 08.07.2024).

Forensic veterinary praxeology summarizes special veterinary knowledge, analyzes the means, forms and methods of their application in the practice of FVM (taking into account the state of research objects, methodological support, etc.). Effectiveness of forensic veterinary activities (hereinafter referred to as FVA) depends on the use of appropriate praxeological tools, such as:

- typology and formation of a system of principles and categories;
- development of theory and methodology of forensic veterinary research (hereinafter referred to as FVR);
- generalization of FVM practice with the outline of its strategic prospects.

In accordance with the above, forensic veterinary praxeology can be defined as a special branch of philosophical and expert research aimed at practical activities, in which the theoretical developments and practical experience of the FVM are used for the rational analysis of forensic phenomena, exploration and substantiation of expert conclusions and ways to solve problems in the field of FVM.

In fact, the FVA is activity of expert witnesses who have specific veterinary expertise and implement them in order to provide expert justice. In view of this, forensic experience influences the development of forensic science and necessitates the regulation of the FVA. Thus, experimental nature is an immanent property of the FVA providing practical and pragmatic function of forensic expertology, and forensic veterinary practice, together with forensic expert doctrines, are components of forensic expertology.

Forensic veterinary praxeology is based on expert ontology (essential conditionality), legal epistemology (cognitive

activity), expert axiology (value guidelines) and forms an integral system and forms productive mechanisms for the functioning of expert practice to influence the latter on the quality of FVR with the aim of improving the effectiveness of the judiciary in general. Improvement and implementation of new data on the theory and methodology of research into the practice of FVM are means of increasing the effectiveness of FVR.

Application issue of forensic veterinary praxeology to this day is quite problematic, so it needs to be resolved. FVM does not participate in the investigation and detection of offenses, but only contributes to the optimization of law enforcement activities by specific methods and means. The focus of FVM on the optimization of activities makes it possible to distinguish within the limits of its methodology a **praxeological approach**, under which we understand a system of theoretical foundations from a purposeful study of the regularities of planning, forecasting and projecting of professional forensic veterinary activity that consists in considering actions and expected effects, comprehensive self-analysis and self-evaluation, modeling conditions, directions and means of improvement based on a complex of special veterinary knowledge and empirical experience, as well as in carrying out certain actions taking into account the peculiarities of the expert situation to obtain effective results.

A special place in the formation and development of forensic veterinary medicine and FVM is occupied by scientists of the Kharkiv Forensic Veterinary School (hereinafter referred to as KFVS): defended 1 doctoral dissertation (*Structural parameters of the skeleton of mammals as objects of forensic veterinary examination when determining the species belonging of biological material*, by I. Yatsenko, 2009) and 3 PhD

dissertation (*Morphological parameters of the bones of the wrist and fingers when determining the age of cattle*, by V. Kamianskyi, 2011; *Morphological specifics of the bones of metatarsal and fingers of the pelvic limb as criteria for determining age of dairy cattle of productivity*, by M. Bondarevsky, 2012; *Forensic veterinary criteria for determining the age and gender of dairy cattle by morphological features of the nasocerebral skull*, by R. S. Abuznaid Karem, 2016), ongoing 4 dissertations research (*Forensic-veterinary determination of the degree of severity of damage caused to the health of an animal* by O. Parylovskyi; *Forensic veterinary examination of animal corpses in their different states and depending on the category, genus and type of death*, by R. Kazantsev; *Forensic-veterinary diagnosis and evaluation of bodily injuries of dogs and cats caused by sharp objects*, V. Kozachok; *Forensic examination of food products of animal origin as a means of detecting their non-compliance with regulatory requirements in criminal proceedings*, N. Kozakova). In 2010, the Department of Veterinary-Sanitary Examination and Forensic Veterinary Medicine was established at the Kharkiv State Zoo-Veterinary Academy (currently: State Biotechnological University) ²⁰.

Currently, 3 international conferences have been held on FVM issues: *Problems, latest achievements, and prospects for the development of veterinary-sanitary expertise and forensic veterinary medicine* (dedicated to the 90th anniversary of the birth of the scientist-veterinary expert V. P. Obratsov; 14-15.05. 2014), *Actual issues, latest achieve-*

ments and prospects for the development of hygiene and expertise of food products and forensic veterinary medicine (dedicated to the 140th anniversary of the birth of veterinary expert, Professor O.M. Petrov; 14–15.09.2017) and *Current issues of forensic veterinary examination: realities and prospects* (May 23-24, 2024).

2019 at the initiative of National Scientific Center «Hon. Prof. M. S. Bokarius Forensic Science Institute» (hereinafter referred to as NSC «Hon. Prof. M. S. Bokarius FSI») in the system of forensic institutions of the Ministry of Justice of Ukraine launched a new expert specialty 18.1 “Veterinary research”, the basis for which was the latest scientific research on FVM animals affected by ill-treatment, where, in particular, prospects for development of FVM in Ukraine are substantiated ²¹. Since many issues of the FVM are still in the process of development, testing and implementation, it can be argued that the developments of the scientists of the KFVS created the conditions for expanding, deepening and significantly supplementing previous scientific achievements in this area, which had a positive impact on the development of the FVM praxeology in Ukraine.

Since the praxeological approach focuses on the development of effective and rational means, methods and techniques of expert research, it can be considered one of the principles of the formation of new methods of research. Therefore, we consider it expedient to trace significance of the praxeological approach as a guiding

20 Яценко І. В., Дегтярьов М. О., Бондаревський М. М., Труш А. М. Харківська школа видатних діячів ветеринарно-санітарної та судово-ветеринарної експертизи. *Проблеми зооінженерії та ветеринарної медицини*. 2014. Вип. 28 (2). С. 20–28. URL: [http://nbuv.gov.ua/UJRN/pzvm_2014_28\(2\)_4](http://nbuv.gov.ua/UJRN/pzvm_2014_28(2)_4) (date accessed: 08.07.2024).

21 Yatsenko I. V., Zapara S. I., Zon G. A., Ivanovskaya L. B., Klochko A. M. Animal Rights and Protection against Cruelty in Ukraine. *Journal of Environmental Management and Tourism*. 2020. Vol. 11. Is. 1 (41). Pp. 91–103. DOI: [10.14505/jemt.11.1\(41\).11](https://doi.org/10.14505/jemt.11.1(41).11) (date accessed: 08.07.2024).

principle of the FVR, as well as to find out its place in the theory and methodology of the FVR.

Praxeological analysis of FVM is a complex process that covers different aspects of this activity. Within the framework of our study, we will highlight the fol-

lowing main aspects of it: the basis for the emergence and development of scientific FVM; praxeological issues of the theory and methodology of FVM; the doctrine of the phenomenon of forensic expert; improvement of national legislation on FVM (see Fig.).

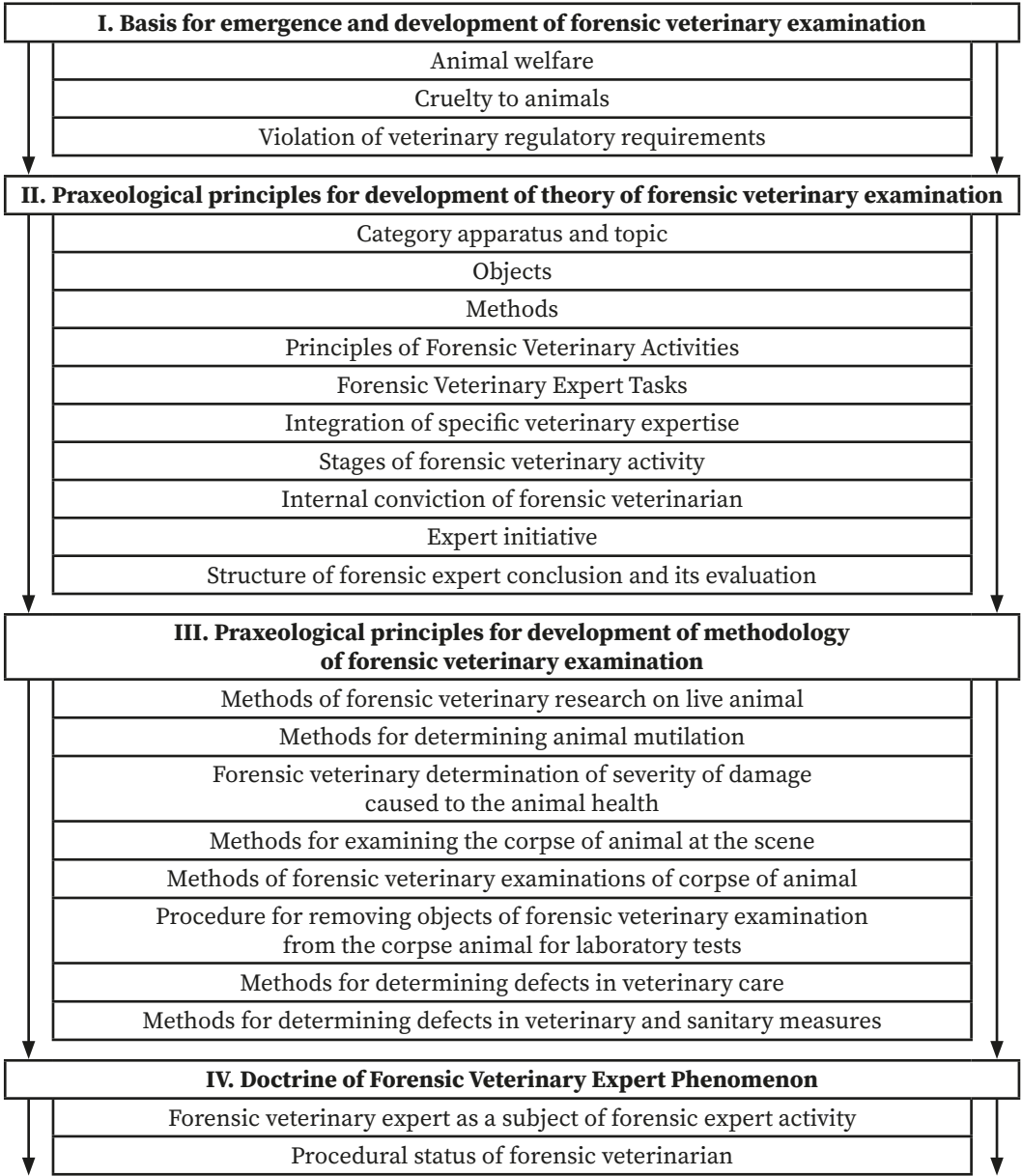




Fig. Praxeological design of forensic veterinary examination in Ukraine

Let us characterize selected praxeological FVM aspects in more detail.

I. Basis for FVM emergence and development

The basis for the initiation and development of FVME was a thorough study of animal welfare and cruelty both in Ukraine and ²² abroad by scientists from KFVS ²³, that contributed to:

- identification of areas for improving FVM: development, approval and implementation of regulations on the FVR of live animals and animal corpses, the use of latest information technologies in FVM;

- author's formulation of the definition of *cruelty to animals* under the criminal qualification of this offense;
- classification of consequences of cruelty to animals that are FVM topic;
- latest achievements in FVM, outlining the prospects for its development in Ukraine.

FVM is appointed and conducted in criminal proceedings, in administrative, civil or economic cases. Most often, the need for special veterinary knowledge in the form of forensic examination arises at the stage of pre-trial investigation or judicial investigation in connection with

22 Лозо О. В., Пілюшенко Д. О. Актуальні питання правового регулювання захисту тварин від жорстокого поводження. *Юридичний науковий електронний журнал*. 2020. № 7. С. 225—228. DOI: 10.32782/2524-0374/2020-7/57 (date accessed: 08.07.2024) ; Ющик О. І. Жорстоке поводження з тваринами: кримінально-правовий аспект. *Приватне та публічне право*. 2022. № 2. С. 46—51. DOI: 10.32845/2663-5666.2022.2.8 (date accessed: 08.07.2024).

23 Sandøe P., Hansen H. O., Bokkers E. A. M., Enemark P. S., Forkman B., Haskell M. J., Lundmark Hedman F., Houe H., Mandel R., Nielsen S. S., de Olde E. M., Palmer C., Vogeler C. S., Christensen T. Dairy cattle welfare — the relative effect of legislation, industry standards and labelled niche production in five European countries. *Animal*. 2023. Vol. 17. Is. 12. Art. 101009. DOI: 10.1016/j.animal.2023.101009 (date accessed: 08.07.2024) ; Araújo D., Lima C., Mesquita J. R., Amorim I., Ochôa C. Characterization of Suspected Crimes against Companion Animals in Portugal. *Animals*. 2021. Vol. 11. Is. 9. Art. 2744. DOI: 10.3390/ani11092744 (date accessed: 08.07.2024) ; Gomes L. B., Paiva M. T., de Oliveira Lisboa L., de Oliveira C. S. F., de Cassia Maria Garcia R., de Magalhães Soares D. F. Diagnosis of animal abuse: A Brazilian study. *Preventive Veterinary Medicine*. 2021. Vol. 194. Art. 105421. DOI: 10.1016/j.prevetmed.2021.105421 (date accessed: 08.07.2024).

offenses (crimes, administrative offenses or civil torts) against the life and health of animals, such as:

- cruelty to animals (Article 299 of the Criminal Code of Ukraine, hereinafter referred to as the *Criminal Code of Ukraine*; Article 89 of the Code of Ukraine on Administrative Offenses);
- illegal hunting (Art. 248 of Criminal Code);
- ecocide (Article 441 of Criminal Code);
- violation of rules for the use of wildlife (Article 85 of Code of Administrative Offenses);
- violation of veterinary rules (Article 251 of Criminal Code);
- violation of legislation on veterinary medicine and animal welfare (Article 107 of the Code of Administrative Offenses);
- violation of legislation on livestock breeding (Article 107-1 of the Code of Administrative Offenses);
- violation of the legislation requirements on identification and registration of animals (Article 107-2 of the Code of Administrative Offenses);
- violation of the rules for keeping dogs and cats (Article 154 of the Code of Administrative Offenses)²⁴.

Examples of factual data and circumstances that require an FVM to be resolved include injury and death of animals as a result of cruelty to them; controversial situations related to the state of health and productivity of animals during their sale and purchase, transportation, breeding and growing; plague of animal aquatic organisms (for example: during the destruc-

tion by Russian aggressors of the Kakhovka Reservoir in 2023); illegal hunting of game animals, mass plague of bees, injury and death of animals as the apotheosis of military actions of the Russian Federation against Ukraine.

II. Praxeological foundations for the development of the FVM theory

A lot of scientific research is devoted to development of FVM theory and ways to solve problems arising in the process of applying its provisions. The result of such explorations is systematic scientific developments in the following areas.

1. Category apparatus and FVM topic

Conceptual-categorical apparatus is one of the essential foundations of the formation of any scientific field, so we proposed the author's version of the cornerstone concept ("**forensic veterinary examination** is research on objects containing information about circumstances of the offense commission, performed by a doctor of veterinary medicine - a forensic by an expert on the basis of a document by which he is instructed to conduct a forensic veterinary examination or is involved in its conduct in accordance with the procedure established by law with the aim of establishing the circumstances and factual data on veterinary and certain biological issues that arose during a pre-trial investigation in criminal proceedings or a trial in any other type of legal proceedings, other than criminal, and which are reflected in an expert's opinion or a notice on the impossibility of its providing") and characterized 7 of its

24 Кримінальний кодекс України від 05.04.2001 р. № 2341-III (зі змін. та допов.). URL: <https://zakon.rada.gov.ua/laws/show/2341-14#Text> (date accessed: 20.06.2024) ; Кодекс України про адміністративні правопорушення від 07.12.1984 р. № 8073-X (зі змін. та допов.). URL: <https://zakon.rada.gov.ua/laws/show/80731-10#Text> (date accessed: 20.06.2024).

signs²⁵, formulated the definition of FVM topic and proved its importance for FVM theory and practice²⁶ that in praxeological aspect made possible:

- outline the range of factual data to be taken into account during FVR and the range of special veterinary knowledge directly related to FVM topic;
- formulate typical questions that are both expert tasks and which FVM customer puts to the forensic expert;
- carry out the FVR only those objects that are material carriers of information within the scope of FVM topic or comprehensive examination;
- develop methods of FVR objects with the goal of performing typical expert tasks;
- separate FVM from forensic examinations of related types (forensic biological ones, forensic molecular genetic ones, etc.);
- integrate specific veterinary expertise to conduct multidisciplinary forensic examinations;
- organize effective conducting FVM in a specialized expert institution, in particular in the NSC «Hon. Prof. M. S. Bokarius FSI».

2. FVM Objects

Since the concept of *object* “is one of fundamental in forensic science and is inte-

gral to the subject of research, outlines the possibilities of such research and affects the choice of methods, ways and means of expert knowledge, as well as the method of concluding the conclusion of a forensic expert, we have formulated a definition of the concept of “objects of forensic veterinary research” for the FVM²⁷, classified and characterized these objects and proved that they are the source of information by which a forensic expert finds out the facts and circumstances that make up the subject of the FVM.

Praxeological advantages of defining the *object* concept for FVM:

- essence of FVR object is embodied in expert tasks;
- will contribute to improvement of theoretical and methodological foundations of FVM, and therefore, to the solution of practical forensic issues;
- clearly differentiated concept is an indicator of the type of expertise, as well as the basis of knowledge about the facts and specific veterinary expertise.

3. FVM

Methods

Use of methods of forensic examination (dialectical, logic, other general-cognitive, individual ones (instrumental and auxiliary

25 Яценко І. В. Ознаки судово-ветеринарної експертизи в аспекті її теорії, методології та прaxeології. *European scientific congress*. Proceedings of the 6th International scientific and practical conference. Barca Academy Publishing. Madrid, Spain, 2023. Pp. 12–28. URL: <https://sci-conf.com.ua/wp-content/uploads/2023/07/EUROPEAN-SCIENTIFIC-CONGRESS-10-12.07.23.pdf> (date accessed: 10.07.2024).

26 Його ж. Предмет судово-ветеринарної експертизи та його значення в теорії і практиці судової експертизи. *Науковий вісник Ужгородського національного університету. Серія Право*. 2022. № 73. Т. 2. С. 154–173. DOI: 10.24144/2307-3322.2022.73.55 (date accessed: 08.07.2024).

27 Яценко І. В. Правовий статус і гносеологічна характеристика об'єктів судово-ветеринарної експертизи. *Теорія та практика судової експертизи і криміналістики*. 2023. Вип. 2 (31). С. 63–102. DOI: 10.32353/khrife.2.2023.05 (date accessed: 08.07.2024).

technical as well as specific ones)²⁸ in FVR is substantiated. The requirements for FVR methods are formulated, methods are systematized depending on the state of preservation of objects.

Praxeological significance of this issue lies in the fact that the FVR methods and techniques are a toolkit for performing expert tasks, depending on the specifics of the subject and object. The possibilities of methods for performing certain expert tasks during the FVR are outlined; it is proved that the functions of special FVM methods are performed by methods of forensic veterinary clinical diagnosis of animal diseases and methods of forensic veterinary pathomorphological diagnosis.

4. FVR Principles

Conceptual provisions of the implementation of the principles of the FEA in FVR are formulated and substantiated (taking into account the specifics of the subject and features of the object of research, in particular: the rule of law; legality; scientific character, consistency, comprehensiveness, completeness, impartiality of the FVR; competence of the forensic expert; independence and methodological independence of the forensic expert; admissibility of the use of methods, means and methods of conducting the FVR; maximum preservation of the objects of research; scientific validity, objectivity, reliability, correctness and truthfulness of the conclusion of the forensic expert; verification of the expert's conclusion; adher-

ence to professional ethics by the forensic expert; personal responsibility of the forensic expert), as well as the ways of their implementation are proposed²⁹.

Effectiveness of the impact of FVR principles is due to its objective basis and the definition of the most significant characteristics that will contribute to the identification of optimal ways of its implementation. Violation of the FVM principles violates the entire system of principles (general legal and special ones) and the forms of expert procedures provided for by law, recognition of the expert's conclusion as unreasonable, biased, false, as well as inadmissible as evidence in legal proceedings.

5. Forensic veterinary expert tasks

Essence of the identification, diagnostic and situational FVM tasks are specified³⁰. In view of this, the clear outline of the expert tasks of FVR in practice made possible to:

- single out the range of issues of FVR (that contributed to definition of the subject of FVM), outline the ways to solve them and reasonably assess the signs of research object, without violating the limits of forensic expert competence;
- formulate new typical questions of the FVM (that at the same time are expert tasks) and supplement them with scientific and methodological recommendations on the

28 Яценко І., Сімакова-Єфремян Е., Дереча Л. Методи судової експертизи та їх застосування у судово-ветеринарних дослідженнях. *Там само*. 2021. Вип. 2 (24). С. 52–76. DOI: [10.32353/khrife.2.2021.04](https://doi.org/10.32353/khrife.2.2021.04) (date accessed: 01.07.2024).

29 Yatsenko I. Principles of Forensic Expert Activities in Ukraine and their Implementation in Forensic Veterinary Research. *Archives of Criminology and Forensic Sciences*. 2022. Vol. 1. Is. 5. Pp. 115–142. DOI: [10.32353/acfs.5.2022.08](https://doi.org/10.32353/acfs.5.2022.08) (date accessed: 08.07.2024).

30 Яценко І. В. Завдання судово-ветеринарної експертизи: теоретичні й праксеологічні проблеми та шляхи їх вирішення. *Форум Права*. 2023. 74 (1). С. 68–89. DOI: [10.5281/zenodo.7319900](https://doi.org/10.5281/zenodo.7319900) (date accessed: 08.07.2024).

preparation and appointment of forensic examinations and expert studies ³¹ (hereinafter referred to as RG);

- outline the range of factual data and circumstances that should be clarified during the FVM or complex forensic examination by integrating special veterinary knowledge and specific expertise of other sciences (animal biology, molecular genetics, ballistics, etc.);
- work out the methods and techniques of FVR for the introduction of new opportunities for solving expert tasks;
- propose to supplement part 2 of Article 242 Criminal Procedural Code of Ukraine ³² with paragraph 7 of the following content: “(7) clarification of the nature and severity of the damage caused to the health of the animal and/or the cause of death of the animal”;
- increase FVM efficiency in State specialized forensic science institutions (hereinafter referred to as the SSFSI);
- outline effective directions for expanding the range of FVR objects and questions that are put to the forensic scientist (for example, regarding defects in branch activity).

6. *Integration of special veterinary knowledge*

Doctrinal integration principles of special veterinary knowledge into complex forensic examinations are substantiated: veterinary biological one; medical veterinary one; veterinary DNA; veterinary ballistic one; veterinary transport trace evidence one; ecological veterinary one; veterinary electrotechnical one; veterinary fire one; art veterinary linguistic psychological one; veterinary commercial one; veterinary and research on potent and poisonous substances; veterinary substance and research on availability of harmful substances (pesticides) in the environment ³³.

Praxeological significance of this aspect lies in the fact that for the first time theoretical, methodological and organizational and legal provisions of complex forensic examinations, in which special veterinary knowledge is integrated, have been proposed for practice. This will make it possible to create new expert methods, which will significantly increase FVM efficiency.

7. *Stages of FVR*

We distinguish the stages of FVR of live animals and animal corpses (preparatory, analytical, comparative and synthetic) and outline the functions of these stages ³⁴ from praxeological positions contributes to:

31 Науково-методичні рекомендації з питань підготовки та призначення судових експертиз та експертних досліджень : затв. наказ. Мін'юсту України від 08.10.1998 р. № 53/5 (зі змін. та допов.). URL: <https://zakon.rada.gov.ua/laws/show/z0705-98#Text> (date accessed: 08.07.2024).

32 Кримінальний процесуальний кодекс України від 13.04.2012 р. № 4651-VI (зі змін. та допов.). URL: <https://zakon.rada.gov.ua/laws/show/4651-17#Text> (date accessed: 08.07.2024).

33 Яценко І. В. Доктринальні засади інтеграції спеціальних ветеринарних знань у комплексні судово-експертні дослідження: проблеми та шляхи їх вирішення. *Аналітично-порівняльне правознавство*. 2023. № 6. С. 646—670. DOI: 10.24144/2788-6018.2023.06.114 (date accessed: 08.07.2024).

34 Його ж. Гносеологічна характеристика та процесуальне значення етапів і стадій призначення та проведення судово-ветеринарної експертизи. *Теорія та практика судової експертизи і криміналістики*. 2023. Вип. 1 (30). С. 70—111. DOI: 10.32353/khrife.1.2023.05 (date accessed: 08.07.2024).

- cognition monitoring of processes of research object forensic scientist (localization and nature of injuries, severity of bodily injuries of the animal, etc.);
- formulation of forensic veterinary diagnosis, generalization of research results, evaluation of expert results and conclusions;
- efficiency of solving intermediate expert tasks;
- effectiveness of assessing the reliability and informativeness of the obtained results of the FVR object;
- verification of expert conclusion during its examination and/or verification.

8. Internal conviction of forensic expert

Praxeological meaning of the author's concept definition of *internal conviction of forensic veterinarian* (as well as outline of its structure, details of epistemological, psychological, ethical and legal aspects, identification of specifics and subjective and objective factors of its formation):

- affects the belief in the results obtained (as a state of confidence in the correctness of researches);
- outlines directions of implementation of this phenomenon in FVR (cognitive, interpretive, evaluative-motivational, communicative, reflexive);
- reveals mechanism of formulation by the forensic scientist of the final conclusions;
- justifies categorical confidence in the willingness to act in accordance with its conclusions.

9. Expert initiative

Theoretical and praxeological substantiation of the forms and directions of implementation of the expert initiative during

FVM is proposed; for the first time, author's definition of the concept of *expert initiative* is formulated.

Praxeological significance of expert initiative phenomenon:

- it is implemented in the form of a request (for the provision of additional materials, the object of research, permission to completely or partially destroy the object during its research, the possibility of the participation of a forensic expert in a court session in the video conference mode, unhindered access to the object of research, etc.), *actions, proposals* (not only in criminal proceedings, but also in other types of legal proceedings and even beyond them) and *interpretation at one's own discretion* of additional facts discovered during FVR, which are necessary to find out the truth;
- exercise by forensic expert of the right to initiate expands the possibilities of FVR and strengthens the evidentiary strength of forensic expert's conclusion;
- contributes to development of new and improvement of existing research methods, the initiation of promising areas of research in the field of FVR.

10. Structure of forensic expert conclusion and its evaluation

Praxeological significance of structuring the conclusion of forensic expert:

- for the first time, *peculiarities* of the content of the introductory, research and final parts of the conclusion of the forensic expert based on FVM results taking into account the subject and research object and performed expert tasks are substantiated;

- for the first time, an algorithm for describing the results of research on animal was proposed according to systemic principle of the body's structure; indication in the research part of the expert's conclusion of research and analysis of individual veterinary documents contained in the materials of criminal proceedings (case) and related to the topic proof;
- optimization of forensic expert's work at the stage of drawing up a conclusion consists in applying the author's approach to the content of individual parts of the conclusion based on the results of conducted FVM taking into account the peculiarities of the subject, tasks, object and research methods;
- visualization and justification in the expert's conclusion of FVR results with illustrative content (forensic photograph; general appearance of the packaging; image of an animal corpse or live animal, animal feed, biological objects of animal origin; histotopograms, radiographs, ultrasonograms, spectrograms; images obtained according to the results computer or magnetic resonance imaging; compilation of photo tables with illustrative content as an appendix to the expert's conclusion);
- algorithm developed by the author of this research for checking and evaluating forensic expert conclusion by the investigator, prosecutor, defense counsel, investigating judge, court will facilitate the adoption of fair procedural decisions in the proceedings.

Foreign scientists focus on the following praxeological aspects of the SVE: the state of forensic veterinary pathology in Europe (R. Munro et al.³⁵), in particular in the UK (S. G. Newbery et al.³⁶); the procedural status of the forensic expert (J. E. Cooper et al.³⁷); the conclusion of the forensic expert as evidence in legal proceedings (R. Munro³⁸; S. P. McDonough et al.³⁹); the participation of veterinary specialists in legal proceedings (R. van Wessum⁴⁰); the testimony of the forensic expert in court (R. Frederickson⁴¹); general trends

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- 35 Munro R., Ressel L., Gröne A., Hetzel U., Jensen H. E., Paciello O., Kipar A. European Forensic Veterinary Pathology Comes of Age. *Journal of Comparative Pathology*. 2020. Vol. 179. Pp. 83–88. DOI: [10.1016/j.jcpa.2020.08.003](https://doi.org/10.1016/j.jcpa.2020.08.003) (date accessed: 01.07.2024).
- 36 Newbery S. G., Cooke S. W., Martineau H. M. A Perspective on Veterinary Forensic Pathology and Medicine in the United Kingdom. *Veterinary Pathology*. 2016. Vol. 53. Is. 5. Pp. 894–897. DOI: [10.1177/0300985816654527](https://doi.org/10.1177/0300985816654527) (date accessed: 08.07.2024).
- 37 Cooper J. E., Cooper M. Veterinary involvement in forensic medicine. *The Veterinary Record*. 2021. Vol. 189. Is. 6. Pp. 249–250. DOI: [10.1002/vetr.1004](https://doi.org/10.1002/vetr.1004) (date accessed: 08.07.2024).
- 38 Munro R. Viewpoint: Integrity and Limitations of Forensic Veterinary Evidence. *Journal of Comparative Pathology*. 2022. Vol. 199. Pp. 86–87. DOI: [10.1016/j.jcpa.2022.10.003](https://doi.org/10.1016/j.jcpa.2022.10.003) (date accessed: 08.07.2024).
- 39 McDonough S. P., McEwen B. J. Veterinary Forensic Pathology: The Search for Truth. *Veterinary Pathology*. 2016. Vol. 53. Is. 5. Pp. 875–877. DOI: [10.1177/0300985816647450](https://doi.org/10.1177/0300985816647450) (date accessed: 08.07.2024).
- 40 Van Wessum R. The Animal Health and Welfare Law: the veterinary statement as evidence and the role of veterinarians in legal procedures. *Tijdschrift voor Diergeneeskunde*. 2001. Vol. 126. Is. 5. Pp. 130–132. URL: <https://pubmed.ncbi.nlm.nih.gov/11256323/> (date accessed: 08.07.2024).
- 41 Frederickson R. Demystifying the Courtroom: Everything the Veterinary Pathologist Needs to Know About Testifying in an Animal Cruelty Case. *Veterinary Pathology*. 2016. Vol. 53. Is. 5. Pp. 888–893. DOI: [10.1177/0300985816647439](https://doi.org/10.1177/0300985816647439) (date accessed: 08.07.2024).

in the development of forensic medical and veterinary examinations (M. S. Pollanen⁴²).

Undoubtedly, the achievements of foreign scientists in the field of FVM contributed to the solution of many theoretical issues, but there are no publications on the subject, object, methods, expert tasks of FVM in the columns of foreign scientific journals, unlike Ukrainian ones.

III. Praxeological foundations for development of FVM methodology

Connection of FVM with praxeology is revealed in the fact that the main task of FVM as an applied science is the FVM optimization.

Within the limits of the general theory of forensic science, the praxeological approach is one of the elements of the methodological apparatus and an illustration of the practical orientation of FVM, since, according to M. Shcherbakovskyi⁴³, “it orients the theory of forensic examinations to solving its tasks as a practical science”

Expert methods and recommendations based on the principles of praxeology (purposefulness, planning, preparedness, situational conditioning, technological feasibility, reasonableness, etc.) make possible to apply theoretically determined regularities for the development of algorithms for the performance of specific expert tasks in typical expert situations.

Praxeological principles of the FVM methodology were implemented by developing expert methods and methodological

recommendations in three directions: 1) regarding live animals; 2) regarding animal corpses; 3) regarding the determination of defects in veterinary aid and veterinary measures.

Let us characterize them in more detail.

Expert methods and method recommendations for live animals relate to: 1) the severity of the damage caused to the animal's health; 2) FVR of live animals; 3) forensic veterinary teaching on animal mutilation.

1. Severity of the damage caused to the animal's health

For the first time in world practice, scientists of the KFPS initiated the teaching of the theoretical and epistemological construction of the phenomenon of the degree of severity of damage caused to the health of an animal, and outlined the ways of its implementation in FVM practice, which in turn will make possible to differentiate severe, medium and light injuries; to improve national legislation on cruelty to animals by differentiating the punishment for this crime depending on the degree of bodily harm, which will contribute to realization of the principle of justice.

Based on results of scientific theoretical and practical research, the *Rules for forensic veterinary determination of the degree of severity of damage caused to the health of an animal (methodical recommendations)*⁴⁴ were prepared, which were added to the List of scientific, technical and reference

42 Pollanen M. S. The Rise of Forensic Pathology in Human Medicine: Lessons for Veterinary Forensic Pathology. *Ibid.* 2016. Vol. 53. Is. 5. Pp. 878–879. DOI: [10.1177/0300985816653171](https://doi.org/10.1177/0300985816653171) (date accessed: 08.07.2024).

43 Щербаковський М. Г. Методологія дослідження феномена судових експертиз. *Вісник Луганського державного університету внутрішніх справ ім. Е. О. Дідоренка*. 2016. № 3 (75). С. 133–142. URL: <https://dspace.univd.edu.ua/server/api/core/bitstreams/5691274c-965d-4c87-820d-2d6beb62defc/content> (date accessed: 08.07.2024).

44 Яценко І. В., Парилівський О. І. Правила судово-ветеринарного визначення ступеня тяжкості шкоди, заподіяної здоров'ю тварини (методичні рекомендації). Харків, 2022. 47 с.

literature used in the conduct of forensic veterinary examination ⁴⁵.

2. FVR of live animals

Scientists of the KFVS have developed the *Methods of forensic veterinary research on live sub-expert animal*, the approbation and adaptation of which is ongoing, where the algorithms of the clinical FVR of mammals and birds are substantiated, and the issue of drawing up an expert's opinion based on the results of the conducted FVM of live animals is highlighted.

Praxeological significance of this methodological direction: the developed algorithms of FVR of live animals will help to optimize procedures of making a forensic veterinary diagnosis and determining the cause of animal health disorders.

3. Forensic veterinary teaching on animal mutilation

For the first time in world practice, the scientists of KFVS initiated forensic veterinary teaching on animal mutilation, within the limits of which:

- definition of *animal mutilation* was formulated;
- identified signs of mutilation, developed and substantiated its classification according to nine criteria;
- characteristics of certain types of mutilation are given, among which: animal mutilation due to loss of tongue, smell, sight, hearing, limb, reproductive ability, as well as damage to animal's appearance;

- anatomical defects are outlined and the degrees of restriction of the animal's vital activity are differentiated depending on its condition; third degree (moderately expressed restriction), the second degree (pronounced), the first degree (significantly expressed);
- identified, systematized and substantiated the stages of organizing and carrying out FVM of animals that suffered physical injuries, the result of which was their mutilation;
- FVM practice of live animals with signs of mutilation is summarized.

Methods of forensic veterinary examination of animals with the aim of establishing their mutilation ⁴⁶ has recently been introduced into forensic veterinary practice which will enable a forensic expert to reasonably, objectively and reliably determine animal mutilation, and law enforcement agencies or the court to correctly qualify the crime of *cruelty to animals*.

4. Examination of animal corpse at the scene

One of the objects of FVM is the carcasses of animals whose death occurred suddenly or as a result of violent actions, in particular due to cruel treatment. Determining the cause of animal death is a key task of the FVM.

A full-fledged pre-trial investigation of crimes against animal life is impossible without such an investigative action as an inspection of the scene of the incident and an examination of the animal's corpse

45 Перелік науково-технічної та довідкової літератури, що використовується при проведенні судової ветеринарної експертизи : дод. до наказу Мін'юсту України від 08.05.2018 р. № 1467/5 (зі змін. та допов.). URL: <https://ips.ligazakon.net/document/MUS30115> (date accessed: 08.07.2024).

46 Яценко І. В., Парилівський О. І., Казанцев Р. Г. Методика судово-ветеринарного дослідження тварин з метою встановлення їх каліцтва. Харків, 2021. 50 с. Реєстр. код 18.1.01 / Реєстр методик проведення судових експертиз : офіц. сайт. URL: <https://rmpse.minjust.gov.ua/search> (date accessed: 01.07.2024).

at the scene of the incident. To carry out this investigative action, law enforcement agencies involve specialists of various profiles, in particular, a specialist in veterinary medicine who has special veterinary knowledge.

Theoretical and applied value of the praxeological approach to the process of examining an animal corpse at the scene is as follows:

- main provisions of the application of special veterinary knowledge during the examination of the animal corpse at the scene with participation of a specialist in the field of veterinary medicine are formulated;
- list of the most frequent cases involving involvement of a veterinary medicine specialist in such an examination was compiled;
- task of a veterinary medicine specialist is substantiated and the algorithm of his actions during such an examination is given, which makes it possible to objectively determine the cause of death after a complete FVR of an animal corpse in the dissection hall;
- it is proposed to add to the Criminal Code of Ukraine ⁴⁷ Art.238-1: *Examination of an animal corpse*.

5. FVR on animal corpses

While classifying offenses against the life of animals, one should take into account the forensic expert's opinion on the nature and degree of severity of bodily injuries, the cause of death, as well as the cause-and-effect relationship between the de-

tected injuries and the death of the animal. In this area, there is already a selection of applied scientific achievements that have a positive effect on the effectiveness of the appointment and implementation of FVM:

- order of FVR of the corpses of mammals and birds in the dissection hall was formed;
- developed and tested cytomorphological methods for determining the age of death of cats and dogs in the early postmortem period;
- algorithms for appointing and carrying out FVM in case of animal poisoning are proposed;
- aspects of thanatogenesis of certain species and subspecies of violent death and different states of animal corpses are highlighted;
- thanato-specific signs and pathomorphogenesis of individual nosologies are formulated;
- thanato-specific features of forensic veterinary diagnosis in case of death of dogs and cats as a result of hypoxemia and hemodynamic disorders are detailed;
- sequence of drawing up veterinary documents on the death of an animal is given.

Methods of forensic veterinary examination of animal corpses has been introduced into forensic veterinary practice ⁴⁸. Another of our developments is at the stage of approbation and implementation: *Methods of forensic veterinary examination of animal corpses in their various states and type of death*.

Availability of these methods in FVM arsenal will enable forensic experts to

47 Кримінальний кодекс URL: <https://zakon.rada.gov.ua/laws/show/2341-14#Text> (date accessed: 01.06.2024).

48 Яценко І. В., Казанцев Р. Г. Методика судово-ветеринарної експертизи трупів тварин. Харків, 2022. 336 с. Реєстр. код 18.1.02 / Реєстр методик проведення судових експертиз : офіц. сайт. URL: <https://rmpse.minjust.gov.ua/search> (date accessed: 01.07.2024).

more reasonably, objectively and reliably determine the cause of death of an animal and the cause-and-effect relationships between damage and the occurrence of an animal's death. In addition, the *Rules for forensic veterinary examination of animal corpses* ⁴⁹ and *Procedure for removing objects of forensic examination from an animal corpse for laboratory research* developed by us ⁵⁰ are regulatory elements of thanatological procedures.

6. Determining defects of veterinary care and veterinary measures

For the first time in world practice, an epistemological construction of defects in veterinary care and the organization of veterinary activities in the aspect of FVM was proposed, and an author's methodology was developed, which contains 5 stages: familiarization-preparatory, organizational-informational, research-analytical, generalizing-evaluative, final ones ⁵¹.

Praxeological significance of developed methods: it will enable forensic experts to detect signs of violation of veterinary regulations by veterinary medicine workers due to their improper performance of their professional duties that caused negative consequences for the life and health of animals, to determine the causes of their occurrence, and for law en-

forcement agencies and/or courts to find out the objective and subjective aspects of the offense.

In addition, it is proposed to add Section: IX *Forensic veterinary examination* of RG ⁵² with typical questions regarding the defects of veterinary activity, which the subject of the appointment of FVM can put to the solution of forensic experts during a pre-trial investigation or judicial investigation, which will have a positive effect on the effectiveness of the appointment and conduct of such FVM.

7. Possibilities of FVM as a new type of forensic examinations

Possibilities of FVM as a new type of forensic examination in criminal proceedings initiated due to illegal hunting (Article 248 of Criminal Code of Ukraine) ⁵³, cruelty to animals (Article 299 of Criminal Code of Ukraine) ⁵⁴, ecocide (Article 441 of Criminal Code of Ukraine) ⁵⁵, mass death of bees and plague of animal aquatic organisms have been demonstrated. Attention is focused on the features of the subject, object, subject, expert tasks, FVR algorithms in the above-mentioned expert situations.

It is important to visualize FVM importance to ensure compensation for the damage caused by the Russian Federation war of aggression against Ukraine.

49 Їх же. Правила судово-ветеринарної експертизи трупів тварин : метод. рек. Харків, 2022. 29 с.

50 Яценко І. В., Парилівський О. І., Казанцев Р. Г. Порядок вилучення об'єктів судово-ветеринарної експертизи з трупа тварини для лабораторних досліджень : метод. рек. Харків, 2021. 51 с.

51 Яценко І. Методика проведення судово-ветеринарної експертизи з метою визначення дефектів ветеринарної допомоги. *Теорія та практика судової експертизи і криміналістики*. 2023. Вип. 4 (33). С. 57—86. DOI: 10.32353/khrife.4.2023.05 (date accessed: 08.07.2024).

52 Науково-методичні рекомендації URL: <https://zakon.rada.gov.ua/laws/show/z0705-98#Text> (date accessed: 08.07.2024).

53 Кримінальний кодекс URL: <https://zakon.rada.gov.ua/laws/show/2341-14#Text> (date accessed: 05.07.2024).

54 Там само.

55 Там само.

8. Compilation of procedural documents

The specifics of drawing up separate procedural documents for the appointment of the FVM, in particular, the resolution of the investigator or the prosecutor, are highlighted, taking into account the specifics of the expert tasks that are put to the solution of the forensic expert. The author's selection of questions is offered to complement Section IX of RG for their practical use by law enforcement agencies.

Praxeological significance: it is proposed to add part 2 of Art. 242 of the Criminal Procedural Code of Ukraine⁵⁶, clauses 7 and 8 of the following content:

"7) *determination of the cause of animal death;*

8) *finding out severity of the damage and nature of the injuries caused of the animal health."*

Knowledge of entities that appoint forensic examination of possible questions for forensic expert (that are at the same time expert tasks) has an important educational value and contributes to the expert provision of justice.

In addition to the achievements of the scientists of the KFVS, FVR effectiveness was influenced by the scientific developments of scientists from other scientific schools of Ukraine. For example, scientists of the Kyiv Scientific Forensic Veterinary School (National University of Bioresources and Nature Management of Ukraine) investigate issues of forensic and veterinary thanatology, in particular asphyxiation (Professor B. Borysevych)⁵⁷ and determining the time of death (Ya. Serdiukov and D. Shkundia)⁵⁸.

Professor M. Skrypka (Odessa State Agrarian University, hereinafter referred to as OSAU) is actively developing a new direction in FVM: pathomorphogenetic substantiation of individual patterns of animal corpses with signs of violent death⁵⁹.

Field of interest of the scientists of the Lviv Forensic Veterinary School (Professors: M. Zhila and G. Kotsyumbas, Associate Professor V. Lemishevskiy) is the FVR of animal corpses in case of poisoning and the determination of species belonging to individual objects of animal origin, in particular hair and skin⁶⁰.

56 Кримінальний процесуальний кодекс ... URL: <https://zakon.rada.gov.ua/laws/show/4651-17#Text> (date accessed: 08.07.2024).

57 Борисевич Б. В., Кручиненко О. В., Передера О. О. Судово-ветеринарне дослідження трупів собак та котів у випадках задушення руками. *Scientific Progress & Innovations*. 2024. Т. 27. № 2. Рр. 90–94. DOI: [10.31210/spi2024.27.02.15](https://doi.org/10.31210/spi2024.27.02.15) (date accessed: 15.07.2024).

58 Shkundia S., Serdioucov Ja. Determination of the time of death of a domestic cat by measuring the area of a wet spot. *Ukrainian Journal of Veterinary Sciences*. 2024. Vol. 15. Is. 1. Pp. 122–138. DOI: [10.31548/veterinary1.2024.122](https://doi.org/10.31548/veterinary1.2024.122) (date accessed: 08.07.2024).

59 Скрипка М., Бойко Ю., Запека І., Головань К. Практика судово-ветеринарної експертизи щодо психоемоційного стресу в генезі [серцевої] недостатності та смерті тварин. *Agrarian Bulletin of the Black Sea Littoral*. 2023. Is. 106. Pp. 14–22. DOI: [10.37000/abbsl.2023.106.02](https://doi.org/10.37000/abbsl.2023.106.02) (date accessed: 08.07.2024).

60 Коцюмбас Г. І., Данкович Р. С., Врецьона Н. П. Патоморфологія та діагностика отруєння собак ізоніазидом. *Науковий вісник Львівського національного університету ветеринарної медицини та біотехнологій імені С. З. Гжицького. Серія: Ветеринарні науки*. 2018. Т. 20. № 83. С. 108–114. URL: http://nbuv.gov.ua/UJRN/nvlnuvmbvn_2018_20_83_23 (date accessed: 08.07.2024) ; Лемішевський В. М. Судово-ветеринарна експертиза трупа собаки із ознаками насильницької смерті: огляд випадку. *Сучасні методи діагностики, лікування та профілактика у ветеринарній медицині : тези доп. II Конф., присвяч. 140-річ. відкрит. навч. закл. «Цісар-королів. вет. шк. та шк. підковув. коней разом із*

The above-mentioned scientific achievements of Ukrainian scientists are actively used during the FVR objects, which has a positive effect on FVM effectiveness.

Undoubtedly, the formation and development of the modern FVM methodology was greatly contributed by foreign

scientific schools, especially in the areas of: thanatology⁶¹; definition of drowning⁶²; sudden death⁶³; FVR of exhumed⁶⁴ and skeletonized corpses⁶⁵; finding out the time of death⁶⁶; toxicology⁶⁷; traumatology, in particular in the case of gunshot wounds⁶⁸; fall from height (FFH)

клінік-стаціонар. для тварин у Львові» (Львів, 18–19.11.2021). Львів, 2021. С. 98–99. URL: <https://nvlvet.com.ua/index.php/conference/issue/view/215/2021-pdf> (date accessed: 08.07.2024).

- 61 Wolf C., Gerst K., Gerst S., Priemer G. Post-mortem clinical pathology in cattle – an additional tool for the veterinary pathologist. *Tierarztl Prax Ausg G Grosstiere Nutztiere*. 2021. Vol. 49. Is. 6. Pp. 403–412. DOI: [10.1055/a-1593-6948](https://doi.org/10.1055/a-1593-6948) (date accessed: 08.07.2024) ; Hioki A., Inaba R. Occupational Fatalities Due to Mammal-Related Accidents in Japan, 2000–2019. *Wilderness & Environmental Medicine*. 2021. Vol. 32. Is. 1. Pp. 19–26. DOI: [10.1016/j.wem.2020.09.010](https://doi.org/10.1016/j.wem.2020.09.010) (date accessed: 08.07.2024) ; Touroo R., Fitch A. Identification, Collection, and Preservation of Veterinary Forensic Evidence: On Scene and During the Postmortem Examination. *Veterinary Pathology*. 2016. Vol. 53. Is. 5. Pp. 880–887. DOI: [10.1177/0300985816641175](https://doi.org/10.1177/0300985816641175) (date accessed: 08.07.2024).
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- 63 Huenerfauth E., Nessler J., Erath J., Tipold A. Probable Sudden Unexpected Death in Dogs With Epilepsy (pSUDED). *Frontiers in Veterinary Science*. 2021. Vol. 27. Is. 8. Art. 600307. DOI: [10.3389/fvets.2021.600307](https://doi.org/10.3389/fvets.2021.600307) (date accessed: 08.07.2024).
- 64 Takenaka C. S., de Souza C. N. A., Momo C. Case studies and technical aspects of the forensic necropsy of exhumed companion animals. *Forensic Science International*. 2023. Vol. 345. Art. 111624. DOI: [10.1016/j.forsciint.2023.111624](https://doi.org/10.1016/j.forsciint.2023.111624) (date accessed: 08.07.2024).
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- 66 Panasiuk-Flak K., Grela M., Listos P. Determination of the time of death of dogs using atropine and pilocarpine in the early post-mortem period – an assessment of the usefulness of the method. *Medycyna Weterynaryjna*. 2021. Vol. 77. Is. 7. Pp. 349–352. DOI: [10.21521/mw.6546](https://doi.org/10.21521/mw.6546) (date accessed: 08.07.2024).
- 67 Bertero A., Fossati P., Caloni F. Indoor poisoning of companion animals by chemicals. *The Science of the Total Environment*. 2020. Vol. 1. Is. 733. Art. 139366. DOI: [10.1016/j.scitotenv.2020.139366](https://doi.org/10.1016/j.scitotenv.2020.139366) (date accessed: 08.07.2024) ; Gordon R. J., Hungerford N. L., Laycock B., Fletcher M. T. A review on *Pimelea* poisoning of livestock. *Toxicon*. 2020. Vol. 186. Pp. 46–57. DOI: [10.1016/j.toxicon.2020.07.023](https://doi.org/10.1016/j.toxicon.2020.07.023) (date accessed: 08.07.2024).
- 68 Grela M., Panasiuk-Flak K., Listos P., Gryzińska M., Buszewicz G., Chagowski W., Teresiński G. Post-mortem analysis of gunshot wounds to the head and thorax in dogs by computed tomography, radiography and forensic necropsy. *Medicine, Science and the Law*. 2021. Vol. 61. Is. 2. Pp. 105–113. DOI: [10.1177/0025802420971176](https://doi.org/10.1177/0025802420971176) (date accessed: 08.07.2024).

injuries⁶⁹; electrical injuries⁷⁰; hyperthermia⁷¹; damage by hard⁷² and sharp⁷³ objects; bite wounds⁷⁴; damage to the musculoskeletal system⁷⁵ and spinal cord⁷⁶; automobile injury⁷⁷; defects of veterinary care⁷⁸; feed safety and quality⁷⁹; collec-

- 69 Lefman S., Prittie J. E. High-rise syndrome in cats and dogs. *Journal of Veterinary Emergency and Critical Care (San Antonio)*. 2022. Vol. 32. Is. 5. Pp. 571–581. DOI: [10.1111/vec.13206](https://doi.org/10.1111/vec.13206) (date accessed: 08.07.2024).
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- 72 Ressel L., Hetzel U., Ricci E. Blunt Force Trauma in Veterinary Forensic Pathology. *Veterinary Pathology*. 2016. Vol. 53. Is. 5. Pp. 941–961. DOI: [10.1177/0300985816653988](https://doi.org/10.1177/0300985816653988) (date accessed: 08.07.2024) ; Gottlieb D. L., Prittie J., Buriko Y., Lamb K. E. Evaluation of acute traumatic coagulopathy in dogs and cats following blunt force trauma. *Journal of Veterinary Emergency and Critical Care (San Antonio)*. 2016. Vol. 27. Is. 1. Pp. 35–43. DOI: [10.1111/vec.12525](https://doi.org/10.1111/vec.12525) (date accessed: 08.07.2024).
- 73 Murase T., Shinba Y., Mitsuma M., Abe Y., Yamashita H., Ikematsu K. Wound age estimation based on chronological changes in chitinase 3-like protein 1 expression. *Legal Medicine (Tokyo)*. 2022. Vol. 59. Art. 102128. DOI: [10.1016/j.legalmed.2022.102128](https://doi.org/10.1016/j.legalmed.2022.102128) (date accessed: 08.07.2024).
- 74 Klainbart S., Shipov A., Madhala O., Oron L. D., Weingram T., Segev G., Kelmer E. Dog bite wounds in cats: a retrospective study of 72 cases. *Journal of Feline Medicine and Surgery*. 2022. Vol. 24. Is. 2. Pp. 107–115. DOI: [10.1177/1098612X211010735](https://doi.org/10.1177/1098612X211010735) (date accessed: 08.07.2024).
- 75 Spargo K. E., Rubio-Martinez L. M., Wheeler D. P., Fletcher L., Carstens A. Catastrophic musculoskeletal injuries in Thoroughbred racehorses on racetracks in Gauteng, South Africa. *Journal of the South African Veterinary Association*. 2019. Vol. 90. Art. 1640. DOI: [10.4102/jsava.v90i0.1640](https://doi.org/10.4102/jsava.v90i0.1640) (date accessed: 08.07.2024).
- 76 Shirota Y., Otani T., Wasada S., Ito S., Mieda T., Nakamura K. Inner and outer penetrating spinal cord injuries lead to distinct overground walking in mice. *IBRO Neuroscience Report*. 2024. Vol. 16. Is. 16. Pp. 345–352. DOI: [10.1016/j.ibneur.2024.02.005](https://doi.org/10.1016/j.ibneur.2024.02.005) (date accessed: 08.07.2024).
- 77 Lyons B. M., Ateca L. B., Otto C. M. Clinicopathological abnormalities associated with increased animal triage trauma score in cats presenting for vehicular trauma: 75 cases (1998–2009). *Journal of Veterinary Emergency and Critical Care (San Antonio)*. 2020. Vol. 30. Is. 6. Pp. 693–697. DOI: [10.1111/vec.13005](https://doi.org/10.1111/vec.13005) (date accessed: 08.07.2024) ; Mohanty Ch. R., Radhakrishnan R. V., Jain M., Sasmal P. K., Hansda U., Vuppala S. K., Doki S. K. A Study of the Pattern of Injuries Sustained from Road Traffic Accidents Caused by Impact with Stray Animals. *Journal of Emergencies, Trauma, and Shock*. 2021. Vol. 14. Is. 1. Pp. 23–27. DOI: [10.4103/JETS.JETS_29_20](https://doi.org/10.4103/JETS.JETS_29_20) (date accessed: 08.07.2024).
- 78 Low R., Wu A. W. Veterinary healthcare needs to talk more about error: For the wellbeing of our patients and medical teams. *Journal of Veterinary Internal Medicine*. 2022. Vol. 36. Is. 6. Pp. 2199–2202. DOI: [10.1111/jvim.16554](https://doi.org/10.1111/jvim.16554) (date accessed: 08.07.2024).
- 79 Wilson-Frank Ch. R., Hooser S. B. Investigative Diagnostic Toxicology and the Role of the Veterinarian in Pet Food-Related Outbreaks: An Update. *The Veterinary Clinics of North America. Small Animal Practice*. 2018. Vol. 48. Is. 6. Pp. 909–915. DOI: [10.1016/j.cvsm.2018.07.001](https://doi.org/10.1016/j.cvsm.2018.07.001) (date accessed: 08.07.2024).

tion, preservation and identification of evidence⁸⁰; establishment of disability⁸¹.

At the same time, there is no coherent FVM system as a science and a field of practical activity abroad: its development there is mostly limited to research institutions or institutions of higher education, and its methodology concerns only certain aspects.

Summing up the interim results, it is possible to state the following: an expert opinion, based on reliable special veterinary knowledge about factual data and circumstances of criminal proceedings (cases), obtained with the help of developed methods of FVR, is the basis of the subject of proof of committed offenses or their absence, i.e., is component of the definition of the objective side of the offense.

Praxeological significance of the application of FVR methods to find out the factual data and circumstances that led to the loss of life and/or animal health is justified by the need to identify the actions of the offender, which were reflected on the objects of FVM (live animals, animal corpses) in certain spatial and time limits.

Therefore, FVM in legal proceedings is used in order to:

- establishment of signs of an offense (injury, mutilation, death of animals);
- clarification of crime elements (object and subject, objective and subjective side);
- qualification of offenses (injury, murder, ill-treatment, violation of veterinary rules, etc.)⁸²;
- distinguishing crimes from administrative offenses (according to Criminal Code of Ukraine⁸³ or Code on Administrative Offenses⁸⁴).

IV. Doctrine of forensic veterinarian phenomenon

An equally important area of scientific research developed by KFVS is the doctrine of the forensic expert as a subject of the FEA in the context of the latest legislation of Ukraine. From a review of this for the first time:

- expanded author's definition of the concept of *forensic veterinarian* was proposed, special and procedural criteria of the legal status of a forensic expert were revealed, this status was generalized, in particular, by adding to the scope of his rights, duties, prohibitions and restrictions⁸⁵;
- all types of legal liability applied to the forensic expert for non-performance or improper performance of his duties (criminal, administrative, disciplinary and material) are investigated.

80 Touroo R., Fitch A. Op. cit. DOI: 10.1177/0300985816641175 (date accessed: 08.07.2024).

81 Aymen J., Fitzgerald G., Lair S., Vergneau-Grosset C. Outcomes of Birds of Prey with Surgical or Traumatic Wing Amputation: A Retrospective Study from 1995 to 2017. *Journal of Avian Medicine and Surgery*. 2022. Vol. 36. Is. 1. Pp. 14–20. DOI: 10.1647/20-00085 (date accessed: 08.07.2024).

82 Кримінальний кодекс ... URL: <https://zakon.rada.gov.ua/laws/show/2341-14#Text> (date accessed: 05.07.2024).

83 Там само.

84 Кодекс ... про адміністративні правопорушення ... URL: <https://zakon.rada.gov.ua/laws/show/80731-10#Text> (date accessed: 05.07.2024).

85 Яценко І. Судово-ветеринарний експерт як суб'єкт процесуальних правовідносин і судово-експертної діяльності. *Теорія та практика судової експертизи і криміналістики*. 2022. Вип. 3 (28). С. 64–97. DOI: 10.32353/khrife.3.2022.05 (date accessed: 08.07.2024).

For the effective application of the legal status of a forensic expert in practice, it is proposed:

- Art.11-14 of the Law of Ukraine: *On Judicial Examination* ⁸⁶ (hereinafter referred to as the relevant Law) to be set out in the wording proposed by us ⁸⁷;
- to replace parts 2–7 of Art. 69 of Criminal Procedural Code of Ukraine ⁸⁸ with part 2, and parts 3–8 of Art. 72 of Commercial and Procedural Code of Ukraine ⁸⁹, parts 3–8 of Art. 69 of Code of Administrative Proceedings of Ukraine ⁹⁰ and parts 3–8 of Art. 68 of the Code of Administrative Proceedings of Ukraine with ⁹¹ part 3 of the following content: “*In the course of professional activity, a forensic expert has procedural rights, performs duties, observes prohibitions and restrictions, and bears legal responsibility provided for by the Law of Ukraine Law of Ukraine: On Judicial Examination*”.

The results of the study by the specialists of the KFVS of the problems of providing the FVR by highly qualified specialists for SSFSI of Ukraine:

- educational component content: *Forensic Veterinary Medicine* (in the aspect of professional formation of veterinary doctors) is substantiated, as well as its importance for training of professional forensic experts is revealed ⁹²;
- cornerstones of professional training of forensic experts are formulated;
- professional training programs for forensic experts majoring in 18.1 *Veterinary researches* were developed;
- issue of certification of forensic veterinary experts was considered;
- it is proposed to add Section IV of Regulations on the Central Expert Qualification Commission under the Ministry of Justice of Ukraine and the certification of forensic experts ⁹³ with new clauses, in par-

86 Про судову експертизу : Закон України від 25.02.1994 р. № 4038-XII (зі змін. та допов.). URL: <https://zakon.rada.gov.ua/laws/show/4038-12#Text> (date accessed: 08.07.2024).

87 Див.: Яценко І. Правовий статус судово-ветеринарного експерта як суб'єкта судово-експертної діяльності у контексті новітнього законодавства України. *Теорія та практика судової експертизи і криміналістики*. 2022. Вип. 4 (29). С. 68–109. DOI: 10.32353/khrife.4.2022.04 (date accessed: 08.07.2024).

88 Кримінальний процесуальний кодекс URL: <https://zakon.rada.gov.ua/laws/show/4651-17#Text> (date accessed: 08.07.2024).

89 Цивільний процесуальний кодекс України від 18.03.2004 р. № 1618-IV (зі змін. та допов.). URL: <https://zakon.rada.gov.ua/laws/show/1618-15#Text> (date accessed: 08.07.2024).

90 Господарський процесуальний кодекс України від 06.11.1991 р. № 1798-XII (зі змін. та допов.). URL: <https://zakon.rada.gov.ua/laws/show/1798-12#Text> (date accessed: 08.07.2024).

91 Кодекс адміністративного судочинства України від 06.07.2005 р. № 2747-IV (зі змін. та допов.). URL: <https://zakon.rada.gov.ua/laws/show/2747-15#Text> (date accessed: 08.07.2024).

92 Яценко І. В. Концептуальні засади професійної підготовки судово-ветеринарних експертів у державних спеціалізованих експертних установах України. *Криміналістика і судова експертиза*. 2023. Вип. 68. С. 731–766. DOI: 10.33994/kndise.2023.68.71 (date accessed: 08.07.2024).

93 Положення про Центральну експертно-кваліфікаційну комісію при Міністерстві юстиції України та атестацію судових експертів : затв. наказ. Мін'юсту України від 03.03.2015 р. № 301/5 (зі змін. та допов.). URL: <https://zakon.rada.gov.ua/laws/show/z0249-15#Text> (date accessed: 08.07.2024).

ticular regarding the rights and obligations of the candidate for the qualification of a forensic expert during certification;

- technology of conducting the qualification exam in oral and written (test) forms is recommended.

Nowadays, all of the above-mentioned best practices are actively applied at NSC «Hon. Prof. M. S. Bokarius FSI», the only expert institution in Ukraine that trains forensic experts.

In addition, scientists of KFVS registered 55 patents for a useful model and 12 copyright certificates for a work, published 6 monographs and 7 educational manuals (*Fundamentals of Forensic Veterinary Medicine* (co-authored with scientists of OSAU), *Practice of Forensic Veterinary Examination, Organizational and procedural foundations of forensic veterinary examination in Ukraine, Forensic veterinary examination of injuries caused by the action of pathogenic physical factors on the body of animals, Forensic veterinary examination in cases of asphyxiation, Forensic veterinary thanatology, Fundamentals of forensic veterinary examination of corpses and live animals*).

The issue of methodology of creation and use of computer technologies during the FVM has been further developed, in particular, the following computer programs have been developed:

- *Osteo i Discriminant* (to find out species belonging to the bones of the skeleton of domestic and industrial small mammals);
- *Manus Vacca* (for determining the age of cattle based on the anatomical characteristics of the bones of the lower links of the thoracic limbs);
- *Pes vacce* (for automation of operations while determining the age of

cattle based on the anatomical characteristics of the bones of the lower links of the pelvic limbs).

- *Skull Cattle* (to determine the age and sex of dairy cattle of the direction of productivity by the skull);
- *SVS: "Forensic veterinary section"* (for automating the registration of the results of forensic-veterinary autopsies of animal corpses).

It is worth adding that scientific and applied achievements in the field of FVM are embodied in the activities of the Bureau of Forensic Veterinary Research, established at State Biotechnological University in 2014, which is conducted by FVR at the request of law enforcement agencies and courts.

Summing up, we note: the methods developed by the scientists of the KFVS have unique praxeological significance, as they contribute to a systematic and stereotyped expert approach to conducting research, therefore, minimize the tendency of expert evaluation, and are able to predictably influence the effectiveness of the appointment and conduct of FVR; increase the range of expert tasks for solving FVM; is a scientific basis for providing a well-founded and objective opinion of an expert; expand the epistemological capabilities of the pre-trial investigation bodies and the court; is a basis for improving the legislation of Ukraine regarding legal responsibility for offenses against the health and life of animals.

The number of FVMs, during which experts test and implement the scientific, theoretical and methodological achievements of the KFVS in practice is growing every year.

V. Improvement of national legislation

Applied methodological developments of KFVS contributed to the improvement

of the legislation of Ukraine regarding offenses against the health and life of animals, in particular Art.238-1 *Examination of animal corpse* and Art.242 *Grounds for examination* of Criminal Procedural Code of Ukraine ⁹⁴.

The author of this publication proposed to single out in Art.299 of the Criminal Code of Ukraine ⁹⁵ ten parts (instead of the current four) with the following content:

- *Part 1*: public calls to commit acts that have signs of cruelty to animals belonging to vertebrates, in particular the homeless, or public demonstration of cruelty to animals, in particular in the media or information and telecommunication networks, including the Internet, or dissemination of materials that promote cruelty to animals, in particular in the media, or information and telecommunication networks, including the Internet, with calls to commit such acts;
- *Part 2*: placing animals belonging to vertebrates, including homeless animals, on each other or on other animals;
- cruel treatment of animals belonging to vertebrates, in particular homeless animals, which was committed intentionally and caused damage to health of light (*part 3*), medium (*part 4*), severe degree (*part 5*);
- *Part 6*: cruelty to animals, manifested in violent acts against animals aimed at satisfying sexual passion;

- *Part 7*: cruelty to animals resulting in mutilation of animals;
- *Part 8*: cruelty to animals resulting in the death of animals;
- *Part 9*: cruelty to animals in the presence of a minor;
- *Part 10*: animal cruelty committed by a group of persons, or by a group of persons by prior conspiracy, or by an organized group, or against two or more animals, or repeatedly, or committed in a particularly cruel manner.

It is also proposed to distinguish in Art.89 of the Code of Administrative Offenses ⁹⁶ five parts (instead of the current four) with the following content:

- *Part 1*: violation of the rules that exclude cruelty to vertebrate animals: leaving them to fend for themselves or in danger of life, violation of hygienic conditions of keeping, feeding, transportation, but did not cause bodily harm, mutilation or death;
- *Part 2*: Violation of rules excluding cruelty to vertebrate animals: abuse of animals that caused them suffering, physical pain and suffering, but did not cause health disorders, bodily harm, mutilation or death;
- *Part 3*: actions specified in parts 1 and 2 are committed with respect to two or more vertebrate animals, or by a group of persons or an organized group;
- *Part 4*: Violation of animal transportation rules;

94 Кримінальний процесуальний кодекс ... URL: <https://zakon.rada.gov.ua/laws/show/4651-17#Text> (date accessed: 08.07.2024).

95 Кримінальний кодекс ... URL: <https://zakon.rada.gov.ua/laws/show/2341-14#Text> (date accessed: 05.07.2024).

96 Кодекс ... про адміністративні правопорушення ... URL: <https://zakon.rada.gov.ua/laws/show/80731-10#Text> (date accessed: 05.07.2024).

- *Part 5*: actions provided for in part 4 of this article are committed by a person who has been subject to an administrative penalty for the same violations within a year.

Praxeological significance: changes and additions proposed to the legislation of Ukraine in the aspect of legal responsibility for offenses against the health and life of animals, in particular in the case of cruelty to animals will contribute to the observance of the principle of legal responsibility, namely: justice, when punishment or another measure of legal influence is applied to the offender, must correspond to the degree of public danger (damage) caused by the offense, as well as the existence of a relapse in the offender's actions.

According to the results of research on the procedural status of forensic expert, the following changes are proposed to the codes of Ukraine, specialized Law ⁹⁷ and the Instructions on the appointment and conduct of forensic examinations and expert researches ⁹⁸: systematize and concentrate the list of rights, duties and limitations of the forensic expert in the relevant Law, while at the same time providing the relevant articles of the codes with a blanket of a nature referring to the norms of the relevant Law. Such a legal construction will facilitate the ease of perception and enforcement of these norms.

VI. Prospective directions for formation of theoretical and methodological doctrine of FVM

Promising directions for the formation of the theoretical and methodological

doctrine of FVM are the development of expert methods for:

- improvement of FVR topic and expansion of the range of FVM objects;
- injuries to animals by blunt and sharp objects, fall from height (FFH) injury, automobile and railway trauma, gunshot and debris injuries, acute asphyxia, exposure to extreme temperatures, baro- and electrical injury;
- violation of conditions for feeding, keeping and exploitation of animals;
- individual animal poisoning;
- determination of the prescription of the damage caused and/or the prescription of the death of animals;
- physical evidence of animal origin;
- FVM use opportunities to resolve disputes in livestock as a means of proof in legal proceedings;
- importance of sow for proving the damage caused by aggressive war of the Russian Federation against Ukraine.

Consequently, development of FVM contributes to solving many problems that arise in law enforcement agencies during the pre-trial investigation of offenses against the life and health of animals and the appointment of FVM within criminal or administrative proceedings; enriches the theory and practice of FVM with new opportunities; positively affects the effectiveness of its conduct, as well as the effectiveness of the use of forensic expert conclusion in legal proceedings; focuses on current scientific prospects in the field of FVM.

⁹⁷ Про судову експертизу : Закон URL: <https://zakon.rada.gov.ua/laws/show/4038-12#Text> (date accessed: 08.07.2024).

⁹⁸ Інструкція про призначення та проведення судових експертиз та експертних досліджень : затв. наказ. Мініюсту України від 08.10.1998 р. № 53/5 (зі змін. та допов.). URL: <https://zakon.rada.gov.ua/laws/show/z0705-98#Text> (date accessed: 20.07.2024).

Conclusions

Forensic expert praxeology is the field of FEA that studies the principles, patterns, conditions of expediency, rationality and efficiency, as well as the means of implementing quality activities in the field of forensic examination, peculiarities of introduction, use and application of forensic veterinary innovations.

Forensic veterinary praxeology is a concept based on expert *ontology* (existential conditioning), legal *epistemology* (cognitive activity) and expert *axiology* (value orientations) forms *an integral system* and forms productive mechanisms for the functioning of expert practice to influence the latter on quality of forensic science conducted in order to increase the efficiency of expert support of legal proceedings.

From a praxeological point of view, the main goal of the FVM is to provide expert practice with optimal methods, ways and means of conducting FEA to establish the actual data and circumstances of criminal proceedings (cases).

Forensic veterinary praxeology is a methodological and practical basis for mastering experience of conducting forensic examinations and improving expert practice, since the praxeological approach makes it possible to develop optimized algorithms for standard expert procedures.

Under praxeological approach, we understand the system of theoretical foundations for a systematic study of the patterns of planning, forecasting and designing of professional FVR that consists in thinking about actions and expected effects, comprehensive self-analysis and self-assessment, modeling of conditions, directions and means of improvement based on a complex of special veterinary knowledge and empirical experience, as well as in the implementation of certain actions (taking

into account peculiarities of the expert situation) to obtain effective results.

Praxeological significance of the application of FVR methods for establishing factual data and circumstances is justified by the need to identify the offender's actions that are reflected in the objects of the FVM within certain spatial and temporal limits.

The praxeology of the FVR makes it possible to predict and model trends and prospects for the development of forensic science in dynamics, which is an important theoretical basis for solving practical FVR tasks.

The pragmatism and impartiality of the FVR will contribute to meeting the demands of society for a fair trial and increasing the efficiency of FVM as a whole. Therefore, further scientific research in order to increase the effectiveness of FVR, taking into account the praxeological principles of the FVM is certainly relevant and promising.

Праксеологічні засади судово-ветеринарної експертизи: проблеми й оптимізація шляхів їх розв'язання Іван Яценко

Мета статті — наукова розвідка сучасного стану та шляхів підвищення результативності судово-ветеринарної діяльності завдяки застосуванню праксеологічного підходу. Для досягнення поставленої мети застосовано комплекс методів (діалектичний, системно-структурний, системно-функціональний, формальної логіки (аналіз, синтез, дедукція, індукція, аналогія), аксіологічний, моделювання). Поняття праксеології трактовано в судово-ветеринарному аспекті. З'ясовано вплив праксеологічних надбань на стимулювання розвитку спеціальних ветеринарних знань у контексті формування концепції ефективної судово-ветеринарної діяльності. Судово-експертну праксеологію проаналізовано з огляду на її ефективність та результативність функціонування судово-ветеринарних механізмів. Аргументовано

особливості праксеологічного підходу в судово-ветеринарній галузі. Судово-ветеринарну практику розглянуто як один із засобів експертного забезпечення судочинства. Увагу акцентовано на тому, що розвиток і вдосконалення теорії, методології та праксеології судово-ветеринарної експертизи є підґрунтям для підвищення ефективності судочинства. Запропоновано новітню праксеологічну конструкцію вітчизняної судово-ветеринарної експертизи, доповнення до Кримінального процесуального кодексу України (щодо обов'язковості призначення судово-ветеринарної експертизи для з'ясування характеру та ступеня тяжкості шкоди, заподіяної здоров'ю тварини, а також для встановлення причини її смерті) і Науково-методичних рекомендацій з питань підготовки та призначення судових експертиз та експертних досліджень (розширення кола питань, які ставлять судово-ветеринарному експертові під час призначення відповідної експертизи).

Ключові слова: судова ветеринарна медицина; судово-ветеринарна експертиза; судово-ветеринарний експерт; висновок експерта; судово-експертні установи; ефективна діяльність; практичне значення; праксеологія; тварини; ушкодження.

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Declaration of Competing Interest

Author declare no conflict of interest.

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