

**ASSESSMENT OF QUALITY OF HUNTING LEGISLATION IN THE  
REPUBLIC OF MONTENEGRO AND RECOMMENDATIONS FOR  
IMPROVEMENTS**

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### Executive summary:

The expertise is based on a systematic analysis of the Hunting Law, executive regulations and other legislation and official documents that directly or indirectly regulate or affect management and status of game species (and some other wildlife species) in the Republic of Montenegro. The expertise pursues two objectives: (i) to assess the quality of hunting regulation, including compliance with ratified international acts with an emphasis on EU directives; and (ii) to provide recommendations for legislative amendments taking into account Montenegro's EU accession activities. The legal, biological and practical aspects are considered in order to enhance the report's utility. The assessments are supported by examples of best practice from countries with comparable historical, cultural and natural characteristics, mainly Slovenia. The general comparative introduction defines Montenegro in terms of its legal and organisational regulation of hunting as belonging among countries where (i) game is in common/state ownership (*res communis*); (ii) hunting rights are owned by the state (which grants or sells them to hunters); (iii) hunters are liable for damage caused by game; (iv) management planning, including the collection of data that are needed for management, is (or should be) predominantly in the domain of the state; and (v) public interest in wildlife management is supposed to be prominent and non-discriminatory to individual group of stakeholders. The second part of the expertise breaks down the principal features with an emphasis on the shortcomings of Montenegro hunting regulation, including differences with countries that have similar legal foundations stemming from the ownership of game. The third part is a concise presentation of the key shortcomings combined with urgent and recommended improvements.

Many segments of game management in Montenegro are well regulated or at least based on sound foundations. But to improve management and make it compatible with EU directives certain shortcomings need to be remedied, of which we deem the following to be particularly important: (i) quality of data on the status of managed species is highly questionable due to vague regulations on monitoring methods and poor data gathering control; (ii) all principal data on the status of game species are collected by hunters; for this type of hunting system hunters also have an outsized role in management planning, which may both lead to conflict of interest; (iii) except for hunters, the legislation does not provide for sufficient participation of other stakeholders (e.g. landowners, NGOs) in the game management process, which is required under the Aarhus Convention and should generally be a characteristic of countries with *res communis* systems; (iv) for certain species, the list of game species (e.g. brown bear, grey wolf), hunting seasons (e.g. several birds, wolf) and legislative procedures allowing hunting is not in conformity with EU legislation (Habitats and Birds directives); (v) existing regulations determines absolute population size estimates and ranking of carrying capacity of hunting grounds (bonitiranje) as the basic model of game management planning; this management planning concept is outdated, in practise often erroneous, and is being replaced around the world by an adaptive management approach; (vi) hierarchical integration of 10-year and annual management plans for local hunting grounds with umbrella management plans for regional units is inadequate (not sensibly resolved); it is also impossible to verify on annual basis whether the executed measures fulfil the goals of the regional units plans, as there is no available data; and (vii) the legislation likely insufficiently supports coordination of game management with other sectors (e.g. forestry, nature protection).

Key words: Legislation, hunting, Montenegro, game, wildlife management, Habitats Directive, Birds Directive

## 1.) INTRODUCTION

This report has two principal objectives as agreed with the client: (i) evaluation of the legislative framework for hunting (i.e. management of wildlife) in Montenegro including its compliance with ratified international acts with an emphasis on EU directives, and (ii) recommendations for amendments to the legislation taking into account Montenegro's pre-accession activities. The authors of the report analysed the Law on Game and Hunting (*Zakon o divljačini i lovstvu*), Official Gazette No. 52/08, key executive regulations and other documents (e.g. the Rules on Hunting Seasons (*Pravilnik o izmjeni in dopuni pravilnika o lovnim sezonama*), Official Gazette No. 60/10), the Programme for the Development of Hunting in Montenegro 2014-2024 (*Program razvoja lovstva Crne Gore za period 2014 - 2024 godina*)), and laws that directly or indirectly regulate or affect the management and status of game populations (e.g. Nature Protection Law, Forest Law).

Game is not a biological category, for it encompasses all terrestrial species of mammals and birds that may be hunted under the current law. The term is therefore an intersection of the interest in species in terms of hunting, their status (population size, conservation status), as well as society's attitude to hunting and the role of species. The list of game species therefore changes in space and time. For the purposes of integrity, the report is not limited to game species as defined by the current Montenegrin Law on Game and Hunting, but we also attempted to conceptually cover other species that may be potentially interesting as game (and may even be protected with other laws).

The report is not an attempt to provide a comprehensive overview of the legislation regulating hunting (and wildlife management) in Europe compared to Montenegro. Such an overview would be very extensive, requiring a significant investment of time and finance, and probably less useful for the specific needs of the client. Instead, taking into account EU regulations as well as Montenegro's historical, cultural and other idiosyncrasies, we highlighted the principal characteristics of Montenegro's hunting legislation with an emphasis on sections that can be improved. We also provided examples of best practice from comparable countries, frequently from Slovenia.

In compiling the report, we were able to harness data on Montenegro only from online sources. Consequently, we were unfortunately unable to source some data and information that were seen as relevant to the report, in particular the specifics of implementation of laws in Montenegro (e.g. consistency, feasibility and specific forms of monitoring of game populations; spatial and temporal hierarchy of management plans). We suggest these issues be resolved in the process of the presentation of the report or in subsequent phases.

The report was conceived to be of maximum utility, in legislative, biological as well as practical terms. This led to the inclusion of forestry, biology, ornithology and legal experts who in Slovenia deal with the wildlife management, hunting, management planning, protection of endangered species and legislation; short presentations of all members of the task force along with their contact details are provided at the end of the report.

After the introductory meeting, where the work was divided based on the competencies, each member covered their specific issues in the general part, subsequently analysed the hunting law and other applicable documents, and, as needed, provided their opinion. This work method has determined the structure of the report. The first part provides general commentary underlining the principal characteristics of hunting regulations in Montenegro with an emphasis on detected shortcomings (e.g. non-conformity with EU regulations and directives, non-integration of hierarchical management plans, questionable monitoring of populations). The second part – ordered according the internal structure of the law – provides minor remarks that may not necessarily be relevant when the law is amended, for the provisions they refer to may be crossed out. The third part provides the principal guidelines and the key recommended amendments to the existing legislation on hunting in Montenegro.

## 2.) ASSESSMENT OF THE LEGISLATION

### 2.1) General premises

With the exception of individual segments (the Habitats and Birds directives, CITES, see below), the EU did not enforce a unified policy or legislation on hunting / management of game populations. The legislative frameworks for hunting are exceptionally diverse across the member states (for an overview, see Apollonio et al., 2000<sup>1</sup>). Nevertheless, European countries can be divided in terms of hunting regulation to two contrasting groups: (i) countries where game is nobody's property (*res nullius*) and (ii) countries where game is in the public or state domain (*res communis*). Ownership of game is an important category in that it determines a series of other key features of hunting regulation such as hunting rights, liability for damage caused by game animals, and the role of the state in management planning and the attendant monitoring. Ownership is also associated with the degree of implementation of public interest in game management, and the attitude of landowners to damage by game species. Where game is nobody's property, the rights and obligations with regard to the game animals are to a larger degree incumbent on the landowner; where game is in the public or state domain, the state typically takes over the bulk of the rights and obligations. Both systems are fairly equally represented in Europe; in Montenegro, much like in other parts of the former Yugoslavia and the majority of Eastern European countries, game is state property.

The system based on *res communis* is, according to the personal opinion of the authors of the report, a civilizational achievement. It has many distinct advantages compared to *res nullius*, including: (i) public interest in the condition and management of game species is inherently easier to assert and hence typically better represented; (ii) it is easier to factor in the biological needs of species in the delineation of hunting districts, as land ownership boundaries are irrelevant; (iii) in

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<sup>1</sup> Apollonio M., Andersen R., Putman R. 2010. European Ungulates and their Management in the 21st Century. New York, Cambridge University Press, 618 p.

general hunting is available to a wider circle of people, as hunting rights are not conditional on land ownership; (iv) narrow economic interests with regard to game management are typically less pronounced, which probably makes it easier to also enable survival of species that are often perceived in traditional hunting as pests (e.g. large predators). Nevertheless, this philosophy negates the ostensible “natural law” that assumes the landowner is the absolute owner and master of all goods the land produces. Moreover, *res communis* establishes a tight intersection of public and private interests, which can trigger a variety of conflicts that are often forcefully acted out if legislation is poor or poorly implemented (e.g. poorly resolved issue of damages, financial benefits accruing to one interest group at the expense of other groups, etc.). Such systems therefore demand greater accountability, compromise by all stakeholders (landowners, various interest groups and general public), better independent oversight over the entire management process, and a clear delineation of planning, implementation and supervision functions with the aim of preventing conflict of interest. Furthermore, it needs to be in compliance with internationally verified legislation. As argued below, many issues and elements in the existing Montenegrin hunting regulation can and should be improved.

## **2.2) Review of relevant European Union (EU) legislation and compliance of current hunting legislation in Montenegro with the EU law**

Although the EU has no direct competence in hunting, various directives and regulations from other sectors (environment, internal market, public, animal health etc.) have impact on member states’ national legal provisions on hunting. The most important legislation is the Birds Directive<sup>2</sup> and the Habitats Directive<sup>3</sup>. Both include important provisions on habitat protection, as well as general and special clauses protecting wild animals that are directly or indirectly related to hunting. Under these directives, a member state has to assure that its hunting practice is sustainable, either by regulating the prohibition of hunting or, for other species, regulating the intensity, time frames and allowed means of hunting; regulation on trading is needed as well. Furthermore, the European Commission has released a “Guide to Sustainable hunting under birds directive”<sup>4</sup>.

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<sup>2</sup> Directive 2009/147/EC of The European Parliament and of the Council of 30 November 2009 on the conservation of wild birds (codified version) with amendments adopted following the enlargement to Croatia.

<sup>3</sup> COUNCIL DIRECTIVE 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora (OJ L 206, 22.7.1992, p. 7); consolidated version.

<sup>4</sup> Guidance document on hunting under Council Directive 79/409/EEC on the conservation of wild birds “The Birds Directive” [http://ec.europa.eu/environment/nature/conservation/wildbirds/hunting/docs/hunting\\_guide\\_en.pdf](http://ec.europa.eu/environment/nature/conservation/wildbirds/hunting/docs/hunting_guide_en.pdf)

### 2.2.1 Birds Directive

The Birds directive creates a comprehensive protection scheme for all wild bird species naturally occurring in the EU<sup>5</sup> and it requires from member states to take all necessary measures to assure maintenance of favourable conservation status for all bird species (article 2). The directive places great emphasis on the protection of habitats for endangered (listed in Annex I) and migratory species, especially through the establishment of Special Protection Areas (SPAs), which are an integral part of the Natura 2000 network. The Birds directive also provides general protection of bird species (article 5 and article 13) and special protection provisions through prohibition or regulation of some specific activities, such as trading and hunting of birds (article 6 to 8).

The Birds directive contains some direct provisions on hunting in articles 7 and 8. Only the species referred to in Annex II, Part A can be hunted in the whole EU territory, while the species referred to in Annex II, Part B may be hunted only in certain member states. The directive thus regulates which bird species can be hunted in the first place (and where). (See Appendix II of this document for reference of listing of bird species from current hunting legislation of Montenegro compared to the annexes of the Birds directive)

If hunting of a certain species is allowed, a member state must assure that hunting does not jeopardize conservation status of the species. This is achieved by appropriate hunting plans in combination with regular and systematic monitoring of species' conservations status. The practice of hunting, including falconry, has to comply with the principles of "wise use" and ecologically balanced control of the species and has to be compatible with maintaining of the "appropriate" level of the population<sup>6</sup> of these species, in particular of migratory species. A general limitation of hunting thus derives from the Birds directive, with an aim of ensuring that hunting practice is sustainable.

Explicit provisions demand that a member state assures a bird species is not hunted during the nesting season or during the various stages of reproduction, and that migratory species is not hunted during its period of reproduction or during their return to their rearing grounds.<sup>7</sup> (*A time ban on hunting in the interest of undisturbed reproduction is required*). Member states are also obligated to prohibit the use of all means or methods used for the large-scale or non-selective capture or killing of birds or capable of causing local disappearance of a species. This prohibition

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<sup>5</sup> A directive is based on the recognition that wild birds, many of which are migratory, are a shared heritage of the member states and that their effective conservation requires international co-operation.

<sup>6</sup> See Article 2 of the Birds directive.

<sup>7</sup> European Commission prepared specific guidelines, which in detail describe how to determine reproduction and spring migration periods, when hunting is not allowed: Key Concepts document on Period of Reproduction and pre-nuptial Migration of huntable bird Species in the EU [http://ec.europa.eu/environment/nature/conservation/wildbirds/hunting/key\\_concepts\\_en.htm](http://ec.europa.eu/environment/nature/conservation/wildbirds/hunting/key_concepts_en.htm)

has to include all requisite measures, but in particular the use of some listed means<sup>8</sup> and hunting from aircraft, motor vehicles or boats driven at a speed exceeding 5 km/h.<sup>9</sup>

Only in exceptional cases may member states allow derogation from the above rules on hunting (or on rules on general protection and sales). The conditions for this derogation are that 1.) there is no alternative solution, and 2.) that one of the enumerated reasons from Article 9<sup>10</sup> applies. Derogation has to specify whether the conditions are met, and concretize the requirements and the control of the derogation; a report on derogation has to be sent to the Commission.

### Compliance of current hunting legislation in Montenegro with the Birds directive

#### 2.2.1.1 List of huntable species

Hunting law of Montenegro lists 22 bird species (article 3). In the article 36 these species are further categorized into three groups: 1) species with permanent prohibition of hunting – 2 bird species (*Tetrao urogallus* and *Tetrastes bonasia*), 2) huntable species with prescribed hunting season – 17 bird species (see appendix II), and 3) huntable species that can be hunted without limitations – 3 bird species (*Corvus cornix*, *Pica pica*, and *Garrulus glandarius*).

Such legal regulation is partly incompatible with the Birds directive. The main problem is existence of category of huntable species that can be hunted without any limitations. This is in contradiction with several Birds directive provisions, including regulation that commands that favourable conservations status must be maintained for all bird species (article 2) and prohibition of hunting during period of spring migration and reproduction season (article 7(4)). Thus changes are required in this part of the existing hunting law. We recommend that the three species from the last category (*Corvus cornix*, *Pica pica*, and *Garrulus glandarius*) are transferred into category of huntable species with prescribed hunting season, which will assure protection during the critical periods and thus make law compatible with EU legislation.

Since *Tetrao urogallus* and *Tetrastes bonasia* are already permanently protected, we recommend including them in the nature conservation legislation (and excluding them from hunting law; see chapter 2.2.2 for argumentation). All other species currently included in the hunting law of Montenegro can be hunted according to the Birds directive. However, the following species can be hunted only under condition that a member state includes them on its national list for the

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<sup>8</sup> Prohibited means are exemplary listed in Annex IV, point (a) of the Directive. They include: snares, limes, hooks, live birds which are blind or mutilated used as decoys, tape recorders, electrocuting devices, artificial light sources, mirrors, devices for illuminating targets, sighting devices for night shooting comprising an electronic image magnifier or image converter, explosives, nets, traps, poisoned or anesthetic bait, semi-automatic or automatic weapons with a magazine capable of holding more than two rounds of ammunition.

<sup>9</sup> On the open sea, Member States may, for safety reasons, authorize the use of motorboats with a maximum speed of 18 km/h. (Annex IV, point b).

<sup>10</sup> A derogation can be allowed (a) in the interests of public health and safety; in the interests of air safety; to prevent serious damage to crops, livestock, forests, fisheries and water, for the protection of flora and fauna, or (b) for the purposes of research and teaching, of re-population, of re-introduction and for the breeding necessary for these purposes, or (c) to permit, under strictly supervised conditions and on a selective basis, the capture, keeping or other judicious use of certain birds in small numbers.



directive's part B of the Annex II: *Corvus cornix*, *Coturnix coturnix*, *Garrulus glandarius*, *Pica pica*, *Streptopelia decaocto*, and *Streptopelia turtur*.

Currently hunting law of Montenegro includes two species, which have unfavourable conservation status in the European Union: *Coturnix coturnix* in *Streptopelia turtur*. Although such species can be hunted, extra care must be taken to assure that hunting will not further jeopardize species' conservation status (article 7(4)). European Commission prepared Management plans for huntable bird species considered to be in unfavourable status, which includes list of activities that member states should conduct in order to prevent deterioration of their conservation status.<sup>11</sup> Management plan for the *Streptopelia turtur* was prepared by the Commission in 2007<sup>12</sup> and for the *Coturnix coturnix* in 2009.<sup>13</sup> Due to unfavourable conservation status we recommend that Montenegro removes these species from the list of hunted species and includes them in nature conservation legislation or, alternatively, in the category of species with prohibition of hunting. Otherwise Montenegro will be required to assure mechanisms to conduct conservation activities listed in European management plans for these species.

#### 2.2.1.2 Hunting seasons

The Birds directive does not explicitly define hunting seasons; however, it dictates that none of the bird species can be hunted during period of spring migration and reproduction period (article 7(4)). In order to harmonize approaches for setting hunting seasons for huntable bird species among countries, the European Commission prepared special guidelines that in detail deal with question how to determine reproduction period and time of spring migration.<sup>14</sup> This document includes data on pre-breeding migration and reproduction periods for all huntable bird species.

In the hunting law of Montenegro the start of hunting seasons is probably set adequately for nine bird species: *Alectoris graeca*, *Anas strepera*, *Anser anser*, *Corvus cornix*, *Gallinago gallinago*, *Garrulus glandarius*, *Pica pica*, *Phasianus colchicus* and *Scolopax rusticola*. For other eleven species the start of hunting season should be postponed, since the reproduction period is most likely not yet completed in Montenegro at that time. We recommend that for *Anas crecca*, *Anas platyrhynchos*, *Anas penelope*, *Aythya ferina*, *Columba palumbus*, *Coturnix coturnix*, and *Streptopelia turtur* the start of hunting season is set to 1<sup>st</sup> September, for *Aythya fuligula* and *Fulica atra* to 15<sup>th</sup> September, for *Columba livia* to 1<sup>st</sup> October and for *Streptopelia decaocto* to 1<sup>st</sup> November.

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<sup>11</sup> See European Commission webpage Evropske komisije: EU Management plans for huntable bird species considered to be in unfavourable status: [http://ec.europa.eu/environment/nature/conservation/wildbirds/hunting/managt\\_plans\\_en.htm](http://ec.europa.eu/environment/nature/conservation/wildbirds/hunting/managt_plans_en.htm)

<sup>12</sup> Management plan for Turtle dove (*Streptopelia turtur*) 2007-2009 - [http://ec.europa.eu/environment/nature/conservation/wildbirds/hunting/docs/turtle\\_dove.pdf](http://ec.europa.eu/environment/nature/conservation/wildbirds/hunting/docs/turtle_dove.pdf)

<sup>13</sup> European union management plan 2009-2011, Common quail *Coturnix coturnix* - [http://ec.europa.eu/environment/nature/conservation/wildbirds/hunting/docs/Quail%20EU\\_%20MP.pdf](http://ec.europa.eu/environment/nature/conservation/wildbirds/hunting/docs/Quail%20EU_%20MP.pdf)

<sup>14</sup> Key Concepts document on Period of Reproduction and prenuptial Migration of huntable bird Species in the EU [http://ec.europa.eu/environment/nature/conservation/wildbirds/hunting/key\\_concepts\\_en.htm](http://ec.europa.eu/environment/nature/conservation/wildbirds/hunting/key_concepts_en.htm)

Similar is the situation with the end of hunting seasons. It is probably set adequately for ten huntable bird species, but for further ten species it ends too late and has to be shortened. We recommend that for *Anas platyrhynchos* and *Anser anser* the end of hunting season is set to 15<sup>th</sup> January and for *Anas crecca*, *Anas penelope*, *Anas strepera*, *Aythya ferina*, *Aythya fuligula*, *Columba palumbus*, *Fulica atra* and *Scolopax rusticola* to 31<sup>st</sup> January.<sup>15</sup>

### 2.2.1.3 Hunting plans

The Birds directive dictates that member states have to assure maintenance of favourable conservation status for all bird species, including huntable species (article 2). Member states must therefore introduce mechanisms that will prevent excessive negative effects of hunting on conservation status of the huntable species. This is conducted with regular systematic monitoring of all huntable species, appropriate hunting planning and effective supervision of hunting activities. In our opinion the current legislation of bird hunting in Montenegro is not in accordance with the article 2 of the Bird directive, because prescribed monitoring of bird populations, as well as planning and control of hunting do not assure adequate risk management for dangers posed to the bird populations by hunting.<sup>16</sup>

For example, *Alectoris graeca* seems to be in unfavourable conservation status in Montenegro. According to BirdLife it seems the population has collapsed from 3,000–4,000 to c.1,300 pairs in only 10 years. Moreover, species has been recently uplisted to Near Threatened in global Red List of Threatened Bird Species as a recent assessment of the available evidence has found that the species is likely to be undergoing a moderately rapid population reduction owing to habitat degradation and over-hunting in some areas.<sup>17</sup> Therefore hunting authorities should consider at least temporal prohibition of hunting, until national population of the species recovers.

### 2.2.1.4 Bird hunting in Natura 2000 sites

The Birds directive dictates that member states designate Special Protection Areas (SPAs) in order to improve conservation of endangered bird species from Annex I<sup>18</sup> and migratory species<sup>19</sup>. SPA sites are part of the Natura 2000 network<sup>20</sup>. Each SPA site is designated to assure favourable conservation status of local population of birds listed in individual annex. In principle, hunting is not forbidden in SPA sites, but it has to be assured that hunting will not jeopardize bird

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<sup>15</sup> For details see chapters for individual hunted species in the Key Concepts document on Period of Reproduction and pre-nuptial Migration of huntable bird Species in the EU

<sup>16</sup> For details see chapters: »Quality of data in game management« & »Spatial and temporal hierarchy of planning«

<sup>17</sup> See BirdLife Data Zone: Rock Partridge *Alectoris graeca* - <http://www.birdlife.org/datazone/species/factsheet/22678684>

<sup>18</sup> Article 4(1) of the Birds directive

<sup>19</sup> Article 4(2) of the Birds directive

<sup>20</sup> Article 3(1) of the Habitats directive

populations that are protected in given site. Besides preventing overharvest of huntable species, it also has to be assured that hunting of huntable specie will not cause excessive disturbance to the protected species present in the area<sup>21</sup>.

As an example of such regulation, let's consider hypothetical SPA site, which was designated for protection of overwintering populations of water birds that spend winter in large numbers at this site. Let's suppose that majority of bird species overwintering on this site are not huntable according to the national legislation, but among them there is also important number of overwintering *Anas platyrhynchos*, which is listed as huntable species and its hunting season includes winter time. During hunting of *Anas platyrhynchos*, which is otherwise legal, it would not be possible to avoid serious disturbance of protected species, for which this SPA site was designated for protection during overwintering. In this case, it would be required to develop adequate hunting regulation, which would prevent any hunting of *Anas platyrhynchos* on this site during most sensitive time period.

In the article 6(3) the Habitat directive determines that any plan or project, which could have excessive negative effects on protected species in Natura 2000 site, requires adequate assessment of its impacts. Permission for such plan/project can be given by the competent authority only after adequate evidence has been produced that the plan/project will not have excessive negative effects on any of the protected species.

Plans that require impact assessments include hunting-management plans. Current hunting law of Montenegro does not include provisions that would determine assessments and permissions for hunting plans inside Natura 2000 sites. This is one of the key deficiencies of current legislation in respect to the requirements of the Birds and Habitat directives and it will need to be adequately addressed. This deficiency can be also arranged with changes in other laws, e.g. nature conservation legislation, which will thus be entitled to certain competence governing hunting.

### **2.2.2 Habitats Directive**

The Habitats Directive contains important provisions concerning habitat protection - along with a network of protected areas of Natura 2000 (Article 3 to Article 11), and relevant provisions concerning species protection (Article 12 to Article 17). Regarding the protection of animal species, the Habitats Directive differentiates between species with strict protection regime (Article 12 and Annex IV (a)), species of community interest (Article 14 and Annex V), and other animal species in community interest for which general protection rules apply.

Article 12 establishes a strict protection regime for animal species listed in annex IV (a). The protection regime prohibits any kind of killing, injuring or disturbance of an animal (in all stages

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<sup>21</sup> Article 4(4) of the Birds directive and article 6(2) of the Habitats directive

of life) in a natural environment<sup>22</sup>. It also prohibits the keeping, transport, sale or exchange, and offering for sale or exchange, of specimens taken from the wild. Furthermore, member states are obligated to establish a system to monitor the incidental capture and killing of strictly protected animal species listed, and to conduct further research or conservation measures to assure that incidental capture and killing does not have a significant negative impact on the species concerned.

In exceptional cases (enumerated in Article 16), derogation from strict protection regime is allowed. For the derogation to be allowed, three conditions must be fulfilled: 1.) there is no satisfactory alternative, 2.) the derogation is not detrimental to the maintenance of the favourable conservation status of the populations concerned, and 3.) the derogation is introduced in the interest of or for reasons enumerated in Article 16 (1)<sup>23</sup>; as an example for justification and assessment of hunting of a priority species in respect to Habitats Directive requirements, see an article on wolf hunting in Slovenia: Jerina, K., Krofel, M., Jančar, T. 2014<sup>24</sup>. Therefore animals listed in the Annex IV (a) of the Habitats Directive may only be hunted if all 3 conditions for derogation of a strict protection regime are met.<sup>25</sup>

The Habitats Directive requires that protected animal species (including species listed in Annex V) have to be maintained at a favourable conservation status. It is noteworthy that favourable conservation status refers not only to the species' population size, but may include several other aspects of species biology. Conservation status is defined in the Article 1 of the Habitats Directive as follows: "Conservation status of a species means the sum of the influences acting on the species concerned that may affect the long term distribution and abundance of its populations within the territory referred to in article 2". Lethal removal of animal(s) is consequently possible only when the ultimate achievement and maintenance of a favourable conservation status is warranted through a 'clear and well-developed framework of species conservation measures' consisting of 'appropriate, effective and verifiable' measures. Thus, member states generally have to prepare and implement species protection plans if the species listed in Habitats Directive (including Annex V species) are to be hunted<sup>26</sup>. For example, to assure favourable conservation

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<sup>22</sup> Explicitly prohibiting: (a) all forms of deliberate capture or killing of specimens of these species in the wild; (b) deliberate disturbance of these species, particularly during the period of breeding, rearing, hibernation and migration; (c) deliberate destruction or taking of eggs from the wild; (d) deterioration or destruction of breeding sites or resting places

<sup>23</sup> Derogation can be allowed (a) in the interest of protecting wild fauna and flora and conserving natural habitats; (b) to prevent serious damage, in particular to crops, livestock, forests, fisheries and water and other types of property, (c) in the interests of public health and public safety, or for other imperative reasons of overriding public interest, including those of a social or economic nature and beneficial consequences of primary importance for the environment; (d) for the purpose of research and education, of repopulating and reintroducing these species and for the breeding operations necessary for these purposes, including the artificial propagation of plants; (e) to allow, under strictly supervised conditions, on a selective basis and to a limited extent, the taking or keeping of certain specimens of the species listed in Annex IV in limited numbers specified by the competent national authorities.

<sup>24</sup> Pregled učinkov odstrela volkov v Sloveniji in presoja skladnosti odstrela z določili Habitatne direktive.. – Varstvo narave, 27: 51-71.

<sup>25</sup> As an example for justification and assessment of hunting of a priority species in respect to Habitats Directive requirements, see wolf hunting in Slovenia: Jerina, K., Krofel, M., Jančar, T. 2014. Pregled učinkov odstrela volkov v Sloveniji in presoja skladnosti odstrela z določili Habitatne direktive.. – Varstvo narave, 27: 51-71.

<sup>26</sup> European Commission. 2007. Guidance document on the strict protection of animal species of Community interest under the Habitats Directive 92/43/EEC. European Commission, Brussels; for interpretation of this guidance document see also CJEU 14 June 2007, Case C-342/05

status of large carnivores, a member state has to assure conservation of enough suitable habitat, including adequate food sources in the form of prey populations<sup>27</sup>. Thus, hunting management of wild ungulates, even when they are not listed in the Habitats Directive annexes, has to make sure the hunting regime will assure adequate ungulate density for large predators listed in the Habitats Directive annexes.<sup>28</sup>

Annex V species are not entitled to complete protection and regular hunting is accepted as long as certain requirements are met. In particular, national rules on hunting have to assure that hunting will not threaten their favourable conservation status. Thus, a member state must take appropriate measures to assure maintenance of this status. Such measures may include hunting quotas based on reliable monitoring data, temporary or local prohibition of hunting, regulation of the periods and/or methods of removal and application of other hunting rules which take account of the conservation of such populations.<sup>29</sup> A derogation of those rules may be allowed under certain conditions (described above).

The Habitats Directive<sup>30</sup> also prohibits the use of all indiscriminate means capable of causing local disappearance or serious disturbance to populations of such species. This applies in particular, but is not limited, to the use of the listed non-selective methods and means<sup>31</sup> and hunting from aircraft or moving motor vehicles.

As a general obligation, member states have to undertake monitoring of the conservation status of wild animal species<sup>32</sup> of Community interest.<sup>33</sup> (Species of Community interest being species which, within the European territory of the member states, are endangered or vulnerable or rare or endemic and requiring particular attention and are listed in Annex II<sup>34</sup> and/or Annex IV<sup>35</sup> or

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<sup>27</sup> Linnell, J.D.C., Salvatori, V. & Boitani, L. 2008. Guidelines for population level management plans for large carnivores in Europe. European Commission, Brussels.

<sup>28</sup> As an example of procedure how to successfully prepare multi-disciplinary management plan using participatory approach we can recommend the Slovenian Wolf Management Action plan:

[http://www.mkgp.gov.si/fileadmin/mkgp.gov.si/pageuploads/podrocja/velike\\_zveri/akcijski\\_nacrt\\_upravljanja\\_volk\\_2013\\_2017.pdf](http://www.mkgp.gov.si/fileadmin/mkgp.gov.si/pageuploads/podrocja/velike_zveri/akcijski_nacrt_upravljanja_volk_2013_2017.pdf)

<sup>29</sup> Article 14 of the Habitats Directive.

<sup>30</sup> Article 15.

<sup>31</sup> Annex VI (a); PROHIBITED METHODS AND MEANS OF CAPTURE AND KILLING include blind or mutilated animals used as live decoys, tape recorders, electrical and electronic devices capable of killing or stunning, artificial light sources, mirrors and other dazzling devices, devices for illuminating targets, sighting devices for night shooting comprising an electronic image, magnifier or image converter, explosives, nets which are non-selective according to their principle or their conditions of use, traps which are non-selective according to their principle or their conditions of use, crossbows, poisons and poisoned or anesthetic bait, gassing or smoking out, semi-automatic or automatic weapons with a magazine capable of holding more than two rounds of ammunition.

<sup>32</sup> Article 11 of the Habitats Directive.

<sup>33</sup> Article 1 (i): "Conservation status of a species means the sum of the influences acting on the species concerned that may affect the long-term distribution and abundance of its populations within the territory referred to in Article 2; The conservation status will be taken as 'favourable' when: — population dynamics data on the species concerned indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitats, and — the natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future, and — there is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis."

<sup>34</sup> Animal and plant species of Community interest whose conservation requires the designation of special areas of conservation.

<sup>35</sup> Animal and plant species of Community interest in need of strict protection.

Annex V<sup>36</sup> of the Habitats Directive). It is therefore clear that for species listed in annexes II, IV and V of the Habitats Directive, the EU requires reliable, regular and systematic monitoring. This is especially important when a species is being hunted, because the member state has to show that lethal removal will not jeopardize maintenance of the species' favourable conservation status and this can be achieved only with reliable data on the status of the population and predicted effects of hunting. For example, in Slovenia brown bears are being hunted as protected species through derogation in accordance with Article 16 of the Habitats Directive. To be able to conduct lethal control of the population, the state was required to provide population size estimates based on a robust (scientifically accepted) modern method. In case of brown bears in Slovenia, this used to be systematic monitoring of the brown bears on a network of permanent counting places; now it is capture-mark-recapture analysis based on non-invasive genetic samples.

Thus it has to be taken into account that when any of the Habitats Directive species are hunted, this can trigger substantial effort and costs required to establish a reliable population size estimate. Even for Annex V species it is required that member states guarantee systematic monitoring on a permanent basis and to assure that hunting will not jeopardize favourable conservation status<sup>37</sup>.

#### Compliance of current hunting legislation in Montenegro with the Habitats directive

The Article 3 the Montenegro hunting law lists the species that can be hunted; Article 36 lists species for which a permanent hunting ban applies, species for which a period of prohibited hunting (*lovostaj*) must apply and species that are not protected but may nevertheless be subject to hunting seasons, if the survival of game species is threatened in a particular area. Those provisions should be amended according to the requirements of the Habitats directives. Some of the species listed among hunted species in the hunting law of Montenegro are listed in the annexes of the Habitats Directive (golden jackal, grey wolf, pine marten, polecat, chamois, and brown bear), including two species labelled also as priority species (brown bear and grey wolf). (See Appendix I hereof for reference of listing of mammal species from current hunting legislation of Montenegro compared to the annexes of Habitats Directive.) When checking the list of animals we advise to bear in mind that a favourable conservation status of all animal species is a final goal and that there may be other animal species in Montenegro territory which could lead to the amendment of the directives upon the succession of Montenegro.

Animal species that have to be subject to special protection (strict protection regime) under the Habitats Directive, Annex IVa, will have to be excluded from the general hunting regime. Generally it is more appropriate to include these species in nature conservation legislation and if deemed necessarily, removal of these species must be seen as a derogation from the protection demands, which can only be allowed if all of the previously mentioned conditions from Article 16 of the Habitats Directive are met (the same is true for bird hunting and Article 9 of the Birds

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<sup>36</sup> Animal and plant species of Community interest, whose taking in the wild and exploitation may be subject to management measures.

<sup>37</sup> Court of Justice of the EU 20 October 2005, Case C-6/04

Directive). For example, when Croatia entered the European Union there were strong initiatives to maintain brown bear as a hunted species, but since bears do not have such status in any other member states, Croatia was obligated to include it among protected species.

We also noted that Eurasian lynx (*Lynx lynx*) is missing from the list of species in the Hunting Law, either as hunted or protected species. To our knowledge, there is a lack of systematic monitoring of Eurasian lynx in Montenegro, therefore its population status, distribution or even presence cannot be adequately assessed at the moment. Since there is non-negligible probability for its present and future presence in Montenegro, and given its critically endangered status, we highly recommend including Eurasian lynx in the national legislation, despite current lack of direct evidence for its presence. We advise similar approach for other species that are locally critically endangered and for which there is lack of systematic monitoring that would enable realistic assessment of their presence and status (e.g. *Alectoris graeca*).

With regard to the hunting of grey wolf (*Canis lupus*), we recommend that specific measures are taken to prevent some of the most important negative side-effects of hunting of this species which could jeopardize its favourable conservation status (e.g. destabilizing pack structure, which can lead to increase of livestock depredations, hybridization with dogs, inbreeding, abnormal behaviour etc.). We recommend that removal of young (non-breeding) individuals is promoted and the excessive removal of breeding (alpha) individuals is prevented. For example, in Slovenia the minimum percentage of young animals (pups and yearlings) in the quota is determined and the culling is terminated earlier if the quota of adults is fulfilled. Due to prolonged maternal care in this species, we also recommend that lethal removal of adult wolves does not start before 1<sup>st</sup> October (currently 1<sup>st</sup> September) in order to prevent death of breeding individual in a time period when pups are less mobile and dependant on provisions brought by adults. Hunting period should also not last longer than until the end of January (31. January) in order to decrease the probability of killing of breeding (alfa) wolves within early reproductive period (which can result in increased probability for inbreeding and hybridisation with dogs; for further descriptions see Jerina et al. 2014<sup>38</sup> and sources therein).

With regard to the hunting of brown bear (*Ursus arctos*), we recommend that size structure of animals that can be hunted is determined. For example, in Slovenia the hunting quota for bears is prescribed according to the 3 body mass categories: <100 kg (at least 75% of prescribed harvest), 100–150 kg (maximum 15% of harvest), and >150 kg (maximum 10% of harvest). In this way, natural mortality patterns are imitated, and the removal of too many adult, dominant males is prevented (increased adult male mortality can for example increase the infanticide rate).

#### 2.2.2.1 Hunting seasons; sex and age structure of hunted animals

Except for birds (see chapter 2.2.1.2), there is no common hunting season regulation at the EU level. However, there are general recommendations suggesting that hunting seasons of all hunted animal species should respect biological seasonal cycles of animal species and “universal ethical

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<sup>38</sup> Jerina, K., Krofel, M., Jančar, T. 2014. Pregled učinkov odstrela volkov v Sloveniji in presoja skladnosti odstrela z določili Habitatne direktive.. – Varstvo narave, 27: 51-71

standards” (see Apollonio et. al, 2011<sup>39</sup> for ungulates). Hunting season for certain animal species should avoid periods when they are most vulnerable, in particular its breeding season: the period of mating, pre-parturition period (period of late development of embryos) and the period following parturition when offspring may be dependent on the mother. In hunting practice of almost all European countries, especially in the case of females of wild ungulates, hunting seasons are outside pre- and post-parturition periods (Apollonio et al. 2011). For the purposes of this analysis we reviewed the hunting seasons for ungulates and all other European commonly hunted species (we did not obtain data on some species that are typically not hunted). The hunting seasons in Montenegro generally comply with the hunting seasons in other countries and are often shorter. With regard to the consideration of reproductive cycles of mammals and ethical standards for hunting seasons, we believe that the Hunting Law of Montenegro is probably compliant for most species (but see chapter 2.2.1.2 for birds; and chapter “Compliance of current hunting legislation in Montenegro with the Habitats directive” for wolves).

However there are some obvious deviations of current hunting seasons in Montenegro from hunting seasons in the majority of other European countries. 1.) Hunting seasons of some animal species, especially wild ungulates, are considerably shorter than in the vast majority of European countries. Of 24 European countries/regions only one country (Norway) has a shorter hunting season for red deer (male) than Montenegro (three months; 1.10. – 31.12.) and only the Apennine region of Italy has a shorter hunting season for roe deer (male) than Montenegro (1.6. -31.7.). Hunting seasons for chamois (1.10. – 31.12.) and for wild boar (1.10. – 31.1.) are in Montenegro shorter than in most European countries (for overview, see Apollonio et al. 2011). 2.) In all 24 reviewed European countries (Apollonio et al. 2011) hunting seasons are set also for females and offspring of red deer, roe deer and chamois, while those two categories are protected (hunting ban) in Montenegro. The discrepancy probably stems from the difference in management goals; in most EU countries the main management goal is to sustain population numbers of ungulates or even to reduce population size or distribution (Apollonio et al. 2010<sup>40</sup>; Putman et al. 2011<sup>41</sup>); in Montenegro the goal for most of the species in most of the regions is to increase their population size (*Program razvoja lovstva*). In the given context, protection of females and offspring makes sense. Taking into account the low hunting quotas of males (e. g. for roe deer it is permitted to harvest up to 2.5 % of estimated total population number; *Program razvoja lovstva*), there is no danger of detrimental effect of extremely (unnaturally) skewed sex and age structure of the populations. However, once the target population size is achieved and hunting quotas for males would increase while females and offspring would still be protected, this could negatively bias population structure. Therefore, protecting females and offspring of wild ungulates with a “permanent hunting ban” as stated in the Hunting Law (Article 36) is not an optimal solution

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<sup>39</sup> Apollonio M., Putman R., Grignolio S., Bartos L. 2011. Hunting seasons in relation to biological breeding seasons and the implications for the control or regulation of ungulate populations. In: Ungulate Management in Europe. Problems and Practices. Putman R., Apollonio M., Andersen R. (ed.). New York, Cambridge University Press, 80-105

<sup>40</sup> Apollonio M., Andersen R., Putman R. 2010. European Ungulates and their Management in the 21st Century. New York, Cambridge University Press, 618 p.

<sup>41</sup> Putman R., Apollonio M., Andersen R. 2011. Ungulate Management in Europe. Problems and Practices. New York, Cambridge University Press, 410 p.



since the law is difficult to change. Therefore we recommend that protecting females and offspring (when necessary) should not be regulated in the law, but in an executive regulation.

Another uncommon arrangement in the Montenegro hunting legislation is hunting season for roe deer males (1.6. – 31.7.). If the end date of the hunting season is set to partially avoid the rut (the second half), this is not in concordance with ecology of the species or with the common practise in other European countries. When trying to limit hunting to only one part of the rut, it is advisable to protect animals in the first half of the rut and not in the second. Namely, early conception and consequently early birth are linked to better chance of survival of young. In addition, it is generally the most competitive, fitter males which are more active at the beginning of the rut (Apollonio, 2011). Limiting hunting season to just the second half of the rut should thus in the long term contribute to higher population viability. Among European countries only Spain protects roe bucks in the second half of the rut (hunting season: mid-April – 31.7.). Total avoidance of the roe deer rut is assured with hunting season in Denmark (16.5. – 15.7. and 1.10. – 15.1.), while hunting is limited to only the second half of the rut in the Alpine part of Italy (1.9. – 7.12.), Apennine part of Italy (1.8. or 15.8. – 30.9.) and in Norway (10.8. – 23.12.). Hunting seasons for roe deer bucks in other European countries do not avoid the rut (Apollonio, 2011) at all. Taking into account the obtained information, we recommend the shift of the hunting season for roe deer males in Montenegro to the later season, starting for example on 1.8. or later.

#### *2.2.1.4 Hunting in Natura 2000 sites*

For compliance of hunting law of Montenegro with the Habitats directive regarding assessments and permissions for hunting plans inside Natura 2000 sites situation is similar to the compliance with the Birds directive (see chapter 2.2.1.4).

### **2.2.3 Animal trade regulations**

The EU implements the provisions of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) through Council Regulation (EC) No 338/97 of 9 December 1996 on the protection of species of wild fauna and flora by regulating trade therein<sup>42</sup> and the implementing Commission Regulation (EC) No 865/2006.<sup>43</sup> For hunters the rules (specific provisions) on import into or export from the EU of hunting trophies are important. Currently, EU residents, which bring for the first time a hunting trophy of an Annex B specimen into the EU, are only required to present to the customs a third-country CITES export permit. But the EU is considering a possible revision of the legislation, in particular the introduction of a

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<sup>42</sup> Official Journal L 61/1, 1997.

<sup>43</sup> Commission Regulation laying down detailed rules concerning the implementation of Council Regulation (EC) No 338/97 on the protection of species of wild fauna and flora by regulating trade therein, OJ L 166/1, 19. 6. 2006.

requirement for import permits for the first introduction of hunting trophies, at least for some selected Annex B species.<sup>44</sup>

Trade with birds and their body parts is regulated also within the Birds Directive, which states that for all bird species member states »shall prohibit the sale, transport for sale, keeping for sale and the offering for sale of live or dead birds and of any readily recognisable parts or derivatives of such birds« (article 6). Derogation from this regulation is possible only for species listed in the Annex III of the directive, if the birds were killed legally. Annex III is divided in three parts. Part A lists species for which no special permit is needed and part B lists species for which sale is allowed only with special permission and after consultation with the European Commission.

Among currently huntable species in Montenegro there are 9 species for which sale is not allowed under any circumstances (i.e. they are not listed on annex III): *Alectoris graeca*, *Anas strepera*, *Columba livia*, *Corvus cornix*, *Coturnix coturnix*, *Garrulus glandarius*, *Pica pica*, *Streptopelia decaocto* and *Streptopelia turtur*. There are no limitations regarding trade for three species (i.e. listed on part A of Annex III): *Anas platyrhynchos*, *Columba palumbus* and *Phasianus* sp. The rest of currently huntable species in Montenegro are listed on part B of the Annex III and therefore sale is allowed only with special permission and after consultation with the European Commission (see also appendix II).

Current hunting legislation of Montenegro lacks provisions that regulate sale of birds or their parts. Therefore such provisions need to be included either into hunting or nature protection law or their executive acts. For example, in Slovenia these provisions are included in the wildlife protection act (article 13)<sup>45</sup>.

## 2.2.4 Permitted hunting methods

In 1991 the Trapping Regulation<sup>46</sup> was adopted. It prohibits the use of leghold traps in the EU.<sup>47</sup> It also prohibits the introduction into the EU of pelts and manufactured goods of certain wild animal species<sup>48</sup> originating in countries that trap those animals by means of leghold traps or other trapping methods which do not meet international humane trapping standards. The Commission publishes in the Official Journal of the European Communities a list of the countries for which it has determined that they meet the conditions of ensuring humane trapping standards.<sup>49</sup>

The Montenegro hunting law regulates allowed and prohibited hunting methods and other conditions concerning hunting methods. Regulations concerning the use of guns and ammunition

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<sup>44</sup> More on: <http://ec.europa.eu/environment/cites/pdf/EU%20information-hunting-trophies.pdf>.

<sup>45</sup> Uredba o zavarovanih prosto živečih živalskih vrstah <http://www.pisrs.si/Pis.web/pregledPredpisa?id=URED2386>

<sup>46</sup> Council Regulation (EEC) No 3254/91 of 4 November 1991 prohibiting the use of leghold traps in the Community and the introduction into the Community of pelts and manufactured goods of certain wild animal species originating in countries which catch them by means of leghold traps or trapping methods which do not meet international humane trapping standards (OJ L 308 , 09. 1. 1991, p.1).

<sup>47</sup> See Article 2 of the Regulation.

<sup>48</sup> Annex I and Annex II.

<sup>49</sup> See Article 3 of the Regulation.

are additionally specified in a special executive regulation (Rules on type and strength of hunting weapons (*Pravilnik o vrsti i jačini lovačkog oružja*), Official Gazette No. 76/09).

In table 1 we present comparisons of regulations regarding use of rifles and ammunition for hunting of different game species in Montenegro with regulations in Slovenia. Generally regulations are similar (minimum bullet diameter, minimum bullet weight, minimum impact energy at 100 m) and in most cases restrictions are more rigorous in Montenegro than in Slovenia. In addition to regulations in Slovenia, Montenegro has also prescribed maximum allowable shooting distance.

Table 1: Comparison of restrictions for rifles and ammunition for hunting of different game species in Montenegro (MN) and in Slovenia (SLO). Green shaded restrictions are more rigorous in Montenegro and red shaded restrictions are more rigorous in Slovenia.

Game species	Min. bullet diameter (mm)		Min. bullet weight (gram)		Min. impact energy at 100 m		Max. allowable shooting distance	
	MN	SLO	MN	SLO	MN	SLO	MN	SLO
Brown bear	7,0	7,0	11,5	11,0	3500	3000	100	/
Red deer, fallow deer, wild boar	7,0	6,5	8,2	9,0	2500	2500	150	/
Chamois, mouflon, wolf	6,0	6,0	4,8	6,0	2000	1800	200	/
Roe deer	6,0	5,6	4,8	3,2	2000	1000	200	/

Similar to Slovenia, in Montenegro smaller game is allowed to shoot with shotguns. However, in Slovenia no limitations regarding pellet size or maximum shooting distance are prescribed, while in Montenegro those limitations are strictly prescribed for individual groups of smaller game species. Therefore also restrictions regarding use of shotguns and ammunition in Montenegro are more rigorous than in Slovenia and in many other European countries.

Considering strict regulations and ban of use of any devices for mass hunting, in our opinion the legal basis in Montenegro properly assures the welfare of hunted animals and prevents unnecessary animal cruelty. We however do not have available information to what degree authorities achieve respecting of these restrictions, which is the crucial part for ensuring animal welfare.

## 2.2.5 Quality of data in game management

### 2.2.5.1 Census method

In practice, culling is frequently the principal direct management measure for most game species. It is used to direct population size and density towards the desired goal. Good planning of culling often requires data on population processes and parameters (e.g. population size, natality). A huge variety of methods have been developed to estimate these data (overview for ungulates: Apollonio

et al. 2010<sup>50</sup>). In practice the tendency is to adopt the method which produces the most reliable estimates, given existing management goals, available funding and the specific habitat. It is therefore not surprising that there are no common general standards at the EU level in this field and many different methods are used throughout the continent, sometimes even within the same country (Morellet, 2011<sup>51</sup>). In general, the demands regarding robustness and accuracy of method used are considerably stricter for species protected by the Habitats and Birds directives compared to species, which are generally classified as game species. Montenegro hunting legislation determines monitoring methods in the form of recommendations, separately for large game (ungulates and large carnivores) and small game, with a variety of possible methods permitted for each group<sup>52</sup>. The law prescribes that the holder of hunting rights conducts monitoring of game species, but it does not determine the census method for individual species. The decision on the type of monitoring is therefore at the discretion of the respective manager and can even change between the years. In our opinion, as described below, this solution is not appropriate and should be changed. The fact is that each method is liable to error (noise and bias). Studies from various parts of the world show that direct observation methods can misjudge population size by multiple factors. In Denmark, for example, roe deer size was estimated with direct observation in a fenced-off hunting ground and the population was subsequently exterminated in the same area. It was established that direct observation underestimated the population by a factor of three (Andersen, 1953)<sup>53</sup>. Nevertheless, direct observation remains one of the most commonly used census methods among hunters. Due to inconsistency of applied methods in space and time, the established differences in population size can therefore be merely an artefact of change in methodology and do not necessarily reflect changes in population. The recommended census method for large game in Montenegro is “observing, surveillance and counting throughout the whole hunting year”. This is a very vaguely defined, non-systematic census method. Even some systematic methods have proven to be inaccurate and it is hard to believe that such a non-systematic method, which encourages hunters to provide their guesstimates, could be accurate enough to determine population size with any reliable accuracy (see below for concrete recommendations).

The second problem with game monitoring in Montenegro is supervision. The legislation provides for potential control of quality of collected data, but it is unclear if and how frequently it is implemented. If management is based on hunters’ data, it is even more important to conduct supervision of the collected data, because hunters can tailor the data to suit their needs (support their goals).

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<sup>50</sup> Apollonio M., Andersen R., Putman R. 2010. *European Ungulates and their Management in the 21st Century*. New York, Cambridge University Press, 618 p.

<sup>51</sup> Morellet N., Klein F., Solberg E., Andersen R. 2011. The census and management of populations of ungulates in Europe. In: *Ungulate Management in Europe. Problems and Practices*. Putman R., Apollonio M., Andersen R. (ed.). New York, Cambridge University Press, 106-143.

<sup>52</sup> Pravilnik o sadržini i načinu izrade lovne osnove, Official Gazette No. 53/11; Program razvoja lovstva.

<sup>53</sup> Andersen J. 1953. Analysis of the Danish roe deer population based on the extermination of the total stock. *Danish Rev. Game Biol.*, 2: 127-155.

The aim of game management in Montenegro is at least formally largely determined by habitat ranking – estimates of the ecological carrying capacity (*bonificiranje*). The assumption that ecological carrying capacity in terms of maximum number of animals that an environment can sustain could be properly calculated is very questionable. Ecological carrying capacity depends on a complex mix of environmental factors (and their interactions) that can vary year to year (e.g. weather conditions) and can by no means be computed as a simple mathematical equation with few environmental factors as variables. Past game management experiences from the 1960's and 1970's in Slovenia have proven that, and recent research conducted in Slovenia (Jerina et. al 2013<sup>54</sup>) has additionally confirmed the inability to properly detect ecological carrying capacity for wild ungulates. The concept of ranking hunting grounds with the aim of setting management goals is outdated and often completely useless, and in some cases even harmful (it can force managers to misappropriate the data; e.g. in Croatia). It is therefore increasingly common to use the concept of adaptive management, which is often based on monitoring of indicators of density/size of game populations, indicators of vitality (e.g. body mass index), and indicators of ecological impact (e.g. damage to farmland, browsing of tree saplings, etc.) (see e.g. Morrellet et al. 2007<sup>55</sup>).

#### 2.2.5.2 Reporting of cull statistics

In Montenegro hunters are obligated to keep and report data on harvested animals as well as of animals found dead (in separate record books/registers; Rules on keeping of records (*Pravilnik o sadržaju knjige evidencija*), Official Gazette No. 52/08). Data on each removed animal has to be promptly recorded (within 3 days). After the end of the hunting year the content of record books has to be reported to the competent authorities. Similar systems of recording and reporting of hunting bags are in place in the majority of European countries. Furthermore, the high level of detail of the records in Montenegro is comparable to only few European countries, such as Austria, Hungary, Slovenia, Croatia, and Norway (Putman, 2008; Putman 2011).

However, accuracy of the data gathered could be questionable, since it appears it is hard to establish control (and this is not an exception in Europe; Putman, 2011). In Slovenia this issue is partially resolved with regard to wild ungulates: for each culled individual the lower left jaw has to be collected as an evidence of cull; after the end of the hunting year managers of management districts have to provide all collected jaws to the competent authorities (which are at the same time responsible for game management plans). The jaws also serve to control the reported age of the animals and potentially even as a source of genetic material for verification of sex of removed animals in case of suspicions of false reporting. Such 'control system' is especially useful where the management goal is to control population size of hunted animals and hunters are obligated to fulfil prescribed quotas. In the current situation in Montenegro, where the management goals are

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<sup>54</sup> Jerina K., Stergar M., Pokorny B., Jelenko I., Miklavčič V., Bartol M., Marolt J. Določitev najbolj primernih kazalnikov za spremljanje stanja populacij divjadi in njihovega okolja pri adaptivnem upravljanju: zaključno poročilo projekta CRP V4-1146. Ljubljana: Biotehniška fakulteta, Oddelek za gozdarstvo in obnovljive gozdne vire; Velenje: Erico, 2013. 24 p.

<sup>55</sup> Morellet, N., J. M. Gaillard, A. J. M. Hewison, P. Ballon, Y. Boscardin, P. Duncan, F. Klein, and D. Maillard. 2007. Indicators of ecological change: new tools for managing populations of large herbivores. *Journal of Applied Ecology* 44:634–643.

mostly oriented towards increasing population numbers, such control is likely not meaningful, but could become once management goals change.

### **2.2.7 Spatial units for game management**

Management systems in European countries are largely determined by ownership of the game animals. In this respect Montenegro belongs in the group of European countries where game is state-owned and management is delegated by the state to hunters' associations that manage game within game management districts (hunting grounds). These group include Switzerland (partially), Poland, Romania, Slovenia, Croatia, Portugal (Apollonio et al. 2010; Putman, 2011). Comparison with Portugal probably does not make sense due to different cultural backgrounds. Minimum size of game management districts varies considerably even between those countries, from 820 ha (mean district size in Switzerland) up to 5000-10000 ha in Romania (depending on the type of terrain). In Croatia, Slovenia and Poland minimum district sizes are 1000 ha, 2000 ha and 3000 ha, respectively (Apollonio et al., 2010). Minimum size of 3000 ha in Montenegro is therefore comparable with other countries and is also ecologically reasonable, given low game densities. Typically countries also have large-scale (regional) game management regions. Regions are of variable sizes and usually consist of a few dozen hunting grounds. They can be administrative units (such as municipalities, cantons) or ad hoc ecological units (as for example in Slovenia). Hunting legislation in Montenegro defines five regional game management districts, based on environmental characteristics and taking into account composition of game species. Based on comparison with other European countries and following ecological principles and rationality, we conclude that current spatial units for game management in Montenegro are suitable.

### **2.2.8 Spatial and temporal hierarchy of planning**

Hunting legislation in Montenegro determines two-stage planning: 10-year plans for management regions under the Hunting Development Programme adopted by the government, and 10-year hunting programmes and annual plans for local hunting grounds prepared by the hunters (holders of hunting rights). The law stipulates that annual plans must be in conformity with 10-year plans and other planning documents (e.g. forestry plans). However, it is not clear how these documents are coordinated in practice. Since there is no umbrella coordinating body staffed by experts, it is unlikely that hunters (holders of hunting rights) can themselves substantively (not just administratively) align their plans with the hierarchically higher plans. The connections between spatial and temporal planning levels are therefore not fully worked out.

Montenegro hunting legislation delegates a substantial scope of planning rights and obligations to hunting rights holders (hunters), who prepare 10-year programmes and annual hunting grounds management plans. This may lead to conflict of interest, underrepresentation of the interests of other stakeholders and interest groups (e.g. landowners, NGOs) and is therefore in contradiction with overarching goal of the Hunting Law, which defines game species as a common good. Even if hunters' plans were outstanding, there will always be lingering doubt about their credibility and

bias. We therefore advise increasing role of governmental organizations in preparation of hunting plans.

### **2.2.9 Public participation in game management (compliance with Aarhus Convention)**

According to the Aarhus Convention, the procedures for adopting strategic plans or executive regulation should involve public participation. Procedures of public participation should be transparent and set in law. The Programme of Hunting Development (*Program razvoja lovstva*) is the major strategic game management plan in Montenegro. We noted that the legislation (articles 6 and 23 of the Hunting Law) does not provide for public participation in the process of adopting the programme (general and expert public and NGOs). The Programme should be publicly announced and there should be at least 30 days of public consultation (preferable more). Furthermore, description of the process of coordination of strategic documents for forestry and agriculture is poor: the process of coordination of all mentioned document is not clear and therefore not transparent. It is not clear how the coordination is carried out and who is involved, as well as the procedure used. In Slovenia, for example, Article 9 of the Forest Act<sup>56</sup> stipulates that the forest management plan also includes game management plan and both documents are prepared simultaneously and are supposed to be harmonised. There is also public discussion of the draft plan. It should be also taken into consideration that for some plans there should be strategic environmental assessment performed according to the SEA Directive 2001/42/EC – this should be regulated in the general environmental protection act.

Article 30 determines that a regulation on the substance and procedure for the adoption of this document and public participation should be adopted by the competent ministry. This is done via executive regulation, namely the Rules on the content and manner of preparing hunting plans, participation of the stakeholders and time frame of adoption (Pravilnik o sadržini i načinu izrade lovne osnove, učešću zainteresovanih u postupku njenog donošenja, kao i rokovima za njeno donošenje / Sl. list CG br. 53/11 /). Public participation is mentioned in Article 23, which is neither clear nor precise. The purpose of public announcement is that information reaches the target audience. In Slovenia we use term “announcement in locally normal/usual way”. The online announcement should be more precisely defined. Furthermore, announcement in a publication distributed in Montenegro should be more precisely defined (e.g. daily publication, distributed in the whole Montenegro area). Overly general definition of public announcement can lead to abuse, as it was for example observed in some cases of spatial planning in Slovenia.

Since there are many executive regulations derived from the Hunting Law, it is very important that these regulations are in public discussion before they are adopted. The adoption of regulations that impact the environment should be clear, transparent and should include participation of the general and expert public and NGOs. If such a regulation already exists in the general environmental protection act, there is no need to regulate public participation in the

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<sup>56</sup> Official Gazette No. [30/93](#), [56/99](#) - ZON, [NPB1](#), [67/02](#), [NPB2](#), [110/02](#) - ZGO-1, [115/06](#) - ORZG40, [110/07](#), [NPB3](#), [106/10](#), [NPB4](#), [63/13](#), [NPB5](#), [101/13](#) - ZDavNepr, [NPB6](#), [17/14](#) in [NPB7](#) – last version on <http://pisrs.si/Pis.web/pregledNpb?idPredpisa=ZAKO6818&idPredpisaChng=ZAKO270>

Hunting Law. In Slovenia there is a special article on public participation in the process of adopting regulations that impact the environment (Article 34a of the Environmental Protection Act; see Appendix III hereof)

#### **2.2.10 Damages compensation system, consideration of game damage and ecological impact of game management**

Damage to farmland, domestic animals and forest (e.g. bark peeling and browsing of regeneration) caused by game species is often one of the most burning issues in hunting systems where land ownership is decoupled from hunting right (as is the case in Montenegro). In many countries damage triggers constant conflict between hunters (including the state) and landowners and can be a significant financial burden on landowners and/or hunters. Comparative analysis shows that damage level is not correlated with ownership (*res nullius vs res communis*) of hunting rights in EU countries. However, the perceived damage is higher, and landowners' tolerance to damage considerably lower in systems where hunting rights are decoupled from land ownership. Indeed, in Slovenia damage is one of the key driving forces of efforts by some landowners (and political groups) to change the system from *res communis* to *res nullius*.

Considering the current low population densities and distribution of typically more conflict-rich game species (e.g. red deer, wild boar) in Montenegro, damage is not a burning issue but may become so in the future. We therefore advise that this issue be adequately addressed in the amending of the legislation. Ideally, the issue of damage should be resolved so that landowners are not motivated to incur damage by game and protected species (which is not always the case; inadequate compensation systems are prone to abuse), but they should not suffer significant damage. At the same time hunters must be motivated to manage game with a view to minimising damage.

In practice culling/management removal is frequently used as the principal means of damage mitigation. Even though it may affect damage at a large scale (by affecting species dynamics and density), at local level the variation in damage is often driven more by other factors, including the scope of protection of wildlife, general food carrying capacity of the habitat, frequency and spatial distribution of wildlife, etc. Effective management of damage (and of attitudes between landowners and hunters) depends on good data on managed game species (that cause damage), and on knowing the extent to which density affects damage compared to other factors. To reduce damage, landowners frequently demand increased removal, but that is unfeasible when densities are low and it may not affect damage anyway (except if the species is exterminated, which is prohibited). This requires the use of other, non-lethal measures. It has to be kept in mind that EU directives are very strict with regard to the lethal removal of protected species. As a means of reducing damage, removal is justified only when there is no other (non-lethal) alternative, it can be proved that removal will actually reduce damage and removal will not jeopardize favourable conservation status. Although it is common belief that lethal removal reduces damage, in reality it



has often turned out to be false; in the case of wolf depredation of sheep, for example, it has turned out to have the opposite effect (Jerina et al., 2014 and sources therein<sup>57</sup>).

In systems where hunting rights are decoupled from land ownership, management of relations between landowners and managers (hunters – holders of hunting rights) requires that the entire management system be very transparent, open to opinions and sound initiatives by interest groups, and supported by good data. Furthermore, it is frequently the case in practice that the best solutions are ones that are adopted in consensus between key stakeholders, even if experts may pragmatically propose better solutions. It is therefore important that key stakeholders participate in dealing with the issue (compensation system, rights and obligations of landowners, rights and obligations of hunters, amount of permitted damage) from the start, when legislative solutions are being prepared.

### 3. MINOR COMMENTS ON THE HUNTING LAW

Below are minor comments on the Hunting Law, listed in the order of the applicable provisions of the law:

General provisions (first articles of the law).

Other hunting laws briefly state the principal goals of management and the legislation in one of the first articles (e.g. preservation and protection of game as a natural asset; preservation and increase in biodiversity, landscape diversity and stability of biotic communities; prevention and compensation of damages by and to game; sustainable management of game), which is useful. We advise that the law be amended accordingly.

#### Article 3

Laws are supposed to be written to be relevant as long as possible, as amending is difficult and often politically sensitive, in particular with regard to hunting laws. We therefore advise that hunted species (list), hunting seasons etc. should be pragmatically regulated in executive regulations, not the umbrella law.

The list of hunted species will have to be adjusted to the Habitats and Birds directive upon EU accession. Protected species (e.g. brown bear, grey wolf, Eurasian lynx, golden jackal) are typically dealt not in the hunting law but in the environmental protection law.

#### Article 9

We advise to change Article 9 in order to allow administrative acts (government regulations and others) to – on the basis of criteria set by a parliamentary act on hunting or nature protection - temporarily or generally exclude or limit hunting.

#### Article 17

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<sup>57</sup> Jerina, K., Krofel, M., Jančar, T. 2014. Pregled učinkov odstrela volkov v Sloveniji in presoja skladnosti odstrela z določili Habitatne direktive.. – Varstvo narave, 27: 51-71.

It may be questionable whether such a prerogative of previous user of management districts is in accordance with EU rules on granting of special and exclusive rights.

Article 36 (3)

The national rules on hunting of EU member states have to take into account that animal species listed in Annex V of the Habitats Directive also have to be maintained at a favourable conservation status and that there is a general requirement in the Birds Directive for conservation of individual species. If the results of surveillance of the conservation status show it is necessary, a member states is obligated to take appropriate measures and therefore this has to be a criteria that empowers and demands the Ministry and all other authorized entities to act and assure stricter hunting rules or even prohibition of hunting and/or exploitation.

Article 36, paragraph 4 and 5

Special hunting decisions by the Ministry have to be regulated in a way that assures the verification of conditions for the derogation of strict protection or derogation in the Birds Directive.

Regarding time frames for bird hunting, the Birds Directive generally (and not for limited species) requires that a bird species is not hunted during nesting season or during the various stages of reproduction and that migratory species are not hunted during their reproduction period or during their return to their nesting grounds (see chapter 2.2.1.2).

Article 37 (4)

Authorization procedure for shooting or hunting of animals that need strict protection and birds that are not hunted or are hunted only when conditions are met, have to assure a verification of conditions for the derogation.

Article 37 (1), Article 38, Article 45 (paragraph 1):

Aside from numerical status of species, “favourable conservation status” (as defined in Article 2(i) of the Habitats Directive) also has to be considered as a criterion that requires stricter hunting limitations.

Article 38:

It is not defined how an inspector can even determine that the population size of a species has decreased; except for monitoring by hunters, the law does not assume the collection of other data.

Article 40:

It is probably impossible to implement this article.

Article 41 and Article 67

Other conditions from Birds and Habitats directives must also be met, above all the requirement that there is no satisfactory alternative.

Article 44:

Rewards are being phased out in modern laws, not least to prevent the promotion of a negative attitude to a species (in particular for broadly endangered species such as wolf). For example, Bulgaria initially paid rewards for wolves but subsequently abandoned the practice.

Article 45:

Given the provisions of the Habitats Directive, this article will no longer be permitted for species of Community interest.

Article 32 and Article 52:

Monitoring and data have to provide satisfactory information on conservation status of individual species, especially one for which a strict protection regime under the Habitats Directive applies and the derogation is only possible if the conservation status is favourable.

Article 57:

We advise that under the general requirements or limitations of hunting, the requirements of maintaining a favourable conservation status as defined by the Habitats Directive is also included.

Article 58 and Article 66:

Prohibited methods of hunting have to be checked against a general requirement for sustainable hunting and special provisions regarding non-selective capture or killing and other prohibited hunting methods of Annex IV of the Birds Directive and Annex VI of the Habitats Directive.

Article 66, indent 17:

It is sensible to put in place safeguards for when plans are not adopted in time, which is not uncommon when the broader public participates in the decision-making process. In Slovenia, for example, it is permitted to cull 40% of the quota from the previous year's plan for game animals (taking into account the structure) until a new annual hunting plan is adopted.

Article 69:

Trading provisions have to include a prohibition on trading of game animals or/and their parts, taking into account that only the sale of some legally captured bird species is allowed in general (Annex III, part A of the Birds Directive) or on the basis of a special authorization (when conditions are fulfilled and the EU Commission consulted; Annex III, part B).

Article 74, paragraph 3:

It will be impossible to implement this provision in practice.

#### 4. FINAL ASSESSMENT OF THE LEGISLATION

Generally speaking, the Montenegrin legislative framework for management of hunted species is good in many areas or at least based on good assumptions. For example, planning is hierarchical and multi-phased, combining implementing and strategic levels; sizes of hunting grounds take into account the large-area needs of game species; the legislation requires collection of data on population status of managed species; systematic collection of data on culled animals is also

required; and the legislation contains multiple safeguards to make sure hunted species do not become endangered (e.g. hunting seasons, refuges where hunting is banned, protection of reproductive categories for species where the aim is to increase population size).

Nevertheless, the legislative framework for hunting can be improved. We assess the main shortcomings to be as follows:

- 1) Regulations determining the implementation of population monitoring are too lax or incomplete; data quality is not assured, raising questions about the quality of the available data on the (conservation) status of the populations of managed species
- 2) All principal data on the status of game species are collected by hunters, who have an oversized role in management planning considering the type of management system. This is questionable due to potential conflict of interest
- 3) Prescribed monitoring, as well as planning and control of hunting do not assure adequate risk management for dangers posed to the animal populations by hunting
- 4) The legislation does not provide for sufficient participation of stakeholders other than hunters (for example landowners, NGOs) in management planning and the adoption of executive regulations; management probably does not take sufficient account of the Aarhus Convention
- 5) The list of game species is not aligned with EU regulations: some species currently covered by the Hunting Law should not be hunted and would be best to be dealt with in the environmental protection law
- 6) The prescribed hunting regime, including hunting seasons, of some species (e.g. brown bear, grey wolf, and several bird species) is not sufficiently in line with the Birds and Habitats directives and would probably be recognised as unlawful in the event of litigation
- 7) Current hunting law does not include provisions that would determine assessments and permissions for hunting plans inside Natura 2000 sites
- 8) Current hunting legislation lacks provisions that regulate sale of animals or their parts
- 9) Integration of local 10-year and annual implementing plans with strategic management plans at district level is insufficient; in strategic plans it is impossible to verify on an ongoing basis (every year) whether the implemented measures actually meet the objectives, as the data are not available
- 10) The law posits observation of absolute population size and rating of ecological carrying capacity of hunting grounds as the principal management model; this model has frequently proved to be less useful, it is outdated and is being abandoned around the world in favour of adaptive management approach
- 11) The prescribed sex and age structure of removal of some hunted species (e.g. permitting only the harvest of trophy males while protecting females and offspring) could be (or perhaps already is) damaging in the event of intensive removal, as it would negatively bias the sexual composition of reproductive animals
- 12) The Hunting Law also circumscribes specific dynamic substance which should be in the domain of executive regulations (e.g. list of game species, sex and age structure of harvest), as the law is more difficult to change than executive regulations.

- 13) The legislation probably inadequately supports coordination of wildlife management with other sectors (forestry, nature protection).

### **Concise recommendations for improvement of legislation**

1. We advise that one or two methods maximum be specified to monitor the population dynamics of individual species (two if necessary due to natural features such as habitat differences). The method should change as little as possible over time and space, which assures spatial comparability of results and monitoring of trends over time, often a key prerequisite in management. Selection of specific method depends on management goals and conservation status of species (e.g. protected or hunted). For species protected under domestic or international legislation, removal must necessarily be supported with more robust and reliable methods given that the state must clearly demonstrate it will not jeopardise species' conservation status. For traditional hunted species such as ungulates, we advise that monitoring focus on relative trends rather than absolute numbers. Financially acceptable methods to determine absolute size typically yield completely unreliable results. For ungulates the line transect method seems to be reasonably cost-effective and sufficiently accurate (for details, see Morellet et al. 2011<sup>58</sup>). The method is especially convenient for use in open habitats, such as mountains above tree line. In more closed habitats (e.g. forests) pellet group counts could be an alternative census methods for ruminant ungulates. This method has been recently tested in Slovenia and proved to provide useful results (Jerina et al. 2013<sup>59</sup>). Regardless of the method used, it is essential that observers with similar and adequate qualifications are conducting the monitoring. Each observer should receive proper preliminary training. For species with wider distribution whose populations are demonstrably not strongly affected by hunting, even more extensive methods produce satisfactory results, for example catch per unit effort methods. Such methods are used in the management of the most common types of hunted birds.
2. The entire management is based on data collected by hunters. In a system where hunting rights are decoupled from land ownership, this is not desirable and we deem it unacceptable since it allows abuse and fraud. We advise that at least a portion of data collection be delegated to independent services (government and non-government institutions) whose interests are not aligned with hunters or other key stakeholders.<sup>60</sup> In

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<sup>58</sup> Morellet N., Klein F., Solberg E., Andersen R. 2011. The census and management of populations of ungulates in Europe. In: Ungulate Management in Europe. Problems and Practices. Putman R., Apollonio M., Andersen R. (ed.). New York, Cambridge University Press, 106-143.

<sup>59</sup> Jerina K., Stergar M., Pokorny B., Jelenko I., Miklavčič V., Bartol M., Marolt J. Določitev najbolj primernih kazalnikov za spremljanje stanja populacij divjadi in njihovega okolja pri adaptivnem upravljanju: zaključno poročilo projekta CRP V4-1146. Ljubljana: Biotehniška fakulteta, Oddelek za gozdarstvo in obnovljive gozdne vire; Velenje: Erico, 2013. 24 p.

<sup>60</sup> For example, in Slovenia monitoring of large part of game species is conducted by the government institution – Slovenia Forest Service, which operates under the auspices of the Ministry of Agriculture, Forestry and Food. The same authority is also in charge of management plans for forests and game species, and it is an important actor in management of protected species (in particular large carnivores). Monitoring of the rest of game species (especially birds) and protected species is conducted (sometimes also in collaboration with the Slovenia Forest Service) by non-government organizations (e.g. Slovenian BirdLife partner DOPPS and NGO Dinaricum) and universities, to which task is usually delegated by the competent ministry via public call for applications.

Montenegro hunters have an outsized role in management planning given the current hunting system (*res communis*), since they prepare 10-year and annual hunting grounds plans which have an unclear connection to strategic plans produced by state authorities. We advise that the role of the state or independent services in management planning increases at the expense of hunters.

3. Considering that game is a common good in Montenegro, the legislation is discriminatory in favour of hunters and at the expense of other interest groups (stakeholders). Furthermore, the legislation probably does not make sufficient allowance for the requirements of the Aarhus Convention. We advise that public presentations of management plans are made a requirement and other stakeholders are included in the management of protected species. In Slovenia, for example, all strategic management plans are publicly presented and the representatives of all stakeholders participate in the preparation of action plans for management of protected species. The author of the plan is obligated to respond to all opinions/initiatives and provide satisfactory explanations of its decisions (responses to the initiatives), else the competent ministry can refuse approval of the plan. A game management plan is supposed to be coordinated with the forest management plan and needs to take into account all nature protection regulations. The plan must also be cleared by the minister in charge of the environment and spatial planning.
4. By the time it starts EU accession negotiations, Montenegro will have to align its list of game species with the requirements of the Habitats and Birds directives. Some species currently covered by the Hunting Law should be transferred to the environmental protection law. Planning of removal of species covered by the EU directives will have to be adjusted to the requirements of these directives (three tests when management removal of a protected species is allowed as derogation; in less strict protection regimes demonstrating that hunting is sustainable). Also hunting seasons for several species should be revised.
5. Before EU accession, Montenegro will have to include provisions that will determine assessments and permissions for hunting plans inside Natura 2000 sites.
6. The spatial and temporal hierarchy of management planning is not sufficiently structured. We advise that the planning system be upgraded with a level of strategic planning (long term, for example 10 years) where the main management goals and measures for regional management districts are defined. For the same districts annual management plans should be prepared for the monitoring of the realization of long-term plans (and specification of measures), based on measurable and reliable indicators. In the third phase the measures from the annual plan for the regional management district are divided to implementing plans for hunting grounds depending on local specifics.
7. The traditional planning method based on habitat rating and estimate of absolute densities should be replaced with adaptive management. In adaptive management, the management objectives (e.g. preservation of game population and their sustainable use, mitigation of damage by game) determine the selection of relevant indicators for each species (e.g. absolute or relative population size, vitality, impacts on environment) that reflect the

approximation of current densities to the ecological, economic and socio-political carrying capacity and appropriate measures are planned in the form of setting the hunting quota and measures aimed to alter habitat quality. Unlike traditional methods, adaptive planning objectives are not fixed in pursuing absolute densities (determined with rating), they are adapted to the natural, economic and socio-political carrying capacity.

8. Guidelines on permitted sex and age composition of removal for individual species should be transferred from the law to executive regulations; it is also necessary to verify whether current guidelines (also taking into account better data) are biologically sensible. Numerous studies around the world show that removing only dominant males has multiple indirectly detrimental effects on population vitality.
9. Parts of the umbrella act that cover subject matter which may change over time (e.g. list of hunted species, guidelines on sex and age structure of harvest, permitted hunting methods) should be transferred from the umbrella act to executive regulations.
10. The law needs to provide better direct participation of other stakeholders (hunters as well as landowners and NGOs) and other sectors (forestry, nature protection) in wildlife management (e.g. public presentation of plans). Conversely, other sectorial legislation (e.g. tourism) needs to make allowance for game and wildlife protection and hunting.

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APPENDIX I: Comparison of mammals species listed in current hunting legislation of Montenegro with listings in annexes of the Habitats Directive (the meaning of different annexes is described expertise)

Latin name	Local name	Status in current hunting legislation of Montenegro	EU Habitats Directive
<i>Canis aureus</i>	Šakal	no protection, possible additional prescription of hunting season	Annex V
<i>Canis lupus</i>	Vuk	no protection, possible additional prescription of hunting season	Annex II and IV, * priority species; except for Bulgarian, Latvian, Lithuanian, Estonian, Polish and Slovak population and part of Spanish, Greek and Finnish populations, which are on Annex V
<i>Capreolus capreolus</i>	srna obična	hunting season for males, full protection for females and calves	-
<i>Cervus elaphus</i>	jelen obični	hunting season for males, full protection for females and calves	-
<i>Dama dama</i>	jelen lopatar	hunting season	-
<i>Felis silvestris</i>	mačka divlja	hunting season	-
<i>Glis glis</i>	puh veliki	hunting season	-
<i>Lepus europaeus</i>	zec obični	hunting season	-
<i>Martes foina</i>	kuna bjelica	no protection, possible additional prescription of hunting season	-
<i>Martes martes</i>	kuna zlatica	no protection, possible additional prescription of hunting season	Annex V
<i>Meles meles</i>	Jazavac	no protection, possible additional prescription of hunting season	-
<i>Mustela erminea</i>	lasica velika	fully protected	-

<i>Mustela nivalis</i>	lasica mala	no protection, possible additional prescription of hunting season	-
<i>Mustela putorius</i>	Tvor	no protection, possible additional prescription of hunting season	Annex V
<i>Ovis musimon</i>	Muflon	hunting season for males, no status listed for females and calves	-
<i>Rupicapra rupicapra</i>	Divokoza	hunting season for males, full protection for females and calves	Annex V; <i>R. rupicapra balcanica</i> on Annex II and IV
<i>Sciurus vulgaris</i>	Vjeverica	hunting season	-
<i>Sus scrofa</i>	svinja divlja	no protection, possible additional prescription of hunting season	-
<i>Ursus arctos</i>	Mrki medvjed	hunting season for adults without cubs, full protection for females with COYs or yearlings	Annex II and IV, * priority species; except for Estonian, Finnish and Swedish populations, which are only on Annex V
<i>Vulpes vulpes</i>	Lisica	no protection, possible additional prescription of hunting season	-

APPENDIX II: Comparison of bird species listed in current hunting legislation of Montenegro with listings in annexes of the Birds Directive together with comparison of hunting seasons in Montenegro, Slovenia and Croatia. With \* are marked species for which we recommend change in the hunting season (see chapter 2.2.1.2).

Latin name	Local name	Status in current hunting legislation of Montenegro	Hunting season in Montenegro	Hunting season in Slovenia	Hunting season in Croatia	EU Birds directive
<i>Alectoris graeca</i>	jarebica kamenjarka	hunting season	1.10. - 31.12.	no hunting allowed	30.9. - 16.1.	Annex I and Annex II part A
<i>Anas crecca*</i>	patka krža	hunting season	15.8 - 15. 2	no hunting allowed	31.8. – 1.2.	Annex II part A and Annex III part B
<i>Anas Penelope*</i>	patka zviždara	hunting season	15.8 - 15.2.	no hunting allowed	no hunting allowed	Annex II part A and Annex III part B
<i>Anas platyrhynchos*</i>	patka divlja-gluvara	hunting season	15.8 - 15.2.	1.9. – 15.1.	31.8. – 1.2.	Annex II part A and Annex III part A
<i>Anas strepera*</i>	patka čegrtaljka	hunting season	15.8 - 15.2.	no hunting allowed	no hunting allowed	Annex II part A
<i>Anser anser*</i>	guska divlja	hunting season	1.10 - 15.2	no hunting allowed	no hunting allowed	Annex II part A and Annex III part B
<i>Aythya ferina*</i>	patka glavata	hunting season	15.8 - 15.2	no hunting allowed	31.8. – 1.2.	Annex II part A and Annex III part B
<i>Aythya fuligula*</i>	čubasta patka	hunting season	15.8 - 15.2.	no hunting allowed	31.8. – 1.2.	Annex II part A and Annex III part B
<i>Columba livia*</i>	golub pećinar	hunting season	1.8. - 31.12.	no hunting allowed	31.7. – 1.2.	Annex II part A
<i>Columba palumbus*</i>	golub grivnjaš	hunting season	1.8. – 15.2.	no hunting allowed	31.7. – 1.2.	Annex II part A and Annex III part A
<i>Corvus corone cornix</i>	vrana siva	no protection, possible additional prescription of hunting season	1.8. – 15.2.	1.8. – 28.2.	31.7. - 1.3.	Annex II part B

<i>Coturnix coturnix</i> *	prepelica pućpura	hunting season	1.8. - 31.10.	no hunting allowed	15.8. – 1.12.	Annex II part B
<i>Fulica atra</i> *	liska crna	hunting season	15.8 - 15.2.	no hunting allowed	31.8. – 1.2.	Annex II part A and Annex III part B
<i>Gallinago gallinago</i>	bekasina	hunting season	1.10. - 31.12.	no hunting allowed	15.10. – 1.2.	Annex II part A and Annex III part B
<i>Garrulus glandarius</i>	sojka	no protection, possible additional prescription of hunting season	1.8. - 15.2.	1.8. – 28.2.	31.7. – 1.3.	Annex II part B
<i>Phasianus sp.</i>	fazan	hunting season	1.10. - 31.1.	1.9. - 28.2.	15.9. – 1.2.	Annex II part A and Annex III part A
<i>Pica pica</i>	svraka	no protection, possible additional prescription of hunting season	1.8. – 15.2.	1.8. – 28.2.	31.7. – 1.3.	Annex II part B
<i>Scolopax rusticola</i> *	šumska šljuka	hunting season	1.11 - 15.2	no hunting allowed	30.9. – 1.3.	Annex II part A and Annex III part B
<i>Streptopelia decaocto</i> *	gugutka	hunting season	1.8 - 31.12.	no hunting allowed	no hunting allowed	Annex II part B
<i>Streptopelia turtur</i> *	grlica	hunting season	1.8 - 31.12.	no hunting allowed	no hunting allowed	Annex II part B
<i>Tetrao urogallus</i>	veliki tetrijeb	fully protected	no hunting allowed	no hunting allowed	no hunting allowed	Annex I, Annex II part B and Annex III part B
<i>Tetrastes bonasia</i> <sup>§</sup>	lještarka	fully protected	no hunting allowed	no hunting allowed	no hunting allowed	Annex I and Annex II part B

<sup>§</sup> previously *Bonasa bonasia*

APPENDIX III:

Example of special article on public participation in the process of adopting regulation that has influence on environment from Slovenian legislation (Article 34a of Environmental Protection Act<sup>61</sup>):

*Article 34.a*

*(participation of the public in the adoption of regulations)*

*(1) In the process of adopting regulations that can have a significant impact on the environment, the Ministry, other ministries and the competent body of the local authority must allow the public the*

*opportunity to familiarise itself with the draft regulation and give its opinion and submit comments thereon.*

*(2) Regulations that can have a significant impact on the environment shall include regulations issued in the field of environmental protection, nature conservation and the management, use or protection of parts of the environment, including the management of genetically modified organisms, and also regulations the environmental impact of which has been identified by the drafting body during the adoption process.*

*(3) The body referred to in the first paragraph of this article shall inform the public, by means of a public announcement on its website, of the location in which the draft regulation is accessible and the method and time of submitting opinions and comments.*

*(4) The public shall have the right to inspect the draft regulation and the opportunity to give opinions and comments for at least 30 days.*

*(5) The body referred to in the first paragraph of this Article shall study the opinions and comments of the public and, in so far as they are acceptable, incorporate them appropriately into the drafting of the*

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<sup>61</sup> (Zakon o varstvu okolja) Official gazette [41/04](#), [17/06](#) - ORZVO187, [20/06](#), [NPB1](#), [39/06](#) - UPB1, [NPB2](#), [49/06](#) - ZMetD, [NPB3](#), [66/06](#) - odl. US, [NPB4](#), [33/07](#) - ZPNačrt, [NPB5](#), [57/08](#) - ZFO-1A, [NPB6](#), [70/08](#), [NPB7](#), [108/09](#), [NPB8](#), [108/09](#) - ZPNačrt-A, [NPB9](#), [48/12](#), [NPB10](#), [57/12](#), [NPB11](#), [92/13](#) in [NPB12](#), last version available on <http://www.pisrs.si/Pis.web/pregledNpb?idPredpisa=ZAKO6357&idPredpisaChng=ZAKO1545>

*regulation. Furthermore, it shall publish on the internet a reasoned position in which it states its views with regard to the opinions and comments of the public and its reasons for incorporating them or not incorporating them in the drafting of the regulation.*

*(6) The provisions of the preceding paragraphs shall not apply to regulations where, for their adoption, the participation of the public is already prescribed by other laws.*