# Bird Hunting along the Adriatic Flyway

An Assessment of Bird Hunting in Albania, Bosnia-Herzegovina, Croatia, Montenegro, Slovenia and Serbia



Report compiled by EuroNatur within the Frame of the Project

Protection of Priority Wetlands for Bird Migration (Adriatic Flyway) in the Dinaric Arc Ecoregion through Integrated Site and River Basin Management

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### **Executive Summary: Evaluation of Bird Hunting**

According to our estimations, each year, far more than 2 Million birds are shot along the Adriatic Flyway. Assumed reasons for that 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.

Main aim of the following 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, namely Albania, Bosnia-Herzegovina<sup>1</sup>, 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. In a first step,

- 1. Control of hunting
- 2. Monitoring of quantity of birds shot
- 3. Length of hunting season
- 4. Hunting during stages of reproduction
- 5. Hunting during the return
- 6. Birds open for hunting
- 7. Impact of hunting on endangered species
- 8. Illegal Hunting
- 9. Hunting Ban Areas
- 10. Trend
- 11. 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 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, according to the recent hunting law, only six bird species are still open for hunting.

<sup>&</sup>lt;sup>1</sup> BiH is politically decentralized and comprises two governing entities, the Federation of Bosnia and Herzegovina and Republika Srpska. Both entities have different legal frameworks, also for hunting. In the following, if not specified, with BiH both entities are referred to.



Tab.1.: Evaluation of the State of Bird Hunting

Countries	AL	BiH		MNE	SRB	HR	SLO	
Entity		Fed	RS					
Control of hunting	1	1	1	1	2	3	4	
Monitoring of quantity of birds shot	1	1	1	1	1	1	4	
Length 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 return	1	1	1	1	1	2	5	
Number of bird species open for	1							
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	insuff	icient					
	1	poor						

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 period 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 protected areas in Croatia, 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, out of the six countries assessed, only Slovenia has joined the EU. This affects the respective legal framework concerning bird protection and hunting in the country, because as EU Member, Slovenia is obliged to implement the EU Birds Directive (Council Directive 79/409/EEC of 2 April 1979)<sup>2</sup> 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-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 EU Bird Directive and illegal hunting is wide spread.

#### 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 return period to their rearing habitats.

The number of species open for hunting includes both protected species as well as many species which look similar to threatened and endangered species which in many cases – due to lack of knowledge of species – leads to the kill of rare species which use the same habitats. For example, the fate of the Slender-billed Curlew, 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 wide spread. Illegal bird hunting poses a huge problem and hunting organisations as entities officially responsible for hunting in many cases in Albania, Bosnia-Herzegovina, Croatia, Montenegro and Serbia do not counteract this problem sufficiently. Often, illegal hunting is performed very blatant, e.g. in the

<sup>2</sup> 



Neretva Delta in Croatia and Bosnia-Herzegovina, at Skadar Lake in Montenegro as well as along the whole Montenegrin and Albanian coast. 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 supermarkets in Montenegro.

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 shooting. In the worst cases, the managers of protected areas even know about the problems and are not able to react and stop them.

The trend during the last years is in many ways heterogenous. On one hand, there are some improvements in Croatia and Montenegro in 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-Herzegovina<sup>3</sup> are worse than the former Yugoslavian laws and difficult to read and to understand.

On the other hand, Slovenia is a good example and demonstrates how the former Yugoslavian 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 Jerzero and Lonjsko Polje in Croatia and the special reserve Slano Kopovo in Serbia, managed by the local hunters association.

<sup>&</sup>lt;sup>3</sup> Please refer to foot note 1.



### **Contents**

EXECUTIVE SUMMARY: EVALUATION OF BIRD HUNTING	2
CONTENTS	6
INTRODUCTION AND RANGE OF THE ASSESSMENT	7
IMPORTANCE OF THE ADRIATIC FLYWAY	9
BACKGROUND AND METHOD	10
NUMBER OF HUNTERS	11
CONTROL OF THE HUNTING	13
HUNTING SEASON	13
LENGTH OF THE HUNTING SEASONHUNTING DURING THE REARING SEASON AND THE VARIOUS STAGES OF REPRODUCTION HUNTING DURING THE RETURN TO THE REARING GROUNDS	14 15
NUMBER OF BIRDS SPECIES OPEN FOR HUNTING	
IMPACT OF HUNTING ON ENDANGERED SPECIES	
Waders Ducks Grouse and Partridges Birds of Prey Song birds and Quail hunting	20 21 21
HUNTING GROUND DEFINITION	21
HUNTING BAN AREAS	22
ILLEGAL HUNTING	23
KILLING OF PROTECTED SPECIES	24
TREND	29
TRADE	30
HUNTING AND TOURISM	31
ACKNOWLEDGEMENT	32
ANNEX	33
References	33

Cover picture: Local hunter at the Bojana-Buna Delta, Montenegro; March 2008

All pictures: © EuroNatur



### **Introduction and Range of the Assessment**

The assessment is part of the project "Protection of Priority Wetlands for Bird Migration (Adriatic Flyway) in the Dinaric Arc Ecoregion through Integrated Site and River Basin Management<sup>4</sup> jointly implemented by WWF MedPo and EuroNatur, financially supported by the MAVA Foundation.

While WWF is working on the basin level to preserve the priority wetlands identified within the project, namely Livanjsko Polje (BiH), Neretva Delta (HR) with Hutovo Blato (BiH) and Lake Skadar including the Bojana-Buna Delta (AL/MNE) fromnegative impacts, EuroNatur's activities within the project aim to analyse bird migration along the Adriatic East Coast and to improve the protection of the key stop over sites.

The following assessment "Bird Hunting along the Adriatic Flyway" provides basic information which will serve to draft recommendations for improvement of the three priority wetlands mentioned above.

The size of the total study area is 255'000 km<sup>2</sup> and covers the countries of former Yugoslavia – Bosnia-Herzegovina, Croatia, Montenegro, Slovenia and Serbia - plus Albania. In all these countries, EuroNatur has established long-term contacts and cooperates with both GOs and NGOs in the implementation of conservation projects since 1987 (see www.euronatur.org). Macedonia - which was also part of former Yugoslavia - was not included, as it is not situated inside the NE-SW migration corridor of the so-called Adriatic Flyway (see below).

Despite the fact that the 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 in international reviews<sup>5</sup>. According to our knowledge though, the most urgent actions in regard to bird conservation are to review the current Kosovar 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.

<sup>&</sup>lt;sup>4</sup> In the text, the project is referred to as "Adriatic Flyway Project" <sup>5</sup> <u>http://www.face-europe.org/</u>



Beside Slovenia, no country has entered into the EU yet, thus it is very interesting to see how the different countries of former Yugoslavia and Albania have improved their hunting laws concerning bird hunting in 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 properly protected according to the above mentioned Conventions.



### 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 Flyway<sup>6</sup>. 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 respectively East Africa. 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 or so-called Central European Flyway. They then cross the Mediterranean Sea after their flight over the European continent and winter in North Africa, e.g. in Tunisia, or in 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 (compare the poster on www.UNEP-AEWA.com), Great-white Egret, Gargeney or the European Spoonbill which cross the Balkan Peninsula and the Adriatic Sea. We call that specific section of the Black Sea and Mediterranean Flyway or Central European Flyway running over the Balkan Penisula 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) are described as bottleneck areas already for a long time, bird migration over the Balkan Penisula was difficult to assess due to 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 be assessed thouroghly.

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

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 Danube, Drava, Mura and Sava in the Pannonian Plain. During

<sup>&</sup>lt;sup>6</sup> http://www.wingsoverwetlands.org/



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, Bojana-Buna Delta, as well as the large wetland system 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 stop over and resting sites during spring and autumn migration (Stumberger in prep.). First information gathered in Livanjsko Polje show a great potential as resting sites for different species of migrants (Schneider-Jacoby et al. 2006).

But not only for water birds, the Adriatic Flyway is of great importance. 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 Quail and Wood Lark use the resting site along the Adriatic East Coast.

### **Background and Method**

In the frame 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 Europe<sup>7</sup>. **Rating** is done 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 being 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 served to prepare different reports such as a report on hunting and its negative impacts on birds which was 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.

<sup>&</sup>lt;sup>7</sup> http://www.birdlife.org/action/science/species/birds in europe/index.html



Since 2006, regular bird monitoring is organised in the Bojana-Buna Delta (MNE/AL), Lake Skadar (MNE), 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 started the previously mentioned Adriatic Flyway Project. One goal of this project is to minimize bird hunting pressure in the different project areas. To be able to take effective measures though, it is necessary to better understand the country 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 the 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 Directive<sup>8</sup>, taking also in consideration the status of birds in Europe<sup>9</sup>.

#### **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 the different countries, with an average of 0.9. As large parts of Albania, Croatia and Montenegro

http://europa.eu.int/comm/environment/nature/nature conservation/focus wild birds/sustain able hunting/pdf/hunting guide en.pdf

<sup>8</sup> 

http://www.birdlife.org/action/science/species/birds in europe/index.html



are mountainous areas and not densely populated, hunting in these countries is focused on the coastal areas and lowlands.

Tab. 2.: Country overview

	Total land area (x 1000) km²	No. of registered hunters	Inhabitants (Mio)	Hunter/ Inhabitants (%)	People/ km²	Hunter/ km²	killed birds/ year	Waterbirds in in January
Slovenia	20	22,000	2	1.0	100	1.1	*50,834	50,000
Albania	29	17,000	3.6	0.6	124	0.6	?	100,000
Bosnia -	51	50,000	4.6	1.2	90	1.0	?	
Herzegovina								20,000
Croatia	57	55,000	4.5	1.4	79	1.0	?	200,000
Montenegro	14	4,500	0.7	0.6	50	0.3	?	200,000
Serbia	88	80,000	10.1	0.7	115	0.9	**?	300,000
Total	259	22,500	25.5	0.9	115	0.9	?	870,000

According to FACE, additional EuroNatur information indicated in red

km<sup>2</sup>, Schneider-Jacoby et al. 2006).

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 at the coast in Montenegro, 500 ha 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).

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 moment<sup>10</sup>, which could be an

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<sup>\*</sup> Hirschfeld & Heyd 2005

<sup>\*\* 38.000</sup> Quails only in Vojvodina Simić &Tucakov 2005

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



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.

### **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 were 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 in known in advance; a serious control of hunting activities is 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 where 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".

### **Hunting season**

### Length of the hunting season

In all countries in the study area, the hunting season is extremely long. Even in Slovenia, bird hunting is open for seven month, leading to a disturbance in the countryside. In Bosnia-Herzegowina, Croatia and Serbia, some bird species are hunted throughout the whole year. Often, the hunting of migrating birds starts during the breeding seasons in summer already and ends in spring only. 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 the January 15<sup>th</sup>. This applies for Ferruginous Duck, Garganey, but even Mallard and other species such as waders and birds of prey. In 2008, the Oystercatcher has been extinct in this part of Europe. Also Shellduck is at the brick of extinction, as only one or two pairs are left in Solana Ulcinj, Bojana-Buna Delta (MNE).



**Fig. 1:** Killed Shelduck at Solana Ulcinj, Montenegro, April 2008. One of the last remaining breeding individuals along the entire Adriatic East Coast.

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

Even in Slovenia, Magpie, Jay and Crow are hunted in August during the breeding season. As the EU Birds Directive forbids hunting during the various stages of reproduction, this also has to apply for corvid species (Corvidae). In addition, many other bird species still rear young in September and shooting should not be allowed during this month. This specifically applies for the wetlands in the whole region, which are home for 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 of bird species. In Bosnia-Herzegovina, Croatia and Serbia, bird hunting starts on August 1<sup>st</sup>, followed by Albania and Montenegro at August 15<sup>th</sup>. One of the target species, the Quail, is still rearing young during this time of the year. The impact of these hunting activities on the bird communities in the cultural landscape is huge. Consequently, bird hunting should not be allowed in August and in September to secure the breeding success of all species in the respective habitats.



#### Hunting during the return to the rearing grounds

Birds at the Adriatic Coast start to return early to the breeding ground. Only Slovenia stops hunting of Mallards on January 15<sup>th</sup>, the latest possible date not to endanger breeding birds returning in the breeding habitats. It would be much better though to stop hunting at the end of the year to avoid impacts on returning populations and already formed pairs.

In all other countries, birds are also shot during the return to the breeding grounds in January and February. Even migrating birds such as Garganey, Snipe or Woodcock 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 has been prolonged in 2008 in order to be able to shoot more Garganey until March 15<sup>th</sup> 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 during the return to the rearing grounds. Both countries never commented on the letters.

#### **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 (2006). 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 regulations<sup>11</sup>, but information on shot corvids are missing in the statistics.

The hunters association of Vojvodina (Serbia) reported on 8<sup>th</sup> November 2004 that during the season 2004 38'000 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 Quail in this province of Serbia, because hunting starts already on August 1<sup>st</sup>. Using these figures and the huge hunting pressure in all countries including all kinds of illegal measures, the annual kill of Quails only can be estimated to be much higher than 100'000 individuals in all six countries assessed.

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



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 Quail shot in Vojvodina (see above) indicate very active bird hunting activities. This is also evident from the field work where often only during one hour more than 10 shots per hunter are 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. The average number of birds killed by one hunter we assumed for 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 the transports of thousands of birds to Italy.
   Only two hunting firms smuggled two million birds over six years from Serbia to Italy (see below)<sup>12</sup>

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



Fig. 2: Hunting hide at Velika Plaza March 2007

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www.traffic.org/species-reports/traffic species birds2.pdf



### **Number of Birds Species open for Hunting**

A large number of bird species is open for hunting in the Adriatic Flyway countries. At least 58 species have a hunting season in one country of the flyway 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 unfavorable conservation status especially in the countries where bird hunting is widespread.

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

The opposite applies for Bosnia-Herzegovina. Here, 120 bird species are listed as hunting animals ("divilijac") in the hunting law of the Federation and even 157 species in the law of the Srpska Republika. 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 protection or monitoring organised by the hunters for these species.

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

For several other hunting species such as corvids, no hunting season is defined in the "hunting calendar" of the Republika Srbska. 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-Hercegovina.

In Albania, song birds as Skylark, Black Bird and Fieldfare are open for hunting and even the Europe wide protected Hooded Lark has a hunting season. This leads to a



huge impact on the passerine species, as most hunters can not distinguish between the different species of small song birds.

Tab 3.: Number of bird species open for hunting per country

				Α.	Bill	BABIE	CDD	SLO	ш
				AL	ып	WINE	SKB	SLU	HR
	Α	В	С						
Bean Goose	_^	ט	X		Х		х		Х
Black Grouse			^		X		^		^
Blackbird		X		х	^	Х			
				X	Х				
Capercaillie Chukar		X			^	Х			
Collared Dove		X			v				X
		X			X	Х	Х		
Common Scoter Coot		X			X				
Crested Lark			X	Х	Х	Х	Х		Х
Crow	X			X	V				
		X			X	Х		Х	Х
Pheasant Fieldfore			X		Х	Х	Х		X
Fieldfare		X		Х					
Gadwal			X	Х	Х	Х			
Garganey			Х	Х			Х		Х
Glossy Ibis	X				X				
Golden Eye		X			Х				
Goosander		Х			Х				
Goshwak	X						X		
Gray Partridge			X		X		Х	X	X
Graylag Goose			X		Х	Х			
Great Snipe	X				Х				
Grey Heron	X				X		X		
Haselhen		X			Х	Х			
Jack Snipe			X		X				
Jackdaw		X			X				X
Jay		X			х	х		X	X
Long-tailed Duck		X			Х				
Magpie		X			х	Х		X	X
Mallard			X	х	х	х	Х	X	X
Marbled Duck	X				X				
				AL	BiH	MNE	SRB	SLO	HR
	_	Б	_						
Merganser	Α	В	С						
Mistle Trush		X			Х				
		X		X					
Pintail Pochard			X	X	X				¥
			X		X	X	X		X
Quail Raven		X		Х	X	Х	Х	Х	Х
	X				X				
Red-crested Pochard		X			X				
Rock Partidge			X	Х	Х	Х	Х		X
Rock Pigeon	]		X	X	X	X			X



					<b>D</b> :::		000	01.0	
				AL	BIH	MNE	SKB	SLO	HR
	Α	В	С						
Rooke		X			х		х		Х
Ruddy Shelduck	Х				X		21		
Shelduck	Х				х				
Shoveler			X	Х	х				
Sky Lark		X		х					
Smew	X				х				
Snipe			X	X	X	Х	X		X
Spoonbill	X				X				
Spotted Nutcracker	X				X				
Starling		X		X					
Stock Dove		X			X				
Teal			X	X	X	X	X		X
Tufted Duck			X		X	X	X		X
Turtle Dove		X		Х	Х	Х	X		
Virginia Quail	X								X
White-fronted Goose		X			х		Х		X
Wigeon			X	х		х	X		
Wood Pigeon			X		X	Х	X		X
Woodcock			X	X	X	Х	X		X
Number of species open									İ
for hunting in the									
respective country				20	47	23	21	6	23
				AL	BiH	MNE	SRB	SLO	HR

A: Indicated red: Species which 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 which are mentioned in Appendix II/2 of the EU Birds Directive. Member states have to apply for a special permission to hunt those species in their country.

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

### Impact of Hunting on endangered Species

#### **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, still species of waders are shot. This leads to impacts in the remaining wetlands especially at 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 Snipe is a real problem as this species rests in same areas which are used by many other waders during migration. As species such as the Slender-billed Curlew are near to extinction world



wide, hunting on all waders should be immediately forbidden in all countries along the Adriatic Flyway (Cleeves et al. 2008). Killing of Snipe, a species which is endangered in Germany and decreasing in Europe, is also not in line with the international responsibility of the hunters.

#### **Ducks**

Duck hunting also causes problems, as several duck species are rare or decreasing in Europe. A huge problem is hunting of 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 shortened to those 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.



**Fig. 3:** Killed Garganey and Grey Heron in a hunting hide at Buljarica, Montenegro, March 2009.



#### **Grouse and Partridges**

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

#### **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 1<sup>st</sup> to January 31<sup>st</sup>. It is extremely important that all species of birds of prey 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 world wide (see above). The killing of prey species and disturbance is also impacting the populations of birds of prey. In hunting ban areas, as on the island of Tilos the density of Bonelli's Eagle 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.

#### Song birds and Quail hunting

The shooting of songs birds and Quail should be stopped in all countries along the Adriatic Flyway. 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 is unknown. Several other species which are similar to the Quails as for example Corncrake, different Larks or Pipits are endangered to be killed during the hunt. In the area of Velika Plaza (MNE) where there is intensively hunted even the Andalusian Hemipode, a bird extremely rare in Europe (Schneider-Jacoby et al. 2006) is shot as the bird resembles Quail<sup>13</sup>.

### **Hunting Ground Definition**

The definition of areas which can be declared as hunting ground is important for bird preservation. A comparison of the different laws and definitions in the countries along the Adriatic Flyway show possible solutions which can be used to improve the situation also in other countries. For example, in Albania, Croatia, Bosnia-Herzegovina and Montenegro the sea is not considered as hunting ground, which forms an important basis for the protection of migrating birds. It is important, that this

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<sup>&</sup>lt;sup>13</sup> http://ec.europa.eu/environment/nature/conservation/wildbirds/threatened/t/turnix sylvatica en.htm



fact is communicated widely, as we have observed hunting activities at and on the sea many time.

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 as a non-hunting ground. In total, the area covers 58 km<sup>2</sup> and forms a new refuge area for migrating birds<sup>14</sup>. 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 as non-hunting ground according to the Montenegrin example as soon as possible as well.

According to the law in Croatia, fish ponds can not 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-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 for Serbia. For example, rivers such as the Sava River are traffic corridors and therefore not considered as hunting ground 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 though, hunting is forbidden on all larger rivers which are used for navigation.

### **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 of national (18) and international (10) importance in Switzerland according to the degree in 1991 for the protection of the migrating and water birds<sup>15</sup>.

Nevertheless there are examples which prove the importance of such preservation measures. At Skadar Lake, the number of water fowl rose again since the hunting ban was established in 2002 – despite the fact that poaching is still widespread. In

<sup>&</sup>lt;sup>14</sup> www.gom.cg.yu/files/1107778025.pdf

<sup>15</sup> www.wild.uzh.ch/winfo/winfo\_pdf/winfo035.pdf



Croatia, the fish farm Crna Mlaka and the Nature Parks Vransko Jezero, Kopacki Rit and Lonjsko Polje become more and more 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, Province Vojvodina, where the number of resting 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.

### **Illegal Hunting**

#### Killing of protected species

Hardly any bird species is safe along the Adriatic Flyway. In the recent years, reports of illegal hunting activities include a long list of protected species (e.g. EuroNatur 2002, Stumberger et al. 2009). We know about two Hoopoes ringed in Germany which have been 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. Flamingos and 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 still being shot at 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 to be extinct will be the Shellduck, as killed specimen were also found during the last years. Alike many other ducks which used to breed along the coast also this species is vanishing.

Even Spoonbills, Little Egrets and Little Bittern are not safe from the hunters, as injured and killed species have been discovered by the EuroNatur team. Shot Pygmy Cormorants and Night Herons have been found on the fish market in Shkodra. A group of Slovenian and Austrian bird watchers found shot Purple Herons, Grey Herons and 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 Golden Eye 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 presented proudly to the spectator. Even worse, the facilities are owned by Vojvodinasume, the State Forest

Organisation of Vojvodina, which is the manager of the Ramsar Site and the protected area, but also manager of hunting area. This means that hunting is organised by those person, who are responsible for the protection and they do not care about any law 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 Neretva Delta then attract those birds arriving during the night to their hides and artificial lakes to kill them in the dark without any identification before (see below). Little and Great Bustards have been reported recently shot from the Bojana-Buna Delta (Dhora & Kraja 2006, Schneider-Jacoby et al. 2006). Further, the EuroNatur team found obviously shot birds of many species, like Pygmy Cormorant, Grey Heron, Common Bussard, Redshank, Oystercatcher and Blackheaded Gull during the preparation of the Rapid Assessment of the ecological values of the Delta (Schneider-Jacoby et al. 2006).





**Fig. 4:** Redshank and Grey Heron. Both wounded in Solana Ulcinj, Bojana-Buna Delta, Montenegro, March 2004.

As hunters are everywhere along the coast and their activities are not controlled at all, we are afraid that the impact on protected species is even much higher than the few reports we received reflect.

### Use of illegal techniques

Illegal hunting techniques which are against the respective hunting laws in the countries are used openly and beside some bird watchers nobody cares about it. An exception is Slovenia and some parts of Croatia and Vojvodina (Serbia). In Montenegro, the National Park Skadar Lake works hard to implement the hunting ban at Lake Skadar, 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 were caught in the recent years. In the reports collected, all kinds of activities (see below) which are easy to observe and to stop 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 – so called speed boats - 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. We have observed this extremely disturbing hunting practice in the National Park Skadar Lake (MNE), the Ormoz Lake at the Croatian-Slovenian border, the Nature Park Hutovo Blato (BiH) and on the water reservoir Busko Blato, a part of the new Ramsar Site Livanjsko Polje (BiH). Besides the actual killing, it is the disturbance of the whole wetland which 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 the birds.



**Fig. 5:** Speed boats used openly for hunting of ducks in the hunting ban area National Park Skadar Lake, Montenegro, October 2008.

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, also specimen of the Slender-billed Curlew are

killed, as the site is one of the key stop over sites in the centre of the migration route of this species (Cleeves et al. 2008). The most recent observation of this world wide endangered species is from Solana Ulcinj which proves this assumption. The use of different duck lures is common in all countries beside Slovenia. In 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 internet<sup>16</sup>. Also in the promotion film for duck and geese hunting on the Danube, decoys are used openly (Golden Audio Video 2008). Different artificial song bird lures were used, e.g. in October 2008 at Velika Plaza (MNE).



**Fig. 6:** Curlew decoy and loud speaker used illegally at Velika Plaza, Montenegro, March 2009. The use endangers the last remaining Slender-Billed Curlew during spring migration.

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 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 are not yet

<sup>16</sup> http://www.setter.hr/hunt.php



destroyed by legal or illegal buildings are bottleneck areas for the Quails migrating in Southwest direction. In the early morning hours, birds stop migration at the coast to rest in a suitable habitat. Tapes with 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 this way and we have similar reports from the Albanian and Croatian coast as well as from the hinterland.

In autumn and winter, calls of Coots and Ducks are used along the coast to attract the bird heading southwest (e.g. Schneider-Jacoby, 2008).



**Fig. 7:** Equipment to attract Quails during the night at Tivat Solila, Montenegro, September 2008.

#### Impact on protected areas

During a World Bank mission into the Nature Park Hutovo Blato (BiH), Sunday, January 29<sup>th</sup>, 2006, at least 20 hunters using boats were shooting inside the park on Svitava Lake (Schneider-Jacoby in lit.). There was no reaction of the park director, not even the registration numbers of the cars with which the hunters had entered the area were noted although hunting is forbidden. Numerous illegal hunting activities have been reported in this protected area (Stumberger et al. 2008). In the Ramsar Site Neretva Delta (HR), hunters built illegal small ponds in the reed beds and use them for hunting. The facilities can be seen from the church of Vid or even better



using Google Earth. Although these illegal hunting activities are implemented blantantly, nobody in Croatia is able to stop them.

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

There are very few examples of best practice where managers of protected areas actually work on the implementation of the protection of the sites. The situation improved considerably, for example in the National Park Skadar Lake, although still poaching is present. 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 not longer accepted by the public and if all state organisations actively support the implementation of the hunting ban.



**Fig. 8**: Pile of left over shells in the hunting ban area Nature Park Hutovo Blato, Bosnia-Herzegovina, February 2009.



#### **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 <u>Albania</u>, 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 at the coast. In 2008, the Ministry for Environment prolonged the hunting season in spring for Garganey *Anas querquedula* until March 15<sup>th</sup>, following the bad example of Montenegro<sup>17</sup>. It is an extreme example for a negative trend, especially as it concerns spring hunting as well as a species which is decreasing all over Europe and is endangered in many countries such as Germany.

Montenegro has improved its hunting legislation considerably in 2008. EuroNatur and the Center for Protection and Research of Birds (CZIP) had pointed out the huge hunting impact along the coast, the killing of rare species in the country and the illegal hunting activities in several studies and documents. The new hunting law from 2008 has defined those bird species which 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 15<sup>th</sup>, is now no longer a species open for hunting. The whole coastal zone was declared as hunting ban area, because it is no 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 years since EuroNatur had compiled the report on illegal hunting activities (EuroNatur 2003). For example, the hunting season has been shortened from August 15<sup>th</sup> to September 15<sup>th</sup> for some species as duck hunting had impacted the breeding season of Ferruginous Duck (Schneider-Jacoby 2003).

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

29

<sup>&</sup>lt;sup>17</sup> EuroNatur letter to the Minister of Environment, Forests and Water Administration, Mr. Lufter Xhuveli, 14<sup>th</sup> March 2008



#### **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 Italia<sup>18</sup>. In March 2007, a hunter in Montenegro even told reporters at Velika Plaza that he sells 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 against illegal trade and cases are brought to the public. In Croatia, also posters with protected species as the Ferruginous duck were published to inform the border control. In Serbia, also cases where illegal traders were caught were published. From Albania, Bosnia-Herzegovina and Montenegro, no reports concerning bird trade are published and it is evident that control in these countries is lacking behind.



**Fig. 9:** Selling of Night Heron, Cormorant, Pygmy Cormorants on the fish market in Shkodra, Albania, February 2005

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<sup>&</sup>lt;sup>18</sup> www.traffic.org/species-reports/traffic\_species\_birds2.pdf



### **Hunting and Tourism**

No information about the economy of bird hunting tourism could be obtained in the countries. Fees paid by the foreign hunters per day are small, e.g.  $100 \in$  per day in Montenegro. In Slovenia, shooting of a Mallard costs  $10 \in$ , a Pheasant  $15 \in$  or a Partridge  $25 \in$ .

The impact of hunting on eco-tourism is huge though. 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 - beside a few exceptions - very difficult to observe birds. Countries as Montenegro are aiming to prolong the tourist season and want 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.



**Fig. 10:** Bird watching at the Salina Ulcinj, Montenegro, during the Adriatic Flyway Conference 2009, April 2009 (<a href="http://www.euronatur.org/Adriatic-Flyway-Conference-2009.899.0.html">http://www.euronatur.org/Adriatic-Flyway-Conference-2009.899.0.html</a>)

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#### Annex

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