

BIRD HUNTING ALONG THE ADRIATIC FLYWAY – AN ASSESSMENT OF BIRD HUNTING IN ALBANIA, BOSNIA AND HERZEGOVINA, CROATIA, MONTENEGRO, SLOVENIA AND SERBIA

Martin Schneider-Jacoby and Annette Spangenberg

EuroNatur, Konstanzer Str. 22, D 78315 Radolfzell, Germany; martin.schneider-jacoby@euronatur.org

Summary

According to our estimations, far more than 2 million birds are shot each year along the Adriatic Flyway. The assumed reasons for such state of affairs are intensive hunting activities by more than 200,000 hunters plus many poachers and guests, inadequate legal frameworks concerning bird hunting in most countries as well as insufficient control of the existing laws in the countries located along the Adriatic Flyway. The only exemption is Slovenia.

The main aim of the present assessment was to analyse the current legal frameworks as well as the actual situation concerning bird hunting in all countries located along the Adriatic Flyway, specifically Albania, Bosnia and Herzegovina¹, Montenegro, Serbia, Croatia and Slovenia in order to verify the above assumption and to gain a clear picture about the respective standards in each country.

The following table briefly summarizes the results of the assessment.

Table 1: Evaluation of Bird Hunting

Countries	Albania	Bosnia and Herzegovina		Montenegro	Serbia	Croatia	Slovenia
Entity		Fed ¹	RS ¹				
Control of hunting	1	1	1	1	2	3	4
Monitoring of birds shot	1	1	1	1	1	1	4
Duration of hunting season	1	1	1	1	1	2	3
Hunting during stages of reproduction	2	1	1	1	1	1	3
Hunting during the birds' return	1	1	1	1	1	2	5
Number of bird species open for hunting	1	1	1	2	2	2	4
Impact on endangered bird species	1	1	1	1	1	1	5
Illegal bird hunting	1	1	1	1	1	1	4
Hunting ban areas	2	2	2	3	2	3	3
Trend analysis	1	1	1	4	2	4	5
Trade in birds	1	1	1	1	3	4	5
	1,18	1,09	1,09	1,55	1,55	2,18	4,09

5	excellent
4	good
3	fair
2	insufficient
1	poor

¹ BiH is politically decentralized and comprises two governing entities, the Federation of Bosnia and Herzegovina (Fed) and Republika Srpska (RS). Both entities have different legal frameworks, also for hunting. In the following text, if not specified, both entities are referred to.

In the first step,

- Control of hunting
- Monitoring of birds shot
- Duration of hunting season
- Hunting during reproduction stages
- Hunting during the birds' return
- Birds open for hunting
- Impact of hunting on endangered species
- Illegal hunting
- Hunting ban areas
- Trend
- Trade in birds

were assessed in each country, rating the situation on a 1 to 5 scale with 1 being the lowest and 5 the highest rating. The results from these rankings were summed up and divided through the amount of criteria (11). This led to an overall ranking, showing that the only country along the Adriatic Flyway corridor, which has adopted good standards in bird hunting, is Slovenia (total rating 4), a country which implemented the EU Bird Directive in an exemplary manner and protects all migrating birds. In Slovenia, only six bird species are still open for hunting according to the recent hunting law.

Croatia has reached the second place in the rating, but was only given a 2 (insufficient), as there are still many deficits compared to the standards defined in the EU Birds Directive. Main deficits are, for example, that hunting is allowed during the breeding and return periods, which has very negative effects – both direct as well as indirect - on bird populations. In addition, there are huge problems with illegal bird hunting even in Croatian protected areas, e.g. in the Neretva Delta. This also lowered the total score considerably.

Montenegro and Serbia were also ranked as insufficient (2), while the other two countries assessed, Albania and Bosnia-Herzegovina, were even rated as poor (1).

Until now, only Slovenia has joined the EU out of the six countries assessed. This affects the respective legal framework concerning bird protection and hunting

in the country, because Slovenia as a EU member is obliged to implement the EU Birds Directive (Council Directive 79/409/EEC of 2 April 1979)² which they do in an exemplary manner.

Consequently, Slovenia is a very positive example along the Adriatic Flyway, while the analysis revealed an alarming situation in the other countries assessed with Albania and Bosnia and Herzegovina being the countries with the weakest hunting laws and, in addition, the worst implementation and control of the existing laws. All countries but Slovenia have not implemented the minimal standards of bird preservation as agreed, for example, in the EU Bird Directive, and illegal hunting is widespread.

This suggests that

- with EU membership, the respective national legal framework for bird hunting as well as control of bird crime improves (example of Slovenia);
- the EU accession process leads to a step by step improvement of bird preservation and hunting (example of Croatia).

In five out of six countries assessed, the actual legislation is problematic concerning bird hunting. Long hunting seasons are impacting birds both during the breeding season and the period when they return to their rearing habitats.

The number of species open for hunting includes both protected species as well as many species that look similar to the threatened and endangered species, which in many cases – due to the lack of knowledge – leads to the killing of rare species that use the same habitats. For example, the fate of the Slender-billed Curlew (*Numenius tenuirostris*), a species which is threatened by extinction worldwide, is most probably decided at the Adriatic Flyway.

In addition, there are no programmes for hunting ban areas in these countries in order to protect resting sites and important habitats of national and international importance. And - even worse - in several protected areas with great importance for birds, illegal hunting is widespread. Illegal bird hunting poses a huge problem and hunting organisations as entities

² http://europa.eu.int/comm/environment/nature/nature_conservation/focus_wild_birds/sustainable_hunting/pdf/hunting_guide_en.pdf

officially responsible for hunting, especially in Albania, Bosnia-Herzegovina, Croatia, Montenegro and Serbia, do not counteract this problem sufficiently. Often, illegal hunting is performed very blatantly, e.g. in the Neretva Delta in Croatia and Bosnia and Herzegovina, at Lake Skadar in Montenegro as well as along the whole Montenegrin and Albanian coasts. In some cases, it is even documented in publications, such as the promotional DVD about “Hunting of Geese and Ducks” (Golden Audio Video 2008) in Serbia, which is available even in Montenegrin supermarkets.

Illegal hunting activities are well known to the local hunters, but not stopped. In some cases, even hunting guards are involved in these activities, especially when foreign hunters are involved. In worst cases, the managers of protected areas even know about the problems, but are not able to react and solve them.

The trend during the last years is in many ways heterogeneous. On the one hand, there are some improvements in Croatia and Montenegro within the legal framework, but also very negative developments in Albania, e.g. with the decision taken in 2008 to prolong spring hunting in 2008. Also, the new hunting laws in both entities of Bosnia-Herzegovina³ are worse than the former Yugoslav laws and difficult to read or understand.

On the other hand, Slovenia is a good example and demonstrates how the former Yugoslav hunting laws can be adapted to international standards. Also, the ban of hunting in the coastal area of Montenegro – 5,800 ha in size – since 2008 is a very positive trend. Other good examples for the establishment of important stop over sites are the National Park Lake Skadar at the Albanian-Montenegrin border, the Nature Parks Vransko Jezero and Lonjsko Polje in Croatia and the special reserve Slano Kopovo in Serbia, managed by the local hunters association.

1 Introduction and Range of the Assessment

The assessment is part of the project entitled “Protection of Priority Wetlands for Bird Migration

(Adriatic Flyway) in the Dinaric Arc Ecoregion Through Integrated Site and River Basin Management”⁴ jointly implemented by WWF MedPo and EuroNatur, financially supported by the MAVA Foundation.

While WWF is working at the basin level to preserve the priority wetlands identified within the project, specifically Livanjsko Polje (BiH), the Neretva Delta (HR) with Hutovo Blato (BiH) and Lake Skadar including the Bojana-Buna Delta (AL/MNE), from negative impacts, EuroNatur’s activities within the project aim to analyse bird migration along the Adriatic East Coast and to

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improve the protection of the key stopover sites.

The present assessment “Bird Hunting along the Adriatic Flyway” provides basic information that will serve to draft recommendations for improvement of the three priority wetlands mentioned above.

The size of the total study area is 255,000 km² and covers the countries of former Yugoslavia – Bosnia and Herzegovina, Croatia, Montenegro, Slovenia and Serbia – plus Albania. In all these countries, EuroNatur has established long-term contacts and has cooperated with both GOs and NGOs in the implementation of conservation projects since 1987 (see www.euronatur.org). Macedonia – which was also part of the former Yugoslavia – was not included, as it is not situated inside the NE-SW migration corridor of the Adriatic Flyway (see below).

Despite the fact that Kosovo is located along the Adriatic Flyway, the country has not been included in this study due to the recent political and administrative changes. The existing data on hunting for Kosovo are often still summarized under Serbia

³ Please refer to footnote 1.

⁴ In the text, the project is referred to as “Adriatic Flyway Project”

⁵ <http://www.face-europe.org/>

in international reviews⁵. According to our knowledge though, the most urgent actions with regard to bird conservation are to review the current Kosovo hunting legislation, to stop poaching and to include the protection of resting sites for birds as soon as possible in the Important Bird Area programme in Europe.

Besides Slovenia, no country has entered into the EU yet, thus it is very interesting to see how different

The Adriatic Flyway, however, is of great importance not only for water birds.

countries of the former Yugoslavia and Albania have improved their hunting laws concerning bird hunting with regard to a future membership in the EU in general and the EU Birds Directive specifically. For example, Croatia has the status of an accession country and is well prepared to join the EU.

This assessment is also meant to provide a discussion platform among hunters and conservationists with the aim to improve the actual situation in the respective countries. It is also a first benchmark for the EU accession process - which is either currently ongoing (Croatia) or will eventually start in the other countries assessed - and its positive influence on nature conservation and hunting management.

Another objective of the study was to check whether international standards of the Bern, Ramsar or Bonn Conventions are implemented and if bird populations are suitably protected according to the above mentioned Conventions.

2 Importance of the Adriatic Flyway

For water birds, Wetlands International identified three important flyways for Europe: the East Atlantic, the Black Sea and Mediterranean as well as the West Asian-East African Flyways⁶. Only the Black Sea and Mediterranean Flyway crosses the Mediterranean

Sea in NW-SE direction, while the other two corridors follow the coastal zones of West and East Africa, respectively. While those water birds flying along the East Atlantic and West Asian-East African Flyways mainly use the coastal wetlands and follow the coast-line of Africa on both sides, the Central and Eastern European water birds use the Black Sea and Mediterranean (Central European) Flyway. Then they cross the Mediterranean Sea after their flight over the European continent and winter in North Africa, e.g. in Tunisia or in the Central African Niger Basin. Along this flyway, resting sites throughout the journey over the European continent and the Mediterranean Sea are limited. Typical bird species using this flyway are the Common Crane (*Grus grus*) (compare the poster on www.UNEP-AEWA.com), Great White Egret (*Egretta alba*), Garganey (*Anas querquedula*) or the Eurasian Spoonbill (*Platalea leucorodia*), which cross the Balkan Peninsula and the Adriatic Sea. We call that specific section of the Black Sea and Mediterranean (or Central European) Flyway running over the Balkan Peninsula and the Adriatic Sea the "Adriatic Flyway" (Schneider-Jacoby 2008) to point out the specific importance and threats of this passage.

In comparison to the huge Eurasian breeding areas and the size of the wintering areas in Africa, the Adriatic Flyway is a real bottleneck section along the Central European Flyway with limited resting sites and many obstacles such as the Adriatic Sea and the Dinarid Mountains. While other areas along the Central European Flyway (e.g. Malta and the Strait of Messina) have been described as bottleneck areas already for a long time, bird migration over the Balkan Peninsula has been difficult to assess due to the lack of data and recent political changes, including war. For example, Yugoslavia collapsed during the preparation of the first edition of "Birds in Europe" (Grimmet & Jones 1989) and Albania was still a politically isolated country. Therefore, the situation in the region could not have been assessed thoroughly.

During the preparation of the second edition (Heath & Evans 2000), armed conflicts and minefields hindered bird monitoring in large parts of the former Yugoslavia.

⁶ <http://www.wingsoverwetlands.org/>

Number of Waterfowl during the international census (IWC) in the six countries is not higher than one million water birds based on the national reports. Key resting sites are the lowlands of the Danube, Drava, Mura and Sava in the Pannonian Plain. During hard winters, though, the birds have to leave these riverine wintering sites. Then, the coastal areas of Dalmatia become important alternative wintering sites. Key resting sites are then the Neretva Delta, Vransko Jezero, the Bojana-Buna Delta, as well as the large wetland system of Lake Skadar and the lagoons and deltas in Albania and Montenegro. The number of birds wintering in the littoral of the sea is yet unknown (Mikuska in lit). Currently, EuroNatur explores the capacity of the Karst Poljes as stopover and resting sites during spring and autumn migration (Stumberger this publ.). First information gathered in Livanjsko Polje show a great potential as resting sites for different species of migrants (Schneider-Jacoby et al. 2006).

The Adriatic Flyway, however, is of great importance not only for water birds. Migratory raptors are typical guests along the whole Adriatic East Coast and need resting sites as well. For example, with eight globally threatened and near threatened migratory raptors, Croatia and Serbia & Montenegro (today two countries) reach the highest number of endangered

migratory raptors, which has been found in the African-Eurasian assessment for all countries in a study of the Bonn Convention (Tucker & Goriup 2005). In addition, many species of the cultural landscape, such as Common Quail (*Coturnix coturnix*) and Wood Lark (*Lullula arborea*), use the resting site along the Adriatic East Coast.

3 Background and Method

Within the framework of the Adriatic Flyway Project, questionnaires were distributed to all countries and answered by NGO partners. Based on the answers and the compiled information, this assessment was prepared and bird hunting in the countries was rated based on the EU Birds Directive and the status of birds in Europe⁷. **Rating** is made on a **1 to 5** scale with **1** being the lowest and **5** the highest **rating** (1 – Poor, 2 – Insufficient, 3 – Fair, 4 – Good, 5 – Excellent). Good solutions and practices rated with 5 are the best or most highly recommended.

In addition, the assessment considers the findings of 20 years of joint field work in the countries along the Adriatic Flyway, conducted by local NGOs, protected area managers and bird watchers in cooperation with EuroNatur. The data collected during the field work

Table 2: Country overview

	Total land area in km ²	No. of registered hunters	Inhabitants (Mio)	Hunter/Inhabitants (%)	People/ km ²	Hunter/ km ²	Killed birds/ year	Waterbirds in January
Slovenia	20,000	22,000	2.0	1.0	100	1.1	*50,834	50,000
Albania	29,000	17,000	3.6	0.6	124	0.6	?	100,000
Bosnia and Herzegovina	51,000	50,000	4.6	1.2	90	1.0	?	20,000
Croatia	57,000	55,000	4.5	1.4	79	1.0	?	200,000
Montenegro	14,000	4,500	0.7	0.6	50	0.3	?	200,000
Serbia	88,000	80,000	10.1	0.7	115	0.9	**?	300,000
Total	259,000	22,500	25.5	0.9	93	0.8	?	870,000

According to FACE, additional EuroNatur information indicated in green

* Hirschfeld & Heyd 2005

** 38.000 Quails only in Vojvodina

Simić & Tucakov 2005

⁷ http://www.birdlife.org/action/science/species/birds_in_europe/index.html



Figure 1: Killed Common Shelduck (*Tadorna tadorna*) at Solana Ulcinj, Montenegro, April 2008. One of the last remaining breeding individuals along the entire Adriatic East Coast. / photo D. Saveljic



Figure 2: Hunting hide at Velika Plaza, March 2009 / photo B. Stumberger

served to prepare different reports, such as reports on hunting, and to assess the negative impacts on birds, as prepared for Croatia (EuroNatur 2003). In 2003 and 2004, a rapid field assessment to evaluate the ecological importance of the Bojana-Buna Delta (MNE/AL) was conducted by EuroNatur (Schneider-Jacoby et al. 2006). This assessment also included the monitoring of bird hunting in the area.

Since 2006, regular bird monitoring has been implemented in the Bojana-Buna Delta (ME/AL), Lake Skadar (ME), Neretva Delta (HR) and Livanjsko Polje (BiH), as well as in other important areas for birds in the region such as the old salinas “Solila” near Tivat in Montenegro (Sackl et al. 2006). This field work revealed intolerable conditions for the protection of birds in most countries along the Adriatic Flyway, as hunting of birds is common and not controlled in most cases.

In 2006, EuroNatur embarked on the previously mentioned Adriatic Flyway Project. One of the goals of this project is to minimize bird hunting pressure in the different project areas.

To be able to take effective measures, it is necessary to well understand the countries’ specific situations and regulations concerning (bird) hunting to have a sound basis for the development and implementation of solution approaches.

For that purpose, a questionnaire was developed, based on other international programmes dealing

with the reduction of excessive, indiscriminate and illegal hunting of (migratory) birds. The questionnaire contained questions related to

- the legal framework and its implementation
- the number of hunters and their organisational structures
- the hunting activities and practises
- the socio-economic importance of hunting
- possible alternatives to hunting, and
- possible best practise models.

The above questions were to be answered for the whole country. In addition, a second set of questions dealt with hunting in protected areas, the priority site identified within the Adriatic Flyway Project, respectively.

The questionnaire was filled in by NGO partners in the respective countries and evaluated by EuroNatur. For the evaluation, the situation in each country was rated in relation to the EU Birds Directive⁸, taking into consideration also the status of birds in Europe⁹.

4 Number of Hunters

According to FACE (Federation of Associations for Hunting and Conservation of the EU), there are 228,500 hunters registered in the range countries. Consequently, the density of hunters per square kilometre differs between 0.6 and 1.3 in different countries, with an

⁸ http://europa.eu.int/comm/environment/nature/nature_conservation/focus_wild_birds/sustainable_hunting/pdf/hunting_guide_en.pdf

⁹ http://www.birdlife.org/action/science/species/birds_in_europe/index.html

average of 0.9. As large parts of Albania, Croatia and Montenegro are mountainous areas and not densely populated, hunting in these countries is focused on the coastal areas and lowlands.

For example, in the Croatian Neretva Delta, according to Bukvic (in Schneider-Jacoby 2002), the density of hunters in the remaining wetland was 47 hunters/km². This led to a huge pressure on the arriving and resting migrants. On Velika Plaza, a natural monument along the coast of Montenegro, 5 km² in size, up to 50 hunters were counted along the coast at the same time (Schneider-Jacoby 2007). Still, in 2008, 21 hunting hides were built along the 9 km long Velika Plaza beach. With some 2,000 local hunters in Albania and Montenegro and hunting tourism (mainly Italians), hunting has an important impact on the bird fauna of the Bojana-Buna Delta (375 km², Schneider-Jacoby et al. 2006).

According to FACE, about 1% of the population is registered in the countries as hunters. The hunters are organised in national hunting organisations, which are cooperating with European hunting associations such as CIC and FACE. CIC organises a special Coordination Forum for Central and South Eastern Europe, chaired by the Slovenia hunters association at the moment¹⁰, which could be an important tool to fight illegal bird hunting and to improve the situation based on the Slovenian legal system in line with the EU Birds Directive.

5 Control of the Hunting

The assessment has shown that the enforcement of the existing hunting laws is lacking in all countries except Slovenia, from where only minor problems have been reported. Although the ministries in all countries employ hunting inspectors, their number is too small and the means to control hunting in the countries are not sufficient. For example, in Montenegro the hunting inspector announces his visit at the hunting ground and is guided during the inspection by the hunting organisation. The inspection is known in advance; a serious control of hunting activities is certainly not possible under these circumstances.

In general, the control of hunting is transferred from the state level to the hunting organisations themselves, which have to employ hunting guards. According to our own observation and the reports given in the questionnaires, this system is not effective, as often those people being in charge of the control are also involved in the hunting activities and especially in the hunting tourism they can financially benefit from. Film documents from Serbia and observations in Montenegro prove that illegal activities, such as hunting outside the hunting season and killing of protected species, are not stopped by the “guards”.

6 Hunting Season

6.1 Duration of the hunting season

In all countries within the study area, the hunting season is extremely long. Even in Slovenia, bird hunting is open for seven months, leading to a disturbance in the countryside. In Bosnia and Herzegovina, Croatia and Serbia, some bird species are hunted throughout the year. Often, the hunting of migrating birds starts already during the breeding seasons in summer and ends as late as in the ensuing spring. The length of the hunting season is impacting the breeding bird populations in the countries and especially all kinds of ducks, which are consequently very rare along the Adriatic East Coast and coastal marshes, as shooting continues after January 15th. This applies for Ferruginous Duck (*Aythya nyroca*), Garganey, but even Mallard (*Anas platyrhynchos*) and other species such as waders and birds of prey. In 2008, the Oystercatcher (*Haematopus ostralegus*) became extinct in this part of Europe. The Common Shelduck (*Tadorna tadorna*), too, is on the brink of extinction, as only one or two pairs have been left in Solana Ulcinj in the Bojana-Buna Delta (MNE).

6.2 Hunting during the rearing season and the various stages of reproduction

Even in Slovenia, Magpie (*Pica pica*), Eurasian Jay (*Garrulus glandarius*) and Hooded Crow (*Corvus corone cornix*) are hunted in August during the breeding season. As the EU Birds Directive forbids hunting during the various stages of reproduction,

¹⁰ CIC Newsletter 2008/2 - <http://www.cic-wildlife.org/index.php?id=37>

this also has to apply for corvid species (Corvidae). In addition, many other bird species still rear their young in September and shooting should not be allowed during this month. This specifically applies to the wetlands in the whole region, which are home to the Ferruginous Duck (Schneider-Jacoby 2003), a late breeding species for which ducklings in September are normal. This and other species are impacted by the hunting activities in late summer, which are allowed in all countries assessed.

In the other countries along the Adriatic Flyway, hunting during the breeding season is even more stretched out, leading to huge impacts on all kinds

In total, we estimate far over two million birds killed in the six countries each year at a minimum.

of bird species. In Bosnia-Herzegovina, Croatia and Serbia, bird hunting starts on August 1st, followed by Albania and Montenegro on August 15th. One of the target species, the Common Quail, is still rearing its young during this time of the year. The impact of these hunting activities on bird communities in the cultural landscape is huge. Consequently, bird hunting should not be allowed in August and September, in order to secure breeding success of all species in the respective habitats.

6.3 Hunting during the birds' return to the rearing grounds

On the Adriatic Coast, birds start to return early to their breeding grounds. Only Slovenia stops Mallard hunting on January 15th, the latest possible date not to endanger breeding birds returning to their breeding habitats. It would be much better, though, to stop hunting at the end of the year to avoid impacts on the returning populations and already formed pairs.

In all other countries, birds are also shot during their return to their breeding grounds in January and February. Even migrating birds such as Garganey,

Common Snipe (*Gallinago gallinago*) or Woodcock (*Scolopax rusticola*) are open for hunting during the return period. It is most important that hunting during the return period is stopped in all countries and on all bird species. The worst examples in this context are Albania and Montenegro, where the hunting period was prolonged in 2008 in order to be able to shoot more Garganey until March 15th in 2008, because the number of killed birds had decreased in the years before. It is out of question that this species is decreasing in the countries north-east of Montenegro and Albania due to the huge hunting pressure during the return period (Schneider-Jacoby 2007). In addition, the killing of the returning ducks in Montenegro and Albania also led to extremely small breeding populations in those two countries. EuroNatur wrote letters to both responsible ministers in 2008 to stop shooting birds during their return to the rearing grounds. Neither of the countries have commented on the letters.

7 Number of Birds Hunted

For most countries, there is no information on how many birds are actually shot. Only for Slovenia, a figure of over 50,000 birds per year is reported by Hirschfeld & Heyd (2005). As in Slovenia bird hunting is not very popular and only six species are open for hunting, it is evident that the number must be much higher in the other countries. Recent information also indicates sinking bird bags in Slovenia due to the good hunting regulations¹¹, but information on shot corvids are missing in the statistics.

The hunters association of Vojvodina (Serbia) reported on 8th November 2004 that during the 2004 season 38,000 Common Quails were killed. It was also reported that the annual number of birds killed during the breeding period in Vojvodina was between 20,000 and 30,000 (Simić & Tucakov 2005). This amount does not only endanger migrating birds, but also the remaining breeding populations of 3,000 to 5,000 pairs of Common Quail in this province of Serbia, given that hunting starts already on August 1st. Using these figures and the huge hunting pressure in all countries, including all kinds of illegal measures, the

¹² www.traffic.org/species-reports/traffic_species_birds2.pdf

¹¹ <http://www.stat.si/letopis/2007/17-07-EUR.pdf>

Table 3: Number of bird species open for hunting per country

	Albania	Bosnia and Herzegovina	Montenegro	Serbia	Slovenia	Croatia
Bean Goose (<i>Anser fabalis</i>) ^C		X		X		X
Black Grouse (<i>Tetrao tetrix</i>) ^B		X	X			
Blackbird (<i>Turdus merula</i>) ^B	X					
Capercaillie (<i>Tetrao urogallus</i>) ^B		X	X			
Chukar Partridge (<i>Alectoris chukar</i>) ^B						X
Collared Dove (<i>Streptopelia decaocto</i>) ^B		X	X	X		
Common Coot (<i>Fulica atra</i>) ^C	X	X	X	X		X
Common Goldeneye (<i>Bucephala clangula</i>) ^B		X				
Common Pheasant (<i>Phasianus colchicus</i>) ^C		X	X	X		X
Common Pochard (<i>Aythya ferina</i>) ^C		X	X	X		X
Common Quail (<i>Coturnix coturnix</i>) ^B	X	X	X	X	X	X
Common Scoter (<i>Melanitta nigra</i>) ^B		X				
Common Raven (<i>Corvus corax</i>) ^A		X				
Common Shelduck (<i>Tadorna tadorna</i>) ^A		X				
Common Snipe (<i>Gallinago gallinago</i>) ^C	X	X	X	X		X
Common Starling (<i>Sturnus vulgaris</i>) ^B	X					
Common Teal (<i>Anas crecca</i>) ^C	X	X	X	X		X
Crested Lark (<i>Galerida cristata</i>) ^A	X					
Eurasian Jackdaw (<i>Corvus monedula</i>) ^B		X				X
Eurasian Jay (<i>Garrulus glandarius</i>) ^B		X	X		X	X
Eurasian Spoonbill (<i>Platalea leucorodia</i>) ^A		X				
Eurasian Wigeon (<i>Anas penelope</i>) ^C	X		X	X		
Fieldfare (<i>Turdus pilaris</i>) ^B	X					
Gadwall (<i>Anas strepera</i>) ^C	X	X	X			
Garganey (<i>Anas querquedula</i>) ^C	X			X		X
Glossy Ibis (<i>Plegadis falcinellus</i>) ^A		X				
Goosander (<i>Mergus merganser</i>) ^B		X				
Goshawk (<i>Accipiter gentilis</i>) ^A				X		
Grey Partridge (<i>Perdix perdix</i>) ^C		X		X	X	X
Greylag Goose (<i>Anser anser</i>) ^C		X	X			
Great Snipe (<i>Gallinago media</i>) ^A		X				
Grey Heron (<i>Ardea cinerea</i>) ^A		X		X		
Hazel Grouse (<i>Bonasa bonasia</i>) ^B		X	X			
Hooded Crow (<i>Corvus corone cornix</i>) ^B		X	X		X	X
Jack Snipe (<i>Lymnocyptes minimus</i>) ^C		X				
Long-tailed Duck (<i>Clangula hyemalis</i>) ^B		X				
Magpie (<i>Pica pica</i>) ^B		X	X		X	X
Mallard (<i>Anas platyrhynchos</i>) ^C	X	X	X	X	X	X
Marbled Duck (<i>Marmaronetta angustirostris</i>) ^A		X				
Mistle Thrush (<i>Turdus viscivorus</i>) ^B	X					
Northern Shoveler (<i>Anas clypeata</i>) ^C	X	X				
Nutcracker (<i>Nucifraga caryocatactes</i>) ^A		X				
Pintail (<i>Anas acuta</i>) ^C	X	X				
Red-crested Pochard (<i>Netta rufina</i>) ^B		X				
Rock Partridge (<i>Alectoris graeca</i>) ^C	X	X	X	X		X
Rock Dove (<i>Columba livia</i>) ^C	X	X	X			X
Rook (<i>Corvus frugilegus</i>) ^B		X		X		X
Ruddy Shelduck (<i>Tadorna ferruginea</i>) ^A		X				
Sky Lark (<i>Alauda arvensis</i>) ^B	X					
Smew (<i>Mergus albellus</i>) ^A		X				
Stock Dove (<i>Columba oenas</i>) ^B		X				
Tufted Duck (<i>Aythya fuligula</i>) ^C		X	X	X		X
Turtle Dove (<i>Streptopelia turtur</i>) ^B	X	X	X	X		
Virginia Quail (<i>Colinus virginianus</i>) ^A						X
White-fronted Goose (<i>Anser albifrons</i>) ^B		X		X		X
Wood Pigeon (<i>Columba palumbus</i>) ^C		X	X	X		X
Woodcock (<i>Scolopax rusticola</i>) ^C	X	X	X	X		X
Number of species open for hunting	20	47	23	21	6	23

A: Indicated green: Species that are not allowed to be hunted in any EU member state, as they are not mentioned in Appendix II of the EU Birds Directive.

B: Species that are mentioned in Appendix II/2 of the EU Birds Directive. Member states have to apply for a special permission to hunt these species in their country.

C: Species that are mentioned in Appendix II/1 of the EU Birds Directive and are open for hunting in all EU member states, given that this does not jeopardize conservation efforts in their distribution area.

annual kill of Common Quails only can be estimated to be much higher than 100,000 individuals in all six countries assessed.

At least 58 species can be seasonally hunted in one Flyway country, despite the fact that some of them are protected according to the EU Birds Directive Appendix I, as they are in need of special conservation measures or not listed in Appendix II as hunting species at all.

In total, we estimate far over two million birds killed in the six countries each year at a minimum. This figure is based on following criteria:

- The number of Common Quail shot in Vojvodina (see above) indicates very active bird hunting activities. This is also evident from the field work, where in a single hour more than 10 shots per hunter are often registered.
- In countries where bird hunting is popular, the average of killed birds per hunter varies, for example 11 birds in Spain, 23 in Italy, 37 in Greece, 26 in France and 59 in Belgium. We assume that the average number of birds killed by one hunter in the countries along the Adriatic Flyway is at least 10 per hunter.
- The number of unregistered hunters in the region is unknown. Only for Albania, about 50,000 unregistered guns are estimated.
- Illegal trade in wild birds indicates transports of thousands of birds to Italy. Two hunting firms alone smuggled two million birds over six years from Serbia to Italy (see below)¹²

Therefore, our estimate of two million birds killed by 206,500 hunters along the Adriatic Flyway (without Slovenia) is a very conservative one.

8 Number of Birds Species Open to Hunting

A large number of bird species is open for hunting in the Adriatic Flyway countries. At least 58 species can be seasonally hunted in one Flyway country, despite the fact that some of them are protected according to the EU Birds Directive Appendix I, as they are in need of special conservation measures or not listed in Appendix II as hunting species at all. Many of the species open for hunting along the Adriatic Flyway suffer under a very unfavourable conservation status especially in the countries where bird hunting is widespread.

There are, however, huge differences in the number and quality of the hunting laws. In Slovenia, for example, all migrating birds are protected and only six species are listed under the hunting law. In this case, we have a very positive example of a sound implementation of the international standards and a good adaptation of the old Yugoslav hunting law.

The opposite applies for Bosnia and Herzegovina. Here, 120 bird species are listed as hunting animals ("divljac") in the hunting law of the Federation, and even 157 species in the law of the Republika Srpska. This is against all international standards, as many of these species are protected by international conventions. It is also not clear why these species are listed under the Hunting Law, as there are no programmes for the protection or monitoring organised by the hunters for these species.

If we delete those bird species from the list that are listed in a special paragraph in both laws as permanently protected, we still end up with 38 seasonally hunted species of birds in the Federation and 43 in the Republika Srpska. This list includes rare birds such as Glossy Ibis (*Plegadis falcinellus*), Eurasian Spoonbill, Goosander (*Mergus merganser*) and Smew (*Mergus albellus*). In the Republika Srpska (BiH), all rails (Rallidae) including the Common Coot (*Fulica atra*) are protected by the Hunting Law. Nevertheless, the Hunting Associations have opened a hunting season on Common Coot. This proves that the Hunting Act is not understood and/or respected by the hunters themselves.



Figure 3: Killed Garganeys (*Anas querquedula*) and Grey Heron (*Ardea cinerea*) in a hunting hide at Buljarica, Montenegro, March 2009 / photo M. Schneider-Jacoby

For several other hunting species, such as corvids, no hunting season is defined in the “hunting calendar” of the Republika Srpska. We assume that this means that they can be hunted throughout the year. Even more unclear are the hunting seasons in the Federation, the other entity of Bosnia-Herzegovina.

In Albania, song birds such as Sky Lark (*Alauda arvensis*), Blackbird (*Turdus merula*) and Fieldfare (*Turdus pilaris*) are open for hunting, and even in Europe widely protected Crested Lark (*Galerida cristata*) has a hunting season. This leads to a huge impact on the passerine species, as most hunters cannot distinguish between the different species of small songbirds.

9 Impacts of Hunting on Endangered Species

9.1 Waders

Hunting of waders is not generally forbidden, which is causing huge problems for bird preservation. In all countries of the study area beside Slovenia, species of waders are still shot. This leads to impacts in the remaining wetlands especially along the coast. While hunting of Woodcock in forest areas far away from wetlands might have little impact on other wader

species, the hunting season for Common Snipe is a real problem as this species rests in the very same areas as used by many other waders during migration. As species such as the Slender-billed Curlew are near to extinction worldwide, hunting on all waders should be immediately forbidden in all countries along the Adriatic Flyway (Cleeves et al. 2008). Killing of Common Snipe, a species which is endangered in Germany and decreasing in Europe, is also not in line with the international responsibility of the hunters.

9.2 Ducks

Duck hunting also causes problems, as several duck species are rare or decreasing in Europe. A huge problem is hunting of Common Pochard and Tufted Duck in August and September, but also during the return period until the end of February, as the endangered Ferruginous Duck lives in some habitats of these species and is in some areas even more common than those two similar looking duck species open for hunting (Schneider-Jacoby 2003). The hunting period has to be limited to the times when Ferruginous Ducks are wintering in Africa in order to avoid impact on this rare species, whose survival depends very much on habitats in Croatia, Bosnia-Herzegovina, Montenegro and Serbia. In Albania, the last few pairs breed in the Bojana-Buna Delta and are impacted by illegal hunting activities as well as the prolongation of the hunting season. Duck hunting in the region of the Adriatic Flyway should, in general, not be allowed from January to October. Many of the species are extremely rare along the coast and their populations are depleted or even extinct.

9.3 Grouse and Partridges

Several Grouse and Partridge species are still open for hunting throughout the region, although they are very rare and there are no good data sets available on their population size and trends. It would be highly important to protect the Capercaillie, Hazel Grouse, Black Grouse and Rock Partridge as rare species. Even Grey Partridge, which is a common species in other parts of Europe, is rare in many areas along the Adriatic East Coast.

9.4 Birds of Prey

All species of birds of prey are protected in all countries with only one exception. The Goshawk is

open for hunting in Serbia from August 1st to January 31st. It is extremely important that all birds of prey species are protected to avoid any killing of rare species by chance. The Adriatic Flyway is among the most important corridors for endangered birds of prey worldwide (see above). The killing and disturbance of prey species is also impacting the populations of these birds. In hunting ban areas, as on the island of Tilos, the density of Bonelli's Eagle (*Hieraetus fasciatus*) is much higher (Rigas and Xenogianni 2007) than for example in the Bojana-Buna Delta due to the fact that neither the species itself nor its prey (mainly Chukar Partridge) are shot.

9.5 Song birds and Common Quail hunting

The shooting of song birds and Common Quail should be stopped in all countries along the Adriatic Flyway. Common Quail hunting is not sustainable as populations are already depleted and continuously decreasing. The impact of hunting in cultural landscapes and the remaining open resting sites along the coast is huge and the number of other birds killed unknown. Several other species, which are similar to the Common Quail, as for example Corn Crake (*Crex crex*), different Larks or Pipits, are likely to be killed during hunting. In the area of Velika Plaza (MNE), even the Andalusian Hemipode (*Turnix sylvatica*), a bird extremely rare in Europe (Schneider-Jacoby et al. 2006), is shot as it resembles Common Quail¹³.

10 Hunting Ground Definition

The definition of areas, which can be declared as hunting grounds, is important for bird preservation. A comparison of the different laws and definitions in the countries along the Adriatic Flyway show possible solutions that can be used to improve the situation in other countries as well. For example, in Albania, Croatia, Bosnia and Herzegovina and Montenegro, the sea is not considered a hunting ground, which forms an important basis for the protection of migrating birds. It is important that this fact is communicated widely, as we have observed hunting activities at and on the sea several times.

A very important step concerning the protection of migrating birds has also been made in the new hunting law of Montenegro in 2008, when the coastal zone (morsko dobro) has been declared a non-hunting ground. In total, the area covers 58 km² and forms a new refuge area for migrating birds¹⁴. The area is of great importance for all kinds of birds during migration and during cold snaps in winter (compare Schneider-Jacoby et al. 2006). The other coastal areas in Croatia and Albania should be declared non-hunting grounds according to the Montenegrin example as soon as possible as well.

According to the law in Croatia, fish ponds cannot be included in hunting grounds. This is a very important definition not only for birds' preservation but also for food safety as lead shots are commonly used throughout the region. It is very important to supervise this regulation in the hunting law in Croatia and to apply it to the other countries as well. Fish farms in Serbia and Bosnia and Herzegovina are very important bird habitats and should therefore not be declared as hunting territories.

Traffic corridors are also declared as zones free of hunting in different hunting laws as hunting activities would endanger passengers. While in Croatia the law is implemented for all traffic corridors as stated in the law, this does not apply to Serbia. For example, rivers such as the Sava are traffic corridors and therefore not considered hunting grounds in Croatia, while thousands of geese and ducks are killed on the Danube in Serbia - an important international traffic corridor. Based on the hunting law of Serbia, however, hunting is forbidden on all larger rivers that are used for navigation.

11 Hunting Ban Areas

None of the countries has a programme to establish secure areas for migrating birds, taking into consideration international standards. This is a huge deficit especially as the region is of great importance for many migrating species. A good example for such a programme is the protection of the bird areas

¹³ http://ec.europa.eu/environment/nature/conservation/wildbirds/threatened/t/turnix_sylvatica_en.htm

¹⁴ www.gom.cg.yu/files/110778025.pdf

of national (18) and international (10) importance in Switzerland according to the 1991 decree for the protection of migrating and water birds¹⁵.

Nevertheless, there are examples that prove the importance of such preservation measures. At Lake Skadar, the number of water fowl rose again since the hunting ban was imposed in 2002 – despite the fact that poaching is still widespread. In Croatia, the fish farm Crna Mlaka and Nature Parks Vransko Jezero, Kopacki Rit and Lonjsko Polje are becoming increasingly important resting sites for migrating birds, based on the step by step implementation of hunting bans on these sites. Another excellent example is the special reserve Slano Kopovo in Serbia, Vojvodina Province, where the number of resting Common Cranes rose from 500 (Grimmet & Jones 1989) to 15,000 – 20,000 (Heath & Evans 2000) due to the establishment of a nearly 10 square kilometres large hunting ban area and its excellent management by the local hunter organisation.

12 Illegal Hunting

12.1 Killing of protected species

Hardly any bird species is safe along the Adriatic Flyway. In recent years, reports on illegal hunting activities include a long list of protected species (e.g. EuroNatur 2002, Stumberger et al. 2009). We know about two Hoopoes (*Upupa epops*) ringed in Germany and shot in Albania: a big loss for the small population in Germany and a potential explanation for the strong decrease of the Hoopoe population in Germany. Greater Flamingos and Common Cranes have been reported to be killed in Montenegro (Saveljic et al. 2004). The last remaining breeding pairs of Oystercatcher along the whole Adriatic East Coast in the Bojana-Buna Delta were shot on the beach in June 2004. According to our research, this species became finally extinct along the whole Adriatic East Coast in 2007. The next species likely to become extinct will be the Common Shelduck, as killed specimens have also been found during the last few years. Like many other ducks, which used to breed along the coast, this species is vanishing, too.

Even Eurasian Spoonbills, Little Egrets (*Egretta garzetta*) and Little Bitterns (*Ixobrychus minutus*) are not safe from hunters, as injured and killed species

The shooting of song birds and Common Quail should be stopped in all countries along the Adriatic Flyway.

have been discovered by the EuroNatur team. Shot Pygmy Cormorants (*Phalacrocorax pygmeus*) and Night Herons (*Nycticorax nycticorax*) have been found at the fish market in Shkodra. A group of Slovenian and Austrian bird watchers found shot, Grey Herons and a Night Heron in the Neretva Delta (Stumberger 2001). During the visit in April 2001, the same group mentioned above did not manage to register even a single individual of the Common Coot, a bird living on open water and open for hunting, but four other species of rails, which normally hide in the reed beds. The promotion DVD for duck and geese hunting on the Danube (Golden Audio Video 2008) is an incredible proof that Italian hunters do not care which species they kill. The film documents how the protected Common Goldeneye and Smew are shot by hunters in one of their most important wintering areas in Europe, the Ramsar Site Labudova Okna, and the killed protected animals are even proudly presented to the viewers. Worse still, the facilities are owned by Vojvodinašume, a state-owned organisation in Vojvodina, which is the manager not only of the Ramsar Site and the protected area, but also of the hunting area. This means that hunting is organised by the very same people who are responsible for the protection, but do not care about any law in order to financially benefit from the Italian hunters.

In winter, when cold snaps force the birds from Central Europe to warmer retreats at the Adriatic coast, hunters in the Neretva Delta then attract these birds arriving during the night to their hides and artificial

¹⁵ www.wild.uzh.ch/wininfo/wininfo_pdf/wininfo035.pdf



Figure 4: Common Redshank (*Tringa totanus*) and Grey Heron (*Ardea cinerea*), both wounded in Solana Ulcinj, Bojana-Buna Delta, Montenegro, March 2004 / photo D. Saveljic

lakes to kill them in the dark (see below). Little (*Tetrax tetrax*) and Great Bustards (*Otis tarda*) have recently been reported shot in the Bojana-Buna Delta (Dhora & Kraja 2006, Schneider-Jacoby et al. 2006).

The promotion DVD for duck and geese hunting on the Danube (Golden Audio Video 2008) is an incredible proof that Italian hunters do not care which species they kill.

Furthermore, the EuroNatur team found shot birds of many species, like Pygmy Cormorant, Grey Heron (*Ardea cinerea*), Common Buzzard (*Buteo buteo*), Common Redshank (*Tringa totanus*), Oystercatcher and Black-headed Gull (*Larus ridibundus*) during the preparation of the Rapid Assessment of the ecological values of the Delta (Schneider-Jacoby et al. 2006). As hunters are found everywhere along the coast and their activities are not controlled at all, we are afraid that the impact on protected species is even much greater than reflected by the few reports.

12.2 Use of illegal techniques

Illegal hunting techniques, which are against the respective hunting laws in the countries, are used openly and with exception of a few bird watchers

nobody cares about it. An exception is Slovenia, with some parts of Croatia and Vojvodina (Serbia). In Montenegro, the National Park Skadar Lake works hard to implement the hunting ban at the lake, but the number of hunters entering the park makes it difficult to control them without strong police forces. In addition, some of the hunters seem to be pretty sure that nobody will stop them. The same applies for Solana Ulcinj in Montenegro, where hunters regularly enter the private estate and only some of them have been caught in recent years. In the reports collected, all kinds of activities (see below), which are easily perceived, are described, but the hunters, the responsible organisations or the police do not stop them. In many cases, the activities are known to local people and, as we heard from different representatives, even to hunting associations.

Hunters use boats with strong outboard motors – speedboats – to kill and chase water fowl on different water bodies. This is not allowed. It would be easy in each case to identify the boats and the persons aboard. We have observed this extremely disturbing hunting practice in National Park Skadar Lake (MNE), at Lake Ormoz Lake on the Croatian-Slovenian border, in Nature Park Hutovo Blato (BiH), and on water reservoir Busko Blato, part of the new Ramsar Site Livanjsko Polje (BiH). Besides the actual killing, it is the disturbance of the whole wetland that strongly impacts the birds. In addition, the flocks have to leave the protected areas and are driven towards other areas, where hunters are waiting for them.



Figure 5: Speedboats used openly for duck hunting in the hunting ban area of Lake Skadar National Park. These hunters were shooting at Ferruginous Ducks (*Aythya nyroca*). Montenegro, October 2008 / photo P. Knaus

The use of decoys or lures for different kind of birds is widespread, although forbidden by law. The artificial birds are placed in front of the hunters' hides to attract the respective bird species. At Velika Plaza, a Natural Monument in the Bojana-Buna Delta, several artificial models of large waders as Curlews and Godwits are used by Italian hunters to attract the arriving waders during their return from Africa in March (Schneider-Jacoby 2007). Very likely, specimen of the Slender-billed Curlew are also killed, as the site is one of the key stopover sites in the centre of the migration route of this species (Cleeves et al. 2008). The most recent observation of this worldwide endangered species is from Solana Ulcinj, which proves this assumption. The use of different duck lures is common in all countries except Slovenia. In the Neretva Delta, a huge number of illegal pools have recently been constructed in the protected water estate of the Ramsar Site. Here, hunters leave the plastic birds even during the day, without any fear to be punished. A hunting enterprise in Croatia even presents hunters with decoys on the internet¹⁶. In the promotion film for duck and geese hunting on the Danube, decoys are again used openly (Golden Audio Video 2008). Different artificial song bird lures were used, e.g. in October 2008 at Velika Plaza (MNE).

The use of tapes to attract all kinds of birds is very common, although forbidden. Alarming is the use of

curlew calls and those of other waders as observed in March 2007 and 2008 at the coast to attract arriving birds flying over the sea at Velika Plaza. As even a dead Dunlin (*Calidris alpina*) was found in a hunting hide at Velika Plaza (Schneider-Jacoby 2007), we have to fear that all species of waders arriving at the Adriatic East Coast are killed without any exception. In September 2008, the coastal lowlands of Montenegro were controlled during the night (Schneider-Jacoby 2008). The few remaining open areas (dunes, meadows or fellow land), which have not yet been destroyed by legal or illegal buildings, are bottleneck areas for the Common Quail migrating in southwest direction. In the early morning hours, birds stop migration at the coast to rest in a suitable habitat. Tapes with Common Quail calls were located in all open areas near the coast and hunters killed the birds attracted by the loudspeaker by prowling through the vegetation in the early morning. In most cases, several hunters and even Italian guests were shooting several times per minute during the hunt. It is very obvious that the whole coastal area is regularly depleted in this way, and we have similar reports from the Albanian and Croatian coasts as well as from the hinterland.

In autumn and winter, calls of the Common Coot and ducks are used along the coast to attract the birds heading southwest (e.g. Schneider-Jacoby, 2008).

¹⁶ <http://www.setter.hr/hunt.php>



Figure 6: Curlew decoy and loudspeaker used illegally at Velika Plaza, Montenegro, March 2007. The use endangers the last remaining Slender-Billed Curlews (*Numenius tenuirostris*) during their spring migration. / photo EuroNatur archive

12.3 Impact on protected areas

During the World Bank mission to Hutovo Blato Nature Park (BiH), Sunday, January 29th, 2006, at least 20 hunters using boats were shooting inside the park on Svitava Lake (Schneider-Jacoby in lit.). There was no reaction by the park director, not even the registration numbers of the cars with which the hunters had entered the area were written down, although hunting is forbidden. Numerous illegal hunting activities have been reported in this protected area (Stumberger et al. 2008). In the Neretva Delta Ramsar Site (HR), hunters built illegal small ponds in the reed beds to be used for hunting. The facilities can be seen from anywhere or, even better, using Google Earth. Although these illegal hunting activities are implemented blatantly, nobody in Croatia is able to stop them.

There are many other examples from protected areas impacted by hunting, e.g. Lake Skadar National Park (MNE), the protected Buna River area (AL), and the protected Danube areas (SR).

There are very few examples of best practice where managers of the protected areas actually work on the implementation of the protection of sites. The situation improved considerably, for example in Lake Skadar National Park, although poaching is still practised. Here, the bird populations slowly recovered

from a long period of hunting, but boats without registration still impact flocks of Ferruginous Ducks and hunters enter the area from the villages without any control. Further improvements in all protected areas can only be achieved if hunting is no longer accepted by the public and if all state organisations actively support the implementation of the hunting ban.

13 Trend

The trend in bird hunting and the impacts deriving thereof in the countries can be assessed by (a) the legal framework development and (b) the observed impact on the birds in the hunting grounds and protected areas.

For Albania, the trend is negative. Already before 2008, the impact on the stopover sites was huge and disturbance by hunting is present all over the country, especially along the coast. In 2008, the Ministry of the Environment prolonged the hunting season in spring for Garganey until March 15th, following the bad example of Montenegro¹⁷. It is an extreme example for a negative trend, especially as it concerns spring hunting as well as a species that is decreasing all over Europe and is endangered in many countries such as Germany.

¹⁷ EuroNatur letter to the Minister of Environment, Forests and Water Administration, Mr. Lufter Xhuveli, 14th March 2008



Figure 7: Equipment to attract Common Quail (*Coturnix coturnix*) during the night at Tivat Solila, Montenegro, September 2008 / photo M. Schneider-Jacoby



Figure 8: Pile of leftover shells in the hunting ban area of Hutovo Blato Nature Park, Bosnia and Herzegovina, February 2009 / photo B. Stumberger

Montenegro has improved its hunting legislation considerably in 2008. EuroNatur and the Center for the Protection and Research of Birds (CZIP) have pointed out the huge hunting impact along the coast, the killing of rare species in the country and the illegal hunting activities in their several studies and documents. The new hunting law from 2008 has defined those bird species that are open for hunting according to international standards, and has deleted several species from the list. The hunting season was shortened by two weeks as Garganey, which used to be hunted until March 15th, is now no longer a species open for hunting. The whole coastal zone was declared a hunting ban area, because it is not a hunting ground any more. This is a good example the other Adriatic Flyway countries should follow.

In Croatia, the former legislation was improved in the last few years, since EuroNatur had compiled the report on illegal hunting activities in the country (EuroNatur 2003). For example, the hunting season has been shortened from August 15th to September 15th for some species as duck hunting had impacted the breeding season of Ferruginous Duck (Schneider-Jacoby 2003).

Extremely negative is the development in Bosnia and Herzegovina, where the new legislation is not in line with the European policy at all and even worse than before in Yugoslavia. This applies to both entities.

14 Trade

Although hunting and eating of songs birds is not common in the region, trade is a huge problem as it is triggered by the export to Italy¹⁸. In March 2007, a hunter in Montenegro even told reporters at Velika Plaza that he was selling birds to the USA. Italian hunters are active throughout the region and take the birds home to Italy, which according to the strict EU regulations after the outbreak of birdflu is not possible anymore at all.

The intensity of illegal trade in birds is not known, but in several cases transports were stopped and proved a professionally organised bird crime. In Slovenia and Croatia, customs and the environmental inspection fight illegal trade and cases are brought to the public. In Croatia, posters with protected species, such as the Ferruginous Duck, were even published to inform the border control. In Serbia, cases where illegal traders were caught were also published. From Albania, Bosnia-Herzegovina and Montenegro, no reports concerning bird trade have been published and it is evident that control in these countries is lagging well behind.

15 Hunting and Tourism

No information on the economy of bird hunting tourism could have been obtained in the countries. Fees paid by the foreign hunters per day are small, e.g.

¹⁸ www.traffic.org/species-reports/traffic_species_birds2.pdf

100 € per day in Montenegro. In Slovenia, shooting of a Mallard costs 10 €, Common Pheasant 15 €, Grey Partridge 25 €.

Montenegro has improved its hunting legislation considerably in 2008.

The impact of hunting on eco-tourism is no doubt huge. All countries along the Adriatic Flyway would offer great possibilities for bird watchers, but as birds are extremely shy in all countries along the Adriatic East Coast due to the high hunting pressure, it is - with a few exceptions - very difficult to observe birds. Countries such as Montenegro are aiming to prolong the tourist season and wish to increase nature tourism, but there is nothing much to show to the guest except the landscape. The wild animal populations are very small and too shy to be seen by tourists.

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Figure 9: Selling of Night Heron (*Nycticorax nycticorax*), Great Cormorant (*Phalacrocorax carbo*) and Pygmy Cormorants (*Phalacrocorax pygmeus*) at the fish market in Shkodra, Albania, February 2005 / photo D. Saveljic

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Figure 10: Bird watching at the Ulcinj salinas, Montenegro, during the Adriatic Flyway Conference, April 2009 (<http://www.euronatur.org/Adriatic-Flyway-Conference-2009.899.0.html>) / photo N. Ramadani

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