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Management Optimization of Wildlife Resources in the Republic of Moldova. Achievements and Problems

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ABSTRACT

In this paper, the author identifies the current problems of management of the animal kingdom and develops a series of recommendations necessary to solve and prevention these problems. Are highlighted the positive and negative aspects of wildlife management in the Soviet period, the effects of economic and institutional crisis in the transition period. Priority attention is paid to study the implementation of economic sanctions mechanism for damage caused by the animal kingdom. It made a deep comparative analysis of previous and current version of the Code of Administrative Offences in the field of wildlife resources and the application of administrative sanctions for these offenses. It also addresses the methodology for evaluation of damage to the animal kingdom and efficiency of the actions of these environmental damages compensation. The author comes up with concrete solutions to problems identified, which may be useful for policy makers in this field.

1. INTRODUCTION

Complex difficulties of building an independent state and the transition to a market economy were reflected negatively on the biological resources of our republic. Damaging effects occurred with greater magnitude on species of fauna and hunting found outside the state forest found and on the biotic components of aquatic objectives, which are not managed by the State Fisheries Department. A major problem is financial shortage, which controls the rural areas and makes the spread of illegal fishing and hunting. To reduce and prevent these effects, in recent years, has improved the legal basis and approved the new rules for use of fauna, according to the environmental situation and to the scientific advice in this sector. Also, one of the main objectives of optimizing the management of hunting and fishing households is increasing of incomes and their economic efficiency.

The current alarming problem is non-transparent and semi-legal exploitation of fishery objectives, which

are not directly managed by the Fisheries Service, as submitted in temporary use to individuals and legal entities. Very frequently violate operating mode of river and fisheries resources and clearing of aquatic objectives practically not performed.

A major influence on the low efficiency of management functions fauna impact it has superficial implementation of the mechanism of administrative sanction. Despite the frequent cases of violation of legislation on the use and protection of the animal kingdom, the amount of fines was very low (about 100 lei MDA). Very often as a form of punishment, apply only warnings and actions for recovery of injury of hunting and fishing resources are brought, almost exclusively, in large fish farms.

2. MATERIAL AND METHOD

The main material that formed the basis of achievement of this study was: 1) Recent legislation regulating the use of animal kingdom; 2) Previous and current edition (dated 31 May 2009) of Offences Code

of the Republic of Moldova [1], [2]; 3) Reports of the National Bureau of Statistics (NBS) on the application of administrative penalties [5]; 4) Yearbook of quality of environmental factors and activity of the State Ecological Inspectorate [3]; 5) Annual reports of Ecological Agencies and Inspections. The study included, with priority, the 2003-2010 years [4].

The main methods used in this study are *statistical, analytical, historical, analogical and consulting* of ability authorities for the detection and examination of environmental offences. The statistical method has been widely used to process statistical information on administrative penalties for violations of rules of use and protection fauna in the all administrative territorial units of Moldova for each type of offences in this field. The analytical method was used for: a) identification of changes (based on comparative analysis of previous and current version of the Offences Code) and the directions of optimization administrative sanction mechanism for breaking the law on wildlife protection and use; b) diagnosis (based on the statistical information processed and on consultations of ability authorities) of situation in this field; c) make recommendations to optimize that mechanism.

3. RESULTS AND DISCUSSION

During Soviet period, public property exclusively on natural resources, including fauna components conditioned the centrally managing of hunting and fishing founds. In this purpose, were created the state services in those areas, and specialized regional companies that worked on the basis of regulations established branch households, which worked under established branch regulations. This regulation provides both direct economic exploitation functions (capture hunting and fishing) and recreational and ecological functions of these resources. It was established a relatively effective system of supervision and control over the use of hunting and fishing objectives, and the rare species of state protected areas. The evaluation and evidence had a systematic character, being well provided with scientific personnel, technical equipment and financial resources. Also, a high level of protection of fauna objects was subjected to the perimeter border areas and rest areas of the great dignitaries of State. The water objectives from the State Found and the communal ponds were regularly cleaned.

Despite those achievements, often find low economic efficiency of the use of hunting and fishing complexes. There was widespread washing and draining of the excessively polluted soils to ponds and water streams, which frequently generated to eutrophication of waters, considerable reduction of fisheries resources and biological diversity and consumed high financial resources to clean and restore these basins. Another big

problem was the massive irrigation and hydraulic works execution key, which no takes account of the ecological, hydrological and climatic recent particularities, which conditioned the major environmental problems in the Lower Dniester and Prut rivers, as well floodplains of the small and medium-sized river. Also, to enhance the hunting value of native forest has been chaotic introduced from other regions of the ex. USSR samples of deer and other hunting species. As a result, was decreased degree of tolerance for pests to those groups of animals, etc.

After obtaining the states independence, was created the necessary legal basis to adequate managing the animal kingdom, especially in protected areas, were improved Regulations of hunting and fishing companies and approved the institutional framework and information system in the field [1], [2], [3]. It was established use regime of faunal complexes and annual are approved the periods of legal hunting and fishing activities for different geographical areas and species. Also, it has been improved methodology for evaluation the damage caused to the animal kingdom [9], including illicit capture and pollution of the fisheries resources [10]. Despite those achievements, institutional and economic crisis was reflected by a large ample on the faunal complexes. Although animal kingdom resources and water resources remain the sole property of the state, most lands were attributed to private property or were put into temporary use. As a result, the area of direct influence of the states and efficiency of operation and accounting functions of faunal resources were reduced considerably. Much of the recently approved legal provisions have a declarative character, without the necessary financial coverage. Objectives of Regulation of Animal Kingdom Cadastre are not made clear and consistent in accordance with the priority and implementation phases.

Under the legislation, State Environmental Inspectorate has the lead role in monitoring the impact on the animal kingdom, in exercise in the territory the accounting and control functions in this sector. In fact, this institution has a very insufficient amount of human, technical and financial resources necessary for the proper exercise of these functions. For this reason, significantly increased not only the unlawful operation of faunal objects and complexes, but and of other natural resources. As a result, are found only an insignificant part of environmental law violations, including of the Animal Kingdom. Moreover, the fines were very low and often apply only to warnings. This critical situation requires urgent improvement of administrative sanction mechanism, providing human, technical and financial resources and effective coordination of these measures.

Another problem is the superficial involvement of local government and lands beneficiaries' in monitoring

and protection the faunal components. This is explained both by lack of resources necessary for such purposes and the negligent attitude of the administration and local population. Most villages do not have plans with concrete actions to protect wildlife and their collaboration with environmental authorities and scientific centres, with hunting and fishing companies is, usually, inefficiently. Often, the tenants of communal ponds do not allow to local population, which contributed significantly to the construction and arrangement of these objectives. Moreover, they are performing a semi-legal activity, do not pay full taxes and payments required by state and local budget and to meet environmental requirements only superficial. Meanwhile, because of legislative gaps on the ownership and possession of the natural goods, of bureaucratic pressures, of corruption and mafia interests, some tenants of fish ponds, which were made, from their own financial means, expensive measures for improvement of ponds and for reproduction of fish resources, can be easily deprived of such goods. Also, there are frequent cases of illegal execution of hydro-technical measures, and local authorities are partial or

powerless. Such works have caused sometimes massive flooding.

3.1. Mechanism of administrative sanction

Administrative penalties for violations legislation of use and protection of natural resources were introduced at the border '70s and 80s years, with the implementation of normative impact on the environment factors and human body. The form and amount of sanctions depends on the status of the offender, the type and size of damages set by the court or other authority empowered to examine such violations [4], [5].

Payment of fines does not release the offender to total compensate the damage caused animal kingdom and their habitats, according to the respective annexes of the Law on Animal Kingdom and its recent changes [1].

During the period 2003-2010, the number and amount of fines imposed for infringements on the animal shows a fluctuating trend, marked by significant growth in latest years (fig. 1).

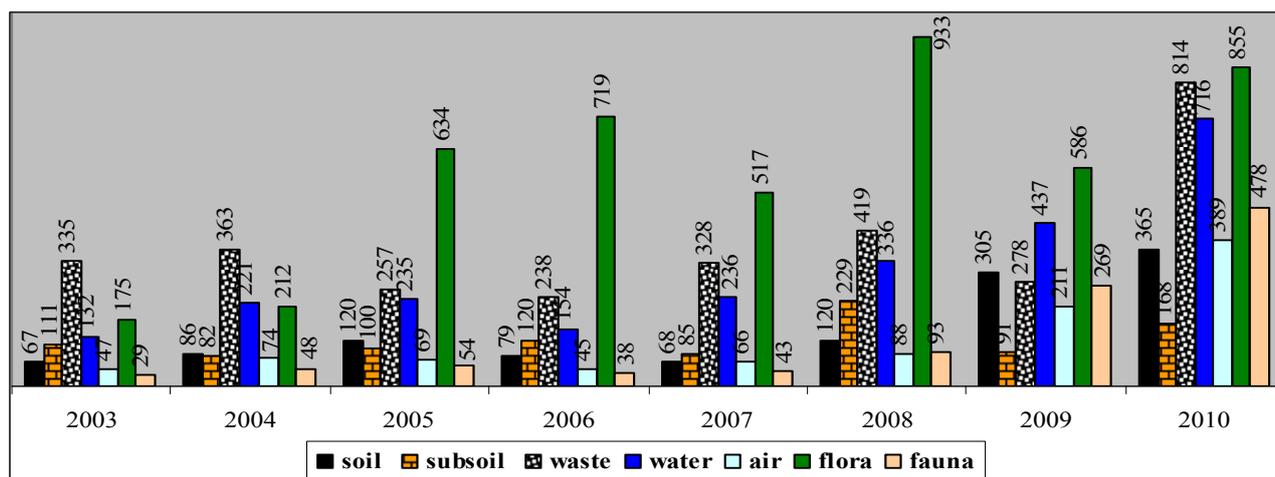


Fig. 1. The amounts of fines applied for infringement of environmental legislation, thousand lei MDA [6].

The maximum amount of fines are applied for violations of use of the animal kingdom legislation is registered in the administrative units with an increased area of fish ponds, as Râșcani, Anenii Noi, Criuleni, Ștefan-Vodă and Cahul districts and of forest land used for hunting purposes - Soroca, Orhei and Hâncești districts (table 1). At the same time, the level of provision to environmental authorities of information on examination of forestry infringements and use of the animal kingdom is insufficient and many cases are dismissed or attacked for some reason.

The number and amount of fines are conditioned and by frequency and effectiveness of control by local environmental authorities, and by their collaboration with the territorial courts, which frequently show a superficial attitude towards examining the environmental violations and sanctions needed.

In the previous Offences Code, fines for violations of use of the animal kingdom was very small (table 2), and often applies only to warnings.

Most of the administrative sanctions were imposed for illegal hunting and fishing (Articles 87 and 87/1) and rarely for other offenses in this area.

Under the new Offences Code, were considerably increased the scope and amount of fines for lows violations of use of the animal kingdom, especially for damage caused to the fish and bee founts and for cruelty to animals.

Have been excluded warnings and introduced, as additional forms of sanction, *community work* and for legal persons and in charge - *the suspension of economic activities for a period up to 1 year*. As a result, has increased several times the amount of fines (table 1).

Table 1. Number and amount of fines imposed on administrative-territorial units, thousand lei MDA [6].

No.	Territorial administrative unit	Number of fines							Amounts of fines (thousands lei)						
		2004	2005	2006	2007	2008	2009	2010	2004	2005	2006	2007	2008	2009	2010
1	Briceni	79	0	0	0	4	14	25	4.2	0	0	0	0.34	2.5	4.6
2	Ocnîța	28	48	9	4	13	9	1	1.22	4.2	0.62	0.26	1.4	1.3	0.2
3	Edineț	25	0	0	0	0	18	52	1.51	0	0	0	0	2	16
4	Dondușeni	0	21	0	28	40	9	7	0	1.8	0	5.26	0.8	4.8	8.1
5	Drochia	7	4	6	0	4	8	19	0.23	0.21	0.28	0	0.36	6.4	12.4
6	Soroca	41	62	34	68	0	44	126	8.3	5.6	9.2	6.2	0	26	25.1
7	Florești	30	11	6	17	16	11	13	2.3	0.8	0.4	1.8	1.3	3.1	2.6
8	Râșcani	0	0	16	7	80	46	79	0	0	0.7	2.52	16	8.5	11.8
9	Glodeni	4	2	4	1	0	0	2	0.5	0.2	0.4	0.1	0.0	0	0.3
10	Fălești	7	11	11	5	5	8	7	0.6	0.9	0.7	0.7	0.5	2.5	3.6
11	Bălți	256	0	1	3	4	2	43	7.6	0.0	0.0	0.2	0.3	0.5	5.1
12	Sângerei	21	18	11	15	0	13	22	1.2	0.4	0.3	0.5	0.0	4.6	2.2
13	Șoldănești	0	9	4	10	4	5	59	0.0	0.8	0.4	0.3	0.3	0.5	8.5
14	Rezina	32	30	13	7	10	38	96	1.7	1.8	1.5	0.4	0.4	12	14.4
	Regiunea de Nord	530	216	115	165	180	225	551	29	17	14	18	22	74	115
15	Telenești	0	0	0	0	12	0	2	0	0	0	0	1.1	0	1.4
16	Orhei	21	51	18	8	20	54	123	1.7	5.6	1.8	0.6	1.6	13	30.8
17	Criuleni	43	17	22	11	18	90	20	1.9	1.9	1.7	1.1	1.8	23	6.7
18	Dubăsari	0	0	0	0	0	117	0	0	0	0	0	0	30	0
19	Anenii Noi	50	53	17	30	27	93	12	3.4	4.1	1.5	2.8	3.3	9.3	4.82
20	Ialoveni	15	0	1	20	35	1	29	1.4	0	0.1	2.3	3.5	0.5	6
21	Strășeni		2	12	6	7	6	4	0.0	0.3	1.1	0.4	1.8	5.8	3.9
22	Călărași	6	0	0	0	0	1	2	0.2	0	0	0	0	1	0.2
23	Nisporeni	27	97	28	0	18	0	24	0	0.1	0.2	0.1	0.1	0	3.3
24	Ungheni	0	1	1	1	2	50	69	1.9	16.6	3.2	0.0	2.4	23	13.8
25	Hâncești	0	14	29	23	14	4	47	0.0	1.1	2.4	5.2	1.4	1.1	11.7
26	Chișinău	10	7	3	3	435	53	234	0.4	0.5	0.5	0.4	47	40	195
	Regiunea Centru	172	242	131	102	588	469	56	11	30	13	13	64	146	278
27	Căușeni	4	2	0	4	16	0	143	0.4	0.2	0	0.2	1.5	0	35
28	Ștefan-Vodă	59	49	24	25	33	94	90	3.8	4.4	3	3.7	0.8	18	12.5
29	Cimișlia	2	4	0	3	2	13	0	0.2	0.5	0	0.3	0.2	3.1	0
30	Basarabasca	1	3	0	5	0	0	1	0.4	0.2	0	0.4	0	0	1
31	Leova	5	6	27	9	1	16	56	0.1	0.2	2.7	0.5	0.2	2.8	18.7
32	Cantemir	6	4	9	11	8	10	5	0.2	0.4	0.7	1.4	0.7	3.8	1
33	Cahul	14	14	26	31	28	119	105	1.2	0.5	3.9	4.1	2.6	17	17.5
34	Taraclia	0	0	3	10	2	3	4	0	0	0.23	1	0.2	0.3	0.4
35	UTA Găgăuzia	21	9	2	2	6	8	1	1.9	1.0	0.2	0.2	1.0	4.1	0.2
	Regiunea de Sud	112	91	91	100	96	263	405	7.7	7.4	11	12	7.2	48	86.3
	Total	814	549	337	367	864	957	1521	48	54	38	43	93	269	478

Despite these beneficial changes, these offences committed by or with the consent of the forestry and the fisheries staffs are rarely examined. This convinces us about the inefficient state management of these resources [9].

In 2010, for low violations of use of the animal kingdom have been applied 1521 fines in the sum of 478 thousand lei, including the North Region - 115 thousand lei in the Central Region - 278 thousand lei and the South - 86.3 thousand lei. Over 90% of the total

number and 80% (402 thousand lei) of the amount of fines for offenses identified in the animal kingdom are applied for violation of fishing rules. In second position, with 13% of the amount and 5% of the total number, are fines for violation of hunting rules. Other type of offenses in the animal kingdom, especially in beekeeping is rarely sanctioned. Unlike plant resources, after applying new Offences Code, the amount of fines for low violations of wildlife has increased considerably, especially for damage caused fish stock.

Table 2. Administrative penalties for violations of use of the animal kingdom [4], [5].

Reasons for applying sanctions	Article number of offences code		Size of sanctions (conventional units ¹)			
	PV ²	CV ³	For citizens		For persons in charge/legal entities	
			PV	CV	PV	CV
1. Infringement of hunting and fishing rules	87	128.1 128.2	5-10, c.w. ⁴ until	20-50 50-100	20-30 c.w. until	200-400
2. Serious violation of hunting rules	87/1	-	5		20	-
3. Cruelty to animals				5-10		
4. Failure animal hygiene conditions		157.1		10-20		20-30
5. Intentional infliction of pain animals	89	157.2	10	20-40	30	
6. Mutilation or killing actions of the animals		157.3		40-60 cw		-
7. Violation of protection rules of fisheries resources	87	114.1	-	10-20	-	/200-300
8. Violation of fishing rules in the public water objectives	-	114.2	-	5-10	-	/200-300
9. Unauthorized transportation and marketing of fishery products and other aquatic organisms	-	114.3	-	100-150	-	/400-500 3 m. – 1 year ⁵
10. The actions specified in paragraph 1 (114.1) together with fishing or destruction of valuable aquatic species	87	114.4	-	150	-	/400-500, 3 m. – 1 year
11. Fishing with the use of electricity, of explosives, poisonous and narcotics substances	87	114.5	-	100-150	-	/400-500
12. Deliberate destruction of dens, mounds and nests of birds in forest found	76.89	129.0	2.10	20-50 60	5.30	-
13. Unauthorized location of hives on the forest land	-	130.0	-	3-5	-	/50-100
14. Lack of apiaries passport, apiary location with violation of sanitary and environmental legislation	-	131.1	-	10-20	-	/20-40
15. Concealing cases of spontaneous morbidity or mortality of bees	-	131.2	-	20-40	-	/40-60
16. Unauthorized marketing and using of the technology to increase the bees and treatment of diseases of chemicals and medicinal preparations	-	131.3	-	30-50	-	/60-100
17. Violation of regulatory requirements for creating, filling, storage, use, registration, sale or delivery of zoological collections	86	138.0	until 5	20-30	until 20	-
18. Violation established mode by use of the animal kingdom in nature reserves and in the other states protected areas	88/2	139.0	until 5	40-50	until 15	-

3.2. Evaluation and compensation the damages caused on animal kingdom

In evaluation of the damage caused to animals, is taken into account the degree of rarity of species, number of copies, date and method of capturing objects fauna. According to the recent modifications of the Animal World Law, the amount of damage caused by hunting, fishing, acquisition, collection, marketing, possession and illicit export or destruction of fauna species listed in Red Book, varies ranging from 50

conventional units (c.u.) for each copy of class VIII of rarity to 250 c.u. – for those in category II of the rarity. Thus, in each rarity category shall be added with 25 c.u. In case of hunting animals, the maximum amount is established for noble stag and elk – 500 c.u., and the minimum – 15 c.u. for each turtle dove or a white pigeon. For a spotted deer and fallow deer the tax equals 350 c.u., for each mouflon, wild boar, deer and wolf – 250 c.u., for a badger – 125 c.u., for each rabbit, ondatra, fox, squirrel as well as for a large crane, pheasant and wild goose – 50 c.u. For the damage caused to protected species of fish and other aquatic organisms the amount of damage varies from 1 c.u. – for each silver carp, bream, pike, perch and frog to 45 c.u. – for each beluga, sturgeon [9].

According to the current legislation, the damage assessment is also carried out in cases of fish river

¹ One conventional unit is equal to 20 lei MDA.

² Previous version of Offences Code.

³ Current version of Offences Code (applied since 31 may, 2009).

⁴ c.w. – confiscation of weapons and hunting and/or fishing tools.

⁵ 3m – 1 year - the suspension of economic activities for a period of 3 months to 1 year.

pollution. The amount reflects the cost of bio pelvis injury subjected to water pollution, which depends on the basin fish productivity before and after pollution, the surface and the pollution period.

When calculating the damage caused by animal and plant resources within the green areas is applied the multiplier which equals 10. It is also necessary the differential apply of multipliers for damage caused to

objects of fauna and flora in the area of state protected natural areas and river protection strips and watercourses [10].

Amount calculated to compensate the damage caused by actions of the animal shows a fluctuating trend. Thus, in 2009, it stating a maximum a maximum amount of 358 thousand lei MDA, and in 2010 - a minimum of only 52.7 thousand lei MDA (fig. 2).

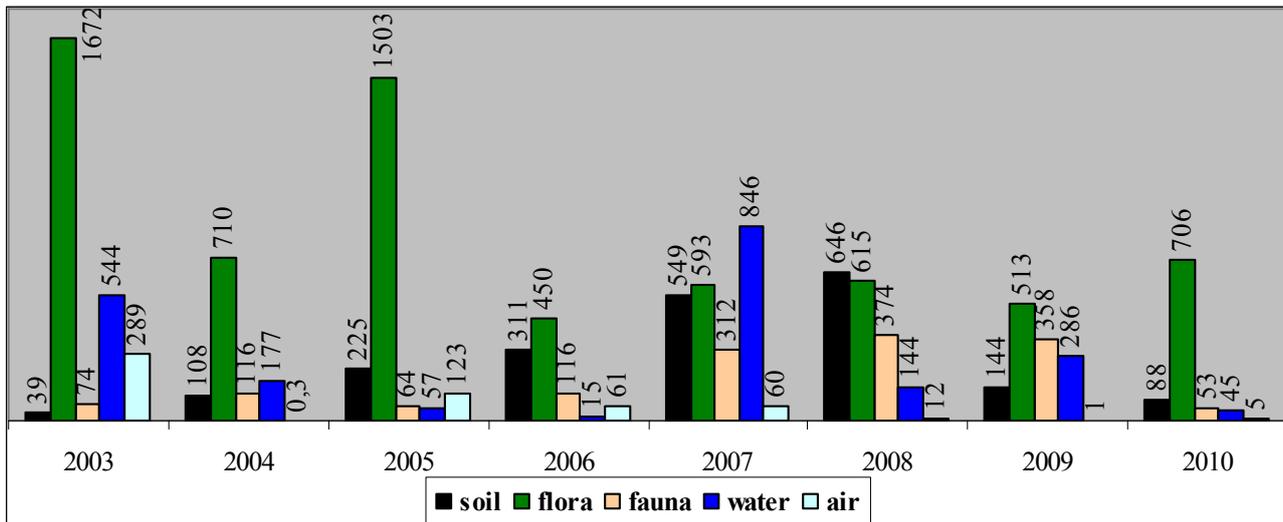


Fig. 2. The amount of actions brought for environmental damage, thousand lei MDA [7].

This is due not so much by reducing damage to the animal kingdom or objects fauna better guard this year, as the lower frequency of environmental control. Maximum amounts of injury recovering actions are testified in the administrative units with rich fishery and hunting resources as Ștefan-Vodă, Anenii Noi, Criuleni, Dubăsari, Râșcani, Ialoveni and Chișinău. Also, in most northern and southern districts, animal world injury compensation measures were not instituted yearly, while in Ocnîța, Sângerei, Nisporeni and Basarabeasca districts – throughout the whole analyzed period.

Similar the applied fines, absolute majority of the action for damages to the animal kingdom being brought for damage to the fishing resources, as a result of illegal fishing (table 3). In districts with a higher degree of forestation, where are headquarter of zonal forest companies, are episodic brought and actions to recover damages caused by illegal hunting. Very rarely are brought the actions for pollution to fish resources, for damage caused to other components of the animal kingdom, for cruelty to animals, including from birds, reptiles and amphibians, to domestic animals, rare species.

This situation is due, especially to reduced capacity of local environmental authorities needed to full detect of these offences and for adequate evaluation of the derived damage. Thus, despite an adequate methodology for evaluation damage to the animal kingdom, their practical application is very superficial.

Therefore, for adequate exercise of environmental evaluation and control functions is necessary to ensure sufficient human, technical and financial resources. It is also necessary to stimulate and enhance collaboration of ecological authorities with forestry and fisheries companies, with science centres and with the other ability structures to exercise management and operation functions of faunal complexes and objects. Another key way to optimize management of faunal resources is collaborations of environmental authorities, of forestry and fisheries authorities with associations of hunters and fishermen and with the population and local authorities. It is welcome the application of financial incentives to people who help detecting offences and of full and timely evaluation of these damages.

4. CONCLUSION

In soviet period, it was established a relatively effective system of supervision and of faunal control objectives and complexes, especially in the state protected areas. After obtaining the independence, efficiency of evaluation and control functions of faunal resources were reduced considerably.

Under the new Offences Code, were considerably increased the scope and amount of fines for lows violations of use of the animal kingdom, especially for damage caused to the fish and bee founds and for cruelty to animals. The amount of fines for

violations of use and protection of animal kingdom has increased considerably.

Over 90% of the sum of fines and actions for recovery damages caused on animal kingdom are applied for violation of fishing rules.

Superficial application of fines and actions for compensation damage makes a weak influence on offenders and reduced efficiency of faunal resources management.

Table 3. The amount of compensation actions for damage caused on the animal kingdom, thousand lei MDA [7].

No.	Territorial administrative unit	Filed							Satisfied						
		2004	2005	2006	2007	2008	2009	2010	2004	2005	2006	2007	2008	2009	2010
1	Briceni	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	Ocnîța	0	0	0	0	0	0.3*	0	0	0	0	0	0	0	0
3	Edineț	0.6* ⁶	1*	0	0	12.9*	1.9*	0	0.61	0.81	0	0	3.5	5.2	0
4	Dondușeni	0	0	0	8.4*	4*	0	0	0	0	0.31*	0	4	0	0
5	Drochia	0	0.18	0	0	2*	0	0	0	0	0	0	2	0	0
6	Soroca	2.05*	0	0	0	35.5*	76*	0	2.1	0	0	0	0.1	0.8	0
7	Florești	1.9*	0	0.76*	0.94*	4.4*	0.7*	0.1	1	0.04	0.8	0	0	0.7	0.1
8	Râșcani	1.8*	1.5	0.46*	14.3*	29.9*	17.7	0	1.6	0.8	0.41	0	14.3	10.7	0
9	Glodeni	0	0	0	1*	0	0	0	0	0	0	0	0	0	0
10	Fălești	0	0	0	2*	10*	0	0	0	0	0	2	0	0	0
11	Bălți	0.36*	0	0	0	0	0	0	0	0	0	0	0	0	0
12	Sângerei	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	Șoldănești	0	0	0	0.2*	0	0	0.1	0	0	0	0	0	0	0.1
14	Rezina	16.3*	1.2	0.2	1.7	0.54*	3.8*	0	4.2	1.2	0.08	0.32	0.4	3.1	0
	Regiunea de Nord	22.9*	3.9	1.4	28.5	99.3	100	0.2	9.5	2.8	1.6	2.3	24	20	0.2
15	Telenești	0.04*	0	0	0	0	1	4	0	0	0	0	0	1	4
16	Orhei	0	4.0*	8.1	5.1	7.3*	4.4	0	1.7	3.3	3.3	2.8	3.2	4.6	0
17	Criuleni	6.5*	1.1*	1.2	28	13.4	10*	5.1	6.3	1.1	0	10.3	12.8	3.9	5.1
18	Dubăsari	7.05*	3.33*	4.8	19.9*	22.1*	70	0.14	5.2	2.7*	1.7	3.9	19.9	53	0.14
19	Anenii Noi	8.6*	0.46*	7.1	43	1.6*	2.4	0	0.5	0.7	3.14	22.8	1.6	2.4	0
20	Ialoveni	2.6	0.6*	0.12*	11.4*	0.3*		0	0	0.44	0.02	11.4	0.3	0	0
21	Strășeni	0	0.32	1	0.1	5.2*	1.3	0	2.6	0	0	0	4	1.3	0
22	Călărași	0	0.1*	0	0	2*	0	1	0	0	0	0	0	0	1
23	Nisporeni	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	Ungheni	0.9	1.8	11.3	14.8	9*	10.5	8.3	0.9	0.83	6.4	9.8	7	12.4	8.3
25	Hâncești	0	3.16*	0.54*	0.50*	8.5*	0.2*	0.12	0	0	0.22		1.8	0.1	0
26	Chișinău	15.7*	27.3*	24.8*	33.7*	54.1*	21*	0	36	24.5	18.3	30*	52.3	20.4	0
	Regiunea de Centru	41.4	42.1	59	156	124	121	18.7	53.1	33.7	29.8	91	103	99	18.6
27	Căușeni	0.05*	2.3*	4	0.61	1.8	4.3*	0.3	0.05	2.3	3	0.05	0.6	0	0.3
28	Ștefan-Vodă	22.3*	11	13.6	124*	42	26	5.9	20.6	7.2	4.3	24.3	26	20.7	2.7
29	Cimișlia	0	0	0	0	0	2	0	0	0	0	0	0	2	0
30	Basarabasca	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31	Leova	0.02*	0.1	3.2*	1	2.5*	0	3	0	0.1	1.74	0.9	0	0	1.5
32	Cantemir	0	0.01*	0	1.0*	4.0*	5.6	0	0	0	0	0	4	1.9	0
33	Cahul	0	0	0.65*	0	101	99*	22.5	0	0	0	0	11.9	43.1	0
34	Taraclia	6.9	1.7	6.1*	1.3	0	0	2.08	5	1.6	1	0	0	0	1.7
35	UTA Găgăuzia	0	2.7*	0	0	0	0	0	0	0	0	0	0	0	0
	Regiunea de Sud	29.3	17.8	55.8	127	151	137	33.8	25.6	11.1	10	25.3	43	68	6.1
	Total	116	64.1	116	312	374	358	52.7	88	48	41	119	170	187	24.9

⁶ * - only for damaged caused on fisheries resources.

Very rarely are brought the actions for pollution to fish resources, for damage caused to other components of the animal kingdom, for cruelty to animals.

For adequate exercise of environmental evaluation and control functions is necessary to ensure the local ecological authorities with sufficient human, technical and financial resources.

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