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The brown bear conservation and management in Slovenia ***(Long version)***

The brown bear protection on Slovenian territory (particularly in the area of Visoki Kras) varying in its forms depending on the historical period goes back to the 19th century. The first initiatives for the protection of brown bears came from the private estates of large landowners mainly for hunting reasons, but nevertheless expressing their strong tendencies toward hunting having sustainability goals. The “Ordinance on the Protection of bears in the Kočevje, Črnomelj, Novo mesto, Logatec and Ljubljana Districts”, dating from 1935, effected a ban on the shooting and killing, as well as buying and selling of bears, which represented one of the first measures for the protection and preservation of bears in Europe and the first attempt for establishing various bear habitat zones on the territory of Slovenia.

The protection of brown bear in Slovenia has been implemented through hunting legislation until 2004. Although being a game species until 2004, brown bear has always had the status of a specially protected species. The granting of permissions for encroachment upon the brown bear population has always been planned and in line with a top-down approach (the state – game breeding area – hunting ground), recognising and taking into consideration the specific ecology of bears.

In 1966, a Decision defined a special “bear region” in Slovenia, encompassing most of the central area of the bear’s habitat. This is the core zone where brown bear habitat is preserved.

In 1993 brown bear was protected according to the nature conservation legislation and the decisions about population regulation were brought in accordance between both of the competent ministries (Ministry of Agriculture, Forest and Food for game species and Ministry of the Environment and Spatial Planning for protected species). In 2004 a new act on protected species was adopted (Decree on protected wild animal species), transposing the Habitat Directive. Since then the brown bear is a protected species, only. From 2005 the competencies for brown bear management are within the Ministry of the Environment and Spatial Planning.

Regarding the strategic approach, the “Brown Bear Management Strategy in Slovenia” was adopted in 2002 by the Government. This is a strategy for the management of free-ranging species, based on scientifically founded ecological principles and involving considered and mutually complementary legal and administrative measures in the fields of culture, sociology and the economy with the

intention of preserving the bear and its natural habitat. It allows animals to live in the way that nature intended, ensuring a sustainable use that man can expect from this part of living nature, whilst also facilitating the bear's coexistence with man. For the strategy to succeed, measures based on it must be adapted to the ecological characteristics of the environment and the historical socio-economic conditions in Slovenia. The purpose of the management of the brown bear population in Slovenia is to determine the aims and goals as well as the measures for the protection of this species and its habitat, as well as measures facilitating the coexistence of man and bear.

The Brown Bear Management Strategy in Slovenia is based on two principles:

Brown bear – a living being and biological species

- The bear, like other free-living plant and animal species on the territory of Slovenia has, for ecological and ethical reasons, a right to exist.
- Large carnivores, of which the bear is one, are an important part of biotic diversity – in their own right and because of the role they play at the top of the food chain.

Relation between brown bear and man

- The brown bear is an animal species that needs a large habitat and lives in areas also populated by people. There is almost no place where man is not present. The bears' prey can include domestic animals and, potentially, bears can be dangerous to man. The protection and preservation of bears is therefore possible alongside coexistence with man and with the provision of measures enabling this.

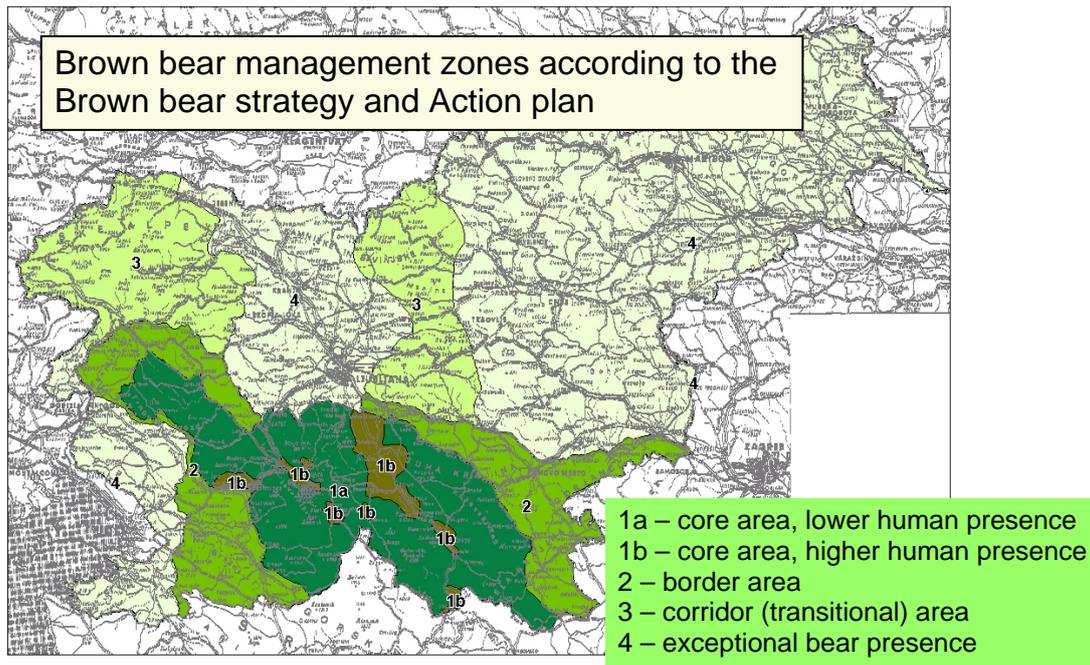
On the basis of these principles, two, equally important goals of the strategy were set:

- the long-term preservation of the brown bear species in Slovenia, including its habitat and
- ensuring the coexistence of man and bear.

In the Strategy, the territory of Slovenia is divided into 4 basic “bear” areas:

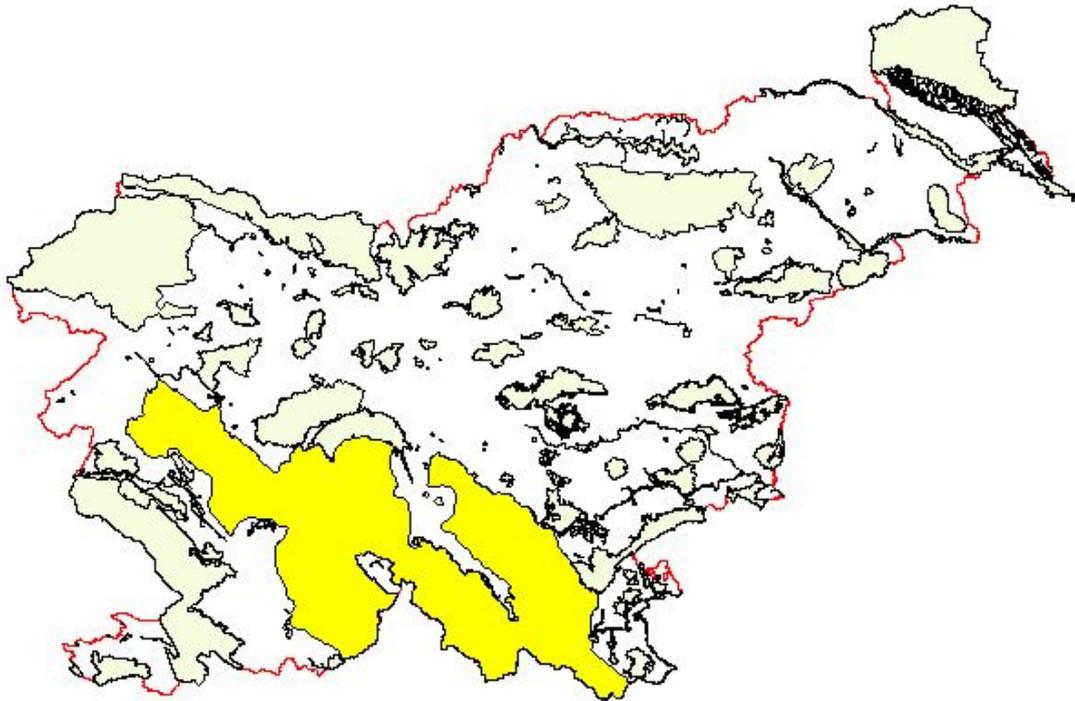
- a central area (350.000 ha – 17,3 % of national territory);
- a marginal area (257.000 ha – 12,7 %);
- a transit (corridor) area (312.000 ha – 15,3 %);
- an area of exceptional bear presence (1,109.000 ha – 54,7 %)

So, almost half (45,3 %) of the national territory has some measures regarding brown bear management.



Each of these area has different measures regarding both goals of the strategy. These regimes are reflected through both, the protection and regulation of the population, as well as measures for adaptation of human behaviour and activities (local population, farming, forestry, tourism, infrastructure, etc.) in order to enhance coexistence with bears. Presently, the greatest difficulty Slovenia has is setting up the regimes for bear population management in the transit area, where we face on the one hand the clearly expressed expectations of the international public, particularly in neighbouring countries, and on the other the increasing number of conflicts between man and bears. The main reason is, that this area is now more populated and the habitat is not so suitable for the brown bear. Brown bears are using this corridor rather frequently, but it is not realistic to restore the habitat in this area and establish ecological conditions for permanent presence of the brown bear in order to restore the Dinaric – Alpine corridor. We encourage in this case the restoration of a functional corridor, bridging this gap with translocations in case that Alpine countries would like to increase the numbers of their brown bear populations.

Within the strategy frame some measures are targeted to preserve the habitat of the species. We believe that this is the most essential conservation measure. If you lose proper habitat, all other measures are questionable. Because in Slovenia we succeeded to manage a proper habitat we have a continuity with the brown bear population until today. Thus the vital areas of the brown bear habitat are included into the Natura 2000/Emerald network (2380 km² – 12 % of the national territory). The second pillar are measures corresponding to the species level (strict protection of the species). The third pillar are measures to enhance coexistence (conflict and damage prevention measures, intervention group, compensation system...). The Strategy is taking into account the provisions of the Bern Convention with its Action plan for the brown bear population in Europe and the Habitat Directive.



Natura 2000/Emerald for large carnivores

In 2002, an action plan based on the Strategy was created for the Slovenian bear population. The action plan took into consideration and included all those points contained in the European action plan referring to Slovenia. In the same year a workshop for the Dinaric and Pindos area on the implementation of the action plan points for individual countries, organised by LCIE (Large Carnivore Initiative for Europe), was held in the Risnjak National Park in Croatia. The workshop was intended for representatives of the countries from Slovenia to Greece, which is from the unified ecological habitat of the so-called Alps-Dinaric-Pindos brown bear population. Slovenia presented its brown bear management strategy to nine countries participating at the workshop and was the only country there to have a strategy that is fully set up and officially accepted at state level. During the review of the individual points of the European action plan for individual countries, it was established that, with the exception of three points, Slovenia is fulfilling the action plan.

Slovenia is also paying attention to international and especially cross-border co-operation as the following activities show:

- Bern Convention
 - implementation of the Action plan
 - Osilnica workshop on transboundary brown bear management
- Repopulation projects
 - Italy (1999-2002 – 10 bears to NP Adamello Brenta)
 - Austria (1993 – 3 bears)
 - France (1996-97 – 3 bears, 2006 – 5 bears)
- LIFE projects
 - Conservation of Large Carnivores in Slovenia – Phase 1: *Ursus arctos*

- Principles for the potential formation of a bear metapopulation in the Alps (with IT and AT)
- Cross-boundary co-operation with Croatia, Italy and Austria

The management of the brown bear population in Slovenia is based on an integrated approach and it is part of the integrated planning system. Following the strategic goals there are different measures in each of the brown bear zones, aiming to regulate the population and to minimise the number of conflicts with men.

The principles of encroachment upon the bear population are a part of this management. It is probably hard for other parts of Europe to imagine that with the present number of bears in Slovenia there is simply no other alternative but to carry out regular culls. With this in mind Slovenia, in line with the provision in paragraph 1 of Article 22 and in relation to Article 6 of the Bern Convention, negotiated a reservation to Appendix II for the brown bear (as well as for the wolf).

Slovenia's accession to the EU in 2004 and implementation of Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora also did not cause major changes in the sustainable management of brown bear, since the principles of the Habitat Directive were already embraced in Slovenia's basic documents and legal acts. We would like to stress here that, despite strict protection, the Habitat Directive does allow exceptions and interventions in populations of threatened animal species (including brown bear).

Encroachments upon the brown bear population are carried out on the basis of technical proposal submitted to a special commission within the Ministry of the Environment and Spatial Planning responsible for brown bear populations. The proposal is prepared by the expert services of the Slovenia Forest Service which is, pursuant to the Decree on protected wild animal species, responsible for integral planning (encroachments upon the population of free-ranging animal species and their habitat). The commission consists of independent experts (from the Department of Forestry, the Department of Biology and the Zootechnical Department at the Biotechnical Faculty of the University of Ljubljana, from the Natural History Museum and from the Slovenia Forest Service, representatives of various interested parties (hunters, NGOs, livestock breeders and local communities) and state officials (the Ministry of Agriculture, Forestry and Food and the Ministry of the Environment, Spatial Planning and Energy). The commission is an advisory body to the responsible minister, that is the Minister of the Environment and Spatial Planning. The minister decides on encroachments upon the bear population (as well as other large carnivores), and mainly relies on the commission for this, even though he has a discretionary right to decide independently. The Department for Wildlife of the Slovenia Forest Service draws proposal for the encroachment at the end of each calendar year for the following year. Proposals for the necessary cull of brown bears are based on the Brown Bear Management Strategy and results of the integral monitoring.

Each proposal takes in consideration all available data, technical methods and is harmonised with the responsible bodies in game breeding areas, which are the wider,

ecologically rounded units for game management in Slovenia. It is agreed with those carrying out the encroachments on the basis of the following parameters:

- the previous trend of the brown bear mortality in the wild (harvested, captured and lost) and the mortality analysis for the last year,
- trend and analysis of the damages to crops, livestock, buildings, vehicles and elsewhere found to be caused by brown bear,
- trend of the conflict situations involving bears, as recorded by the *Intervention group for problems involving brown bears* (over 200 calls for intervention in 2006),
- data derived from the brown-bear monitoring (regular and other counts) conducted by the Slovenian Forest Service and the Hunters Association of Slovenia in 2000, 2001, 2002, 2003, 2004, 2005 and 2006 with an emphasis on the monitoring performed at the permanent monitoring places,
- daily monitoring of brown bear in the special-purpose hunting-districts *Jelen* ("Deer") and *Medved* ("Bear"),
- theoretical fundamentals and practical experience gathered by animal experts working within the scope of the activities of the Slovenia Forest Service

Based on integral monitoring the culling quota in the technical proposal (and later in the Ministerial decision) is structured by sex, weight and spatially. That means that the quota is divided among individual hunting grounds, taking into consideration the criterion that those hunting grounds and areas where conflicts between man and bear have occurred have the priority. The joint quota of bears to be culled is divided according to weight categories (up to 100 kilograms, 100 – 150 kg, over 150 kg), with most of the planned cull being in the first weight category, involving young, immature animals, most often involved in conflict situations. The cull is monitored, and any violations are controlled and dealt with by the hunting inspectors with the help of the courts.

The planned cull includes not only bears that are to be shot – proven losses in the bear population are also subtracted from the quota, influencing the realisation of the Ministerial decision. This ensures that the population dynamics is controlled, as the planning of shooting alone could lead to an uncontrolled number of accidental losses, the occurrence of which seems to have grown in recent years.

Problems connected with the coexistence of man and bear in Slovenia have started to increase particularly over the last decade and have escalated in the last four to five years. There are a number of reasons for this, which cannot be completely explained, as experts have different opinions on the reasons or their relative importance. It is unarguable that the Slovene bear population is progressively increasing and is spreading their range. These two reasons have led to difficulties. Today, the number of bears in Slovenia exceeds the sustainable capacity of their environment and problems involving bears have turned the image of the species into a negative one. Slovenian government is trying to avoid that because it could have a very negative impact on the brown bear population, ultimately resulting in the illegal, uncontrolled hunting and killing of brown bears.

How do we ascertain the number of bears

The absolute number is not the only important factor; more significant is the population trend that is, as already mentioned, a progressive one. The absolute number is used only when it is necessary to decide in what way and how much to encroach upon the population by culling, starting from the assessed number of bears, which again differs depending on the point of view. Whether the number of bears can be simulated with various models or whether it is easier to assess it on the basis of “hard” facts derived from the actual monitoring of the population, is left to individual judgement. The actual monitoring of the bear population in Slovenia means that the number of bears is ascertained by direct counts in relatively permanent places (bear meat feeding stations, corn feeding stations for wild boar, and other counting places) and by daily monitoring indices in the Slovenia Forest Service professional game breeding areas in the central bear zone, encompassing an area of over 70,000 ha. All hunting organisations in whose hunting grounds bears are permanently present participate in this, counting bears on the same day (on a moonlit night), two to three times a year. After the count, the collected forms are analysed and any sightings judged on the basis of the time they were recorded to be duplicated, are excluded. Dr Miha Adamič from Biotechnical faculty, together with the Hunters Association of Slovenia, developed this method few years ago. With this method, it is possible to follow the population trend, as well as determining the social structure of the population, that is the proportion of bears sighted involving female bears with cubs. We maintain that on the counting nights, when there are also optimum weather conditions, it is possible to sight and count at the feeding stations up to 70 % of the bear population. After the count, hunting organisations fill another part of the form, where they estimate the number of bears more or less constantly present in their hunting grounds, which were not spotted during the count. And this produces the difference between the numbers recorded (the number of animals actually counted – the assessed number).

Based on the Project Life Natura III and European commission requirements the net of permanent counting spots (167) was formed. The counting at this spots is obligatory and the results obtained are processed and kept separately. The counting spots are located two kilometres from the nearest settlement and three kilometres from each other. The net of permanent counting spots was formed for the purpose of long term population’s parameters trend assessment.

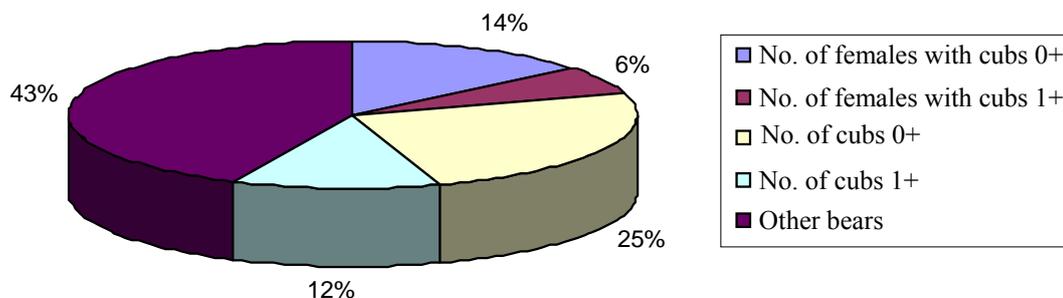
The estimations of the population are based on integral monitoring which consists of:

- Regular counting on 176 permanent spots 2-3 times a year on the same moonlit night
- Other counting spots
- Observations
- Registering contacts and intervention calls
- Captures and losses
- Telemetry
- Genetic research

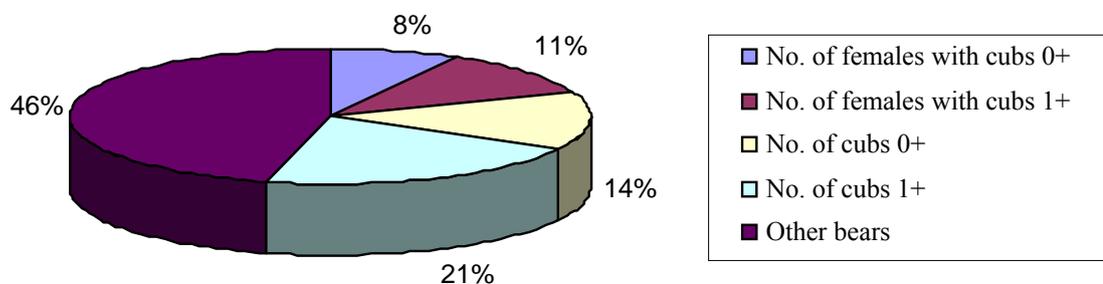
The results of the counts on the permanent counting spots:

	10.10.2003		28.5.2005		24.9.2004		22.10.2005		20.5.2005		19.8.2005		14.10.2005		12.5.2006		4.8.2006		6.10.2006		TOTAL	
	sk.	%	sk.	%	sk.	%	sk.	%	sk.	%	sk.	%	sk.	%	sk.	%	sk.	%	sk.	%	sk.	%
No. of bears seen	94	100	144	100	137	100	135	100	190	100	238	100	186	100	163	100	118	100	158	100	156	100
No. of females with cubs	16	17	26	18	25	18	26	19	36	19	51	21	36	19	32	20	19	16	33	21	30	19
No. of females with cubs 0+	12	13	11	8	18	13	20	15	16	8	37	16	29	16	12	7	13	11	21	13	19	12
No. of females with cubs 1+	5	5	16	11	8	6	7	5	20	11	14	6	9	5	20	12	6	5	12	8	12	7
No. of cubs 0+ with female	23	24	21	15	28	20	34	25	29	15	66	28	54	29	22	13	23	19	39	25	34	21
No. of cubs 1+ with female	6	6	21	15	13	9	10	7	30	16	25	11	14	8	35	21	11	9	22	14	19	12
No. of cubs 0+	24	26	21	15	28	20	35	26	29	15	67	28	54	29	22	13	23	19	39	25	34	22
No. of cubs 1+	9	10	29	20	13	9	12	9	34	18	33	14	17	9	40	25	19	16	27	17	23	15
No. of all cubs	33	35	50	35	41	30	47	35	63	33	100	42	71	38	62	38	42	36	66	42	58	36
Av. No. of cubs 0+ per female	2,00		1,91		1,56		1,75		1,81		1,81		1,86		1,83		1,77		1,86		1,82	0

Brown bear population structure based on the data gained by counting at permanent counting spots in autumn for the period 2003 - 2006



Brown bear population structure based on the data gained by counting at permanent counting spots in spring for the period 2003 - 2006

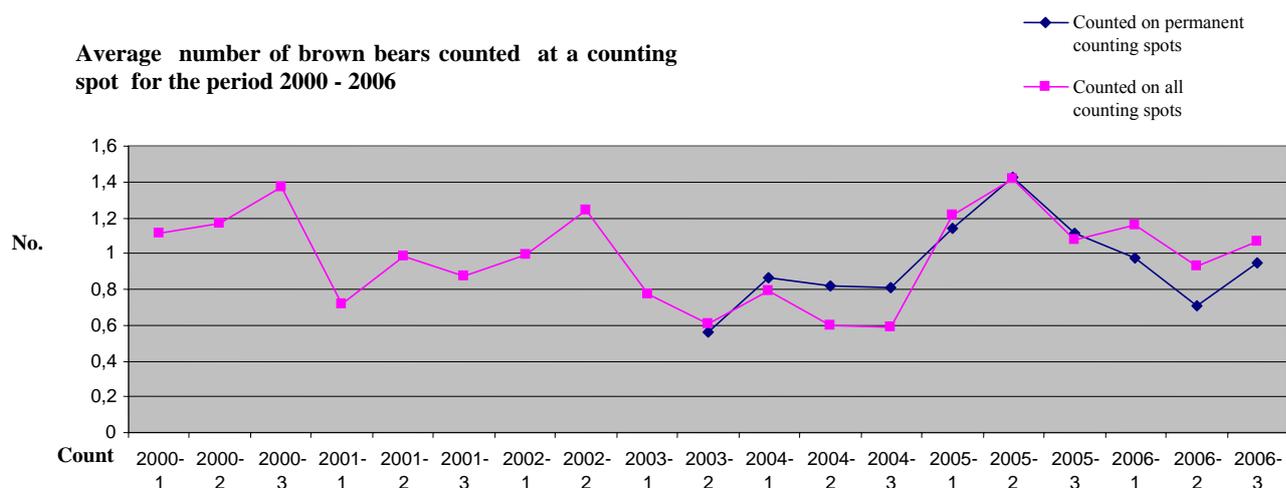


The results of the counts on all counting spots:

Beside the counting at the permanent counting spots the counting also takes place at other counting spots (feeding stations, places of regular bear sightings,...) which are defined and agreed on by Slovenia Forest Service, Hunters Association of Slovenia and Regional Association of Hunting Grounds and Special Purpose Hunting Grounds Managers. Their number varies and also depends on the effort and interest of hunting grounds managers to gain additional data.

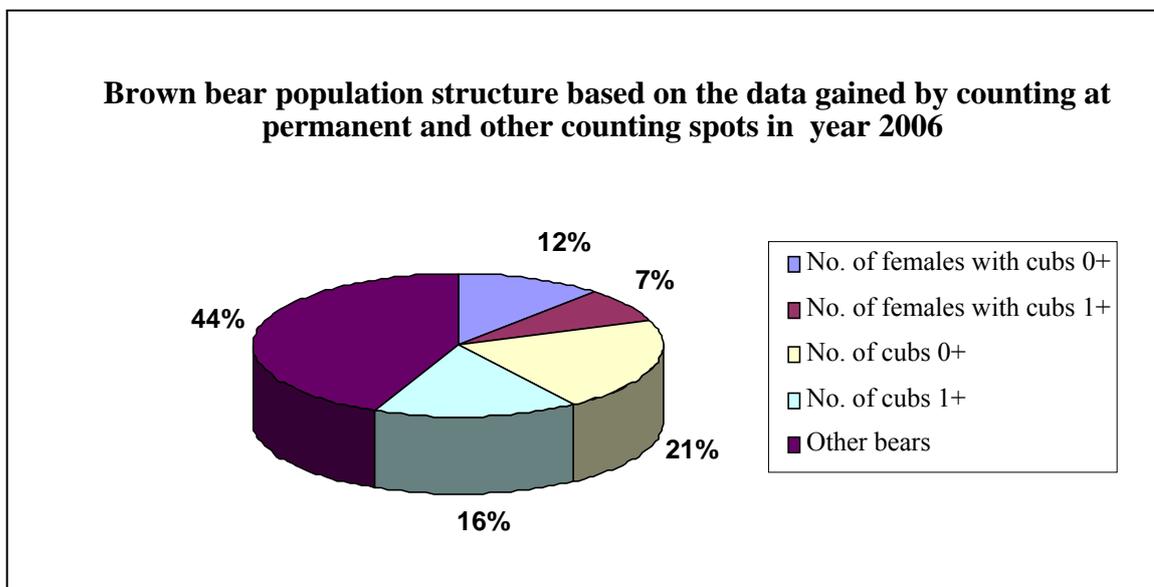
The results of the counts over the last six years are shown in the following table:

Year and counting No.	No. of counting spots	Counted in total	Females	Cubs in their 1 st and 2 nd year	Cubs per female
2000 – 1	206	228	51	87	1.71
2000 – 2	278	326	67	156	2.33
2000 – 3	315	432	84	156	1.86
2001 – 1	293	212	41	76	1.85
2001 – 2	290	285	57	103	1.81
2001 – 3	321	279	53	104	1.96
2002 – 1	349	344	57	105	1.84
2002 – 2	372	468	100	186	1.86
2003 – 1	378	291	52	93	1,79
2003 – 2	366	224	40	68	1,70
2004 – 1	342	271	45	88	1,96
2004 – 2	391	233	42	74	1,76
2004 – 3	394	233	45	85	1,89
2005 – 1	337	407	73	140	1,92
2005 – 2	305	434	89	176	1,98
2005 – 3	351	378	69	139	2,01
2006 – 1	283	329	65	125	1,92
2006 – 2	284	265	46	94	2,04
2006 – 3	292	312	64	120	1,88



Comparing all the counts, the most interesting is the number in the last column – the number of cubs per female (in their 1st and 2nd year) – which is very stable, most often around 1.8 to 2 cubs per female, the lowest number – only 1.71 – occurring in

April 2000, and the highest – 2.33 – in May 2000. The number of bears counted (since 2000) was highest in the last counts, as was the assessed number of bears, which additionally confirms the thesis about the progressive growth of the population. We estimate, that the annual increment of bears (newly born) in Slovenia is between 100 and 150. It should be mentioned here that we estimate the survival level of cubs to be very high, the main reason being the sufficiency of both natural food and food offered to bears by man (at feeding stations, etc.).



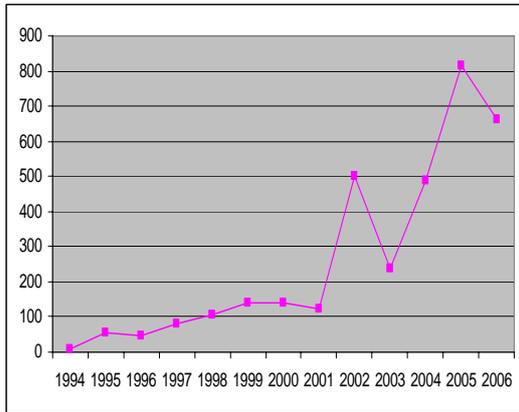
Cases of damage involving bears:

The assessment of the present state of affairs, based on the data collected so far (13-year analysis), regarding damage incurred by bears (in line with the methodology of compensation payments) and the analysis for 2006 shows the following:

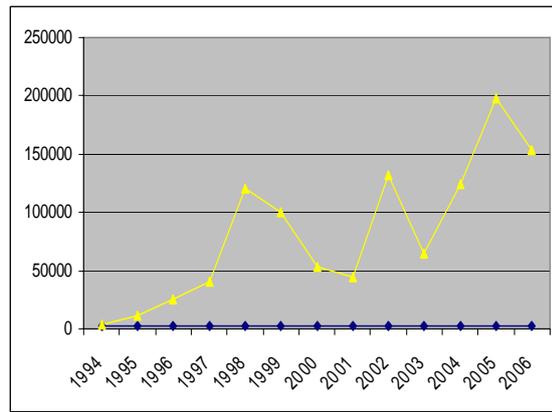
Year	Number of damage cases	Damages paid out in SIT
1994	7	837,000.00
1995	57	2,826,562.00
1996	45	6,139,890.00
1997	81	9,724,539.00
1998	105	28,913,215.00
1999	138	23,921,963.00
2000	139	12,614,238.00
2001	123	10,601,558.00
2002	503	31.483.145,00
2003	239	15.557.848,00
2004	466	29.746.252,00
2005	814	47.329.139,00
2006***	678	37.851.519,00

***All the damages in 2006 are not yet estimated and resolved (lawsuits,...)

1 EUR = 239,640 SIT

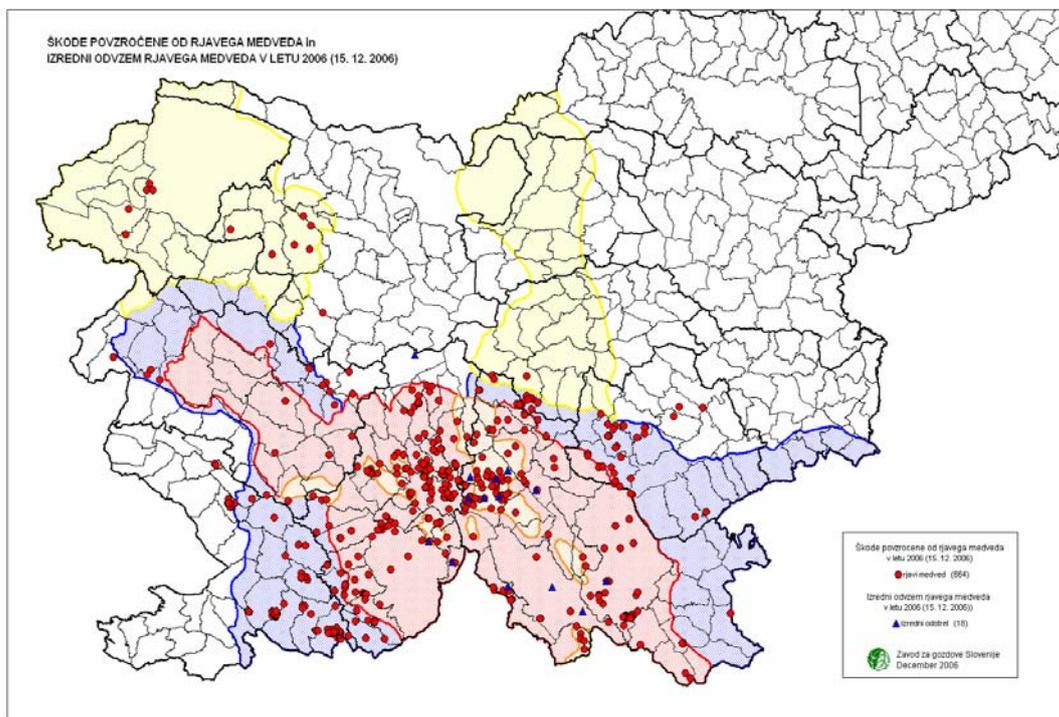


Number of cases



Payed compensation

The data shows that, prior to 2002, the number of damage cases settled around just over a hundred a year. The nominal value of compensations kept increasing, slowly at first, whereas in 1998 and 1999 it went up dramatically. But the amount declined after 1998. In 2002, the number of cases shot up. It is highest in the Kočevje and Notranjska areas and in the wider Alpine and sub-Alpine region (see map). In the former, this is the result of the higher number of bears; whilst in the latter the main cause is the utilisation of the land (free pasture in the mountains), as the number of bears here, compared to the central area, is considerably lower, but nevertheless on the increase.



Legend:
dots – recorded cases where damage occurred

triangles – exceptional cull (interventions)

Bears culled so far:

An overview of bears culled in last 13 hunting years (i.e. from 1st April to 31st March) during the period between 1994 and 2000 and the cull in the 2001 to 2006 calendar years, according to gender and weight:

No. of bears culled	BY SEX			BY WEIGHT				TOTAL
	male	female	unknown.	up to 100 kg	101-150 kg	over 150 kg	unknown	
throughout Slovenia								
Hunt. year 94/95	19	20	2	23	11	6	1	41
Hunt. year 95/96	23	8	1	16	9	6	1	32
Hunt. year 96/97	29	17	1	28	16	3	-	47
Hunt. year 97/98	29	20	-	32	13	4	-	49
Hunt. year 98/99	37	21	4	29	20	9	4	62
Hunt. year 99/00	33	23	-	40	5	11	-	56
Hunt. year 00/01	38	21	-	37	19	3	-	59
Cal. year 2001*	34	20	2	33	16	5	1	55
Cal. year 2002	73	42	1	86	20	9	1	116
Cal. year 2003	45	26	1	53	13	6	-	72
Cal. year 2004	49	29	2	52	17	9	2	80
Cal. year 2005	50	45	-	69	22	4	-	95
Cal. year 2006	64	59	2	81	31	13	-	125
Total 94/2006	504	334	14	558	200	86	8	852
Ratio (%)	59	39	2	65	23	10	2	100

Structure of losses in 2006:

- Culling:
 - regular culling according to the Minister’s Ordinance (76 bears, 61 %)
 - interventions (part of the quota), special permit required (18 bears, 14 %)
- Translocations - part of the quota (5 bears, 4 %)
- Train and car accidents (26 bears, 21 %)

During the whole previous year, 104 bears were harvested / lost in the core area, 19 in the marginal area, none in the transit (corridor) area and 2 in the region of exceptional presence of bears. A large number of bears were harvested in the northern part of the core area, where also the number of damage cases was highest, as well as in those parts of the core region in which the human population density is the highest.

The majority of the encroachment (61%) was carried out by so called “regular cull” by the hunting organizations in accordance with population regulation, followed by 21% of losses (natural deaths, traffic accidents – roads, railways,...), 14% of “exceptional cull” (serious threats to humans and their property) and 4% of live capture and relocation (transfer of 5 bears to France).

The share of losses is markedly high in recent years – it amounts to more than 20% of the total mortality number. In 2006, there were 20 losses due to traffic; in addition to these, there were 13 traffic accidents involving bears that were not found afterwards. During the last 7 years, 107 bears died in collisions with vehicles: 11 on highways, 49 on local roads, and 47 on railways.

Among the bears harvested/lost in 2006, there is a strong preponderance of those with a body weight of less than 100 kg (in 64,8 % cases of all known bear deaths), while the bears weighing 101 to 150 kg accounted for 24,8 % of bear deaths, and those weighing above 150 kg for 10,4 %. These percentages are quite close to the orientation levels defined in the Strategy.

In 2006, among the 125 bears harvested, relocated or lost, 21 of them were females of the age of reproductive maturity (of those 21 four females were captured and transferred to France). 63 % of the bears harvested or lost were not sexually mature yet (cubs of the year, yearlings, bears aged two or three years), which is less than previous year (78%) These data show that special attention must be paid to the structure of future encroachments upon the population.

The work of the brown bear intervention group

The intervention group for problems involving brown bears was founded on the basis of Government resolutions and Decision No. 017 – 62/00, dated 5. 4. 2000, adopted by the Ministry of Agriculture, Forestry and Food. The group acts on the basis of a written operative agreement with the police and on the basis of the resolution adopted by the director of the Slovenia Forest Service No. 16/00, dated 30.5.2000. In cases of a conflict with bears, the group answers calls to the intervention numbers 112 and 113 – the operative communication centre and the police. In line with its legal and professional responsibilities, the methods for solving problems with bears used by the intervention group are the capture of bears, scaring bears with different technical devices and rubber missiles or killing them with fire arms.

The following can be established from the analysis of the encroachments upon brown bear population:

- It is estimated that for a number of years, if not a whole decade, fewer bears have been killed than born; bears are more common in areas where they were once rare, and the population density in the core presence area has increased.
- The cull predominantly involves bears weighing up to 100 kg (64% of all the proven cull), however, the share of the culled bears weighing between 101 and 150 kg and above 150 kg is relatively high (33% of the total). With respect to the correlation between weight and age, it is estimated that the natural age composition of the population is altered and leaning towards younger and middle aged immature bears, which are also the ones involved in conflict situations within their environments.
- According to the gender structure in the period of five years, it was males that predominated in the cull in comparison with females (59:39%), while 2% of bears were of unknown gender. The natural gender structure of the population

is thus likely to be considerably altered, which is the result of the internal documents adopted by the Hunters Association of Slovenia, protecting females with young.

On the basis of the above the following conclusions can be made:

- The brown bear population in Slovenia is in a “favourable position” (stable) and not threatened either in the short or long-term. The population size is increasing and the area where bears can be found is widening;
- Special emphasis is given to habitat conservation and preventive measures, as culling is the last option in the population control;
- In management process other management measures should be foreseen to control the population, meeting the needs and concerns of local population (higher acceptance). It is our firm belief that confidence and conviction of local population that the situation is controlled (including transparent, operational and quick compensation system, effective intervention group, encouraging preventive measures, public relation activities...) is minimizing poaching and assuring high law implementation. In Slovenia, hunting is certainly not the driver of the political tendency (management outcomes are much higher of incomes, no private hunting grounds and thus private interest, non-reproductive part prevails in the culling quota, strict control). Conflicts between bears and people are the most important driving force for political pressure regarding higher quotas;
- In particular cases of conflicts in rural areas some bears were truncated and translocated to remote areas. But as in Slovenia distances are relatively small and an average daily range of a brown bear is up to 80 km, they returned to the same place in a few days which indicates that this measure is quite ineffective. We are highly interested to translocate these bears to any of the countries concerned about the faith of population of the brown bear in Slovenia;
- Culling is one of the regulation methods, transparent and strictly regulated;
- Culling quota is based on the results of integrated monitoring and structured regarding space, sex and weight;
- With different structure of the culling (to have more impact in the reproductive part of the populations - to cull more reproductive females) we could lower quota fundamentally, but we don't see this acceptable from the technical and point of view, regardless that lower culling numbers would be much more appreciated in the public;
- Integrated monitoring system is well developed, there are divergences in interpretation of the results;
- All losses in population (culling, illegal hunting, car and road accidents...) are recorded in a standard way (sex, weight, place of death, reason...) and available;
- The positive trend in brown bear population, increase in damage, contacts and conflicts with human, spreading of bears presence outside the area of usual range led to more radical population control. The results in the population are carefully monitored and will be bases for further decisions;
- The number of bears in the total culling quota actually shot is falling, while the number of animals exceptionally culled in conflict situations and the number of bears lost, particularly in road and rail accidents, is growing;

- Instances of damage incurred by bears and the number of conflicts with man are increasing, causing the image of this species to be perceived in a progressively negative way. In the last five years, several serious incidents involving a bear's attack on a person resulting in serious injuries have been recorded. As a consequence of this, there is the strong possibility of unlicensed hunting of bears - that is completely uncontrolled encroachments upon the brown bear population;
- The species is above the sustainability threshold for its environment and the areas in which bears appear in Slovenia could not sustain a larger population.

Implementing the Brown bear Strategy we are taking into account the integrity of the measures aimed at solving the problems, which does not involve just the culling of bears, but also the implementation of a whole range of measures in the brown bear habitat (habitat improvement, prevention relating to the breeding of small livestock, illegal refuse dumps, intervention group, public relation activities, feeding, etc.) aiming to minimize conflicts and damages with local inhabitants.

In its management of the brown bear, Slovenia is respecting international regulations, including all the documents and plans at international level. We are open for all scientific based suggestions and invite co-operation. We believe that countries where the large carnivores were exterminated can learn and better understand the problems of coexistence of men and large carnivores and share knowledge and responsibilities in conserving these key species of European importance.

Ljubljana, April 2007