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20th March 2017.

Board of
UK Wolf Conservation Trust

Dear Ts,

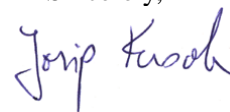
With gratitude for your support in 2016, here I attach our report.

Enclosed please find:

1. The report about the work on our project on wolves and lynx in 2016.
2. Financial accounting

Our work is being funded from various sources. Here I present the full report, which describes all of our activities, including the work within LIFE project for bears. This project is entirely funded from other sources, but I give short overview of it to draw the complete picture of our activities. The contribution of "UKWCT" is outlined in the table showing the "Activities list". Detailed financial report about the use of funding provided by UKWCT is described in the financial accounting tables at the end of this report.

Sincerely,



Josip Kusak

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20 March 2017.

Project report for 2016

Board of
UK Wolf Conservation Trust

RESEARCH OF AND CONSERVATION OF WOLVES AND LYNX IN CROATIA

SUMMARY

Described are all activities related to wolf and lynx research, conservation and management in Croatia in the previous 12 months. We were again internationally active (Bosnia and Herzegovina, Montenegro, Macedonia, Albania, Romania, Poland, Greece, Germany, Alaska) what is described and illustrated here. In most cases, we were invited to speak and teach about work on large carnivores in Croatia: monitoring system, emergency teams, trapping methods, health survey etc.

In Croatia, considerable efforts were invested to capture and collar new wolves and lynx resulting in the **capture and collaring of three lynx**. Supported with other data obtained by different means, the evidence of wolf population stagnation at the level same as during the last year was documented in Croatia. This finding lead to the important management decision not to allow any hunting quota for wolves this year again.

The use of trap cameras is continuing to be a rather important but also demanding task since data processing is always time consuming. Here we present summary data on lynx counting during 2016.

The report the work on the LIFE DINALP BEAR is listed here. This work was performed mostly by Đuro Huber and Slaven Reljić and described as part of this report.

Three contracts for the research of large carnivores (one for each species of LC) in the Plitvice Lakes NP (PLNP) provided six GPS collars (two for each species of LC) for telemetry tracking, 25 new automatic cameras, free accommodation for field work and the opportunity to accept more students for field work participation and teaching during 2016.

PROGRESS REPORT

This yearly report is for the period from 12 November 2015 to 01 March 2017 (475 days).

We continued with efforts of capturing and radio-tracking of wolves, bears and lynx, collection and examination of dead carnivores, as well as direct application of our study results in management and protection. This year we were involved in training of students, researchers and large carnivore management professionals from Italy, Germany, The Netherlands and USA. Researchers from the project were invited to present project results in Germany, Greece, Montenegro, Macedonia, Poland, Albania and Romania.

Project researchers, and one PhD student (partly overlapping during the field work) spent a total of 191.8 (40.8% of time) work/days doing field work, checking cases of wolf mortality, performing necropsies of dead wolves, participating on workshops and meetings related to research and conservation of wolves and lynx in Croatia and other countries. Đuro Huber and Josip Kusak continued to help in research and monitoring of large carnivores in the area of newly established (in 2011) **National park “Una”**, at the border between Croatia and **Bosnia & Herzegovina**. On 11.05.2016, and in the company of Daniele De Angelis and Jacopo Morelli (students from Italy), Đuro, Josip and Slaven have found dropped collar of a bear Buk and then also a den of the same bear from the winter 2015-2016.



Figure 1: Jacopo Morelli, Slaven Reljić, Josip Kusak, Đuro Huber and Daniele De Angelis at the found dropped collar of a bear Buk in Bosnia and Herzegovina, near but outside of NP Una on 11.05.2016 (Photo Daniele De Angelis).



Figure 2: Jacopo Morelli, Slaven Reljić, Đuro Huber and Daniele De Angelis at the found dropped collar of a bear Buk in Bosnia and Herzegovina, near but outside of NP Una on 11.05.2016 (Photo Josip Kusak).

Our LC project(s) continues to attract young people from Croatia and around the world and continue to serve as training polygon for future (and already grown up) wolf-lynx-bear researchers, conservationists and educators. During 2016, our project accepted seven foreign students/researchers/conservationists to work and to learn about LC research and conservation, within various frames of engagement in the lab, in the field or both.



Peter Haswell, a graduate biologist and assistant professor at the School of Biological Sciences at Bangor Prifysgol. He can hardly be called a guest since he is participating and greatly contributing to the project since 2011.

Currently, Peter participated in research of wolves in Croatia for the third year in a row in the period from 01.07.2015 to 30.09.2015. Peter continued to collect data for his doctoral thesis, advised by prof. dr. Josip Kusak and prof. dr. Matt W. Hayward (School of Biological Sciences, Bangor University, Bangor, Gwynedd, UK). Peter carried out field work in the area of Plitvice Lakes National Park and has spent a total of 53 days in the Plitvice area.



Daniele De Angelis, a graduated MS student from the University of Rome, spend five days on the project during spring 2016. He got the scholarship for PhD project on bear movements in Croatia and Italy and is intensively working on it. His PhD thesis will be based on the merged data from bear telemetry tracking in Italy and in Croatia and his two mentors are Paolo Ciucci and Josip Kusak.



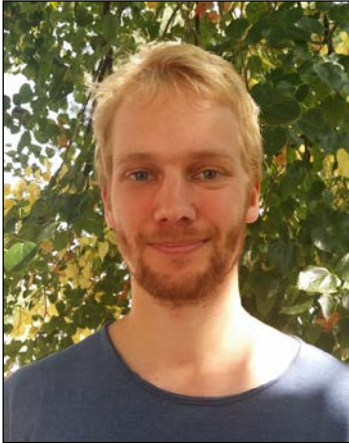
Jacopo Morelli, a graduate student of veterinary medicine from University of Pisa, was participating in all ongoing activities on large carnivores (brown bear, wolf and lynx) projects and has spent 15.7 days in the field during 2016. Main focus of his work was monitoring physiological parameters during chemical immobilization of the bears.



Nathan Dee, a graduate student of Conservation Biology at NYU's Gallatin School of Individualized Study has spent a total of 51.9 days in the field assisting during wolf capturing project as a part of his practical education that enhanced his understanding of the natural world.



Massimiliano Balasso Krisa is a graduate student at School of Biological Sciences at Bangor Prifysgol. He has spent a total of 13.7 days at our project, but primary working, helping to Pete Haswell in collecting the data for his PhD thesis.



Tomas Meijer is a graduate student at the University of Amsterdam - at which he studies the master track Ecology & Evolution. He stays from 01.09.2016 until 30.04.2017. The purpose of his stay is a research project (internship) to build up some practical experience and broaden knowledge. He came specifically to learn more about large carnivores and large carnivore studies, which are very rare/limited in the Netherlands. He also thinks that going abroad is a very useful experience as a person to learn more about himself because it is often more challenging than staying at home, so it is not just purely educational motives!



Julia Kamp is a graduate student on Master programme Forest and Nature Conservation from the Faculty of Veterinary Medicine University of Wageningen, The Netherlands. Main topic of her work is analysing data from camera traps using CameraBase and ArcGIS.



Several Croatian graduate students of veterinary medicine are constantly involved in project activities on voluntary basis. Here on the picture are Mateja Stipić, Tomas Meijer and Ira Topličanec, measuring, dissecting and taking tissue samples from testicles of hunted bears. Marina Habazin and Daria Octenjak were major assistance for entering data from collected bear scats in the online database (http://medvedi.mbase.org/bears/genetics/samples/statistics_public/all).



Figure 3: Foreign students (Daniele De Angelis, Jacopo Morelli and Nathan Dee) preparing traps for the beginning of trapping season in 2016. (Photo J. Kusak).



Figure 4: Nathan Dee (USA), Josip Kusak (CRO), Daniele De Angelis (ITA) and Ivica Matovina (CRO) in front of newly (2016) purchased Land Rover Defender. (Photo J. Kusak).

On 01.10.2016 Josip Kusak was invited by German NGO NABU (BAG Wolf) to participate at meeting named “Herdenschutz 2.0”. This meeting was the follow-up of the International Wolf Conference in Wolfsburg, Germany, held between 24.09.2015 to 26.09.2015. Josip Kusak was invited to give a talk and answer questions about ways of protecting livestock against wolves.

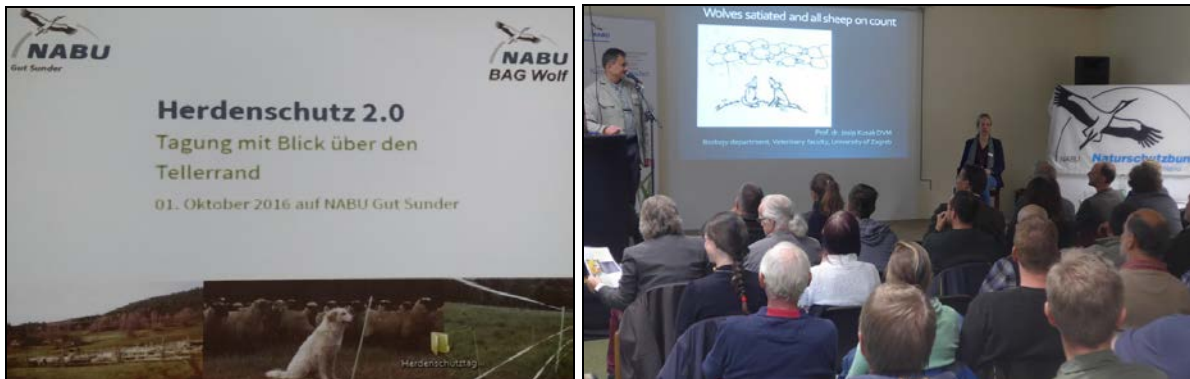


Figure 5: and Figure 6 Josip Kusak, giving a presentation at “Herdenschutz 2.0” meeting organized by NABU at NABU Gut Sunder on 01.10.2016.

Josip Kusak and Jasna Jeremić (State Institute for Nature Protection) held five meetings/workshops to organize collecting of wolf scat samples for the genetic analysis and the determination of the minimal number of wolves in Croatia. This is the first such action which should cover the whole Croatia and give more accurate and credible number of wolves in Croatia. Invited was personnel working in nature conservation on state and county level, as well as any other individuals (hunters, mountaineers, nature conservation NGO members, etc.) interested to participate in the action on voluntary basis. A total of 97 participated on five meetings held across wolf range in Croatia, from Gorski kotar all the way to Dubrovnik.

Additional purpose of these meetings was to encourage further cooperation with hunters and others in gathering data in the field in the form of recording observations signs of the wolf. On that occasion, Josip Kusak and Jasna Jeremić devoted to answer inevitable questions of hunters about reasons why for the fourth year in a row a hunting quota on wolves was not approved.



Figure 7 and Figure 8: Josip Kusak, Jasna Jeremić and participants of the meeting for genetic sampling of wolves by collecting wolf scats Sinj (Dalmatia) on 15.06.2016.



Figure 9 and Figure 10: Josip Kusak and participants (smelling wolf scats!) on the meeting for genetic sampling of wolves by collecting wolf scats Šibenik (Dalmatia) on 17.06.2016.



Figure 11, Figure 12 and Figure 13: Josip Kusak, Czechoslovakian wolf-dog (brought by wolf enthusiast and meeting participant) and one of participants (smelling wolf scats!) on the meeting for genetic sampling of wolves by collecting wolf scats in Crni Lug (Gorski kotar) on 16.06.2016.



Figure 14 and Figure 15: Participants on the meeting for genetic sampling of wolves by collecting wolf scats in Čilipi near Dubrovnik on 26.09.2016 and Muljava near Karlovac town on 27.09.2016.

During these meetings, all comments, complaints, ideas of hunters and other participants regarding wolf management were discussed or at least noted for later consideration by the Comity for Large Carnivores.

On 23.04.2016, a meeting about wolf appearance in the area of Petrova gora, was organized by “Local Agency Group” (LAG), which is devoted to the rural development of the area. Wolves were absent in this area for a long time, but they seems to settles there recently. Because of this, locals (primary farmers) became concerned about wolves and called authorities to discuss what can be done. Jasna Jeremić from the Agency for Nature and Environment arranged the cooperation with LAG organized a meeting where Josip Kusak was invited to explain about wolves and together with Jasna Jeremić from the Agency, explain to locals what they can expect with wolves being present in the area and what the government can do within the frame of the current Wolf management Plan.



Figure 16 and Figure 17: A meeting about wolf appearance in the area of Petrova gora was organized by Local Agency Group (LAG) on 23.04.2016. Josip Kusak (VEF), and Jasna Jeremić from Agency for Nature and Environment, were invited to answer on questions and explain about biology and wolf conservation in Croatia.

This year we again performed a training workshop for Wolf and Lynx Emergency Team and Bear emergency team, together with the training for Damage experts in Kuterevo on 21.09.2015 to 22.09.2015. The workshop had the aim of further education on how to deal and act in situations when large carnivores are causing problems or when they get in trouble. The workshop consisted of one day of theoretical sessions and one day of practical training. On practical part of workshop, the measurements and taking samples of dead animals were trained.



Figure 18 and Figure 19: Theoretical part of the Workshop for large carnivores' emergency teams and for damage inspectors, Kuterevo, Croatia 10.11.2016. (Photos Đuro Huber)



Figure 20 and Figure 21: Practical part of the Workshop for large carnivores' emergency teams and for damage inspectors, Kuterevo, Croatia 11.11.2016. Handling of tranquilized bear included X-raying of hind part because of bear limping, while wolf practical work included the training for external examination, measuring, necropsy and sampling of a dread wolf (Photos J. Kusak and Julia Kamp).

The activities (field work, meeting, workshops) on bears

The description of work activities funded by LIFE DINALP BEAR project is described here. The activities on bears were mainly done by Đuro Huber and Slaven Reljić and are presented separately to wolf and lynx work. In the period reported Đuro Huber traveled a total of 53 times, on 138 days and visited 10 different countries: Albania (1 mission), Montenegro (1), Poland (2), Italy (4), Slovenia (7), Bosnia and Herzegovina (2), Macedonia (1). USA (1), Portugal (1), and Croatia (48). There is a minor overlap with previously describe activities.

Table 1: Travels to Plitvice Lake NP related to bear work.

N	Dates	Mission	People	Days
1	30.10.2015.	Collar search	3	1
2	04.11.2015.	Collar search	3	1
3	11.11.2015.	Collar search	3	1
4	14.11.2015.	Collar search +	4	1
5	08.04.2016.	PLNP 67 years anniversary - invited talk	48	1
6	14-18.04.2016.	Traps setting (Duško Čirović, Dušan Toholj)	5	4
7	23.04.2016.	B50 Nikola capture	4	1
8	25-26.04.2016.	Traps setting	4	1
9	02-04.05.2016.	Traps and telemetry (Aleksandar Perović, Aleksandar Stojanov,	5	3
10	08-09.05.2016.	B51 Jakov capture	4	2
11	09-12.05.2016.	B52 Daniel capture	3	3
12	18-19.05.2016.	Traps + pick road killed bear (RH170) at Sv. Rok	3	2
13	19-20.05.2016.	B52 Daniel recapture	3	2
14	23-25.05.2016.	LIFE BEAR Steering meeting Traps cheeks	35	3
15	26-27.05.2016.	B53 Jasna capture	4	2
16	31.05-01.06.2016.	Traps removed	3	2
17	18-19.09.2016.	Tatra rangers visit, telemetry	2	2
18	08.10.2016.	B48 Lana telemetry	2	1
		TOTAL		33

Table 2: Other Croatian travels related to bear work.

N	Dates	Location	Mission	People	Days
1	20.04.2016.	Zaprešić	Bear signs search	2	1
2	01-02.06.2016.	V.Gorica-Hotnja	Gabriel Schwaderer visit	2	2
3	10.06.2016	NP Risnjak	Karlovac students	50	1
4	04.07.2016.	Zagreb Zoo	Bear Goran handling (tumor)	8	1
5	23.09.2016.	Gerovo	Bear managers workshop	42	1
6	09.09.2016.	Gorski kotar Samarske stijene	B43 Slavko dens	2	1
7	10.11.2016.	Krasno	Intervention teams workshop	34	1
8	11.11.2016.	Kuterevo	KB15 Marko handling, IT talks	20	1
					9

Table 3: International events where Đuro Huber and Slaven Reljić were invited for participation and presentations.

N	Dates	Location	Mission	Participants	Days
1	20-24.10.2015.	Tirana (Albania)	Balkan lynx symposium	70	3
2	24-27.10.2015.	Podgorica, Gusinje (Montenegro)	Bear conservation workshop	16	3
3	20.11.-04.12.2015.	Krakow (Poland)	Bear health project preparation	3	15
4	19.-21.01.2016.	Valderi (Italia)	LIFE DINALP BEAR and WISO platform meeting	32	2
5	22.01.2016.	Cuneo (Italia)	Wolf in Alps meeting	520	1
6	23.01.2016.	Ljubljana (Slovenia)	Bear day (LIFE DINALP BEAR)	102	1
7	27-28.01.2016.	Ljubljana (Slovenia)	LIFE BEAR meeting (monitor)	23	2
8	29.01.2016.	Delnice (Croatia)	LIFE BEAR meeting (highway visit)	14	1
9	04.02.2016.	Ljubljana (Slovenia)	LYFE LYNX project preparation	25	1
10	18-19.02.2016.	Banja Luka (B&H)	Bear management workshop	44	2
11	19.03.2016.	Crni lug (Croatia)	Bear friendly day (LIFE BEAR)	43	1
12	14.04.2016.	Karlovac (Croatia)	Nature and wildlife Symposium	150	1
13	19.04.2016.	Ljubljana (Slovenia)	LIFE LYNX project preparation	18	1
14	11.05.2016.	NP Una (B&H)	B42 Buk collar and den found	4	1
15	20.05.2016.	Ljubljana (Slovenia)	Irena Kavčič PhD defending	28	1
16	23-25.05.2016.	Plitvice (Croatia)	LIFE BEAR Steering meeting	35	3
17	11-25.06.2016.	Alaska (USA)	IBA 24 Conference	450	15
18	08-16.09.2016.	Macedonia	NATURA 2000 project	3-9	9
19	18.09-2016.	Plitvice (Croatia)	Tatra NP (Poland) rangers visit	50	1
20	20.09.2016.	Ljubljana (Slovenia)	Maja Jelenčič PhD defending	50	1
21	21-22.09.2016.	Ljubljana (Slovenia)	LIFE BEAR Steering meet (monitor)	25	2
22	22-23.09.2016.	Kuterevo (Croatia)	Tatra NP (Poland) rangers visit	50	2
23	02-06.10.2016.	Perugia (Italy)	LIFE STRADE invited talk	80	5
24	12-16.10.2016.	Teramo (Italy)	LIFE PLUTO invited talk	130	5
25	18-28.10.2016.	Krakow (Poland)	Bear health project preparation	3	11
26	30.10-02.11.2016.	Porto (Portugal)	Large Carnivore for Europe meet	28	3
27	03-05.11.2016.	Porto (Portugal)	CIBIO syposium – invited talk	125	2
	SUM				95

Some of the events are highlighted bellow with photographs.



Figure 22: 20-24.10.2015. Tirana (Albania), Balkan lynx symposium



Figure 23: 24-27.10.2016. Podgorica, Gusinje (Montenegro), Bear conservation workshop



Figure 24: 20.11.-04.12.2016 Krakow (Poland) „Bear health“ project preparation



Figure 25: 19.-21.01.2016. Valderi (Italia), LIFE DINALP BEAR and WISO platform meeting



Figure 26: 22.01.2016. Cuneo (Italia), Wolf in Alps meeting



Figure 27: 23.01.2016. Ljubljana (Slovenia), Bear day (LIFE DINALP BEAR)



Figure 28: 04.02.2016. Ljubljana (Slovenia), LYFE LYNX project preparation.



Figure 29: 27-28.01.2016. Ljubljana (Slovenia), LIFE BEAR meeting (monitor).



Figure 30 and Figure 31: 29.01.2016. Delnice (Croatia), LIFE BEAR meeting (highway visit).



Figure 32 and Figure 33: 18-19.02.2016. Banja Luka (B&H), Bear management workshop.



Figure 34 and Figure 35: 19.03.2016. Crni lug (Croatia), Bear friendly day (LIFE BEAR)

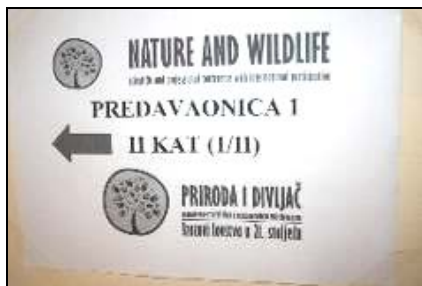


Figure 36 and Figure 37: 14.04.2016. Karlovac (Croatia), Nature and wildlife Symposium



Figure 38 and Figure 39: 11.05.2016. NP Una (B&H), B42 Buk collar and two dens found



Figure 40: 20.05.2016. Ljubljana (Slovenia), Irena Kavčič PhD defending



Figure 41: 20.09.2016. Ljubljana (Slovenia), Maja Jelenčič PhD defending



Figure 42 and Figure 43: 23-25.05.2016. Plitvice (Croatia) LIFE BEAR Steering meeting and field trip.



Figure 44: 23-25.05.2016. Plitvice (Croatia) LIFE BEAR field trip



Figure 45: 11-25.06.2016. Alaska (USA), IBA 24 Conference.



Figure 46: 11-25.06.2016. Alaska (USA), IBA 24 Conference.



Figure 47 and Figure 48: 08-16.09.2016. Macedonia, NATURA 2000 project.



Figure 49: 18.09-2016. Plitvice (Croatia), Tatra NP (Poland) rangers visit



Figure 50: 22-23.09.2016. Kuterevo (Croatia), Tatra NP (Poland) rangers visit



*Figure 51: 02-06.10.2016. Perugia (Italy)
LIFE STRADE invited talk*



*Figure 52: 12-16.10.2016. Teramo (Italy)
LIFE PLUTO invited talk*



Figure 53: 30.10-02.11.2016. Porto (Portugal), Large Carnivore Initiative for Europe meeting



Figure 54: 03-05.11.2016. Porto (Portugal), CIBIO symposium – invited talk



Figure 55: 23.09.2016. Gerovo Bear managers workshop



Figure 56: 11.11.2016. Kuterevo KB15 Marko handling, IT talks



Figure 57: and Figure 58: 09.09.2016. Gorski kotar Samarske stijene, B43 Slavko dens search and measuring.

Field work on wolves and lynx - overview

The description of work activities, funded partly by UKWCT, is described here. Josip Kusak spent a total of 117.3 days doing the field work on the project. Slaven Reljić, PhD student and veterinarian, who have been primary, contracted to work on bear part of our projects, spent 3.3 days, helping on the wolf and lynx work, while Đuro Huber spent 4.7 days on the field part of the project work.

A considerable contribution to the wolf field work was given by Peter Haswell, Graduate teaching assistant and PhD researcher at School of Biological Sciences Prifysgol, Bangor University, UK. **Pete spent 53 days doing field work in Croatia during 2016.** Pete continued the work on his PhD thesis in Plitvice lakes NP, but he was also contributing in searches for wolf signs, sample collecting and work with camera traps. Other people that contributed are listed in Table 3. Majority of other persons participated in management meetings, and some contributed during filed work.

Table 4: Summary table of work activities on the project in the period from 12 November 2015 to 01 March 2017 (475 days), when we collected 191.8 work days and where up to four persons were doing filed work at the same time.

ACTIVITY OBJECTIVE	N ACTIVITIES	N DAYS
Entering data	3	0.3
LC comity meeting	4	0.3
Monitoring meeting	4	4.5
Project meeting	2	0.1
Telemetry	3	5.8
Trapping	12	173.7
Trapping course	1	0.7
Wolf meeting	3	3.3
Wolf-Lynx management meeting	1	0.1
Workshop	2	3.0
	35	191.8

Note: It is not entirely possible to accurately count all activities because often 2-3 or more things were done at once (Like: trapping and telemetry, collecting dead wolves, checking wildlife crossings places and telemetry during the same trip).

Table 5: Detailed table of work activities related to wolf and lynx work on the project in the period from 12 November 2015 to 01 March 2017 (475 days), when we collected 191.8 work days and where up to four persons were doing field work at the same time. Activities marked with green were done by the use of UKWCT funding.

#	ACTIVITY N	ACTIVITY OBJECTIVE	START	END	N DAYS
1	590	LC comity meeting	12.11.2015 10:00	12.11.2015 13:11	0.13
2	591	Trapping	17.11.2015 07:00	17.11.2015 21:00	0.58
3	592	Monitoring meeting	19.11.2015 10:00	19.11.2015 13:15	0.14
4	593	Trapping	11.12.2015 07:00	12.12.2015 20:00	1.54
5	594	Trapping	19.12.2015 07:00	19.12.2015 21:30	0.60
6	595	Project meeting	13.01.2016 13:00	13.01.2016 14:30	0.06
7	596	Wolf-Lynx management meeting	05.02.2016 09:00	05.02.2016 12:00	0.13
8	597	Telemetry	06.02.2016 06:00	07.02.2016 19:15	1.55
9	598	Workshop	18.02.2016 06:00	19.02.2016 17:00	1.46
10	599	Project meeting	03.03.2016 00:00	03.03.2016 01:00	0.04
11	600	Monitoring meeting	07.03.2016 09:00	07.03.2016 11:00	0.08
12	601	Trapping	14.03.2016 06:30	15.03.2016 20:15	1.57
13	602	LC comity meeting	23.03.2016 14:05	23.03.2016 15:45	0.07
14	603	Trapping	29.03.2016 04:00	01.04.2016 22:48	3.78
15	604	Trapping	08.04.2016 06:00	08.04.2016 20:30	0.60
16	605	LC comity meeting	11.04.2016 10:30	11.04.2016 12:00	0.06
17	606	LC comity meeting	11.04.2016 13:39	11.04.2016 15:00	0.06
18	607	Telemetry	15.04.2016 06:00	15.04.2016 21:20	0.64
19	608	Wolf meeting	23.04.2016 06:00	23.04.2016 21:45	0.66
20	609	Wolf meeting	30.04.2016 07:00	30.04.2016 20:00	0.54
21	610	Trapping course	14.05.2016 06:10	14.05.2016 22:20	0.67
22	611	Monitoring meeting	18.05.2016 08:37	20.05.2016 22:00	2.56
23	612	Trapping	24.05.2016 06:30	01.06.2016 17:45	8.47
24	613	Trapping	03.06.2016 16:00	14.06.2016 20:00	11.17
25	614	Trapping	20.06.2016 06:21	22.07.2016 16:25	32.42
26	615	Trapping	23.06.2016 20:58	05.09.2016 20:58	74.00
27	616	Telemetry	23.08.2016 07:00	26.08.2016 20:25	3.56
28	617	Trapping	14.09.2016 07:30	24.09.2016 17:01	10.40
29	618	Monitoring meeting	26.09.2016 05:00	27.09.2016 23:30	1.77
30	619	Wolf meeting	30.09.2016 14:30	02.10.2016 16:30	2.08
31	620	Trapping	08.10.2016 07:30	05.11.2016 20:00	28.52
32	621	Workshop	10.11.2016 06:00	11.11.2016 20:00	1.58
33	624	Workshop	18.01.2017 11:17	19.01.2017 11:30	1.01
34	3265	Entering data	01.04.2016 09:00	01.04.2016 10:30	0.06
35	3266	Entering data	22.12.2015 11:12	22.12.2015 13:30	0.10
36	3267	Entering data	15.11.2016 14:49	15.11.2016 18:13	0.14
		TOTAL			191.8

Table 6: List of persons participating on the project in the period from 12 November 2015 to 01 March 2017. (475 days). During this time a total of 77 different persons participated in project activities, resulting in 458 person/days.

#	PERSON	N ACTIVITIES	N DAYS
1	Balasso Krisa, Massimiliano	1	13.76
2	Bosiljevac, Damir	2	1.42
3	Bračulj, Zoran	1	1.21
4	Budor, Ivica	1	0.14
5	Cross, Alasdair	1	0.30
6	Čorak, Josip	1	0.31
7	Čirović, Duško	1	1.15
8	Čorak, Ivica	1	0.31
9	De Angelis, Daniele	3	4.96
10	Dee, Nathan	3	51.86
11	Delač, Zvonimir	1	0.44
12	Dizdarević, Una	1	0.14
13	Domazetović, Zrinka	4	1.47
14	Fontana Pudić, Karmela	1	0.13
15	Gašić, Branislav	1	1.15
16	Gomerčić, Tomislav	1	0.06
17	Gospočić, Stjepan	1	0.13
18	Grgas, Ana	1	1.21
19	Groff, Claudio	1	0.45
20	Gužvica, Goran	1	0.14
21	Hadzovac, Ivana	1	0.08
22	Hak, Igor	1	1.21
23	Hamidović, Daniela	4	0.46
24	Haswell, Peter	1	53.00
25	Heap, Tom	1	0.30
26	Huber, Đuro	12	4.70
27	Huber, Juraj	1	0.08
28	Hunter, Jim	1	0.45
29	Ilić, Krešimir	2	0.18
30	Ilić, Milovan	1	1.15
31	Jelenić, Ivana	2	0.13
32	Jeremić, Jasna	13	8.92
33	Jobin, Anja	1	0.45
34	Kamp, Julia	1	28.52
35	Katušić, Luka	2	0.15
36	Knauer, Felix	1	0.45
37	Kokić, Stipe	1	1.21
38	Kulić, Blaženka	1	1.21
39	Kusak, Josip	31	117.34
40	Kusak, Pavao	1	3.56
41	Kusak, Tanja	8	8.85
42	Lupret-Obradović, Svjetlana	3	0.42
43	Ljubičić, Marko	1	1.21
44	Magdić, Nikola	1	0.21
45	Majić-Skrbinšek,	1	0.45

#	PERSON	N ACTIVITIES	N DAYS
	Aleksandra		
46	Matovina, Ivica	9	75.41
47	Meier, Martina	1	0.70
48	Meijer, Tomas	2	27.45
49	Modrić, Marko	2	0.70
50	Morelli, Jacopo	2	15.67
51	Novosel, Anđelko	1	0.31
52	Pavlinić, Maja	1	2.52
53	Raos, Petar	1	0.14
54	Reljić, Slaven	6	3.40
55	Rendulić, Željko	2	0.52
56	Sikora, Časlav	1	0.33
57	Sindičić, Magda	1	0.06
58	Sjeničić, Jovica	1	0.25
59	Slijepčević, Mirjana	1	0.06
60	Slijepčević, Vedran	6	5.34
61	Šabić, Boris	1	1.21
62	Šlopar, Neven	1	0.14
63	Špoljarić, Danijel	1	0.39
64	Štahan, Željko	1	0.21
65	Štrbenac, Ana	5	1.85
66	Šupe, Ivica	1	1.21
67	Toholj, Dušan	1	1.15
68	Tomaić, Marin	1	0.14
69	Tomljanović, Kristijan	1	0.14
70	Tomljanović, Marko	2	0.19
71	Topić, Ramona	1	0.13
72	Trbojević, Igor	1	1.15
73	Urli, Lucija	6	0.58
74	Vivoda, Bojan	1	0.45
75	Vukelić, Matea	1	0.08
76	Vuković, Dalibor	2	0.62
77	Zupan, Irina	1	0.07
TOTAL PERSON/DAYS			458

FIELD WORK

During 2016, wolf and lynx work was done in Plitvice Lakes National Park and in Gorski kotar. It consisted of winter snow-tracking of wolves and lynx and counting of wolves in packs in and around of PLNP area, searching for wolf signs, howling testing of tracked packs, searching for wolf dens and proofs of wolf reproduction. We did one aerial search for one dropped lynx collar too. We used automatic camera to check for the presence of wolves in the area and to document all other facts, like reproduction, presence of other wild animals, primary lynx.

Searches for signs of wolf and lynx presence

During 2016, searching for signs of wolf presence was done inside Plitvice Lakes NP. The search for the presence of wolves was done during the winter spring, summer and autumn, for wolf tracks in three packs in and around PLNP. The size of searched area was 749.7 km², or almost twice the size of PLNP. However, very few signs of wolves were found during 2016.

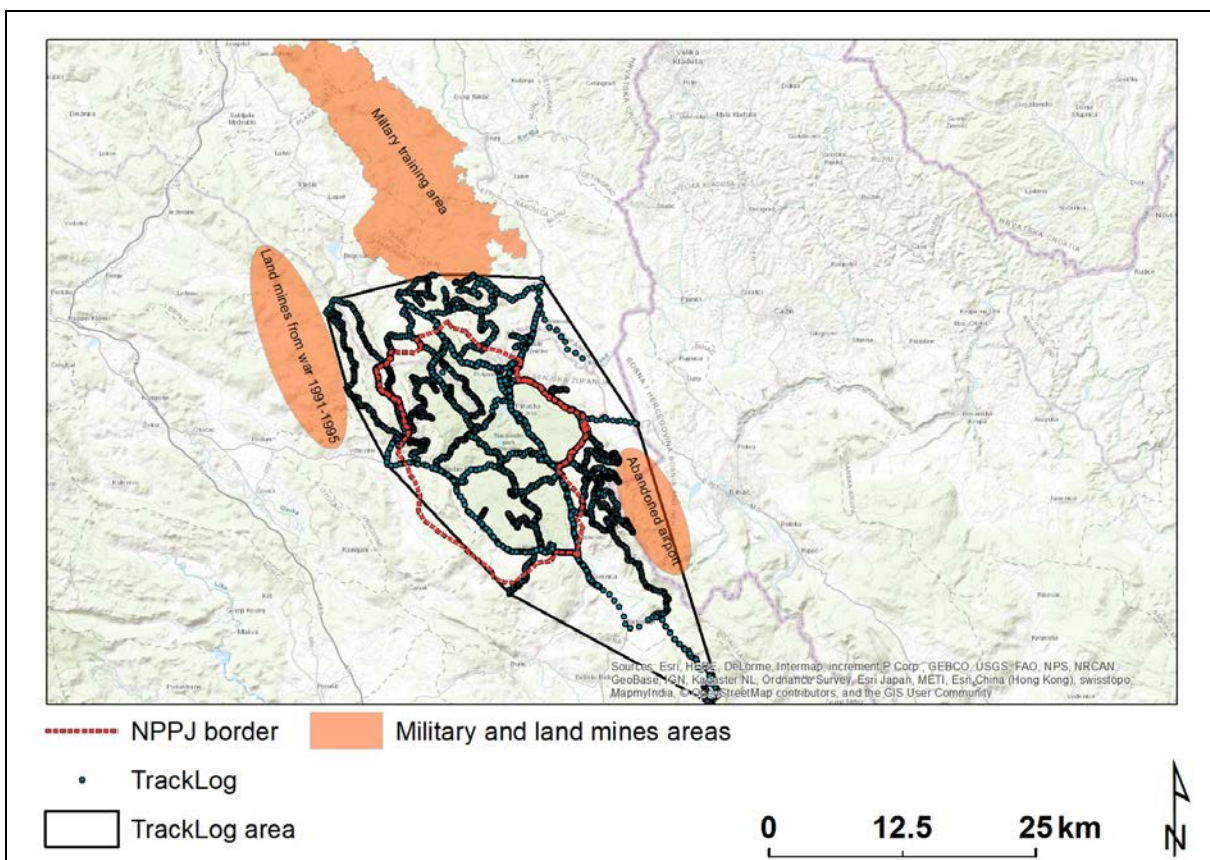


Figure 59: Map of area searched for signs of wolves and lynx during 2016. One military (NATO!) area and two areas (part of Mala Kapela mountain and Željava abandoned military airport) both with land mines, were inaccessible for sign searching.

Signs of wolf presence (footprints, scats, howling, and scratch markings) were found in 34 occasions only (Table 7). Only six(!) signs of wolf presence were recorded inside the borders of PLNP, while remaining 28 signs were found outside of the border of the PLNP (Figure 60). Our conclusion was that during 2016 not a single wolf pack found earlier (in 2014 and 2015) did not have litter inside PLNP. The reasons for this could be that either some of wolf packs did not have a litter in 2016 at all or that they decided to have it outside of PLNP borders. This was most likely the case with Plješevica pack, for which we found most signs close to the border with B&H.

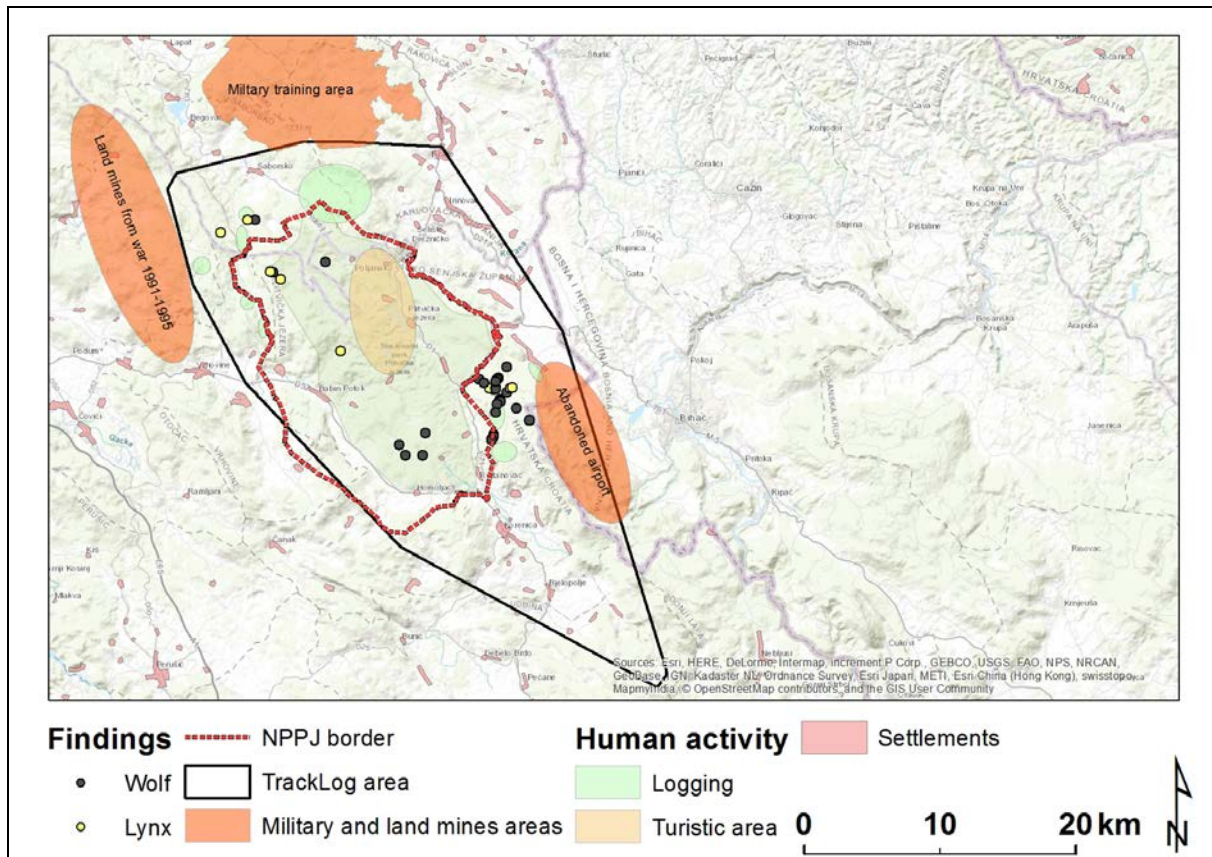


Figure 60: Wolf and lynx signs were found in and around of PLNP during 2016, but majority of signs were found outside of NPPJ borders. The study area is a mosaic of “wolf friendly” areas (military and land mines areas) and “wolf unfriendly areas” (settlements, logging areas and especially PLNP touristic area around lakes).

We were searching for wolf signs only in area available for searching. Around PLNP there are three areas inaccessible to people. North of PLNP is one large (same size as PLNP) military training ground with forbidden access, west of PLNP is the area of Mala Kapela mountain still “infested” with land mines from the last war, while at the east of PLNP, at the very border with B&H, is another military facility (Željava abandoned airport of Yugoslav army), where the access is also forbidden because of land mines around the airport. In the same time, the study area has areas with intensive human use. This includes permanent settlements, roads, logging areas and in particular touristic area around lakes, which receives about 1.4 million (!!!) tourists yearly. We believe that wolf packs were using quiet areas (military and land mine areas) during 2016 most of the time. We have also documented (by automatic cameras) rather intensive use of areas outside PLNP, where besides logging operations, some unregulated and uncontrolled touristic activities (like “herds” of bikers), occasionally happen.



Figure 61: and Figure 62: Roaring “herds” of moto-bikers occasionally do wild rides in forests around PLNP additionally contributing to generally high disturbance of wildlife in and around PLNP.

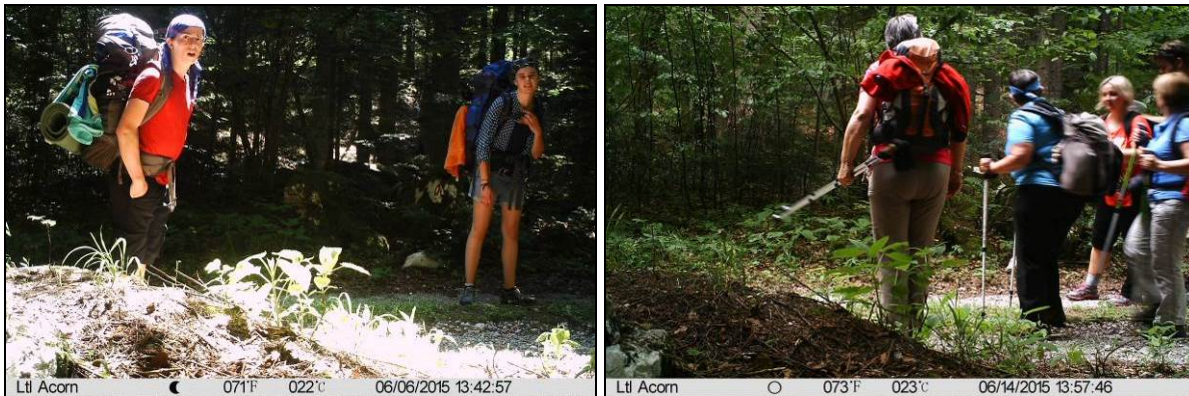


Figure 63: and Figure 64: Hiking tourists in PLNP during the summer 2015. The same was documented during 2016 too.



Figure 65: and Figure 66: The number of tourists on bikes was also rather high in PLNP during the summer 2015. The same was documented during 2016 too.

These preliminary results indicate that in PLNP wolf activity and space use may be under the strong influence of touristic activity during the touristic season. More than one millions of tourists visit PLNP every year! The great majority of them walks only around lakes, but it seems that there is enough of tourists who go further, even on closed roads, and they drive wolves away from most of NP areas. This is just an impression and assumption, which will hopefully be documented by targeted study using automatic cameras. For the management purposes of the PLNP, it would be important to evaluate if touristic activity is significantly influencing wolves and other wildlife. The first evidences of human use of parts of NP away from lakes were collected by the use of automatic cameras, but these data will be processed and analysed later.

Lynx signs were found on 8 sites only and in spite of rather intensive searching for lynx signs. Observations (reports) of jackal presence found in 2015 were not reconfirmed during 2016.

Table 7: Summary data about signs of wolf and lynx and some other species recorded in the study areas during 2015 surveys.

SIGN	SPECIES	N
Footprint	Lynx	3
Footprint	Wolf	3
Scat	Lynx	4
Scat	Wolf	21
Scratch mark	Wolf	10
Visual	Lynx	1
TOTAL		42

Wolf trapping in Plitvice lakes National park (PLNP)

First traps were set on 28.05.2016 and activated on 06.06.2016. During the spring, part of the summer and autumn, traps were active during four periods lasting 18.9, 30.7, 29.6, 14 and 13.9 days respectively. This was in total **107.3 days of the effort for capturing** and collaring of wolves in PLNP during 2016. During this period traps were set on 44 different sites, primary targeting the Plješevica pack, for which we had some evidences (signs) of presence in the area east of PLNP, Plješevica Mountain.

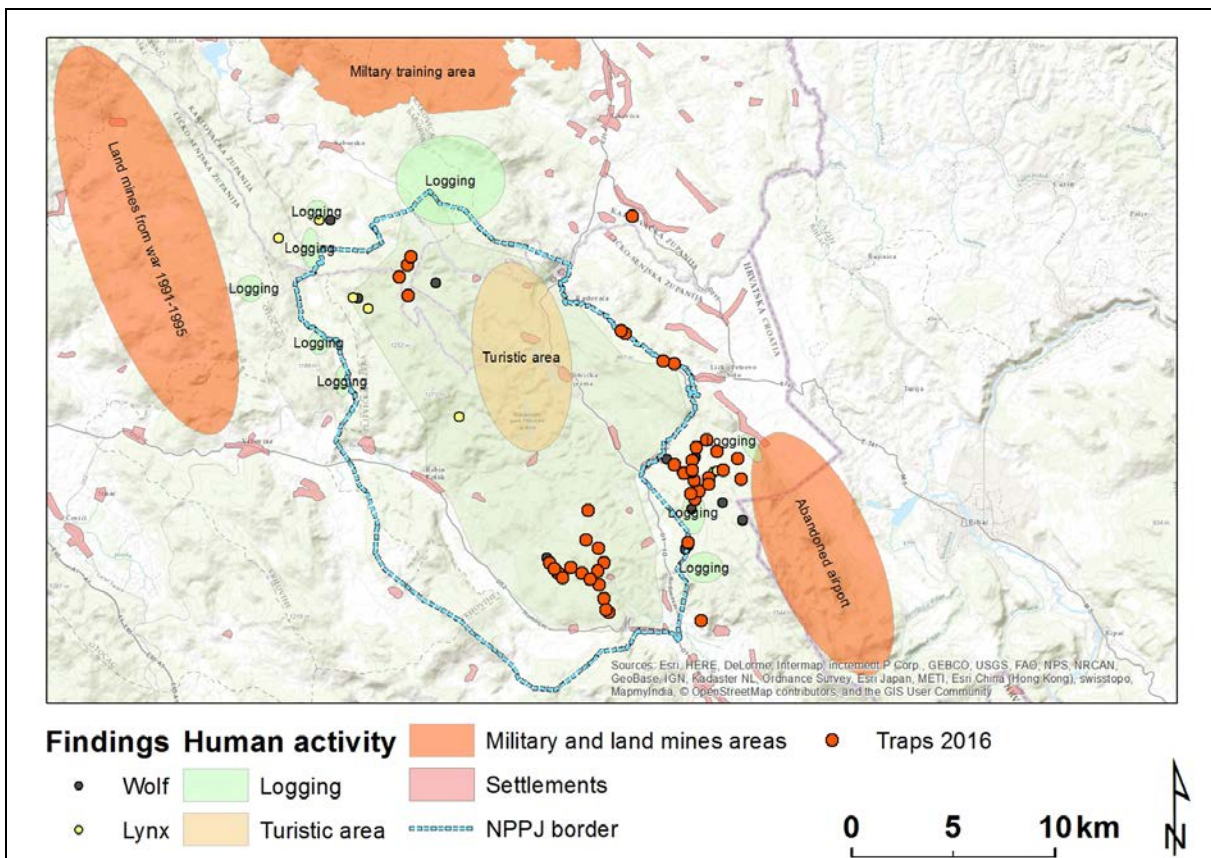


Figure 67: Observations of wolf signs and human activity then trap sites locations in PLNP during 2016.

The total daily driving for checking of all traps was 135 km. This included only trap-line checking, while signs searching, camera traps checking and radio-tracking required additional driving. In total, we invested **1667.9 trap-nights**, but did not capture any wolf. Traps were checked 1834 times. We

experienced very low frequency of wolf visits to traps (only once!), what was not enough for any wolf capture. The most numerous visitors to traps were martens, which visited our traps on 99 occasions. Two badgers, one fox and **three bears** were captured, tranquilized and released during trapping season.

Table 8: List of events on traps during 2016 trapping season in Plitvice area, in the period from 06.06.2016 to 05.11.2016.

#	EVENT	N
1	badger capture	2
2	badger pull out	2
3	badger visit	3
4	bear capture	3
5	bear visit	18
6	dog capture	1
7	foresters on site	2
8	fox capture	1
9	fox pull out	1
10	fox visit	13
11	marten visit	99
12	mole digging	1
13	nothing	1645
14	rain	1
15	unknown visit	20
16	wild boar visit	21
17	wolf visit	1
18	TOTAL	1834

Lynx trapping in Gorski kotar

Lynx trapping with box traps at marking sites is less demanding than wolf trapping since box traps are set at marking sites with available GSM signal. We can use GSM trap alarms, but with periodical checking of traps, which is being done by National park rangers or local game wardens.

Lynx capture attempts were continued from the year 2015 when Peter Haswell and Josip Kusak have set three box traps for lynx capture at known lynx marking sites in Gorski kotar. At one of these sites a funny event happened! On 03.02.2016 a sheep was captured in a box trap set inside an abandoned house, deep in the forest! We could not find out whose sheep it was, so we gave it to a local farmer.



Figure 68: A sheep captured in a box trap on Čarapine drage site on 03.02.2016.

Sheep capture did not discourage us from further waiting for lynx capture and this paid off! On 01.04.2016 an alarm SMS came from Lipovača site. We came there and have found a young male lynx captured! A lynx was captured in a box trap which was set in an old stable which was used for keeping logging horses in the past times. The animal was tranquilized, processed, released with the GPS-GSM collar. This lynx was named L12-Burni ZIP. The age was estimated to 2 years and it had a mass of 20 kg.



Figure 69: Happy crew with captured and collared lynx L12-Burni ZIP on 01.04.2016.



Figure 70: A lynx L12-Burni ZIP walking away with a collar on 01.04.2016 (Photo J. Kusak).

Lynx trapping in Plitvice lakes NP

During 2015 and 2016, NPPJ obtained two lynx collars, made two additional box traps and purchased 25 new camera traps, all to be used inside PLNP. They also provided free accommodation for researchers and all students who wanted to participate in the wolf and lynx project.

The use of camera traps and searches for lynx marking sites provided better information about lynx marking sites and traveling routes, and consequently we moved two of box traps to new locations inside PLNP during the winter and spring of 2016.



Figure 71: Nathan Dee and Josip Kusak setting a box traps in the PLNP area during the spring 30.05.2015. in PLNP (Photo J. Kusak).

On 29.03.2016 at 02:41, an alarm SMS informed us that a lynx was captured at Koturača site inside PLNP. It was a male lynx at age of four years and mass of 23 kg. It was named L11-Čorak and released with GPS-GSM collar.



Figure 72: Male lynx L11-Čorak captured in PLNP on 29.03.2016.



Figure 73: Josip Kuvsak, Vedran Slijepčević and Ivica Marovina processing tranquilized lynx L11-Čorak on 29.03.2016.



Figure 74: L11-Čorak lynx walking away after the capture and collaring on 20.03.2016 in PLNP (Photo J. Kusak).

On 06.06.2016 at 20:22, an alarm SMS informed us that a lynx was captured at Preka kosa site in PLNP.



Figure 75: Female lynx L13-Stella entering a box trap on 06.06.2016.



Figure 76: Female lynx L13-Stella in a box trap on 06.06.2016.



Figure 77: Josip Kusak darting a female lynx L13-Stella.

Captured lynx was a female, age of two years and mass of 17 kg. It was released back to nature at 23:01.



Figure 78 and Figure 79: Processing of L13-Stella in PLNP on 06.06.2016 (Photos: Jacopo Morelli).

TELEMETRY TRACKING

Lynx tracking

The collar of a lynx L09-Goran ZIP dropped from his neck after the 52 weeks of proper functioning. The GPS-GSM part of the collar stopped functioning few months earlier, but FHV and drop-off systems were still functioning OK. The most efficient way of finding dropped collar was to rent Cessna plane and do aerial search, so we did it on 15.04.2016. We checked almost the whole Gorski kotar area, found dropped collar and by the way detected VHF signal of L12-Burni Zip and some of LIFE project bears.

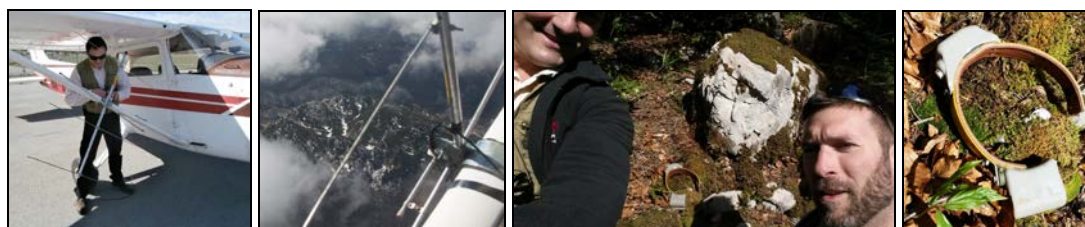


Figure 80, Figure 81, Figure 82, Figure 83: The preparation, search and finding a dropped collar of L09-Goran ZIP in Gorski kotar on 15.04.2016.

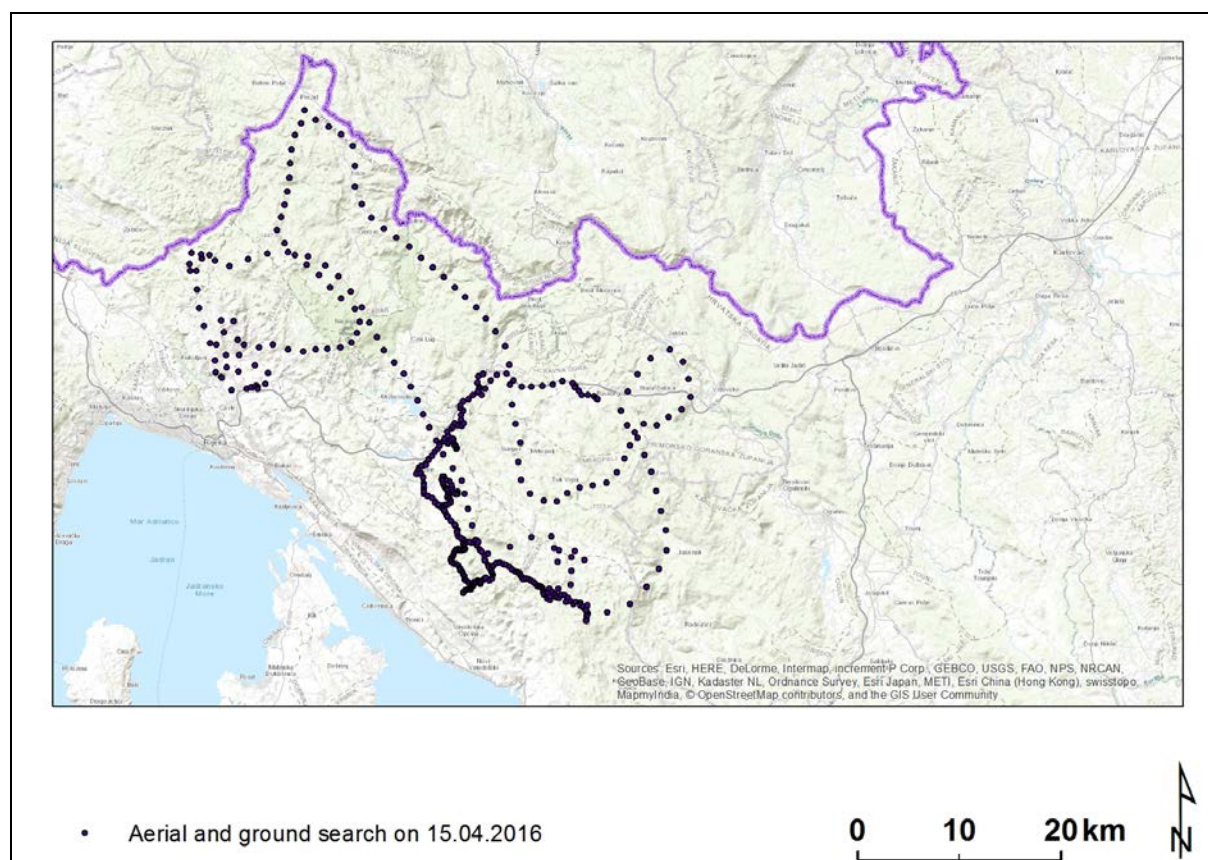


Figure 84: Track log of aerial and ground search for the collar of L09-Goran ZIP on 15.04.2016.

During 2016, telemetry tracking of three lynx, one in Gorski kotar (L12-Burni ZIP) and two in Plitvice area (L11-Čorak and L13-Stella) was done. Unfortunately, the tracking of neither of three lynx was not long enough for the calculation of home range. The longest was the tracking of L11-Čorak (167 days), while the other two lynx were tracked for 58 and 26 days only.

For lynx L12 and L13 the reason for too short tracking was confirmed collar failure since we could not detect so called "recovery" signal from collars, while animals were active, i.e. moving. Collars could not be recovered since they did not have remote triggered drop-off mechanism, which would be too big for lynx collars.

Table 9: Summary table of work tracked lynx during 2016.

ANIMAL ID	START	END	N DAYS	N LOCATIONS
L11-Čorak	29.03.2016	12.09.2016	167	901
L12-Burni ZIP	01.04.2016	29.05.2016	58	265
L13-Stella	06.06.2016	02.07.2016	26	141

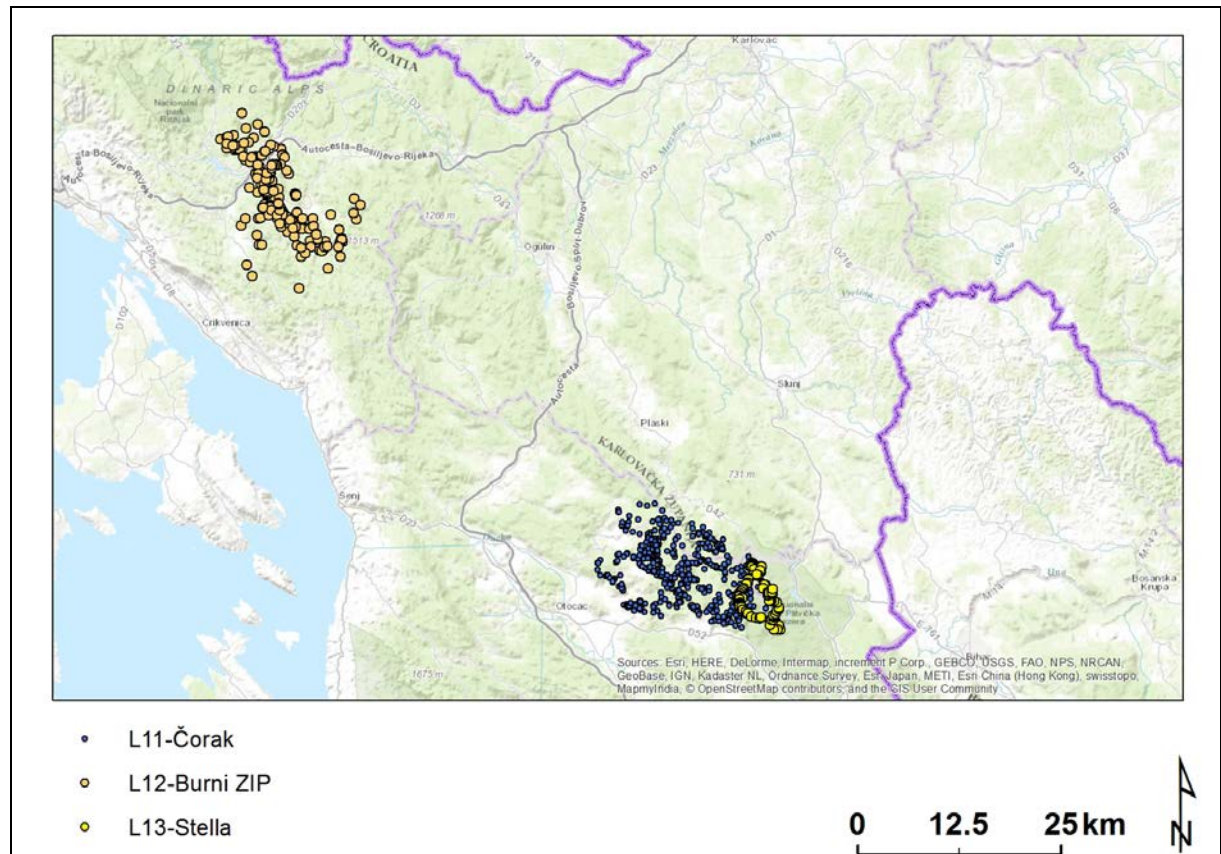


Figure 85: Locations of three GPS tracked lynx in Croatia during 2016.

FIELD WORK ON BEARS

1. Una National Park in Bosnia and Herzegovina

The tracking of the bear B41-Ljutoč has been completed already last year. This bear has been tracked for 730 days and the satellite GPS system provided a total of 5335 location. The bear moved over the area of 1627 km². B41-Ljutoč was located 1219 times in Croatia.

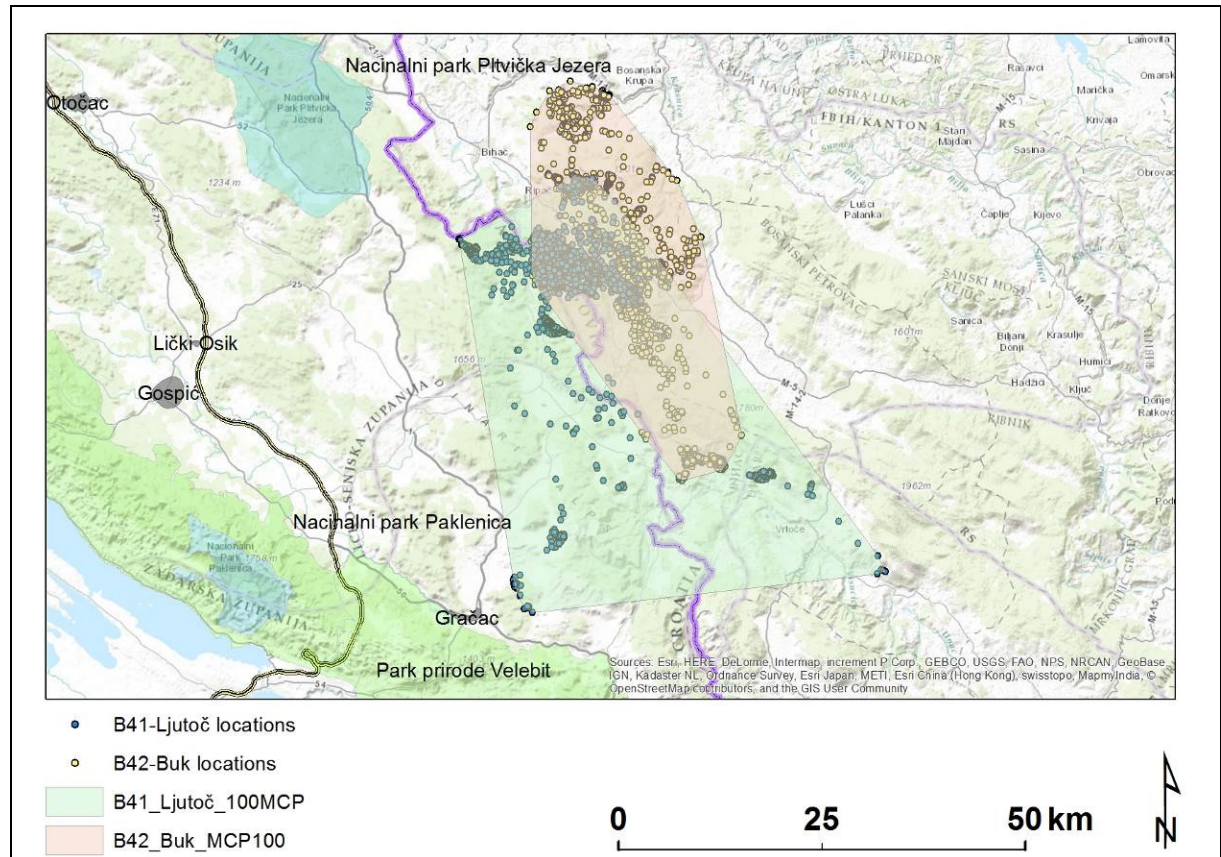


Figure 86: Locations and home ranges of two bears collared in NP Una (B&H).

Bear B42-Buk dropped the collar on 19 April 2016, as scheduled. In the meantime the bear has been relocated a total of 6851 times on the area of 764 km².

On 11th of May 2016 we picked the dropped collar within the range of that bear. The same day we located two dens where the bear Buk spent the winter 2015-2016. One was a big open nest in the middle of his range on the Bosnian side and the other one was the dug-out den less than 1 km away from the nest den.

2. Plitvice Lakes National Park

Two bears have been captured and collared with GPS devices in the Plitvice Lakes National Park in 2015.

The bear Lana (B48), female, 80 kg, was captured on 12 October 2015. Till now she is tracked for 396 days, and was relocated 4410 times. Most of the time she was within the PLNP border but she crossed the southern border several times as well.

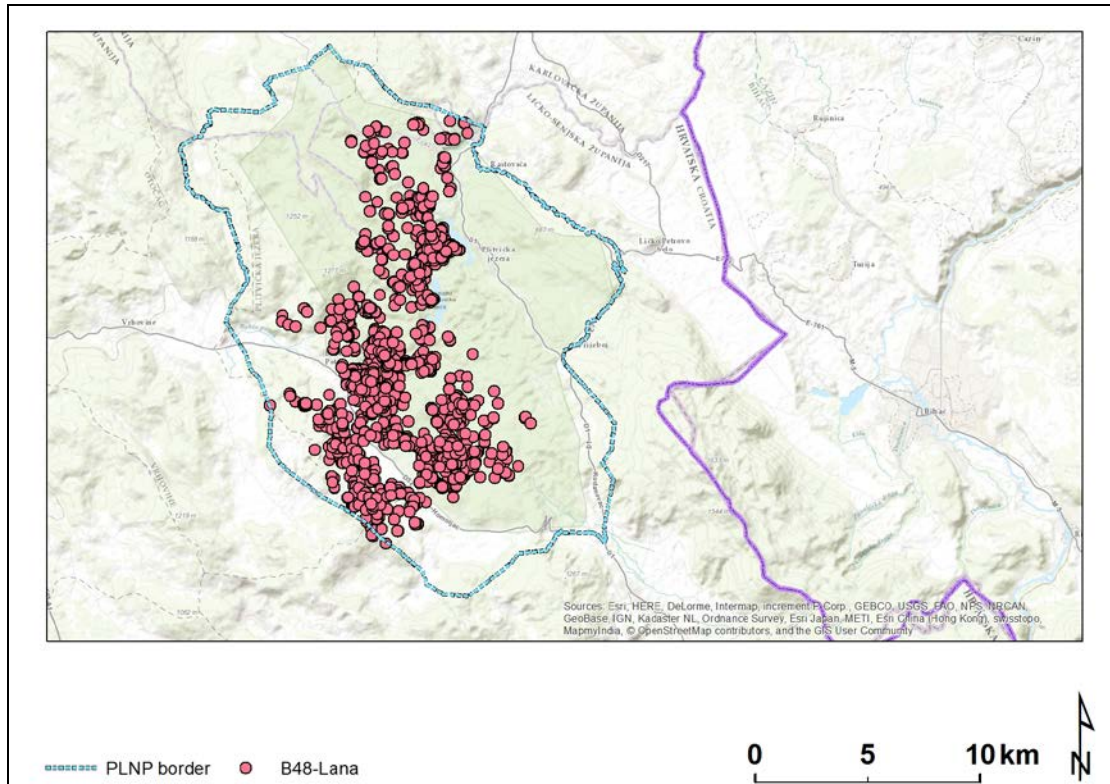


Figure 87: Locations of B48-Lana till 20 November 2016.

The bear B49- Runja, male, 184 kg, was captured on 12 October 2015. It was successfully tracked only 5 days, as on 26 October 2015 this bear took the collar off over the head.

In 2016 we captured and collared 4 different bears 5 times (one recapture).

On 02 April 2016 we captured a male **B50-Nikola** of 108 kg who took the collar over head after several days and provided no useful data,

On 08 May 2016 we captured a male cub **B51- Jakov** of 39 kg who was still accompanied with mother and two other siblings.

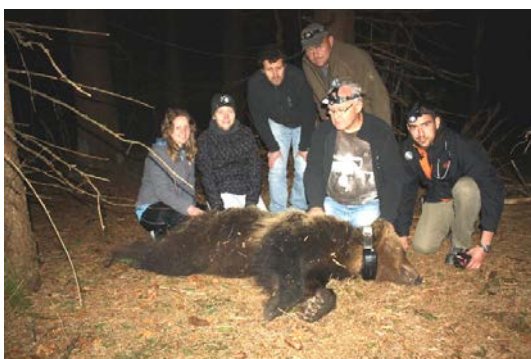


Figure 88: 02.04.2016. Bear Nikola (B50) captured at Plitvice



Figure 89: 08.05.2016. Jakov (B51) capture at Plitvice



Figure 90: Trap camera photo of bear family including B51 Jakov and the mother B53 Jasna

Around 06 July 2016, less than two months after capture Jakov was found dead with a broken femur. Seems that he was shot when outside Plitvice Lakes National Park.



Figure 91: Dear bear Jakov with broken femur bone.

The bear **B52- Daniel**, male 189 kg, we captured two times, on 09 and 19 May 2016. In the meantime the collar placed at the first capture stopped working and luckily we could place the new one.

On 29 May 2016 we captured the female **B53-Jasna**, female 101 kg, who is the mother of Jakov. We tracked her only for 10 days when after 161 GPS locations the signal was lost.



Figure 92: 09.05.2016 B52 Daniel capture at Plitvice

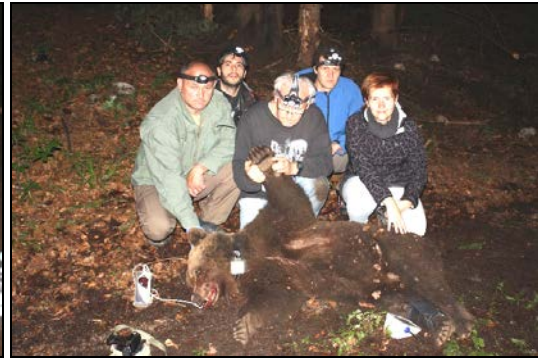


Figure 93: B53 Jasna captured on 29 May 2016 at Plitvice

Table 10: Home ranges (MPC) of bears tracked in the period 2015-2017.

BEAR	AREA(KM2)
Daniel	250,19
Jakov	15,23
Jasna	36,88
Lana	110,27
Bojan	149,01
Slaven2	903,94
Slavko	477,28
Vedran	199,08

3. The work with bears in Gorski kotar

3.1. Capturing, marking and tracking the bears

No new bears were captured and collared in Gorski kotar in 2016.

On 12 November 2015 the bear **B47- Vedran** was shot in legal hunting with the body mass of 124 kg (51 kg more than at capture on 17 June 2015). The collar was retrieved.

On 09 September 2016 we located the two dens used by bear **B43- Slavko** in the winter 2015-16. On 11 November 2016 the bear Slavko was shot in the legal hunting. The collar was retrieved and the body mass was measured at 225 kg.

The collar of the bear **B44- Bojan** was found on ground taken off by bear over the head. It was already not working and the last GPS location we received on 26 December 2015.

The collar of bear **B46-Slaven2** stopped working on 01 January 2015. We managed to drop his collar by remote radio activation and retrieved it.

All bears collared in Gorski kotar were crossing the highway and were spending some time within the buffer zone of 1.0 km along the highway. Shown in tables, graphs and maps below.

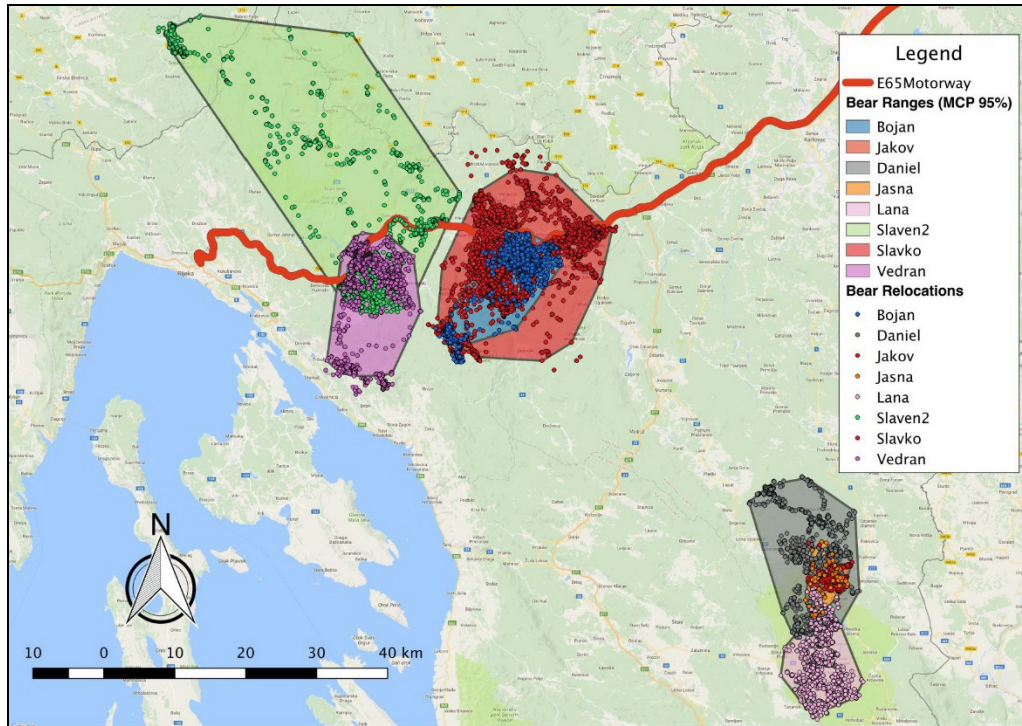


Figure 94: Home ranges of all tracked bears in 2015-16.

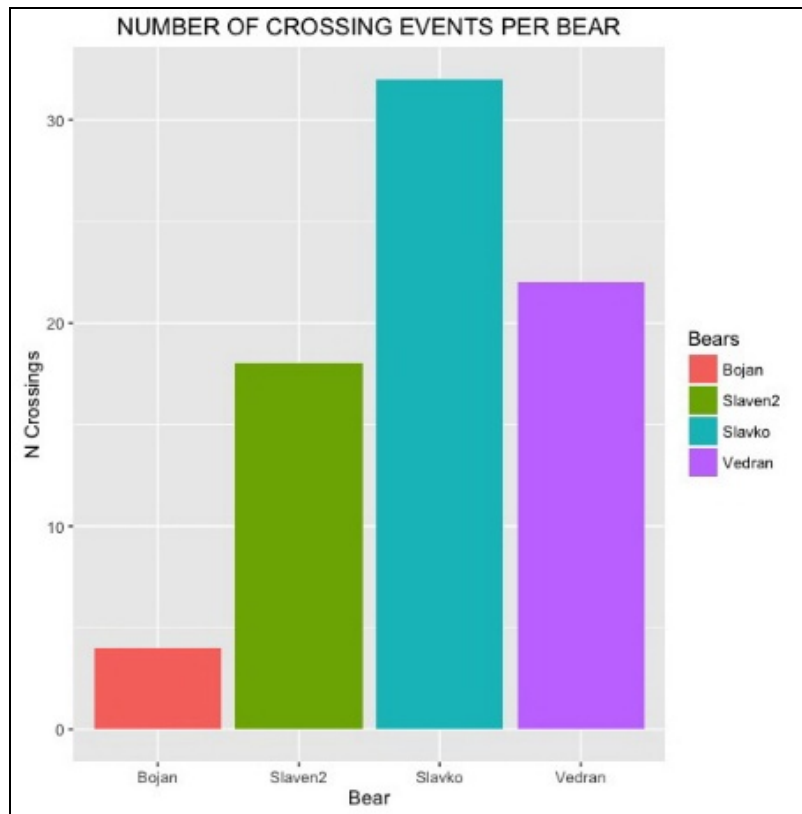


Figure 95: Number of highway crossing by 4 different collared bears,

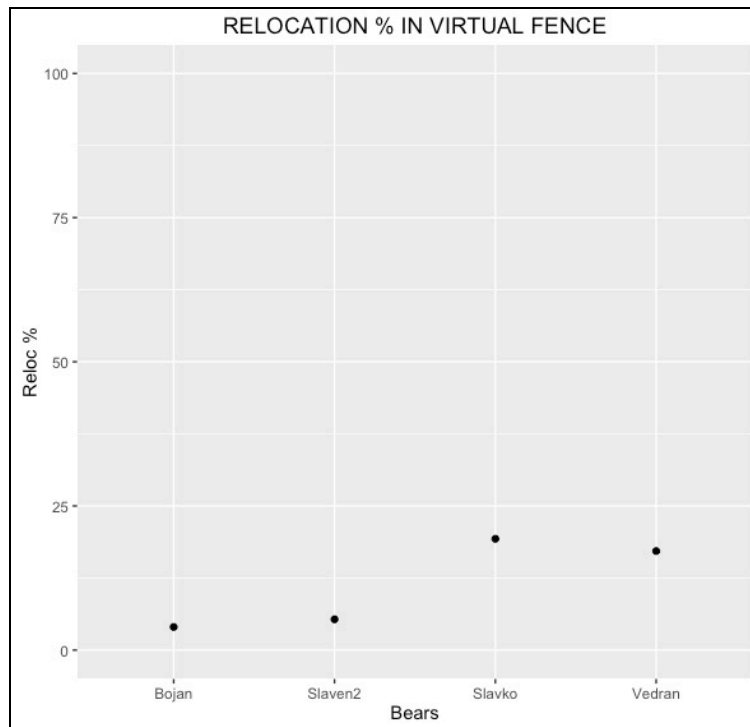


Figure 96: Time that GPS collared bears spent within 1.0 km of the highway.

Table 11: Time that 4 GPS collared bears spent within 1.0 km of the highway.

BEAR	LOCS IN BUFFER (%)
Slavko	19,30
Vedran	17,18
Slaven2	5,35
Bojan	4,01

3.2. Collecting samples from dead bears and some results

From each dead bear samples and measurements have been collected in Croatia since 2005. Within the current LIFE project on the top of standard samples (muscle tissue for DNA and premolar teeth for aging, as well as fat tissue, kidney, liver and hair) we are collecting many more samples off almost all dear bears. So far over 100 bears have been fully sampled. The hunting season lasts till 15th December and the number of samples is growing daily.

The list of samples include: all internal organs for parasitology, uterus, ovaries and testicles for reproductive status, various swabs fir microbiology, fat and muscle for fatty acids, one big bone and two kg of meat and the whole liver for radionuclides, adrenal glands and hair for stress, reproductive organs for their activity.

3.3. Collecting samples from living bears (scats) for genetic counting

The major action in 2015 within the LIFE project was the collection the bear scat samples for the genetic count of the population. The target number was 2000, but a total 2251 scat samples were collected from over the entire bear range in Croatia.



Figure 97: Part of 2251 bear scat samples collected for genetic analyses

3.4. Other actions related to LIFE DINALP BEAR project

The list includes:

- Increasing value of bears through non-consumptive use: “bear friendly
- Measures for traffic mortality mitigations on Rijeka-Zagreb Motorway
- Various publications (were sent separately)

More detailed information are in the separately sent “Mid-term report” and at the project web page: www.dinalpbear.eu

CAMERA TRAPS

During 2016, camera traps were used in PLNP area for the purpose of lynx counting, but also for the determination of wolf presence and the activity of ungulates and humans. Here we present the data about lynx counting and a separate analysis of “Avoidance Behaviour In Large Carnivores and Ungulates Towards Humans” in PLNP, prepared by a student Julia Kamp, who participated in project activities during 2016. This analysis is provided as separate document.

Cameras were set on the area of 176.7 km, mostly inside PLNP (only three cameras outside of PLNP).

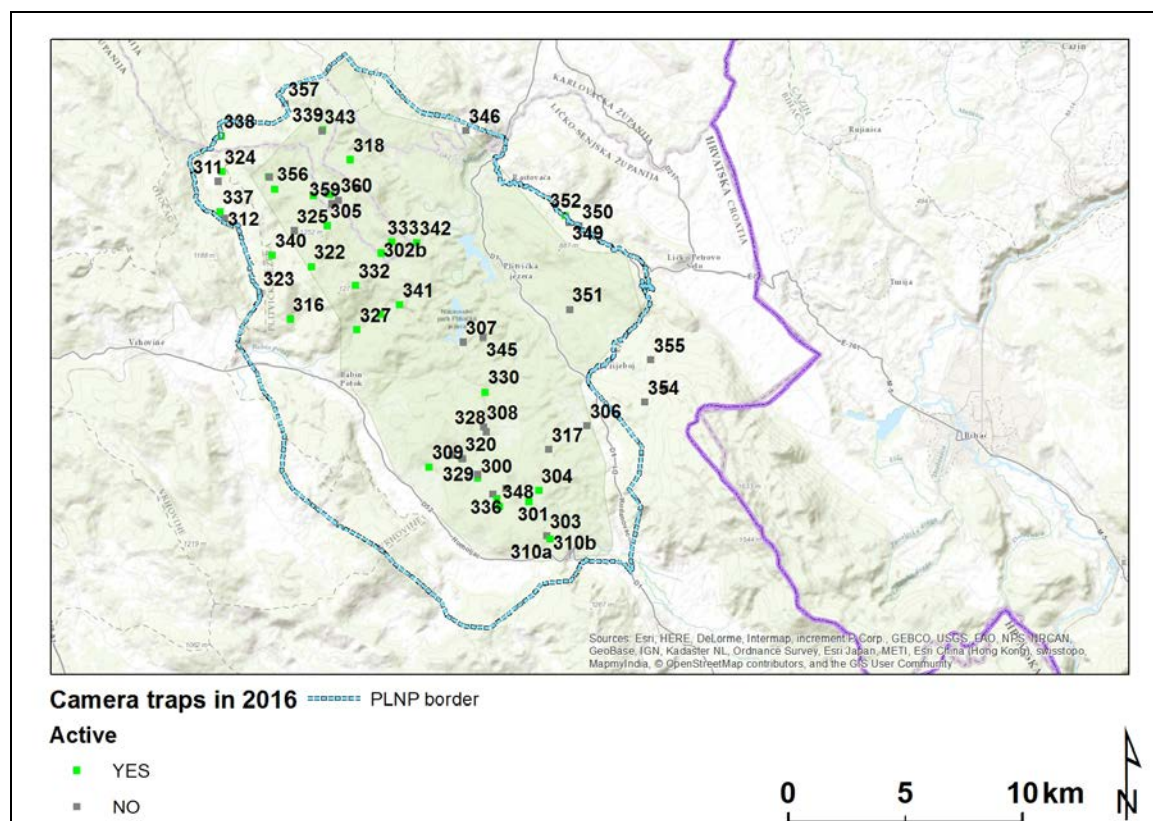


Figure 98: Locations of camera traps in PLNP during 2016.

The types of sites where camera traps were set are listed in table.

Table 12: Summary table of sites used for camera trapping during 2016.

#	SITE TYPE	N SITES
1	Animal trail	2
2	Forest road primary	6
3	Forest road secondary	3
4	Forest road secondary with gate	9
5	Forest road tertiary	1
6	Forest road tertiary with gate	7
7	Touristic trail	3
8	Water pond	3
9	Old house	2
10	Sand „bath“	1
	TOTAL	37

During 2016, lynx was photographed 89 times at 14 different sites. Out of 89 lynx events at camera sites, in 27 (30.3%) cases recorded photos were good enough for the distinguishing and the determination of individual lynx. The usable right sides of lynx were recorded 14 times, while left sides were recorded 13 times.

Table 13: The list of all 89 lynx photo events recorded in PLNP during 2016.

#	SITE	DATE TIME	BODY SIDE	N PHOTOS	USABLE	X	Y
1	339	02.01.2016 20:46	left side	3	NO	5541889	4976840
2	316	06.01.2016 22:59	left side	3	NO	5540516	4968766
3	316	11.01.2016 02:59	left side	3	NO	5540516	4968766
4	321c	12.01.2016 00:16	right side	3	NO	5539607	4974816
5	322	12.01.2016 18:45	right side	3	NO	5541411	4970994
6	340	16.01.2016 14:45	right side	3	YES	5539737	4971490
7	339	21.01.2016 19:20	left side	3	NO	5541889	4976840
8	340	22.01.2016 19:44	right side	3	NO	5539737	4971490
9	340	22.01.2016 19:44	left side	2	NO	5539737	4971490
10	340	24.01.2016 01:54	left side	2	NO	5539737	4971490
11	339	28.01.2016 17:10	left side	2	NO	5541889	4976840
12	318	28.01.2016 17:56	right side	1	NO	5543085	4975558
13	349	31.01.2016 19:32	left side	3	NO	5552449	4972875
14	349	01.02.2016 03:39	left side	3	YES	5552449	4972875
15	339	03.02.2016 06:55	left side	3	NO	5541889	4976840
16	321c	08.02.2016 01:47	left side	3	NO	5539607	4974816
17	318	08.02.2016 02:57	right side	3	NO	5543085	4975558
18	334a	10.02.2016 19:41	left side	3	NO	5549354	4961078
19	339	17.02.2016 05:28	left side	1	NO	5541889	4976840
20	316	17.02.2016 19:00	left side	3	NO	5540516	4968766
21	318	18.02.2016 16:57	left side	3	YES	5543085	4975558
22	339	18.02.2016 22:06	right side	2	NO	5541889	4976840
23	339	21.02.2016 05:15	left side	2	NO	5541889	4976840
24	318	21.02.2016 10:54	right side	1	YES	5543085	4975558
25	318	21.02.2016 18:31	left side	2	NO	5543085	4975558
26	318	21.02.2016 22:49	right side	3	NO	5543085	4975558
27	340	23.02.2016 14:50	left side	3	YES	5539737	4971490
28	340	23.02.2016 14:51	right side	3	YES	5539737	4971490
29	340	29.02.2016 19:00	right side	3	NO	5539737	4971490
30	340	03.03.2016 21:23	right side	3	NO	5539737	4971490
31	316	04.03.2016 10:49	right side	2	YES	5540516	4968766
32	302b	07.03.2016 01:36	left side	3	NO	5544398	4971573
33	318	14.03.2016 17:02	left side	4	YES	5543085	4975558
34	316	14.03.2016 17:10	right side	1	YES	5540516	4968766
35	318	14.03.2016 17:10	right side	1	NO	5543085	4975558
36	318	15.03.2016 21:35	right side	3	NO	5543085	4975558
37	339	22.03.2016 21:01	left side	1	NO	5541889	4976840
38	318	23.03.2016 00:36	right side	3	NO	5543085	4975558
39	318	23.03.2016 02:49	right side	1	NO	5543085	4975558
40	321c	29.03.2016 01:39	right side	3	NO	5539607	4974816
41	318	01.04.2016 16:54	left side	2	YES	5543085	4975558
42	340	06.04.2016 01:58	right side	3	NO	5539737	4971490
43	321b	06.04.2016 16:24	left side	3	YES	5539596	4974832
44	318	17.04.2016 15:29	right side	3	YES	5543085	4975558
45	315	18.04.2016 02:32	right side	4	NO	5544363	4968969
46	340	20.04.2016 23:42	left side	3	NO	5539737	4971490
47	338	22.04.2016 05:04	right side	3	NO	5537561	4976567
48	316	22.04.2016 17:16	left side	2	YES	5540516	4968766
49	340	23.04.2016 19:04	right side	3	NO	5539737	4971490
50	324	23.04.2016 21:17	left side	3	NO	5537585	4975049
51	318	29.04.2016 17:55	left side	3	YES	5543085	4975558
52	321b	30.04.2016 20:18	right side	1	NO	5539596	4974832
53	318	06.05.2016 06:48	right side	3	YES	5543085	4975558
54	315	06.05.2016 18:28	right side	3	YES	5544363	4968969
55	338	06.05.2016 18:55	left side	3	NO	5537561	4976567
56	321b	08.05.2016 09:10	right side	2	YES	5539596	4974832
57	338	08.05.2016 17:01	left side	3	YES	5537561	4976567

#	SITE	DATE TIME	BODY SIDE	N PHOTOS	USABLE	X	Y
58	318	12.05.2016 04:37	right side	1	NO	5543085	4975558
59	321b	12.05.2016 17:13	right side	3	YES	5539596	4974832
60	339	14.05.2016 06:42	right side	1	NO	5541889	4976840
61	340	17.05.2016 09:07	right side	3	YES	5539737	4971490
62	318	18.05.2016 01:39	right side	3	NO	5543085	4975558
63	340	20.05.2016 20:31	left side	3	NO	5539737	4971490
64	318	22.05.2016 00:48	right side	3	NO	5543085	4975558
65	339	24.05.2016 03:19	left side	3	NO	5541889	4976840
66	340	25.05.2016 00:07	right side	3	NO	5539737	4971490
67	321b	26.05.2016 03:01	right side	1	NO	5539596	4974832
68	321b	26.05.2016 03:04	left side	3	YES	5539596	4974832
69	339	30.05.2016 10:40	right side	2	YES	5541889	4976840
70	321b	02.06.2016 01:47	left side	3	NO	5539596	4974832
71	318	06.06.2016 20:20	right side	3	NO	5543085	4975558
72	340	08.06.2016 20:57	right side	3	NO	5539737	4971490
73	334a	09.06.2016 01:21	right side	2	NO	5549354	4961078
74	334b	09.06.2016 01:22	left side	3	NO	5549349	4961063
75	319	09.06.2016 03:21	right side	3	NO	5541507	4974027
76	327	11.06.2016 03:07	right side	3	NO	5543359	4968321
77	302b	11.06.2016 05:45	left side	3	YES	5544398	4971573
78	340	14.06.2016 16:12	right side	3	YES	5539737	4971490
79	340	16.06.2016 13:30	right side	3	NO	5539737	4971490
80	316	19.06.2016 20:01	right side	1	NO	5540516	4968766
81	318	19.06.2016 20:01	right side	1	NO	5543085	4975558
82	316	21.06.2016 03:44	right side	1	NO	5540516	4968766
83	318	21.06.2016 03:44	right side	2	NO	5543085	4975558
84	327	22.06.2016 03:04	right side	3	NO	5543359	4968321
85	302b	22.06.2016 06:34	left side	3	YES	5544398	4971573
86	340	24.06.2016 02:22	right side	3	NO	5539737	4971490
87	340	26.06.2016 11:39	right side	3	YES	5539737	4971490
88	322	09.07.2016 07:04	left side	3	YES	5541411	4970994
89	302b	10.07.2016 21:28	right side	2	NO	5544398	4971573

Lynx appeared mostly in the north-western part of the PLNP, while during 2015, they were equally appearing in the southern part of the NP.

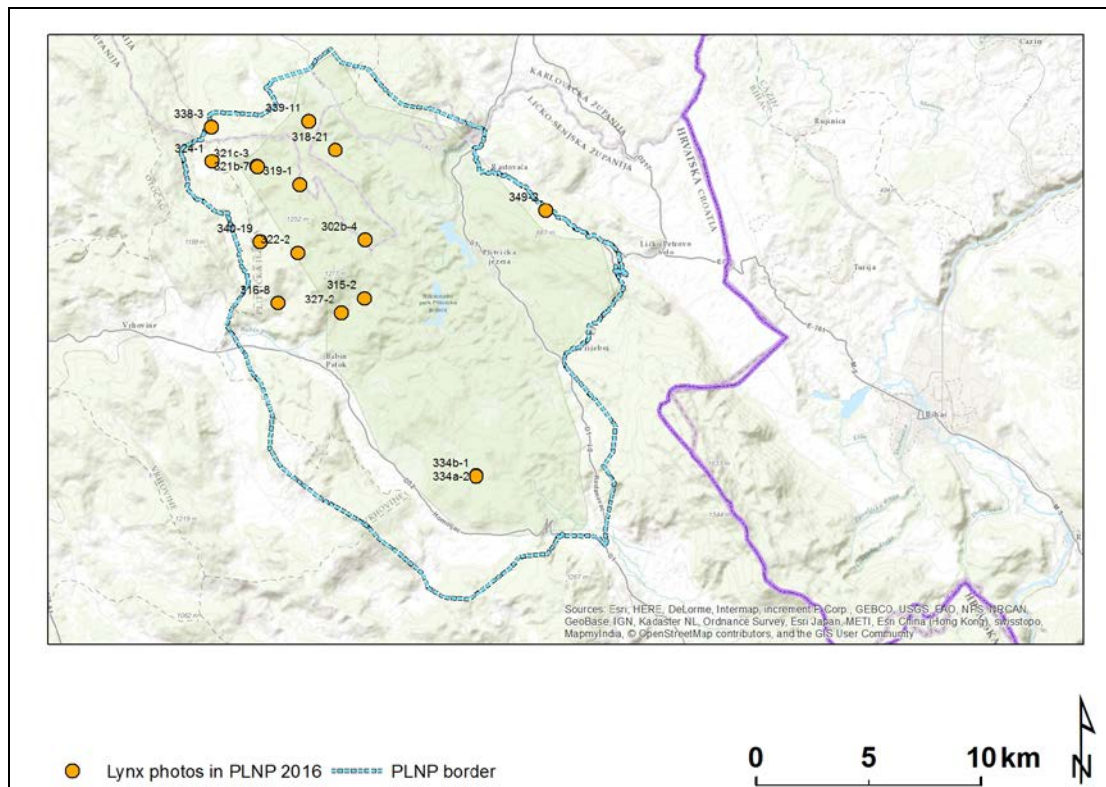


Figure 99: Locations of sites where a lynx was documented in PLNP during 2016.

During 2016, a total of four different lynx were detected to use the area of PLNP. This is the same number of lynx appearing during 2015, but the difference is that of four lynx from 2015, only one was photographed in 2016.

Table 14: Summary data about lynx detected in the area of PLNP during 2014, 2015 and 2016. The effort for lynx counting was not equal over the years. During 2014 and part of 2016 was opportunistic and non-systematic setting of cameras done by park rangers of PLNP.

Individual		Sites of lynx appearance by years			Note
Name	Sex	2014	2015	2016	
Bijelo uho	F	332, 333,	Not recorded	302, 316, 318, 326, 338	With three kittens in 2014!
L10-Iva	F	Not recorded	309, 315, 318, 334		
Crna kosa 1	?	Not recorded	334	Not recorded	
Crna kosa 2	?	Not recorded	334	Not recorded	
L11-Čorak	M	Not recorded	Not recorded	318, 321, 322, 340, 350	
L13-Stella	F	Not recorded	Not recorded	318	Recorded only at capture
Koturača	?	Not recorded	315	318, 321, 339, 340	

WOLF MORTALITY

A mortality of 15 wolves was documented between 30.10.2015 and 22.02.2017, including one wolf illegally killed in 2014, but we got to know about it in 2016. Prevailing causes of death was still traffic (n=13) and illegal killing (n=1). Illegal killing of wolves is still present.

Table 15: Basic data about dead wolves in Croatia between 18.09.2014 and 29.10.2015.

ANIMAL ID	TIME	CAUSE	GENDER	SITE	EAST(X)	NORTH(Y)
WCRO272	18.11.2015 05:00	Road kill	M	Velika Solina near	5582243	5028890
WCRO273	17.12.2015 06:30	Road kill	F	Mojanka	5632704	4835913
WCRO274	02.02.2015 07:00	Road kill	F	Dubravina-Dušikrava	5495817	4947710
WCRO275	21.11.2015 21:30	Road kill	M	Poličnik - Gornji Poličnik	5528527	4891164
WCRO276	19.03.2016 09:30	Road kill	M	Hrvace, Naselje Buljci	5628887	4876156
WCRO277	29.02.2016	Road kill	?	Vučje glave kod Senja	5500503	4985185
WCRO278	15.05.2016 06:00	Self defense	M	Pokrovnik	5586466	4851893
WCRO279	20.09.2016 23:23	Road kill	M	Velić	5643204	4833151
WCRO280	15.08.2014 06:00	Illegal killing	?	Konavle	5777520	4716862
WCRO281	11.10.2016 10:30	Road kill	F	Polača-Kijevo (D1)	5606240	4874225
WCRO282	03.11.2016 06:00	Road kill	F	Muša Sinjsko polje cesta	5637350	4839706
WCRO283	20.11.2016 06:00	Road kill	F	Ceranje Gornje cesta	5549199	4871485
WCRO284	17.12.2016 22:22	Road kill	F	Mojanka	5632704	4835913
WCRO285	18.12.2016 17:00	Road kill	M	Mojanka	5632704	4835913
WCRO286	22.02.2017 12:00	Road kill	F	Prapatnica	5597107	4829250

All dead wolves were pathologically processed at the Veterinary faculty of the University of Zagreb and some of them were fresh enough to be thoroughly examined.

LYNX MORTALITY

There was no confirmed dead lynx in Croatia during 2016, as well as in 2015.

IMPLEMENTATION OF THE WOLF AND LYNX MANAGEMENT PLANS

WOLF MANAGEMANT

Duro Huber and Josip Kusak continue to participate in large carnivores management through the work in the “Committee for large carnivores in Croatia” and the “Comity for bear management in Croatia” and through various other activities (organizing and implementing monitoring, giving courses for damage inspectors and Intervention team for large carnivores, media appearances and statements..). Both researchers are co-authors of the yearly report about wolf population status in Croatia.

The trend in wolf numbers since the beginning of the implementation of wolf management plan from 2005 was for the first five years positive and then it turned down during the last five years. The most serious drop happened in the year 2014.

The negative trend in wolf number and the fact that illegal wolf killing is still present form two main arguments against any legal quota on wolves this year.

The regular public meeting on discussing the yearly quota of accepted mortality was not held this year! The ministry in charge of wolf conservation and management decided that it is enough to have the “Yearly wolf status report” and discuss it at the National Large Carnivore Committee meeting. The 2016 wolf report proposes that this year the wolf quota will be 0 (zero). This will certainly raise additional negative reaction from the hunting lobby, but seems that there was no alternative.

FINANCIAL ACCOUNTING

For our work in 2016 UKWCT generously donated a total of 5000 GBP (about 50000 HRK, depending on exchange rate). All of fund in 2016 was spent for field work; fuel for cars and food for field workers with some minor expenses for the consumable equipment like receiver batteries and refiling prepaid SIM cards for trap alarms. Josip Kusak, Pete Haswell, and other volunteers were doing the entire wolf and lynx related field work.

Table 16: Summary list of expenses made on the project with the use of UKWCT fund during 2016.

PURPOSE	N OF EXPENSES	SUM OF EXPENSES (HRK)
Car-fuel	42	21525.78
Car-highway	38	1435.12
Car tire repair	1	360.00
Personal-food	124	17823.82
Personal-overnight stay	1	380.00
Technic-equipment	31	8066.93
TOTAL	237	49591.65

Table 17: Detailed list of expenses made on the project with the use of UKWCT fund during 2016.

#	ACTIVITY N	OBJECTIVE	TIME	TO	PURPOSE	RECIEP#	AMOUNT (HRK)
1	601	Trapping	14.03.2016 07:09	BILA KC 01	Personal-food	22334/221/4	265.93
2	601	Trapping	14.03.2016 08:43	CRODUX DERIVATI DVA d.o.o.	Car-fuel	63853/32603260/3	538.99
3	601	Trapping	14.03.2016 10:16	AC RI-ZG	Car-highway	2016031460302101622062	46.00
4	601	Trapping	14.03.2016 17:09	AC RI-ZG	Car-highway	2016031460502170914406	9.00
5	601	Trapping	15.03.2016 15:53	AC RI-ZG	Car-highway	2016031560302155322261	5.00
6	601	Trapping	15.03.2016 17:45	AC RI-ZG	Car-highway	2016031518102175609337	39.00
7	601	Trapping	15.03.2016 18:50	AC RI-ZG	Car-highway	2016031518007185052502	7.00
8	601	Trapping	15.03.2016 20:20	TIFON d. o. o.	Car-fuel	033861	504.11
9	603	Trapping	29.03.2016 06:15	AC RI-ZG	Car-highway	2016032910303061590252	19.00
10	603	Trapping	29.03.2016 13:07	AC RI-ZG	Car-highway	2016032918004131785612	19.00
11	603	Trapping	29.03.2016 15:38	TIFON d. o. o.	Car-fuel	041118	550.02
12	603	Trapping	01.04.2016 03:09	CRODUX DERIVATI DVA d.o.o.	Personal-food	84169/326033260/3	59.96
13	603	Trapping	01.04.2016 04:14	AC RI-ZG	Car-highway	2016040160502141418909	55.00
14	603	Trapping	01.04.2016 06:37	AC RI-ZG	Car-highway	2016040160302063725167	9.00
15	603	Trapping	01.04.2016 08:12	Bijela ruža	Personal-food	10764/04/1	24.00
16	603	Trapping	01.04.2016 09:44	AC RI-ZG	Car-highway	2016040110304100873483	20.00
17	603	Trapping	01.04.2016 10:43	AC RI-ZG	Car-highway	20160401118006100367376	19.00
18	603	Trapping	01.04.2016 11:05	HG Spot	Technic-equipment	13932/500/1	116.00
19	603	Trapping	01.04.2016 21:26	TIFON d. o. o.	Car-fuel	042920	574.79
20	603	Trapping	05.04.2016 10:23	TELUR d.o.o.	Technic-equipment	4578/10/1010	57.50
21	603	Trapping	05.04.2016 18:38	KARMAT d.o.o.	Technic-equipment	7717/001/1	108.50
22	604	Trapping	06.04.2016 12:02	KARMAT d.o.o.	Technic-equipment	1724/002/1	38.00
23	604	Trapping	06.04.2016 18:01	Pevec KC 01	Technic-equipment	8413 0024/001/116	123.97
24	604	Trapping	07.04.2016 11:37	KARMAT d.o.o.	Technic-equipment	7870/001/1	8.44
25	604	Trapping	07.04.2016 12:47	Ina - Industria Nafta, d.d.	Technic-equipment	65593-5006-1	859.97
26	604	Trapping	07.04.2016 13:43	BILA KC 01	Personal-food	30069/221/1	81.91
27	604	Trapping	08.04.2016 07:15	CRODUX DERIVATI DVA d.o.o.	Car-fuel	36289/32273227/1	524.03
28	604	Trapping	08.04.2016 07:56	AC RI-ZG	Car-highway	201604081030405681725	19.00
29	604	Trapping	08.04.2016 18:02	AC RI-ZG	Car-highway	2016040818005180231589	19.00
30	604	Trapping	08.04.2016 20:20	TIFON d. o. o.	Car-fuel	046963	333.13
31	608	Wolf meeting	20.04.2016 09:41	MOTRON	Technic-equipment	2527-1-1	39.00
32	608	Wolf meeting	20.04.2016 16:57	KARMAT d.o.o.	Technic-equipment	9061/001/1	69.00
33	608	Wolf meeting	22.04.2016 10:32	Medičar Špičko	Technic-equipment	1948/1/1	112.50
34	608	Wolf meeting	22.04.2016 18:49	BILA KC 01	Personal-food	0221-20160422-02-6335	145.51
35	608	Wolf meeting	23.04.2016 06:43	Beny 1	Personal-food	52833-P01-1	58.00
36	608	Wolf meeting	23.04.2016 19:46	BAUHAUS	Technic-equipment	16678	279.60
37	608	Wolf meeting	23.04.2016 19:48	BAUHAUS	Technic-equipment	16679	22.90
38	608	Wolf meeting	23.04.2016 20:39	IKEA	Technic-equipment	32330/21/8	319.60
39	608	Wolf meeting	23.04.2016 20:59	CRODUX DERIVATI DVA d.o.o.	Technic-equipment	94428/32283228/1	533.57
40	608	Wolf meeting	25.04.2016 12:57	BAUHAUS	Technic-equipment	17029	819.00

#	ACTIVITY N	OBJECTIVE	TIME	TO	PURPOSE	RECIEP#	AMOUNT (HRK)
41	609	Wolf meeting	27.04.2016 12:10	Auto-Far	Technic-equipment	7131/02/01	206.00
42	609	Wolf meeting	27.04.2016 13:11	MAVIK d.o.o.	Technic-equipment	3560-PROD-2	63.00
43	609	Wolf meeting	27.04.2016 15:19	Auto-Far	Technic-equipment	7003/02/01	51.00
44	609	Wolf meeting	29.04.2016 19:52	BAUHAUS	Technic-equipment	18219	173.80
45	609	Wolf meeting	30.04.2016 06:57	BILA KC 01	Personal-food	0221-20160420-04-8176	34.95
46	609	Wolf meeting	30.04.2016 08:56	PD Jankovac	Personal-food	3077-03081-1	20.00
47	609	Wolf meeting	30.04.2016 09:14	PD Jankovac	Personal-food	3078-03081-1	29.00
48	609	Wolf meeting	30.04.2016 09:23	PD Jankovac	Personal-food	3079-03081-1	17.00
49	609	Wolf meeting	30.04.2016 10:27	PD Jankovac	Personal-food	3082-03081-1	53.00
50	609	Wolf meeting	30.04.2016 16:25	PD Jankovac	Personal-food	3143-03081-1	396.00
51	609	Wolf meeting	30.04.2016 18:09	Ina - Industria Nafte, d.d.	Car-fuel	66622-5003-1	551.95
52	610	Trapping course	04.05.2016 11:04	KARMAT d.o.o.	Technic-equipment	10276/001/1	62.00
53	610	Trapping course	13.05.2016 20:24	Ina - Industria Nafte, d.d.	Car-fuel	90018-5006-1	783.01
54	610	Trapping course	13.05.2016 20:35	BILA KC 01	Personal-food	0221-20160513-03-8767	311.26
55	610	Trapping course	14.05.2016 08:56	AC RI-ZG	Car-highway	2016051460402085352826	51.00
56	610	Trapping course	14.05.2016 15:28	Risnjak, NP	Personal-food	1637/P01/1	167.00
57	610	Trapping course	14.05.2016 17:02	AC RI-ZG	Car-highway	20160514181020170246267	44.00
58	610	Trapping course	14.05.2016 18:03	AC RI-ZG	Car-highway	2016051418005180303153	7.00
59	611	Monitoring meeting	16.05.2016 15:21	Ljekarna DE 01	Personal-food	11821-3-14	502.44
60	611	Monitoring meeting	19.05.2016 17:08	Restaurant Galeb	Personal-food	47085/P1/3	226.00
61	611	Monitoring meeting	20.05.2016 08:09	Tudić turistički biro	Personal-overnight stay	282/POS12/1	380.00
62	612	Trapping	24.05.2016 07:38	CRODUX DERIVATI DVA d.o.o.	Car-fuel	101664/32273227/1	595.04
63	612	Trapping	24.05.2016 09:59	AC RI-ZG	Car-highway	2016052410303095966539	19.00
64	612	Trapping	24.05.2016 11:14	Market IVKA	Personal-food	7979/0112/002/172	227.69
65	612	Trapping	24.05.2016 15:34	JU NP Plitvička jezera	Personal-food	6599/1004/1	90.00
66	612	Trapping	24.05.2016 16:01	JU NP Plitvička jezera	Personal-food	5130/1008/1	20.00
67	612	Trapping	24.05.2016 20:43	JU NP Plitvička jezera	Personal-food	6660/1004/1	90.00
68	612	Trapping	25.05.2016 16:58	TIFON d. o. o.	Personal-food	077204	35.89
69	612	Trapping	25.05.2016 17:29	AC RI-ZG	Car-highway	2016052518006172908335	34.00
70	612	Trapping	27.05.2016 10:45	Decatlon	Technic-equipment	2807	314.00
71	612	Trapping	27.05.2016 11:50	KONZUM d. d.	Personal-food	29954/0205/9	549.71
72	612	Trapping	27.05.2016 12:33	AC RI-ZG	Car-highway	2016052710304123351745	19.00
73	612	Trapping	27.05.2016 12:56	LUKOIL	Car-fuel	59218	594.02
74	612	Trapping	27.05.2016 13:46	Caffe Bar	Personal-food	3455/2/1	15.00
75	612	Trapping	29.05.2016 16:56	JU NP Plitvička jezera	Personal-food	6171/1509/1	18.00
76	612	Trapping	30.05.2016 17:41	Gavranović d.o.o.	Personal-food	8373 0399/002/695	105.67
77	612	Trapping	01.06.2016 15:01	Ina - Industria Nafte, d.d.	Car-fuel	16406-S081-1	509.39
78	612	Trapping	01.06.2016 16:27	TIFON d. o. o.	Personal-food	085066	12.00
79	612	Trapping	01.06.2016 17:07	AC RI-ZG	Car-highway	20160601180061714236	34.00
80	612	Trapping	01.06.2016 21:33	TIFON d. o. o.	Personal-food	077672	29.00
81	613	Trapping	02.06.2016 17:57	Chipoteka	Technic-equipment	47280	50.00
82	613	Trapping	02.06.2016 18:21	BAUHAUS	Technic-equipment	44064	450.10
83	613	Trapping	02.06.2016 18:23	BAUHAUS	Technic-equipment	44065	119.90
84	613	Trapping	03.06.2016 09:26	BAUHAUS	Technic-equipment	009993	2074.00
85	613	Trapping	03.06.2016 17:50	AC RI-ZG	Car-fuel	2016060310305175031305	19.00
86	613	Trapping	03.06.2016 18:12	INTERSPAR	Personal-food	57232/8713/107	257.82
87	613	Trapping	03.06.2016 19:06	LUKOIL	Car-fuel	063162	587.06
88	613	Trapping	06.06.2016 14:56	Ina - Industria Nafte, d.d.	Car-fuel	18359-S081-1	400.04
89	613	Trapping	06.06.2016 15:25	Kordun d.d.	Personal-food	1834 0112/001/159	167.99
90	613	Trapping	07.06.2016 11:53	MRVICA M. d.o.o.	Technic-equipment	9594/002/2	14.60
91	613	Trapping	07.06.2016 13:00	KONZUM d. d.	Personal-food	28063/3282/1	423.36
92	613	Trapping	07.06.2016 13:29	Ina - Industria Nafte, d.d.	Technic-equipment	66211-S065-1	4.00
93	613	Trapping	07.06.2016 13:44	JU NP Plitvička jezera	Personal-food	3815/1507/1	76.00
94	613	Trapping	08.06.2016 10:10	Izbor Jandric d.o.o.	Personal-food	68636/1/1	512.74
95	613	Trapping	08.06.2016 10:21	Ina - Industria Nafte, d.d.	Technic-equipment	66689/S065-1	87.99
96	613	Trapping	10.06.2016 12:52	Ina - Industria Nafte, d.d.	Car-fuel	67957-S065-1	575.52
97	613	Trapping	11.06.2016 10:45	Izbor Jandric d.o.o.	Personal-food	70440/1/1	268.63
98	613	Trapping	11.06.2016 19:12	Turist Grabovac	Personal-food	3038/UU01/10	293.00
99	613	Trapping	12.06.2016 10:17	NINAJ PEK. D.o.o.	Personal-food	32574/POS11/2	64.00
100	613	Trapping	14.06.2016 17:18	Ina - Industria Nafte, d.d.	Car-fuel	21311-S081-1	571.01
101	613	Trapping	14.06.2016 18:58	AC RI-ZG	Car-highway	2016061418006185825313	34.00
102	614	Trapping	18.06.2016 15:20	Ina - Industria Nafte, d.d.	Car-fuel	115303-S006-1	325.73
103	614	Trapping	20.06.2016 16:39	AC RI-ZG	Car-highway	2016062010304163989466	19.00
104	614	Trapping	20.06.2016 17:16	INTERSPAR	Personal-food	56719/8713/1/0	515.03
105	614	Trapping	20.06.2016 17:34	INTERSPAR	Personal-food	4161778713/116	14.00
106	614	Trapping	20.06.2016 19:23	Ina - Industria Nafte, d.d.	Car-fuel	23715-S081-1	428.32

#	ACTIVITY N	OBJECTIVE	TIME	TO	PURPOSE	RECIEP#	AMOUNT (HRK)
107	614	Trapping	21.06.2016 15:56	Izbor Jandric d.o.o.	Personal-food	75799/1/1	537.85
108	614	Trapping	21.06.2016 19:06	Old Shaterhand	Personal-food	1418/1/1	19.00
109	614	Trapping	21.06.2016 20:55	Kordun d.d.	Personal-food	16427/112/1	110.00
110	614	Trapping	23.06.2016 12:04	Izbor Jandric d.o.o.	Personal-food	765/1/1	190.38
111	614	Trapping	23.06.2016 16:44	Old Shaterhand	Personal-food	1481/1/1	112.00
112	614	Trapping	24.06.2016 11:47	Ina - Industria Nafte, d.d.	Car-fuel	25134-S081-1	507.78
113	614	Trapping	24.06.2016 13:12	TIFON d. o. o.	Personal-food	106885	47.97
114	614	Trapping	24.06.2016 13:28	AC RI-ZG	Car-highway	2016062418004132845939	19.00
115	614	Trapping	24.06.2016 16:58	TIFON d. o. o.	Personal-food	102362	12.99
116	614	Trapping	24.06.2016 17:23	AC RI-ZG	Car-highway	2016062410305172354532	19.00
117	614	Trapping	24.06.2016 19:20	Turist Grabovac	Personal-food	4296/UU01/10	126.00
118	614	Trapping	25.06.2016 15:00	JU NP Plitvička jezera	Personal-food	5131/1507/1	50.50
119	614	Trapping	25.06.2016 15:37	NINAJ PEK. D.o.o.	Personal-food	36211/POSL1/2	44.00
120	614	Trapping	25.06.2016 15:57	KONZUM d. d.	Personal-food	46922/3282/3	461.45
121	614	Trapping	26.06.2016 11:41	Ina - Industria Nafte, d.d.	Car-fuel	78704-S065-1	505.01
122	614	Trapping	26.06.2016 11:56	JU NP Plitvička jezera	Personal-food	5151/1507/1	57.00
123	614	Trapping	27.06.2016 10:35	Izbor Jandric d.o.o.	Personal-food	78479/1/1	191.82
124	614	Trapping	27.06.2016 10:47	KONZUM d. d.	Personal-food	47422/3282/3	53.65
125	614	Trapping	28.06.2016 14:53	Kordun d.d.	Personal-food	1841 0112/002/172	92.07
126	614	Trapping	28.06.2016 21:51	Rotokor d.o.o.	Personal-food	4845/UU01/10	532.00
127	614	Trapping	29.06.2016 15:21	NINAJ PEK. D.o.o.	Personal-food	37417/POSL1/2	40.50
128	614	Trapping	29.06.2016 15:29	Ina - Industria Nafte, d.d.	Car-fuel	81129-S065-1	570.03
129	614	Trapping	29.06.2016 16:38	JU NP Plitvička jezera	Personal-food	5312/1507/1	38.50
130	614	Trapping	30.06.2016 11:23	JU NP Plitvička jezera	Personal-food	5386/1507/1	44.00
131	614	Trapping	30.06.2016 20:14	Old Shaterhand	Personal-food	1756/1/1	125.00
132	614	Trapping	30.06.2016 20:44	Kordun d.d.	Personal-food	19867/11272	339.05
133	614	Trapping	01.07.2016 10:36	JU NP Plitvička jezera	Personal-food	5447/1507/1	38.50
134	614	Trapping	01.07.2016 15:05	Bistro Centar	Personal-food	15414/PO1/1	135.00
135	614	Trapping	01.07.2016 15:29	NINAJ PEK. D.o.o.	Personal-food	25098/POSL2/1	8.00
136	614	Trapping	02.07.2016 11:04	JU NP Plitvička jezera	Personal-food	5510/1507/1	47.00
137	614	Trapping	02.07.2016 13:05	Ina - Industria Nafte, d.d.	Car-fuel	28759-S081-1	543.80
138	614	Trapping	02.07.2016 13:55	Turist Grabovac	Personal-food	12130/UU01/11	16.00
139	614	Trapping	03.07.2016 10:31	JU NP Plitvička jezera	Personal-food	5552/1507/1	38.50
140	614	Trapping	03.07.2016 11:22	KONZUM d. d.	Personal-food	49801/3282/3	359.21
141	614	Trapping	04.07.2016 12:22	MACOLA d.o.o.	Personal-food	8571/11/4	77.00
142	614	Trapping	04.07.2016 18:13	Old Shaterhand	Personal-food	1899/1	55.00
143	614	Trapping	05.07.2016 11:43	JU NP Plitvička jezera	Personal-food	5694/1507/1	43.00
144	614	Trapping	06.07.2016 11:41	Ina - Industria Nafte, d.d.	Car-fuel	30593-S081-1	562.76
145	614	Trapping	06.07.2016 13:12	TIFON d. o. o.	Personal-food	121761	44.97
146	614	Trapping	06.07.2016 13:27	AC RI-ZG	Car-highway	2016070618004132760402	19.00
147	614	Trapping	07.07.2016 06:35	AC RI-ZG	Car-highway	2016070710303063537429	19.00
148	614	Trapping	07.07.2016 10:50	JU NP Plitvička jezera	Personal-food	5816/1507/1	50.50
149	614	Trapping	07.07.2016 11:43	KONZUM d. d.	Personal-food	43115/3282/2	285.05
150	614	Trapping	07.07.2016 11:57	Ina - Industria Nafte, d.d.	Car-highway	86789-S065-1	551.12
151	614	Trapping	08.07.2016 11:19	JU NP Plitvička jezera	Personal-food	5881/1507/1	45.00
152	614	Trapping	08.07.2016 17:23	Old Shaterhand	Personal-food	2006/1/1	70.00
153	614	Trapping	09.07.2016 10:56	JU NP Plitvička jezera	Personal-food	5957/1507/1	32.00
154	614	Trapping	10.07.2016 11:31	JU NP Plitvička jezera	Personal-food	5994/150771	60.00
155	614	Trapping	10.07.2016 12:13	KONZUM d. d.	Personal-food	44334/3282/2	300.47
156	614	Trapping	10.07.2016 12:23	Ina - Industria Nafte, d.d.	Car-fuel	89350-S065-1	543.26
157	614	Trapping	11.07.2016 11:24	JU NP Plitvička jezera	Personal-food	6062/1507/1	38.50
158	614	Trapping	11.07.2016 18:02	Old Shaterhand	Personal-food	2153/171	42.00
159	614	Trapping	13.07.2016 13:32	KONZUM d. d.	Personal-food	45531/3286/2	357.86
160	614	Trapping	13.07.2016 13:42	Ina - Industria Nafte, d.d.	Car-fuel	92112-S065-1	500.22
161	614	Trapping	14.07.2016 11:20	JU NP Plitvička jezera	Personal-food	6261/1507/1	30.00
162	614	Trapping	15.07.2016 11:17	JU NP Plitvička jezera	Personal-food	3335/1507/1	38.50
163	614	Trapping	16.07.2016 11:15	JU NP Plitvička jezera	Personal-food	6468/1507/1	45.00
164	614	Trapping	16.07.2016 12:05	KONZUM d. d.	Personal-food	53064/3282/3	344.04
165	614	Trapping	17.07.2016 11:26	Ina - Industria Nafte, d.d.	Car-fuel	95291-S065-1	545.07
166	614	Trapping	17.07.2016 14:01	Old Shaterhand	Personal-food	2397/1/1	17.00
167	614	Trapping	18.07.2016 11:06	JU NP Plitvička jezera	Personal-food	6647/1507/1	30.00
168	614	Trapping	20.07.2016 11:19	Ina - Industria Nafte, d.d.	Car-fuel	97745-S065-1	611.90
169	614	Trapping	20.07.2016 15:53	Turist Grabovac	Personal-food	7881/UU01/10	76.00
170	614	Trapping	20.07.2016 16:44	Kordun d.d.	Personal-food	24349/112/2	333.98
171	614	Trapping	21.07.2016 11:24	JU NP Plitvička jezera	Personal-food	6875/1507/1	38.50
172	614	Trapping	22.07.2016 12:03	JU NP Plitvička jezera	Personal-food	6949/1570/1	52.00
173	614	Trapping	22.07.2016 16:41	Bistro Centar	Personal-food	18280/PO1/1	90.00
174	614	Trapping	22.07.2016 17:55	TIFON d. o. o.	Personal-food	144839	9.49
175	614	Trapping	22.07.2016 18:26	AC RI-ZG	Car-highway	2016072218006182675615	19.00
176	614	Trapping	22.07.2016 21:03	TIFON d. o. o.	Car-fuel	106508	535.10

#	ACTIVITY N	OBJECTIVE	TIME	TO	PURPOSE	RECIEP#	AMOUNT (HRK)
177	616	Telemetry	23.08.2016 08:09	Ljekarna Dodek	Personal-food	34758-1-1	46.30
178	616	Telemetry	23.08.2016 08:30	BILA KC 01	Personal-food	0221-20160823-03-0011	507.42
179	616	Telemetry	23.08.2016 08:51	CRODUX DERIVATI DVA d.o.o.	Car-fuel	130883/32633263/1	510.11
180	616	Telemetry	23.08.2016 13:02	AC RI-ZG	Car-highway	2016082310304130208545	19.00
181	616	Telemetry	23.08.2016 14:36	Bistro Centar	Personal-food	24009/P01/1	99.00
182	616	Telemetry	24.08.2016 10:07	Kordun d.d.	Personal-food	3974/0112/001/159	151.43
183	616	Telemetry	26.08.2016 15:42	AC RI-ZG	Car-highway	2016082618007163749178	19.00
184	616	Telemetry	26.08.2016 15:45	TIFON d. o. o.	Car-fuel	204200	706.24
185	620	Trapping	08.10.2016 10:54	KONZUM d. d.	Personal-food	35796/0205/10	685.93
186	620	Trapping	08.10.2016 11:33	AC RI-ZG	Car-highway	2016100810304113378852	19.00
187	620	Trapping	08.10.2016 12:38	Ina - Industria Nafte, d.d.	Car-fuel	77559-S081-1	490.07
188	620	Trapping	08.10.2016 18:39	Kordun d.d.	Personal-food	8094 0112/002172	84.75
189	620	Trapping	08.10.2016 18:53	Turist Grabovac	Personal-food	20078/UU01/11	25.00
190	620	Trapping	09.10.2016 15:19	JU NP Plitvička jezera	Personal-food	42021/1408/1	90.00
191	620	Trapping	10.10.2016 12:14	JU NP Plitvička jezera	Personal-food	14266/1507/1	32.00
192	620	Trapping	10.10.2016 13:02	KONZUM d. d.	Personal-food	64345/3282/1	447.16
193	620	Trapping	11.10.2016 11:39	JU NP Plitvička jezera	Personal-food	14408/1507/1	37.50
194	620	Trapping	11.10.2016 17:42	Ina - Industria Nafte, d.d.	Car-fuel	78587-S061-1	595.02
195	620	Trapping	11.10.2016 19:06	JU NP Plitvička jezera	Personal-food	13548/1407/1	31.00
196	620	Trapping	12.10.2016 12:38	JU NP Plitvička jezera	Personal-food	14431/1507/1	47.00
197	620	Trapping	13.10.2016 11:50	JU NP Plitvička jezera	Personal-food	14534/1507/1	32.00
198	620	Trapping	14.10.2016 11:55	JU NP Plitvička jezera	Personal-food	14576/1507/1	52.00
199	620	Trapping	14.10.2016 12:30	KONZUM d. d.	Personal-food	65434/3282/1	250.93
200	620	Trapping	14.10.2016 12:39	Ina - Industria Nafte, d.d.	Car-fuel	164572-S065	490.07
201	620	Trapping	15.10.2016 12:31	Kordun d.d.	Personal-food	43105/112/1	147.59
202	620	Trapping	16.10.2016 13:20	JU NP Plitvička jezera	Personal-food	14705/1507/1	52.00
203	620	Trapping	17.10.2016 12:52	JU NP Plitvička jezera	Personal-food	14794/1507/1	37.00
204	620	Trapping	18.10.2016 11:35	JU NP Plitvička jezera	Personal-food	14830/1507/1	38.50
205	620	Trapping	18.10.2016 12:15	Izbor Jandric d.o.o.	Personal-food	143029/1/1	348.44
206	620	Trapping	18.10.2016 12:30	Ina - Industria Nafte, d.d.	Car-fuel	166414-S065-1	565.04
207	620	Trapping	19.10.2016 11:34	JU NP Plitvička jezera	Personal-food	32859/1509/1	22.00
208	620	Trapping	19.10.2016 15:28	JU NP Plitvička jezera	Personal-food	13818/1407/1	28.00
209	620	Trapping	20.10.2016 18:21	Ina - Industria Nafte, d.d.	Car-fuel	80916/S081-1	92.99
210	620	Trapping	20.10.2016 19:10	Plitvički Dvori	Personal-food	16128/P02/1	52.00
211	620	Trapping	21.10.2016 12:19	JU NP Plitvička jezera	Personal-food	32960/1509/1	54.00
212	620	Trapping	21.10.2016 15:28	TIFON d. o. o.	Car-fuel	244016	591.07
213	620	Trapping	21.10.2016 16:28	AC RI-ZG	Car-highway	2016102118003162826242	72.00
214	620	Trapping	22.10.2016 15:56	Decatlon	Technic-equipment	5162	759.00
215	620	Trapping	23.10.2016 11:17	BILA KC 01	Personal-food	128745/221/4	740.30
216	620	Trapping	23.10.2016 19:32	Ina - Industria Nafte, d.d.	Car-fuel	209626-S006-1	473.01
217	620	Trapping	24.10.2016 11:31	AC RI-ZG	Car-highway	2016102410304113199218	19.00
218	620	Trapping	24.10.2016 13:24	Ina - Industria Nafte, d.d.	Car-fuel	81968-S081-1	422.78
219	620	Trapping	24.10.2016 13:25	Ina - Industria Nafte, d.d.	Technic-equipment	81969-S081-1	41.99
220	620	Trapping	25.10.2016 11:44	KONZUM d. d.	Personal-food	68093/3282/1	385.65
221	620	Trapping	26.10.2016 12:50	JU NP Plitvička jezera	Personal-food	151318/1507/1	48.00
222	620	Trapping	27.10.2016 12:17	JU NP Plitvička jezera	Personal-food	15196/1507/1	31.00
223	620	Trapping	27.10.2016 13:11	Izbor Jandric d.o.o.	Personal-food	17435/1/2	84.01
224	620	Trapping	28.10.2016 13:06	JU NP Plitvička jezera	Personal-food	15234/1507/1	72.00
225	620	Trapping	28.10.2016 13:31	Ina - Industria Nafte, d.d.	Car-fuel	170590-S065-1	595.15
226	620	Trapping	29.10.2016 17:54	AC RI-ZG	Car-highway	201610291800417549234	19.00
227	620	Trapping	29.10.2016 20:21	TIFON d. o. o.	Car-fuel	161501	485.09
228	620	Trapping	02.11.2016 12:59	AC RI-ZG	Car-highway	201611020305125912324	19.00
229	620	Trapping	02.11.2016 19:39	Kordun d.d.	Personal-food	46915/112/2	363.62
230	620	Trapping	03.11.2016 12:30	JU NP Plitvička jezera	Personal-food	15509/1507/1	49.00
231	620	Trapping	03.11.2016 13:46	Ina - Industria Nafte, d.d.	Car-fuel	173599-S065-1	531.04
232	620	Trapping	03.11.2016 14:27	AGRODISKONT RAKOVICA	Technic-equipment	15165/1/1	88.00
233	620	Trapping	05.11.2016 18:25	AC RI-ZG	Car-highway	2016110518005182522378	19.00
234	620	Trapping	05.11.2016 20:22	TIFON d. o. o.	Car-fuel	165792	588.01
235	620	Trapping	08.11.2016 11:39	MOTRON	Car-maintenance-tire	7921-1-1-	360.00
236	624	Workshop	18.01.2017 12:39	AC RI-ZG	Car-highway	2017011810303130225999	19.00
237	624	Workshop	19.01.2017 10:39	AC RI-ZG	Car-highway	2017011918005103973320	19.00
TOTAL							49591.65

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