

# Albania (AL)

*Ferdinand BEGO & Haki ZOTO*

Area: 28'748 km<sup>2</sup>

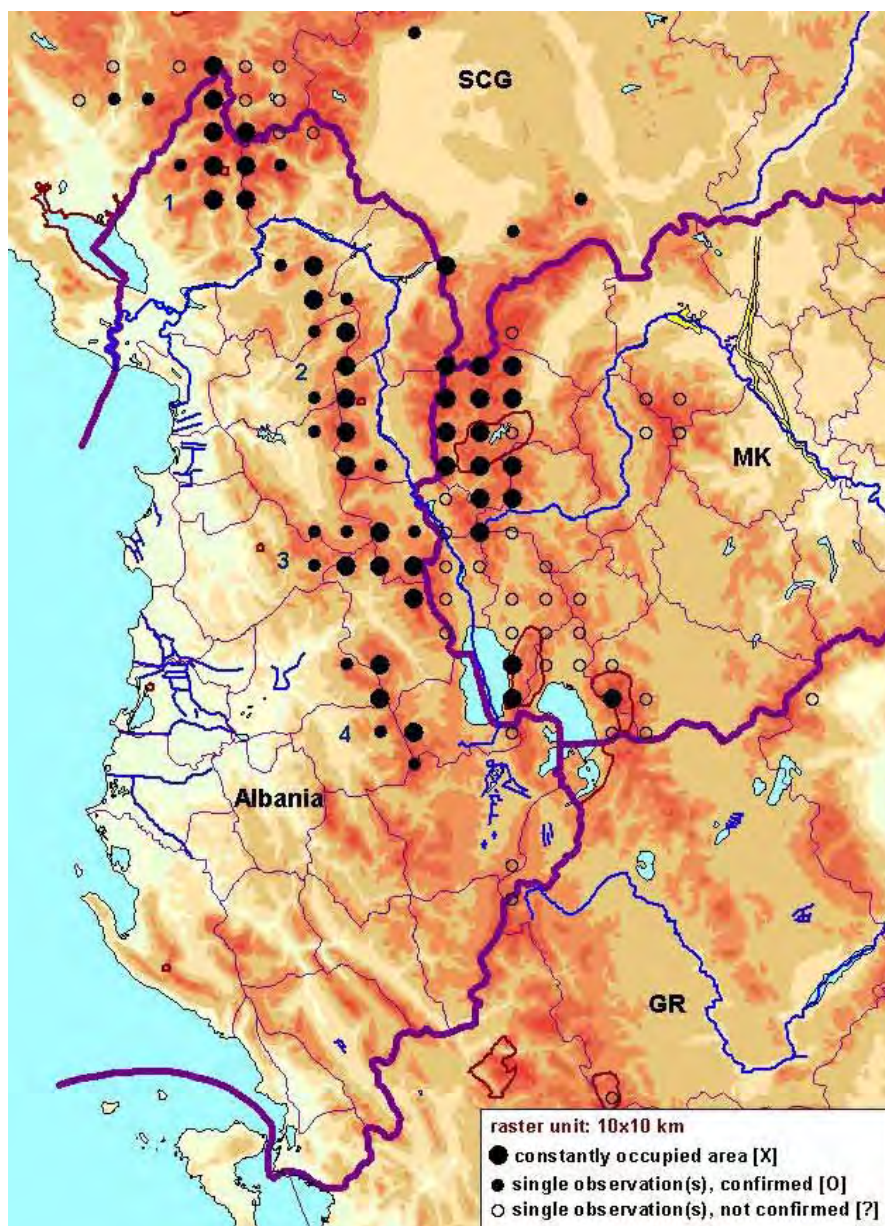
Forests & Woodland: 36.2 % (2000)

Human population: 3'510'484 (2001)

Population density: 122.1 / km<sup>2</sup>



## 1. Lynx distribution in Albania in 2001:



### Geographic range of the population(s)

**Balkan population:** 1. Albanian Alps (Vermosh, Bjeshket e Namuna, Theth, Shale), 2. Central North & Central (Iballe, Munelle, Tuç, Lure-Balgjaj-Allamani), 3. Central East (Martanesh, Çermenike, Golloborde, Shebenik-Jabllanice), 4. Central South (Shpati, Polis, Guri Zi, Valamare).

*Methods:* sightings & signs, snow tracking, inquiry, lynx mortality

## 2. Lynx population(s):

Population	Pop. size (Ø 1996- 2001)	Lynx distribution area [km <sup>2</sup> ]				[X] & [X+O] / country area [%]	Pop. density [lynx/100 km <sup>2</sup> ]
		[X]	[O]	[?]	[X+O]		
<b>Balkan</b>	15-25	2'300	1'500	500	3'800	8 / 13.2	0.65-1.09
<b>Total</b>	15-25	2'300	1'500	500	3'800	8 / 13.2	0.65-1.09

## 3. Population size:

### 3.1. Estimations

Population	Year	Official estimation	Additional estimation	Accuracy	Tendency
<b>Balkan</b>	2000	<b>15-25</b>		Data collected by the Museum of Natural Sciences, Tirana University do not allow for annual estimation, but give an idea about the distribution range and a rough estimation.	<b>unknown</b>
<b>Ø 1996-2001</b>		<b>15-25</b>			

### 3.2. Methods and institutions responsible for the estimations

Population	Official estimation	Additional estimation
<b>Balkan</b>	Data collected by the inventory work organised by the DFSs of the GDFP.	-
<i>Institution</i>	District Forest Services (DFSs) of the General Directorate of Forest and Pastures (GDFP)	-

## 4. Legal situation, harvest and losses of lynx:

### 4.1. International treaties

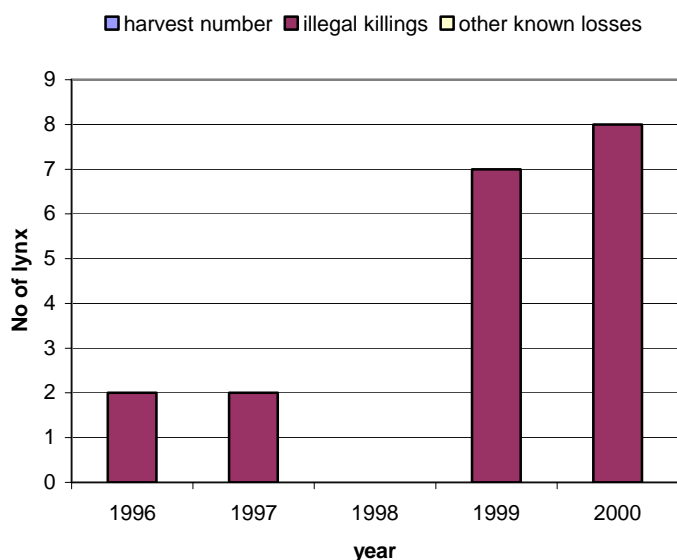
EU Habitat Directive	Bern Convention	CITES
-	ratified 1999	-

### 4.2. Legal status

Lynx has been fully protected by law since 1994.

### 4.3. Harvest numbers and other known losses to the population(s)

Population	Year	Harvest number	Traffic	Other accidents	Illegal killings	Removal problem animals	Diseases	Unknown cause	Orphans	Other	Total	% of population
Balkan	1996	-	0	0	2	0	0	0	0	0	2	~10
	1997	-	0	0	2	0	0	0	0	0	2	~10
	1998	-	0	0	0	0	0	0	0	0	0	0
	1999	-	0	0	7	0	0	0	0	0	7	~35
	2000	-	0	0	8	0	0	0	0	0	8	~40
	2001	-			no data available							n.a.
<b>Total 1996-2000</b>		-	0	0	19	0	0	0	0	0	19	-
<b>Yearly Ø</b>		-	0	0	3.8	0	0	0	0	0	3.8	~19
<b>Known mortality / 100 km<sup>2</sup> [X+O]</b>		-	0	0	0.1	0	0	0	0	0	0.1	-



Number of known losses to the Balkan lynx population in Albania from 1996-2000 (for 2001 no data available).

### 4.4. Lynx management

Population	Authority in charge		Management / Conservation Plan
	National level	Regional level	
Balkan	General Directorate of Forest and Pastures (GDFFP)	District Forest Services (DFSs)	(Some efforts were made but a lynx conservation action plan is not yet prepared.)

## 5. Depredation:

→ No known depredation losses due to lynx in Albania from 1996-2001. There are no compensation systems applied in the country. Flocks are guarded by sheep guarding dogs.

## 6. Major threats to the lynx population(s) in the country:

Population	Past (<1996)	Present (1996-2001)	Future (>2001)
<b>Balkan</b>	Agriculture Extraction of wood Infrastructure development: Industry Infrastructure development: Human settlement Legal hunting & trapping Shooting Trapping / snaring Poisoning Pathogens / parasites Limited dispersal	Agriculture Extraction of wood Shooting Trapping / snaring Competitors Prey / food base Limited dispersal Poor recruitment / reproduction / regeneration High juvenile mortality Low densities Skewed sex ratios (?) Slow growth rates Restricted range	Agriculture Extraction of wood Infrastructure development: Tourism / recreation Infrastructure development: Road building Shooting Trapping / snaring Competitors Prey / food base Limited dispersal Poor recruitment / reproduction / regeneration High juvenile mortality Low densities Skewed sex ratios (?) Slow growth rates Restricted range Recreation / tourism Transport

## 7. Conservation measures:

Conservation measure	Lacking / proposed	Drafted / ratified	Implemented / applied
Legislation on a national level			X
Legislation on a regional level			X
Public involvement	X		
Formal education	X		
Awareness	X		
Capacity-building / Training	X		
Taxonomy			X
Population numbers and range		X	
Biology and Ecology	X	X	
Habitat status			X
Threats			X
Conservation measures	X		
Monitoring / Trends	X		
Genetic status	X		
Human attitude / Human dimensions	X		
Maintenance / Conservation	X		
Restoration	X		
Corridors	X		
Identification of new protected areas		X	

Conservation measure (cont.)	Lacking / proposed	Drafted / ratified	Implemented / applied
Establishment of protected areas	X	X	X
Management of protected areas	X	X	
Expansion of protected areas	X	X	
Community-based initiatives	X		
Re-introductions	X		
Sustainable use / Harvest management	X		
Recovery management	X		
Disease, pathogen, parasite management	X		
Limiting population growth	X		
Captive breeding / Artificial propagation	X		
Genome resource bank	X		

## 8. Judgement of the status of the population(s) within the country & most urgent actions needed:

Population	Judgement	Most urgent actions needed
Balkan	endangered	<ul style="list-style-type: none"> <li>• Law enforcement</li> <li>• Species recovery action plan</li> <li>• Monitoring and professional training</li> <li>• Awareness raising</li> </ul>

## 9. Projects:

→ No current projects.

## 10. Contact:

Population	Name	Address
Balkan	Ferdinand BEGO	Tirana University, Museum of Natural Sciences, Rruga e Kavajes no. 132, Tirana, AL e-mail: <a href="mailto:ferdibego@albaniaonline.net">ferdibego@albaniaonline.net</a>
<i>Collaborator:</i>	Haki ZOTO	General Directorate of Forest and Pastures, Tirana, AL

## Country assessment:

Albania hosts at present the largest distribution area of the critically endangered Balkan lynx population. The lynx in Albania is currently distributed over four small nuclei in the north and east of the country. The two southernmost are actually supposed to be the more important ones - although they are smaller - due to the relatively large areas of still well preserved high mountain forests (BEGO 2001). The network of protected areas as proposed by the Biodiversity Strategy and Action Plan 1999 (and approved by the Council of Ministers in 2000, F. BEGO, pers. comm.) intends to cover much of the current lynx range (mainly in the form of national parks and landscape

protected areas). A few protected areas are planned along the border to FYR Macedonia, where the main Macedonian lynx range lies, too. However, most of the proposed areas are small, and some areas within regions of lynx occurrence will not be protected. The connection between the four distribution nuclei including the one in FYR Macedonia should have highest priority, as it actually seems that the already small Balkan population is furthermore fragmented (see population report). Therefore, a habitat suitability study should be carried out. The Drin valley, densely populated and dammed up over long stretches, is a potential barrier separating the northern Albanian and the Macedonian occurrence from the central and southern Albanian nuclei. Possible corridors need to be identified and secured.

It is only since 1990 that Albania has started to participate in international environmental organisations and signed international conventions (MAZREKU 2002). Since 1994, lynx is fully protected by the "Law on Hunting and Wildlife Protection" (BEGO, PEJA & PLLAHA 2002). Nevertheless, law enforcement is insufficient: Between 1996 and 2000, at least 19 lynx have been illegally killed (Table 4.3)! Regarding the estimated population size and its conservation status, this number is tremendous (yearly 10-40% of the Albanian population), and activities to prevent further killing of lynx should immediately be taken. The lynx' prey (roe deer, chamois) are neither allowed to be hunted due to their own low numbers, but suffer from illegal killings as well (BEGO, PEJA & PLLAHA 2002). Prey impoverishment strongly affects lynx.

Illegal killing, insufficient prey base and probably habitat degradation and increasing fragmentation (currently, several main roads and highways are under construction: BEGO, PEJA & PLLAHA 2002; homepage of the Office for South East Europe: [www.seerecon.org/infrastructure/projects/index.html](http://www.seerecon.org/infrastructure/projects/index.html)) are the main threats for the lynx in Albania. The identification of additional threats listed in Table 6 might be guesses because research is more or less missing. Therefore, we do not consider questions like habitat status, threats and taxonomy (Table 7) as finally being answered yet.

Albania has a relatively high human population density (around 122/km<sup>2</sup>), given the fact that a high percentage of people is living in rural areas (53.5% in 1998, although decreasing since 1991), especially in the mountains (BEGO, PEJA & PLLAHA 2002). For the conservation of the lynx (and other large carnivores), measures based on and involving the local community are therefore very important and should be improved to reduce conflicts.

In the Biodiversity Strategy and Action Plan of Albania from 1999 lynx was declared as one of the priority mammal species, for which a Species Action Plan is required to be prepared within two years and then immediately implemented. This has, however, not happened yet to our knowledge. For the conservation of the Balkan population it would be important not to have national strategies only (which is an important first step), but also to promote international co-operation and a cross-border conservation strategy. The strong decline in Albania, that has been noticed since 1970 (BEGO 2001) has to be halted and reversed, as the occurrences in this country are very important for the survival of the whole population.

## References:

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- BREITENMOSER, U., BREITENMOSER-WÜRSTEN, CH., OKARMA, H., KAPHEGYI T., KAPHEGYI-WALLMANN, U. & MÜLLER, U. 2000: Action Plan for the Conservation of the Eurasian lynx in Europe (*Lynx lynx*). Nature and environment No. 112, Council of Europe Publishing: 1-70.
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- Office for South East Europe, European Commission, The World Bank:  
<http://www.seerecon.org/infrastructure/projects/index.html>